

This is ABB

Shaping a global leader in power and automation

As one of the world's leading manufacturers of power and automation technologies, we work to ensure reliable and efficient transmission and distribution of electricity and increased productivity in industrial, commercial and utility operations, at the same time as lowering our customers' environmental impact.

We necessarily work and interact with a wide range of business partners as part of our efforts to deliver sustainable profitable growth. Our approach to value creation is based on partnerships and exchanges – of goods, services, skills and information – which benefit both ABB and our industry, utility, infrastructure and transportation customers. This is sometimes described as creating shared value; it is mutually interdependent.

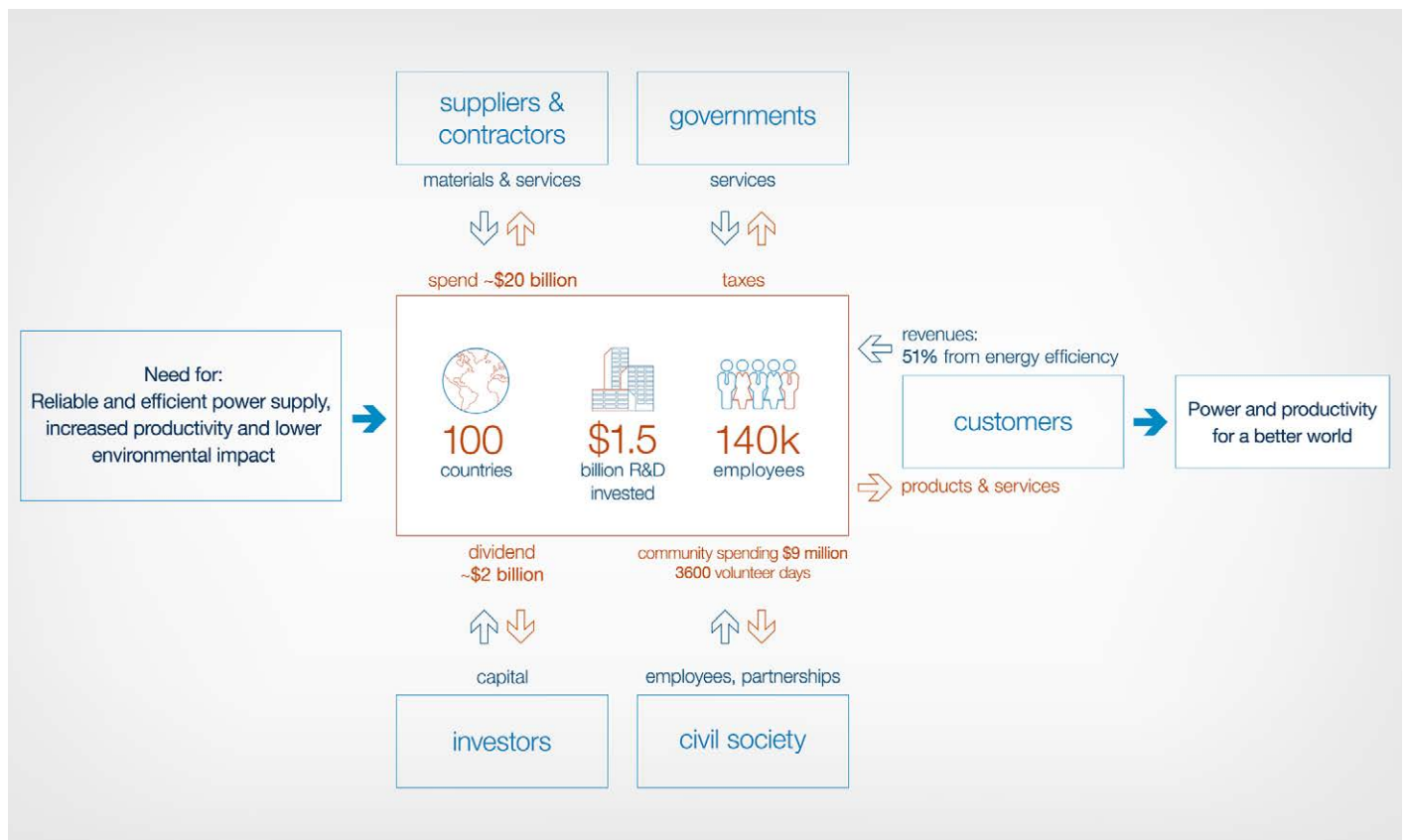
Our success is based on constant and innovative interaction: with our researchers who provide the backbone for technology leadership and enable us to serve our customers better; with our suppliers who commit to providing their services in an economical, high quality and on-time manner, using the materials and processes agreed with ABB; and with our employees and contractors who are responsible for developing and delivering the systems, products, solutions and services to our global customers.

