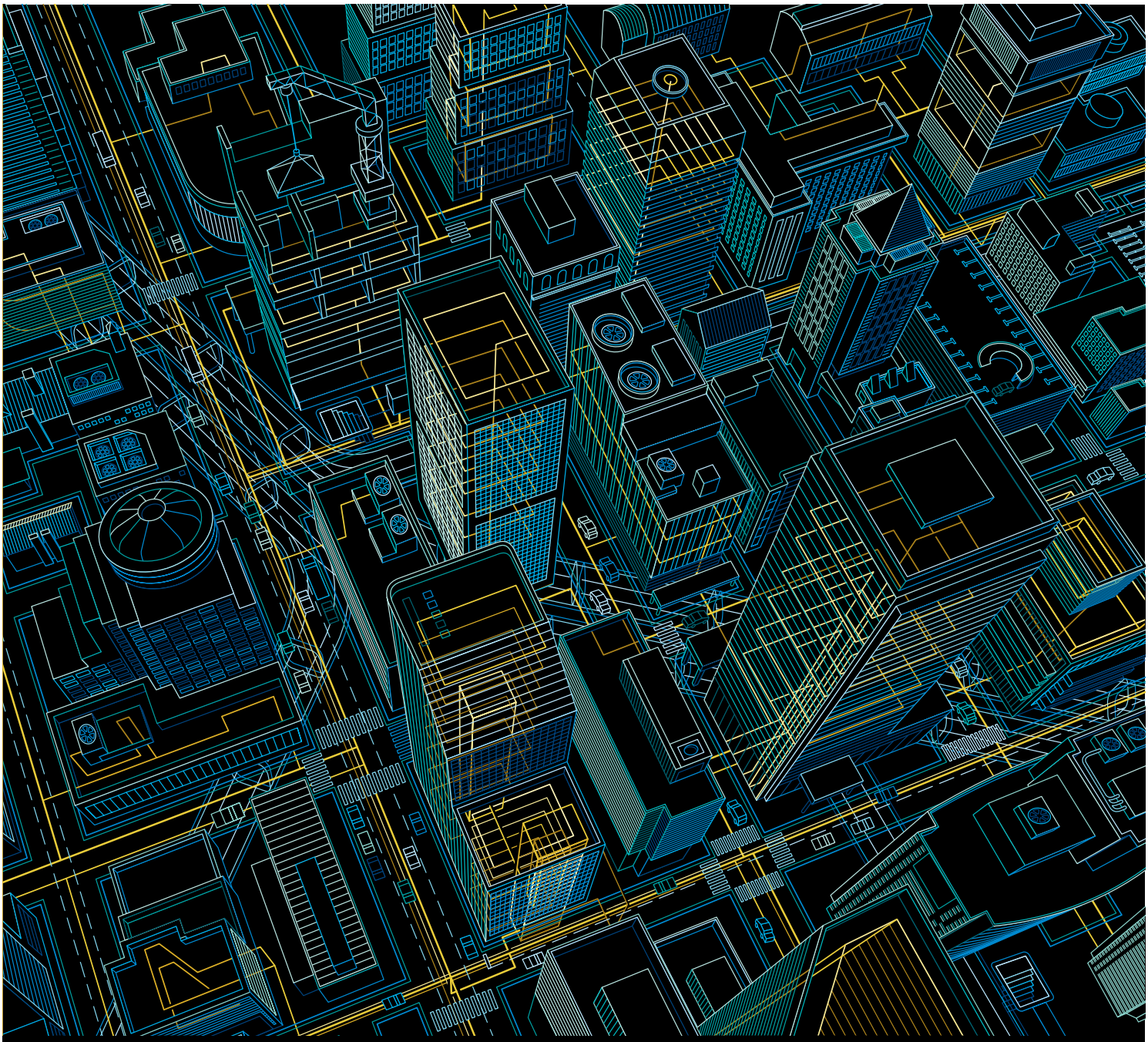


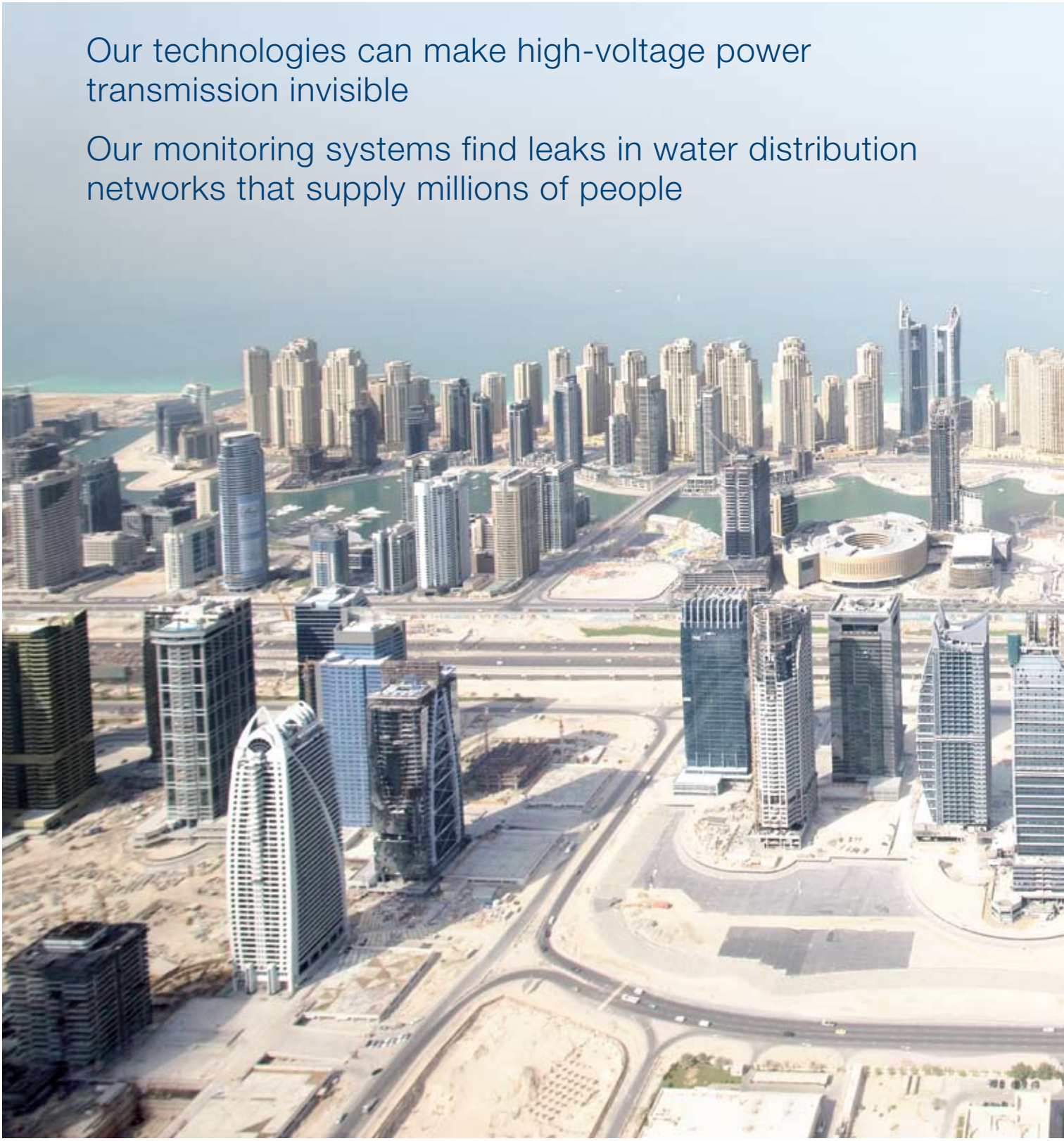
Power and productivity for a better world

