Engaging in Greenhouse Gas Emissions Reduction

Since 2012, Constellium has been monitoring and disclosing our greenhouse gas (GHG) emissions, while also taking energy efficiency measures in order to reduce them. **Constellium's 2025 target aims to reduce the intensity of GHG emissions by 25% compared with a 2015 baseline.**

Historically, we did not have a specific target for scope 1 and 2 emissions reductions, but worked to minimize them through our energy efficiency program. This approach was nonetheless effective; in 2019, our measures to improve energy efficiency saved about 100 kt of CO_2 equivalent (eq.), as compared with 2015 performance(1).

Our target leverages this experience, and by 2025 we plan to reduce our scope 1 and 2 GHG emissions intensity by 25%, as compared with the 2015 baseline. We calculate emissions intensity by dividing scope 1 and 2 emissions in tons of CO_2 eq. by consolidated sales volume.

Using a range of levers

Improving energy efficiency remains at the heart of our efforts to limit our carbon footprint, since most of our GHG emissions are the product of energy use. We are undertaking various initiatives to be more energy efficient, including using LED lighting, optimizing production routes, and upgrading the idle modes on our equipment. For example, in casting operations, we will continue to deploy state-of-the-art technologies such as electromagnetic stirring and regenerative burners.

We are always looking for opportunities to work with our customers and reduce our joint carbon footprint by optimizing product delivery. We have achieved this by reducing the quantity of material to be transported (see our Issoire plant example, page 43), and by substituting road transportation with rail (see our example with the Ball Corporation, page 43).

We intend to complement these measures by modifying our energy mix, and are exploring new possibilities, such as using electricity from renewable sources, or substituting high-emissions energy sources with more efficient ones. For instance, we plan to switch our last furnace using heavy fuel oil to natural gas. This is expected to reduce Constellium's yearly emissions by several thousand tons of CO_2 eq.

Collaborating to minimize GHG emissions

Constellium is also seeking to reduce our scope 3 emissions, in collaboration with our customers, suppliers, and other stakeholders (such as professional associations).

One important way is through cooperation on recycling activities, which reduces the need for virgin metal (see page 42). Recycling aluminium creates about 20 times less GHG emissions than producing primary aluminium. Constellium works internally to develop and optimize our recycling capacities, and we engage with others to improve

2025 TARGET	2019 ACCOMPLISHMENTS	NEXT STEPS
• A 25% reduction in scope 1 and 2 emissions intensity in comparison to 2015	• Scope 1 and 2 emissions intensity was reduced by 7% at the end of 2019 in comparison to the 2015 baseline (1)	• Continue working on energy efficiency and explore further opportunities to reduce GHG emissions

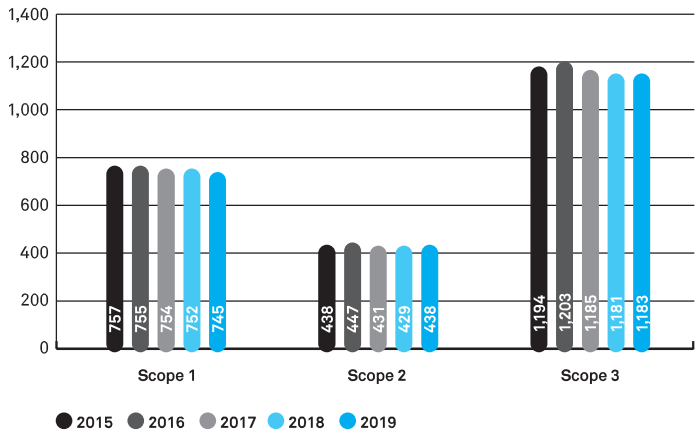
(1) The CO_2 eq. emissions saved, in kilo metric tons, and the scope 1 and 2 emissions intensity reduction from 2019, have been reviewed by PwC as part of the non-financial performance statement.

recycling rates and the efficiency of recycling schemes.

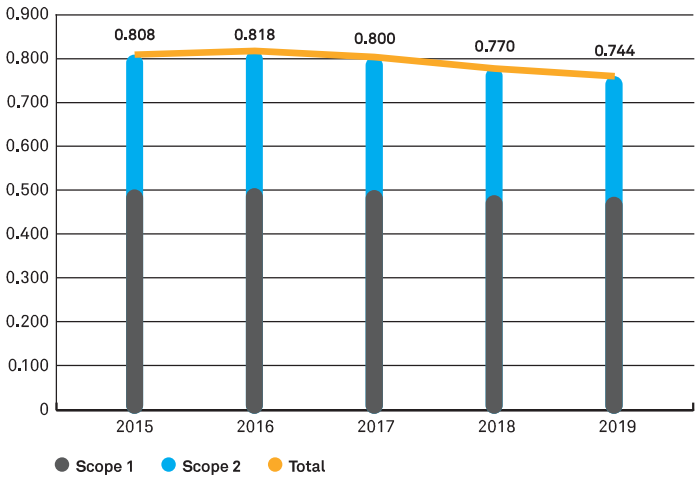
Another way we address scope 3 emissions is by offering our customers advanced aluminium solutions that can lower the environmental impact of their products. This is of particular relevance in the transportation industry. Constellium's lightweight solutions, such as Surfalex®, Securalex®, Strongalex® and HSA6® allow for major savings in automotive product emissions, while Airware® can reduce the emissions of aircraft and spacecraft. Trucks, boats, and rail cars are some of the other applications for our advanced aluminium solutions.

Measuring the true environmental benefit of Constellium's advanced aluminium products requires a full life cycle assessment. For example, it takes more energy to increase the recycling rate of a plant, but the result is better for the environment. Similarly, producing weight-saving alloys for transportation applications consumes more energy than manufacturing standard products. In both of these cases, doing the right thing for the planet increases our scope 1 and 2 emissions, but they are more than offset by the emissions saved over a product's life cycle.

GREENHOUSE GAS EMISSIONS (kt CO_2 eq.)(1)



GREENHOUSE GAS INTENSITY (t CO_2 eq. / t of sales)(1)



Scope definitions:
Scope 1: direct emissions from sources we own or control
Scope 2: indirect emissions from production of the energy we purchase (electricity)
Scope 3: all indirect emissions (not included in scope 2) that occur throughout Constellium's value chain, including both upstream and downstream emissions

(1) GHG Emissions in kilo metric tons of CO_2 eq., and GHG Intensity in metric tons of CO_2 eq. per ton of sales, from 2019, have been reviewed by PwC as part of the non-financial performance statement.