

# GE VERNOVA INDUSTRIALIZING TECHNOLOGY AT SCALE

Scott Johnson, Advanced Technology Leader  
Gas Power

NETL inspired DLN2.6e Injector on  
display at New York Stock Exchange  
April 2024



For the new era of energy...a new company  
with full focus on the energy transition

**80K**

Global employees

**100+**

Countries

**12**

## Businesses + Accelerators

Digital  
Financial Services

### **Gas Power**

Grid Solutions  
Solar and Storage Solutions  
Hydro Power  
Nuclear Power  
LM Wind Power  
Offshore Wind  
Onshore Wind  
Power Conversion  
Steam Power

### **Advanced Research\***

Consulting Services\*

\*Accelerators



# Strength + reach



**~30%**

World's electricity generated with the help of our **technology**



**2,200GW**

Global **Installed Base**



**\$29B**

2022 revenue  
~**50% services**



**7K**

**Gas turbines installed...**  
world's largest fleet



**1st**

**Small Modular Reactor commercial contract**  
signed in North America



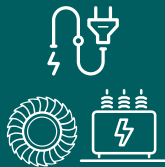
**\$4B**

**Financial Services - enabled orders**



**54K**

**Wind turbines installed**  
in >50 countries...  
**#1 Onshore Wind in US<sup>a</sup>**



**1st**

**Enhanced Electric Gas Turbine (EGT)**  
Aero + Storage + Hybrid Control



**~\$1B**

**Investment Advanced Research + Businesses**  
~3% of revenue



**30%**

Global utilities served by our **software**



**220M**

**Haliade-X rotor size**



**\$107B**

**Backlog<sup>b</sup>**

a) Source: American Clean Power Association

b) GE Vernova refers to the sum of our Renewable Energy & Power segments, without giving effect to eliminations and Corporate adjustments. On a stand-alone basis, GE Vernova will include GE's portfolio of energy businesses and Digital