Group profile

Power and productivity
for a better world™

Our technologies can make high-voltage power transmission invisible

Our monitoring systems find leaks in water distribution networks that supply millions of people



Our instruments measure greenhouse gases from space

Our transmission systems deliver electricity efficiently over thousands of kilometers

Our intelligent building installation systems lower power consumption in homes and offices

Many of the benefits we take for granted in our daily life, from electricity at the touch of a switch to the consistent high quality of industrial goods, are made possible by technology that was pioneered, improved and adapted by ABB over more than a century of innovation.

Formed in 1988 by the merger of two long-established engineering groups, ABB has about 120,000 employees and operations in more than 100 countries in every region of the world.

Today, ABB is one of the world's leading engineering companies, helping customers to use electrical power effectively and to increase industrial productivity in a sustainable way.

Our software lets robots and people work safely side by side

Our energy consultants help identify a plant's potential for energy savings

Our systems manage lighting for the world's biggest sporting events

Saving energy at every opportunity

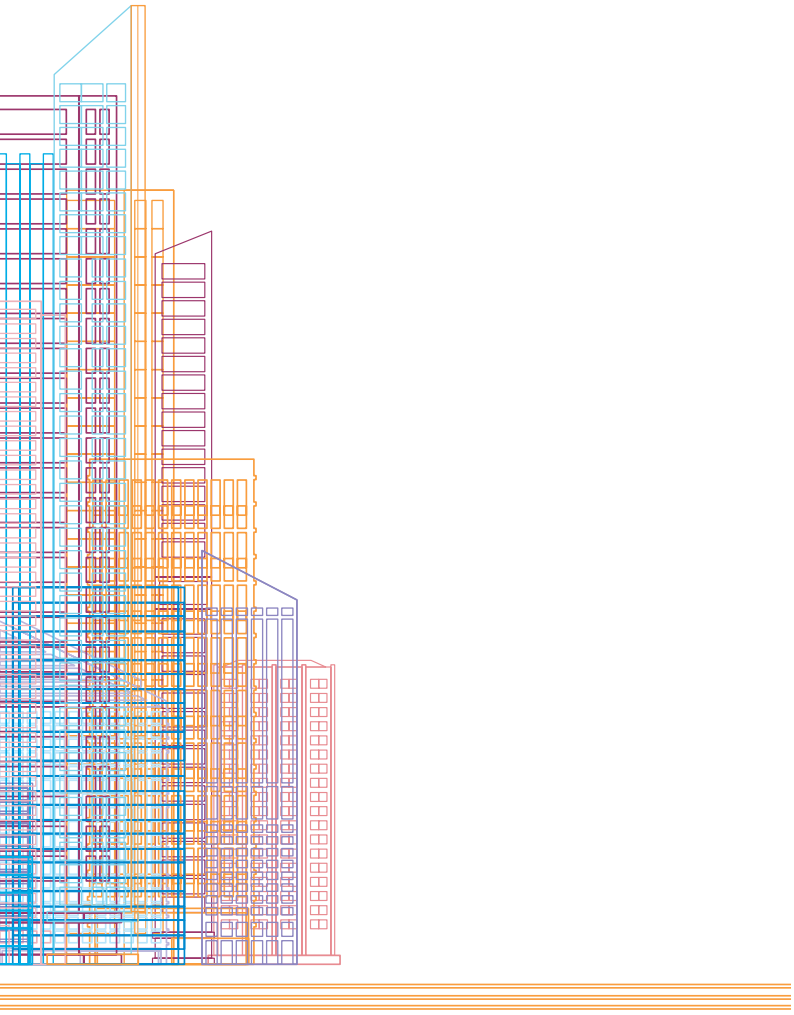
Energy efficiency

Addressing the energy challenge

ABB helps customers produce and deliver more goods and power for each unit of energy used. Improvements come from ABB's motors and motor-control devices, industrial robots, technologies for the efficient generation, transmission and distribution of power, industrial control systems, turbochargers, and technology to manage heating, lighting and ventilation in buildings. Energy consulting and auditing services also help customers improve their energy efficiency.

Efficient power supply

A significant amount of the electricity generated in power stations never reaches the consumer because of losses that occur during its transmission and distribution. ABB is pushing the boundaries of technology to increase the efficiency of the power supply system: optimizing power generation, facilitating the reliable transmission of large of amounts of power with minimal losses, and working to monitor, regulate and improve distribution networks.



Controlling entire plants

ABB also makes software and control systems that help power and industrial plants operate more efficiently. In industries ranging from pulp and paper to mining and petrochemicals, they regulate equipment to ensure that it runs at optimum efficiency, delivers consistent quality and forecasts when maintenance will be needed. Energy savings can be multiplied by combining control systems, high-efficiency motors and variable-speed drives.

