

ABB in China overview

In China, for China and the world

ABB is a global leader in power and automation technologies that enable utility, industry, and transport and infrastructure customers to improve productivity and energy efficiency while lowering environmental impact. ABB Group has about 145,000 employees in more than 100 countries, with revenues of around \$42 billion in 2013.

A Fortune 500 company, ABB is headquartered in Zurich, Switzerland, and is listed on the Swiss, Stockholm, and New York exchanges. ABB Group was formed in 1988, when the Swedish Asea and the Swiss BBC Brown Boveri merged under the name of ABB.

China: ABB's second largest market

ABB's relationship with China dates back to 1907, when it delivered the first steam boiler to the country. In 1974, ABB established its first office in Hong Kong, followed by its first permanent office in Beijing in 1979. In 1992, ABB launched its first Chinese joint venture in Xiamen. In 1994, ABB moved its China headquarters to Beijing. In 1995, ABB's holding company, ABB China Limited, was formally established.

After years of fast growth, ABB has established a full range of business activities in China, including R&D, manufacturing, engineering, sales, and service, with 19,000 employees, 39 local companies, and an extensive sales and service network across 109 cities. In 2013, ABB reported that China had continued as its second largest market worldwide with \$5.6 billion in revenue.

A focus on local talent

ABB attaches great importance to the cultivation of talent and actively creates a sound environment for local employee development. In 2009 and 2013, ABB was selected as one of "Top 10 Best Employers in manufacturing/electric sector" in the "Survey of Best Employers among University Students", becoming one of the most desired working places for graduates in China. In 2013, ABB was named one of the world's most ethical companies for the second year in a row. One researcher from ABB Corporate Research Center in China was awarded the Capital Labor Medal in 2012 by the Beijing Municipal General Labor Union.

Through the "Student Innovation Competition", ABB has strengthened cooperation between universities and enterprises to promote research and other local talent development.



ABB's footprint in China

Remarkable local R&D capacity

ABB adheres to its "In China, for China and the world" strategy and actively propelled the R&D localization. ABB has continuously improved its local R&D and innovation capabilities through continued investment and R&D footprint optimization. In 2005, ABB located one of its 7 global R&D organizations in China. From 2010-2013, ABB China's R&D team has doubled in size.

The ABB China R&D team has achieved a great number of results and awards, including the development of IRB 120, ABB's smallest robot and the IRB 460, the world's fastest palletizing robot, award-winning digital door entry system of *Welcome*, the innovative high-voltage isolation circuit breaker, the new generation 145 kV gas-insulated switchgear, as well as the *Welcome M* building intercom system which is popular in the European market. In 2012, the first ± 800 kV High Voltage Direct Current (HVDC) transformer manufactured in Chongqing, which is also the highest voltage transformer produced by ABB in China to date, successfully passed the type test and put into operation at site. Meanwhile, ABB worked closely with State Grid Corporation of China and successfully developed the ± 1100 kV converter transformer technology, marking another important milestone for ABB China in the HVDC field.

ABB's R&D capabilities and results in China have won recognition and praise. In 2013, ABB won the Swiss Business Awards "Innovation of the Year Award"; in the *American Scientist* "2013 Innovators of the Year", ABB Group's China Research Center was named as a "Top 10 Most Influential Research and Development Center."

With world leading technology and solutions, ABB actively helps its domestic customers improve energy efficiency and promotes the development of renewable resources for the realization of sustainable development in China. As of 2013, the drives ABB has provided to domestic customers have contributed to saving 201 TWh in electricity, enough to power a super-large city with 20 million residents for 2.5-year years; ABB's efficient motor products helped domestic customers save 4.1 TWh in 2013 alone, equivalent to reducing carbon dioxide emissions by 400,000 tons. Meanwhile, ABB provides onshore and marine intertidal zone wind farm project converters, generators, substations, and battery energy storage facilities, helping China build the world's largest green grid.

Full range of products tailored to local needs

ABB's product portfolio in China includes a full range of power and distribution transformers, switchgear technologies for high, medium and low voltage applications, electrical drives and motors, and industrial robotics products. These products are widely used in industrial, commercial, and utility applications. With over 100 years of electrical engineering experience,

ABB is a leader in the power and automation industries. Many ABB companies in China are the best in class, setting benchmark standards for their peer groups, while serving industries as diverse as metals, pulp and paper, chemicals and life sciences, automotive, utility automation, and building systems.

In China, ABB has participated in many key national projects, such as power transmission from the Three Gorges to Shanghai, Changzhou, and Guangdong, the south-to-north water diversion project, the west-to-east power transmission project, the Qinghai-Tibet Railway, the Beijing Olympic Games stadiums, the Beijing International Airport expansion project, Shanghai Expo projects, and substation and metro construction. In addition, ABB has provided reliable power and automation technology and solutions for numerous customers, including high speed rail projects in Beijing, Shanghai, and Guangzhou among others; auto manufacturers including Shanghai-VW, Shanghai GM, and BMW; steel and metal customers including Baosteel and Shagang; and, datacenter customers including Global Data Solutions (GDS). In the HVDC field, ABB China has participated in the construction of the Xiangjiaba-Shanghai, Nuozhadu-Guangdong, Jinping-Sunan, and Hami-Zhengzhou, Xiluodu-Zhexi ± 800 kV high-voltage transmission projects. Among them, the Hami-Zhengzhou ± 800 kV HVDC transmission line, which has become operational in 2014, has top the world with the highest voltage level, the largest transmission capacity, and the longest transmission distance at present. ABB also partnered with Shenzhen BYD Daimler New Technology Co., Ltd. to build a fast-charging network for electric vehicles over the next 6 years and work together to support the sustainable development of urban transportation in China.

ABB's smart technologies for improving efficiency and productivity can support the local customers in the utility, industry and infrastructure to realize intelligent upgrading.

A responsible corporate citizen

ABB actively fulfills its social responsibility and takes an active part in charitable, educational, and environmental programs in China. For many years, ABB Group Chairmen, CEOs and members of the Executive Committee have been members of mayors or governor's advisors in Beijing, Shanghai, Chongqing

and Guangdong. They actively propose forward-looking strategies to support the fast economic growth in China.

From 2007 to 2012, ABB and Shanghai Charity Foundation jointly sponsored the “Care for the senior citizens, care for our future” initiative, contributing RMB 2 million yuan to help retrofit facilities in over 26 nursing home in Shanghai, benefiting more than 2,500 elderly people. ABB also launched the “ABB-New Great Wall Fund,” funding impoverished students to realize their dream of studying in colleges and universities, technical schools. The fund has accumulated more than RMB 12 million yuan in donations, providing funds for more than 2,000 students at 44 colleges and universities. In face of natural disasters of earthquakes, snow storms, ABB is always among the first to extend its supporting hand, especially to youngsters affected during disasters. ABB also actively organizes employee volunteers across the country to plant trees, volunteer in the community, and provide electrical safety seminars and other public events.

With these efforts, ABB has won several awards for corporate social responsibility, such as ranking top 3 for multinational companies in the "2013 China Top 100 Green Companies" award; winning Best CSR Performer at the annual Chinese Enterprises Social Responsibility awards; and being awarded the 2013 China Low Carbon 2013 and Most Environmentally-Friendly Enterprise among others.