Our operating parameters are determined by partners such as governments, which provide the regulatory frameworks for our business, and investors, institutional and individual, who provide the lifeblood for our operations. We need to satisfy their demands to prosper.

Central to our ability to maintain technology leadership and create value – for ourselves and for society – is our ability to attract, develop and retain the right people in the right jobs. Our interaction with different parts of society helps us to attract the best employees and secure our standing in the communities where we operate.

These are some of the factors which help us to derive value from and create value for our customers, through whichever channel we serve them, and they underscore our daily efforts to create "Power and productivity for a better world."

ABB value chain



In 2014, ABB laid the foundations to take the company to the next level, with a new strategy aimed at accelerating sustainable value creation to deliver attractive shareholder returns. To provide us with a systematic and robust approach for value creation, enhanced earnings per share and cash return on invested capital, ABB defined three focus areas: profitable growth, relentless execution and business-led collaboration.

ABB vision

Our Next Level strategy is built around ABB's vision: "Power and productivity for a better world." This describes what we stand for: Power, because we are a leader in addressing power infrastructure and control needs for utilities, industry, and transport and infrastructure; and Productivity, because ABB is a leader in operational asset effectiveness – supporting our customers in achieving high uptime and speed while reducing waste.

"Better world" refers primarily to our value proposition to decouple economic growth from environmental impact. Based on our offerings and technologies, we are well positioned to enable growth with less relative energy consumption and make the energy supplied cleaner and more sustainable.

Profitable growth

To achieve the next level, ABB is targeting profitable growth by shifting our center of gravity – through strengthening competitiveness, driving organic growth and lowering risk.

We are enhancing competitiveness in areas such as technology, service and software. We will expand our customer value proposition with new engineering and consulting services and advanced software-based services. Our offerings are also addressing the big shift in the electrical value chain – for instance with more efficient, long-distance power transmission and micro-grids – and we are innovating to help our customers derive the benefits of the "internet of things, services and people."

ABB's strong global presence means we are well positioned to access high-growth segments, where we are driving momentum by selling more of our existing offering to customers, developing innovative new offers and value propositions, and expanding into additional, high growth segments.

Alongside our focus on organic growth, we are also reducing intrinsic business risks by, for example, aligning business models more closely with our core competencies.

We are complementing our focus on organic growth by targeting incremental strategic acquisitions that contribute value in line with the new strategy. We are also extending partnerships with other leading global companies.

Relentless execution and business-led collaboration

Our second strategic focus area is execution. We have been successful in our programs to reduce costs and improve customer service. We intend to broaden those efforts by developing a leading operating model across ABB, starting with the areas of white-collar productivity, net working capital management and quality.

Our third focus area is aimed at simplifying how the organization works together and at achieving a more market focused organization. We have introduced undiluted and clear business-line responsibility as the core of ABB, along with strengthened cross-business collaboration.

Big shifts in power and automation

ABB's future business prospects are promising, thanks to the big shifts taking place in the electricity value chain and industrial automation. The rise of the emerging economies is also a tremendous opportunity; in Africa and India alone, nearly one billion people are waiting for access to electricity.

