Innovation and Technology

Partnership at work

GE in Bangladesh
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GE
Innovating for a better tomorrow

General Electric (NYSE: GE) works on things that matter. With the best people and the best technologies, we are able to take on the toughest challenges. We innovate solutions relating to energy, healthcare, transportation and finance sectors. GE has made its mark as a company that builds, powers, moves and cures the world.

History
• 1876 was the year that Thomas Alva Edison opened a laboratory in Menlo Park, New Jersey
• Out of that laboratory was to come perhaps the greatest invention of the age - a successful incandescent electric lamp
• In 1890, Edison established the Edison General Electric Company by bringing his various businesses together

Quick Facts
• Global Locations: More than 180 countries
• Employees: Over 333,000 worldwide
• Businesses: Power, Energy Connections, Transportation, Renewable Energy, Aviation, Lighting, Oil & Gas, Healthcare
• Total revenue FY15: $117.4 billion
• Invested US $1 billion in training and development of approximately 40,000 employees and 3,000 customers
• Ranked #1 in the Global AON Hewitt Top Companies for Leaders survey
• Ranked #2 in the Best Global Company for Leadership as per the Hay Group
• #6 most valuable global brand as per the Interbrand’s Best Global Brand Survey

GE doesn’t stop at imagining. It does. It works.
GE in Bangladesh
A history of partnership

GE’s relationship with Bangladesh began in 1970, when we installed the first steam turbine. Today, we have a diverse portfolio in the country ranging from healthcare innovations addressing cancer and cardiac care, clean and efficient energy solutions with best-in-class turbines, fuel efficient gas engines, energy efficient lighting solutions to world class solutions in aviation and transportation industry.

GE believes in building, powering, moving and curing the world. GE innovates, partners and develops technology solutions that helps improve quality of life in most parts of the world including Bangladesh.

Businesses

• Power
• Renewable Energy
• Healthcare
• Avation
• Energy Connections
• Transportation
• Oil & Gas

A company with localized operations and established in-country channel partners across its business portfolio.

Strategic Local Partnerships for Unique Solutions
GE is driven by its goal to meet the needs of Bangladesh customers and develop localized solutions. To accomplish this, we have partnered with a number of local companies across businesses including energy, healthcare and infrastructure. Some of our partner companies are:

• Summit Corporation Limited
• Dana Engineers International Limited
• Transcom Electronics Limited
• Clarke Energy Limited
• Meditrust Limited
• Unhealth Limited

...and many more
Driven by innovation and technology, GE has achieved significant milestones in its over 45 years in Bangladesh. From the first steam turbine installation in 1970 to important breakthroughs in healthcare, GE constantly leads the way.

Milestones Achieved
For GE in Bangladesh

GE's commitment to Bangladesh is evident from its history of significant achievements in the country.
GE Power
Opportunities powered in Bangladesh

GE Power provides a wide range of power generation, energy delivery, services and wastewater treatment technologies to solve the challenges faced locally. We work in several areas of the energy industry fuelled by coal, oil, natural gas and nuclear energy amongst others.

Gas Power Systems
- Around 1.9 GW of Bangladesh’s installed power base is from GE, representing more than 30 gas turbine units
- Localized field engineers and technology centers, supported by an international network of specialized engineers, provide solutions to customers’ technical requirements

Steam Power Systems
- GE provides integrated power block solutions including comprehensive environment control solutions for clean and efficient steam based power generation

Distributed Power
- GE gas engines supply over 2 GW of power to support the power generation requirements of key economic drivers in Bangladesh - the textiles and ready-made garment industry. The country has over 1500 gas engines, our second largest fleet in the world

Power Services
- The newly formed GE Power Services business offers portfolio of solutions that are designed to help identify new revenue opportunities, lower operating costs and keep the plants up and running to meet power commitments
- By harnessing the Industrial Internet, we offer a platform of software and analytics that empowers the customers to break through new barriers in performance, predictability and profitability
- Proven expertise in asset life cycle management, technology upgradation and Renovation and Modernization (R&M) of steam and gas turbines and associated generators

Water
- GE offers the most comprehensive set of chemical and equipment solutions and services like Membrane Bioreactor (MBR), Reverse Osmosis etc. to help our customers manage and optimize new resources and process challenges across industries and municipalities

We develop advanced technologies to help solve some of the world’s most complex challenges related to power infrastructure.

“Around 3 GW of power is generated using GE engines and turbines.”
GE Renewable Energy
Working towards a greener Bangladesh

Amid growing electricity demand, rising fuel costs and climate change concerns, GE Renewable Energy is focused on providing wind, hydro and innovative power solutions for customers around the globe. Our tailored solutions range from single component to full turnkey power plants.

GE Renewable Energy is one of the world’s leading wind turbine suppliers, with over 30,000 turbines across the globe. Our portfolio includes a suite of onshore and offshore turbines, flexible support services ranging from development assistance to operations and maintenance, and cutting edge technology to upgrade your fleet.