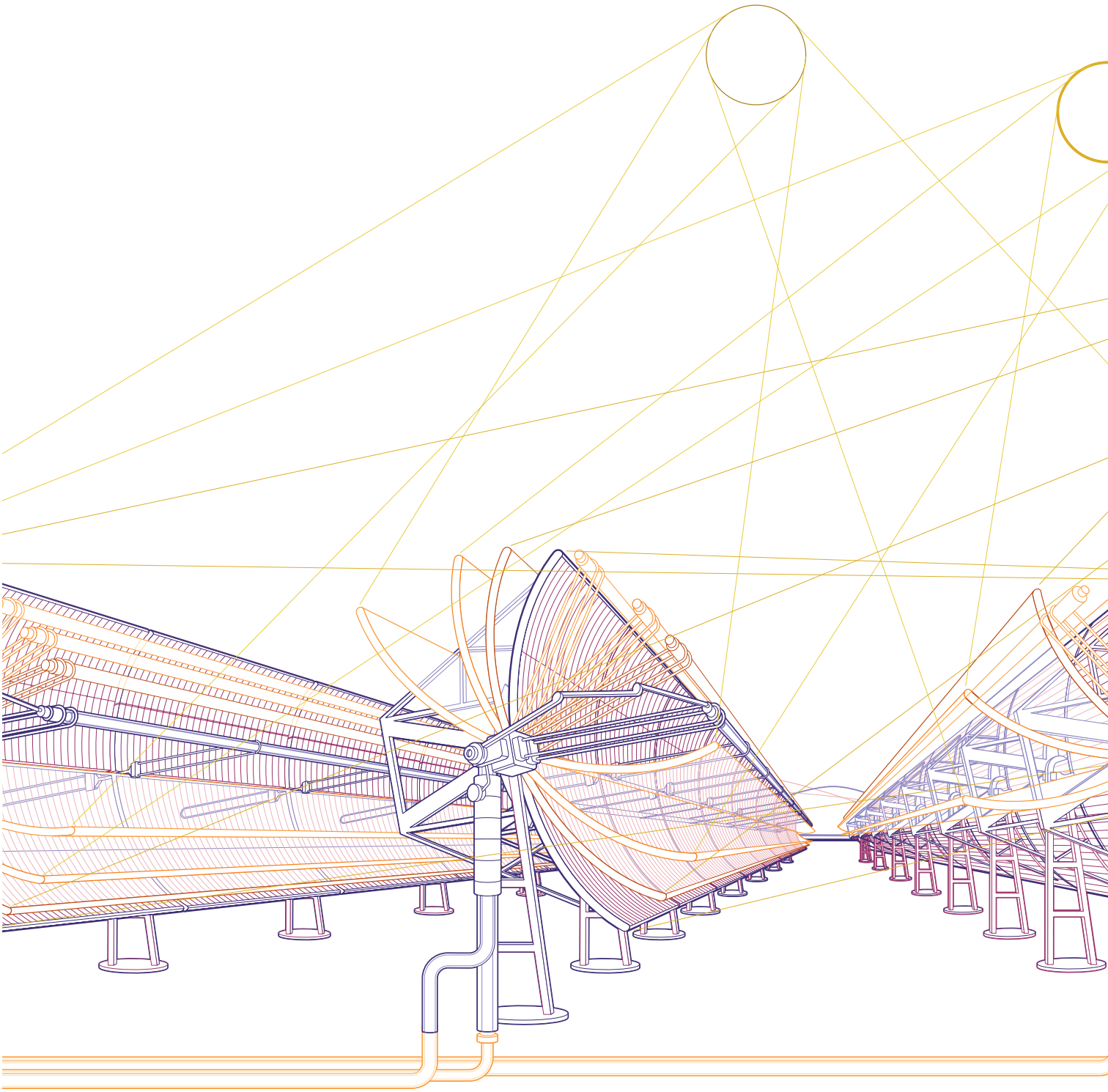
Managing the workhorse

Industry consumes more than 40 percent of the electricity generated worldwide, and electric motors account for two-thirds of that. They are the workhorses of industry, and their performance is best controlled using variable-speed drives. ABB's low-voltage drives (just one type of motor-control device) saved more than 170 million megawatt-hours of electricity in 2008, equal to the annual power consumption of 42 million European households.

Designing for efficiency

ABB strives to maximize the resource and energy efficiency of its products over their entire life cycle. This includes the materials and processes used in their production, their years in operation, as well as their retirement and disposal. ABB has developed independently verified Environmental Product Declarations for its main products in all business areas.

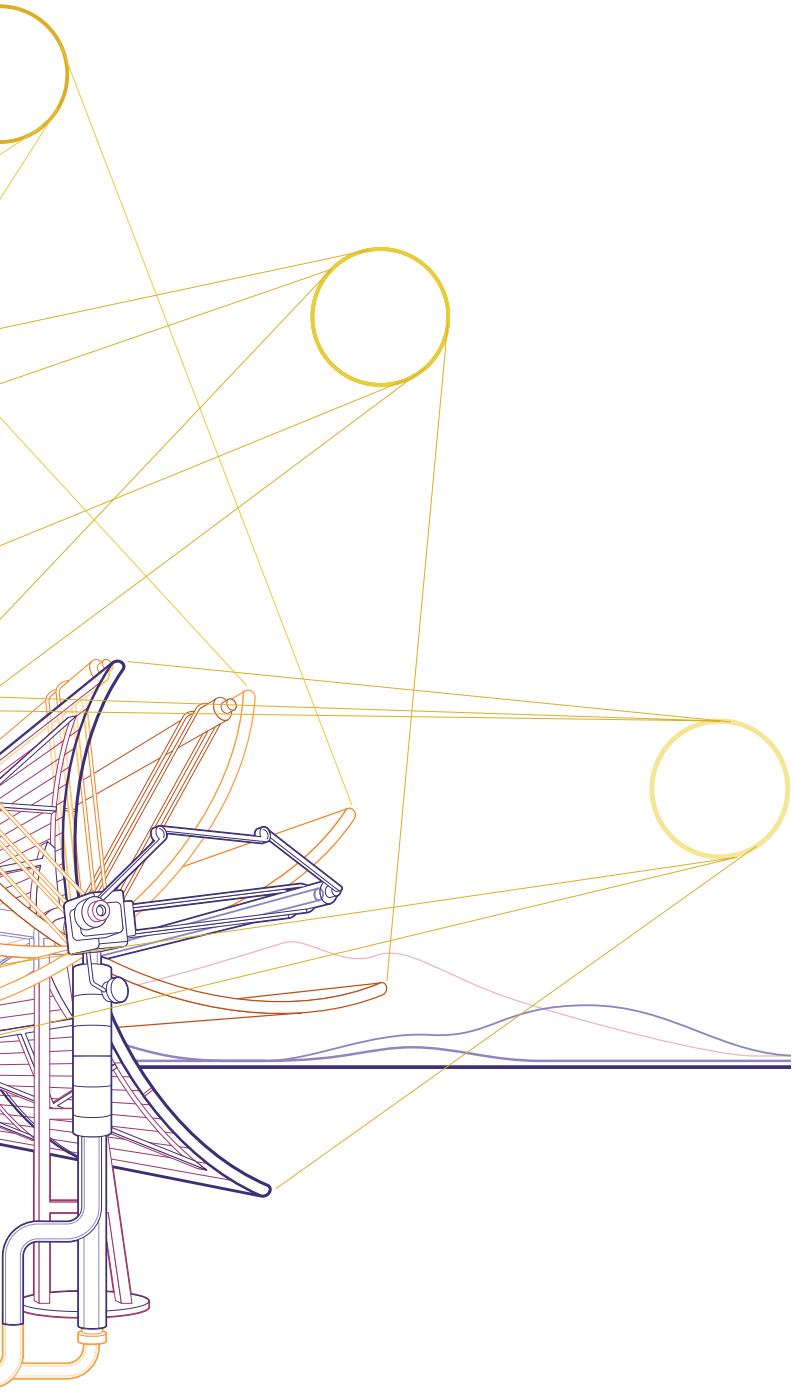
Reliable, high-quality power is vital to modern economies



