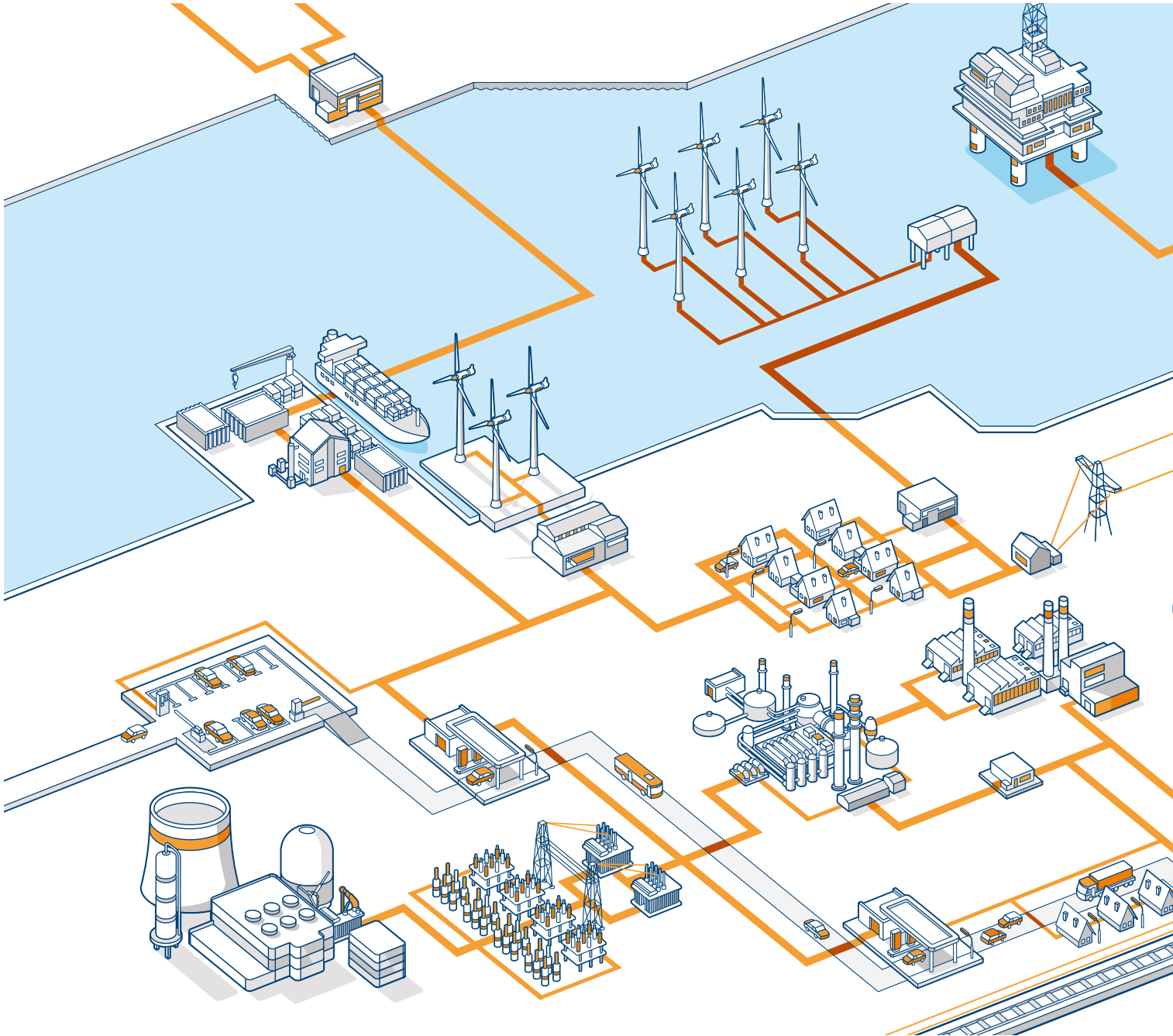


# What ABB does

Power ABB is the world's leading supplier of power grids worldwide. Our technologies are present across the entire power value chain from generation to transmission and distribution. ABB technologies also enable renewable energy to be integrated into the grid, whether from offshore wind parks, hydropower or solar farms. Our solutions extend to on-board DC grids for ships, power systems for trains, and fast-chargers for electric vehicles.



