About GE

GE (NYSE: GE) is the world’s leading Digital Industrial Company, transforming industry with software-defined machines and solutions that are connected, responsive and predictive. GE has a history of 138 years and it is the only company listed in the Dow Jones Industrial Index today that was also included in the original index in 1896. GE is having eight businesses and ten global R&D center. With a global presence across more than 180 countries and 333,000 employees, GE’s 2015 revenues amount to $117.4 billion.

GE’s business covers two areas: The first one is global infrastructure construction, including Aviation, Healthcare, Power, Renewable Energy, Oil & Gas, Transportation, Lighting etc. The second one is cross-segment digital and vertical financing business. In all the regional markets, GE will integrate the technological expertise, market advantage, global footprint as well as professional knowledge and leadership of all businesses to provide excellent products and services to customers.

GE in China

GE’s development in China has a long history. GE started doing business in China as early as 1906 and was considered one of the most active foreign companies in the country at the time. In 1908, the first GE lighting plant was built in Shenyang. GE acquired Anderson, Meyer & Co. in 1934 and started to provide installation and repair services of imported electric equipment in China. GE resumed trade with the People’s Republic of China in 1979 at the outset of the country’s reform and opening-up. GE Hangwei Medical Systems Co., Ltd, GE’s first joint venture in China, was established in Beijing in 1991.

For over 100 years, GE has been adapting to market changes through constant business integration and transformation. Today, all of GE’s businesses have set up operations in China. It has 22,000 employees, 7 R&D centers, more than 60 laboratories, over 30 manufacturing bases and 34 joint ventures in more than 40 cities in the country. In 2015, GE’s revenue in China amounted to $8.1 billion.

Over the years, GE has provided more than 200 gas turbines, 180 steam turbines, over 1300 wind turbines and 150 compressors to the Chinese market. Besides, GE has cooperated with more than 100 Chinese EPC companies in overseas projects in 65 countries.
Power

Over the years, with long-established industrial know how, GE has constantly improved product technology and provided clean, energy efficient and competitive products in the areas of power generation, combined heat and power, gasification as well as services.

For over 30 years, GE has provided to the Chinese market more than 200 gas turbines, 180 steam turbines, 300 gas engines, over 40 licenses for gasification tech services as well as multiple water recycling facilities.

In the fields of gas turbine, GE Power has established a long-standing partnership with China. During the 2008 Beijing Olympic Games, we provided 2 GE’s 9FA+e gas turbines for Taiyanggong Power Plant which powered the main stadium. Powered by natural gas, these 2 gas turbines used CCHP technology. They can bring clean and efficient power supply for the stadium. In 2014, we established Harbin Innovation Center to further push forward the localization of technology. Over the past two years, GE has reached with Harbin Electric the 9HA gas turbine technology transfer agreement as well as the agreement signing of D650 and A650 steam turbine. Our first 9HA gas turbine project with Harbin Electric was selected as part of the “US-China EcoPartnership.” Many achievements such as the 9FB gas turbine technology data update have also contributed to the technology improvement of China’s local enterprises. Particularly, in November 2015, GE and Harbin Electric signed an agreement to build a joint venture for heavy-duty gas turbine business in China. The joint venture will focus on localizing the manufacture of 9F class and 9HA class gas turbines.

In steam power systems, GE has a long time partnership with China’s power industry for over 50 years and made lots of great efforts to its fast development. Our advanced technological expertise, products and solutions has equipped many prestigious coal-fired power and nuclear power projects. As the global industry leading equipment supplier, we are committed to help customers to succeed. As early as 1986, we supplied conventional island to China’s Daya Bay nuclear power plant. Since then, GE has provided equipment to important Chinese nuclear projects such as Ling Ao I and II, Hongyanhe, Ningde, Taishan, Fuqing, Fangjiashan. Besides, GE has provided steam turbine/generator sets to many coal-fired power plants in China such as Pingwei II and III, Dabieshan I and II, Longshan, Pingliang II, Guixi and Shentou I and II. GE has won a good reputation in China and overseas markets for its good quality and excellent performance. Particularly, we have the world-class
manufacturing bases for boilers, turbines and generators for large-scale power plant in Wuhan and Beijing. Now, we have become one of the "Big four" Chinese power equipment suppliers.