# Our mission: decarbonize + electrify

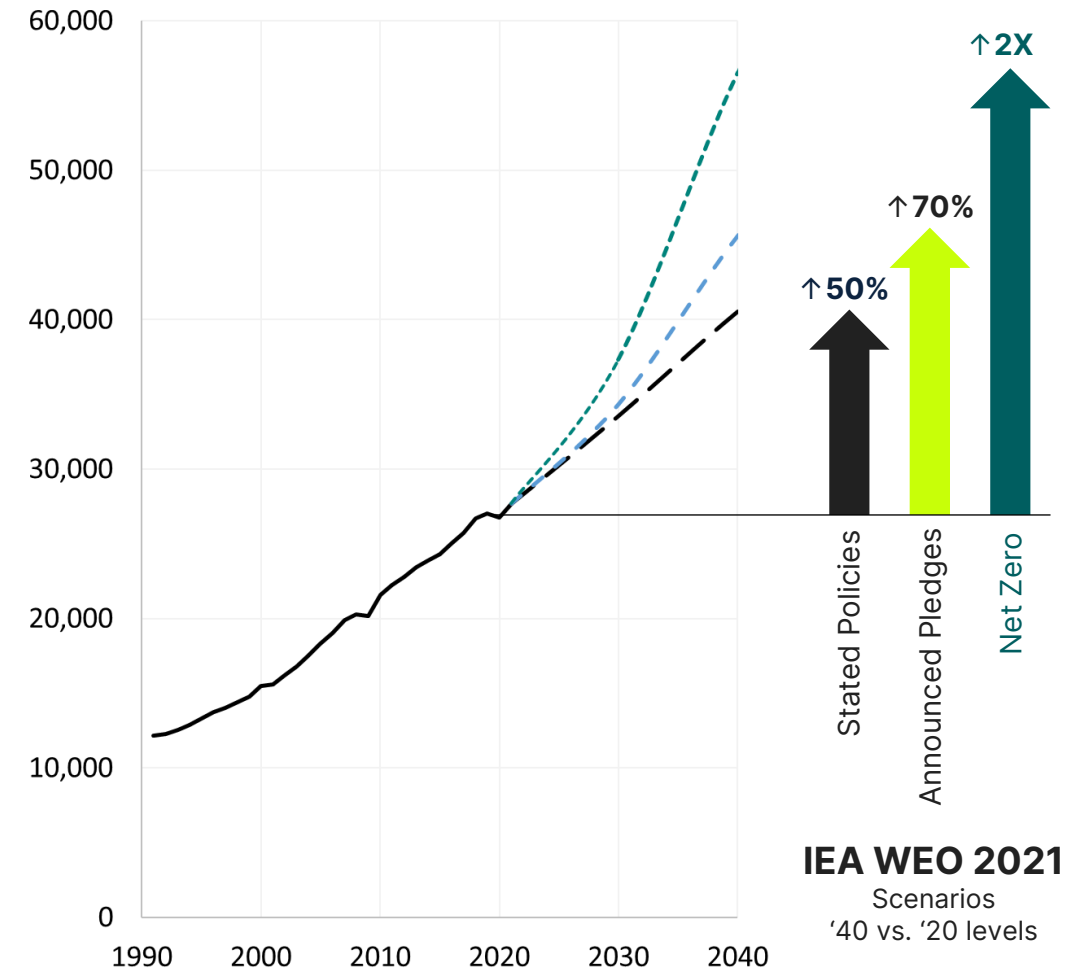
## The world needs more electricity

- >50% increase over the next 2 decades
- ~775M people lack access to reliable electricity
- Enables economic growth, health and prosperity
- Electrification of transportation, industry and heat to decarbonize non-power sectors

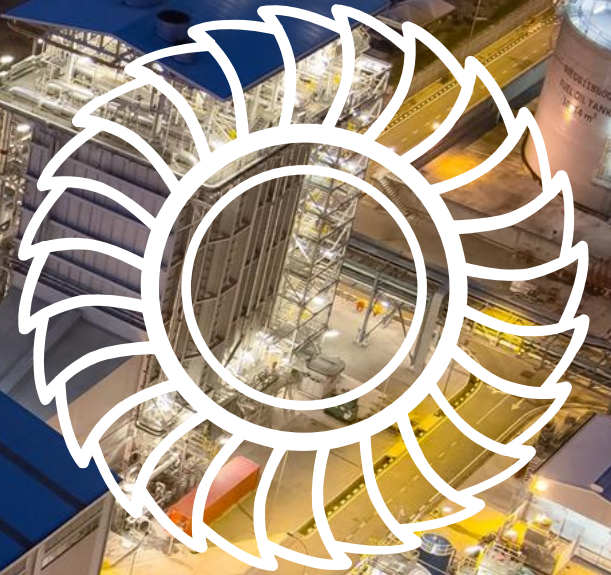
## ~30% of the world's electricity today is generated with GE Vernova's installed base

- ...we must help electrify the world
- ...while decarbonizing it with lower and zero-carbon-intensive technology
- ...that is more sustainable, affordable, reliable/secure

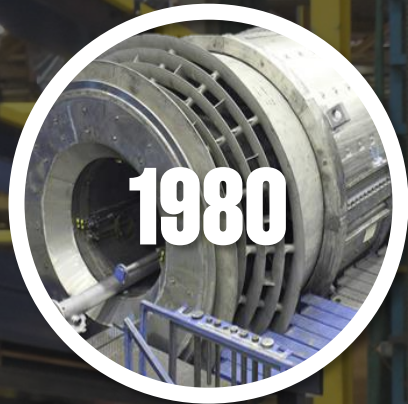
## Global electricity generation (TWh/y)



