



# Sustainability Report

## Building a World That Works for Tomorrow



# Building a World that Works for Tomorrow

## OUR COMMITMENT

We build the technology that enables a sustainable tomorrow.

### Energy Transition

We have equipped

**90%**

of the world's power transmission utilities with our technology

### Precision Health

**4M+**

healthcare installations

### Future of Flight

Target of more than

**20%**

lower fuel consumption and CO<sub>2</sub> emissions compared to today's engines through the CFM RISE Program

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

### Global R&D

**\$3.8B**  
in 2020

Companywide, GE, customer and partner funded



## U.S.

### Blade Recycling

GE has partnered with Veolia North America to recycle decommissioned wind turbine blades. This agreement—the first of its kind in the US wind industry—helps to contribute to the circular economy for composite materials.

[Learn more on p. 71 ▶](#)

### Offshore and Onshore Wind

GE powered the first U.S. offshore farm at Block Island, Rhode Island, and will power Vineyard Wind, the largest offshore and first utility-scale U.S. offshore wind project.

[Learn more on p. 23 ▶](#)

## Global

### Making airplanes more efficient

GE Additive—in combination with GE Aviation's advanced materials such as Ceramic Matrix Composites and aerodynamic technologies—is revolutionizing the design and manufacturing of GE engines. The GE9X engine includes more than 300 metal 3D printed parts, helping increase fuel efficiency by up to 10 percent compared to the GE90 engine.



[Learn more on p. 33 ▶](#)



## Haiti

### Disaster and Humanitarian Relief/Healthcare

The GE Foundation has supported HEI, a small rural hospital in Haiti that stepped up when a 2010 earthquake destroyed the capital. HEI is now a technology-enabled, full-service hospital, and its staff hopes it becomes a model for bringing modern healthcare to impoverished areas around the world.

[Learn more on p. 85 ▶](#)

## Brazil

### CT-in-a-Box

As part of the fight against COVID-19, GE Healthcare developed "CT-in-a-Box," a high-precision tool to quickly, safely, and effectively diagnose patients with coronavirus. This mobile unit was rolled out in the Hospital de Campanha Lagoa Barra, in Rio de Janeiro in May 2020, and is now used throughout the world.

[Learn more on p. 14 ▶](#)



## U.K.

### Haliade™-X

In 2020, GE's Haliade™-X, the most powerful offshore wind turbine built, was selected to power Dogger Bank off the coast of England in the North Sea. Dogger Bank is expected to be the world's largest offshore wind farm. When complete, it will be capable of producing 3.6GW of electricity—enough to power 6 million homes, ~5 percent of total U.K. demand.

[Learn more on p. 23 ▶](#)



## Norway

### Energy Transition

GE is helping Norway's grid operator Statnett meet its goal of reducing GHG emissions by 25 percent in 2025. Statnett is installing GE g<sup>3</sup> gas insulated equipment at its new Oslo substation. g<sup>3</sup> gas is a game-changing alternative to sulphur hexafluoride (SF<sub>6</sub>), one of the world's most potent greenhouse gases.

[Learn more on p. 20 ▶](#)



## Turkey

### Energy Transition

GE is powering Turkey's first nuclear power plant with steam turbines, along with installing and commissioning over 150 MW of wind energy, supporting Turkey's energy strategy of "More Local, More Renewable."



## China

### Energy Transition

With more than 200 gas turbines in service, GE is powering China's coal-to-gas transition. A new power plant in Tianjin City marks the first commercial operations of GE's 9HA.01 technology in mainland China. It will deliver 661 MW to the national grid and steam for district heating for over 100,000 citizens living in an area of approximately 7 million square meters. We are supplying three 9HA.02 gas turbines for a power plant in Guangdong province. The plant will add 2.4 GW, powering more than 4 million homes in the Greater Bay Area.

### Next Engineers

GE Foundation recently announced Next Engineers, committing up to \$100 million over the next 10 years to increase the diversity of young people in engineering.

[Learn more on p. 81 ▶](#)



## Middle East

### GE's 360 Foam Wash

Airlines such as Emirates and Etihad Airways (UAE), Qatar Airways (Qatar), and Royal Jordanian Airlines (Jordan) are using GE's 360 Foam Wash, a groundbreaking jet engine cleaning system. This alternative to the water wash method restores engine performance leading to reductions in fuel consumption.

[Learn more on p. 35 ▶](#)

## Zambia

### Rural Healthcare

GE is partnering with the government of Zambia to help open 108 new health centers and five large hospitals to increase care for pregnant women. In rural areas, some women must walk over 30 miles for their postnatal visits. GE equipment like ultrasounds also help reduce infant mortality rates.

## India

### Energy Transition

India has the most residents in the world without reliable access to electricity—some 240 million people, according to the World Bank. An international GE team designed software to analyze India's extensive electricity demands, resulting in an AI-powered system installed by Power Grid Corporation of India to create the world's largest wide-area monitoring system.

[Learn more on p. 24 ▶](#)

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## FORWARD-LOOKING STATEMENTS

This document 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.

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## NON-GAAP FINANCIAL METRICS

In this document, 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 report on Form 10-K, as applicable.

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## COVER

Logan Toynbee, GE Renewable Energy  
Ashley Meaux, GE Digital



# Dear fellow stakeholders,

*GE has always held a larger purpose. With 174,000 employees serving customers and communities in more than 170 countries, our cutting-edge technology, global network, and exceptional team are anchored in the service of others. Every hour of every day, our team has an opportunity to broaden access to electricity, healthcare, and transport around the world.*

*As a high-tech industrial company, GE feels a heightened sense of responsibility when it comes to sustainability. Over our 129-year history, our innovation has improved quality of life around the world—a core driver of sustainability. We are advancing our sustainability priorities both through our own commitments to our people, communities, and planet, as well as by innovating groundbreaking technologies that will help build a more sustainable world at GE and beyond.*



This commitment came to life in a unique way in 2020 in one of the most difficult environments. Since the start of the pandemic, GE's people have served on the front lines—from delivering hospital equipment in the first days in Wuhan, China, to quadrupling the production of ventilators—and today, we continue to help parts of the world like India and Brazil fight against COVID-19. Together with our customers, the GE team keeps power flowing, hospitals operating, and planes flying. I'm proud of the way we are persevering in the face of great uncertainty.

The impacts of COVID-19 on the world reinforced how the planet shares its challenges and of the need for innovative solutions. Our purpose statement, "We rise to the challenge of building a world

that works," has never been more true than it is now. GE is committed to tackling the world's biggest challenges with a clear alignment to sustainability—leading the energy transition to drive decarbonization, developing precision healthcare that personalizes diagnoses and treatments, and building a future of smarter and more efficient flight. Sustainability priorities are woven into all that we do, and this is right for both business and the planet.

*We will innovate our technology and our Company to ensure we rise to the challenge of building a world that works.*

Take the energy transition. Roughly one billion people around the world lack access to reliable electricity, and overall demand continues to grow. As a company that helps to generate one-third of the world's electricity, we are committed to supporting customers and governments in meeting this demand while reducing greenhouse gas emissions. Innovative technology will be critical. In Renewable Energy, our Haliade™-X is the most powerful wind turbine built today; in Gas Power, our 7HA.03 is the most efficient gas turbine on the market. And we are partnering with our customers to modernize the physical and digital grid, increase resiliency, and enable more renewable energy.



Wind turbine in Ontario, Canada

With half of the world's population lacking access to essential health services, we continue developing cutting edge medical equipment to ensure more health care providers have the tools they need for an increasingly digital, more personalized approach to medicine. From our portable Vscan Air ultrasound to new advances with our Mural technology to creating virtual ICUs, our innovative technology and software are helping to ensure patients receive quality care wherever they are.

A more sustainable future means connecting more people with lower impact. In June 2021, we joined Safran to unveil our shared vision for the future of flight, with a revolutionary new technology demonstration program that will ensure even greater efficiency than today's most advanced engines.

We apply this same spirit of innovation to our own operations. We announced a new goal to achieve carbon neutrality within our own facilities and operations by 2030 after surpassing our 2020 emissions reductions targets ahead of schedule. To do this, we will make operational investments to achieve energy efficiencies; reduce our emissions from the grid through smart power sourcing; and use lean practices to eliminate energy waste.

We also announced our planned exit from the new-build coal power market. These decisions highlight the interplay we are seeing between decarbonization, market dynamics, and our own business strategy.

Looking ahead, we are setting a further ambition for GE to be a net zero company by 2050—encompassing not just GE's operations, but also the Scope 3 emissions from the use of sold products. We look forward to partnering closely with our customers on existing and future technologies to help them succeed in meeting their own ambitions and address the world's needs for reliable, affordable, and sustainable power and safe, efficient flight.

We are particularly aware of the engineering challenges still to be solved to make the ambition of net zero a reality, and that developing solutions will require collaboration with our customers, policymakers and other companies. However, we believe those challenges are also key strategic opportunities for GE. These pages show the investments we are making in both our current products and breakthrough technologies.

We also recognize the importance of measurement and target setting to drive progress in reducing emissions over a shorter time horizon as well. We plan to

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#### GLOBAL ISSUES GE IS ADDRESSING

Roughly  
**1B**  
people lack access to reliable electricity

**1/2**  
the world's population lacks access to essential health services

Reducing  
**CO<sub>2</sub>**  
emissions through aircraft engine innovation



Wysheka Austin inspecting 7HA.02 Gas Turbine unibody

#### GE's GLOBAL REACH

**\$4.9M**  
in global COVID-19 relief since  
the pandemic began

**1/3**  
of the world's electricity  
generated with GE equipment

We serve more than  
**1B patients**  
per year

**Largest &  
youngest**  
aviation fleet

*Sustainability priorities are woven into all that we do, and this is right for business and the planet.*

continue developing and to communicate details about more specific, nearer term GE greenhouse gas reduction metrics and targets that include Scope 3 emissions. As a company that has led innovation for more than a century, we will continue to pioneer the technologies the world needs to move toward a net zero future.

Beyond climate change, this year we also sharpened our focus on one of the most pervasive challenges—systemic inequality. As a global company, we know that the most effective teams bring together people with diverse backgrounds and experiences and we are taking steps to improve our transparency, accountability, and community. We named Mike Barber Chief Diversity Officer and appointed chief diversity officers in each of our businesses to ensure diversity is integrated into our culture and business strategy. Recognizing that education is an important driver towards economic inclusion, the GE Foundation committed to help create more equitable access to opportunities for STEM education as well as help minority-owned companies compete for business with larger enterprises. In addition, we published our first Diversity Report to provide a snapshot of our people and practices, and to allow our stakeholders to measure our future progress. While it's clear that we have work to do, we are committed to building a more diverse workforce and inclusive workplace.

As the GE team knows, *how* we accomplish our commitments is just as important as what we accomplish. To that end, we are approaching sustainability with the same high expectations of rigor and accountability that we use to run

our businesses. We appointed Roger Martella as our first Chief Sustainability Officer. Knowing that sustainability at GE requires cross-functional collaboration, Roger will help facilitate the success of our businesses and employees in our important sustainability missions, both in strategy for solutions and improving our impacts through ambitious metrics and targets. We are committed to accelerating progress by collaborating with government leaders, policy makers, NGOs, investors, communities, and peers. You will see our shared passion for sustainability through these growing efforts and engagement.

I am united with GE's employees in taking pride in the sustainability mission detailed on these pages. While our 2020 Sustainability Report shows what we are accomplishing today, we know hard work lies ahead. Looking forward, we will work to lead innovating breakthrough technologies for the future such as small modular nuclear reactors, carbon capture, hydrogen as a fuel, greater access to precision health, and a broad suite of technologies for air travel. And we will set our sights on ambitious targets across our global operations to improve our impacts and lift up our people, communities, and planet. We will not sit still. We will innovate our technology and our Company to ensure we rise to the challenge of building a world that works.

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



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# Our sustainability priorities

Innovating technology to lift up quality of life around the world—a core driver of sustainability—has been fundamental to how GE works since our inception more than 125 years ago. Sustainability priorities are not a separate endeavor at GE but are woven into all that we do. Sustainability priorities are embedded in our policies, leadership engagement, operating mechanisms, commitments, and, ultimately, our products. Our diverse portfolio—**from sustainable, reliable, and affordable energy to precision health to aviation innovation**—and legacy in these markets enable us to make substantial impact on people and the planet for the better.

With substantial changes to the Company over the past few years, our pursuit of the energy transition, precision health, and future of flight is unwavering. Our mission to succeed in these goals 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 our programs and improve to best ensure we succeed in these priorities.

In the spirit of humility, we persistently 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 174,000 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 innovation work to build a more sustainable world and how our foundational culture of integrity, forward-looking strategy, and robust sustainability programs make these priorities come to life.



## JOINING THE CALL TO ACTION

# How our strategy and sustainability priorities align with the United Nations Sustainable Development Goals

The United Nations Sustainable Development Goals (SDGs) represent a global agenda to address the most pressing challenges facing our world, including climate action, access to healthcare, and reducing inequities throughout the world. We recognize the importance and urgency of this global initiative and how GE plays a critical role in infrastructure, advancing quality of life, and furthering global development sustainably. GE has been a signatory to the UN Global Compact since 2008 and we see close alignment between the following SDGs and our strategy and sustainability priorities:

<b>3</b> GOOD HEALTH AND WELL-BEING	<b>7</b> AFFORDABLE AND CLEAN ENERGY
<b>8</b> DECENT WORK AND ECONOMIC GROWTH	<b>9</b> INDUSTRY, INNOVATION AND INFRASTRUCTURE
<b>10</b> REDUCED INEQUALITIES	<b>11</b> SUSTAINABLE CITIES AND COMMUNITIES
<b>13</b> CLIMATE ACTION	<b>16</b> PEACE, JUSTICE AND STRONG INSTITUTIONS
<b>17</b> PARTNERSHIPS FOR THE GOALS	

## 3 GOOD HEALTH AND WELL-BEING



Our product innovations work to advance precision health through integrated, efficient, and highly personalized care, with a focus on increasing accessibility across the globe. We serve over 160 countries around the globe with our healthcare products and services and are leading innovation in conventional technology and digital tools such as artificial intelligence to make healthcare more accessible to more people globally. We recognize access to care is an important social determinant of health, and products like our Vscan Family technologies help doctors deliver expanded care to more people, including in rural regions.

The health and safety of our workforce and those doing work on our behalf across the globe is as important as any GE top priority, driving GE's system to safeguard workers and workplaces.

Through the GE Foundation, Developing Health Globally™ (DHG) and Developing Health U.S. (DH) are signature programs with a longstanding history of increasing access to quality healthcare in underserved communities around the world.

At the beginning of the COVID-19 pandemic, we implemented precautions to ensure the health and safety of our employees and prioritized the manufacturing of medical equipment needed to treat COVID-19 patients globally.

### BUSINESS AND PRIORITY ALIGNMENT

Precision Health  
Safety  
Lifting Our Communities

### LEARN MORE

- 12** COVID-19
- 27** Innovation—Precision Health
- 81** Our Commitments—GE Foundation

## 7 AFFORDABLE AND CLEAN ENERGY



We are uniquely positioned to innovate the technology that will decarbonize the energy sector and promote affordable, reliable, and accessible electricity around the globe. Our commitments, products, services, and global reach are crucial to decarbonizing the world. We pursue this goal in three ways. First, we build diverse technology that works to keep the lights on, healthcare equipment operating, and offices open around the world. Our offerings from renewable power to gas power to the grid enable our customers to provide energy reliably and affordably. Second, we are focused on our own use of energy by committing to be carbon neutral in our own Scope 1 and Scope 2 greenhouse gas emissions by 2030. Third, we are establishing our ambition to be a net zero company by 2050, which includes our own operations as well as Scope 3 emissions from the use of sold products.

### BUSINESS AND PRIORITY ALIGNMENT

Energy Transition  
Environmental Stewardship

### LEARN MORE

- 20** Innovation—Energy Transition
- 66** Our Commitments—Climate Change
- 69** GE's Ambition to Be a Net Zero Company

# 8

## DECENT WORK AND ECONOMIC GROWTH



We believe that the energy, transportation, and healthcare sectors can be leaders in the future of work in a changing world economy, by providing for advancement, educational opportunities, mentoring, and community assistance to workers. We are also part of a collaboration of companies that promotes positive change in how migrant workers are employed.

Our goal is to treat everyone affected by our businesses and value chain with fairness and dignity. We have strict prohibitions on child, prison, and forced labor as well as a long-standing program focused on our suppliers and ethical supply chain.

### BUSINESS AND PRIORITY ALIGNMENT

Energy Transition

Precision Health

Human Rights

Future of Flight

Safety

### LEARN MORE

**20** Innovation—Energy Transition

**48** The Spirit & The Letter

**61** Safety

**77** Our Commitments—Human Rights

**79** Our Commitments—Ethical Supply Chain

# 9

## INDUSTRY, INNOVATION AND INFRASTRUCTURE



GE at core is an innovation company with significant investment in research and development that defines our history. This has led to us introducing technology that has raised the quality of life for people around the world. We innovate current and breakthrough technologies to solve the challenges of the energy transition, precision health, and future of flight.

Our programs for redeveloping brownfield, Superfund, and other contaminated sites turn idle properties into new hubs of economic growth and job creation globally.

### BUSINESS AND PRIORITY ALIGNMENT

Energy Transition

Precision Health

Future of Flight

Environmental Stewardship

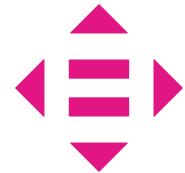
### LEARN MORE

**15** Innovation

**65** Our Commitments—Environment

# 10

## REDUCED INEQUALITIES



As a global company, GE works with local communities to train and employ the local labor force. We believe education is a significant driver of economic inclusion, and we have long supported multiple organizations focused on training and educating a diverse pipeline. In 2021, the GE Foundation launched a new initiative to increase the diversity of young people in engineering globally. GE's respectful workplace policies strive for a more diverse workforce and inclusive workplace.

GE also supports an Employer Pay Principle to remove inequities and exploitation hitting the most vulnerable worker population through its membership with the Leadership Group for Responsible Recruitment.

Access to affordable and reliable healthcare is also a significant driver of reduced inequalities and economic inclusion. We strive to improve access through the work of GE Healthcare and the GE Foundation's Developing Health programs, focusing on underserved communities.

### BUSINESS AND PRIORITY ALIGNMENT

Precision Health

Lifting Our Communities

Human Rights

### LEARN MORE

**15** Innovation

**55** Diversity and Inclusion

**77** Our Commitments—Human Rights

**81** GE Foundation

# 11

## SUSTAINABLE CITIES AND COMMUNITIES



As utilities, power producers, grid operators, and policymakers around the world set their own decarbonization goals, our diverse offerings are part of the toolkit needed to achieve their targets. Our expansive business operations provide cities and communities with career and business opportunities that support them in achieving a more sustainable future.

Our environmental programs are designed to promote sustainability—from our robust Environment, Health, and Safety (EHS) programs to our initiatives to clean up and redevelop idle properties—we are investing for the public good in the communities where we operate.

### BUSINESS AND PRIORITY ALIGNMENT

Energy Transition

Environmental Stewardship

### LEARN MORE

**20** Innovation—Energy Transition

**38** Our Process: How GE Operates to Succeed in our Mission

**64** Our Commitments—EHS, Environmental Stewardship

# 13

## CLIMATE ACTION



In 2020, we announced our commitment to be carbon neutral in our own facilities and operations by 2030 (Scope 1 and Scope 2 emissions), our planned exit from the new-build coal business, and a holistic strategy to utilize renewable energy and efficient natural gas technology to decarbonize energy sector emissions. With this report, we are setting a further ambition for GE to be a net zero company by 2050—including not just GE's operations, but also the Scope 3 emissions from the use of sold products.

Our businesses function to provide energy, transportation, and healthcare with lower emissions and less carbon intensity over time. We have an established history of both providing sustainable products to our customers and reducing our own emissions—commitments which we are accelerating for the future.

### BUSINESS AND PRIORITY ALIGNMENT

Energy Transition

Future of Flight

Environmental Stewardship

### LEARN MORE

**20** Innovation—Energy Transition

**66** Our Commitments—Climate Change

**69** GE's Ambition to Be a Net Zero Company

# 16

## PEACE, JUSTICE, AND STRONG INSTITUTIONS



As outlined in our Human Rights Statement of Principles, we promote respect for fundamental human rights and support the principles contained in the Universal Declaration of Human Rights. We endeavor to advance respect for fundamental human rights by leading by example in our business capacity, with our direct business partners, and in the communities where we operate.

We also govern our actions internally and toward our people and communities through strong governance programs starting with our Board, a culture of integrity, an unyielding commitment to compliance, and an open reporting system.

### BUSINESS AND PRIORITY ALIGNMENT

Human Rights

Culture of Integrity

### LEARN MORE

**47** Culture of Integrity

**77** Human Rights

# 17 PARTNERSHIPS FOR THE GOALS



GE has longstanding partnerships with civil society groups and works directly with various governments around the world. Our operational footprint allows us to invest, expand, trade, and knowledge share with our partners around the world. Our relationships are critical to advancing our goals and priorities. Our founding membership in the Global Business Initiative on Human Rights enables us to further our human rights goals and commitments. Similarly, our membership in the Leadership Group for Responsible Recruitment, a collaboration between leading companies and expert organizations, drives positive change in the way that migrant workers are recruited. We are also an active Participant in the UN Global Compact (including the Human Rights and Business Dilemmas Forum).

In 2021, we have been proud to partner with government leaders, non-governmental organizations (NGOs), and more than 300 businesses to support ambitious climate reduction goals. We intend to continue growing our engagement to be a constructive voice and leader on the role of technology and innovation in addressing global challenges.

## BUSINESS AND PRIORITY ALIGNMENT

Energy Transition  
Human Rights  
Environmental Stewardship

## LEARN MORE

- 66** Our Commitments—Climate Change
- 77** Our Commitments—Human Rights

## About this report



This report covers the environmental, social, and governance activities of GE, primarily for 2020. Today's report reflects how GE has evolved to the streamlined, forward-looking company it is today. This report allows us an opportunity to deepen existing conversations with our stakeholders about our important sustainability programs.

While the contents within this report have not been externally assured, the information and data within has been quality reviewed for completeness and accuracy by management and GE's dedicated internal resources. In addition to the significant internal and data-collection resources brought to ensure accuracy, GE's senior leadership oversaw the preparation, assembly, and drafting of the report.

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](#).

As described below at page 39, the GE Board of Directors exercises oversight and provides direction on GE's sustainability strategy. The GE Board is also issuing the report on page 69 in response to the shareholder proposal included in GE's 2021 proxy statement regarding the "net zero indicator" defined in that proposal.

Many of the images in this report were captured before the COVID-19 pandemic and may not include face coverings and social distancing.

# Our performance and priorities

As an active participant and signatory to the UN Global Compact since 2008, we understand that 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 2020 and priorities for 2021 and beyond align with the identified UN Sustainable Development Guidelines (SDGs) to help address the identified societal challenges.

TOPIC	BASELINE	2018	2019	2020	UN SDG
<b>Financial Performance (\$M)</b>					
Total Revenues		\$97,012	\$95,214	\$79,619	
GE Industrial Organic Revenues*		<sup>a</sup>	\$84,051	\$73,180	
Adjusted GE Industrial Profit*		<sup>a</sup>	\$8,313	\$2,520	
GE Industrial Free Cash Flow*		\$4,341	\$2,322	\$606	
Total Research & Development Spend		\$4,065	\$4,164	\$3,820	
<b>Diversity and Inclusion** (pages 55–59)</b>					
<b>GE U.S. Workforce, all employees</b>					
Total Race & Ethnic Minority				24.1%	
Asian				8.7%	
Black/African American				6.8%	
Hispanic/Latinx				6.5%	
American Indian/Alaskan Native				0.3%	
Native Hawaiian/Pacific Islander				0.2%	
Multiracial				1.6%	
<b>Global Female Representation per Category</b>					
Female representation, all employees				21.9%	
Female representation, professional employees				26.2%	
Female representation in leadership***				26.0%	
<b>Human Rights: Supplier Responsibility Program<sup>b</sup> (pages 77–79)</b>					
Number of Global Audits <sup>c</sup>				1,286	
Total Suppliers Approved <sup>d</sup>				1,039	
New Suppliers				433	
Existing Suppliers				553	
Supplier From Acquisition				53	
Total Suppliers Rejected <sup>d</sup>				71	
New Suppliers				62	
Existing Suppliers				8	
Supplier from Acquisition				1	
Total Findings				7,348	
<b>Percentage of Findings per Category:</b>					
Health & Safety				29%	
Environment				31%	
Emergency Preparedness				21%	
Human Rights & Labor				16%	
Dormitory Standards				<1%	
Conflict Minerals				2%	
Security / Other <sup>e</sup>				<1%	
<b>Audits per Region:</b>					
China				41%	
India				28%	
North and South America				13%	
Europe, Middle East & Africa				9%	
Rest of Asia				9%	



TOPIC	BASELINE	2018	2019	2020	UN SDG
<b>Safety<sup>f</sup> (pages 61–64)</b>					
Injury & Illness Total Recordable Rate <sup>g</sup>		0.55	0.60	0.51	
Days Away From Work Incident Rate <sup>h</sup>		0.24	0.28	0.26	
Fatalities - Employees		2	3	3	
Fatalities - Contractor Workers		6	2	4	
<b>Environmental Stewardship<sup>f</sup> (pages 65–76)</b>					
<b>Environmental Performance</b>					
ISO 14001 sites	185	107	97		
Global Penalties Paid (in \$ thousands)	65	25	25		
Spills & Releases (Count) <sup>i</sup>	41	36	47		
Air Exceedances (Count) <sup>j</sup>	1	1	9		
Wastewater Exceedances (Count) <sup>j</sup>	25	17	11		
<b>Climate Change and Energy<sup>j</sup></b>					
<b>2019 Baseline</b>					
GE Operational GHG Emissions (million metric tons of CO <sub>2</sub> equivalent) (market based)	2.30	2.80	2.39	2.07	
Scope 1 Emissions (million metric tons of CO <sub>2</sub> equivalent)	1.29	1.00	0.92		
Scope 2 Emissions (million metric tons of CO <sub>2</sub> equivalent) (market based)	1.51	1.39	1.16		
GE Operational Energy Use (million MMBtu)	24.9	30.1	25.7	23.2	
Direct SF6 Emissions (thousand metric tons CO <sub>2</sub> equivalent)	179	164	138		
Total Electricity (MWh)	3,690,000	3,420,000	3,030,000		
Renewable Energy Used (MWh)	44,541	31,800	53,000		
<b>Water<sup>k</sup></b>					
<b>2011 Baseline</b>					
Total Freshwater Use (Billions of Gallons)	6.52	6.54	4.93	5.12	
Once-Through Cooling Water (Billions of Gallons)	2.27	1.64	1.85		
<b>Lifting Our Communities (pages 81–85)</b>					
GE Company Contributions via GE Businesses and to the Foundation (\$M)		90.7	55.4	44.9	
Employee and Retiree Contributions matched by GE Foundation (\$M)		38.8	24.6	16.8	
Total GE "Family" Giving (\$M)		129.5	80.0	61.7	
Total Contributions as a Percentage of GE Revenue (\$M) <sup>l</sup>	0.07%	0.06%	0.08%		

\* Non-GAAP Financial Measure.

\*\* Data representative of GE's workforce as of December 31, 2020, extracted on February 10, 2021.