Grid reliability

Power on demand

As technology advances, we have become increasingly reliant on secure electricity supplies. Without them, the lights go out, industry comes to a standstill, trains stop running and computers shut down. With demand for electricity rising, and concern for the environment bringing more renewable energy online, power utilities are under growing pressure to increase capacity, make their grids more flexible, and accommodate the demands of deregulated power markets.



Reliable from generation to plug

ABB is a major supplier to power generators and the world's biggest manufacturer of power transmission and distribution equipment. We have more than 125 years of experience and a wide range of products and solutions to boost capacity, increase power security and enhance grid reliability. ABB provides complete electrical, automation, instrumentation and control solutions for the efficient generation of electricity. The power is transported to the end-user safely and with minimal losses, using AC and DC transmission technologies and a portfolio that includes transformers, switchgear, circuit breakers, cables, substation automation and protection systems, as well as entire substations and network management systems.

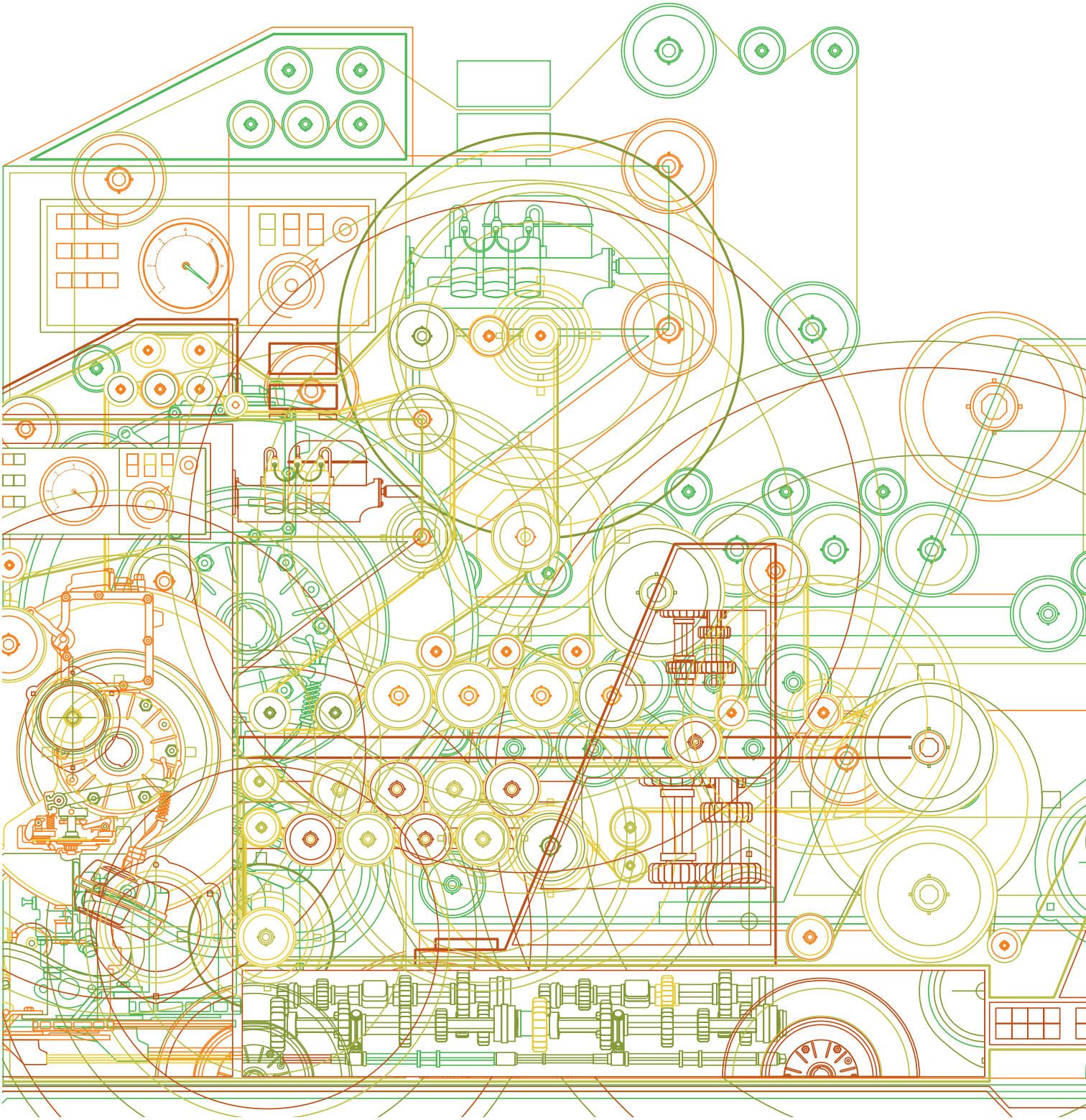
Breakthrough technology

ABB's reputation is built on pioneering technology. Recent breakthroughs include our HVDC Light technology, which transmits high-voltage power underground, underwater or along traditional overhead lines, and improves the stability of power grids. ABB has also developed technologies for ultrahigh-voltage transmission at 800 kV DC and 1,000 kV AC, a leap from the 400 kV used in most grids. A higher voltage improves the efficiency of long-distance power transmission and reduces its environmental impact.

Building a smarter grid

Power grids are facing a major transformation, driven by the need to integrate renewable energy, improve energy efficiency and allow consumers more control over their energy consumption. As it evolves, the "smart grid" will combine established power technologies with advanced analytics, smart devices and automation technologies to create a power system that is more reliable, flexible, secure and efficient, and has a lower impact on the environment.

