

**Green product range**

HYDRO	PULP & PAPER	METALS	SEPARATION
<p>Hydropower: Electromechanical equipment for hydropower plants (32,000 turbines with a total output in the region of 457,000 megawatts have been installed or refurbished to date)</p>	<p>Recovery boilers that incinerate the black liquor occurring in pulp production as well as recovering the chemicals needed for pulping and making the steam thus generated suitable for use in power generation</p>	<p>Schuler ECOFORM – a collection of measures to increase the energy efficiency of products: From analysis and optimization of existing machines to the development of new processes, modules, and system solutions</p>	<p>Municipal and industrial waste water treatment: Systematic and efficient treatment reduces water and energy consumption and conserves raw materials.</p>
<p>Modernizations and retrofitting of new turbines and generators</p>	<p>Steam generating plants that make the biomass (e.g. bark) from pulp production and the waste materials produced in paper recycling suitable for use in power generation</p>	<p>Acid reduction in the production of stainless steel: The Pyromars process treats the waste pickle to produce a re-usable mixed acid regenerate. The ZEMAP plant concentrates the remaining acidic waste water from rinsing and pickling, which is then recovered in the Pyromars process.</p>	<p>Thermal sludge treatment – dried sludges have a much higher calorific value and up to 80% less volume, which leads to reduced transport and operating costs. It provides marketable residual material that can be used as renewable energy source.</p>
<p>Offshore solutions: Tidal current turbines, tidal lagoon hydropower plants</p>	<p>Biomass boilers: Fluidized bed boilers that make it possible to produce energy from different types of biomass, for example, and to generate heat from biomass and biogenic residues and waste.</p>	<p>Recycling of electrical and electronic scrap: The secondary copper mini-smelter enables reuse of copper alloys and recycling of copper scrap. Both base metals and precious metals can be recycled.</p> <p>Lightweight automotive construction: Welding plants to manufacture tailored welded blanks, particularly to combine hot-forming steel grades of different strengths, and hot stamping lines to manufacture stronger and lighter automotive parts</p> <p>Low and ultra-low NOx burners are used in the steel and aluminum industries to reduce nitrogen emissions.</p>	<p>Waste recycling – treatment and fermentation of waste for the production of biogas</p>
<p>Pumps for water transport, irrigation of agricultural land and applications in various industries Highly efficient turbogenerators for thermal power stations (modern gas turbine plants are much more efficient than the old ones using fossil fuels and they also help to lower the CO<sub>2</sub> emissions from power generation).</p>	<p>Gasification plants in which only renewable fuels are used to generate energy by means of carbonization or pyrolysis</p> <p>Drying and pelleting of biomass: Complete solutions for generating energy from biomass</p>	<p>Chromium plating lines that use TCCT (Trivalent Chromium Coating Technology) / trivalent chromium (instead of hexavalent chromium) for plating of packaging steel. Thus they meet the REACH requirements, that ban Chromium6+.</p>	<p>Production of biomass pellets</p>
	<p>Generating energy with waste materials from the papermaking process: Rejects, sludges and other residual materials are converted into fuel.</p> <p>Recycling technologies ranging from complete plants to single equipment and services for the processing of various waste streams: Rejects from the pulp and paper industry, electronic/electrical waste and refrigerators, cable scrap and metals, end-of-life vehicles and tires, wood waste, organic waste, as well as domestic and industrial waste.</p> <p>Flue gas cleaning plants; wet and dry cleaning processes for acidic pollutant gases, plants to reduce nitrogen oxide emissions and combinations of complex flue gas cleaning technologies: Used in power plants, biomass plants, waste incineration plants, and various industrial applications</p> <p>Exhaust gas cleaning for maritime vessels: ANDRITZ has developed the SeaSOx scrubber technology for the maritime industry. It can be installed on all types of ships, either on a new build or retrofit basis.</p>		