\*\*\* Leadership encompasses the top 1.5 percent of all active employees.

a 2018 recasted data not available.

b Beginning with the 2020 metric year, our Supply Chain metrics reflect changes and improvements in GE's Supplier Responsibility Governance (SRG) program. 2018 and 2019 metrics do not represent today's Supplier Responsibility Governance program and are not calculated.

c 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.

d New metric reported in 2020 from Supplier Responsibility Governance program and audits.

e "Other" includes findings not allocated to a category or relate to quality findings identified during Supplier Responsibility Governance audit.

f Due to the changing nature of GE's enterprise business structure, figures are periodically updated to reflect changes in scope. For instance, acquired businesses may not have aligned data for the same time periods.

g Number of OSHA recordable injury and illness cases per risk population YTD based on 100 employees working 200,000 hours annually. Baker Hughes included in 2018.

h Days Away From Work Incident Rate uses the OSHA calculation for days-away-from-work cases (transfer or restricted cases are excluded), based on 100 employees working 200,000 hours annually. Baker Hughes included in 2018.

i Spills & Releases, Air Exceedances, and Wastewater Exceedances data includes Baker Hughes in 2018.

j For GHG and energy-related metrics, each year GE adjusts its 2019 baseline inventory to account for divestments and acquisitions. Interim years are not adjusted.

k For water metrics, each year GE adjusts its 2011 baseline inventory to account for divestments and acquisitions. Interim years are not adjusted.

l Total Contributions as a Percentage of GE Revenue was established as a metric in 2018 to align with Chief Executives for Corporate Purpose Giving in Numbers annual survey.

#### A NOTE ON THE IMPACT OF COVID-19

2020 was an incredibly challenging and unprecedented year for everyone across the globe, including GE and our operations.

We believe that several of our 2020 metrics likely reflect the impacts of COVID-19 due to travel restrictions, populations working from home, and variable utilization of some of our facilities. We continue to be committed to transparency. The information in this report is overseen by subject matter experts and has been reviewed by GE's dedicated internal resources.



# Responding to COVID-19 for our employees and communities

The COVID-19 pandemic undoubtedly changed the world at an unimaginable human cost—significantly impacting how we live and work. But, together with our customers, we helped keep essential services working uninterrupted: hospitals and medical equipment kept operating, electricity flowed, and critical infrastructure remained online. In our mission-critical industries, GE's people have served on the front lines since the beginning of the pandemic, delivering hospital equipment in Wuhan, China, during the first days of the crisis, while maintaining the power equipment that keeps the lights on across the globe.

Throughout 2020, the GE team pursued a two-pronged approach to the uncertain landscape of COVID-19: first, protecting the health and safety of our employees and communities; and second, supporting our communities through providing technology to fight the pandemic. The GE Board of Directors and management teams engaged with leadership from the outset to keep our workplaces around the world safe, to accelerate the manufacture of critical ventilators, and to ensure GE's operations were functioning well in a digital and remote work environment.

*GE Healthcare employees in Madison, Wisconsin, U.S.A., support the increased production of ventilators, which can play a critical role in the treatment of COVID-19 patients.*



## Protecting our employees

At the onset of the COVID-19 pandemic, GE quickly instituted strong safety precautions for its global workforce. We adopted operational and governance rhythms across the Company and with our Board of Directors to coordinate and oversee actions related to the COVID-19 pandemic. We established an enterprise-wide, cross-functional internal COVID-19 Task Force to protect the health and safety of our employees globally while maintaining business continuity. We continuously engaged with our unions as a key part of our worker safety response efforts. And we pledged financial support to employees and their families through GE's new Employee Relief Fund. These efforts are ongoing, and we continue to build on them as the impact of the pandemic evolves in various parts of the world.

Below are some of the specific ways we have supported the safety, health, and wellness of our employees in response to the COVID-19 pandemic:

- We implemented a four-level GE Site Safety Roadmap aligned with global regulatory guidance to ensure the health and wellness of individuals working at our facilities globally.
- We established a key theme, "Protect and Respect," to drive all COVID-19 safety behaviors. This theme and its practices will continue to influence our actions going forward.
- We issued frequent communications about worker safety and safety practices at the corporate, business unit, and site levels and continue to enhance safety protocols as local regulations change. We continue to promote our open ombuds reporting channel for worker concerns related to compliance with COVID-19 safety protocols.
- We placed a strong focus on the impact of COVID-19 on mental and emotional health. We launched #NotAloneGE to reinforce for our employees that it's okay to seek help with emotional wellbeing.
- We continue to engage in educational dialogue with our people through our Chief Human Resources Officer and Chief Medical Officer, covering a variety of topics including vaccinations, face coverings, and other COVID-19 related developments.
- Our Employee Relief Fund provided support to 3,900 GE employees and their families around the world facing unprecedented challenges due to the pandemic.

*The pNeuton Model A-E ventilator was authorized under the United States Emergency Use Authorization (EUA), which is a special authorization during emergencies, such as the COVID-19 pandemic, enabling the U.S. FDA to help make medical products available as quickly as possible to reach patients in need when there are no adequate, cleared, or approved alternatives.*



### GE AVIATION TEAM IN CHELTENHAM, U.K. TRANSITIONS TO MAKING PATIENT MONITORS

With demand for patient monitors outstripping GE Healthcare's production capacity, a GE Aviation team transformed available floor space at their factory into manufacturing space for the GE Healthcare team. Using lean principles and only the materials they had on hand, the GE Healthcare team went from zero to more than 5,000 patient monitors in 15 weeks, delivering one of our hospital customers' most important tools to fight COVID-19.

### GE HEALTHCARE AND FORD PARTNER TO QUICKLY MANUFACTURE VENTILATORS FOR COVID-19 PATIENTS

In March 2020, GE Healthcare and Ford Motor Company began working together to scale up the production of ventilators—a move aimed to arm clinicians with vital medical equipment to treat patients with COVID-19. We collaborated with Ford to quickly scale the Airon-licensed Model A-E ventilator to provide an additional supply of critical

medical devices. Independent of its partnership with Ford, GE Healthcare doubled its capacity of ventilator production twice in 2020 to address unprecedented demand. GE Healthcare also worked with the U.S. Food and Drug Administration to advise its existing anesthesia customers on how anesthesia devices can be used for ventilation.

# Supporting our communities

GE also supported the fight against COVID-19 in our communities and throughout our businesses. Across different GE sites, factories ramped up to manufacture the ventilators and patient monitors needed in clinical settings to treat patients suffering from COVID-19; technicians found themselves driving thousands of miles across the U.S. to lend their expertise; in Italy, a sales manager pitched in as a volunteer ambulance driver; and GE Aviation plants in England were rapidly adapted to produce patient monitors.

- GE Healthcare quadrupled ventilator production and increased production capacity and output for other critical medical equipment to help doctors diagnose and treat COVID-19, including monitoring solutions, x-ray, anesthesia, and point-of-care ultrasound products. GE Healthcare also launched digital solutions to help providers deliver care to patients virtually.
- Since the onset of the pandemic, the GE Foundation has contributed \$4.9 million in COVID-19 relief, which included delivering personal protective equipment to U.S. healthcare workers in urgent need and reinforcing healthcare systems in Southeast Asia and Africa. As part of its support, the GE Foundation gave a [\\$1 million donation](#) to the United Nations and World Health Organization's Strategic Pandemic Response Plan, which seeks to curtail the spread of COVID-19 by increasing lab capacity and critical supplies, protecting vulnerable patients and frontline health workers, setting up intensive care units, coordinating research and development of life-saving products, and improving community engagement.
- GE researchers are working on a [sensor smaller than a fingertip](#) that could find viruses and pathogens in the air. The work could mean that, in the future, smartphones and smartwatches equipped with such sensors could help users detect not only the SARS-CoV-2 virus causing COVID-19 but also other pathogens and irritants.
- And GE employees across the globe [sprang into action](#) to put their expertise to help fighting the pandemic. Some 100 extra workers and volunteers from across the U.S. made their way to a GE Healthcare factory in Wisconsin to help increase its production of ventilators, while an executive account manager for GE Healthcare in Spain applied the philosophy of lean to organize ventilators and other medical equipment for quicker deployment. A global clinical marketing specialist for the GE's LOGIQ ultrasound systems volunteered as a second shift custodian at GE Healthcare's Madison, Wisconsin plant as it ramped production of mechanical ventilators. He helped the custodial team reimagine their roles and establish a rigorous disinfecting schedule. Two colleagues at GE Renewable Energy's wind turbine factory in Florida used their skills to 3D-print protective shields out of a thermoplastic polymer, which they passed out to colleagues and hospitals in Florida and South Carolina in just a few days. The shield extends the life of N95 masks, which are normally single-use. In addition, the pair joined with GE employees from around the globe to improve the design and to distribute thousands of shields to frontline workers.



Tyler Vermeij has been called the “valve guru” because of his intricate knowledge of the ventilator parts that regulate oxygen and airflow in and out of a patient’s lungs. He got his start at GE Healthcare in 2016 after graduating from the University of Wisconsin-Madison.

## GE MOBILIZES TO HELP INDIA AND BRAZIL DURING COVID-19

While the U.S. and other parts of the world have started to turn a corner in the fight against COVID-19, GE is providing support to countries where the virus continues to spread.

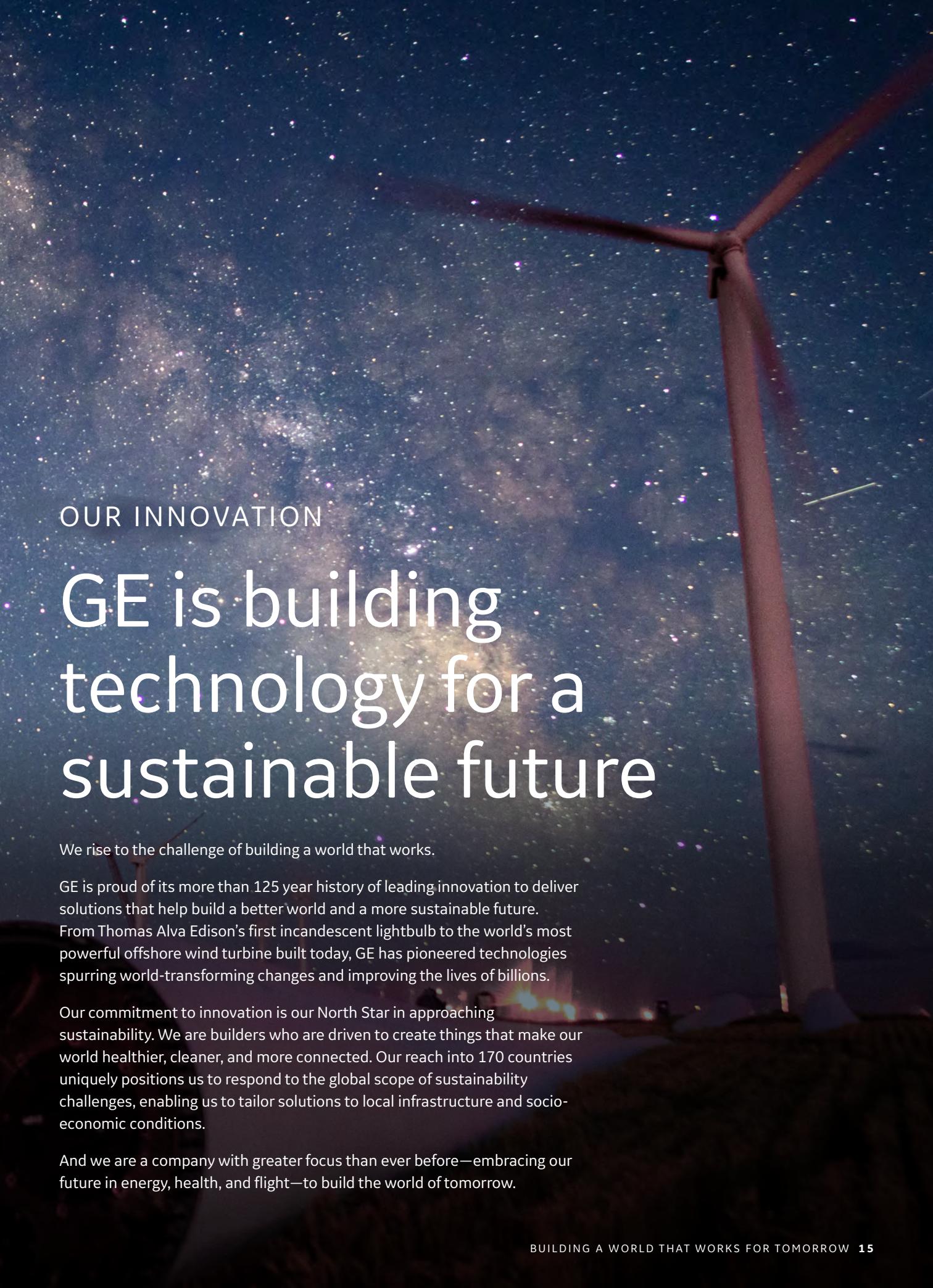
- In the beginning of India’s early 2021 outbreak, GE India’s Vice President of Sourcing and his team identified an urgent need for oxygen concentrators, a lifesaving stop gap arrangement until people can get proper hospital care. In less than 24 hours, the GE team

searched around the world and found eight such units in Hungary, which were shipped immediately to India.

- In May 2021, the GE Foundation announced \$600,000 in COVID-19 Community Response Grants, which will fund the build out of 60 intensive treatment units at a hospital in Bengaluru and 100 oxygen concentrators for hospitals in other regions in India. This commitment builds on a prior \$275,000 COVID-19 Community Response Grant made in late 2020 to support the United

Way India’s “Hungry No More” initiative and other support to communities across India.

- In April 2021, the GE Foundation provided a \$350,000 COVID-19 Community Response Grant to two Brazilian community organizations dedicated to improving quality of life in the favelas. The grant supports the Emergency Hunger Relief initiative, which is providing food assistance to families in Brazil impacted by the pandemic.



## OUR INNOVATION

# GE is building technology for a sustainable future

We rise to the challenge of building a world that works.

GE is proud of its more than 125 year history of leading innovation to deliver solutions that help build a better world and a more sustainable future.

From Thomas Alva Edison's first incandescent lightbulb to the world's most powerful offshore wind turbine built today, GE has pioneered technologies spurring world-transforming changes and improving the lives of billions.

Our commitment to innovation is our North Star in approaching sustainability. We are builders who are driven to create things that make our world healthier, cleaner, and more connected. Our reach into 170 countries uniquely positions us to respond to the global scope of sustainability challenges, enabling us to tailor solutions to local infrastructure and socio-economic conditions.

And we are a company with greater focus than ever before—embracing our future in energy, health, and flight—to build the world of tomorrow.

# Our focus is on innovating solutions to three of the world's most pressing challenges

## Energy transition

Climate change is an urgent global priority. At the same time, energy demand is increasing and roughly one billion people are without access to reliable power. As a company helping to generate one-third of the world's electricity, GE plays a central role in meeting this demand while lowering carbon intensity of energy and making energy more reliable. In 2020, we [set a new goal](#) to achieve carbon neutrality within our own operations by 2030 after surpassing our 2020 emissions reductions targets ahead of schedule, and we announced our intention to [exit the new-build coal power market](#). We also are announcing our ambition to be carbon neutral by 2050, including our sold products, as described on page 69.

GE's innovative technology and expertise help our customers meet their decarbonization goals. From the Haliade™-X, to our approximately 50,000 onshore and offshore wind turbines installed, to our HA gas turbine fleet, to digital controls and hardware solutions that help utilities modernize and bring more renewables onto the grid, to our hydro and storage offering, to supporting the existing nuclear fleet and developing new advanced nuclear technologies—we can enable material emissions reductions today while accelerating technological innovation for higher renewable penetration and lower-carbon power generation.



GE Power



GE Renewable Energy

**SHARED MISSION** Our GE Power and GE Renewable Energy businesses have a shared mission of making power sources more sustainable, reliable, and affordable anywhere in the world.

**UNITS** Gas Power, Power Conversion, Steam Power, GE Hitachi Nuclear Energy

**INSTALLED BASE** 7,000+ gas turbines, representing 800+ GW of gas power; 215 nuclear steam turbines worldwide, representing 200GW carbon-free power generation, over 1,200 hybrid and electric ship power systems

**EMPLOYEES** ~34,000

**2020 REVENUE** \$17,589MM

**2020 R&D\*** \$330MM

**PRODUCT SPOTLIGHTS** World-record setting HA 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 generating 2 percent more power output with 99.96 percent reliability; developing advanced nuclear technology like BWXR-300 and Natrium™\*\* will provide carbon-free electricity during operation, dependable base load, and flexible capacity.

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

**INSTALLED BASE** ~50,000 wind turbines & 7,500+ hydro units equipped with GE technology, representing 400+ GW of renewable energy

**EMPLOYEES** ~40,000

**2020 REVENUE** \$15,666MM

**2020 R&D\*\*** \$485MM

**PRODUCT SPOTLIGHT** The world's largest offshore wind farm in the North Sea will be powered by GE's Haliade™-X turbine, the world's most powerful offshore wind turbine built today; GE's largest onshore wind turbine, Cypress, offers revolutionary two-piece wind blades, enabling increased output from hard-to-reach sites; GE's state-of-the-art high voltage direct current (HVDC) transmission system will supply one of the world's largest offshore wind farm projects off the coast of England.

\* 2020 GE and Partner Funded R&D.

\*\* Jointly developed with TerraPower.

## Precision health

Doctors, nurses, and clinicians are often under-resourced and over-burdened and healthcare has never been under more pressure, from rising costs to aging populations. COVID-19 has brought this front and center. Solving the industry's productivity challenges by improving access, enabling more precise patient diagnosis and treatment, shortening hospital stays and wait times, and lowering overall costs is more pressing now than ever.

Creating a more sustainable future for healthcare means getting earlier, better, and faster diagnosis and treatment to more people in need using fewer resources. Delivering on the future of healthcare is about enabling precision health—integrated, efficient, and highly personalized care. Making this a reality requires merging clinical medicine and data science by applying advanced analytics and artificial intelligence across every possible point of the patient journey. Healthcare's Edison™ platform is the foundation of our digital capabilities and helps providers use data in new and significant ways, such as applying deep learning to *make MRI scans both clearer and faster*. Today and tomorrow, Healthcare is focused on building an intelligence-based healthcare system and a healthier and more sustainable world.



GE Healthcare

**MISSION** Creating a healthier world by enabling broad and diverse access to precision health that is integrated, efficient, and highly personalized

**UNITS** Healthcare Systems including Imaging, Ultrasound, Life Care Solutions (anesthesia, respiratory, and monitoring), and Digital; Pharmaceutical Diagnostics

**INSTALLED BASE** 4M+ healthcare installations

**EMPLOYEES** ~47,000

**2020 REVENUE** \$18,009MM

**2020 R&D\*\*** \$872MM

**PRODUCT SPOTLIGHTS** Edison™ intelligence applications are designed to enable better patient care and increases access to care, and with Edison Marketplace, hospitals can test-drive AI-powered applications; Vscan Air™, handheld ultrasound that improves healthcare access, joins the Vscan Family technologies with 30,000 units in more than 100 countries.

## Future of flight

The future of flight will be defined by how the aviation industry innovates to lower emissions and improves fuel efficiency, a trend accelerated by COVID-19's impact on the airline industry.

Advances in engine architectures, aerodynamics, and materials developed by GE and Safran Aircraft Engines through CFM International<sup>1</sup> have resulted in today's aircraft engines consuming 40 percent less fuel—and emitting 40 percent less CO<sub>2</sub>—than engines manufactured in the 1970s and 1980s. But, we cannot be satisfied with the pace of progress from the past.

We are currently developing the next suite of engine technologies—including open fan architectures, hybrid-electric and electric propulsion concepts, and advanced thermal management concepts—that offer the potential to achieve at least a 20 percent additional improvement in fuel efficiency compared to today's state of the art single-aisle aircraft engines. GE Aviation is also supporting industry initiatives to approve and adopt 100 percent Sustainable Aviation Fuel (SAF) and investigating hydrogen as the zero-carbon fuel of the future.



GE Aviation

**MISSION** A driving force for flight, connecting the world, and making air transport increasingly sustainable with smarter, more efficient technologies

**UNITS** Commercial, Military, Systems, and Other

**INSTALLED BASE** ~37,700 commercial aircraft engines and ~26,500 military aircraft engines

**EMPLOYEES** ~40,000

**2020 REVENUE** \$22,042MM

**2020 R&D\*\*** \$1,797MM

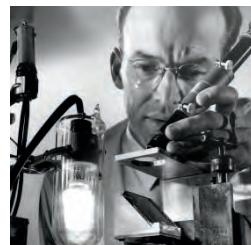
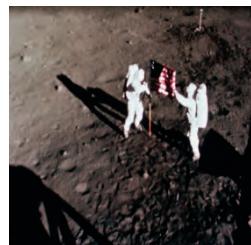
**PRODUCT SPOTLIGHTS** The world's largest and the most powerful aircraft engine, the GE9X, is also the most efficient engine we have ever built on a per-pounds-thrust basis. The culmination of a complete renewal of our commercial engine product line, GE9X is designed to deliver up to 10 percent greater fuel efficiency than its predecessor, with emissions of nitrogen oxides (NO<sub>x</sub>) 55 percent below current regulatory requirements.

<sup>1</sup> CFM International is a 50-50 joint company between GE and Safran Aircraft Engines and produces LEAP and CFM56 engines.

## INNOVATION TIMELINE

# Tackling the world's challenges for more than 125 years

## Innovating technologies and redefining what's possible



1992

**MARS OBSERVER**  
GE builds the Mars Observer for NASA, which will study Martian geology and climate while mapping the planet's surface.

1983

**MRI**  
GE scientists develop the Signa Magnetic Resonance Imaging System, which produces images of "soft" tissues difficult to image by X-ray methods.

1969

**TECHNOLOGIES FOR FIRST MOON LANDING**  
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.

1962

**WORLD'S FIRST LED**  
Building on Hall's solid state laser, Nick Holonyak Jr. demonstrates the world's first light emitting diode (LED) at GE Research Niskayuna. LEDs enable solid state lighting, which uses 85 percent less electricity than conventional lighting.

1957

**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.

## Building a sustainable tomorrow



1995

**GE90 AIRCRAFT ENGINE**  
GE introduces the GE90, the first jet engine to include components made of lightweight carbon fiber composites. The GE90 turbofan substantially reduces engine weight and enables higher standards for fuel burn and emissions.

2002

**ENTERS WIND POWER BUSINESS**  
GE continues its focus on sustainable energy, entering the wind power business.

2009

**VSCAN**  
Vscan, a handheld, pocket-sized ultrasound technology, helps doctors deliver expanded care to more people, including in rural regions.

2014

**DIGITAL GRID**  
GE launches Advanced Distribution Management Solutions (ADMS), providing electric utilities with reliable and resilient distribution grid while enabling more renewable energy.

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.

### ***g<sup>3</sup> INSULATING & SWITCHING GAS***

An environmentally preferable alternative to sulfur hexafluoride (SF<sub>6</sub>) used in high voltage grid equipment, g<sup>3</sup> provides a 99 percent reduction in global warming potential.



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.



1879

**FIRST COMMERCIALLY PRACTICAL INCANDESCENT LAMP**

Edison invents the first commercially practical incandescent lamp.



1896

**X-RAY MACHINE**

A rich tradition of GE breakthroughs in medical imaging begins with the demonstration of stereoscopic Roentgen pictures.



1910

**FIRST ELECTRIC RANGE**

GE improves life in the kitchen with the first electric range.



2016

**CLINICAL COMMAND CENTER**

GE launches the first 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 4,000 cars off the road.

**CFM LEAP ENGINE**

The CFM LEAP\* engine application for single-aisle aircraft entered service in 2016 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 percent more fuel efficient than its predecessor. It is also quieter and produces fewer emissions.

**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 MWe small modular reactor.

**OFFSHORE WIND TURBINE**

The first Haliade™-X wind turbine prototype is installed in Port of Rotterdam. Haliade™-X is the world's most powerful offshore wind turbine built today.

**GE9X AIRCRAFT ENGINE**

Certified by the U.S. Federal Aviation Administration, the GE9X sets a new standard for engine performance and efficiency thanks to GE's most advanced technologies.

**Enabling a better quality of life**



1927

**FIRST HOME TELEVISION RECEPTION**

The first home television reception takes place in Schenectady, NY with a signal from GE's radio broadcast station.

\* 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.

# LEADING THE ENERGY TRANSITION

## Sustainability, reliability, and affordability

### Power and Renewable Energy

As the leaders of GE's diverse energy businesses, we are proud to deliver innovative technology and climate change solutions across the energy ecosystem. With one-third of the world's electricity generated using GE equipment, we take this responsibility seriously and with urgency. We are committed to a decade of action, continuing the substantial impact we are making in reducing emissions today, while accelerating the path to an even lower-carbon world in the future.

Addressing the energy transition means solving one of the world's most serious challenges: ensuring we can deliver sustainable, reliable, and affordable energy to all people globally while quickly reducing the impacts of our sector on the planet. At the end of the day, energy is about improving quality of life—making sure people have access to healthcare, children can get good educations, and economic opportunities are available for everyone. GE Renewable Energy and GE Power offer technology that complement each other to help ensure we succeed in these goals.

There is no one solution to this global challenge. To succeed, we are working across all elements of the energy ecosystem—renewables (wind and hydropower), gas, nuclear, and grid—to help solve these issues.

Together, we are reducing greenhouse gas emissions while bringing reliable power to more people globally. We're proud of our leadership position in the renewable energy sector, including offshore and onshore wind. And our gas turbines, the most efficient in the world, provide the critical foundation for an energy ecosystem to succeed in growing renewable energy while driving further decarbonization.

Together, we are enabling stronger energy resilience. Some 90 percent of power transmission utilities worldwide have been equipped with our technology. And, more than 40 percent of Transmission and 30 percent of Distribution utilities globally are served by our Digital Grid Software business. We're focused on modernizing the electricity grid with physical and digital solutions to ensure everyone has access to reliable energy while integrating much more renewable content and protecting against growing risks from extreme weather events and cyber threats. We are combining wind and solar along with storage (batteries or pumped hydro) to provide baseload renewable solutions.

Together, we are innovating breakthrough technologies to drive deeper decarbonization of the energy sector in the future, including advanced nuclear, hydrogen, carbon capture, superconductor generators with no rare earth elements, grid switchgears which reduce by 99 percent greenhouse gas emissions, and direct air capture. And, our progress in the power sector will enable further emissions reductions of other sectors through the electrification of transportation, heat, and industry.

Importantly, we believe all people globally should have access to energy and technology. We're proud of our efforts to power some of the most rural, hard to reach places in the world to ensure access to healthcare, education, and a better quality of life, while building infrastructure for a better environment and more sustainable future.

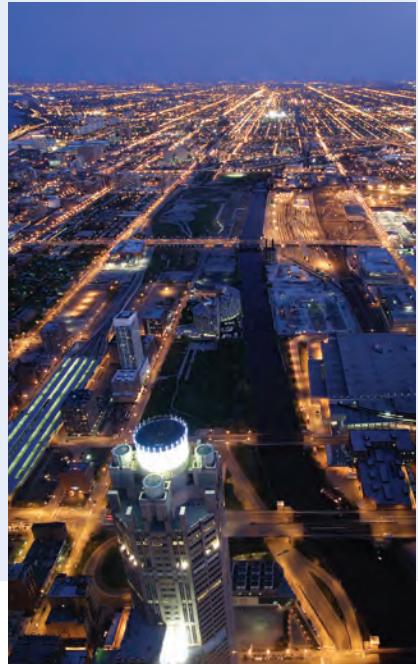
For more than 125 years, GE has innovated technology to solve the world's biggest challenges. We are meeting this challenge together and driving towards a cleaner energy future.



**JÉRÔME PÉCRESSE**  
Senior Vice President, GE and  
CEO, GE Renewable Energy



**SCOTT STRAZIK**  
CEO, GE Power



### Our solutions

GE is uniquely positioned to innovate the technology to decarbonize the energy sector and promote reliable and accessible electricity. We strongly support the Paris Agreement commitments and other ambitious targets to reduce energy sector emissions. In 2020, we took strong actions implementing these commitments, including announcing a pledge to be carbon neutral in our own operations by 2030 (Scope 1 and Scope 2 emissions), our planned exit from the new-build coal business, and a holistic strategy to utilize renewable energy and efficient natural gas technology to decarbonize energy sector emissions. We also are announcing our ambition for GE to be a carbon neutral company by 2050 including emissions from our sold products. See pages 66-69 for more information on our internal climate change goals, and the steps we are taking to meet them.