**Onshore Wind**
- 2 MW and 3 MW wind turbine platforms: Optimizing hardware to get the most out of the wind resource
- Wind Services: Focus on customer outcomes, realizing AEP and profit over the lifetime of the fleet
- Digital Wind Farm: A farm level solution - dynamic, connected and adaptable wind energy ecosystem
- 50+ GW of GE installations globally

**Offshore Wind**
- Fixed bottom offshore wind turbines: Haliade 150-6 MW
- Floating offshore wind turbines: Haliade 150-6 MW
- Wind services: Preventive and corrective maintenance

**Tidal turbines**
- Oceade tidal turbines platform, including Oceade 18 - 1.4 MW, electrical subsea hub

**Hydro**
- GE’s hydro turbines and generators represent more than 25% of the total installed capacity worldwide. Our Hydro portfolio includes the broadest range of hydro solutions and services, from water to wire, from individual equipment to complete turnkey solutions, for new plants and existing installed base. We are industry leaders in the pumped-storage equipment market and have the world’s top-five highest capacity hydro installations in operation under our belt.

**Innovative Solutions**
- GE’s strong history of innovation continues to help customers of all sizes to meet their sustainability goals with a full array of exciting technologies in renewable energies such as:
  - Geothermal energy
  - Tidal energy
  - Biomass energy
  - Solar energy
  - Energy storage

With over 125 years of experience powering the world, GE has now become the largest renewable energy producer in the world, providing a wide range of offerings to meet customer needs.
More than 30,000 employees, including 4,600 engineers and over 75 manufacturing locations globally.

GE Energy Connections specializes in delivering advanced technologies across various infrastructure segments. Project execution capabilities for Power industry segments like Generation, Transmission, Distribution and Renewables form the core of the company’s business offerings. It has a strong presence and market leadership in segments like Oil and Gas, Marine Propulsion Systems, Defense, Metro Railways, Metals and Mining. Our electrical solutions allow utilities and energy-intensive industries to efficiently manage electricity from the point of generation to the point of consumption.

GE Energy Connections Advancing Bangladesh

We are committed to serve Bangladesh across segments and invest heavily in developing advanced technologies for tomorrow’s needs.

Key Products and Capabilities

- Transmission Equipment: High Voltage/Extra High Voltage Products (up to 765 kV) - Transformers, Switchgears (AIS, GIS), Turnkey Substations, Substation Automation, Monitoring and Diagnostic, Network Management Softwares, Power Electronics (HVDC, FACTS), Services.
- Turnkey solution capability up to 765 kV
- Automation Solutions: Programmable Logic Controllers, Distributed Control System, SCADA
- Software Analytics
- Motors, Drives, Inverters, Uninterrupted Power Supply, Automatic Transmission Switches
- Generator Circuit Breakers (GCB)
- Turnkey solutions for electrical Balance of Plant (e-BOP) - thermal and renewable power
- Strong Energy Consulting capabilities for advisory services to power utilities
- Protection relays, LV switchgears and busbar
- Marine Propulsion Systems, Embedded Controllers for Defense Applications
- Turnkey project execution capabilities in Metro Rail, Power, Oil and Gas and Marine Industries
GE Oil & Gas
Fueling Bangladesh’s future

GE Oil & Gas is a global leader in advanced technology for all segments of the Oil and Gas industry, from extraction and production to downstream.

“Pushing boundaries of technology to bring energy to the world.”

With unique capabilities across the entire value chain - from Oil and Gas drilling equipment and subsea systems, to turbomachinery solutions and downstream processing - we are neither upstream nor downstream; we are full stream.

Our quest for progress is relentless. We work on things that matter, becoming trusted partners for our customers to solve today’s toughest energy challenges. Our extensive global network of manufacturing facilities, operational bases and service centers allow us to operate where it matters to you.

GE Oil & Gas is a world leader in advanced technologies and services with 45,000 employees, in more than 100 countries, supporting customers across the industry - from extraction to transportation to end use.

Offerings
- Subsea systems for drilling, production, compression
- Surface equipment for drilling, completions, data logging
- Well performance services including a range of artificial lift solutions
- Turbomachinery solutions for upstream, downstream and transportation
- Condition monitoring, inspection technology, measurement, control and automation products for critical applications
- Predix and industrial internet software solutions for asset health monitoring and optimization
For the last 17 years, we have focused on some of the toughest healthcare challenges in Bangladesh - lowering maternal and infant deaths, enabling early detection of cancer for early and effective treatment, and addressing the heart disease burden. Our technological innovations help improve access to quality, affordable healthcare for 162 million people in Bangladesh.

GE’s broad expertise in medical imaging and information technologies, medical diagnostics, patient monitoring systems, drug discovery, biopharmaceutical manufacturing technologies, performance improvement solutions help our customers deliver better care, to more people around the world, at a lower cost.