**Cleaner**  
**More Dispatchable**  
**More Reliable**  
**More Affordable**

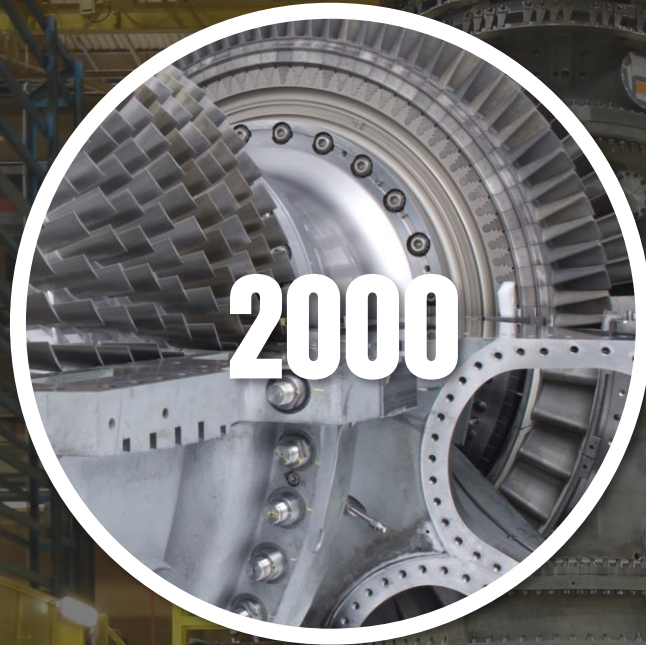


# 20 points in 40 years



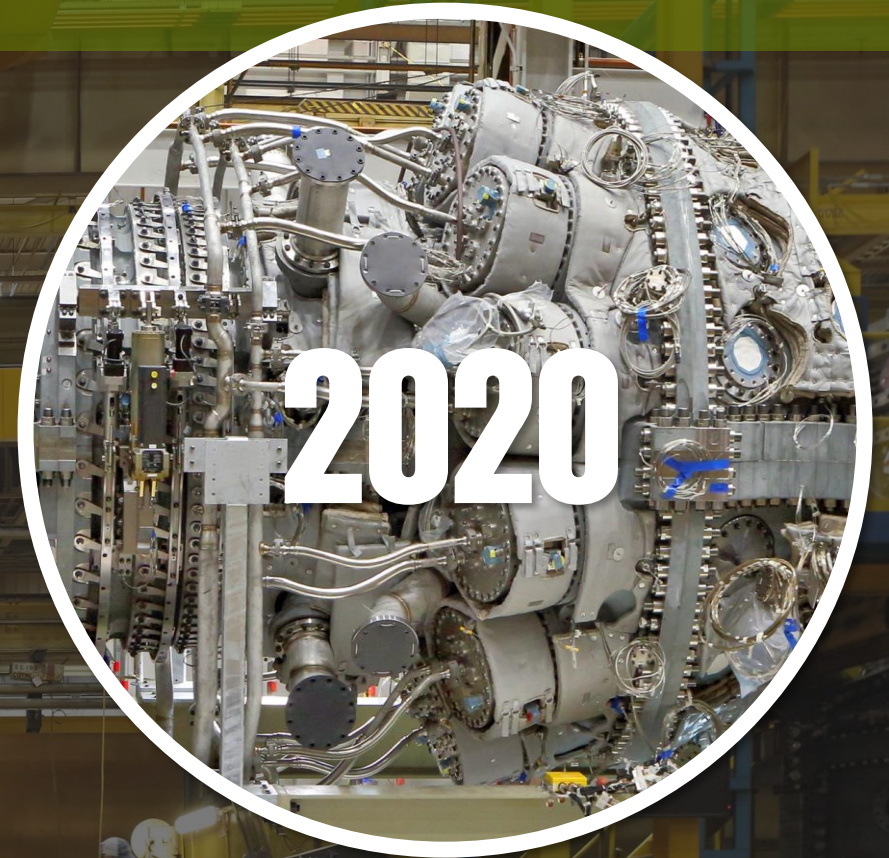
1980

43%  
80MW



2000

56%  
200MW



2020

63%+  
430MW

# FECM / NETL Investment

## 1 Research

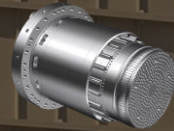
**Advanced Combustion System**

**Advanced Components & Aerodynamics**

**Advanced Alloys and Coatings**

**Advanced Manufacturing**

## 2 Industrialization



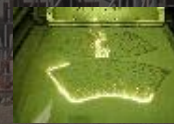
**DLN2.6e**  
Higher efficiencies at lower NOx



**F and HA Products**  
Advanced cooling for higher efficiency



**F and HA Products**  
Higher temperature capability for higher efficiency



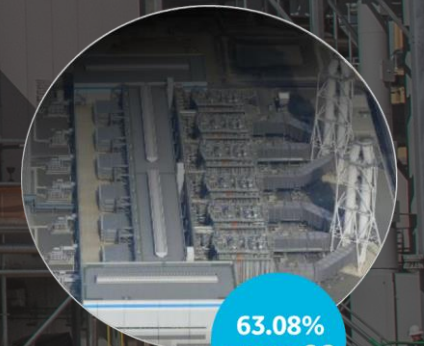
**Emerging**  
Continually evolving sciences and processes

## 3 Impact



**50 Hz**  
**EDF BOUCHAIN**  
**9HA.01**

62.22%  
net CC



**60 Hz**  
**CHUBU NISHI**  
**NAGOYA**  
**7HA.01**

63.08%  
gross CC

# Reflections



Advanced technology must have a **compelling, differentiated** product proposition.



Funding is important but **speed, iterations and results** more important.



Simplify complex problems into **digestible bites** to reduce risk and drive adoption.



Recognize the financial **risk/rewards** but you'll never make everyone happy.



Never underestimate the impact of having a senior leader **champion** in your corner.



# Frontiers

## Efficiency

every btu matters for gas, H2, capture

## Cycling

capability for renewable ups and downs

## Sustainability

new investment into next gen manufacturing

## Advanced Systems

dispatchable systems that cross traditional and emergent technologies



GE VERNOVA