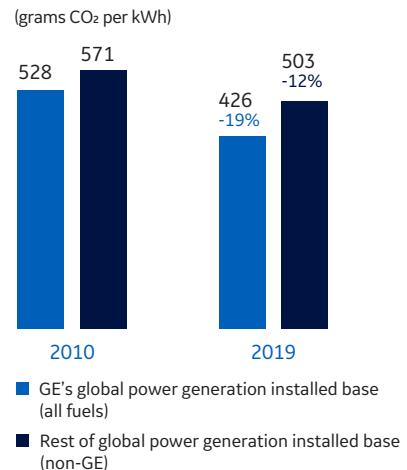
As a company that leads the full life cycle of power sector technology, we see the pathway toward deeper decarbonization of the energy sector.

- We begin with growing renewable energy as rapidly as feasible, by continuing to bring down the cost of onshore and offshore wind energy, and leveraging our offerings in battery storage and hydropower.
- 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.

- We support the existing global nuclear fleet with innovative digital solutions and technology upgrades to increase carbon-free output, while reducing costs.
- We modernize the grid to increase resiliency from the growing threats of more severe weather and cyber risks, and to integrate more variable generation from renewable and increased electricity demand.
- We invest now to innovate breakthrough technologies such as advanced nuclear to further reduce emissions, green hydrogen production leveraging our wind and controls expertise, hydrogen utilization in our gas turbines, and carbon capture and sequestration to decarbonize gas turbines.

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.

#### **During the last decade, the carbon intensity of GE's installed power generation base fell by almost 20%**



This calculation is based on the capacity factor of the installed base and the reduction is largely a result of the transition to more efficient gas power and renewable energy installations.



LM Wind Power, a GE Renewable Energy business, Grand Forks, North Dakota, U.S.A.

*GE sees the path toward rapidly reducing emissions while strengthening the grid. These are mutually achievable goals.*

#### **Rapidly reduce emissions**

Drive energy sector emissions down as quickly as possible

Accelerate renewables to the fullest, fastest extent

Utilize gas with methane controls as a force multiplier for renewables

Innovate hydrogen and carbon capture to decarbonize gas

Develop small modular nuclear reactors and other breakthrough carbon-free technologies

#### **Increase grid resilience**

Decarbonizing energy and increasing grid resilience are mutually achievable through physical and digital solutions

**Enable more renewable deployment**

**Increase resilience from growing threats**

**Provide jobs, economic opportunities in near term**

## Our global impact on the energy transition

GE believes that access to reliable, affordable, and sustainable energy is essential for all people globally. As the demand for energy grows, 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 GE's power generation portfolio has decreased. We are also actively working with countries to help them achieve their climate goals, which we can 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.



Wind farm, British Columbia, Canada



### BRAZIL

Brazil's Federal Government has committed to reducing its greenhouse gas emissions 43 percent by 2030 compared to 2005 levels. GE recently announced an agreement to provide our Cypress platform, our largest onshore turbines, for the Ventos da Bahia wind farm, and GE is also providing Cypress turbines for an expansion of the Serra da Babilonia wind power complex in Bahia. The Cypress units will be produced at GE's facility in Camaçari and the blades will be produced by LM Wind Power, a GE Renewable Energy business unit located in the Port of Suape (PE).



### FRANCE

France is home to the headquarters of GE Renewable Energy. At our Saint-Nazaire manufacturing plant, we assemble the offshore wind nacelles that will power the very first offshore wind farm in France. In Cherbourg, LM Wind Power recently announced plans to hire and train 300 more employees to support increased manufacturing of blades for GE's Haliade™-X offshore wind turbine. France is also home to GE's Arabelle, the most powerful nuclear steam turbine in operation, which is manufactured at our factory in Belfort.



### INDONESIA

GE products generate up to 26 percent of Indonesia's power with an installed base of 130+ gas turbines. Indonesia's 780 MW Tambak Lorok combined cycle power plant is powered by GE's 9HA.02 gas turbines, which have the capacity to burn up to 50 percent hydrogen and are engineered to be extremely efficient and flexible to help lower emissions. GE is also supporting government efforts to accelerate renewable energy development.



### KENYA

GE Renewable Energy and GE Energy Financial Services collaborated with Kipeto Energy Plc to provide turbines and advisory support for the flagship Kipeto Energy Plc 100 MW wind power project in Kajiado, Kenya. The project, which started generating power this year, will produce enough clean electricity to power the equivalent of approximately 40,000 homes, as part of Kenya's Vision 2030.



### MEXICO

Within Mexico, we have over 35,000 MW of installed capacity across our businesses, which include nuclear, conventional power, and wind energy. Our technology represents about one-third of Mexico's electricity generation capacity. Mexico has an incredible potential for renewable energy. The country is blessed with solar, wind, and hydro resources. In the wind sector, the company plays an ever-growing role and in the next few months, we will have five projects in operation in the country totaling 450 MW.



### UNITED ARAB EMIRATES

GE supports the goals of the UAE Energy Strategy 2050. The UAE's first two GE HA gas turbines were delivered to Hamriyah Independent Power Plant in March 2021. The 1.8 GW project, which was supported by GE EFS is expected to be the most efficient power plant in the Middle East's utilities sector when completed, helping to reduce the carbon footprint of power generation. GE also supplied solar inverters to the Mohammed bin Rashid Solar Park, the largest single-site solar energy project in the world.

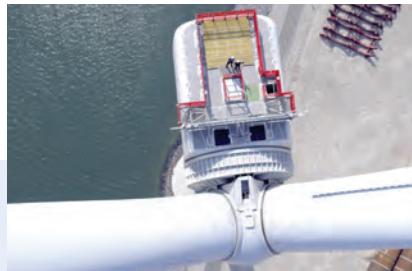
## Our solutions in action

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

- GE Renewable Energy harnesses the earth's most abundant resources—the strength of the wind, the heat of the sun, and the force of water; delivering electrons to power the world's biggest economies and the most remote

communities. With an innovative spirit and an entrepreneurial mindset, we engineer energy products, grid solutions, and digital services that create industry-leading value for our customers around the world.

- GE Power's gas, steam, nuclear, and power conversion units all work to create products that provide access to sustainable, reliable, and affordable power.



### HALIADE™-X OFFSHORE WIND TURBINES

2020 was a banner year for our Haliade™-X wind turbine, the most powerful offshore wind turbine built. In September 2020, we signed the first contract for the Haliade™-X, agreeing to supply 190 turbines to the Dogger Bank wind project off the coast of England in the North Sea. Scheduled for completion in 2026, the project is expected to be the world's largest offshore wind farm. In November 2020, the Haliade™-X received its type certification, signifying that it will operate safely, reliably, and according to design specifications and giving GE's customers the ability to obtain financing when purchasing the turbine. We designed the Haliade™-X to generate 12 MW but found through testing a prototype in the Netherlands that it could outperform its original goals and reach 13 MW. Finally, in December 2020, we announced that the Haliade™-X would be used in the 800-MW Vineyard Wind 1 project, which is set to become the first utility-scale offshore wind project in the U.S. when it starts supplying clean energy to Massachusetts homes and businesses in 2023. Five of our Haliade™ 150-6MW turbines are already producing electricity off the coast of Block Island, Rhode Island, at what is the first offshore farm in the United States. Haliade™-X machines have also been selected for a large wind farm off the coast of New Jersey and Maryland that is being planned by the Danish renewable energy company Ørsted.

### MALAYSIA BECOMES FIRST COUNTRY TO OPERATE GE 9HA.02 TURBINE

Malaysia, which is targeting a 45 percent reduction in CO<sub>2</sub> emissions by 2030, became the first country to begin using a pair of GE's 9HA.02 turbines to generate electricity. The growing country of 33 million consists of several large, hilly islands and a peninsula scarce of open land suitable for building large wind or solar farms. Southern Power Generation (SPG), a large Malaysian utility, turned to GE Gas Power and its advanced turbines for lower-carbon electricity. The turbines come from a new generation of GE machines that had already set a world power plant efficiency record. They are also equipped with a combustion system that allows them to burn up to 50 percent by volume of hydrogen when blended with natural gas, allowing SPG to have the option to utilize hydrogen or other lower or no-carbon fuels at some point in the future. The new 1,440-MW plant using the turbines will be in Pasir Gudang, and will produce the equivalent power needed by 3 million Malaysian homes.

### FIRST PURPOSE BUILT HYDROGEN-BURNING POWER-PLANT IN THE U.S.

By fall 2021 Hannibal, Ohio will have a massive new gas turbine built by GE and running on a blend of natural gas and hydrogen. The turbine will power a 485-MW power plant with enough capacity to light up the equivalent of 400,000 U.S. homes and is on track to be the first in the U.S. to use a large-scale gas turbine fired by a blend of hydrogen and gas, another milestone in the power industry's journey to shrink its carbon footprint. More than 75 GE F- and E-class and Aeroderivative gas turbines have already amassed over 6 million operating hours running on hydrogen or hydrogen-like fuels, mostly waste products from steel mills and smelters.

### ONSHORE WIND IN VIETNAM

In March 2021, GE Renewable Energy was awarded a contract by the Vietnam Joint-Stock Construction Electricity Corporation to supply a total of eight of GE's 3.8-137 wind turbines to support construction of the Thuan Nhien Phong wind farm in Binh Thuan province in the south-central coastal region of Vietnam. The second such GE wind farm in Vietnam, the 30-MW wind farm will power the equivalent of 45,000 households. GE is a long-term partner in supporting Vietnam's energy transition by bringing its innovative technology to support the country in its efforts to power households with sustainable energy. *GE Vietnam* has more than 1,600 employees in Vietnam and is the only wind OEM with a manufacturing footprint in the country.

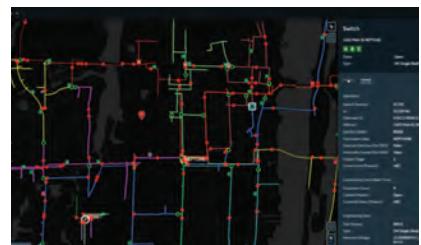
## GE DIGITAL: MODERNIZING THE GRID WITH DIGITAL

We are accelerating our efforts to modernize the grid through the work of GE Digital, a leading industrial software company. GE Digital Grid Software serves more than 40 percent of Transmission and 30 percent of Distribution utilities globally. As such, GE Digital is enabling the energy transition through digital improvements to the grid.

The electric grid is experiencing significant changes due to increasing renewables penetration and demands for resilience in light of weather events and other disruptions. For the world's largest utilities and energy producers, the pressures of the energy transition are accelerating their need to transform their operations, improve network efficiency, and reduce costs, while never letting the lights go out.

We are partnering with our customers to change the global trajectory of climate change by enabling reductions in emissions and accelerating the use of digital technologies.

GE Digital's Grid software solutions leverage data to move electricity more efficiently and reliably. Our solutions provide stable, renewable power to customers while reducing carbon and costs through visibility to real-time data on energy production and consumption in the grid. Our broad and deep set of software solutions enables grid operators to see further into the system and allows them the flexibility to better manage the intermittency of renewables—enabling wind and solar to be deployed rapidly.



*Network Digital Twins can help operators create virtual models to better operate, analyze, and optimize how the grid responds to the impact of increasingly extreme weather, aging infrastructure, and the growing use of renewables on the grid.*



### MANAGING RENEWABLE'S VARIABILITY AND INTERMITTENCY IN THE NETHERLANDS

As more renewables come online around the world, electric utilities need to ensure safe and efficient delivery of electricity. Stedin, a leading distribution systems operator in the Netherlands, is using GE Digital's Advanced Distribution Management Solutions (ADMS) software to forecast and better manage the variability and intermittency of renewable energy generation.

### ADVANCED DISTRIBUTION MANAGEMENT SOLUTIONS (ADMS) AT WORK IN ALABAMA

Alabama Power Company has integrated GE Digital model-based Fault Location, Isolation & Service Restoration (FLISR) and Fault Isolation and Service Restoration (FISR) applications into their system and control center to improve service to their more than 1.4 million customers. FLISR successfully solved issues in over 700 instances, avoiding more than 7.5 million customer minutes of interruption. The self-healing FISR application returned power to 50 percent of customers in under two minutes, saving approximately \$14.5 million in projected interruptions costs.

*Ashley Meux and Robert Wu, GE Digital, Chicago, U.S.A.*

### MAKING INDIA'S GRID MORE RESILIENT

Besides having one of the largest electricity grids, India also has the most residents in the world without reliable access to electricity—some 240 million people, according to the World Bank. Crippling power outages have plagued India for years, including one in 2012 that originated in northern India and spread across 2,000 miles—an area the size of the United Kingdom and Denmark put together. GE assembled an international team to design software that could analyze the country's enormous electricity demands in real time. The result was e-terrphasorpoint, an AI-powered system that Power Grid Corporation of India installed at 34 of its control centers to create the world's largest wide-area monitoring system (WAMS). The combined suite of hardware and software is designed to detect dangerous power fluctuations and should help put an end to crippling outages. The installation could set a template for other nations to follow.

We're responding to the energy transition with continued innovation and incorporating **Industrial AI** and **machine learning (ML)** to deliver predictive and prescriptive insights. Our award-winning Grid Analytics portfolio is designed to forecast system inertia, predict the impact of weather events, and reduce operations and maintenance outages. We are also using **Digital Twins** to model entire networks (digital network twin) and help power utilities reduce costs.

For example, **Storm Readiness** utilizes historical weather, outage, cost, and facility damage data, combined with geospatial (GIS) data and high-resolution weather forecasts to deliver effective storm planning that reduces crew costs while improving safety and customer satisfaction.

Today, utilities spend millions of dollars per year on vegetation management and asset inspection programs to reduce outages, increase compliance, improve safety, and

*Our SmartSignal and Asset Performance Management (APM) solutions create Digital Twins based on operational / fleet data of components (pumps or compressors), critical assets (turbines), or systems of assets (an entire power station).*

reduce the probability of catastrophic events such as wildfires or major regional outages. With **Visual Intelligence**, our customers can optimize these systems and processes and provide a holistic picture of the grid to help reduce the cost and complexity associated with traditional inspection approaches.

## Innovating breakthrough technologies

The achievement of deep decarbonization goals over the coming decades is likely to depend in part on technologies which are still be being developed and have yet to

be deployed or widely adopted. Examples include: grid-scale batteries or other storage solutions, advanced nuclear power, hydrogen-based power generation, carbon capture and sequestration, direct air capture, and superconducting magnets to replace rare earth materials used in wind turbines. GE's history of innovation has prepared us to support the global energy transition in ways that are as equitable as they are efficient. From superconducting magnets in wind turbines to grid digitalization, we are already innovating the technologies of tomorrow.



## GE'S GRID SOLUTIONS

GE's Grid Solutions is focused on helping its customers accelerate the energy transition by providing them with the hardware, digital solutions, and services needed to deliver affordable, sustainable, and reliable electricity.

### HVDC'S ROLE IN CONNECTING RENEWABLE ENERGY TO THE GRID

A specially formed consortium of GE Renewable Energy's Grid Solutions and Sembcorp Marine recently announced the full contract award to supply a state-of-the-art high voltage direct current (HVDC) transmission system for Sofia, one of the world's largest offshore wind farm projects. GE's HVDC offshore converter station will be the most powerful ever built and will be installed 220 kilometers from shore, which will also make it the most remote. Once operational, Sofia, located off the coast of the North East of England, will be able to generate enough wind energy to meet the electricity needs of almost 1.2 million average U.K. homes.

### GE'S SVC TECHNOLOGY SOLVES COMPLEX GRID CHALLENGES FOR CUSTOMERS AROUND THE GLOBE

Today, transmission systems are expected to carry bulk power in ways they were never originally designed to accommodate.

Static Var Compensator (SVC) solutions are highly reliable, easy to integrate into both existing and new infrastructures, and reduce the costs of building new network extensions. GE manages the broadest SVC portfolio in the industry. The SVC solution at Santa Barbara D'Oeste, Brazil, is one of the largest ever delivered by GE. Recently, Saudi Electricity Company put in service GE's Main Reactor Design patented solution to provide fast voltage support and stabilize power across its regional network.

### FROM ANALOG TO DIGITAL TO DRAMATICALLY SHRINK A SUBSTATION'S PHYSICAL COMMUNICATION NETWORK

Substations are the grid's unsung heroes that toil in obscurity to keep our homes lit and phones charged. Avon, a rural area around 80 kilometers south of the Australian city of Sydney, is the country's first-ever digitized substation, which came online in 2018. The substations on

the New South Wales grid not only supply electricity to the homes and businesses of Sydney—the country's largest city—but they also manage the power flowing into the grid from the state's wind turbines, solar panels, and hydroelectric dams.

### TECHNOLOGY COULD WIDELY REPLACE THE MINERAL OIL OF FOSSIL ORIGIN USED IN POWER TRANSFORMERS

To support the environmental sustainability of major utility Engie Brazil's Campo Largo complex in Brazil, GE delivered two 200.000 kVA and 230 kV power transformers that use vegetable oil as an insulating medium and refrigerant in place of mineral oil. As one of the largest equipment of its kind in South America, this GE transformer technology provides for more sustainable operation through its use of biodegradable vegetable oil.

## DECARBONIZING GAS TURBINES THROUGH HYDROGEN AND CARBON CAPTURE AND SEQUESTRATION

GE 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 is investing in both decarbonization pathways to ensure we have multiple solutions for our customers and the world to fulfill carbon reduction commitments.

There is significant and growing interest in hydrogen as a substitute for fossil fuels, driven by decarbonization goals. 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 Renewable Energy business has 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.

Our HA turbines can already work with up to 50 percent hydrogen/natural gas mix. We have more than 70 gas turbines worldwide using hydrogen and associated fuels for power generation; they have run about 6 million operating hours in aggregate. Work is underway to extend the capability to 100 percent hydrogen in these machines

by the end of the decade, and we are already working with our customers to fulfill that vision. GE will supply the first purpose-built hydrogen-burning power plant at Ohio's Long Ridge Energy Terminal with our 7HA.02 turbine. The plant is expected to run on 100 percent hydrogen by 2030.

In addition, GE is in close collaboration with multiple strategic partners on the development and execution of a gas turbine carbon capture and sequestration system. GE is currently working on multiple studies to optimize the integration of these existing technologies to ensure the lowest cost, greatest reliability and flexibility, and smallest footprint to deliver this critical technology to the market.



## SUPERCONDUCTING GENERATORS AIM TO UNLOCK MORE OFFSHORE WIND POWER AT LOWER COST

Backed by funding from the U.S. Department of Energy (DOE), GE researchers are incorporating superconducting magnets into offshore wind turbine generators that convert strong sea winds into electric power, lowering costs, simplifying the turbine-manufacturing supply chain, and supporting DOE's goal of nearly tripling wind power's role in U.S. energy production—to 20 percent—over the next decade. The use of superconducting magnets also would eliminate the need for rare earth materials, essential ingredients in the permanent magnets currently being used in offshore wind turbines.

## BWRX-300 CAN HELP COUNTRIES MEET THEIR CLIMATE GOALS

GE is investing in advanced nuclear to provide carbon-free power generation and support countries' emission reduction targets. As the tenth generation of the Boiling Water Reactor (BWR), the BWRX-300 is a 300 MWe water-cooled, natural circulation small modular reactor (SMR) that can replace coal-fired generation, and is projected to require significantly less capital cost per MW when compared to other SMR designs. In addition to supplying power to the grid, the BWRX-300 has the capability to supply electricity and/or steam for process heat applications, district heating, and hydrogen production. Artist rendering pictured above.

## TECHNOLOGY THAT IMPROVES GRID RESILIENCE WITHOUT CO<sub>2</sub> EMISSIONS

GE Power Conversion's Rotating Stabiliser technology is used to manage grid stability but without the CO<sub>2</sub> emissions, enabling more renewable generation to operate.

## ADVANCING PRECISION HEALTH

# Integrated, efficient, and highly personalized care

## Healthcare

When COVID-19 hit, healthcare companies needed to act fast to supply clinicians on the front lines with critical equipment to diagnose and treat patients.

Our first priority was keeping our employees safe and healthy—from our field engineers installing and servicing urgently-needed equipment to our manufacturing workers as we increased production. We dramatically ramped up and localized manufacturing, from teaming up with Ford to produce 50,000 emergency use ventilators to quadrupling our own ventilator production. We also launched an unprecedented global logistics push to ensure we could get medical devices to where they were needed most.

We invested in immediate value-add innovations, like our CT-in-a-Box, to help clinicians in numerous countries assess disease progression and complications in COVID-19 patients. We also saw a major switch to digitization in healthcare systems—some hospitals told us they made more progress in a few months than they'd expected to in the next several years—highlighting the need to build an intelligence-based health system for the future.

The World Health Organization (WHO) estimates that 20 to 40 percent of health systems' resources are wasted, which undermines service delivery. Global health providers understand that by reducing inefficiencies, welfare gains can be achieved. For public health systems, performance management and efficiency are important priorities, crucial to accelerate progress on health outcomes.

Innovations like our Mural virtual care solution and our Edison platform, the foundation of our AI and analytics capabilities, are helping healthcare providers maximize resources and improve patient care while minimizing burnout. Tampa General Hospital in Florida deployed our Command Center technology to reduce the length of a patient's stay by an entire day, adding 30 beds of additional capacity and eliminating \$40 million in cost—all critical benefits in fighting COVID-19 and in building a more sustainable health care system.

Sustainability is core to our mission of delivering precision health, as we work to ensure that patients around the globe can access quality treatment faster. It will require the integration of data sets that have been very fragmented up to now and a move to portable and virtual care, like our virtual ICU or our new Vscan Air pocket-sized ultrasound. And it's why our teams around the globe and in some of the world's toughest markets work tirelessly to support healthcare providers and create a healthier world with more precise and efficient care.



KIERAN P. MURPHY

President & CEO, GE Healthcare



The COVID-19 pandemic demonstrated that healthcare systems are not as sustainable as many thought. Creating a more sustainable future for healthcare means getting earlier, better, and faster diagnosis and treatment to more people in need using fewer resources. Breakthrough technologies can help healthcare providers advance care for a wider range of conditions and diseases—but only if people have access to such care. That's why GE puts clinical medicine, data science, artificial intelligence (AI), and virtual and digital technologies to work in regions across the world. From reducing the radiation dose needed for image clarity, to reducing scan times or bureaucratic tasks that lead to physician burnout like paperwork, charting, and patient data capture, AI has potential to help increase efficiency and make clinicians' daily work more manageable.

*The Senograph Pristina mammography system has reshaped the mammography experience by helping women support breast health across the globe. Designed by women, for women, in collaboration with radiologists, technologists, and patients, the Pristina offers a patient-friendly design enabling a more comfortable mammogram for women and men alike. Together with the SensorySuite patient experience technology, patients can come away from their mammograms with reduced anxiety, dose, and fear.*



## Our solutions

### GETTING HIGH QUALITY CARE TO MORE PEOPLE IN NEED

According to the World Health Organization, about half of the world's population lacks access to essential health services. GE Healthcare's advanced technology allows caregivers to bring advanced diagnostics and treatments to people in remote parts of the world with limited access to hospitals and medical equipment. Many people around the world live miles from the basic equipment that can improve their quality of life—from ultrasounds to x-rays—equipment especially useful in early diagnosis and treatment. For example, about 65 percent of people in India live in rural communities, while most of the healthcare systems are in cities.

GE Healthcare is not only getting more equipment and technology into the hands of more caregivers around the world, but also is advancing the decentralization

of care so that experts can deliver care to patients outside traditional clinical settings or remotely, including in some of the world's most rural and hard to reach areas. Such technology used beyond traditional hospital walls may help mitigate social determinants of health, breakdown disparities, and create better care. GE's Mural virtual care solution, for example, allows one clinician to remotely view numerous ventilated patients in the intensive care unit (ICU) at the same time, helping identify those at risk of deterioration. It integrates data from multiple systems and devices into a single display and can provide a real-time view of patients' status across a department, a hospital, or an entire health system. Likewise, the GE Vscan Air™ is a portable handheld ultrasound that includes intuitive software and is completely wireless. Patient data is secured on the device rather than the cloud, so an internet connection is not needed—something often missing in emergency situations or areas with underserved populations.

### HOW GE IS USING AI TO MAKE HEALTHCARE IMAGING QUICKER AND MORE EFFICIENT

GE Healthcare has done a lot of work at the intersection of healthcare imaging and AI. Using AI effectively allows MRIs, CT scans, X-rays, and ultrasounds to be analyzed quickly and thoroughly by machines, enabling healthcare workers to identify issues and get critical care to patients most in need. For example, AI is being used to catalog the correct configuration of vertebrae and a comprehensive database of spinal anomalies. A radiologist can then run a CT scan through a machine, and the software will alert the physician to any abnormalities. Similarly, GE Healthcare's Critical Care Suite is a collection of algorithms embedded in a mobile X-ray device that can sort through hundreds of images in minutes and call attention to anything that looks suspicious.

Technology can help medical professionals treat more patients more safely and efficiently and has the potential to improve lives. We believe healthier lives lead to a healthier, more sustainable society.



## Our global impact on precision health

The COVID-19 global health pandemic has highlighted the critical role GE Healthcare plays in helping governments and healthcare systems improve accessibility and health outcomes for diverse populations during times of unprecedented transformation. During the COVID-19 pandemic, we've glimpsed a future where hospitals will treat the sickest of the sick, with others cared for in the home environment. With the onset of the pandemic, hospitals rapidly reduced the number of their patients in order to accommodate those with COVID-19, turning to telehealth and other virtual services to maintain care for non-COVID-19 patients. As we look to build an intelligence-based health system, this requires a complete modernization of the current infrastructure to enable virtual hospitals, greater access to care, and ultimately lower costs of care delivery.



### INDIA'S FIRST CT-IN-A-BOX FOR QUICK AND SAFE COVID-19 DIAGNOSIS

In December 2020, the Mumbai Metropolitan Region Development Authority (MMRDA) began using "CT-in-a-Box," a unique "plug-n-play" solution designed and developed by GE Healthcare. A CT scan combines a series of X-ray images taken from different angles around a patient's body and uses computer processing to create cross-sectional images of the bones, blood vessels, and soft tissues inside the body—all very helpful for the diagnosis and management of COVID-19. The product is easy to install and safe to use. Real-time online application support is also provided by Wipro GE Healthcare using Digital Expert, a comprehensive solution utilizing modern digital technology for on-demand application support and training of clinical teams. What's more, the unit's insulated box casing was designed and fabricated for faster decontamination and no physical contact, minimizing secondary infection by ensuring separate entry points for staff and patients.



### NIGERIA OPENS ITS FIRST FULLY-EQUIPPED PRIVATE ONCOLOGY CENTER

In spring 2021, the *Marcelle Ruth Cancer Centre & Specialist Hospital* became the first fully-equipped private oncology center in Nigeria, Africa. GE Healthcare delivered and installed advanced radiology and radio pharmacy equipment that will accelerate diagnostic care for cancer, along with innovations like the award-winning Senographe Pristina 3D, the first patient-assisted compression device in mammography; the advanced LOGIQ F8 ultrasound, the comprehensive radiation therapy solution Discovery RT; and the BRIVO XR575 X-Ray and OEC 785-C Arm, two easy-to-use systems that deliver superior image quality. "We built the Marcelle Ruth Cancer Centre & Specialist Hospital to help address the gap in the treatment and diagnosis of cancer in Nigeria," explained co-founder Dr. Modupe-Odunsi. "Patients who previously would have had to travel abroad to receive world-class treatment are now able to get the critical care they need here at home."