In terms of water & process technologies, we partner with customers to provide water treatment, wastewater treatment and process system solutions. Our technology helps customers reduce costs, meet environmental regulations and prepare for the evolving demands of their industry. For instance, before the 2008 Beijing Olympics Games, GE provided the National Stadium rainwater recycling system with nanofiltration membrane products and core technologies. The National Stadium Rainwater Recycling Project is China’s first-ever implementation of this system. The system recycles rainwater for the stadium, using underground pools to process rainwater, which can be re-used for landscaping, fire-fighting, and cleaning — a direct way to lower the stadium’s water consumption.

GE has cooperated with more than 100 Chinese EPC companies in overseas projects in 65 countries. For instance, in 2015, GE cooperated with its Chinese partner Harbin Electric International (HEI) to win the Balloki and Bhikki power plant projects in Pakistan – GE will provide two high-efficiency 9HA gas turbines to each of the project. In 2016, GE partnered with HEI to provide steam turbines, generators and boilers to Dubai Hassyan Clean Coal IPP, which is the first clean coal power plant in the Middle East.

**Aviation**

GE is a leading provider of jet and turboprop engines, components and integrated systems for commercial, military, business and general aviation aircraft. Every two seconds, a plane powered by GE’s engines takes off around the world.

GE Aviation has been in operation in China for more than 30 years since the first CFM56 engine entered China in 1985. Now there are more than 4,300 units GE/CFM engines powering the Chinese airlines.

In China, GE is committed to partnering with China’s aviation industry for future growth. CFM International (50/50 jointly owned by GE and Snecma) has developed the LEAP-1C engine. With its state-of-the-art aerodynamic design, ground-breaking innovation in eco-friendly features and material technology, as well as fuel efficiency and low emissions, LEAP-1C has been selected as the engine for C919 – China’s first self-developed big passenger plane, which was rolled out in 2015. Meanwhile, GE’s CF34-10A engine also powers ARJ21, a China-developed regional airliner. The ARJ 21
has already successfully entered into commercial operation in Chengdu Airlines in 2016. AVIAGE SYSTEMS, a joint venture of GE and Aviation Industry Corporation of China (AVIC), is providing the next generation avionics system to the C919 program. By integrating the best resources from its parent companies in technology, management and talent, AVIAGE SYSTEMS has become a reliable partner of China’s aviation industry.

GE has also worked with China Eastern Airlines to support digital transformation with pilot programs. For instance, GE is in collaboration with the China Eastern Flight Safety Technology Institute to develop the GE MyFlight App. Through Predix platform, the app analyses massive data generated from each flight and updates critical indicators to pilots through mobile devices. By optimizing the operating procedures of pilots, MyFlight app can improve the flight safety of the fleet.

Healthcare

GE Healthcare provides transformational medical technologies and services to meet the demand for increased access, enhanced quality and more affordable healthcare around the world.

GE Healthcare started doing business in China in 1979 and established the first office in Beijing in 1986. In 1991, Hangwei Medical Systems Co. Ltd., the first joint venture for GE in China, was established in Beijing. Today, GE Healthcare is the largest medical equipment company in the Chinese market. 80 million Chinese citizens benefit from GE’s advanced CT diagnostic technologies.

GE Healthcare China has a number of operating entities, including wholly owned enterprises and joint ventures, with more than 7,000 employees. GE Healthcare operates five global manufacturing sites in China, including a Computed Tomography (CT) and X-Ray sites in Beijing, a Bio-Sciences plant in Shanghai, ultrasound and patient monitor facilities in Wuxi, a filter paper facility in Tonglu, and a Magnetic Resonance Imaging (MRI) in Tianjin.

GE Healthcare activities in China span areas including R&D/engineering, sourcing, manufacturing, sales, marketing, distribution and services, covering all technology and services that GE Healthcare provided worldwide. Benefitting from the fundamental research conducted by GE China Technology Centre and other global R&D centers, a team of over 1,100 engineers is specifically developing products and technologies for China and the world.
In recent years, GE is introducing industrial Internet to healthcare industry and has successfully improved the operation rate of core devices like CT, NMR and ultrasound. For instance, Shanghai Renji Hospital pilots an intelligent and highly effective “centralized information system” known as the APS (Asset Performance Solution). Built on Predix platform, APS addresses the challenges of data transmission across GE and non-GE devices, and increases device efficiency through precise location tracking and data analytics. With clinical Big Data analysis, it enables hospital to Increase utility of key equipment by 20%+. Patient waiting time was cut from 6-8 Weeks to 1 week.

