

CLIMATE ACTION

Contributing to climate goals with pioneering technologies

ABB understands the consequences of climate change and is committed to decarbonizing its own operations

We support the Paris Agreement, which came into force in November 2016, and consider it a critical opportunity to limit global warming and avert the potentially devastating consequences of climate change. We are committed to reducing our own greenhouse gas (GHG) emissions, stemming both from our use of energy and transport and from the handling of sulfur hexafluoride gas (SF₆).

ABB is also an active participant in the United Nations-driven "Sustainable Energy for All" initiative, which is working towards the goal of providing affordable, reliable and sustainable energy for everyone on the planet. The company is contributing to climate goals with pioneering technologies that enable utilities, industry and transport & infrastructure customers to improve their energy efficiency and operational performance while reducing waste.

In 2017, we refined the 2020 measures and targets for climate action at ABB. Going forward, our new target is to reduce our GHG emissions by 40 percent by 2020 vs a 2013 baseline. We made this change because we wanted to clearly demonstrate our commitment, drive action across all of our operations, and show the impacts of our efforts.

We performed well towards our 2020 target over the past year, as ABB's total GHG emissions (scope 1 + 2) decreased to 1.03 million tons. This

25.5 percent reduction includes a methodology change in how we monitor emissions from our vehicle fleet. Without this change, our emissions reduction for 2017 would have been 4.6 percent, similar to reductions achieved in 2015 and 2016.

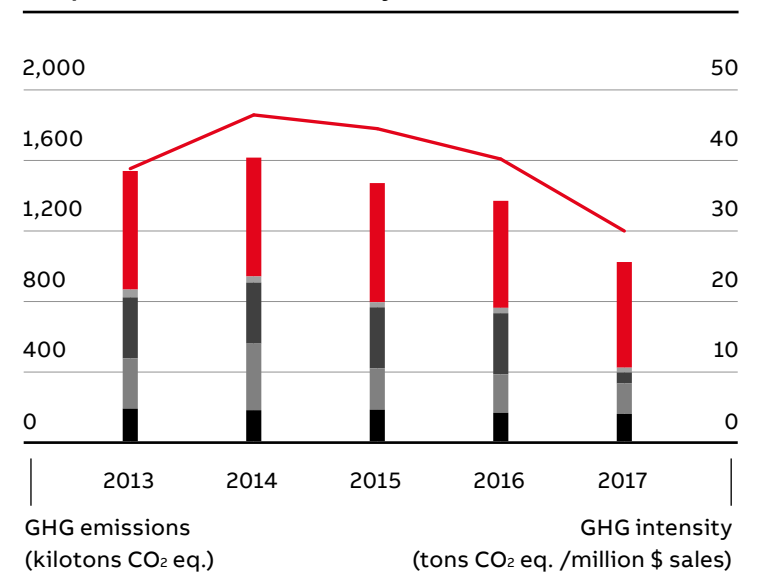
Our emissions of SF₆ from production processes and gas handling continued to decrease in 2017, amounting to a nearly 40 percent reduction from 2013. Measures to improve handling, leak detection and storage procedures for the gas have been undertaken.

We achieved further emissions reductions thanks to initiatives to reduce the carbon intensity of our energy sources. Compared to 2013, we have reduced our use of fossil-fuel oil and diesel by more than 30 percent, while our use of biofuels has more than doubled and now constitutes a slightly larger share of our energy use than fossil-fuel oil and diesel.

In several European countries we now purchase all of our electricity from renewable sources. In 2017, 165 GWh, or 10.6 percent of all electricity used by ABB, was purchased as certified "green" electricity, an increase of 2.8 percentage points from 2016.

More of our facilities are also installing on-site photovoltaic power plants to reduce their environmental impact and demonstrate our solar

Total greenhouse gas (GHG) emissions (Scope 1 and 2) and GHG intensity



- GHG emissions intensity (scope 1+2)
- Electricity consumption (scope 2)
- District heat consumption (scope 2)
- CO₂ from own fleet (scope 1)
- SF₆ (scope 1)
- Energy (scope 1)

capabilities. In 2017, ABB's Real Estate function expanded its energy efficiency program in the US, identifying over 400 technical measures it could apply in ABB's buildings. These measures have the potential to save \$6.8 million annually with an average payback period of 4.7 years. In previous years, the program had already identified 700 technical measures it could apply in our buildings in Europe.

In 2017, more than 250 energy-saving projects were underway at ABB sites, with expected annual energy savings of 35 GWh. Many of these projects addressed the efficiency of compressed air systems and heating, ventilation and cooling processes, while others focused on investing in more efficient equipment, implementing or updating heat recuperation from machines and processes, and improving the energy efficiency of our buildings. The most common and cost-effective projects involved the implementation of energy-efficient lighting solutions at our sites.

In addition, all ABB sites are required to establish energy-saving programs and act to reduce GHG emissions. In 2017, we introduced a quarterly KPI at 300 of our largest manufacturing sites, accounting for 95 percent of ABB's energy usage, to track our progress.



Case study
**ABB boosts renewables
and power reliability at
its own facilities**
[Click here to reveal](#)