### CONNECTING PATIENTS AND DOCTORS ACROSS BORDERS FOR BETTER HEALTH OUTCOMES

Even before COVID-19 emerged, the Dubai Health Authority *was promoting telemedicine* as a valuable way to improve healthcare by giving patients easier access to the doctors they need, even when not in the same building, city, or country. That's why Al Tadawi Healthcare Group is installing high-end critical care, ultrasound, and imaging equipment exclusively from GE Healthcare and its partner, Abu Dhabi International Medical Services (ADI) at its new hospital in Dubai's Umm Ramool neighborhood. All the equipment selected for the facility is enabled for remote connection to enable telemedicine.



### SOUND ENGINEERING: FROM BIG CITIES TO RAINFORESTS, POCKET-SIZE ULTRASOUND HELPS SAVE LIVES AROUND THE WORLD

Last year, Dr. Yale Tung Chen, an emergency medicine clinician in hard-hit Madrid, Spain, became one of a handful of clinicians around the world testing Vscan Air™, a handheld, wireless ultrasound scanner developed by engineers at GE Healthcare. The device, which GE Healthcare released for sale in the U.S. and Europe in March, beamed images from the ultrasound probe to an app on his smartphone, and this quickly became common practice on his daily rounds. "I've been using it on COVID-19 patients, scanning hearts, lungs, blocked vessels," he says. It fit inside his white coat pocket and allowed him "to quickly perform a complete exam on my patient and make decisions quickly right at the bedside." Anders Wold\*, former president and CEO of global ultrasound at GE Healthcare, envisions the Vscan Air™ "as delivering on the future of healthcare at a time when ultrasound has proven to be an essential tool at the point of care."

\* Wold now serves as a Business Development and Strategy Advisor for GE Healthcare

## MAKING CARE SMARTER AND MORE EFFECTIVE FOR EVERYONE

GE Healthcare technology is also helping medical professionals around the world make sense of the volumes of data they collect, allowing them to make real-time decisions that save time, resources, and lives. For example, GE Healthcare data aggregation software known as “command centers” can now run on smartphones, helping caregivers identify problems before they impact patient care. Medical staff use GE’s so-called “tiles” application to manage patient flow and optimize systems, decreasing average length of patient stay, reducing emergency room diversion, and saving hospitals money. Artificial intelligence algorithms embedded into medical devices like MRI, CT, X-ray, and ultrasound devices can reduce the time needed for image scan, and therefore, in some cases, also the required radiation dose, while simplifying bureaucratic tasks like paperwork, charting, and patient data capture. All these efficiencies mean better care for patients and better quality of work for healthcare providers.



*Allia IGS 7 is a completely redesigned image guided therapy suite focusing on ergonomics, ease-of-use, and workflow efficiency. This system is designed to enhance user experience, improve workflow efficiency, and increase adoption of advanced image guidance in daily practice.*



### BEATING THE ODDS: PRENATAL ULTRASOUND GIVES BABIES WITH HEART DEFECTS A FIGHTING CHANCE

Congenital heart defects—when the fetal heart doesn’t develop properly—are the most common birth defect and the leading cause of infant mortality, particularly in developing nations. India alone has about 240,000 babies born each year with congenital heart defects.

Babies with congenital heart defects are most likely to die during their first 28 to 30 days, making an early diagnosis a key to their survival. Thanks to GE ultrasound technology, physicians can diagnose these conditions before birth and be ready to treat their tiny patients promptly after birth. Over the past decade, the advent of high-definition ultrasound technology to identify heart defects *in utero* has been credited as one of the factors that helped Kerala, India lower its infant mortality rate from 10 infants per 1,000 as of 2017 to just 7 per 1,000 in 2020. Early interventions, including the use of prenatal ultrasound, also reduce hospital stays, reducing patients’ costs, which is especially important for lower-income families.

### STRATEGIC COLLABORATION ANNOUNCED TO ACCELERATE GROWTH OF TRANSFORMATIONAL HEALTHCARE COMPANIES ACROSS THE MIDDLE EAST, NORTH AFRICA, AND SOUTHEAST ASIA

In December 2020, GE Healthcare announced a strategic collaboration with *TVM Capital Healthcare* to support and accelerate the growth of transformational healthcare companies across selected emerging healthcare markets in the ASEAN and MENA regions. Both parties will contribute their complementary expertise and capabilities to promote and support the success of these innovative healthcare companies with ambitious growth plans in both regions. At GE Healthcare, we are focused on helping increase capacity within the health system, improving productivity and driving better outcomes for patients and clinicians around the world. As healthcare in emerging markets continues to grow and more people have access to advanced care, technology plays a critical role in delivering more precise diagnosis, therapy, and monitoring. Public and private investment into health systems will help drive this shift.

# DEVELOPING THE FUTURE OF FLIGHT

## New technology for sustainability and efficiency

### Aviation

As the leading provider of civil and military propulsion, GE Aviation has an inherent responsibility to help the aviation industry decarbonize. Rising to this challenge inspires our employees, serves our customers, and indeed, is good for our business.

We are organizing our efforts around three pillars: accelerating bold technology developments in future engines to reduce emissions; driving efficiencies across our own facilities; and engaging across the aviation industry with governments to advocate for advances like alternative fuels that will enable the installed base to operate more sustainably, a critical element of the commercial aviation industry's carbon commitments.

Our newest engines are designed to offer better fuel efficiency and lower CO<sub>2</sub> emissions than their predecessors. From the GE9X, which is the culmination of our decade-long commercial product renewal, to the 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.

Beyond engines, GE Aviation'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 Dowty Propellers, which is developing more efficient and quieter integrated propeller systems.

However, we are not stopping there. We are actively investing in developing technologies for the next generation of engines, defining bold new architectures, and embracing the most advanced materials to enable us to lead the decarbonization effort. We plan to demonstrate hybrid-electric capabilities by the middle of this decade, and we have a clearly defined roadmap to deliver at least another 20 percent improvement in efficiency and CO<sub>2</sub> emissions for the next generation engine for future single-aisle airliners, the workhorse of the commercial airline industry.

Equally important is the work we have done to advance the use of Sustainable Aviation Fuel (SAF), which offers up to 80 percent less lifecycle carbon emissions than traditional jet fuel. Our first tests with biofuels were in 2007; we successfully operated GE90 engines on 100 percent SAF in 2018; and all our engines are capable of using approved SAF blends without modification. GE Aviation is leading industry efforts to define standards for 100 percent SAF, and we are advocating for constructive government engagement to help make SAF more widely available and affordable. Hydrogen also holds promise as an alternative aviation fuel, and our research efforts there draw from GE Research and GE Power, where we have accumulated millions of hours of experience using blended hydrogen fuels with both industrial and aeroderivative engines.

Finally, we are empowering our 40,000 employees and embracing sustainability as a core value across our global facilities. We are using lean practices to identify and eliminate environmental waste, thereby reducing cost and our carbon footprint, consistent with GE's commitment to achieve carbon neutrality by 2030.

Throughout our 100-year history, GE Aviation has distinguished itself through a relentless focus on powering the future of flight. Sustainability is the challenge of our time and we embrace our role as a leading driver in decarbonizing the aviation industry, including supporting initiatives in our industry to achieve net zero carbon emissions by 2050. This is our noble cause.

### Our solutions

The future of flight will continue to be defined by how the aviation industry innovates to improve sustainability and efficiency. Continual advances in engine architectures, aerodynamics, and materials developed by GE and Safran Aircraft Engines through CFM International\* have resulted in today's aircraft engines consuming 40 percent less fuel—and emitting 40 percent less CO<sub>2</sub>—than engines manufactured in the 1970s and 1980s. Examples of the continuing progress in this endeavor include recently introduced engine designs yielding significant reductions in fuel burn and CO<sub>2</sub> emissions over the engines they replaced due to:

- **Higher bypass ratios (BPR)** that dramatically improve propulsive efficiency.
- Advancements in aerodynamics yielding **higher overall pressure ratios (OPR)** coupled with **new combustion technologies** to reduce emissions of nitrogen oxides (NOx) and improve thermal efficiency.
- **Materials and manufacturing breakthroughs** including carbon fiber composite fan blades, additive manufacturing, Ceramic Matrix Composites (CMCs), and titanium aluminide (TiAl) turbine blades.



**JOHN SLATTERY**  
President & CEO, GE Aviation

A GEnx-2B engine undergoes testing covered by a turbulence control structure at GE Aviation's Peebles Testing Operations in Ohio.



\* CFM International is a 50-50 joint company between GE and Safran Aircraft Engines and produces LEAP and CFM56 engines.

Not resting on our laurels, we are already developing the next suite of engine technologies—including open fan architectures, hybrid-electric capability, and advanced thermal management concepts—that offer the potential to achieve at least a 20 percent additional improvement in fuel efficiency compared to today's state of the art single-aisle aircraft engines. GE Aviation is also supporting industry initiatives to approve and adopt 100 percent Sustainable Aviation Fuel (SAF) and investigating hydrogen as the zero-carbon fuel of the future.

## A LEGACY OF INNOVATION FOR IMPROVED FUEL EFFICIENCY

### SINGLE-AISLE AIRCRAFT



**15% decrease**

In fuel burn from the single-aisle, CFM56-7B to LEAP engine

### TWIN-AISLE AIRCRAFT



**Up to 15% decrease**

In fuel burn from the twin-aisle CF6-80C2 to GEnx engine

### TWIN-AISLE AIRCRAFT



**Up to 10% decrease**

In fuel burn from the large twin-aisle GE90-115B to GE9X engine



### ADVANCED OPEN FAN

GE has continually advanced state-of-the-art open fan systems, and the environmental benefits they can provide by increasing propulsive efficiency. 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 FAA and NASA on sub-scale wind tunnel test campaigns through the CLEEN Program demonstrating better fuel efficiency compared to the CFM56-7B engine and significant margin to noise requirements.
- GE's Italian entity, Avio Aero, contributed to the development and testing of counter rotating open fan architectures under Europe's Clean Sky research program.
- Under the Clean Sky 2 program, Avio Aero supported optimization of open fan architectures through design and integration studies conducted with airframers.

### ADVANCED THERMAL MANAGEMENT

Enabling the **next generation of thermal efficiency** unlocks the potential to increase operating pressures and temperatures yielding improved engine efficiency. New materials and advanced manufacturing processes are key enablers in this area.

GE is a leader in developing and implementing new materials and processes including:

- **Advanced Ceramic Matrix Composites (CMC)** have one-third the weight and additional temperature capability versus the most advanced metal alloys. CMCS enable engines to operate at higher temperatures, helping to improve fuel efficiency.
- **Additive Manufacturing (AM)**, or 3D printing, has revolutionized how GE designs and manufactures engine components. AM parts reduce weight and enable efficient designs that cannot be generated with traditional manufacturing techniques. Learn more about GE Additive below.

### HYBRID-ELECTRIC

Electric technologies will play a role in future propulsion architectures. GE is accelerating technologies to advance the state of the art for hybrid electric and electric propulsion concepts, including power generation, power distribution, energy storage, electric motors, and propulsor technology. GE has successfully demonstrated major advances in key elements of hybrid propulsion systems, including:

- **Power Generation** – Generation of one MW of electric power while operating a modified F110 military engine in altitude conditions up to 15,545 meters (51,000 feet).
- **High Power Devices** – Demonstration of a MW class high power density, high efficiency electrical motor/generator used to convert electrical energy to mechanical power to drive a 3.35 meter (11 foot) diameter propeller on a test stand.
- **High Voltage/High Switching Frequency Devices** – Demonstration of state-of-the-art power conversion peak efficiency and power density in equipment that enables high performance and excellent power quality under variable loads.

## 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 the major societal challenges, such as climate change, digitalization, and decreasing natural resources.

GE Additive, a subsidiary of GE Aviation, 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 Aviation's learnings as an early adopter of additive technology. Over the past five years, GE Additive has become one of the leaders in metal additive technology with a diverse customer base with a particular focus on highly regulated industries and with other GE businesses.

Since the late 1980s, metal additive manufacturing has been mostly used for tooling and concept modeling in automotive, medical, and aerospace industries. But in the 2010s, research in corporate R&D labs and federal agencies

drove breakthrough applications of the technologies, and by 2015 GE Aviation 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 metal 3D printers full of metal powder. The printers' lasers heated up and melted particles together in thin layers, gradually forming structures never before built.

Metal 3D printing is now used in lieu of wasteful "subtractive" machining that chips away at blocks to produce shapes, or "formative" manufacturing, time- and cost-consuming processes that stress parts into particular forms.

The German Fraunhofer Institute further reports in a recent study that metal fabrication of titanium parts using laser powder-bed additive emits approximately 70 percent less carbon dioxide than equivalent production by CNC milling processes.



Additive operator prepares a GE Additive electron beam melting Q10plus system for production.



### GE9X ENGINE

The GE9X, the world's largest jet engine, includes more than 300 metal 3D printed parts including low pressure turbine blades and fuel nozzles. The printed blades are lighter than traditionally manufactured counterparts and contribute towards an up to 10 percent increase in fuel efficiency compared with the GE90 engine.

[Learn more ▶](#)

### GE CATALYST ENGINE

GE's Catalyst is the first clean-sheet turboprop engine for the Business and General Aviation market in more than 50 years. Additive components reduce the Catalyst's weight by 5 percent while contributing a 1 percent improvement in specific fuel consumption (SFC), and up to 20 percent better fuel efficiency than legacy turboprop engines available today.

[Learn more ▶](#)

## Innovations beyond the engine

GE's technology development efforts extend beyond the engine itself.

### SUSTAINABLE AVIATION FUEL (SAF)

GE has been actively involved in assessing and qualifying SAF since 2007 and works closely with SAF producers, regulators, and operators to ensure that SAF can be widely adopted for use in aviation. More than 300,000 commercial flights have been operated using SAF since 2011, according to Air Transport Action Group. We believe widespread use of SAF will be critical to dramatically reducing aviation carbon emissions. Increasing the use of SAF has the potential to dramatically reduce fuel lifecycle carbon emissions up to 80 percent independent of other actions. As highlighted below, GE has performed extensive testing, including the industry's first commercial biofuel demonstration flight in 2008, and the first 100 percent SAF commercial airliner flight in 2018. All GE and GE partnership engines in service today—and in the future—can operate with approved SAF.

#### Examples of GE Testing: SAF & other synthetic fuels

Currently, SAF approved for use in the aviation industry is actually a blend of petroleum-based Jet A fuel and a SAF component with a maximum blend limit of 50 percent. One of GE's fuel experts chairs a new ASTM International task force developing standardized industry specifications supporting adoption of 100 percent SAF for aviation—a significant opportunity to expand the impact of SAF on aviation's carbon reduction efforts. Increasing availability of SAF at a price competitive with jet fuel is a public policy goal for the aviation industry.

#### Hydrogen as an aviation fuel

Hydrogen fuel presents a unique opportunity for the aviation industry to achieve zero carbon emissions flight. The absence of carbon in hydrogen results in combustion byproducts limited to water vapor and nitrogen oxides ( $\text{NO}_x$ ). Elimination of  $\text{CO}_2$  offers significant potential to reduce greenhouse emissions beyond the reductions offered by SAF.

For aviation use, hydrogen will be stored in liquid form ( $\text{LH}_2$ ) which requires storage in cryogenic fuel tanks at or below  $-253^\circ\text{C}$  ( $-487^\circ\text{F}$ ). GE believes that hydrogen-

powered flight is technically feasible and is working to develop technical solutions to address product design and certification hurdles associated with the combustion of a cryogenic fuel.

GE is actively working in close cross-business collaboration with GE Research, GE Renewables, and GE Power to advance research and development supporting the use of  $\text{LH}_2$ .

### EXAMPLES OF GE TESTING: SAF & OTHER SYNTHETIC FUELS



**CF6-80C2**  
Demonstration Flights (FAME)



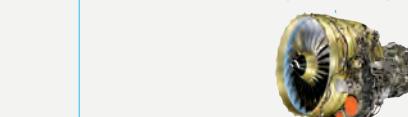
**CFM56-7B**  
Demonstration Flights (HEFA-SPK)



**CF6-80C2**  
Demonstration Flights (HEFA-SPK)



**CFM56-7**  
Engine Test (FAME,  
FT-SPK,  
HEFA-SPK)



**MILITARY**  
Engine Test (FT-SPK)



**CF6-80C2**  
Engine Test (HEFA-SPK)



**CFM56-7**  
Engine Test (HEFA-SPK)



**MILITARY**  
Engine Test (FT-SPK)



**CFM56-5B**  
Demonstration Flights (HEFA-SPK)



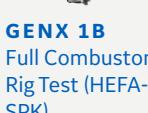
**CF34-10E**  
Demonstration Flight (SIP)



**GENX 1B**  
Full Combustor Rig Test (HEFA-SPK)



**CFM56-7**  
Engine Test (HEFA-SPK)



**MILITARY**  
Full Combustor Rig Test, Engine Tests (HEFA-SPK), U.S. Navy Demonstration Flight



**CFM56-2**  
Engine Test (FT-SPK,  
HEFA-SPK)



**CF34-10E**  
Engine Test (SIP)

2007

2008

2009

2010

2011

2012

## FLIGHTPULSE® FROM GE DIGITAL DRIVES EMISSIONS, FUEL REDUCTIONS

Software solutions that can help deliver immediate carbon reductions are available today and already in use. Developed in collaboration with long-time customer Qantas, FlightPulse® is a flight analytics tool that helps airline pilots improve safety and operational decision-making. In the first year of use, Qantas avoided 5.71 million kilograms of carbon emissions plus achieved a 15 percent increase in pilot adoption of fuel-saving procedures.

### Optimizing operations and performance

#### Data analysis to help aircraft operators lower emissions

— GE Digital has developed a number of software applications to help aircraft operators to reduce emissions and drive operational efficiencies. 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 carbon emissions.

### Improvements to engine performance

— GE has developed 360 Foam Wash, an advanced on-wing cleaning technology to help ensure that engines continue to operate efficiently. In the Middle East, 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 CO<sub>2</sub> emissions, and increased engine time on wing.



*GE's proprietary detergent solution 360 Foam Wash has more cleaning capability than typical water wash. The process involves injecting a specially-formulated, proprietary solution that removes dust and dirt particles in the engine.*



## Our collaborations

GE has a long history of working collaboratively across the aviation industry to address the sustainability challenge. GE Aviation works closely on aviation and environmental issues with the International Civil Aviation Organization (ICAO), a United Nations assembly. GE Aviation is active in ICAO's Committee on Aviation Environmental Protection (CAEP), which assists the ICAO Council in formulating new standards related to aircraft noise and emissions and other aviation environmental impacts. ICAO established a certification standard for aircraft CO<sub>2</sub> emissions and established a mechanism to achieve carbon neutral growth through the framework known as the Carbon Offsetting and Reduction Scheme for International Aviation (CORSIA). ICAO discussions continue to further develop long-term goals for more sustainable aviation.

In addition, aviation industry associations, including International Air Transport Association (IATA), Air Transport Action Group (ATAG), and other industry partners,

recognize the need to address the global challenge of climate change and adopted the following targets to reduce CO<sub>2</sub> emissions from air transport:

- An average improvement in fuel efficiency of 1.5 percent per year from 2009 to 2020 (achieved)
- Stabilizing CO<sub>2</sub> emissions from 2020 with carbon neutral growth
- A reduction in net aviation CO<sub>2</sub> emissions of 50 percent by 2050, relative to 2005 levels

The European Commission is on a more ambitious trajectory for emission reductions. While governments are working on legislative proposals, the European aviation industry issued Destination 2050, a report announcing a pathway to net zero emissions by 2050 and a 55 percent reduction by 2030.

GE Aviation participates in these efforts and fully supports a globally-harmonized approach to environmental standards and policies for aviation. We are collaborating with airline customers to achieve their goals to reduce emissions.



*With the GE90, GE introduced the composite fan blade—the first-ever in commercial aviation.*

Decades of technological achievements, innovations currently being developed, and a strong commitment to carbon reduction demonstrate that the aviation industry will continue to be a partner in achieving our shared goals of a more sustainable future and continued economic growth.



## INVESTING IN THE FUTURE OF FLIGHT

In 2020, GE and customer-funded spending on research and development totaled \$1.8 billion. These investments in aviation innovation have spurred us to develop leading-edge technologies, including work at our Electrical Power Integration Centre (EPIC) in Cheltenham, England, and a state-of-the-art Electrical Power Integrated System Center (EPISCenter) in Dayton, Ohio. Our engineers collaborate with top researchers at the *University of Dayton* and have access to the breakthrough innovations of GE Research.

## PARTNERSHIP TO REDUCE EMISSIONS

In June 2021, GE Aviation and Safran launched a bold technology development program. The **CFM RISE\*** (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 CO<sub>2</sub> emissions by more than 20 percent compared to today's most efficient engines, as well as ensuring 100 percent compatibility with alternative energy sources such as Sustainable Aviation Fuels and hydrogen.

Central to the program is achieving state-of-the-art propulsive efficiency for the engine, including developing an open fan architecture that 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.

\* RISE (Revolutionary Innovation for Sustainable Engines) is a registered trademark of CFM International.

# Driving sustainability with cutting edge research

GE Research is our innovation engine where we invest for the long term to differentiate our businesses and drive cutting-edge solutions across our industry sectors and beyond. With flagship R&D facilities in the U.S. and India, we're a global, interdisciplinary team of 1,000 scientists and engineers (>500 with PhDs) that works closely with our businesses, customers, and other external partners to advance the energy transition, expand and innovate healthcare, design the future of flight, and discover new opportunities to create value.

Our focus is to see, move, and create the future of GE and our industries, helping to solve today's problems while looking around corners to identify and get a jump start on the problems of tomorrow. We strive every day to build on our legacy of innovation of developing and deploying new technologies that redefine and transform our industries. We know that we must continue to create breakthrough technologies in our industries and beyond to continue to build a world that works.

We have built a highly contemporized research model that is externally facing and market-tested. We work closely with GE's businesses and customers, applying our broad technical capabilities and deep expertise across many domains to address their future needs. Increasingly, we have found strong alignment with the U.S. government on research priorities in our sectors, securing over \$500 million in government grants over the past two years to accelerate future technologies to combat climate change, advance precision medicine, and enable safer, more sustainable air travel.

From decarbonization to precision health to the future of flight, our scientists and engineers are driven by a passion to provide solutions that meet the world's needs today and tomorrow. Much of our work is being done in close partnership with our businesses and U.S. government agencies. In energy, we're working with our Gas Power business to advance

hydrogen and carbon capture technologies to place natural gas on the path to being a net zero carbon fuel source. With the U.S. Department of Energy (DOE) and the Advanced Research Projects Agency for Energy (ARPA-E), we're supporting the *3D Design and development of new turbine components*, developing *technologies to modernize the grid* and *studying new wind phenomena with supercomputers* to scale up wind power offshore and onshore. In healthcare, we're working with the Defense Advanced Research Projects Agency (DARPA) and the National Institutes of Health (NIH) to develop new *vaccine production* and *medical diagnostic* technologies to improve the ability of governments and the healthcare industry to respond to future pandemics like COVID-19. In aviation, we're partnering with NASA to demonstrate *new technologies on the path to electric flight*.

## RESEARCHING POTABLE CLEAN WATER OUT OF THIN AIR

GE Research was selected by the Defense Advanced Research Projects Agency (DARPA) to lead a four-year, \$14.3 million revolutionary project that could dramatically simplify the transport of potable water to troops in the field and address water scarcity around the world in a powerful new way. GE scientists are designing an AIR2WATER prototype device, or **Additively Manufactured, Integrated Reservoir To Extract Water using Adsorbents and Thermally-Enhanced Recovery**, which can produce enough water to supply the daily water needs of 150 troops and is light enough to be carried by soldiers for use at bases. The key technologies being used to produce potable water are sorbent materials to absorb the air and a unique 3D-enabled design of an additively manufactured heat exchanger that effectively draws in heat over the sorbent materials to release the water.



## 5G TESTBED TO EXPLORE ENERGY, HEALTH CARE, AND AVIATION USE CASES

Signaling the dawn of a new era for smart industrial machines and systems, GE Research is collaborating with Verizon Business to create a cross industry testbed powered by Verizon 5G Ultra Wideband. 5G is the next generation network that boasts the high speed and low latency that is required to dynamically manage industrial machines, systems, and operations. 5G can accelerate the path to everything from self-driving cars and digital health to more resilient energy grids powered by more carbon-free energy assets like intelligent wind farms.

## GE RESEARCHERS UNVEIL 12 MW FLOATING WIND TURBINE CONCEPT

In what admittedly is still a futuristic concept in the wind industry, GE researchers unveiled details of an ongoing two-year, \$4 million project through the ARPA-E's ATLANTIS (Aerodynamic Turbines Lighter and Afloat with Nautical Technologies and Integrated Servo-control) program to design and develop advanced controls to support a 12 MW Floating Offshore Wind Turbine. GE is partnering with Glosten, one of the leading innovators in the Marine industry. GE and Glosten are taking on the challenge of designing a light-weight Floating Turbine with up to 35 percent less mass in the tower and the floating platform.

A photograph of a woman with dark hair, wearing blue safety goggles and a red and black plaid shirt. She is looking upwards and to the right, focused on a large, complex mechanical assembly made of metal pipes, valves, and sensors. The lighting is dramatic, with strong highlights and shadows. The background is blurred, emphasizing the mechanical components.

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, with leadership that sets the example of a culture of integrity that is core to everything we do. We also operate our businesses with a view toward long-term sustainability and continuing to develop and deliver products and services 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.

*Krista Carroll, GE Research, Niskayuna, New York, U.S.A.*

## Independent board leadership



**THOMAS HORTON**

Lead Director

**CHAIR:** Management Development & Compensation Committee



**LESLIE SEIDMAN, CPA, GCB.D**  
**CHAIR:** Audit Committee



**RISA LAVIZZO-MOUREY, MD**  
**CHAIR:** Governance & Public Affairs Committee

## Board oversight

The Board sets the tone from the top for GE's culture. GE's 11-member 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 and Public Affairs Committee ("GPAC") seeks 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 selecting and recruiting director candidates, the GPAC considers a wide range of factors, including:

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

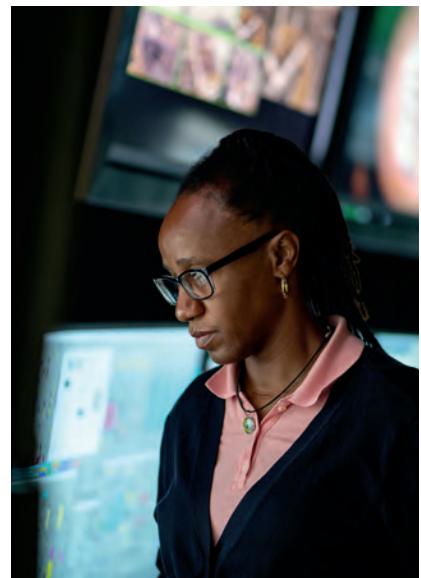
The Board recognizes that the long-term interests of the Company require responsibly addressing the concerns of stakeholders beyond just shareholders, including employees, recruits, customers, suppliers, communities, government officials, and the public at large.

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. In that regard, relevant focus areas for the Board in 2020 included:

- Health and safety of employees and communities;
- Oversight of risk management and governance for COVID-19-related uncertainty;
- Strategy for the energy transition, including climate-related risks and opportunities;
- GE's ambition and goals related to greenhouse gas emission reductions;
- Enterprise risk management; and
- Developments in ESG reporting and analysis.

The Board also reviews horizontal strategy topics that cut across GE's businesses, such as decarbonization, the prospects for greater decoupling in U.S./China relations, and digital product and service offerings.

Matters related to sustainability often span multiple functional categories and areas of oversight, and therefore involve discussion at the full Board level rather than individual committees. The GPAC also plays an important role in GE's sustainability oversight, and has primary oversight of sustainability reporting, key programs, and the development of related goals, targets, policies, and strategies. For example, the GPAC receives a standing update on safety incidents throughout GE at regular meetings. The Audit Committee also has a role in sustainability matters to the extent these topics relate to financial reporting and regulatory requirements.