Productivity improves competitiveness and living standards



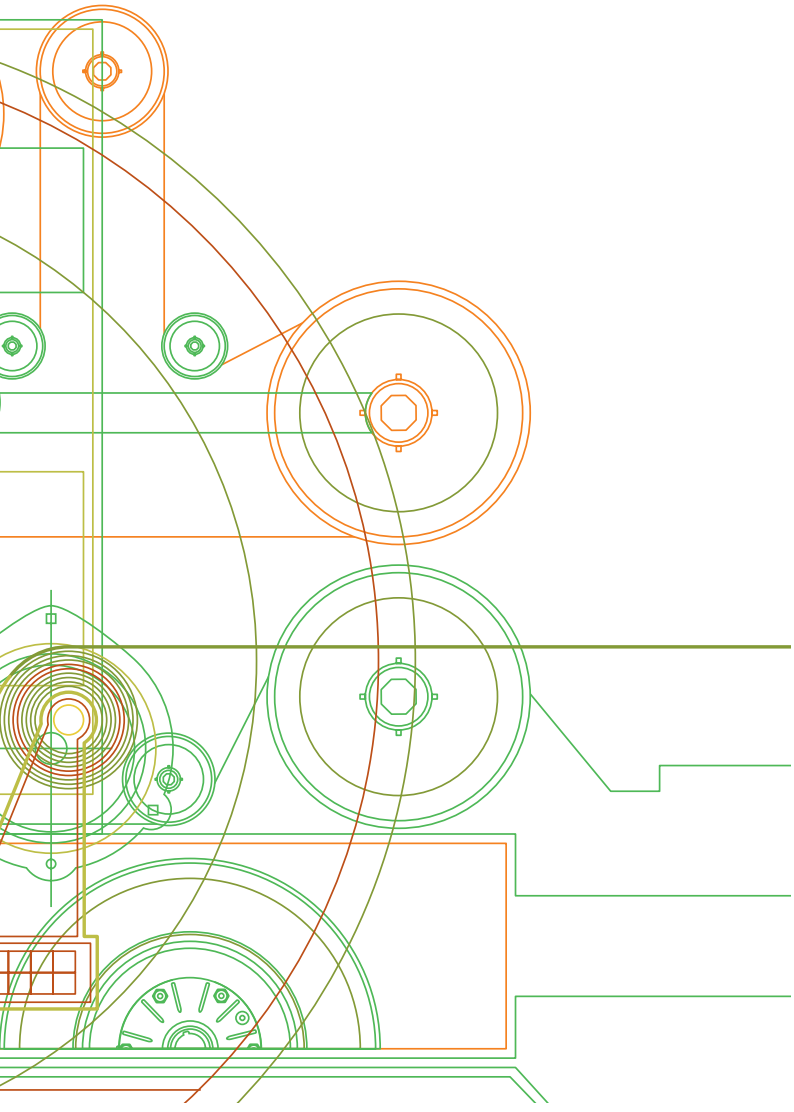
Industrial productivity

The benefits of productivity

Productivity improvements have pushed living standards higher and faster in the past 50 years than any time in recorded history. Rapid industrialization continues to improve living standards and transform the lives of ordinary people around the world. But maintaining this trend requires advanced, knowledge-based power and automation solutions such as those provided by ABB.

Solutions made simple

ABB supplies a vast range of advanced power and automation technologies to enhance the productivity of industries and utilities, including electrical motors and machines, power transformers and switchgear, drives and power electronics, control and safety systems, low-voltage products, instrumentation, and robotics.



Quality and reliability

ABB's industrial customers operate diverse and sophisticated businesses. They include discrete manufacturers like automakers, process industries making items such as paper, steel and petroleum products, and utilities generating or delivering electrical power. Whatever they do, our customers need the most reliable power and automation solutions available. Efficiency, quality, safety and reduced energy consumption are their competitive edge, and our goal is to deliver the products, services and systems that help them keep that edge.

Lower investment and life-cycle costs

In addition to improving quality and productivity, ABB products and solutions help customers to optimize the return on their power and automation investment. Our control systems support easy upgrades and expansions, while allowing cost-effective evolution from older installations. Our power management systems increase power quality and reliability, and boost production output. And our advanced life-cycle and consulting services help customers squeeze extra value from installed assets by keeping them in top working order.

Looking ahead

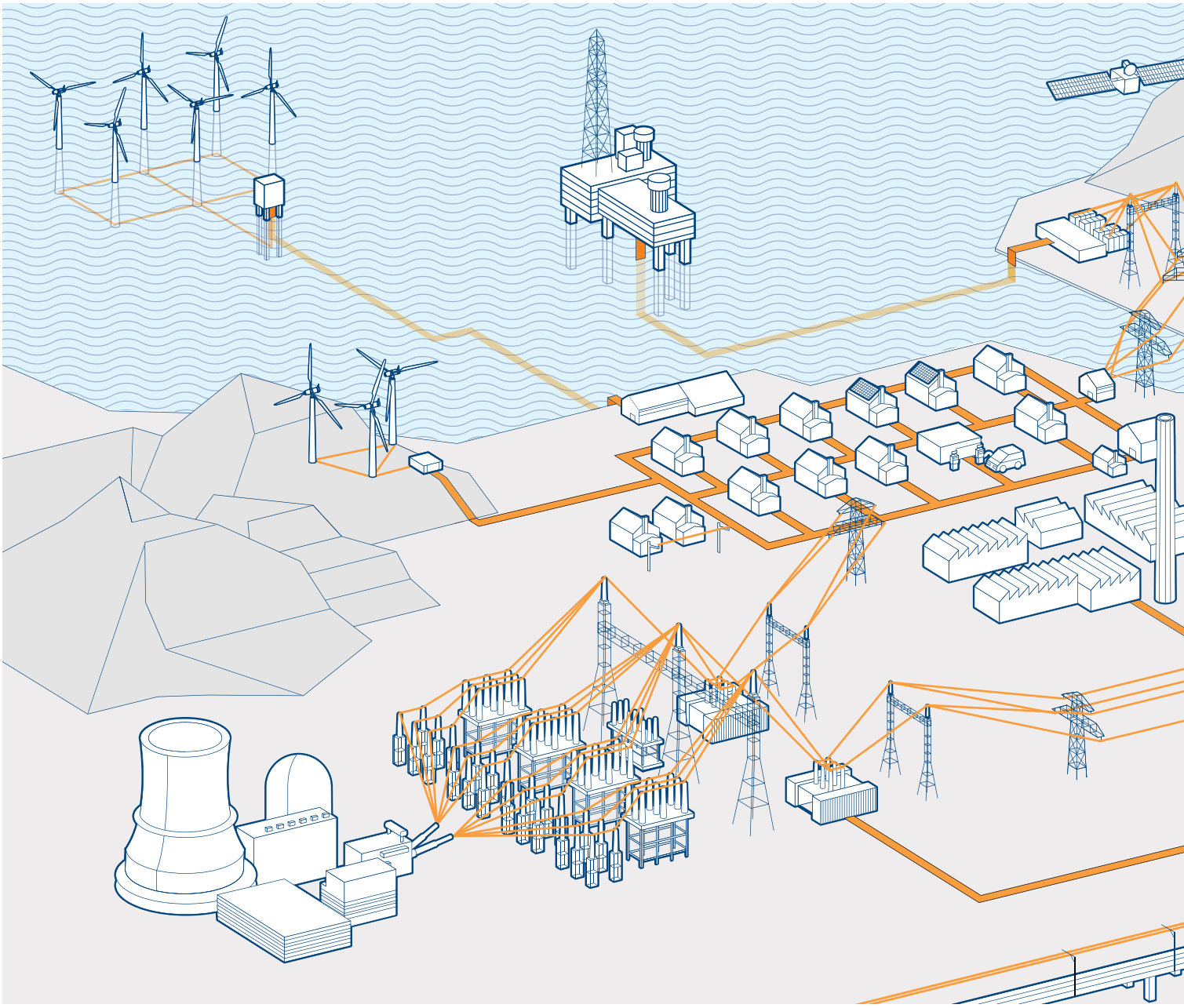
Our extensive research and development efforts are designed to anticipate the changing demands of industrial productivity, and our solutions-based approach is designed to link installed products and systems with the information needed to operate and maintain them. Remote access to information about the performance of installed devices, combined with wireless networking and open communication standards, offer ever-improving asset visibility to enterprise managers.

