

Power and productivity for a better world

Energy efficiency

ABB's broad energy-efficient product portfolio in power and automation technologies can achieve substantial savings and reduce emissions, contributing to global efforts on climate change mitigation and energy efficiency along the entire energy value chain.



Global shipping emits 30 percent more CO₂ than global aviation.

International Energy Agency, 2006

- The global shipping industry handles 300 million containers every year, producing 521 million tons of CO₂ compared with aviation's 400 million tons. Container ships are an important market for ABB turbochargers, which cut fuel consumption by up to 10 percent and reduce emissions.

- **ABB Azipod propulsion systems help cruise and cargo vessels save more than 135,000 tons of fuel annually.**



Industry accounts for about 40 percent of the electricity consumed worldwide.

International Energy Agency, 2007

- Motors consume two-thirds of this electricity. Less than 10 percent of the world's electric motors are equipped with variable-speed drives. ABB's installed base of drives saves about 130 million megawatt-hours of electricity per year, equivalent to 16 nuclear reactors.

- **ABB's variable-speed drives can reduce energy consumption by more than 50 percent.**



Global energy demand will grow 45 percent by 2020.

McKinsey Global Institute, 2007

- Energy efficiency can reduce the growth rate of energy demand by half. In the EU, inefficiencies in the transmission and distribution of electricity resulted in losses of up to 10 percent in 2005.

- **Using ABB direct current transmission technology cuts energy losses by up to 30 percent over long distances.**



China uses five times more energy than Japan per unit of GDP.

International Energy Agency, 2007

- Countries differ widely in energy productivity. Huge improvements can be made using existing technology.

- **The potential for energy efficiency is greatest in emerging markets, where ABB is the leading provider of power and automation technology.**



Wind is the fastest growing energy technology.

International Energy Agency, 2006

- The 20,000 MW generated by wind turbines added globally in 2007 will generate as much electricity as 29 coal-fired power stations.

- **ABB is the world's largest supplier of electrical products and services to wind turbine manufacturers. ABB's wind power business grew more than 50 percent a year between 2003 and 2006.**