Healthcare Solutions
These include a host of advanced medical imaging technologies such as X-ray, Magnetic Resonance Imaging Systems (MRI), Molecular Imaging (MI), Computed Tomography (CT), Life Care Solutions (LCS) and Ultrasound etc., that are used across the continuum of healthcare. Our surgery solutions also help guide minimally invasive surgical procedures.

Life Sciences
This business accelerates precision medicine with tools for biotechnology R&D, biopharma manufacturing, cell therapy and regenerative medicine, diagnostic imaging, molecular and precision diagnostics.

Medical Diagnostics
We also research, manufacture and market innovative imaging agents designed to highlight the organ and tissue functions inside the human body, thus, helping physicians in the early detection, diagnosis and management of a disease.
GE Aviation
Helping Bangladesh fly high

GE Aviation is the world’s leading producer of both large and small engines for commercial, military, business and general aviation aircrafts. We are also a global leader in the production of avionics, electric power and mechanical systems and continue to lead the way in pioneering aircraft and engine technology.

With thousands of GE engines installed on the global fleet of commercial, business and general aviation aircraft, we help power the aircrafts that are moving Bangladesh.

“Designed to deliver game-changing performance.”

Key Products and Capabilities

Commercial
With more than 30,000* engines in service, GE is a world leader in jet engine manufacturing, offering products for many of the best-selling commercial airframes. Each one of our commercial engines is a leader in its class for performance, reliability and cost of ownership.

Offerings: GE90, GE9X, GENx, GP7200, CF6, CFM56, LEAP and CF34

Military
Since developing the first turbo-supercharger for U.S. military aircraft during WWI, we continue to expand mission capabilities with innovations that deliver unprecedented speed, power, fuel efficiency and reduction in costs.

Offerings: Engines for combat, rotorcraft, tanker and transport

Business and General Aviation
GE is a leading provider of jet and turboprop engines, components and integrated systems for Business and General Aviation (B&GA) aircraft.

Offerings: Large cabin (CF34, CFM56, GE Passport), Small cabin (HF120, CF700, CFE738, CJ610), Turboprop (H series)

Systems and Services
With a broad range of avionics, power and structures products and services, GE Aviation is bringing the future of flight to today’s aircrafts. From Integrated Propulsion Systems that create unprecedented engine energy efficiencies to advanced flight management systems, that enhance the capacity of the skies, we provide the advanced technologies critical to superior aircraft performance and is poised to take aviation industry to the next level.

* Includes CFM engines. CFM is a 50:50 JV between GE and Safran
GE Transportation delivers breakthrough efficiencies through brilliant connected machines, use advanced manufacturing techniques that bring innovative concepts to life more efficiently and cost effectively and deliver on a promise of speed to move them faster to market.

GE Transportation Moving Bangladesh forward

GE Transportation is a global technology leader and supplier to railroad, mining, marine, stationary power and drilling industries.

Rail
- Leading diesel-electric locomotive manufacturer with the largest diesel locomotive fleet across the globe (over 21,000 locomotives in operation)
- GE Evolution® Series Locomotive for heavy-haul freight trains that meet EPA “Tier 4” emission requirements - a global first

Mining
- GE Mining solutions can carry your business through every step of the mining process. From the delivery of reliable power in remote regions, to water supply and management, to maximizing the output of your equipment - our solutions are catered specifically to your business’s challenges in the most productive, most efficient and even more importantly, the safest way possible.

Marine, Stationary and Drill
- Technology leader with advanced diesel engines that reduce key emissions by more than 70%, enabling “in-engine” compliance with IMO Tier III that eliminates the need for expensive and complete aftermarket fitments of urea
- Market leader in high performance electric drill motors that find extensive use in harsh onshore and offshore Oil and Gas applications
Together, we are working to make the world work better.

At GE in Bangladesh, we believe that integrating work life and personal life fosters a happy and productive lifestyle. To support this balance, we bring in flexible work arrangements and the infrastructure necessary for providing that flexibility.

GE empowers people by helping them build the skills they need to succeed in a global economy. We equip communities with the technology and capacity to improve access to better health and education. We elevate ideas that are tackling the world’s toughest challenges to advance economic development and improve lives.

Citizenship at GE
Contributing to the welfare of all

GE Volunteer

GE Volunteers is a global network that includes employees, retirees, Affinity Groups, friends and family - “good people doing great things” - all supported by GE businesses and corporate resources. The global mission of GE Volunteers is to facilitate and support volunteering activities that improve life in the communities where GE people live and work. These are carried out through a wide range of projects in the areas of community-building, education, environment and health.

Community activities

GE is committed to working towards a healthier and more empowered communities. In Bangladesh, we undertake a variety of activities to give back to society:

• Partner with Jaago Foundation for child education and development
• Tree plantation for a greener environment
• Keep community clean and spread awareness through activities like cleaning lakes and parks
In Bangladesh
For Bangladesh