Our power connections turn unpredictable wind into a reliable source of power

Our technologies can bring electricity to millions over a single power line

Our substations can hide in the middle of a city

ABB technology improves control over electricity, enabling power networks to be more reliable, more efficient, and more accessible to renewable energy



Energizing and controlling power plants

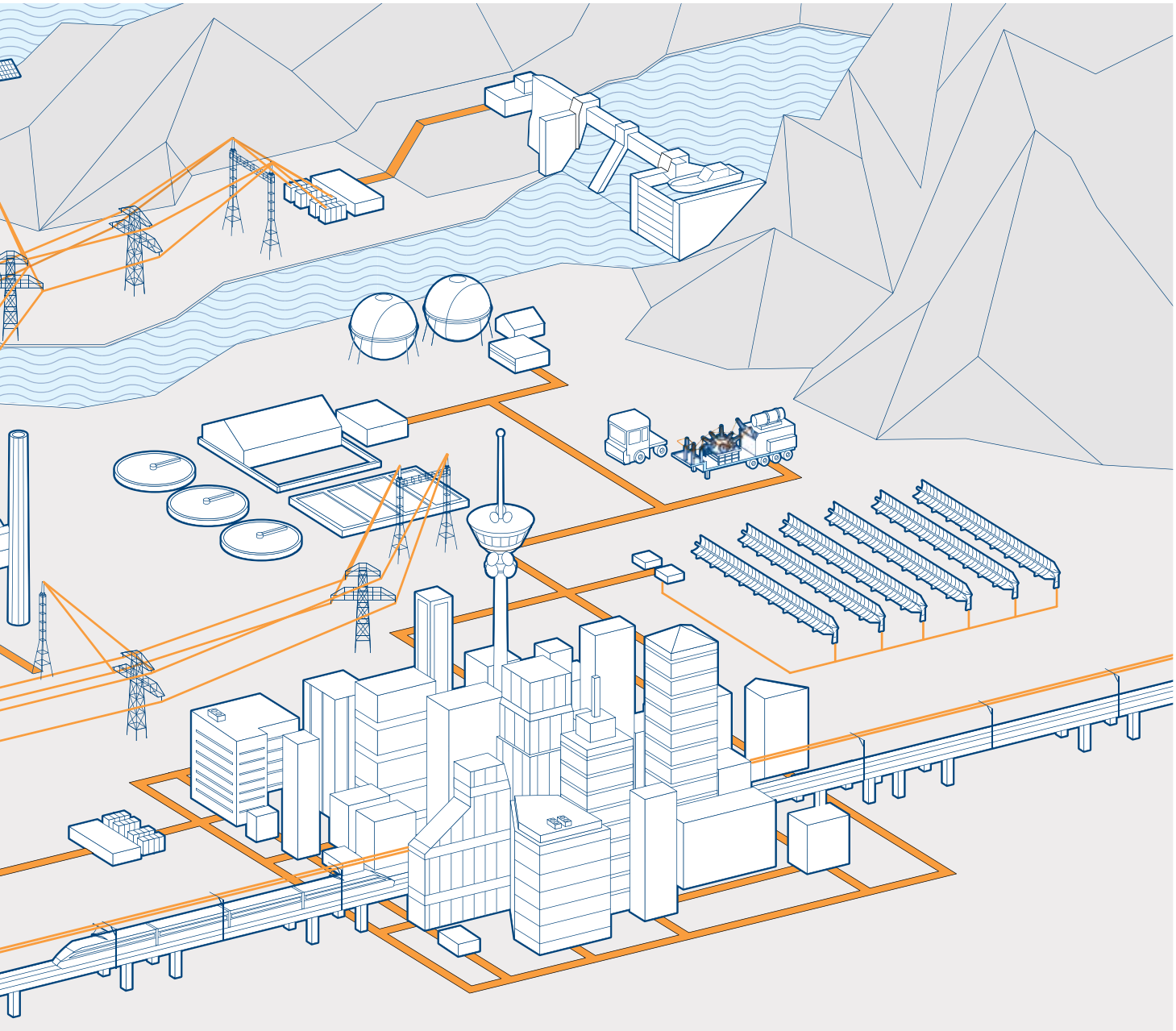
Power plant operators aim to run their installations at the highest possible level of efficiency, regardless of the energy source. With more than 125 years of experience and a vast installed base, ABB offers technologies for complete electrical and automation solutions as well as controls and instrumentation products for power generation plants of all kinds.

Power transmission

ABB is a pioneer and market leader in technologies for efficient and reliable transmission of power over long distances with minimal losses. Our ultrahigh- and high-voltage solutions up to 1000 kV, including technologies like HVDC, HVDC Light, FACTS and cable systems, help transport power and connect transmission grids over land, underground and even underwater.

Substations

Transmission and distribution substations enable power transfers with a range of high- and medium-voltage products that ensure reliability and efficiency, such as surge arrestors, protection equipment, switchgear and circuit breakers. Transformers adjust voltage levels higher or lower for a vast range of purposes, while special automation systems protect and optimize the flow of power within a substation.



Managing the network

A network management system lets utilities collect, store and analyze data from hundreds of thousands of points in a power network. Systems like network control, SCADA (Supervisory Control and Data Acquisition) and utility communications enable real-time monitoring and control with advanced applications for generation, transmission and distribution, and are useful for industry and rail networks as well.

