RESOURCE EFFICIENCY

Making our operations smart and sustainable

One of ABB's top objectives is to reduce the environmental impact of its sites around the world

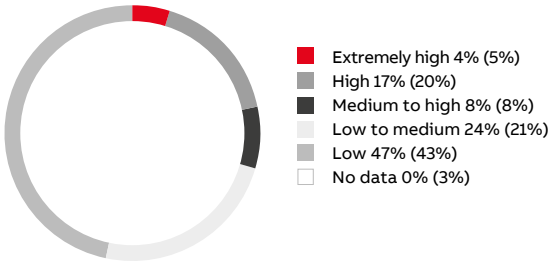
We work to optimize our use of resources, minimize waste from our operations, increase the share of waste that is reused or recycled, and ensure that the products we produce and the materials we use comply with our own and our stakeholders' standards.

In 2017, no changes were made to our 2020 measures and targets for resource efficiency. Our first target is to reduce absolute water withdrawals by 25 percent between 2013 and 2020 at facilities in watersheds with medium to extremely high baseline water stress. While most of our manufacturing processes do not consume significant amounts of water, ABB is committed to reducing its water impact where it matters most. We map our facilities using the World Business Council for Sustainable Development's Global Water Tool and classify them according to the level of "baseline water stress" of the watershed where they are located. Of the 561 ABB locations mapped in 2017, 81 face an extremely high level of water stress, 118 face a high level, and 89 face a medium to high level.

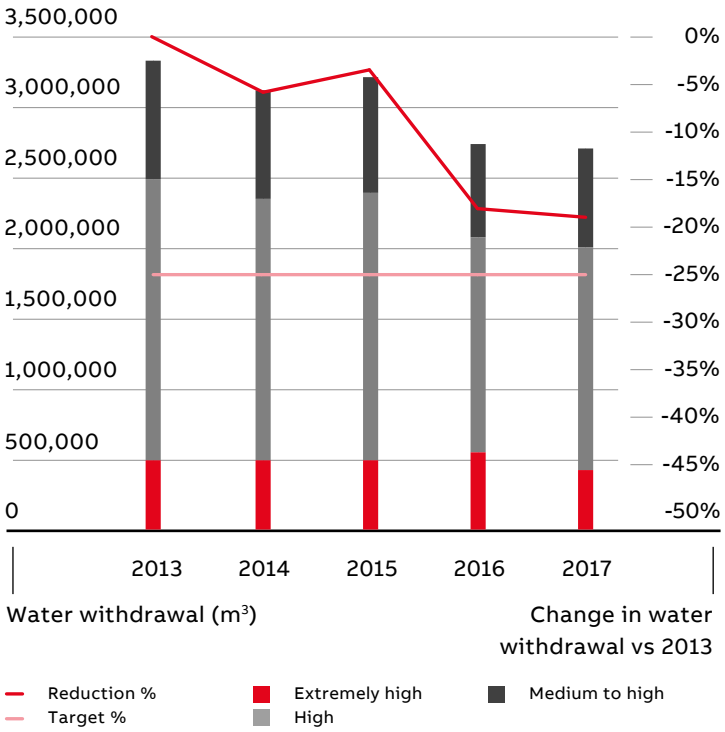
Over the past year, we performed well towards our 2020 water target. For all ABB sites in stressed watersheds, total water withdrawals in 2017 were 19 percent lower than the 2013 baseline. We achieved a 1.1 percent reduction in our withdrawals in stressed watersheds compared to 2016, even as our total water use increased by 2.0 percent.

The 35 water reduction projects we implemented across ABB contributed to these savings. For example, a facility run by our Power Grids division in Beijing – an area facing an extremely high level of water stress – cut water consumption by nearly 50 percent after deploying an automated water control and optimization system at its 26,000-square-meter campus.

Distribution of water withdrawal in 2017 (2013)



Water withdrawal in water-stressed areas 2013–17



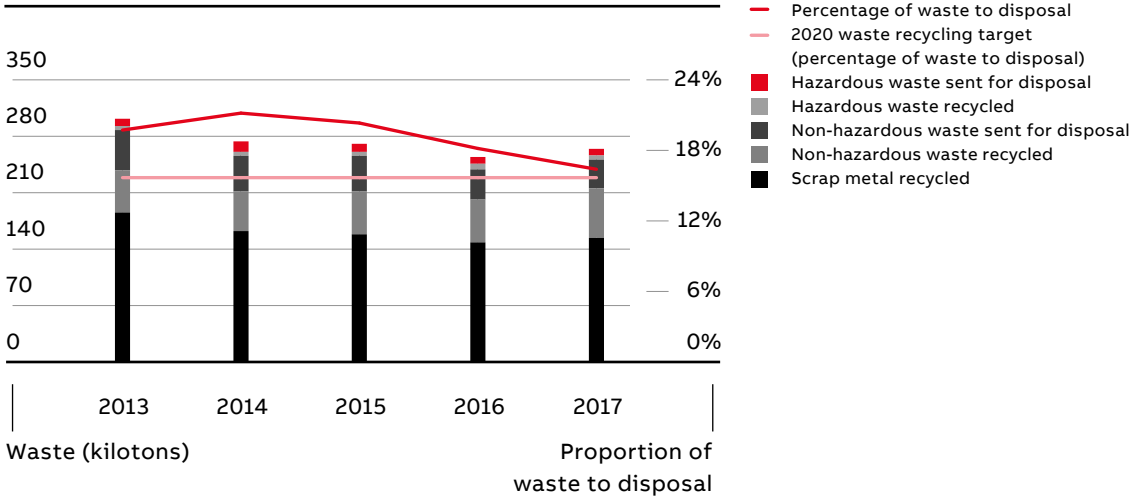
Our second target is to reduce the amount of waste sent to final disposal – both hazardous and non-hazardous – by 20 percent by 2020. This is measured as the proportion of total waste that is sent for final disposal and compared with a 2013 baseline.

In 2017, we reduced the proportion of waste sent to final disposal to 16.6 percent compared to 19.6 percent in 2013. In-house recycling and reuse, mainly of packaging materials and thermoplastics, reduced the amount of waste by 5,100 tons. Nearly 80 recycling or waste reduction projects were underway in ABB in 2017.

For example, this past year our composites factory in Piteå, Sweden, cut manufacturing scrap by 16 metric tons through process optimization, an action that will deliver $65,000 in savings per year. Our semiconductor factory in Prague, Czech Republic, also increased its income from the sale of scrap metal and other waste by $40,000 by using better sorting methods.

Our most significant new initiative in 2017 to support the achievement of our waste reduction target was the introduction of a quarterly KPI at 300 of our largest manufacturing sites to track progress on sorting and recycling of non-hazardous waste. These sites represent more than 95 percent of ABB's generation of non-hazardous waste. This year we also launched a global control standard on waste management that explicitly states sending waste to landfill should be avoided.

Waste and recycling



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