## Energizing and controlling power plants

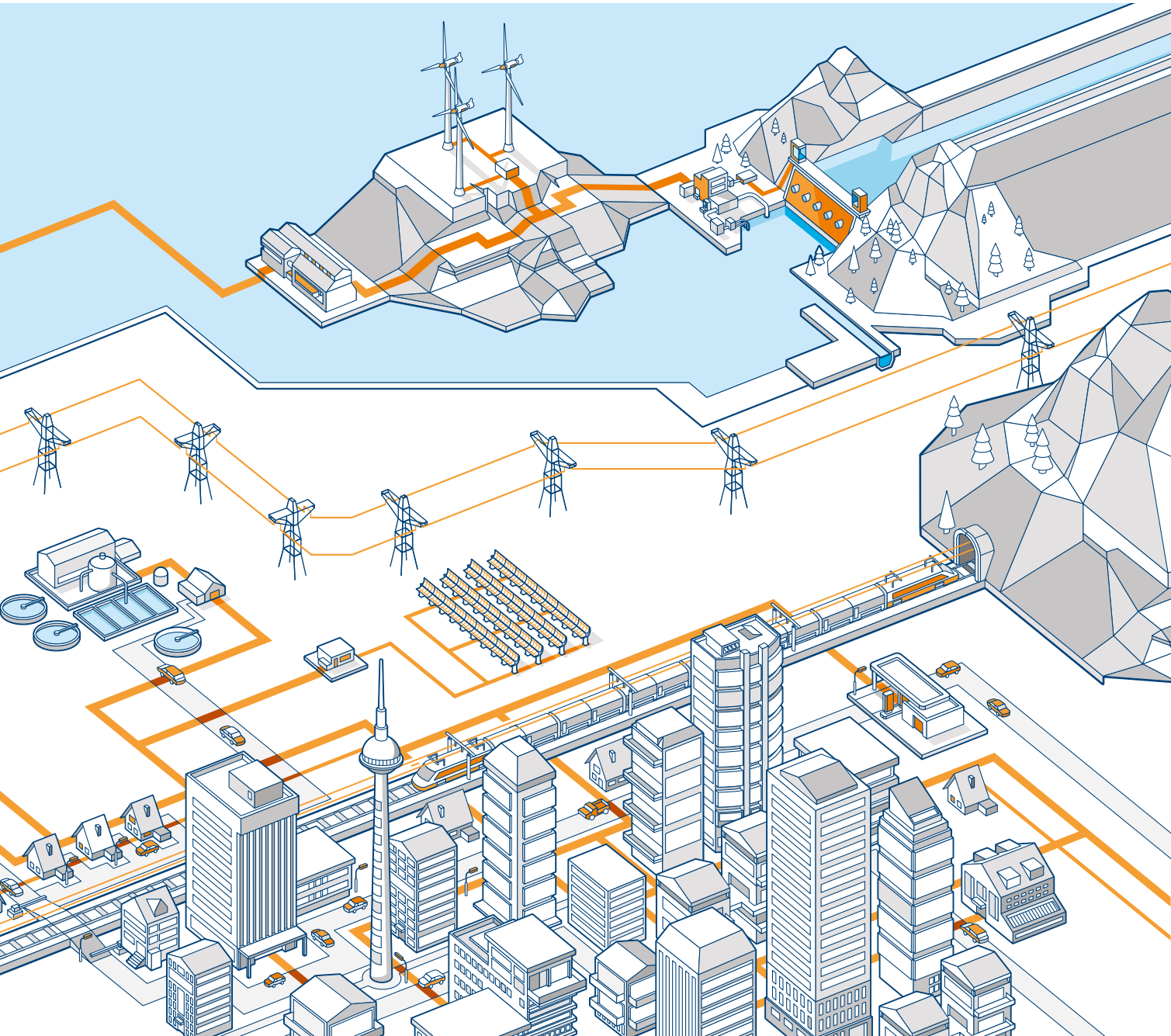
Power plant operators aim to run their installations at the highest possible level of efficiency, regardless of the energy source. With more than 130 years of experience and a vast installed base, ABB offers technologies for complete electrical and automation solutions as well as controls and instrumentation products for conventional and renewable-based power generation plants.

## Power transmission

ABB is a pioneer and market leader in technologies for the efficient and reliable transmission of power over long distances with minimal losses. Our ultrahigh and high-voltage solutions up to 1,200 kilovolt (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 distribution network

ABB's advanced energy management, automation and communications solutions improve the reliability and efficiency of utility and industrial operations. Our products, systems and services boost capacity, enhance security and improve productivity. Coupled with enterprise software for asset management and business applications, we bridge the gap between operations technology and IT, providing complete solutions for asset-intensive industries.