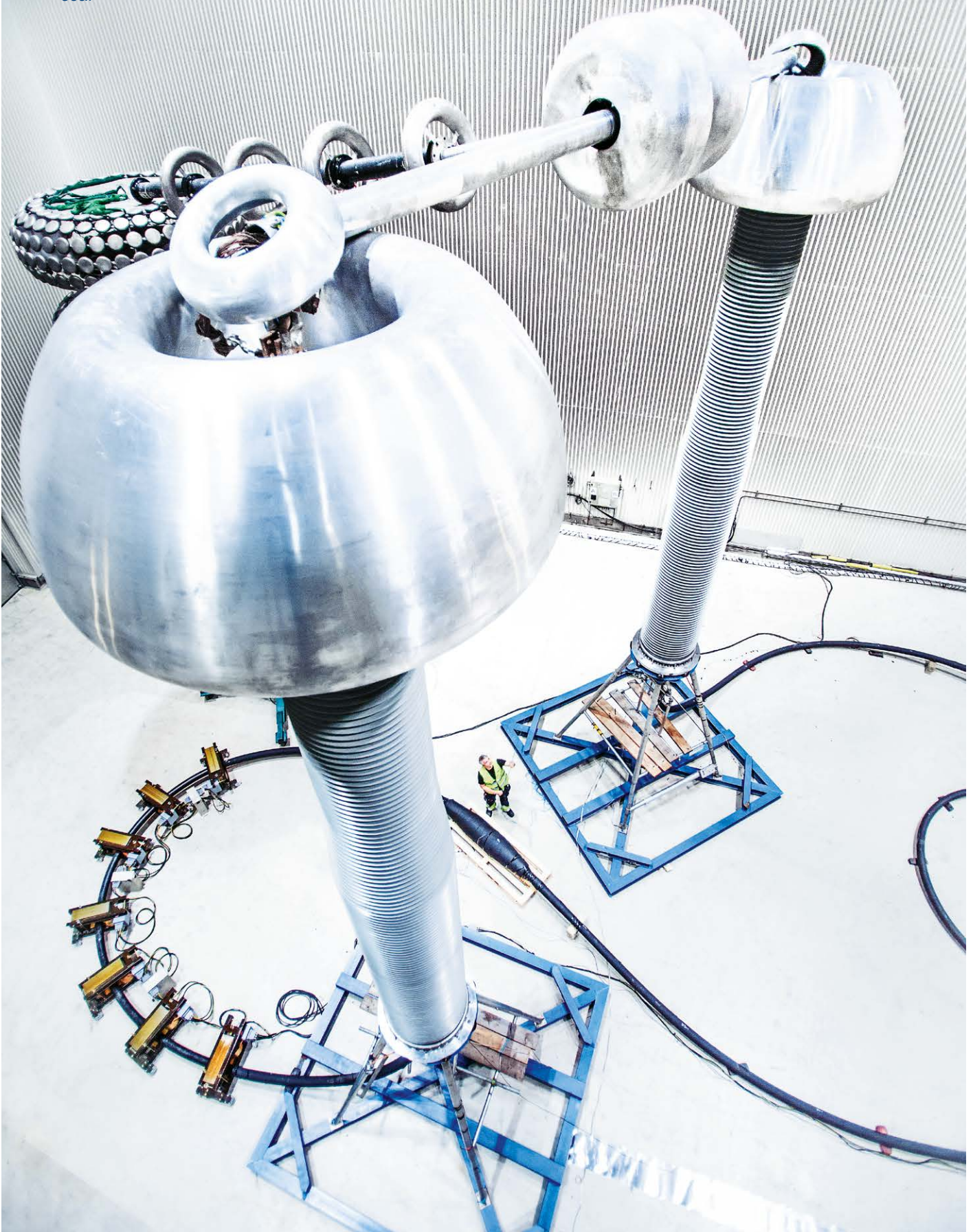
Electricity supply is undergoing seismic changes as the power generation mix shifts towards renewables and more feed-in nodes increase the complexity of the grid. By 2035, renewables are expected to account for 40 percent of new power generation, meaning electricity will have to be transported over longer distances and at higher voltages. Renewables are also making stand-alone grids possible for remote, off-grid communities and innovations in power storage technology promise to dramatically expand the application of these micro-grids.