*Tammy Bennett, GE Gas Power, Greenville, South Carolina, U.S.A.*



*James Lloyd, GE Aviation operations leader for On Wing Support in Dubai, leads a team meeting.*

## Board oversight of public policy and lobbying

The GPAC, composed solely of independent directors, oversees the Company's political spending and lobbying. 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 GPAC 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; and
- **Reporting.** Semi-annual review of the Company's political spending, which is made available on our ESG website.

In 2018, the GPAC decided to further enhance the Company's political spending disclosures by disclosing 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 2020 GE Company did not contribute any corporate funds to political campaigns, committees, or candidates for public office.

## Board focus on climate change

As noted above, the energy transition and climate change have been significant areas of focus at the Board level. At its meetings throughout 2020, 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; scenario analysis of potential pathways for decarbonization; customer, shareholder, and other stakeholder expectations; and

reducing the environmental impact of GE's own operations. 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 in 2050 including sold products, and the planned exit from the new-build coal business. This focus is also reflected in the Board's Governance Principles and committee charters, which the Board recently revised to more expressly highlight its role in the oversight of sustainability and climate change-related matters.



Wind farm in Texas, U.S.A.

## BOARD OVERSIGHT: KEY AREAS RELATED TO SUSTAINABILITY



For more information, see GE's 2021 Proxy Statement [here](#).

## How GE engages with its stakeholders

### EMPLOYEES

- Regular company- or business-wide emails and videos from senior leadership
- 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

### 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

### 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
- Regular meetings with large institutional investors and other shareholders, including governance engagement

### REGULATORS/GOVERNMENT AGENCIES

- Pursuit of “honest broker” relationships with government stakeholders to promote collaborative, win-win outcomes on sustainability and environmental issues
- Commitment to regulatory compliance and strong performance
- Engagement to support decision makers in sustainability goals, including climate change and decarbonization

### 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
- 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



Scott Strazik, CEO, GE Power, meets with customers at Azito Energie S.A.

# Integrated approach to strategy, risk, and sustainability

Our company and strategy are at the core of what is needed to build a sustainable world that works.

Climate change, precision health, future of flight: these 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 the external environment changes and learn from our mistakes. In a world where we will never have perfect information or complete control, our strengthened programs and processes are designed so that the Company makes decisions in a structured, objective manner, and with an appropriate view for the long term.



**CHRIS PEREIRA**  
Chief Risk Officer and  
Vice President, Strategy, GE

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 account of a range of risks such as strategic alignment, supply chain, 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 (1) define and

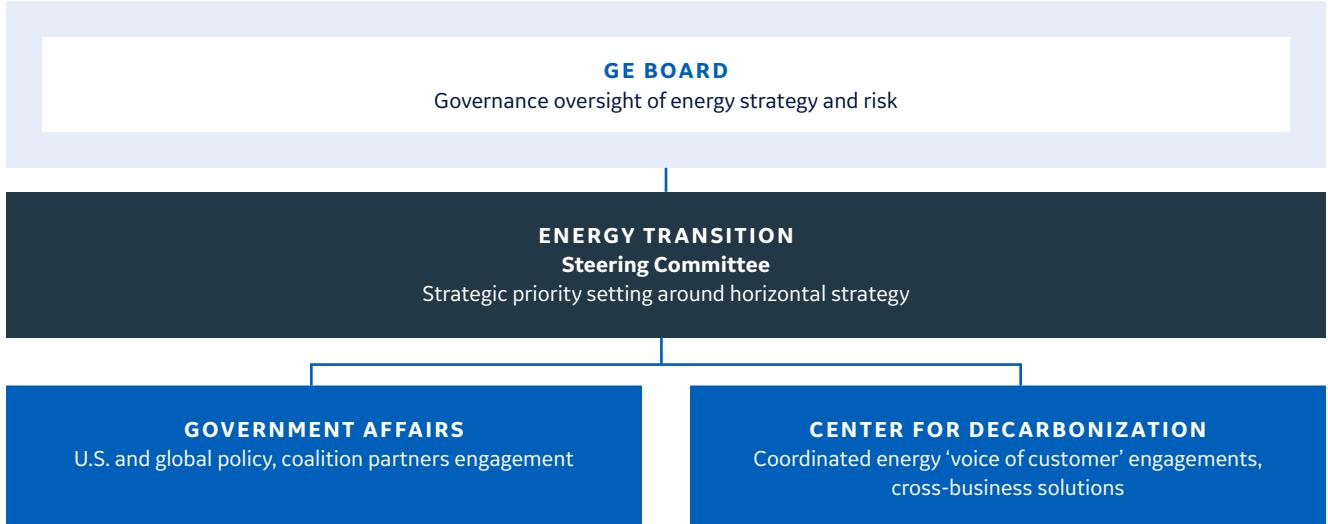
identify enterprise risks; (2) prioritize the top risks and opportunities; and (3) assess existing action plans to mitigate risk. The process also requires the business to identify owners at each stage of the process, instilling business ownership throughout the risk assessment process. At the Corporate 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. 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.

## Enterprise risk management framework



## Energy transition governance



### Energy transition governance at management level

Our work related to the energy transition is a good example of the convergence of strategy, risk, and sustainability. As part of an integrated approach, we engage in strategic planning for climate change both vertically and horizontally. We are guided by the long-term forces shaping the power sector of the future: severe weather, dispersed/variable generation, growing demand, and security risks. Against this backdrop, key questions related to energy transition and decarbonization are part of regular operating reviews, and the strategies for many of our businesses are closely related to helping our customers navigate this transition.

For strategic planning and risk assessment, GE considers a range of internal and external scenarios and pathways for decarbonization across our industries. As an outgrowth from that work, and to strengthen the centralized governance for the energy transition as a primary strategic focus for the Company, we formed an Energy Transition Steering Committee in 2020. This committee, comprised of our CEO, relevant business CEOs, and senior Corporate leaders, meets monthly. Among other things, the committee considers how GE's technology can contribute to decarbonization solutions and provide customer offerings to help navigate the energy transition with the full force of GE's capabilities across power generation equipment and services, grid planning, digital solutions, and financing.

The committee also considers potential breakthrough technologies, and how to prioritize and assess GE's readiness to invest in and commercialize promising technologies.

The committee's work supports recommendations to the GE Board and businesses taking into account input from the GE government affairs team, GE's newly-created Center for Decarbonization, other internal stakeholders, and external experts and advisors. GE has also engaged externally to express its support for domestic and global climate change policies to realize deep decarbonization of the energy sector while sharing GE's perspective with decision makers to help craft strong action in pursuit of ambitious goals. Learn more about GE's engagement and our Center for Decarbonization on page 67.

#### FRAMEWORK FOR CLIMATE CHANGE-RELATED RISKS AND OPPORTUNITIES

Through our enterprise risk management and long-term strategy frameworks at the company and business levels, we regularly identify and consider climate-related risks and opportunities. Each of our businesses has an enterprise risk management framework, and as part of their risk management processes, the businesses identify and assess top risks and consider mitigating actions at least quarterly. Our standard risk identification processes and reporting also consider the anticipated timeframes for potential risks to materialize, tiering top risks depending on whether the impacts would be expected

to manifest over short-, medium-, or long-term time horizons. Our businesses assign management-level ownership for specific risk mitigating actions and report on key risks and actions they are taking at regular quarterly operating reviews, as well as in periodic reporting to the GE Audit Committee and Board of Directors. Considering the nature of the products and services we offer across all our businesses, we believe most significant risks related to climate change and the energy transition arise in our Power, Renewable Energy, and Aviation businesses. Refer to the Risk Factors described in our Annual Report on Form 10-K for the year ended December 31, 2020 for details about those risks.

Climate change and the energy transition also offer important strategic opportunities for many of our businesses. For example, our wind businesses are expected to benefit from the significant growth in renewables energy-based power generation in the coming years. In addition, GE sees new opportunities for our businesses over time, whether through investment in the energy transition and future of flight breakthrough technologies (as described on pages 20–26 and 31–36), or through other solutions—such as storage and advanced energy controls that allow greater renewable energy penetration, green hydrogen production, and electric flight and hydrogen-based commercial aviation. As our industries continue to move toward a net zero future, we believe GE will continue to play an important role in innovating technology solutions to enable that transition.



Reggie Brewster, GE Gas Power, Greenville, South Carolina, U.S.A.

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, levelized cost of energy, levelized 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. For example, during 2020 our Corporate Risk team worked with GE's Global Research Center and other internal and external experts on scenario analysis that modeled potential pathways for electricity generation consistent with a 1.5°C target that required net zero greenhouse gas emissions by 2050. This analysis considered how electricity demand and supply could remain balanced over that time horizon with different combinations of power generation technology, as well as cost optimization for each pathway depending on the types of technology assumed to be available for use in the pathway. Our businesses considered key themes and questions raised by this analysis as part of their annual long-term strategy reviews, including review during a strategy session with the GE Board of Directors in December 2020.

In addition to informing our strategic planning and risk assessment, one of the other outgrowths from the work

related to this scenario analysis was the decision to form our Energy Transition Steering Committee at the management level last year. Decarbonization has been a key strategic theme and area of focus at the company level for the past several years, and in 2021 our energy businesses are undertaking additional modeling and scenario analysis to analyze potential decarbonization pathways in our industries and further develop our strategy setting and risk management activities. For example, page 67 describes the efforts of our coordinated Center for Decarbonization to focus on data-backed analysis to support our planning. We consider this type of internal analysis, as well as external modeling and scenarios such as the IEA's recent Net Zero by 2050 report, on an ongoing basis as we evaluate the opportunities, risks and resilience of our business strategy as it relates to the energy transition and climate change.

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 or are not yet known.

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 GE'S SUSTAINABILITY EFFORTS THROUGH THE CHIEF SUSTAINABILITY OFFICER

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.

Sustainability at GE is the ultimate team effort, with GE's employees united in realizing the success of our mission. The CSO will help GE accelerate outcomes by enabling closer collaboration between GE's leaders and governments, policy makers, NGOs, our investors, communities, and peers. The CSO also will operationalize GE's sustainability efforts by approaching sustainability with the same high expectations of rigor and accountability that we use to run our businesses, and will use lean principles, as described in more detail below, to continuously improve toward our goals.

## LEAN PRINCIPLES APPLIED TO SUSTAINABILITY

# Our strategy for continuous improvement and eliminating waste



Larry Culp with Tom Edelmann, GE Aviation, Springdale, Ohio, U.S.A.

Lean is a set of principles that emphasizes customer focus, elimination of waste, high-quality growth, and ruthless prioritization of work to improve safety, quality, delivery, and cost. In connection with GE's sustainability strategy, lean is more than a contributor—lean is fundamental to how we execute our strategy and embedded in our culture. Lean principles help us examine processes and continually improve them by solving problems at their root cause. Lean principles allow us to identify where we can ensure

worker safety, limit emissions, eliminate hazardous wastes, reduce our footprint, and deliver essential, life-enhancing products quickly and efficiently.

Our Environment, Health, and Safety teams are particularly close partners of GE's lean experts. Together, the teams embark on kaizen weeks to improve the safety conditions of a particular site. Kaizen teams focus on reducing movement, eliminating hazardous operations, and keeping an organized,

*"In the spirit of continuous improvement, what I've learned over time and what I've seen at GE, progress allows you to see the next field of opportunity."*

- LARRY CULP

efficient work environment, which improves ergonomics, reduces tripping incidents, and reduces distractions while mitigating risks. Focusing on continuous improvement through structured problem solving helps us get to the root cause and minimize the risk of recurrence. The environment team uses lean to accelerate the cleanup and reuse of brownfields, prioritize cleanups of properties in environmental justice communities, and assess risks across our property portfolio.



The stator bar line in Schenectady after its lean makeover.

### SCHENECTADY FACTORY "SLOWS DOWN TO GO FAST" IN A LEAN EXERCISE THAT LEADS TO HIGHER QUALITY, LESS WASTE, AND A SAFER WORK ENVIRONMENT

For over 130 years, this factory in upstate New York has made generators, steam turbines, and parts for power plants that supply homes and businesses with electricity. One key component in the modern generator is the stator bar, which weighs 300 pounds and looks like a 30-foot-long hockey stick. More than 120 of these bars fold together like a complex 3D puzzle to form the inside wall

of the stator. At one point, the plant was making over 1,000 bars a day, but many bars had flaws that had to be reworked or scrapped. And it took nearly a year to make a single generator. The team embarked on a wholistic lean exercise and identified the "root cause" at the stator bar shop. Working the problem, the team cleared out half of the shop floor, cut the distance each bar had to travel from 2.5 miles to just 0.3 miles, and adopted a single-piece flow rather than sending bars down in batches. This "slow down to go fast" approach allowed any safety, quality, or process issue to be immediately

visible and corrected. Nearly 18 months after it started, the team not only halved the lead time but also reduced inventory by 84 percent. It also cut the injury rate by 45 percent, in part by eliminating crane moves needed to reposition the bars from 22 to just 8. In addition to these improved metrics, a key part of the lean process is getting the entire team to be committed to a change in culture and focused on continuous improvement, from leadership to the operators.

Lean principles have long been a part of GE's sustainability strategy. A critical component of GE's ongoing operational improvements are "treasure hunts" which are essentially targeted lean "waste walks" to identify energy waste, drive efficiency, and reduce greenhouse gas emissions. These processes bring together a local team to identify any source of waste at a worksite: open doors, lights and machines left on, wasted materials, as well as

opportunities to invest in our operations to optimize performance. Once these sources of waste or opportunities are identified, the team then implements the change necessary to eliminate the waste. For example, a 2020 exercise at GE Aviation's Celma facility in Brazil—which served more than 9,000 engines in 2020—resulted in an 11 percent reduction in energy use across the site.



#### LEAN MANAGEMENT IS DRIVING GE'S TURNAROUND—AND HELPING DURING THE COVID-19 PANDEMIC

When GE Healthcare needed to set up and attach accessories to thousands of medical monitors in record time to serve patients during the COVID-19 pandemic, teams in the U.K. used lean principles to assemble and ship hundreds of systems to hospitals in just six weeks. Demand for clinical devices that track heart rate, blood pressure, and other vital signs was high, and supply chains for monitor parts and accessories were strained. Along with repurposing equipment, GE Aviation engineers, production teams, and volunteers used lean tools like problem-solving and feedback, a visual scheduling system called kanban, and rapid prototyping and iteration to assemble a monitor set-up every four minutes—all while maintaining strict social distancing and tool and workstation sanitization schedules. "You will never be perfect at solving any problem," says Angie Norman, a GE expert in lean management who helped lead the effort. "In a crisis, you build a plan based on what you know today. It's a cycle of try, fail, try again, fail, try again, succeed."

*"You will never be perfect at solving any problem," says Angie Norman. "In a crisis, you build a plan based on what you know today. It's a cycle of try, fail, try again, fail, try again, succeed." This image was taken before the COVID-19 pandemic.*

#### GE RENEWABLE ENERGY USES LEAN TO MAINTAIN WIND TURBINES IN EUROPE WHILE REDUCING WASTE

A network of in country warehouses combined with two central European warehouses form the backbone for a network strategy that enables turbine maintenance crews to have the right parts in the field when they need them, and that the wind turbines GE services in Europe and the Middle East can keep spinning. They are also the core of an ambitious global plan to overhaul how GE Renewable Energy maintains one of the planet's most complex networks of onshore wind turbines—a plan that leans heavily on lean management. The team in Europe used lean management to optimize inventory and cut delivery times. The process also allows GE to consolidate its oil and grease supplies, which are key to maintaining turbines. By doing so, GE avoids storing buckets of oil and grease at its several thousand turbine locations, where they may go unused, avoiding waste.

## 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.

*"It can be tough sometimes to admit that we don't have the answers. So, for me, it's about being brave enough to ask vulnerable questions and admit that you and we, as a team, don't know everything and we have an opportunity to learn from other's experiences."*

#### ASHLEY BARTOWITZ

Executive, Fleet Management, GE Aviation

### 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.

*"First, it's not only about flagging compliance issues. By bringing everything to the surface, we can better identify and understand the problems. And it's a crucial part of our lean journey and continuous improvement of our processes, products, people, management, and other aspects of our business."*

#### ARILD FORLAND

EMEA General Manager for GE Healthcare's Pharmaceutical Diagnostics (PDx) business

### 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.

*"It's about shared commitment to getting the job done, while prioritizing taking care of your people."*

#### GARY WIESNER

Americas Quality Leader for GE Renewable's Onshore Wind

In the first quarter of 2021, we conducted an enterprise-wide culture survey to gauge our progress on our Leadership Behaviors, as well as areas such as integrity, safety, and career development. While there was expected variability in the results among our businesses related to certain topics, a company-wide view of trends demonstrated a strong commitment to safety. Responses to questions related to integrity validated GE's strong foundation in compliance efforts. The survey also reflected that we still have work to do on diversity and inclusion, though our progress and leadership commitment to both is evident. Employees also identified career advancement and candor as areas for improvement. We believe listening and gaining these insights drive improvement, in both our business and our culture.

## 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. As such, the S&L sets forth core employee and manager integrity expectations and summarizes our key company-wide compliance policies. 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.

Available for download in 19 languages, the S&L and its accompanying policies address the full spectrum of integrity and compliance issues across GE's global value chain.

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 updated all polices in 2021 to be simpler, principle-based, and easier to understand and comply with.

These policies are augmented by 22 Enterprise Standards, which set forth the core programmatic expectations of the businesses in all of our significant risk areas. Each Enterprise Standard defines the specific risks for which the businesses need to have documented, outlines auditable controls, and requires, among other things, that the businesses have appropriate mechanisms in place to monitor those controls. These Enterprise Standards were developed and launched in 2020 and, as with our policies, will be refreshed 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

## ALWAYS WITH UNYIELDING INTEGRITY GE's Ethics & Compliance program

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 & communications

GE uses a focused training & communications plan to educate employees across all GE businesses 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 training course. At GE, salaried employees are expected to complete the *Spirit & Letter Acknowledgement* at the time of hiring and then again every year subject to local

labor law restrictions. In 2020, 98 percent of eligible employees completed the *Spirit & Letter Acknowledgement*. Additional training on key risk areas is provided to targeted employee groups based on risk. GE 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.

### 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.

We maintain strong controls aimed at preventing and detecting bribery. GE's approach to compliance in this critical area is *multifaceted*. Its key features are policies and procedures, upstream and downstream controls, third party due diligence, training (employee and third party), investigation and remediation, monitoring, and Internal Audit support.

## 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 Ombuds Program ("OMB"). Under the OMB, employees are required to submit concerns regarding potential violations of law, regulation, or GE policy through one of the available open reporting Channels ("channels"), including Managers, Human Resources, Legal, Compliance, Internal Audit, Ombuds, and anonymously at [inside.integrity.ge.com](http://inside.integrity.ge.com). GE understands that 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 ombuds person and, in addition, a network of part-time employees across the globe to whom concerns can be raised. In 2020, 2,729 concerns were raised, and 2,685 concerns were closed.

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; and
- 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 Vice Presidents of Internal Audit, Compliance, and Global Investigations. The SCC reviews the significant case criteria annually to ensure both internal and external risks are considered.



GE measures the robustness of its open reporting program using a number of metrics. The OMB tracks the average number of days that 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 comparison across businesses as well as control for any headcount changes; confirmation rate, or the number of closed policy cases that are confirmed violations; and anonymity rate.

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

## 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 22 Enterprise Standards, 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 by 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.

## Compliance governance

GE has a rigorous compliance governance process, both at a corporate and business level. Each business (i) 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; (ii) meets with Company's Chief Compliance Officer on a biannual basis to discuss its risk assessment, any program weaknesses or enhancements, and any compliance trends; and (iii) reports its most significant enterprise risks and compliance issues to the Company's Audit Committee on an annual basis.

At a corporate level, the Chief Compliance Officer holds three meetings per year with the Company's most senior officers to discuss significant program updates, open reporting trends, significant investigations, and compliance audit results. In addition, the Chief Compliance Officer and Vice President of Investigations report on the same issues to the Audit Committee periodically.

*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.*

[S&L BOOKLET ▶](#)

[EHS POLICY ▶](#)

[OPEN REPORTING POLICY ▶](#)

[IMPROPER PAYMENTS PREVENTION POLICY ▶](#)

# Privacy and cybersecurity

GE is committed to protecting information about our employees, our customers, our suppliers, and our company as well as the technology resources GE provides to its 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, 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.

GE's approach to product cybersecurity includes vulnerability management and incident response, lifecycle management, 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 information on GE's network necessarily extends to business partners who are afforded access to such information, and GE requires those business partners to appropriately secure and maintain their information technology systems and protect GE's information on their systems. We take additional steps to validate the security of our critical and high-risk suppliers through ongoing monitoring of adherence to GE specified metrics and conducting regular security assessments.

GE understands that 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 cyber security responsibilities at GE, identify phishes 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 that technology and the nature of its threats and risks are changing, and GE will continue to evolve to meet those changes. GE believes that 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 our 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.

## Cybersecurity governance and leadership at GE



*Benette Bassette, GE Aviation, Norton Shores, Michigan, U.S.A.*

GE's Chief Information Security Officer (CISO) is responsible for developing and implementing an information security program, which includes a cybersecurity strategic framework, procedures, and policies 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. 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 Chief Information and Product Security Officer meets on a recurring basis with our CEO and other senior leadership to review and discuss GE's cybersecurity program, including emerging cyber threats and industry trends. Cyber is included in GE's enterprise risk management framework and GE information technology risk leaders and information security leaders 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.



*To meet its goals of zero losses or downtime, Subaru uses iFIX from GE Digital as its HMI/SCADA for plant-wide monitoring and control.*

## GE's privacy program

GE employs privacy practices based upon its Privacy Enterprise Standard, which is designed to support its compliance with the 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 COMMITMENT AND APEC CERTIFICATION

GE's Commitment 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; and
- 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 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.

*Remote Monitoring Center for Almerai, one of Saudi Arabia's largest food and beverage producers, uses APM from GE Digital to monitor the health of their equipment.*



# Investing in our people



Corwin Angel, GE Aviation, Cincinnati area, Ohio, U.S.A.

GE's success starts with its people, and we are committed to making sure our employees fulfill their greatest 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 to drive individual and company performance.

In late 2020, we announced the launch of a new performance management system—"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. Outcomes are directly linked to incentive compensation. Our executive teams regularly assess, including through business reviews, talent,

potential, 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.

## Developing our people

GE is committed to continued employee development. First and foremost, we believe on-the-job training plays a significant role in the development of our people. In 2020, while COVID-19 put a pause on in-person learning and development courses, GE's Brilliant You®—the company's online library of customized content—ensured that learning would continue. At GE, we are prioritizing learning and growth, constantly refreshing the content available to our employees while ensuring it is easily accessible.

In support of our lean culture transformation, in 2020 we developed new curricula and launched two new lean leadership development programs: our Business Leadership Program (BLP) and Leadership in Action (LIA). Both are designed to elevate high potential executive-level talent who can lead us towards a more sustainable future. Developed in partnership with our existing leaders, our leadership development programs are premised upon a rigorous learning process tied directly to outcomes, with a focus on hands-on, experiential learning and building a lean mindset.

### BUSINESS LEADERSHIP PROGRAM (BLP) 2020

- Prepares successful lean leaders of GE businesses. Participants invest time in live virtual instruction, simulations, live virtual coaching (one-on-one and in a small group), and hands-on practical assignments designed to transfer learning immediately to work.
- Instructors from the University of Michigan Ross Business School, professional executive coaches, and external guest speakers
- Topics include customers and markets, problem solving and process improvement, finance, strategy and innovation, change management, and talent and culture

### BRILLIANT YOU® 2020 HIGHLIGHTS:

**86,374**

Total distinct employees who used BYOU in 2020

**2,251,522**

Total views of all assets<sup>2</sup> in 2020

**262**

Lean related resources

**6.9 million**

Total number of course completions (for all content types)

**19,437**

Total hours spent learning lean content online

**14**

Total number of languages content was delivered in

**99k**

Total number of unique employees who accessed the learning platforms (average unique monthly logins)

### LEADERSHIP IN ACTION (LIA) 2020

- Equips senior leaders to lead GE's business transformation through a focus on Leadership Behaviors and lean principles and tools with overarching themes of respect for people and continuous improvement
- Uses peer-to-peer engagement, interactions with customers and teams, 1:1 coaching, and on-the-job activation

<sup>2</sup> "Assets" are defined as all unique materials available on the Brilliant You® site, including courses, articles, videos, book abstracts.

## Supportive work environments

### 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 is comprised of 6 weeks of disability and 10 weeks paid leave, resulting in a total of up to 16 weeks paid for maternity, paternity, or adoption. Full time GE employees also receive permissive time off, which allows employees to take the time off when needed with no-predefined amount of time.

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 to 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.

### FLEXIBLE WORK ARRANGEMENTS

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

We continue to evaluate our benefit offerings to support our employees and their families. New offerings planned for 2022 include access to caregiver support, legal assistance and consultations, and ID theft protection.

#### PROMOTING FLEXIBILITY

[Learn more ▶](#)

#### JOB SHARING

[Learn more ▶](#)

## 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, wages and hours, as well as prohibiting forced, compulsory, and child labor and employment discrimination in our operations and business partnerships.

Our Respectful Workplace Policy in *The Spirit and 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 the [open reporting and Ombuds Program](#).



# Advancing diversity and inclusion

2020 presented challenges on many fronts, including further highlighting one of the most pervasive challenges globally—systemic inequity. As the pandemic worsened, existing inequities only deepened. At GE, we are committed to building a more diverse workforce and a more inclusive workplace by focusing on transparency, accountability, and community. We believe in the value of each person's unique identity, background, and experiences, and are committed to fostering an inclusive culture in which everyone feels empowered to do their best work because they feel accepted, respected, and that they belong.

Embracing diverse teams and perspectives better equips GE to build a world that works for everyone.

This year, we published our inaugural annual *Diversity Annual Report* to transparently share our diversity data and hold ourselves accountable for continuous improvement. The data covers two dimensions of diversity: global gender and U.S. racial and ethnic minority status. We see this first report as the beginning of a journey to improve the depth and breadth of our diversity data. In the future this might include self-identified data such as sexual orientation, disability, and military service.



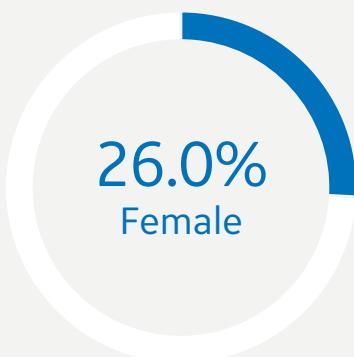
## OUR PEOPLE<sup>3</sup>

### UNITED STATES DATA

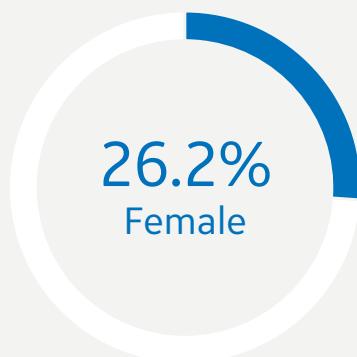
	ASIAN	BLACK / AFRICAN AMERICAN	HISPANIC / LATINX	AMERICAN INDIAN / ALASKAN NATIVE	NATIVE HAWAIIAN / PACIFIC ISLANDER	MULTI-RACIAL	TOTAL RACE & ETHNIC MINORITY
Leadership	11.1%	3.4%	3.4%	0.2%	0.1%	0.7%	18.8%
Professional	12.1%	4.4%	5.0%	0.2%	0.1%	1.5%	23.4%
All Employees	8.7%	6.8%	6.5%	0.3%	0.2%	1.6%	24.1%

### GLOBAL DATA

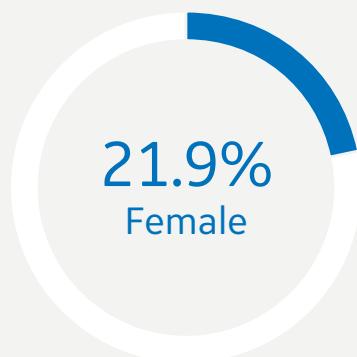
#### LEADERSHIP\*



#### PROFESSIONAL



#### ALL EMPLOYEES



<sup>3</sup> Data representative of GE's workforce as of December 31, 2020, extracted on February 10, 2021.