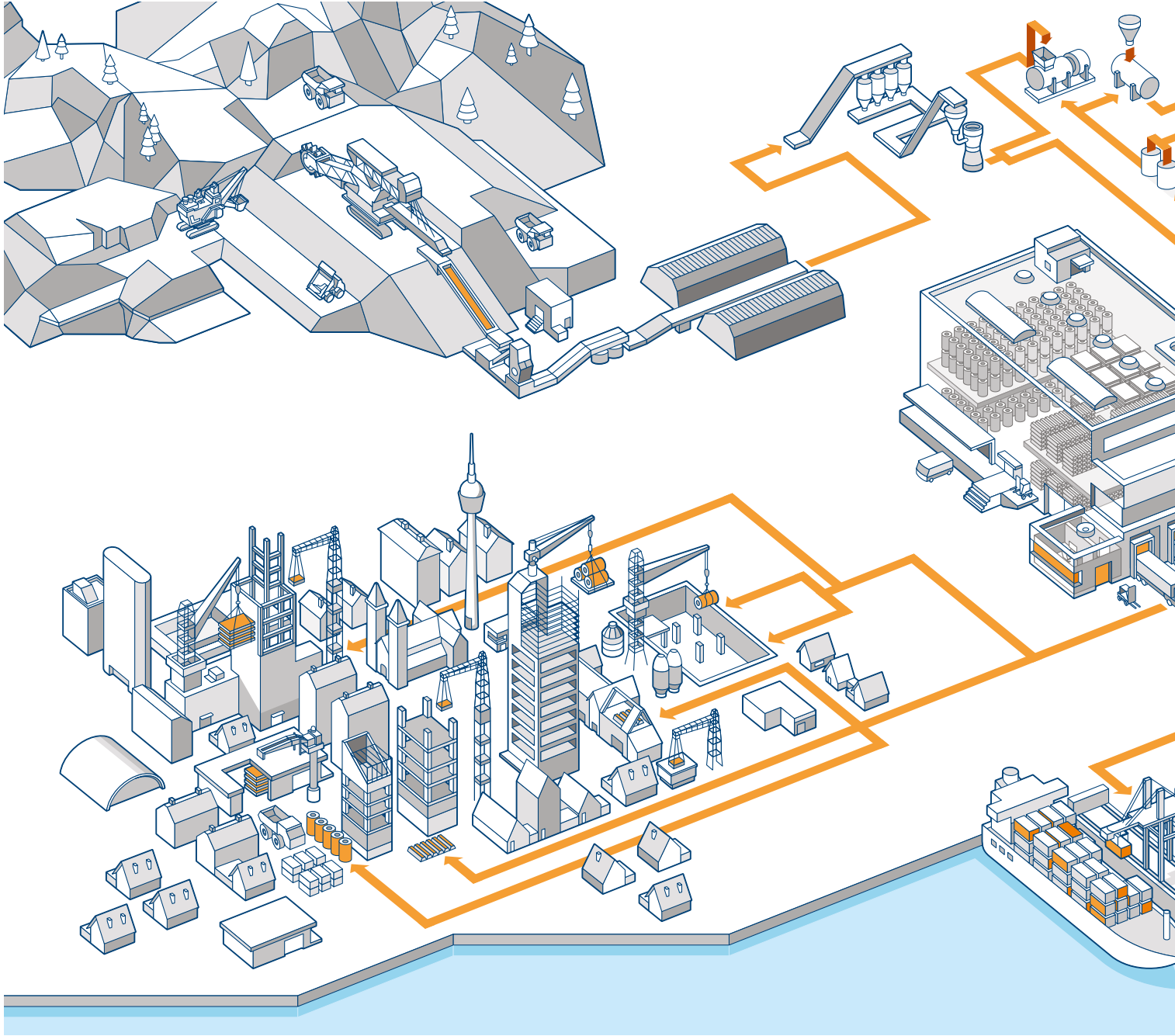
### Products across the power value chain

ABB's product offering across voltage levels includes circuit breakers, switchgear, capacitors, instrument transformers, power, distribution and traction transformers as well as a complete range of high- and medium-voltage products – enhancing reliability, improving energy efficiency and lowering environmental impact.

### 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 modernize older ones.

Automation ABB is a leading provider of energy efficient motors and drives, and automation technologies to industry. Our solutions range from the electrification of manufacturing and processing plants to automation systems and robots that improve industrial productivity and control of production processes. We are also key suppliers of building automation systems and power solutions for infrastructure and transport.