Thanks to the internet, the world is on the cusp of a new revolution in digital technology. The next step will be the optimization of industry: from a central control center and using algorithmic reasoning, we will be able to help our customers get more out of their devices and maximize the performance of their plants and machinery. A new era in industrial automation is just around the corner.

In terms of markets, emerging economies are expected to account for two-thirds of global GDP growth in the next five years. We can expect demand for electricity to soar as incomes rise and economic development advances.

The long-term demand outlook in our three major customer sectors – utilities, industry, and transport and infrastructure – remains clearly positive. We are well-positioned to tap these opportunities for long-term profitable growth, with our strong market presence, broad geographic and business scope, technology leadership and financial strength.

ABB technologies contribute to the development of a cleaner, more reliable and efficient power supply. Our high-voltage transmission systems help transport power and connect transmission grids over land, underground and even under the sea.



Well positioned in attractive markets

ABB is a leading provider of power and automation technologies for power utilities, industrial enterprises, and transport and infrastructure customers. They are attractive sectors – the market served by ABB is forecast to grow from about \$600 billion in 2014 to \$750 billion in 2020.

Utilities

ABB serves utilities and industrial and commercial customers with products, systems and services for the generation, transmission and distribution of electricity. Turnkey solutions include power plant electrics and automation, bulk power transmission, substations and network management.

The product offering across voltage levels includes circuit breakers, switchgear, capacitors, instrument transformers, power, distribution and traction transformers, and a complete range of medium-voltage products. With a 130-year heritage of technology and innovation and a presence in more than 100 countries, ABB continues to shape the grid of the future, by facilitating power capacity, enhancing reliability, improving energy efficiency and lowering environmental impact.

Power generation

ABB provides integrated power and automation solutions for all types of power generation plants, including coal, gas, combined-cycle, nuclear, waste-to-energy and a range of renewables including solar, wind and biomass. ABB technologies help optimize performance, improve reliability, enhance efficiency and minimize emissions throughout the plant life cycle.

Power transmission

ABB's comprehensive offering includes both AC and DC products, systems and services, which help customers maximize efficiency, reduce transmission losses, and improve grid

reliability. Sixty years ago, ABB pioneered high-voltage direct current (HVDC) transmission, an essential technology in the efficient transportation of large amounts of power over long distances with minimal losses. Our high-voltage technologies, such as switchgear and transformers up to 1,200 kilovolts (kV), help transport power and connect transmission grids over land, underground and even under the sea.

In 2014, ABB launched the world's most powerful submersible power transmission cable system, a 525-kV extruded HVDC cable that doubles power flow and extends range significantly, enabling greater integration of distant renewable energy sources into the grid and improving grid interconnections. ABB's substation offering includes flexible alternating current transmission systems (FACTS) technologies that help improve power quality and can significantly increase the capacity of existing AC transmission systems – by as much as 50 percent. FACTS solutions can also be used for the safe integration of intermittent power sources, such as wind and solar, into the grid.

Power distribution

ABB's distribution offering includes a complete range of medium-voltage products as well as network management and utility communications solutions to monitor, control, operate and protect power systems. These solutions are designed to manage power networks intelligently, ensure the reliability of electricity supplies and enable real time management of transmission grids and distribution networks. The portfolio also includes supervisory control and data acquisition (SCADA) systems, and enterprise software solutions that facilitate the convergence of operational and information technologies.

Industry

ABB technologies are key enablers of industrial productivity, increasing the output, quality, variety and affordability of goods, and helping to raise living standards around the world. They power manufacturing and processing plants, monitor and manage the processes to maximize efficiency, ensure people, process and product safety, and drive key equipment.

Energy efficiency and productivity are the hallmarks of ABB's offerings for industry. Our energy efficient products, systems and services reduce consumption and therefore electricity bills and carbon emissions, while our automation systems increase productivity, quality and efficiency, and keep workplaces safe.