Services

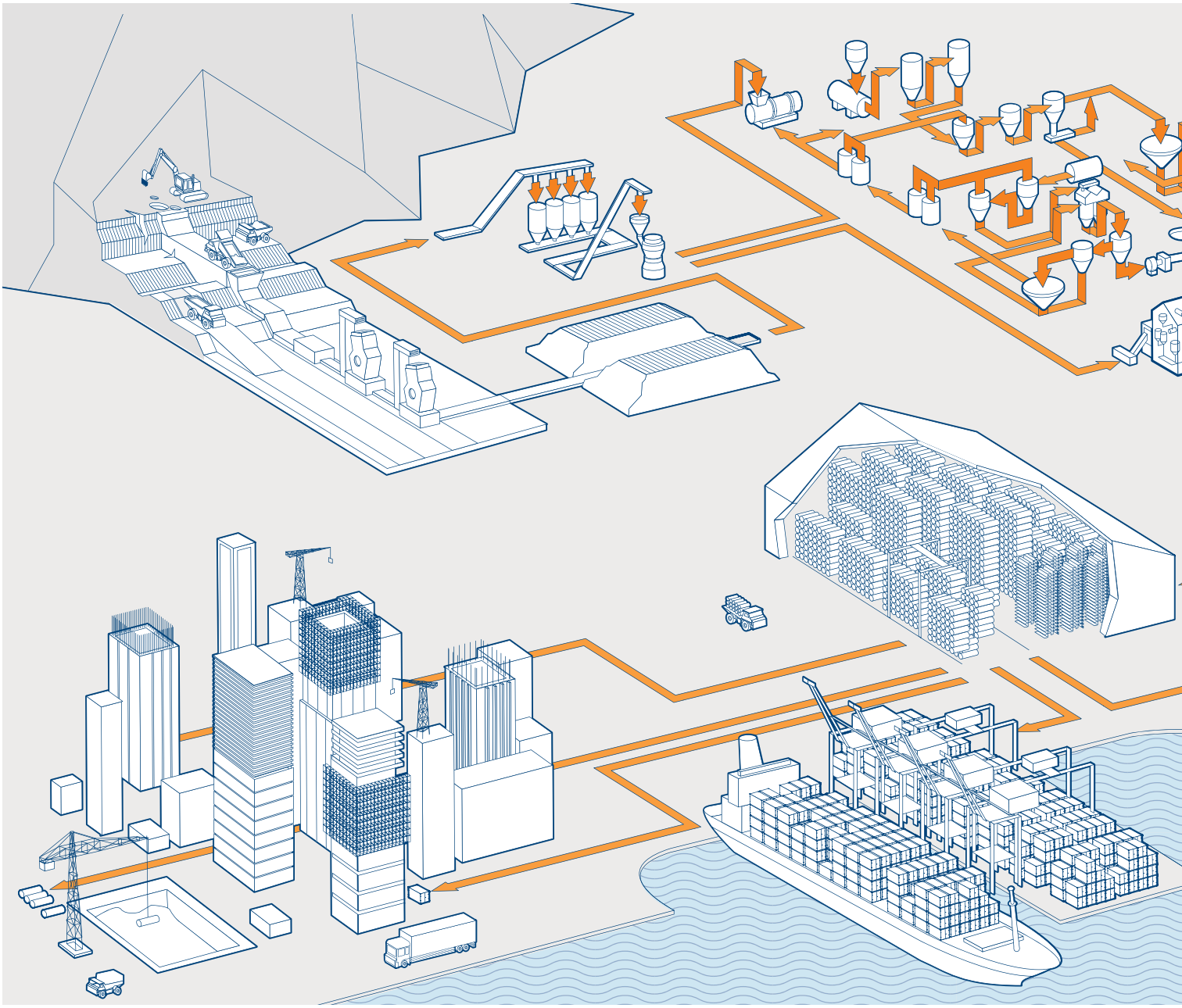
With a global installed base and unparalleled domain expertise, ABB's service offering encompasses the entire energy value chain, from consulting, repair, refurbishment and maintenance-related services to complete asset management solutions. ABB's knowledge of installed electrical systems and equipment is unsurpassed, enabling us to design and build new power products and systems, or repair and retrofit older ones.

Our drives can cut the power consumption of motors by 50 percent

Our remote monitoring services let machines call for maintenance

Our control systems ensure busy urban rail systems run safely and on time

ABB technology delivers better quality with greater speed and flexibility, and with lower environmental impact