Renewable Energy

GE is committed to bringing state-of-the-art clean energy technologies to China.

Since entering the Chinese market in 2004 with our first wind turbine, GE now has an installed base of over 1300 in the country with a total capacity of 2 million kW. Over the past ten years, GE Wind Energy has provided more than 46.7 billion kwh clean power to China, equivalent to reducing 460 million carbon dioxide emission. In 2016, GE Wind Energy Shenyang Training Center opened. It is also the first Wind Energy training center in China.

Meanwhile, GE also has 25% of the global hydropower installed capacity. Since its establishment in 1995, GE Renewable Energy’s hydropower industrial base in Tianjin has become a leading supplier of hydro power generation equipment and systems in China. It is also GE’s largest hydro industrial base in the world. In the past 20 years, it has accumulated a 20% market share of the total Chinese installed capacity of large hydro equipment. To date, it has signed contracts for hydro turbines and generators covering 53 GW. The four hydroelectric generating units (4X800MW) that GE Tianjin site provided to China’s Xiangjiaba project are the most powerful ones in operation in the world. GE also participated in the Three Gorges Project – the world’s largest hydro power project and provided 14 units, making it the largest supplier of this project.

Energy Connections

GE Energy Connections designs and deploys industry-leading technologies that turn the world on. We transport, convert, automate and optimize energy to ensure we provide safe, efficient and reliable electrical power. Uniting all the resources and scale of the world’s first digital industrial company, we connect brilliant machines, grids,
and systems to power utility, oil & gas, marine, mining and renewables customers, that keep our world running.

GE Energy Connections has been present in China since 1990s and has 9 manufacturing sites, including 6JVs in the country.

In December 1999, GE and Shanghai Guandian Electric Group Co., Ltd. (SGEG) established two joint ventures in Shanghai and together known as the SJV. In August 2013, GE and XD Electric launched the Global Transmission and Distribution Partnership. It combines GE’s world-class grid automation capabilities and global energy presence with XD Electric’s comprehensive portfolio of high-voltage power equipment. The combined portfolios will also support the rapid electrification and productivity requirements demanded by energy-intensive industries like oil and gas, mining and petrochemicals

**Oil & Gas**

In China, GE participates in important projects in gas pipeline, oil refinery, ethylene, coal-chemical and industrial power. GE Oil & Gas has offered China more than 1000 centrifugal compressors and reciprocating compressors, steam turbine, gas turbine and pump valves as well as distributed gas solutions technology.

Since 2005, GE has provided more than 150 pipeline compression equipment to over 60,000 km-long China gas pipelines including the West-to-East Pipeline Project, bringing clean energy to over 1 billion people in 20 provinces. GE also provided compressor trains to the world’s two largest coal-based propylene plants: Shenhua Ningxia Coal Industry Group's plant in Ningxia and Datang International Power Generation Co. Ltd.’s facility in Xilinguola, Inner Mongolia. GE’s measurement & control solutions have also been used in a wide range of industries in China, including aerospace, oil & gas, transportation and healthcare, etc.

**Transportation**

GE Transportation is committed to helping customers solve the most complex problem with innovative technology, services and data analysis.

GE Transportation has entered into China since 1980s and has supplied more than 1200 diesel locomotives to the Chinese market, including all the 78 NJ2 locomotives in service in Qinghai-Tibet Railway (Golmud to Lhasa section). GE Transportation also
begins to provide Industrial Internet-based digital system to Daqin Line and other main freight line to improve operation efficiency, which brings opportunities for intelligent transportation.

GE Transportation has strong local capabilities in China for repair, maintenance and overhaul services. A Regional Distribution Center was established in Shanghai in April 2016 to provide upgraded service level with agile logistics and improved lead time to customers in China and Asia Pacific.

GE Mining provides customers with propulsion systems and mining equipment, as well as integrated solutions in digital mining, power, water treatment to cope with challenges in energy efficiency.