\* Leadership encompasses the top 1.5 percent of all active employees.

It is clear from our 2020 Diversity Annual Report that we still have work to do. To lead this critical work, in 2020, we created the role of Chief Diversity Officer (CDO) for GE, named a Chief Diversity Officer for each business unit, and launched the CDO Council, which brings together business CDOs and HR diversity leaders to share best practices and drive new levels of connection and accountability across the Company. Each business CDO is tasked to work with the CEOs and their leadership teams to ensure diversity is integrated into business rhythms, not run as a separate initiative. Most CDOs retain their daily operational role in tandem with their new position intentionally: these are leaders who know how to deliver results. During monthly operating reviews, each business CEO and their senior HR managers now report on key Diversity and Inclusion key performance indicators to provide regular visibility and accountability, as we do with all critical business metrics.

As we move forward in 2021, GE is strengthening our focus on accountability, transparency, and community by expanding our diversity strategy to include mitigating bias in our talent processes; growing engagement in our employee resource groups; expanding our understanding and collection of our diversity data; and further developing and promoting allies and sponsors. As a company, we look to improve every day, every quarter, and every year. That includes being motivated to demonstrate progress in diversity and inclusion.

We believe strengthening our community externally and internally will help create sustainable change. In 2020, GE Foundation committed \$2 million in grants to help create more equitable access to opportunities for STEM education as well as help to remove financial barriers for minority-owned businesses to participate in training (e.g., cyber security and lean) so they are positioned to compete for business with larger enterprises. See page 83 for more information.



Diana Kayrouz, GE Renewable Energy, Argentina

## Q&A with GE Chief Diversity Officer

Mike is the Chief Diversity Officer for GE. In this role, Mike leads GE's diversity strategy to drive sustainable change with an added focus on driving leadership accountability and metrics, building an inclusive culture, and reinvigorating inclusion and diversity learning and mentoring. Mike joined GE in 1981 and, prior to his role as GE CDO, he served as GE Officer and President and CEO of GE's Molecular Imaging and Computed Tomography (MICT) business. Additionally, Mike was the first leader for GE's strategy on global health, called healthyimagination, to improve the quality, cost, and access to care by 15 percent or more on a global basis. During his career, Mike held a variety of roles in engineering, operations, and product management.

### Q: HOW DOES DIVERSITY CONTRIBUTE TO TEAM PERFORMANCE?

We are better able to serve our customers and address their challenges when there are people in the room who have had different experiences. High performing teams have the diversity of thought, skills, perspectives, and backgrounds needed to more completely understand challenges and develop better solutions. Simply said, embracing diverse teams and perspectives better equips GE to build a world that works – for everyone.

### Q: WHAT IS THE MOST PRESSING PRIORITY FOR GE'S DIVERSITY AND INCLUSION EFFORTS?

We are building a more diverse workforce and a more inclusive workplace by strengthening our focus on accountability, transparency, and community. Moving forward, this means expanding our diversity strategy to include initiatives like mitigating bias in our talent processes; growing engagement in our Employee Resource Groups globally; expanding our understanding and collection of our diversity data globally; and further developing and promoting allies and sponsors. As a company, we look to improve every day, every quarter, and every year. That includes being motivated to demonstrate progress in diversity and inclusion.



**MICHAEL J. BARBER**  
Chief Diversity Officer, GE

### Q: WHAT DOES A SENSE OF BELONGING AT GE MEAN TO YOU?

At GE, we are committed to fostering an inclusive culture, where everyone feels empowered to do their best work because they feel accepted, respected, and that they belong. I believe most GE employees want their work to be more than a "job" – they want to feel part of the purpose their business is working to fulfill, meaningfully contribute, and have a rewarding career.

## Employee resource groups

While we introduced new diversity initiatives in 2020, we have been committed to enhancing diversity at GE for years—our Employee Resource Groups (ERGs) have added value to our colleagues and businesses by helping to engage and develop diverse talent for nearly 30 years. We are firm believers in the importance of fostering community. The 2020 African American/Affinity Forum (AAF) virtual symposium, for example, brought together more than 1,000 AAF members from 25 countries for conversations around strengthening advocacy for diverse talent, fostering community, and accelerating the development of AAF members and allies.



Norris Ryan, GE Aviation, Cincinnati area, Ohio, U.S.A.

Internally, we're proud to have been an early leader in the creation of strong Employee Resource Groups (ERGs) nearly 30 years ago. These groups accelerate development through mentoring, learning, networking, organizing outreach and service activities, and they address challenges that are important to their members and the Company through targeted initiatives. Our current company-wide ERGs welcome all employees to learn, connect, advocate, and foster a sense of belonging.

### 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.

### 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.

### 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.

### 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 value, and enabling strong networks and alliances across ERGs.

### DISABILITIES 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.

### VETERANS NETWORK (VN)

The VN 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.

### GREEN TEAM NETWORK (GTN)

Building on our commitment to achieve carbon neutrality in our operations and facilities by 2030, the GTN supports and furthers our sustainability goals with a grassroots-driven approach. Members are passionate GE employees from around the world.

More information about these groups can be found on our website and in our 2020 Diversity Annual Report [here](#).

## Building a diverse talent pipeline

Our ERGs also support our goals to build a diverse talent pipeline. For the last 18 years, the GE Women's Network has been working with the Society of Women Engineers (SWE) to build a strong pipeline of female talent to help tackle the ongoing gender imbalance within the STEM community. Local hubs of the Women's Network hold fundraising events throughout the year, raising money to fund SWE scholarships to female STEM students. These scholars also become part of GE's network, with mentor matching within the Company, invitations to partake in professional development activities, and line of sight to internship and employment

opportunities. GE Women's Network funded 15 \$5,000 SWE scholarships for the 2020–2021 school year (through 2019 fundraising).

GE's Asian Pacific Allies & Friends (APAF) ERG promotes the value of the Asian Pacific Islander Americans community through volunteering, educating, mentoring, and other activities. Under the pillars of recruiting and outreach, GE has long partnered with the Society of Asian Scientists and Engineers (SASE) to engage emerging professionals and build better leaders for tomorrow. GE's relationship with the SASE dates back to 2010, just a few

years after the organization was founded to give Asian heritage collegiate students a way to connect with corporations to learn business and leadership skills. GE joined as a corporate partner, embracing SASE's focus of on-campus engagement and proactive top talent recruitment. And as heartbreaking incidents of anti-Asian hate unfolded in the U.S. in 2020 and 2021, GE's commitment to the Asian community only deepened.

For nearly 100 years, the GE Foundation, an independent charitable organization funded by GE, has actively supported efforts to create a high-quality education pipeline for all students. Most recently, the GE Foundation announced a new commitment of up to \$100 million to create the Next Engineers program—a global college-readiness initiative to increase the diversity of young people in engineering. Next Engineers is built around some of the best community initiatives happening across GE. [GE Girls](#), an initiative launched by our Women's Network, has reached hundreds of eighth grade girls to explore STEM careers. [GirlsGetSET](#), a program from the GE team in the U.K., shows young girls what Science, Engineering, and Technology (or SET for short) is all about. Learn more about Next Engineers on page 81.



## Using lean to amplify our diversity and inclusion efforts

We also use lean exercises to examine how we recruit diverse talent to come to GE and how we grow gender and underrepresented minority representation at all levels of the organization.

### GAS POWER: FOCUSED PRIORITIES SETTING AND KAIZEN

GE Gas Power recognizes that diversity and inclusion play a central role in being successful, and their cultural mission is clear: build a safe, winning, and inclusive culture where every employee is treated with respect and dignity every day. The team is focused on defining the Leadership Behaviors and practices needed to foster dignity and respect, implementing learning and development programs that focus on unconscious bias, crucial conversations, allyship, empathy, and improving the performance management process to drive accountability.

Lean is helping the business identify areas that drive the most improvement in terms of diversity. Value stream mapping and problem solving identified three focus areas to grow gender and underrepresented minority representation in the business: development, hiring, and attrition. For development, the team found that most movement into executive leadership occurs through promotion, but the business needs to grow the pipeline of diverse talent. For hiring, the business is refreshing the processes to increase visibility to more women and underrepresented minority candidates in the interview process. Finally, for attrition, the business will apply lean methodologies to dig deeper into understanding gaps in the existing talent pipeline. Although GE Gas Power is in the early days of this effort, the data-based, questioning lens of lean has provided transparent paths forward.



Vicki Lunsford helps build the heart of the first-ever 7HA.03 Gas Turbine, the rotor, for Florida Power & Light.

## MEET SOME OF OUR GE COLLEAGUES WHO ARE RISING TO THE CHALLENGE OF BUILDING A WORLD THAT WORKS FOR EVERYONE

Please click "learn more" below to hear more about our colleagues' unique stories.



**Lauren Duncan**  
Customer Technical Program Leader, GE Aviation

[Learn more ▶](#)



**Andrea Henriquez**  
Sales Manager, GE Healthcare

[Learn more ▶](#)



**Jamie Pierce**  
Executive Project Management,  
GE Renewable Energy

[Learn more ▶](#)



**Donovan Buckley**  
Senior Engineer, GE Research

[Learn more ▶](#)



**Angie Norman**  
Executive Lean Leader,  
GE Corporate

[Learn more ▶](#)



**Jonathan Metz**  
Lead Finance Systems Analyst,  
GE Hitachi Nuclear

[Learn more ▶](#)



**Russell Stokes**  
President & CEO,  
GE Aviation Services

[Learn more ▶](#)



**Jayesh Shanbhag**  
Regional General Manager,  
GE Aviation

[Learn more ▶](#)



*Ernestine Mboua Mben, LM Wind Power, a GE Renewable Energy business, Gaspé, Canada*

### GE RENEWABLE ENERGY: IMPROVING THE HIRING RATE OF BLACK AND AFRICAN AMERICAN TALENT

To improve recruitment and hiring rate of Black and African American talent in the United States, GE Renewable Energy immersed themselves in a kaizen event for two weeks, assembling a team of 12 people—including current Black and African American employees, hiring managers, and employees from Human

Resources—to identify and implement necessary changes. The team created a value stream map, which was used to increase the visibility to different flows, including information, people, and equipment, to help uncover waste and inefficiencies. By visualizing all the steps currently followed during the external recruiting and hiring process, the team identified eight opportunities for further kaizen that impact hiring, such as a lack of diverse candidates, a lack of recruiting strategies specific to Black and African

Americans, and a low ratio of diverse interviewers. The team prioritized opportunities and turned them into action plans that included creating standard pipelining and recruiting strategies for future open roles, and training people leaders on strategies to attract more diverse candidates. These kaizen opportunities will be implemented over the course of the year to change the way we recruit and hire.



## OUR COMMITMENTS

# GE respects our people, our planet, and our communities

As a global company with reach across 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
  - innovate technology to address climate change and reduce the environmental footprint of our own operations and those of our customers
  - maintain a strong EHS and environmental compliance program
  - invest in returning contaminated properties to protective reuse for communities
- Respect the human rights of our own workforce and all of those in our value chain
- Respect employee's rights to freedom of association
- Hold suppliers accountable for an ethical supply chain
- 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

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

# Safety

## At GE, we put safety first

Protecting our people and those doing work on our behalf across the globe is among GE's top priorities. Visit our website [here](#) to learn more.

GE has experienced continued improvement in our overall injury and illness (I&I) rate over the past decade. However, one injury is too many. We believe the record of fatalities and significant injuries over the last several years is unacceptable. The most serious issues often involve our project and services operations with contract workers or others doing work on our behalf. As detailed below, we are focusing heightened attention on addressing safety at project and service operations, both for employees and contractors.

### OPERATIONALIZING SAFETY AT THE LEADERSHIP LEVEL

Reflecting the priority GE places on safety discussed above, and the recognition of the need to improve performance in higher risk project and safety operations, leadership took additional steps in 2020 to further optimize our program and drive improvement in these areas: resource prioritization, leadership focus, and company-wide attention on the importance of safety. GE views safety as a core operational issue that must be driven from the top by GE's operational leaders, starting with business CEO-level

accountability for each business' safety program. To help facilitate the success of a top-driven, operationally-focused safety program, in 2020 GE announced a Corporate Safety Leader reporting directly to the CEO to complement our EHS leadership across the Company. The role of the Corporate Safety Leader is to integrate safety more strongly into the GE operational and leadership mindset as a top priority.

In 2021, the Corporate Safety Leader launched a Safety Promotion Office (SPO). The SPO is modeled on our Kaizen Promotion Office to augment our safety program, leveraging lean as a critical tool to prevent injuries and events and drive safety as a core operational attribute for the businesses. This new structure is intended to complement our rigorous EHS program by driving operational accountability and a strong safety culture globally, and ensuring learnings and improvements are implemented across the enterprise. Additionally, for our 2021 annual bonus program, we have added a bonus modifier for safety—in addition to financial metrics—to reflect our company-wide prioritization of improvement relative to health and safety in the workplace.

### GE RENEWABLE ENERGY VISION SAFE PROGRAM

GE Renewable Energy launched its Vision Safe program in 2019, following a journey of listening to employees and contracting partners, and visiting sites. The program is a fundamental change in the way we operate, helping to benefit our safety performance and ability to bring GE teams and contracting partners home safely. The program is based on three key principles: One Team, working together; One Goal, zero harm; One Standard, world class. Vision Safe is built on four key pillars: **Plan-Do-Review** to help ensure jobs are completed safely every day; **Safety by Design** to ensure human factors are embedded into design processes; **Training** to provide leaders and managers with key competencies and tools; and **Leadership in Action** to hold our entire leadership team accountable. Vision Safe is currently being deployed globally. Using lean kaizen tools, more than 5,000 EHS Gemba Walks have been held globally to improve processes.



Wind farm, Oregon, U.S.A.

### SAFETY

	2018	2019	2020
<b>Injury &amp; Illness Total Recordable Rate<sup>1</sup></b>	0.55	0.60	0.51
<b>Days Away From Work Incident Rate<sup>2</sup></b>	0.24	0.28	0.26
<b>Fatalities - Employees</b>	2	3	3
<b>Fatalities - Contractor Workers</b>	6	2	4

<sup>1</sup> Number of OSHA recordable injury and illness cases per risk population YTD, based on 100 employees working 200,000 hours annually. Baker Hughes included in 2018.

<sup>2</sup> Uses OSHA calculation for days-away-from-work cases (transfer or restricted cases are excluded), based on 100 employees working 200,000 hours annually. Baker Hughes included in 2018.

Due to the changing nature of GE's enterprise business structure, figures are periodically updated to reflect changes in scope. For instance, acquired businesses may not have aligned data for the same time periods.

## Safety risks in focus at project sites

We extend our safety expectations to all places where we work, including at our own operations, customer sites, in the field, and at our project installation and construction sites. Although our safety expectations do not change, managing risk at various operations sites is inherently different. For example, our business model evolved with the acquisition of Alstom, and the incorporation of its power and grid businesses. This acquisition added delivery Engineering, Procurement, and Construction, or EPC, and extended scope projects, with GE responsible for consortium projects and, sometimes, the

coordination of EHS and safety with our contractors. These types of operations and projects have a wide variability of work environment, hazards, and controls in place, and we began experiencing contract worker events, primarily in this projects space. Evaluation of these events showed an opportunity to identify high risk contract workers and projects, as well as to operationalize a standard pre-qualification common and process.

Recognizing this new risk profile, we implemented a set of standards for contractor prequalification, as well as a

system to manage the process globally. We review training and competency expectations, programmatic elements for high-risk operations such as working at heights, electrical work, and executing lifts, as well as performance metrics. Using these standards, we are able to assess capabilities and help drive safe execution in alignment with our expectations. When we find defects in programs or competency, we may partner to help provide risk mitigation plans or basic competency in certain areas.

### SAMPLE OF GE'S LIFE SAVING PRINCIPLES POSTERS, AVAILABLE IN SEVERAL LANGUAGES

**GE LIFE SAVING PRINCIPLES**

**LIFTING OPERATIONS**

Follow the Lift Plan, and stay clear of suspended loads

**DO**

1. Do follow the lift plan
2. Do perform a daily pre-use visual inspection and operational check
3. Do check that load does not exceed equipment load capacity
4. Do use lifting equipment or accessories for which you have been trained and authorized

**DON'T**

1. Don't allow yourself or anyone else to be under a suspended load
2. Don't position yourself between the load and a fixed object you could get crushed by
3. Don't use any damaged lifting equipment or accessories

**STOP WORK**  
You are the last line of defense.

**GE LIFE SAVING PRINCIPLES**

**WORK AT HEIGHT**

Hook on where there is a risk of falling

**DO**

1. Do use appropriate personal fall protection
2. Do make sure it is in good condition
3. Do review, understand and follow the revision rescue plan
4. Do verify working platforms, fall arrest systems and lanyards are anchored securely
5. Do make sure it is attached to a suitable anchor point

**DON'T**

1. Don't work on a vertical lifeline if anyone else is on the same line

**STOP WORK**  
You are the last line of defense.

**GE LIFE SAVING PRINCIPLES**

**CONFINED SPACE**

Obtain authorization and check atmosphere before entering a confined space

**DO**

1. Only enter a confined space if you are authorized and have a valid signed off permit
2. Only enter a confined space once 3 roles (entrant, attendant and supervisor) have been assigned and attendant will be present at all times
3. Wear appropriate PPE and have calibrated gas detector/means of communication
4. Have emergency equipment in place
5. Monitor ventilation and gas detection before, during and after work
6. Have confined space identified and restrict access at all times

**DON'T**

1. Do not enter a confined space unless the atmosphere has been proven to be safe

**STOP WORK**  
You are the last line of defense.

**PRINCIPIOS DE GE PARA SALVAR LA VIDA**

**OPERACIONES DE IZAMIENTO**

Observe el Plan de Izamiento y manténgase alejado de las cargas suspendidas

**DO**

1. Revisar el plan de izamiento
2. Realizar una inspección visual y operativa diaria antes del uso
3. Verifique que la carga no excede la capacidad de carga del equipo
4. Use el equipo o accesorios que ha recibido capacitación y autorización

**DON'T**

1. No permanezca debajo de una carga suspendida ni permita que
2. No se coloque entre la carga y un objetoijo que podría aplastarlo
3. No use equipos ni accesorios de izamiento defectuosos

**STOP WORK**  
You are the last line of defense.

**RÈGLES VITALES DE SÉCURITÉ GE**

**TRAVAUX EN HAUTEUR**

Toujours s'attacher quand un risque de chute est présent

**OBLIGATION**

1. Toujours s'attacher
2. Utiliser un équipement de sécurité en bon état
3. Vérifier que l'équipement de sécurité est correctement installé et fixé
4. Respecter les consignes de sécurité sur le site
5. Se familiariser avec les procédures d'évacuation et de secours
6. Ne pas travailler sur une ligne verticale si d'autres personnes sont également présentes

**INTERDICTION**

1. Ne pas travailler sur une ligne verticale si d'autres personnes sont également présentes

**STOPPEZ VOTRE ACTIVITÉ**  
Vous êtes la dernière ligne de défense

**GE 珍爱生命法则**

**受限空间**

进入受限空间前，先获得授权并检测气体

**务必**

1. 获得授权及具备的许可证才可进入受限空间
2. 在三人以上的受限空间内作业时，必须有三名人员负责监督和执行，其中一人监护，一人作业，一人备用。
3. 遵循受限空间的PPE、配备检测设备和通风设备，以及对进入受限空间的人员进行培训。

**禁止**

1. 除非受限空间气体经证实安全后，否则不得进入。

**如不安全，停止作业**  
你是安全保障的最后一道防线。



At the same time, we also reinvigorated our contract worker incident recording process. Ensuring we are recording and learning from both employee and contractor events, as well as putting mitigations in place to prevent them from recurring, is part of our overall commitment to a safe working environment for all.

We also developed and launched GE's Life Saving Principles (LSPs), a series of 13 orienting values that illustrate critical steps to stay safe in certain hazardous situations. These steps are never to be circumvented; and if the party doing the work cannot do the work safely—or questions their capability to do so—they must **STOP WORK** until they can mitigate the risk.

These LSP documents, represented visually and in many languages, are widely available, posted at our operations, and are used to orient our contractors and partners, specifically at our project sites, to GE's most fundamental expectations. We share them freely with our stakeholders.

Although GE's safety program is a commercial differentiator, we don't believe safety is proprietary. The benefit to all is greatest when we share our learnings and elements of our program to prevent injuries or events.

This shift in our risk profile required us to identify standard work practices across variable operations. We leveraged our learning and the improvement in injury and significant events we realized in our own fixed facilities from applying similar standard work practices. Starting in 2018, we developed and implemented standard work protocols for these project operations, including training and competency, contractual terms and conditions, and self-assessment expectations. This lean approach to EHS and safety, including using robust root cause analyses and implementing the best defenses available, is critical to GE's continued improvement. We continue to refine our programs in partnership with the businesses, subject matter experts, the Safety Promotion Office, and senior leaders across the Company.

#### "WALK THE CART:" FOCUS ON SAFETY AT GE AVIATION

To focus site awareness on hand safety, the GE Aviation Caledonian site in the U.K. relies on a mobile display cart to increase awareness of potential risks and discuss proactive risk reduction solutions. With its "Walk the Cart" campaign GE Aviation encourages safety at work and at home. The Company provided each employee a pair of gardening gloves and a Handy Home Safety leaflet to continue to prompt hand safety awareness at home.

As a result of this campaign's all-employee effort, over the past 17 years, we have seen a 96 percent reduction in hand-related injuries. The Caledonian site has been recognized as a Global Star site and is one of GE Aviation's leading facilities in employee safety performance.



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



*Yanmang Zhang, GE Healthcare, Beijing, China*

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

Our strong EHS program comes from a robust network of systems and professionals supporting our sites, services, and projects across the globe. 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; and
- 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, and Electrical Safety and environmental risk areas such as air emissions, spill and release management, prevention, and response, and waste and water management.

Our employees complete more than 1 million EHS courses annually covering regulatory and non-regulatory topics and translated into appropriate languages. The courses are designed and maintained centrally by a team who ensure accuracy, accessibility, and compliance with EHS regulations and GE's standards. The assignments are done locally by EHS professionals who are able to develop targeted roles-based training for relevant employees.

We assess the EHS impacts of our businesses globally using an enterprise-wide system of record for the majority of our EHS data, allowing for robust analysis and trending to be done in order to learn and improve. We track industry standard key performance indicators (KPIs), such as injuries, illnesses, significant environmental events, training completion, and regulatory findings and closure. Framework 2.0, a key element of our EHS management system, measures individual operations against a series of self-assessment questions on environment, health, and safety topics. In the Environmental Defenses element of our Framework, organizations are evaluated on air emission sources, air pollution control equipment, water sources and discharges, wastewater treatment equipment and operating conditions, and hazardous and industrial waste collection, management, and shipping practices.

The implementation of these expectations is carried out by a robust network of 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, in order for issues to be elevated and addressed. Our EHS data is published internally no less than quarterly and is available real-time through a system of dashboards maintained at the company and business levels. This proactive use of performance KPIs and data underscores GE's commitment to transparency and continuous improvement. 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 and Public Affairs (GPAC) committee. This layering of review ensures visibility and accountability, cornerstones of our EHS program. Audits are conducted at a frequency that reflects the inherent risk and performance of the operation. We also report our performance on key metrics such as spills and releases, air exceedances, and wastewater exceedances to our public stakeholders on our ESG website no less than annually. Our commitment to continuous improvement and risk reduction drives us to analyze EHS events to identify corrective actions and to prevent recurrence.



*Erustus Nzomo, GE Renewable Energy, Kenya*

# 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. In addition to the self-assessments and inspections, governance audits are conducted at a frequency determined by the risk and performance of each operation. Environmental inspections or investigations by regulatory agencies are reported as "events" and any findings are tracked to closure. Key environmental metrics are reported and tracked at the site, business, and company level for the purpose of monitoring performance and ensuring compliance.

Reporting and escalation is required in the event of exceedances of permit limits 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. Environmental KPIs (key performance indicators) include Framework scores, regulatory finding closure rate, regulatory training completion, severe environmental events, notices of non-compliance, penalties paid, and spills and releases.

*Hydro power stations, Linthal, Switzerland*



### ENVIRONMENT

	2018	2019	2020
<b>ISO 14001 sites</b>	185	107	97
<b>Global Penalties Paid (in \$ thousands)</b>	65	25	25
<b>Spills &amp; Releases (Count)<sup>1</sup></b>	41	36	47
<b>Air Exceedances (Count)<sup>1</sup></b>	1	1	9
<b>Wastewater Exceedance (Count)<sup>1</sup></b>	25	17	11

<sup>1</sup> Spills & Releases, Air Exceedances, and Wastewater Exceedances data includes Baker Hughes in 2018.

97

ISO 14001

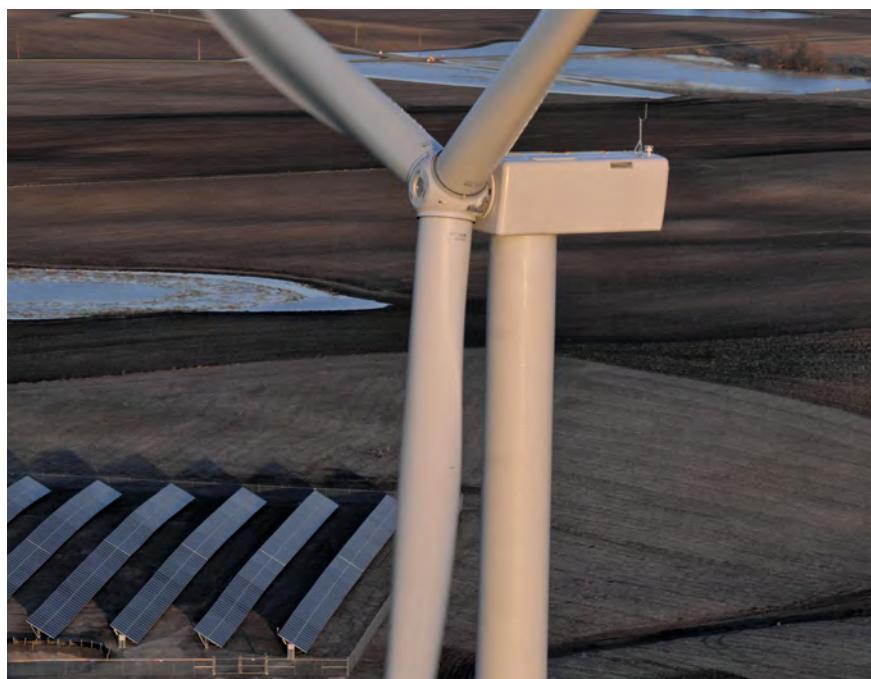
Due to the changing nature of GE's enterprise business structure figures are periodically updated to reflect changes in scope. For instance, acquired businesses may not have aligned data for the same time periods.

## Climate change

As described above, GE is committed to delivering innovation and technology to address the energy transition and climate change globally. This includes taking strong actions internally and leading by example. In order to monitor its own environmental footprint, GE maintains a greenhouse gas (GHG) and water inventory database, which is integrated with GE's GHG and energy inventory processes.

Through 2019, GE has reduced GHG emissions from our operations by 21 percent from our adjusted 2011 baseline. With these results, we surpassed our 20 percent by 2020 GHG reduction goal. Our emissions have decreased due to better control of key gases in manufacturing; energy efficiency projects; business changes, such as acquisitions and divestitures; and changes in overall grid emission factors.