#### Plant electrification and energy management

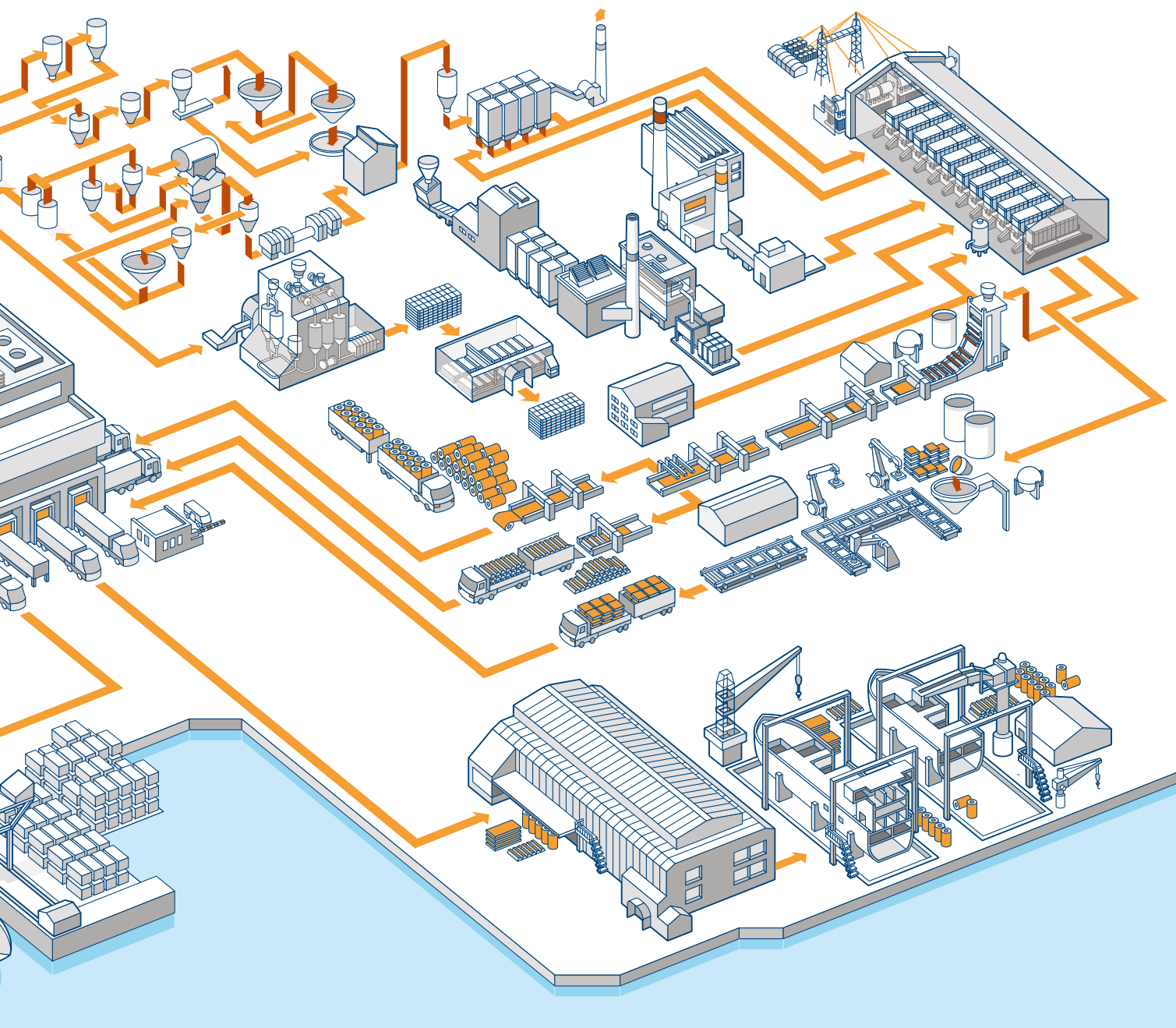
ABB electrification solutions deliver and distribute electricity safely and efficiently throughout manufacturing and processing plants. ABB energy management systems help customers reduce energy bills and carbon emissions by up to 20 percent by lowering energy consumption, minimizing distribution losses and improving generation efficiency.

#### Process automation

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

#### Material handling and robotics

ABB motors drive key equipment, and frequency converters deliver precise and dependable motor control while helping to reduce energy consumption. Together, motors and drives increase energy efficiency in fans, pumps, compressors, conveyors, kilns, centrifuges, mixers, extruders, hoists and cranes. Fast, cost-effective crane systems control lifting and handling for shipping and industrial applications. Since 1974, ABB has delivered 250,000 robots for a wide variety of industries.



### Building automation and control

Low-voltage circuit breakers, switches and control products protect people, buildings and equipment from electrical overloads. 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 blinds, lighting, heating, 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.

### Transportation and shipping

ABB enables fast and efficient electric mobility while minimizing environmental impact. It provides reliable, energy efficient electrical systems for high-speed trains and powerful DC charging technology that can charge electric vehicles and buses at roadside stops. It supplies flexible marine power and propulsion systems for ships and its turbocharging solutions improve gas and diesel engine performance while lowering fuel consumption and NOx emissions.