In China, GE Mining has provided service for 700 mining trucks propulsion system and established good cooperative relationship with local mining trucks manufacturer. Besides, GE also provided more than 200 underground mining equipment (vehicles and drilling equipment) to the Chinese market.

**Lighting**

Since Edison’s invention of the electric light bulb in 1879, GE has been behind countless major lighting innovations and is credited with illuminating some of the world’s most recognizable landmarks.

In China, GE provides environmentally-friendly innovative power and hi-tech intelligent environmental solutions to customers of different industries such as commerce, retailing, street and roadway, manufacturing, sports venues, hotels and healthcare facilities. GE also makes contributions to sustainable urban development.

We have provided tailored lighting solutions to customers of different industries and to a series of large-scale projects in China, such as the 2008 Beijing Olympic Games, 2010 Shanghai EXPO and Guangzhou Asian Games, 2014 Nanjing Youth Olympic Games, LED Lights for GAP Stores and LED signage system and indoor lighting system for China Resources Vanguard’s supermarkets.

Now, Current, powered by GE, is working with Tianjin to deploy Predix-enabled intelligent environment in its 4.8 KM2 central business district with LED street lamps equipped with sensors. With GE Predix platform, the street lamps provides urban parking space management, information broadcast, navigation and parking fees payment through mobile devices, uses sensors to evaluate real-time traffic flow conditions and adjust traffic light durations, safeguards the city by monitoring the
surrounding environment 24/7. The street lamps also reduce lighting-related energy use by more than 50%.

Capital

GE Capital leverages cross-business synergy to help move, cure and power the world. We are committed to helping our customers go further and do more by investing in the businesses that GE specializes in.

Digital

GE Digital was newly created in September 2015 globally, integrating the functions of GE’s Software Center and global IT, in an effort to speed up GE’s transformation to become the world’s premier digital industrial company.

Founded by GE Digital, GE Digital Foundries bring together a network of centers around the world, where GE Digital will collaborate with customers on new application development and work to extend and promote GE’s international developer ecosystem. The first foundries locate in Paris (France), Shanghai (China), San Ramon, California (USA) and Boston, Massachusetts (USA).

In July 2016, with an investment of US$11 million, GE opened the GE Digital Foundry in Shanghai. It is the first new GE Digital center in Asia designed to incubate startups, improve collaboration and drive ecosystem growth. Meanwhile GE also announced alliance with China’s Huawei to accelerate development of Predix applications. The integration strategies will help accelerate the development of innovative Industrial Internet applications that will support China’s industry transformation.

CTC

GE China Technology Center (CTC) is one of GE’s ten R&D centers in the world. It is a multi-disciplinary center and conducts fundamental R&D, develops new products and also works on engineering development and sourcing for GE’s diverse businesses across the world.

Founded in 2000, CTC is located at Zhangjiang High-Tech Park in Shanghai and was put into use in May 2003. It covers an area of 47,000 square meters. CTC is one of the
biggest foreign invested R&D centers and among the very few enterprise R&D centers which have fundamental research capabilities.

GE has nearly 3,000 researchers in China and has more than 150 world-class laboratories in Shanghai, Beijing, Chengdu, Xi’an and Wuxi. GE China Technology Center provides comprehensive support for GE’s China and global businesses.

**GE China milestones**

1906
GE started to do business with China and was considered one of the most active foreign companies at that time

1908
The first GE lighting plant was built in Shenyang

1934
GE acquired Anderson, Meyer & Co. and started to provide installation and repair services of imported electric equipment in China

1979
GE resumed trade with the People's Republic of China in 1979, and established the Beijing office

1991
The first joint venture GE Hangwei Medical Systems Co., Ltd opened in Beijing

2003
GE Global Research Center opened in Shanghai, solving the toughest challenges by bringing innovative technologies to the world

2008-2010
GE was proud sponsors of the 2008 Beijing Olympics and the 2010 Shanghai Expo

2015
GE announced the creation of GE Digital, a transformative move that brings together all of the digital capabilities from across the company into one organization

2015
GE completed the acquisition of Alstom Power and Grid businesses

2016
GE sold the appliances business to Haier
2016
GE Digital Foundry was opened in Shanghai