



# THE FUTURE OF ENERGY

## RAPIDLY CHANGING THE TRAJECTORY ON CLIMATE CHANGE

**Addressing climate change is an urgent global priority, requiring global action, national commitments, consistent policy and regulatory frameworks, and the technological innovation and business partnership to realize these goals.**

GE is committed to tackling the world's biggest challenges and believes that climate change is one of the most pressing issues we face today. GE is strategically focused on playing an essential role in helping achieve the global energy transition and building solutions for a world that works.

### LEADING BY EXAMPLE



#### **Supporting the Paris Agreement and the first-ever global standards regulating aircraft greenhouse gas emissions**

GE supports the science and commitments expressed in the Paris Agreement to reduce global carbon emissions. We invest **\$1 billion annually** to accelerate technology innovations needed to drive reductions in carbon emissions that help make flying increasingly sustainable.



#### **Achieving carbon neutrality for operations by 2030**

GE's goal focuses on reducing greenhouse gas (GHG) emissions at its over 1,000 facilities across the planet. We exceeded our prior GHG reduction goal for 2020.



#### **Exiting the new build coal power market**

GE will continue to focus on and invest in its core renewable energy and power generation businesses, working to make electricity more sustainable, affordable, reliable, and accessible.

### ADVANCING THE GLOBAL ENERGY TRANSITION

**GE is unique as a U.S.-based company with a global reach throughout the full energy generation lifecycle. Through this lens, we see that accelerated and strategic deployment of renewables and gas power along with modernizing the grid can help change the global trajectory of climate change, enabling substantive reductions in emissions quickly while continuing to accelerate technologies for low or near zero-carbon power generation.**

**We must continue to grow renewables while strengthening our infrastructure** to achieve a cleaner energy future—faster. Renewables are the fastest growing source of new power generation capacity, and technology continues to advance rapidly in this sector.

**We see additional benefits when growing renewables alongside state-of-the-art gas power.** High-efficiency gas power can be deployed quickly and at scale, requiring less land and ensuring consistent power generation. The U.S. power sector has cut its carbon emissions by 33% since the peak in 2007, mainly by replacing coal with gas generation and building out renewable capacity.

**Modernizing the grid is crucial to ensuring resiliency and enabling more renewable energy.** We believe this requires both physical upgrades to better manage renewables and increase efficiency as well as digital improvements to increase overall capacity, reliability, and security.

## POWERING FORWARD

Our energy capabilities and expertise span a full renewable energy portfolio, including onshore and offshore wind, hydro, hybrid, and grid. GE is also a leader in emission-reducing natural gas and carbon-free nuclear power technologies.

# ONE-THIRD

OF THE WORLD'S ELECTRICITY  
IS CREATED BY GE

# 90%

OF POWER TRANSMISSION UTILITIES  
WORLDWIDE ARE EQUIPPED WITH  
OUR TECHNOLOGY

# 40%

OF THE WORLD'S  
ENERGY IS MANAGED  
BY OUR SOFTWARE.

## DEVELOPING AND INNOVATING SOLUTIONS

Throughout our more than 127-year history, we have continued to invest in innovative and sustainable solutions.

### GE's Haliade-X Offshore Wind Turbine

The world's most powerful offshore wind turbine will power the first major offshore wind project in the U.S., Vineyard Wind. One Haliade-X 13 MW turbine can save up to **52,000 metric tons of CO<sub>2</sub>**,\* the equivalent of the emissions generated by **11,000\* vehicles** in one year.

### GE's Onshore Wind Turbine

GE's portfolio of onshore wind products and services is meeting the need for cleaner power—today and tomorrow. GE's two-megawatt onshore wind platform is approaching 20 gigawatts of installed base globally, which is enough to power **6,000,000 U.S. homes**.

### GE9X Aircraft Engine

The world's largest and most powerful aircraft engine is also the most efficient engine we have ever built and is designed to deliver **10% greater fuel efficiency** than its predecessor.

### Nuclear Power

We are working with partners and customers to develop advanced nuclear technologies like BWRX-300 and Natrium™\*\* that will be able to provide carbon-free, dependable base load and flexible capacity.

### Grid Optimization

The growing amount of renewables and distributed energy resources (DERs) on the grid is presenting unprecedented challenges for today's grid operators. GE Digital's DER Orchestration software helps utilities manage and coordinate more renewables imports onto the grid.

### GE's HA Gas Turbine

Our engineers were the first to leverage new gas turbine technology that **complements variable renewables**, and our GE 9HA.01 turbine is at the heart of the world's **most efficient** combined-cycle power plant.



As a global company operating in 125 countries, GE is **committed to ensuring all communities** where we operate realize the strongest environmental protection from our activities. **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.** Our technology plays a key role in helping governments reach their Paris Agreement goals, while also promoting the UN's Sustainable Development Goals ("UN SDGs"), which we believe are the blueprint to achieve a better and more sustainable future for all.

\*According to the U.S. Environmental Protection Agency Greenhouse Gas Equivalencies Calculator.

\*\*Jointly developed with TerraPower.