To learn more about our Greenhouse Gas Inventory and Energy Inventory Process, click [here](#).



Wind-solar hybrid project in Minnesota, U.S.A.

### CLIMATE CHANGE AND ENERGY

	BASELINE <sup>1</sup>	2018	2019	2020
<b>GE Operational GHG Emissions (million metric tons of CO<sub>2</sub> equivalent) (market based)</b>	2.3	2.80	2.39	2.07
<b>Scope 1 Emissions (million metric tons of CO<sub>2</sub> equivalent)</b>	1.29	1.00	0.92	
<b>Scope 2 Emissions (million metric tons of CO<sub>2</sub> equivalent) (market based)</b>	1.51	1.39	1.16	
<b>GE Operational Energy Use (million MMBtu)</b>	24.9	30.1	25.7	23.2
<b>Direct SF6 Emissions (thousand metric tons CO<sub>2</sub> equivalent)</b>	179	164	138	
<b>Total Electricity (MWh)</b>	3,690,000	3,420,000	3,030,000	
<b>Renewable Energy Used (MWh)</b>	44,541	31,800	53,000	

1 For GHG and energy metrics, GE adjusts its 2019 baseline inventory to account for divestments and acquisitions. Interim years are not adjusted.

The GE 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 for Scope 1 and 2 GHG emissions and energy consumption discussed in this document unless explicitly stated otherwise.

## 2020 CLIMATE CHANGE COMMITMENTS

In 2020, GE committed to a carbon neutrality pledge by 2030 for GE's Scope 1 and Scope 2 emissions. Given the industrial nature of GE's businesses and its global supply chain, this is a strong commitment in leading by example. While we are focused on driving absolute reductions to achieve carbon neutrality, where necessary, we will balance remaining emissions with carbon offsets. We anticipate that the majority of our progress toward meeting

our 2030 goal will be achieved through absolute reductions of direct emissions and energy use achieved through operational investments, smart power sourcing, and elimination of waste. Our employees are using lean to hold site-specific sustainability assessments, identify energy reduction opportunities, and calculate and track costs and paybacks. GE maintains a global database used to track our GHG emissions, energy, and water usage. This is the foundation for our reporting.

**For the decade ahead, GE is targeting the majority of its progress toward the 2030 goal with absolute reductions of direct emissions and energy use achieved through:**

### OPERATIONAL INVESTMENTS

### ELIMINATING ENERGY WASTE

### SMART POWER SOURCING

For more details on our incorporation of lean into our sustainability efforts, please refer to page 45-46.



## CENTER FOR DECARBONIZATION

In 2021, as part of its efforts to align technology and innovation to addressing climate change, GE created the Center for Decarbonization, a new cross-GE organization with a mission to serve the broader and connected GE interests addressing the future of energy. One of the initial challenges our businesses and customers can face is in developing a clear, data-backed understanding of the complex elements of the energy transition, such as technical feasibility, future cost curves, and the interdependency of various energy solutions. An initial goal of the Center is to develop and share common model outputs that facilitate comparative and integrated views drawn from a highly-vetted and objective data set. This output will serve as foundational for the entire company to use for strategic planning activities. The Center also drives common 'Voice of Customer' engagements to identify "problems worth solving" and generate core strategic questions for further strategy development.

## GE HEALTHCARE ELECTRIC VEHICLE INITIATIVE

As part of its commitment to increasing the use of renewable energy, reducing greenhouse gas emissions, and improving energy efficiency, GE Healthcare is transitioning its fleet of over 10,000 cars and vans in North America and Europe to electric vehicles. We consider it important to lead by example as part of our longstanding commitment to environmental stewardship, human rights, and a culture of integrity and compliance.



## ENVIRONMENTAL "TREASURE HUNTS" AT GE AVIATION

GE Aviation transformed the pandemic-induced downturn in the global commercial aviation industry into an opportunity to use lean at its facilities worldwide to identify energy savings opportunities. When some of GE Aviation's facilities temporarily ceased operations and went into idle mode, GE Aviation leveraged the opportunity to execute Environmental Treasure Hunts to find waste from sources like HVAC, lighting, compressed air, and water usage. These Treasure Hunts also identified opportunities for operational investment and process improvements which would optimize energy and water use.

A total of 135 energy, water, and natural gas-savings projects were identified; 97 of them were implemented in 2020, and the balance are planned for 2021. These events resulted in 65 million kilowatt hours reduced in 2020—lowering utility costs while saving approximately 45,000 tons of Scope 1 and 2 CO<sub>2</sub> emissions.

In 2021, GE Aviation continues employing Treasure Hunts in our operations and embedding them into the way we work. Events were already underway in the first quarter of 2021 and will continue throughout the year. The learnings from these events are shared and will help us optimize energy savings across our entire portfolio.



## GE'S AMBITION TO BE A NET ZERO COMPANY

GE's purpose is rising to the challenge of building a world that works, and GE is uniquely positioned to help address the urgent challenge of climate change. In addition to our key contribution of innovating technologies and solutions to continue driving the global energy transition, we are taking a number of complementary actions such as the planned exit from the new-build coal power business and providing an influential voice globally for ambitious greenhouse gas emission reduction targets aligned with the goals of the Paris Agreement. We have also worked for many years to reduce GE's emissions: through 2019, GE reduced greenhouse gas emissions from our operations by 21 percent compared to our adjusted 2011 baseline, surpassing our prior "20 percent by 2020" greenhouse gas reduction goal. In 2020, we set a new goal of carbon neutrality by 2030 for GE's operations (Scope 1 and 2 emissions). Our progress toward that new goal will generate a meaningful reduction in emissions, although we recognize other types of emission reductions are needed over time across the broader value chains in our industries to meet the Paris Agreement's goals.

To that end, we are setting a further ambition for GE to be a net zero company by 2050—including not just GE's operations, but also the Scope 3 emissions from the use of our products. Within the category of Scope 3 emissions, we are focusing on reducing emissions from the use of sold products as the most impactful and relevant component given the nature of our business. Many of our customers operate in carbon intensive industries that are at the center of the energy transition, and partnering with them to help reduce emissions with our technology will play an important role in the broader decarbonization of the economy.

As a technology provider to the power and aviation sectors globally, we are particularly aware of the engineering challenges still to be solved to make the ambition of net zero a reality, and that many of the solutions will need to be developed in collaboration with policymakers and other companies. However, we believe those challenges are also key strategic opportunities for solutions and ongoing innovation that GE can provide. As described elsewhere in our Sustainability Report (see pages 20–26 and 31–36), we are providing solutions today that help our customers

achieve their climate goals and meet the world's needs for reliable, affordable, and sustainable power and safe, efficient flight, while continuing to invest in breakthrough technologies for the future. As our industries continue to move toward a net zero future, we believe GE will continue to play an important role in developing innovative technology solutions to enable that transition.

With net zero as our 2050 ambition, we also recognize the importance of measurement and target setting to drive progress in reducing emissions over a shorter time horizon as well. GE's product portfolio ranges from conventional power generation equipment to renewable energy, grid, digital, and other technologies that will help drive decarbonization not just for our customers but for consumers of electricity much more broadly. GE's contribution to the energy transition over time should be seen not just in absolute emission reductions but also in the growth of zero carbon energy and avoided emissions that many GE products enable. The exercise of developing specific, credible, and well-founded greenhouse gas emission reduction metrics and goals that include emissions from sold products outside of GE's operations also depends on the range of potential pathways for decarbonization, the speed of research and innovation efforts, the timelines for deployment of technologies, the impact of government policies, and other factors that could significantly affect GE's approach in the decades ahead or are not yet known. Increasingly sophisticated modeling, such as in the recent "Net Zero by 2050" report from the International Energy Agency (IEA), is starting to provide more insight into what the potential pathways to net zero may look like. As we continue to study these pathways using both our internal and external modeling and scenarios, we plan to continue developing and to communicate details about more specific, nearer term GE greenhouse gas reduction metrics and targets that include Scope 3 emissions.

Already some broad contours of the pathways for our businesses to reach net zero by 2050 are clear. For example, there is broad consensus that in the near term the power generation mix globally needs to rapidly shift away from coal, and our business strategy is aligned with that anticipated trend. Relative to the total emissions associated with

products that GE sells, the planned exit from the new-build coal power market that we announced in 2020 will result in a significant reduction in our Scope 3 emissions over the near term. Over the near and medium term, the onshore and offshore wind power, grid, and other solutions that GE's Renewable Energy business provides will continue to support the growth of renewables-based generation. Renewables growth avoids new emissions and will further decrease the emissions intensity from customers' use of GE products across our power businesses. We anticipate that the significant growth in renewable energy-based generation will also be complemented by strategic deployment of gas power both to reduce emissions and to become a force multiplier for building renewable energy infrastructure. Meanwhile, GE Aviation has already committed along with our commercial airframer and airline customers and partners to the industry's goals targeting carbon neutral growth in aviation from 2020 and achieving a reduction in net CO<sub>2</sub> emissions of 50 percent by 2050. Furthermore, GE Aviation supports initiatives in our industry to achieve net zero carbon emissions by 2050, and in that context we will continue providing technological leadership in transitioning to hybrid flight and expanding the use of sustainable aviation fuels in our next generation engines.

Over the long term, to achieve the levels of decarbonization that the industries we serve will need to align with the goals of the Paris Agreement, we anticipate that additional breakthroughs and advances will be needed to develop deep decarbonization solutions that are widely available, scalable, and affordable. These include solutions such as the use of hydrogen, carbon capture, and small modular nuclear reactors for power generation; electric flight and hydrogen-based commercial aviation; direct air capture; and other technologies. The pace and adoption for these types of solutions in the more distant future are considerably more difficult to meaningfully estimate today. But as a company that has led innovation in our industries for more than a century, GE will continue to partner with our customers to drive meaningful progress on the energy transition and to build a world that works sustainably.

## Water

In 2020, GE met its goals to reduce water use by 20 percent — and, in particular, reduced freshwater use by approximately 21 percent — compared to 2011. 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

	BASELINE <sup>1</sup>	2018	2019	2020
<b>Total Freshwater Use (Billions of Gallons)</b>	6.52	6.54	4.93	5.12
<b>Once-Through Cooling Water (Billions of Gallons)</b>		2.27	1.64	1.85

To learn more about our Water Inventory Methodology, click [here](#).

<sup>1</sup> For water metrics, each year GE adjusts its 2011 baseline inventory to account for divestments and acquisitions. Interim years are not adjusted.

## Product stewardship

GE's businesses are constantly innovating to enhance efficiency and reduce the Company's environmental impact while Building a World that Works, either through their own work or, in many cases, by partnering with other organizations. We consider the environmental impact of our processes and products from design to operationalization, leveraging our lean principles to drive efficiency and eliminate waste. Across our businesses and around the world, we're using lean to make real improvements in safety, quality, delivery, and cost. For example, in 2018, a GE Aviation plant in Batesville, Mississippi, was losing up to 15 percent of its output due to production defects. Using lean tools, the plant has been able to reduce losses by more than 60 percent so far, saving millions of dollars' worth of waste. And it extends to our customers as well; our GE Digital team creates software for manufacturers to map and eliminate waste in their own processes.

*Responsible product stewardship—with a relentless focus on eliminating waste—is woven into GE's culture and strategy.*



*LM Wind Power, a GE Renewable Energy business, Cherbourg, France*

## RECYCLING BLADES: CREATING A CIRCULAR ECONOMY FOR COMPOSITE MATERIALS

In December 2020, GE Renewable Energy announced it signed a multi-year agreement with Veolia North America (VNA) to recycle blades removed from its U.S.-based onshore turbines during upgrades and repowering efforts. Wind turbine blades may be replaced through turbine improvement, or “repowering” efforts, when specific elements of the turbine are upgraded to improve the efficiency and lifespan of the turbine without replacing the entire machine. Longer, lighter blades help the turbine to generate more energy every year, providing even more renewable energy to end customers.

The first agreement of its kind in the U.S. wind industry, the partnership with VNA will allow GE to recycle the majority of blades that are replaced during repowering efforts—a recycling solution that can be deployed quickly and at scale to maximize benefits to not only the wind industry but also to the aerospace, maritime, automotive, and construction industries in the future.

What's more, recycling decommissioned wind turbine blades into cement production will aid the cement industry in its efforts to decarbonize. As a part of the agreement, blades that have been removed from turbines will be shredded at VNA's processing facility in Missouri and



then used as a replacement for coal, sand, and clay at cement manufacturing facilities across the U.S. On average, nearly 90 percent of the blade material, by weight, will be reused as a repurposed engineered material for cement production. More than 65 percent of the blade weight replaces raw materials that would otherwise be added to the kiln to create the cement, and about 28 percent of the blade weight provides energy for the chemical reaction that takes place in the kiln. VNA has a successful history of supplying repurposed engineered materials to the cement industry. Similar recycling processes in Europe have been proven to be effective at a commercial scale.

An environmental impact analysis conducted by Quantis U.S. found that, compared to traditional cement manufacturing,

blade recycling enables a 27 percent net reduction in CO<sub>2</sub> emissions from cement production and a 13 percent net reduced water consumption. In addition, a single wind turbine blade that weighs 7 U.S. tons recycled through this process enables the cement kiln to avoid consuming nearly 5 tons of coal, 2.7 tons of silica, 1.9 tons of limestone, and nearly a ton of additional mineral-based raw materials. Largely due to the avoided coal consumption, this type of blade recycling also has a net-positive environmental impact in the categories of human health, ecosystem quality, and resource consumption. The resulting cement has the same properties and performance as cement manufactured using traditional means, meeting all applicable ASTM standards.

## GE AND HITACHI ABB POWER GRIDS SIGN LANDMARK AGREEMENT TO REDUCE ENVIRONMENTAL IMPACT IN THE ELECTRICAL TRANSMISSION INDUSTRY

On Earth Day 2021 (April 21), GE Renewable Energy's Grid Solutions business and Hitachi ABB Power Grids Ltd. announced a non-exclusive, cross-licensing agreement related to the use of an alternative gas to sulfur hexafluoride (SF<sub>6</sub>) used in high voltage equipment. Under this landmark agreement, both companies will share complementary intellectual property, paving the way for a standard SF<sub>6</sub>-free solution for high-voltage equipment and enabling utilities and industries to accelerate their reduction of greenhouse gas emissions.

For almost half a century, SF<sub>6</sub> gas has been the norm in the electrical power transmission and distribution industry due to its unique physical properties. A powerful greenhouse gas if leaked, however, SF<sub>6</sub>



contributes to climate change. For this reason, GE and Hitachi ABB Power Grids have been investing in the development of better alternatives to SF<sub>6</sub>.

In 2015, GE pioneered a fluoronitrile-based gas, which we named *g3*, and subsequently developed a broad SF<sub>6</sub>-free product range for eco-efficient insulation and switching gas in high-voltage equipment. A recent *EU Commission report* concluded that fluoronitrile-based gas mixtures may be the only insulating and switching gas alternative to SF<sub>6</sub> when space is a constraint.

The two companies will keep the product development, manufacturing, sales, marketing, and service activities of their gas solutions fully independent. Each company will continue to independently grant and set terms of licenses to its respective intellectual property, hence preserving supplier base diversity for the industry and fair competition.

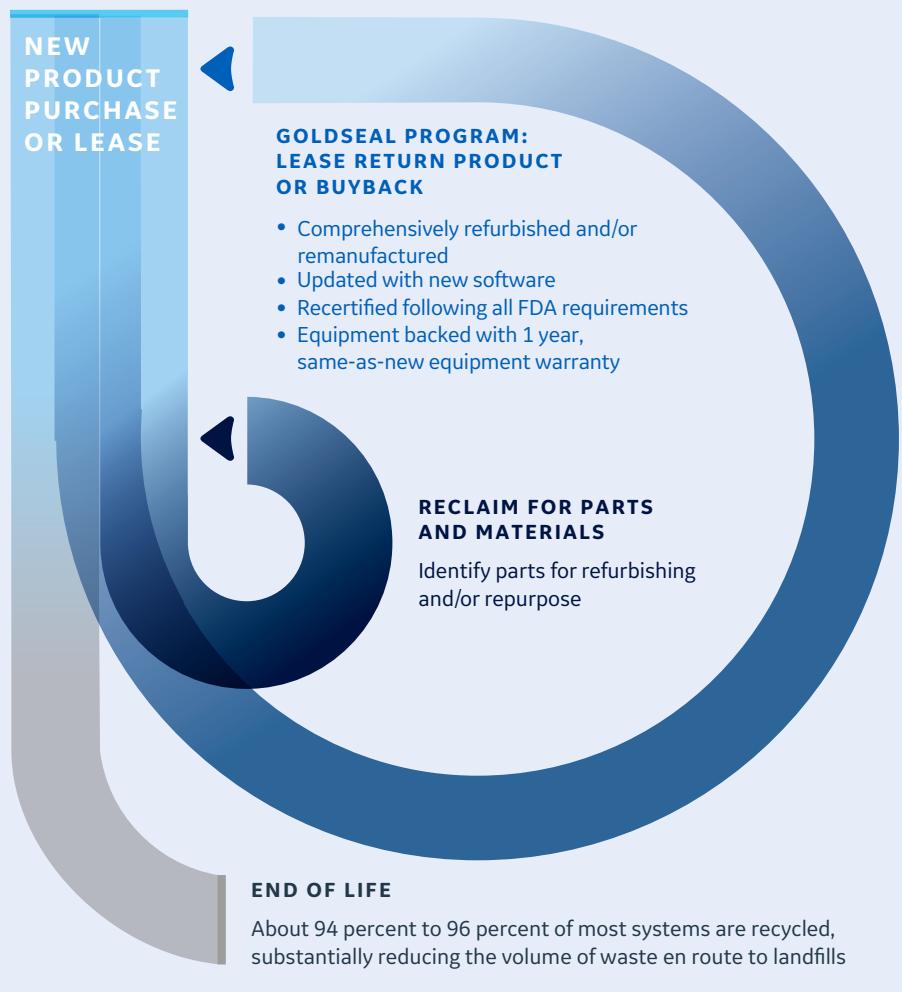
## MANAGING SUPPLY OF GOLDSEAL PRODUCTS DURING COVID-19

The COVID-19 pandemic greatly disrupted the global refurbished medical equipment market in 2020, and companies like GE Healthcare were challenged to secure used assets while demand spiked for new and refurbished equipment. GE used its problem-solving capabilities to navigate these constraints.

*"In a circular economy, we look at how we can make the right commercial and environmental plays to gain more value from the supply chain. On the environmental side, this means keeping waste out of landfills, saving energy on the creation of new products, saving money on raw material costs, and more."*

**SIVA BALAKRISHNAN**

GE Healthcare, Goldseal General Manager



## GE HEALTHCARE PRODUCT STEWARDSHIP COMMITMENT:

- For more than 20 years, GE Healthcare's **GoldSeal** program has played a vital role in reducing medical imaging equipment waste by promoting and enabling the reuse of equipment and parts from de-installed imaging systems. After undergoing an extensive inspection and testing process, GoldSeal equipment is refurbished to meet the original system specifications. Buyers of GoldSeal MRI, CT, or PET/CT products can save on the acquisition costs associated with buying new equipment. Machines deemed unsuitable for GoldSeal refurbishment are dismantled at end of life, and after successfully passing acceptance testing criteria, specific parts are harvested for reuse. Where harvesting is not appropriate, GE Healthcare recycles about 94 percent to 96 percent of most systems. In a typical year, GoldSeal refurbishes approximately 8,000 pieces of imaging machines and ultrasounds.
- Customers can reset the life of their existing scanner with new applications and the latest generation hardware with our **SIGNA™ Lift program**. We also have certain scanner designs that allow customers to upgrade their systems without having to do a complete system swap. This prolongs the useful life of the product and reduces waste for our customers. And we use a packaging system<sup>4</sup> for our contrast media pharmaceutical products that is 100 percent recyclable, with a 59 percent lower (total life cycle) environmental impact than glass alternatives.
- Our **Pharmaceutical Diagnostics business**, which develops and supplies imaging agents used to support around 100 million procedures per year globally, equivalent to three patients every second, **has a contrast media return program** in a number of markets. To reduce the volume of pharmaceuticals requiring disposal, GE Healthcare takes back unopened iodine-based contrast media from customers or its supply chain, with active pharmaceutical ingredients then recovered and/or recycled. In addition, GE Healthcare has implemented an expanding service which allows customers to return any opened but leftover iodine contrast media product back to GE for recycling and re-use.
- We also have numerous smaller projects around the world. For example, in China, our teams have worked to save helium usage during MR transportation, reducing the helium leakage rate from 66 percent to 33 percent saving almost 15,000 tons of helium and reducing the energy consumption for helium production and refilling. In Bangalore, packing boxes were modified and reused as covers for kitting trolleys before they are recycled by the vendor, saving more than 5500 kilograms in materials annually. In Southern China, changes including using a customer warehouse and shipping equipment and waste packaging on the same truck have led to reductions of 50 percent in carbon emissions.

<sup>4</sup> PlusPak, polypropylene packaging

## Environmental justice

GE's implements its commitment to environmental justice in several ways.

First, we are committed to ensuring that all communities where we operate realize the strongest environmental protection from our activities.

Second, we strongly believe that access to affordable, reliable, sustainable electricity is critical to reducing poverty and hunger, and promoting access to education and healthcare for all people. As described on page 20 above, 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 Agreement goals, while also promoting the UN's SDGs, which we believe are the blueprint to achieving a better and more sustainable future for all (see pages 6–9).

Third, GE supports policies to cleanup and redevelop idle contaminated properties into new hubs of economic growth and job creation. As described below, we are particularly focused on addressing brownfields—contaminated vacant properties that could serve a better purpose once cleaned up—in environmental justice communities through a GE initiative investing in cleaning up properties for public good.

## Brownfields

As with any long-standing industrial company, GE owns a number of former manufacturing properties that are no longer core assets for GE's businesses. These properties can be found anywhere from thriving manufacturing hubs to small-town centers 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 property blight, and allows GE to redirect financial assets back to its core operations. For certain parcels with lengthy operating histories, this

*From 1836 through 1989—long before GE's ownership—the Ghent, Belgium plant shifted from dyeing and cutting textiles to metal working and electrical component assembly to producing Bakelite resins, polyesters, and synthetic materials.*



### GE'S ENVIRONMENTAL JUSTICE BROWNFIELD INITIATIVE

As these pages show, GE is committed to prioritizing the cleanup of properties that can be put to a greater community benefit or public good. In many areas, there are myriad opportunities for investment to redevelop a property, but in some environmental justice (EJ) neighborhoods, that investment pipeline is not as strong. Even after remediation, the commercial opportunities in some neighborhoods are sparse, and leaving a neighborhood with a vacant building or lot creates further blight.

As part of its commitment to environmental justice, GE in 2021 is focusing a new initiative and investment

in EJ community properties with more challenging commercial cases for redevelopment. Using the U.S. Environmental Protection Agency's (EPA) screening tool, EJSCREEN, GE has reviewed its inventory of 100+ owned, underused properties in the U.S. to identify properties located in disadvantaged communities that are most heavily burdened by historic industrial activity and least able to bear this burden.

During 2021, GE will prioritize investment in these properties to conduct further assessment and develop site-specific strategies for environmental cleanup and real estate repurposing. GE intends to work hand-in-hand with local government and private groups, property experts,

and technical resources to assure that any proposed redevelopment plans reinforce community revitalization goals and catalyze sustainable economic redevelopment. GE also plans to implement similar available screening approaches and to target investment for cleanup and redevelopment at our underutilized properties in disadvantaged communities across the globe. Once these properties are identified, we will look for opportunities to make additional investments beyond cleanup and demolition to bring some public good to the community in these spaces.

commitment can prove daunting, costly, and time-consuming due to obsolete infrastructure and environmental impacts.

In 2012, to accelerate property reuse, GE founded the Brownfields program to focus on repurposing the company's former industrial assets. This team divides sites into two categories for action: those properties having minimal impact that can be repurposed quickly; and those properties requiring demolition, remediation, regulatory engagement, or other substantial work to promote meaningful reuse. Based on these categories, the team prioritizes the sites

for strategic action and investment along a Brownfields Pipeline to ensure that all sites move successfully through the process.

GE's Brownfields program has meaningfully advanced GE's property stewardship efforts. Since 2012, GE has sold more than 330 industrial sites that have been properly prepared for appropriate reuse, more than double GE's former pace. Seventy percent of these sites fall into the second category requiring substantial work for meaningful redevelopment, compared to fifty-two percent in prior years. By melding a data-driven, methodical preparation process with a significantly increased sales rate, the

Brownfields Program has repurposed 1.8 times more challenging sites than under GE's previous approach. Simultaneously, the team has increased average property sales values by 16 percent, allowing the team to recoup \$1.3 billion in property sales proceeds. This is more than 2.4 times the sales value received over a comparable prior timeframe. Moreover, by repurposing these idle assets, GE has shifted approximately \$38 million that would have been paid annually to maintain these vacant properties back into core business operations, freeing up \$196 million through 9 years of program sales.

## Repurposing former industrial assets



### OAKLAND, CALIFORNIA

GE's Oakland plant manufactured electrical transformers from 1924-1975. The 24-acre property is one of the last large undeveloped tracts of industrial land near Oakland Bay. GE has worked with California DTSC and U.S. EPA to perform targeted cleanup actions on site and on neighboring properties. In 2019, GE sold the property to Bridge Development Partners, which is redeveloping the property and returning it to productive reuse for the benefit of the Oakland community. In 2020, BRIDGE broke ground on the new, state-of-the-art industrial building, which will incorporate notable features, including the original brick façade from the former structure into the building. The new facility is expected to be in the first quarter of 2022.



### BRIDGEPORT, CONNECTICUT

For 90-plus years, GE's 76-acre Bridgeport, CT plant produced wire and cable, appliances, and other goods. By 2007, innovations in manufacturing had rendered the buildings obsolete. GE decommissioned the site, deconstructed the buildings, and sampled environmental media to begin remediation. In 2018, GE donated 17 acres of land and worked with The City of Bridgeport to relocate its Harding High School from an aging nearby campus to a state-of-the-art facility built on part of the site, installing solar panels on an adjacent parcel to provide renewable power for the new school. The following year, GE constructed an athletic complex with turf baseball fields for the Bridgeport Caribe Youth Leaders, a not-for-profit serving nearly 700 youth through sports, education, and community programs. By 2020, the Connecticut Department of Environmental Protection and the U.S. EPA confirmed that GE had met state and federal corrective action targets for the property.

### GHENT, BELGIUM

From 1836 through 1989, the Ghent, Belgium plant shifted from dyeing and cutting textiles to metal working and electrical component assembly to producing Bakelite resins, polyesters, and synthetic materials. GE acquired the property in 1989 for production of electrical components and power supply equipment. When GE sold its Industrial Solutions business in 2018, new owner ABB continued to operate on portions of the site under a lease with GE. To assure that site redevelopment would render the property suitable for future use, GE teamed with Revive, a Belgian brownfields developer, who entered the site into Belgium's Brownfields program and expanded the remediation begun by GE. As of May 2020, Revive had purchased the property and begun cleanup.

*Oakland, California, U.S.A. (artist rendering)*



*Bridgeport, Connecticut, U.S.A.*



## Cleaning up 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 of these sites but also work with other key stakeholders (e.g., local municipalities, the

public, etc.) 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, finance, and communications personnel) to manage the full life cycle of a remedial project from investigation to remedy implementation and potential maintenance and monitoring obligations. 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 have recently incorporated the principles of lean to drive long-term solutions for the environment and company, in addition to helping identify process/programmatic issues requiring improvement and helping to drive more accountability across the team.

GE recognizes that contaminated sites can be concerning and controversial issues for surrounding communities. GE works to develop solutions in consensus with key regulators and the public to the fullest extent possible. 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.