Plant electrification and energy management

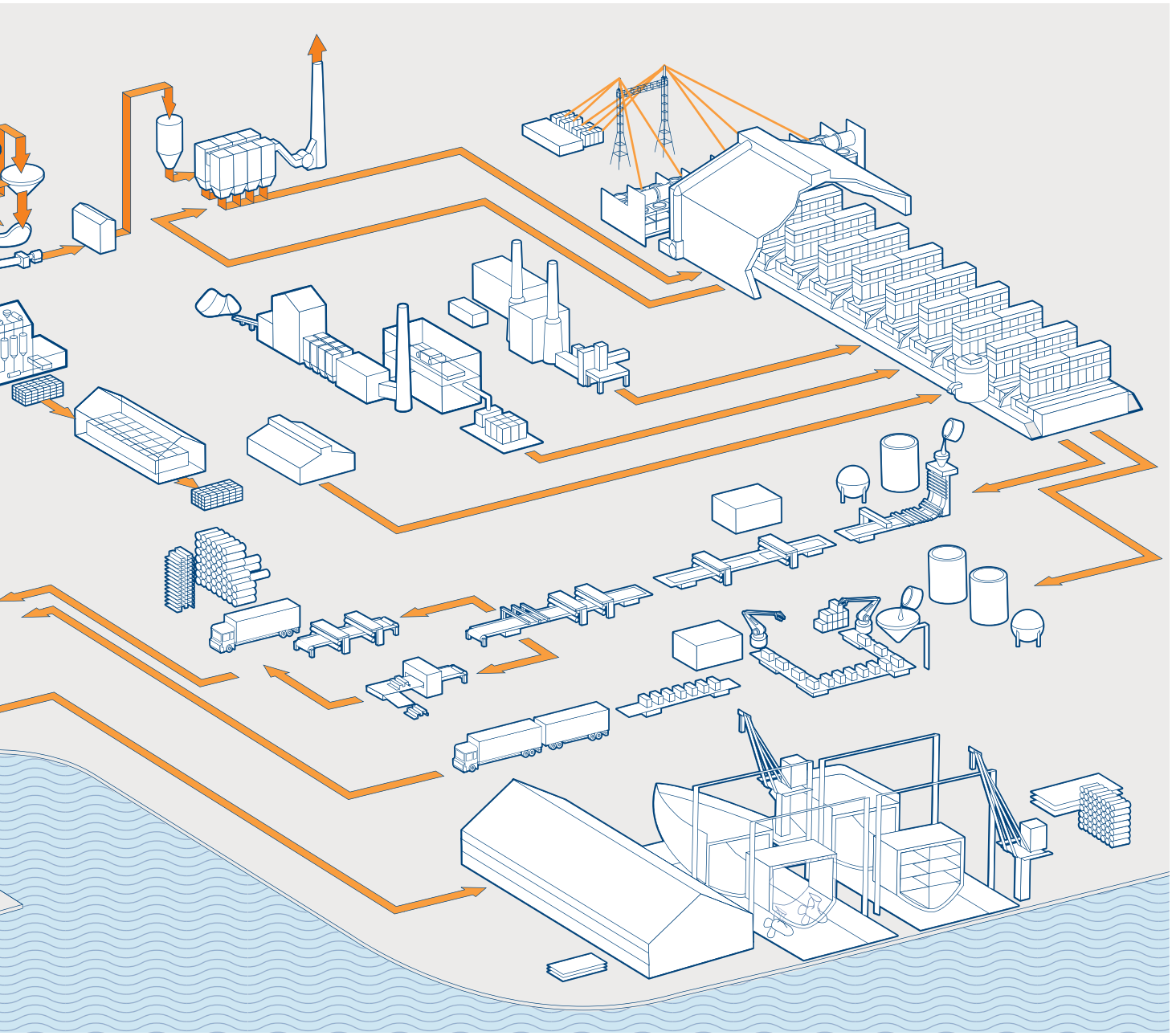
ABB electrification solutions deliver and distribute electricity safely and efficiently throughout manufacturing and processing plants. ABB frequency converters deliver continuous clean electricity in the most demanding industrial applications. ABB energy management systems help customers reduce energy bills and carbon emissions by 5 to 20 percent by lowering energy consumption, minimizing distribution losses and improving generation efficiency.

Process automation and data acquisition

ABB automation systems increase productivity, improve energy efficiency, and keep workplaces safe. Our systems reduce production costs with better scheduling, execution and management of industrial processes, improving customer service and product quality. ABB instruments measure essential parameters in real time, including pressure, temperature and flow. Our online analyzers monitor critical processes to help manage production quality and emissions.

Material handling and robotics

ABB motors and drives increase energy efficiency in fans, pumps, compressors, conveyors, kilns, centrifuges, mixers, extruders, hoists and cranes. Fast, cost-effective ABB crane systems control lifting and handling for shipping and industrial applications. A global installed base of 160,000 ABB robots do jobs from welding, packing and painting to assembly, materials handling and machine tending with power and precision.



Protection and control

ABB low-voltage circuit breakers, switches and control products protect people, buildings and equipment from electrical overloads. ABB line protection products, wiring accessories, enclosures and cable systems control and protect building installations. When integrated with ABB intelligent building automation systems, energy consumption is optimized and controlled through automated adjustment of lights, heat and ventilation.

Services

ABB services help customers improve the performance of automated systems and equipment. Life-cycle services provide preventive, predictive and corrective maintenance and continual evolution of installed automation equipment. Consulting services help customers use less energy, ensuring process efficiency and reliability. Full service contracts put ABB in charge of engineering, planning, and managing plant maintenance activities.

ABB’s technology leadership is built on innovation

Technology

At the heart of technology leadership

ABB has not only pioneered many of today's power and automation technologies, but maintains a technology advantage in these areas through sustained investment in research and development. Our R&D strategy continues to be driven by our customers' need to improve performance while minimizing cost. That means improving energy efficiency, cutting waste and providing reliable power supplies.

Groundwork of the future

ABB's researchers are laying the groundwork of future product development in the areas of power device technology, power transmission and distribution applications, power electronics, mechatronics (a blend of mechanics and electronics) and robotics applications, control systems and optimization, automation networks and devices, software architecture and processes, advanced materials and manufacturing technologies.

Pushing boundaries

Recent developments in power transmission technology have taken conventional products and systems to new dimensions to provide cost-effective solutions for the world's increasing demand for power. Our control platform, Extended Automation System 800xA, is also pushing boundaries. It has gained a higher certification, strengthening our customers' ability to tailor their safety systems to specific process requirements, such as energy and cost efficiency, while at the same time protecting processes, personnel and the environment.

As strong as our people

Our customers want innovations that give them operational flexibility, and assurance that ABB products and systems will operate reliably for years without unexpected refits or overhauls. Given ABB's massive installed base of power and automation technologies, reconciling innovation and continuity is a high priority for our more than 6,000 research scientists and engineers.

The ABB research presence

Through our R&D centers around the world, we maintain close ties to our customers and technology partners. In recent years, we have increased our research presence in growing markets such as India and China, and strengthened our presence in the US. We work closely with more than 70 of the world's leading universities and research institutes, including the Massachusetts Institute of Technology, ETH Zurich, the Indian Institute of Science in Bangalore, KTH Royal Institute of Technology in Sweden and Tsinghua University in Beijing.

Striving for excellence in all we do

Culture and values

A culture of inclusiveness

ABB is one of the world's most global companies, in both the reach of its business and the diversity of its staff.This has bred a culture of openness, flexibility and inclusiveness that helps to attract and retain top performers from all over the world. This broad outlook is a tremendous asset as we pursue our strategy of expanding our global presence.

Every employee a leader

We strive for excellence in personal development, operational execution, health and safety, and social and environmental performance, because the best people want to work in a first-class environment. Our staff development program to bring a culture of leadership to every level of the organization has been attended by thousands of employees.

Highest standards

Excellence in manufacturing, engineering and service is achieved by developing global or regional best practices and then sharing those practices across the company. We aim to eliminate work-related incidents, as part of our commitment to take the utmost care of health and safety.

Uncompromising business ethics

ABB's pursuit of excellence also extends to business ethics, where we continue to strengthen mechanisms to educate staff and eliminate inappropriate activities. ABB enforces a zero tolerance policy relative to breaches of the Code of Conduct, including company policies and directives.

Improving quality of life

ABB takes an active interest in the well-being of the communities in which we operate around the world, and supports local and national programs that promote education, the arts and health services. Examples include programs to ease poverty in Brazil, Canada, China, India and South Africa, and fund-raising events for cancer research organized by employees in the UK and the US. We also work in partnership with other companies and non-governmental organizations, for example providing electrification expertise in rural parts of Africa and India.

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