Productivity

Thanks to its long history of developing automation solutions for industry, ABB is today the global leader in distributed control systems, with more than 20 percent market share*. Our systems measure, analyze, diagnose, and provide full control of industrial plants in industries from chemicals, pulp and paper, mining, minerals processing (e.g., cement making), to pharmaceuticals and food and beverage.

Energy efficient

Complementing our portfolio of control systems are our energy efficient motors and drives, where we are also global

market leader. Last year, our installed base of drives saved about 445 terawatt hours (TWh) in electricity, equivalent to the annual power consumption of 110 million European households. Only a small proportion of the world's electric motors, which account for about 70 percent of industrial electricity consumption, are able to efficiently adjust their power use to match the required demand. This leaves significant room for continued market expansion, which is further supported by increasing minimum energy performance standards in many countries and industries.

Redefining robotics

As the company that pioneered the world's first electrically powered industrial robot in 1974, ABB supplies robots for industries as diverse as automotive, packaging and palletizing, and consumer electronics. Now we are again redefining robotics with YuMi, an innovative dual-arm collaborative robot. YuMi is designed for a new era of automation; for example, in small parts assembly, where people and robots safely work alongside each other on the same tasks.

Service

Tying together ABB's portfolio of automated systems is our comprehensive range of service offerings. Our life-cycle services ensure the health, reliability and continual evolution of installed equipment, while our experts can be called on to help customers reduce energy consumption and improve process efficiency and reliability. ABB also offers a host of remote monitoring and predictive maintenance services that can alert and dispatch service experts to resolve potential issues before a shutdown occurs.

* According to leading technology research and advisory firm ARC Advisory Group



ABB provides systems and solutions for the automation and electrification of industrial processes across industries as diverse as oil and gas (pictured), pulp and paper, metals, minerals and mining, chemical and marine.



ABB's industrial motors drive key equipment, and frequency converters deliver precise and dependable motor control while helping to reduce energy consumption.