### HOUSATONIC RIVER: A LANDMARK AGREEMENT

Twenty years ago, GE committed to work with the EPA, Massachusetts and Connecticut, and local communities to clean the Housatonic River. Since that time, we invested more than \$500 million in environmental projects in the Pittsfield area, including the cleanup of the first two miles of the river. We've also provided economic development funds to the City of Pittsfield, remediated commercial property for donation to the Pittsfield Economic Development Authority, and provided additional funds to PEDA to develop the William Stanley Business Park.

In 2020, we reached an agreement with the EPA and local communities that makes

good on our longstanding commitment to a comprehensive cleanup of the Housatonic Rest of River that protects the environment. This plan brings certainty to the parties, exceeds the cleanup requirements of an earlier Consent Decree, and removes more PCBs from the river than GE originally agreed to, and provides local communities with additional financial and land resources for development. As part of the agreement, GE has started work to design the cleanup and begin implementation at the earliest opportunity.

The agreement is currently under appeal at the EPA's Environmental Appeals Board.

[Learn more ▶](#)

*"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

## HUDSON RIVER: A “HISTORIC ACHIEVEMENT”

The U.S. Environmental Protection Agency (EPA), on April 11, 2019, confirmed GE successfully completed the Hudson River dredging project. The EPA concluded that the dredging project was effective in reducing PCB levels and said these declines are expected to continue.

During six seasons of dredging, GE removed more than twice the volume of PCBs the EPA originally expected. The project produced declines in PCB levels in sediment, water, and fish from their pre-dredging levels. New York State data showed that 99.8 percent of post-dredging sediment samples in the Upper Hudson

were below EPA's criteria for removal. GE worked closely with the EPA, New York State, and local communities to ensure the success of the project and invested \$1.7 billion in the work.

GE's focus on the Hudson continues. We are working closely with the EPA to address environmental conditions along the shorelines and collecting data to assess ongoing improvements in the river itself.

[Learn more ▶](#)

*“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



### SURABAYA, INDONESIA

Following closure of the GE Lighting Surabaya (Indonesia) manufacturing plant, GE undertook site closure soil and groundwater investigations in 2017–2019. Results of these assessments confirmed the presence of a localized heavy metal impact in shallow soil and a separate area of localized groundwater impacted by solvents.

As part of preparing the site for sale and re-use, GE prepared and submitted a Remedial Action Plan (RAP) in December 2018, involving the excavation

of the heavy metal impacted soil as well as a series of injections of emulsified vegetable oil to promote the natural breakdown of the solvents present in groundwater. The RAP was approved by the environmental regulator Kementerian Lingkungan Hidup dan Kehutanan (KLHK) in May 2019 and GE proceeded to conduct the remediation in August 2019.

Following completion of the remediation, validation sampling of the soil excavation confirmed that background concentrations had been achieved. Validation groundwater

monitoring was conducted periodically over 12 months (September 2019–September 2020) to track the natural degradation process and confirm that solvent concentrations were reduced below the applicable regulatory limits. The regulator issued a No Further Action notice in December 2020, signifying the end of GE's remediation obligations and releasing the site for future use.

# Human rights

People are at the heart of GE's operations and strategy. We have implemented a suite of policies and programs to respect our own workers, those of our suppliers, and the communities affected by GE operations and business relationships.

GE's *Human Rights Statement of Principles* 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 Sustainable Development Goals. We seek to treat everyone affected by our business and value chain—including employees (see Respectful Workplace), workers, customers, and communities—with fairness and dignity.

The screenshot shows the homepage of the GE Human Rights Statement of Principles. It features a blue header with the GE logo and the title "GE Human Rights Statement of Principles". Below the header, there is a large image of a construction site with workers. The main text on the page discusses the company's commitment to human rights, mentioning the UN Guiding Principles, the OECD Guidelines, and the Ten Principles of the UN Global Compact. It also refers to the International Bill of Human Rights, the International Labor Organization Declaration on Fundamental Principles and Rights at Work, and the Sustainable Development Goals. The page includes links to the statement itself and a sustainability report.



## GE human rights enterprise policies and standards

For our employees, directors, and officers, GE's *The Spirit & The Letter (S&L)* details GE's human rights expectations along with other related policies and procedures such as our Environmental, Health, and Safety Policy and Respectful Workplace Policy. These policies are embedded throughout GE's business operations through enterprise standards and policy documents and implementation.

The Human Rights Enterprise Standard, intended specifically for GE business compliance professionals, supplements the S&L Human Rights Policy by setting forth the core human rights expectations of the businesses. The Enterprise Standard addresses GE's most salient human rights risks within our operations which fall primarily in supply chain, facility site management, and subcontractor engagement. It outlines auditable

controls and requires that the businesses have appropriate mechanisms in place to monitor those controls to mitigate human rights risk within our operations. Furthermore, the Enterprise Standard sets out minimum requirements regarding risk assessment and mitigation, due diligence of third parties, and escalation and remediation of any concerns related to human rights.

Implementation of the Human Rights Enterprise Standards requires cross functional engagement. The GE Global Human Rights Counsel leads a Human Rights Working Group with business human rights champions representing every business and various functions throughout the organization. Each business human rights champion works with its business Human Rights Risk Mitigation Team to discuss the salient human rights risk across the Company, how to address the risk and who is responsible for owning, and implementing the requirements in the Enterprise

Standard. The Human Rights Working Group meets regularly to discuss the implementation of the standard and the evolving landscape of human rights issues and risks in the communities we serve.

## Modern slavery

Since 2017, GE has published a California Transparency in Supply Chains Act Statement and an annual Modern Slavery Act Statement outlining our efforts to prevent forced labor in our operations and supply chain. Our human rights program is multi-faceted and includes enterprise standards and policies that guide our conduct across the Company, ensuring an ethical supply chain with suppliers through our Supplier Responsibility Governance (SRG), Responsible Mineral Sourcing, and promoting a respectful workplace. In 2021, we published our *U.K. Modern Slavery Act Statement* and *Australia Modern Slavery Act Statement* providing a detailed description of our approach to addressing modern slavery.



Xinlong Huang, GE Healthcare, Beijing, China

Based on our due diligence and risk assessments, we have identified the following general types of modern slavery risks that may be present in our operations and supply chains:

**1. Operations** — In our operations, modern slavery risks may exist within the population of contingent workers that support GE office sites. These workers provide janitorial, food/beverage, security, and other facilities-type services. These contingent workers are primarily provided through an enterprise-wide vendor arrangement but may also be further sub-contracted. GE maintains a strong partnership with the vendors who provide us with our contingent workers and conducts periodic reviews to ensure they are complying with their obligations and respecting human rights.

**2. Supply Chain** — Due to the nature of GE's products and services, potential sources of modern slavery risks include: manufacturing sites in high risk countries; mineral sourcing deep in our supply chain; and use of low-skilled and/or migrant workers from subcontractors. Our modern slavery risks are most acute in those parts of our supply chain where we have limited or no visibility, such as subcontractors

using seasonal, low-skilled, and/or migrant labor and pre-smelter mineral sourcing. GE is also committed to work to eliminate from our products all minerals that support armed groups in the Democratic Republic of the Congo or from conflict-affected and high-risk areas (CAHRAs), while at the same time minimizing unintended consequences for legitimate miners and their dependents. More information on our Responsible Mineral Sourcing Program can be found on page 79 below.

To help combat the global crisis of modern slavery, 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, and bring focus to emerging challenges and identify solutions.

Based on our engagement with the Leadership Group for Responsible Recruitment (LGRR), GE adopted and

implements 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.

Our human rights program depends on the practical understanding of our people and business partners. We provide employees with learning modules on human rights and forced labor which give employees an easy, efficient way to understand the core principles of human rights; the Company wide policies and programs; the causes and global footprint of forced labor; and most importantly, how they can serve a role in identifying and reporting possible signs of modern slavery when they are at GE operations, supplier facilities, or customer sites.

# 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, 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. 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 multi-faceted ethical supply chain program, suppliers are prioritized for detailed pre-engagement and periodic follow-up, onsite 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. 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.
- 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 at a frequency of one to five years based upon the supplier's risk profile.
- Recorded, tracked, and monitored, all SRG audit findings must be in our proprietary reporting tool. The supplier 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 all purchase orders under the contract, should the supplier not 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, following the pandemic restrictions in 2020, GE pivoted to allow the option of desktop audits for suppliers so that our auditing program could continue; we are also working on enhanced virtual audit tools.

suppliers we can build their capability to improve their compliance, environment, health and safety practices, and fair employment practices, and reduce human rights and modern slavery risks.

## Responsible mineral sourcing

Aligned with GE's SRG program, GE strives to assure that our supply chains are ethical and sustainable when obtaining products containing tin, tantalum, tungsten, gold (known collectively as "3TG"), cobalt, and mica, 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 "conflict minerals," that potentially finance armed groups in the Democratic Republic of Congo (DRC), its adjoining countries or other conflict-affected and high-risk areas (CAHRAs). *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.

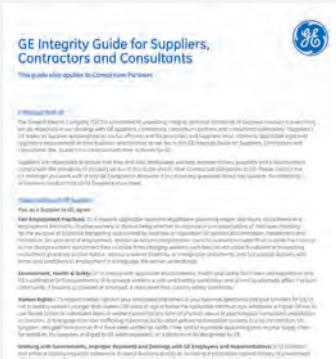
GE prohibits use of forced or child labor in its operations and supply chain and proactively addresses these concerns through its *Ethical Supply Chain Program*. We recognize that conflict is just one of the risks related to mineral sourcing where critical issues such as poverty, environmental degradation, 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 CAHRAs. 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

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 importantly, through our regular communication and engagement with our



The image shows the cover of the 'GE Integrity Guide for Suppliers, Contractors and Consultants'. It features the GE logo at the top right and a small note below it: 'This guide also applies to GE's joint ventures and partners'. The main title is in large, bold, blue font. Below the title, there is a detailed description of the document's purpose and scope, including sections on 'What is the GE Integrity Guide?', 'How does the GE Integrity Guide work?', and 'What does it mean for my business?'. At the bottom, there is a section titled 'How to use this guide' with instructions for suppliers.

[Learn more ▶](#)

## AUDITING GE'S GLOBAL SUPPLY CHAIN

2020<sup>1</sup>

Number of Global Audits	1,286 <sup>2</sup>
Total Suppliers Approved (New and Existing)	1,039 <sup>3</sup>
Total Suppliers Rejected (New and Existing)	71 <sup>3</sup>
Total Findings	7,348

1. Beginning with the 2020 metric year, our Supply Chain metrics reflect changes and improvements in GE's Supplier Responsibility Governance (SRG) program. 2018 and 2019 metrics do not represent today's SRG program and are not displayed. New metrics of Total Suppliers Approved and Rejected are included to show the effectiveness of the SRG program.
2. The total audit number (1,286) is greater than total suppliers reviewed (1,164) as there were suppliers that were audited twice (i.e., desktop audit due to COVID-19 restrictions and then on-site visit) or a return visit to confirm corrective actions performed.
3. New metric reported in 2020 from SRG program and audits.

# Freedom of Association



*GE respects its workers' right to associate.*

## Respect for freedom of association is one of GE's core commitments to all employees.

In 2019, GE ratified a four-year agreement with all of the unions that make up the Coordinated Bargaining Committee (CBC), putting the agreement into effect and completing the labor negotiation process. There are approximately 6,600 GE employees represented by contracts with the seven GE unions that are part of the CBC: the International Union of Electronic, Electrical, Salaried, Machine and Furniture Workers—Communications Workers of America (the largest of the GE unions); the International Association of Machinists and Aerospace Workers; the United Auto Workers; the International Brotherhood of Electrical Workers; the United Steelworkers; the International Federation of Professional and Technical Engineers; and the United Association of Journeymen and Apprentices of the Plumbing, Pipefitting and Sprinkler Fitting Industry of the United States and Canada.

GE's relationship with employee-representative organizations outside the U.S. takes many forms, especially in the EU. We estimate that our employees are represented by approximately 200 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 structure; it comprises a Central Committee focused primarily on enterprise-wide issues, together with four business specific committees in respect of our GE Renewable Energy, Power, Healthcare, and Aviation divisions. Those Committees enable the exchange

*GE Renewable Energy, hydro facility in Grenoble, France*

of information and inputs between Senior Leaders of the company and European employees' representatives. Together, GE EWC now covers approximately 99 percent of our European workforce which provides a voice to nearly 54,000 employees.

In China, 39 GE legal entities with 23 have unions representing nearly 13,000 employees, all affiliated with the All-China Federation of Trade Unions, including GE China's headquarters in Shanghai. Collective bargaining agreements are being negotiated at each of these locations.

# The GE Foundation

## Next Engineers: Increasing the diversity of young people in engineering

At GE, we are committed to building a world that works, no easy feat. In 15+ years at GE, I've had a front-row seat to watching our teams wrap their minds and hands around what it means to create towering offshore wind turbines, ultrasounds that fit in the palm of your hand, and disruptive jet engine technology designed to drive a more sustainable future of flight. These, and so many other breakthrough innovations are the output of GE's 30,000 engineers who are literally creating blueprints for the future.

With Engineering so core to GE, we have also recognized the need to pave the way for others, particularly in diverse populations who are woefully underrepresented in the field. In U.S., Black and Hispanic people represent less than 13 percent of the current engineering workforce. In the U.K., women comprise only 12 percent of those working in engineering roles, and in South Africa, only 11 percent of the total number of engineers registered are female.

With both the need and our ability to contribute to the future in mind, earlier this year, we announced the GE Foundation's commitment of up to \$100 million to create the *Next Engineers* program—a global college-readiness initiative specifically focused on increasing the diversity of young people in engineering.

Over the next decade, the goal of Next Engineers is to reach more than 85,000 students in approximately 25 cities globally to develop the next generation of engineers and innovators. The program will focus on students underrepresented in engineering in grades eight to 12 (ages 13 to 18), providing hands-on exposure to engineering concepts and careers, and ultimately awarding scholarships to pursue engineering degrees.

Next Engineers has three pillars: **Engineering Discovery**, exposure through a career fair, assembly, or classroom to increase awareness about engineering opportunities; **Engineering Camp**, a week-long immersive experience to develop engineering identities; and **Engineering Academy**, a three-year program to guide and encourage students to pursue engineering degrees.

Next Engineers is built around some of the best community initiatives happening across GE. *GE Girls*, an initiative launched by our Women's Network, has reached hundreds of eighth grade girls to explore STEM careers. *GirlsGetSET*, a program from the GE team in the U.K., shows young girls what Science, Engineering and Technology (or SET for short) is all about.

For nearly a century, the Foundation has made *great progress* around education and health. As we look ahead to the Foundation's next evolution, we are committed to making an ever greater impact globally with Next Engineers. This is our commitment to building a world that works. You can follow our journey [here](#).



LINDA BOFF

President, The GE Foundation, and Vice President, GE



## Developing STEM and other technical skills

### PROGRAM HIGHLIGHTS

Over 2,000 public schools	Over 100,000 educators
More than 1.3 million students	More than \$185 million invested since 2005

Through its signature education and skills program, Developing Futures and Developing Skills, we have invested more than \$185 million since 2005 to support the equity and quality in math and science education. Then and today, we know the Future of Work is rooted in science, technology, engineering, and mathematics (STEM). Launched in seven U.S. cities, the program has benefited 2,000 public schools, over 100,000 educators, and more than 1.3 million students through student proficiency gains, decreased drop-out rates, and narrowing of the achievement gap. The program is in its final year, culminating with the installation of **GE Innovation Labs** in six Milwaukee Public Middle Schools. Packed with 3D printers, laser and vinyl cutters, and shop bots, these labs will not only ignite and excite students around STEM but provide them with hands-on learning using advanced technology to solve real-world problems.

In April 2016, the GE Foundation brought **Developing Skills to Boston** to create a Model of Excellence by providing opportunities for students to become critical thinkers, innovators, creators, problem solvers, and leaders. Through a \$25 million commitment, the GE Foundation is investing in STEM education

in Boston Public Schools through a series of in-school initiatives to help today's students explore career opportunities and prepare for the jobs of the future. Highlights include:

- **Science Education:** Funding high quality science education by expanding access to standards aligned curricula across the district and building educator capacity by deploying a coaching model dedicated to science instruction. The program will meet the curricula needs of 54,000 students, 120 schools, and 3,000 educators.
- **COVID-19:** Funding was aligned to support academic learning loss due to closure of schools to in-person learning during the 2020–2021 academic year. The initiative will provide grant funding to schools to provide targeted interventions and acceleration academies offered during out of school time to help close academic learning gaps caused by the pandemic.
- **Mobile STEM Labs:** Funded two mobile fabrication labs—GE's Brilliant Career Lab for Boston Public Schools' high school students and, in partnership with the Boston Celtics, Brilliant Career Play, for Massachusetts middle school students to provide access and exposure to digital fabrication with hands-on experiences in STEM. The program reached 36 schools, more than 6,100 students, and nearly 150 educators.
- **JFK-GE Foundation STEM Scholarship:** In partnership with the JFK Presidential Library, the GE Foundation committed to provide scholarships to more than 100 Boston high school students pursuing STEM careers.

### ENABLING HIGHER EDUCATION

GE Foundation established the GE STAR Awards program in 1984 to provide competitive scholarships to children of eligible GE employees and retirees around the world. Since then, more than 14,500 awards have been given worldwide, totaling more than \$19 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.



*The GE Foundation announced a new commitment of up to \$100 million to create the Next Engineers program—a global college-readiness initiative to increase the diversity of young people in engineering.*

### GE INNOVATION LABS TO BE CREATED IN SIX MILWAUKEE PUBLIC SCHOOLS SITES

[Learn more ▶](#)

### DURING THE COVID-19 PANDEMIC, THE BRILLIANT CAREER PLAY LAB WENT VIRTUAL AND DEVELOPED SOME AT HOME BASKETBALL-THEMED STEM LESSONS

[Learn more ▶](#)

### HOW THE NEXT GENERATION OF STEM SCHOLARS WILL BUILD OUR FUTURE

[Learn more ▶](#)

## 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 in October 2020 to support five organizations focused on training and education.

**National Society of Black Engineers (NSBE), Jackie Robinson Foundation (JRF), Advancing Minorities' Interest in Engineering (AMIE), and National Action Council for Minorities in Engineering (NACME)** were funded by the GE Foundation to provide scholarships and leadership development and mentoring programs to help diverse high school students pursue higher education in STEM fields. Some of the initiatives will focus in five GE Cities—Atlanta, Georgia; Cincinnati, Ohio; Greenville, South Carolina; Milwaukee/Waukesha, Wisconsin; and Schenectady, New York—to connect students with GE Volunteers. The programs not only help eliminate financial barriers for students to go to college, they also include immersive summer experiences to help them transition from high school to college.

In addition, GE Foundation is supporting two innovative development programs with the **National Minority Supplier Development Council (NMSDC)**. These programs will help prepare minority business enterprises (MBEs) for contract opportunities with the U.S. government and corporations. GE is supporting the creation of a Cybersecurity Program that aims to improve the MBEs' capabilities in a growing industry through the pilot program to support their efforts to become cyber ready. Through the NMSDC Online University, the lean Supplier Capability Development Program will provide licensed lean e-learning portfolio of courses plus immersive Action Workout sessions facilitated by internal GE lean experts. Together, these programs are aimed at helping improve minority suppliers' ability to operate, be competitive, and win contracts.

*The National Medical Fellowships Primary Care Leadership Program (PCLP), funded by the GE Foundation, is an innovative service learning program that provides health professions' 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.*

## ADVANCED MANUFACTURING IN MASSACHUSETTS

### STUDENT HIGHLIGHTS

**15%**

are women

**57%**

are racially and ethnically diverse

**63%**

have a high school diploma

While advanced manufacturing is one of the largest economic and employment sectors in the Massachusetts' economy, there remains a skills gap across the state with the number of open jobs exceeding the availability of skilled workers. In November 2019, the GE Foundation announced a \$2.5 million grant to launch the **Advanced Manufacturing Training Expansion Program (AMTEP)** in Lynn and Massachusetts' North Shore. The five-year program complements the Baker-Polito administration's Workforce Skills Cabinet and will triple the region's training footprint, reaching more than 900 high school students and adult learners by 2024.

With the goal of developing a diverse and well-trained pipeline, the initiative will focus on high school students enrolled at Lynn Vocational Technical Institute, Essex North Shore Agricultural & Technical School, and Gloucester High School, as well as underemployed, underrepresented populations, including veterans, minorities, and women living in Lynn and across the North Shore.

The program will train additional educators to deliver advanced manufacturing training; increase the number of advanced manufacturing trainees across the region's vocational schools, including launching the first-ever adult program in Gloucester; and provide foundational literacy and mathematics curriculum to adult learners with support from North Shore Community College.

The COVID-19 pandemic had an impact on the breadth of the program due to school closures to in-person learning resulting in a smaller scale launch.

Despite that, we graduated 73 adults from the Advancement Manufacturing Training program with 70 percent securing employment. Programming has continued into 2021 using the Hybrid learning approach, a mix of on-line and in person learning, with a target of doubling adult learners to 139.



## Developing health

The GE Foundation's signature programs, Developing Health Globally™ (DHG) and Developing Health U.S. (DH), have a long history of increasing access to quality healthcare in underserved communities around the world. These programs have been funded and managed by the GE Foundation in collaboration with national ministries of health, public and private health facilities, non-governmental organization, and academia.

### INCREASING ACCESS TO SAFE SURGERY

Since 2015, the GE Foundation has led a multi-sector effort to 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 five billion people across the world who lack access to the safe surgical care they need, 90 percent of whom are in low- and middle-income countries. 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, leading to reductions in maternal and trauma-related mortality and to stronger health systems. 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 South East Asia, with programs starting in Cambodia. Through this initiative, we have also scaled skills training and social entrepreneurship programs such as surgical leadership training, biomedical technician training, and oxygen delivery under the Safe Surgery 2020 umbrella. Learn more [here](#).

*Access to safe and high-quality surgical care is critical to advancing global healthcare and improving the lives of millions of people around the world. Funded by the GE Foundation, Safe Surgery 2020 (SS2020) initiative has explored innovative models for expanding safe surgical care, and has contributed valuable insights and ideas for improving surgical and health care systems.*



### REDUCING HEALTH DISPARITIES

Access to specialty health care in rural and medically underserved areas around the world is limited. Project ECHO (Extension for Community Healthcare Outcomes) 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, multi-year commitment made in 2015, the GE Foundation as one of the largest funders of Project ECHO, has supported global replication and scale of this innovation. By leveraging technology, primary care providers are linked with multi-disciplinary 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 GE Foundation's support, Project ECHO is operating in all 50 U.S. states, 52 Hub countries, with 601 replicating partners training in 180 countries.

### CHANGING THE FACE OF MEDICINE

Launched in 2012, the National Medical Fellowships **Primary Care Leadership Program** (PCLP) is an innovative service-learning program that provides health professions' 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 build capacity at partner CHCs.

### COMMUNITY HEALING: THIS TEAM OF MEDICAL STUDENTS IS LEARNING HOW TO MAKE PRIMARY CARE COOL AGAIN

[Learn more ▶](#)

### ATTACKING THE OPIOID CRISIS

In 2016, the GE Foundation announced a \$15 million commitment to community health in Boston and greater Massachusetts, to expand care in behavioral health and addiction medicine with a focus on the opioid crisis. The Developing Health initiatives in Massachusetts focus on expanding access to evidence-based treatment through primary care provider capacity building and reskilling, and on driving awareness and advocacy to combat the stigma associated with the disease of substance use disorder.

- **SUSTAIN Communities:** In partnership with the Massachusetts League of Community Health Centers and Boston Medical Center, SUSTAIN is focused on expanding care in addiction medicine at community health centers and has doubled the number of providers equipped to treat individuals with opioid use disorder (OUD).

- **Project HERE:** In partnership with the Massachusetts Attorney General, Maura Healy, Project Here provides free resources to educators across Massachusetts to teach substance use prevention to middle school students (in grades 6–8) in order to empower students to make healthy decisions and promote social-emotional learning.

- **Community Care in Reach®:** With support from the GE Foundation, the Kraft Center for Community Health, Massachusetts General Hospital, and Boston Health Care for the Homeless, this mobile health van has supported 10,000+ encounters with at-risk and homeless individuals in downtown Boston and surrounding neighborhoods.

### BREATHING EASIER: TWO NEW OXYGEN PLANTS ARE HELPING COVID-19 PATIENTS IN ETHIOPIA

[Learn more ▶](#)

## GE giving

### 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. Since 2020, GE Foundation's philanthropic contribution in disaster relief totaled nearly \$5.4 million, which was largely focused on our response to the COVID-19 pandemic (see page 14). GE Foundation made a grant to the Australian Red Cross during the Australian bushfire to support people at evacuation centers and recovery hubs and provide emergency assistance to those who have lost homes. Following Typhoon Molave in Vietnam, GE Foundation made a contribution to Habitat for Humanity to help build back safer schools with improved water and sanitation. And as part of the devastating

second wave of COVID-19 cases in India, GE Foundation made grants to United Way Bengaluru and Americares for the purchase of medical equipment, including 60 intensive treatment unit beds, which will care for up to 600 patients each month, and 100 oxygen concentrators and associated supplies, which will help approximately 2,500 patients for six months.

Additionally, the GE Foundation's Matching Gifts program enabled employees to contribute to crisis relief efforts in their local communities, doubling their impact by matching their donations 1-to-1. GE remains committed to preparing for and responding to future natural disasters and humanitarian crises, diligently maximizing the impact of our financial, technological, and human resources.

### 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 Foundation's portfolio, with gifts matched in 2020 totaling nearly \$17 million.

### GIVING

**\$61.7 million**  
in total GE Family giving in 2020

### GE FOUNDATION

**\$30.4 million**  
in GE Foundation in 2020

### MATCHING GIFTS

**\$16.8 million**  
in Matching Gifts in 2020



*In the aftermath of 2016's devastating Hurricane Matthew, GE in Latin America funded two Clinics in a Can, which are shipping containers fully outfitted with all the equipment necessary to become health clinics.*

**LIVING LEGACY: 10 YEARS AFTER HAITI EARTHQUAKE, RURAL HOSPITAL ENDURES AND EXPANDS**

[Learn more ▶](#)

# Sustainability Frameworks

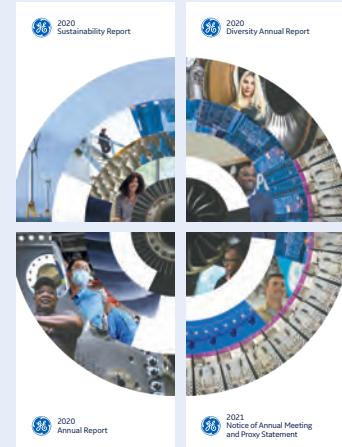
We routinely and purposefully analyze and revisit our sustainability programs, commitments, and targets. For disclosure purposes, in addition to the UN SDGs, we have considered three key sustainability reporting frameworks as we developed this report:

- (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](#).

We are informed by these standards and frameworks, as well as our engagement with key stakeholders as we determine sustainability priorities and goals. Of course, building a more sustainable world requires us to revisit and reassess our goals frequently, and we intend to continue mapping our progress against these frameworks to further develop our sustainability strategy.

## WHERE YOU CAN FIND MORE INFORMATION



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Contributor



NYSE  
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### 2020 Annual Report

[https://www.ge.com/investor-relations/  
annual-report](https://www.ge.com/investor-relations/annual-report)

### 2020 Diversity Annual Report

<https://www.ge.com/about-us/diversity>

### 2021 Proxy Statement

<https://www.ge.com/proxy>

### 2020 Sustainability Report

<https://www.ge.com/sustainability>

### BACK COVER

The back cover of this report features GE employees, including:

Logan Toynbee, Renewable Energy  
Ashley Meaux, GE Digital

Lauren Duncan, Aviation

Donovan Buckley, GE Research

Tammy Franklin, Power

Jon Ohman, Aviation

Yanmang Zhang, Healthcare

Charles McKinney, Power



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