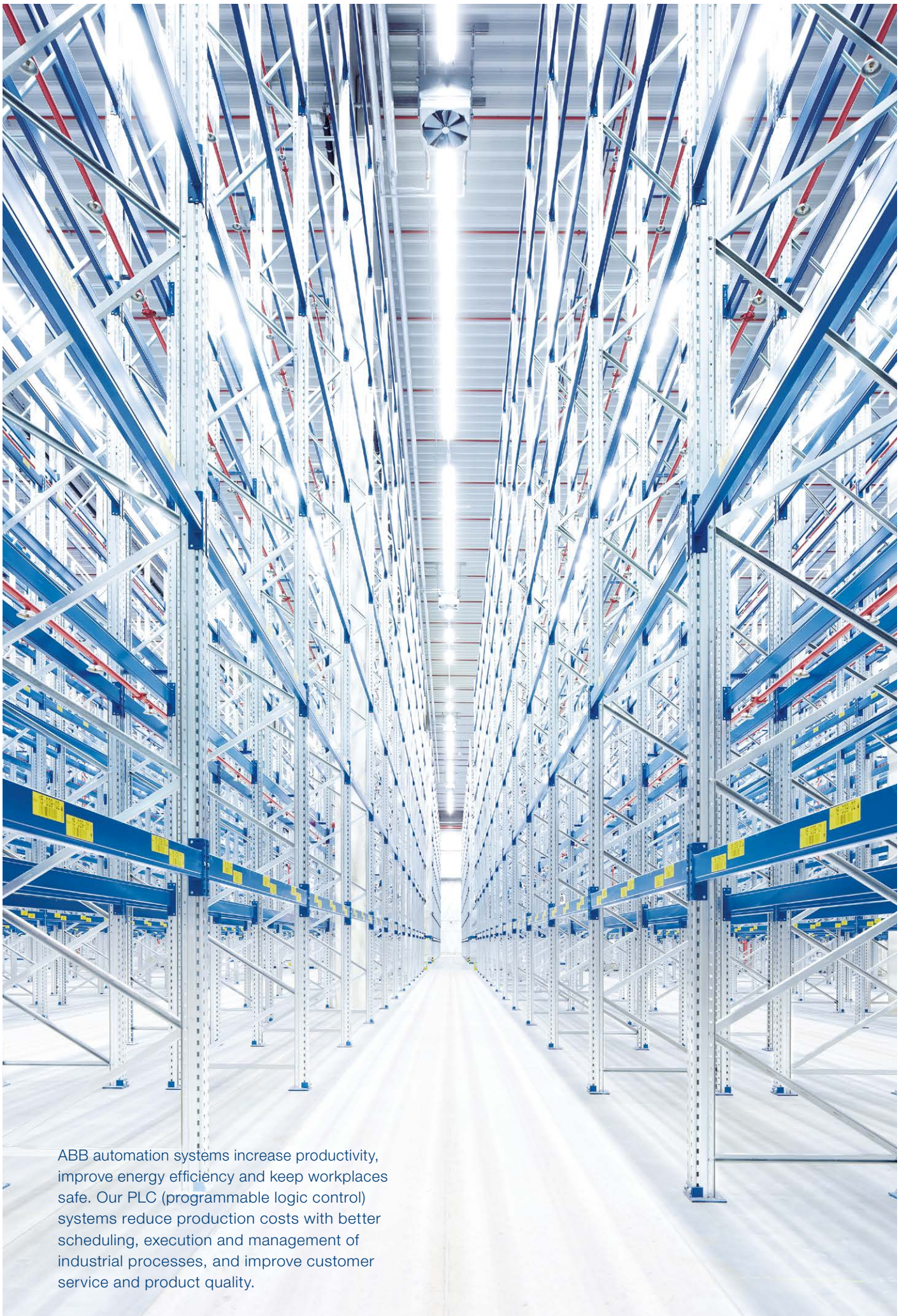


ABB automation systems increase productivity, improve energy efficiency and keep workplaces safe. Our PLC (programmable logic control) systems reduce production costs with better scheduling, execution and management of industrial processes, and improve customer service and product quality.

ABB's building automation systems allow full control of electrical systems, from blinds and lighting to heating, ventilation and air conditioning. When combined with ABB's efficient motors and drives, energy savings can be dramatic.



Transport and infrastructure

Alongside its offerings for utilities and industry, ABB plays an important role in providing technology for sustainable marine, rail and vehicle transport, and in powering the world's cities and improving the urban environment.

Our expertise in power and automation has given us the edge when it comes to providing clean and reliable power solutions for transport networks and infrastructure.

Emission-free transport

ABB's electric traction systems for trains and high-speed locomotives support the construction of clean, safe railway networks, linking urban centers and districts. Our wayside energy management systems can reduce overall power consumption by 10–30 percent through recuperating energy normally lost when a train brakes.

As the market and technology leader in electric-vehicle charging, we provide fast-charging infrastructure for electric vehicles and battery-powered buses, cutting carbon emissions and providing real alternatives to gasoline-powered cars.



ABB has a long history of providing innovative and energy-efficient technologies to the rail sector, both for rail infrastructure and rolling stock.

Power and propulsion systems for ships

ABB technologies extend to electrical power and propulsion systems for ships, dramatically reducing marine emissions, while our turbochargers improve gas and diesel engine performance while lowering fuel consumption and nitrogen oxide (NOx) emissions. We also supply fast, cost-effective crane systems for loading and unloading vessels in port.

Intelligent building systems

In buildings, which account for about 40 percent of total energy consumption, ABB's intelligent automation systems enable control of all electrical systems, including blinds, lighting, heating, air conditioning and ventilation, helping cut power consumption and reduce energy bills. Installing systems powered by ABB's energy efficient motors and drives (see page 14) can further cut power consumption by half, and in extreme cases by up to 90 percent.

Power supply

Our compact substations are designed to fit into built-up areas and can easily be installed underground, and their automated control systems mean they can be remotely monitored and left to run themselves. ABB's power equipment ensures the safe, efficient and reliable distribution of electricity throughout cities and large buildings.



ABB also provides life-cycle service support including maintenance and retrofits for its large, global installed base.