Corbion's Carbon Footprint reduction

A Science-Based Approach

What is the Science Based Targets initiative?

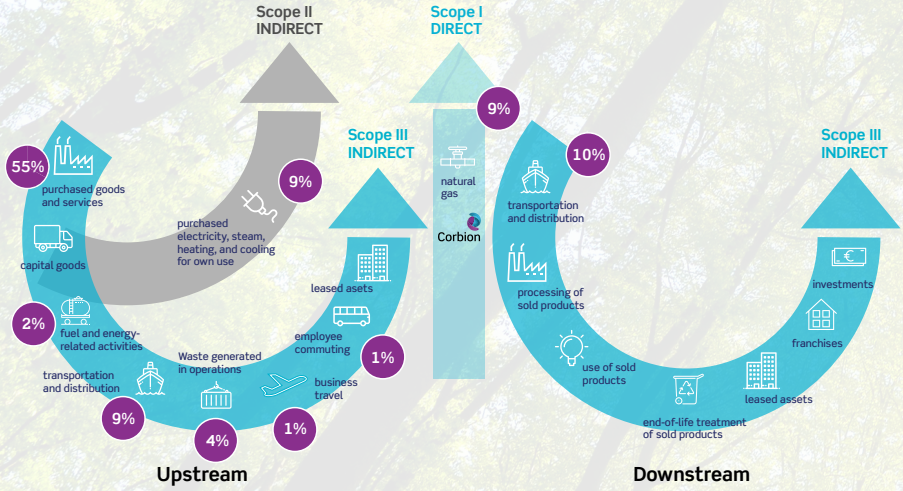
The Science Based Targets initiative (SBTi) is a collaboration between CDP (formerly the Carbon Disclosure Project), the United Nations Global Compact, World Resources Institute, and the World Wide Fund for Nature (WWF). The initiative supports companies in setting carbon footprint targets in line with the Paris Agreement. By quantifying science-based targets, companies can clearly define a pathway to future-proof growth that specifies how much and how quickly they need to reduce their greenhouse gas emissions. Overall, more than 670 companies around the world have answered the initiative's call-to-action so far.

Why have we committed to a science-based target?

As a sustainable ingredients company, helping customers reduce their carbon footprint through food waste reduction and the use of biobased chemicals is already at the heart of our business. Working with SBTi and committing to this footprint reduction target sets an example for other companies and demonstrates the power of our science-driven, innovative brand in action.

What is our current carbon footprint?

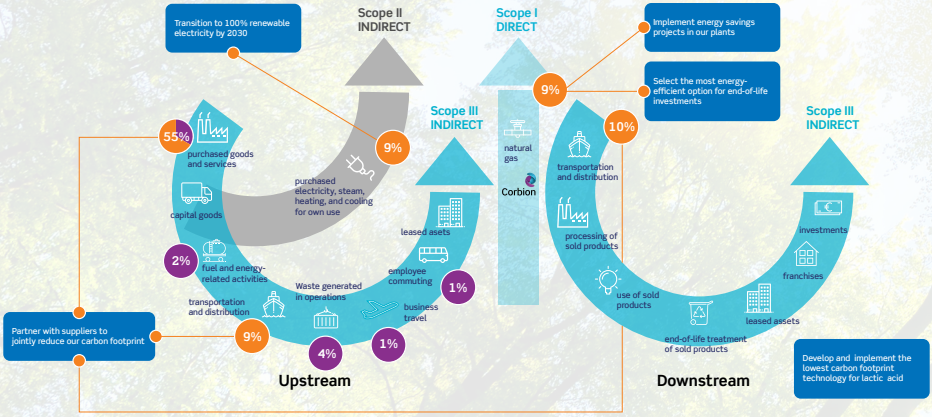
Corbion's carbon footprint includes emissions from the natural gas we use in our factories (Scope I), emissions from the electricity and steam we purchase (Scope II), and other indirect emissions related to raw materials, transport and other categories (Scope III). We report our emissions in carbon dioxide equivalents in accordance with the Greenhouse Gas Protocol. In 2016, which is the base year for our science-based target, we had total emissions of 1,069 kT CO_2 equivalents.



Our commitment

Corbion has committed to reducing our CO_2 emissions related to energy, key raw materials, and transport by 33% per ton of product by 2030 from a 2016 base year. To fulfill this pledge, we have developed a roadmap, including the following actions, some of which are already in motion.

- transition to 100% renewable electricity by 2030
- implement energy-saving projects in our manufacturing sites
- select the most energy-efficient technology available when equipment is replaced
- establish an R&D program to identify opportunities for heat integration, electrification, and recycling
- partner with key raw material suppliers to jointly reduce CO_2 emissions



How did we define these targets?

First, we analyzed Corbion's current carbon footprint as a step toward determining the scope and ambition level of our target, using guidelines provided by the SBTi. Next, we formed a cross-functional team, bringing together experts from R&D, Engineering, Procurement and Sustainability to develop a realistic roadmap for achieving the target. We conducted brainstorming sessions to identify carbon reduction measures, looking for both low-hanging fruit and breakthrough ideas that would require research and development. We realized that our existing plan for achieving 100% renewable electricity by 2030 would make a significant contribution to our science-based target, but it was clear we had to do more. We developed a coherent plan for reducing energy consumption through various investments over the next 5-6 years, and identified potential solutions for closing the remaining gap to meet our target. To address Scope III emissions, we reached out to strategic suppliers of key raw materials in order to assess their current performance and their potential for improvement.

What have we done so far?

Over the past several years, we have made good progress in pursuing our renewable electricity roadmap. Corbion aims to be 100% powered by renewable electricity by 2030. To achieve this goal, we combine on-site generation with the purchase of renewable electricity from suppliers. In 2018, we increased our renewable electricity coverage globally to 42%.

Concerning Scope III, the use of lime in our lactic acid production process contributes significantly to our emissions. We have developed a new technology for lactic acid production that eliminates the use of lime, resulting in a significantly lower carbon footprint. In 2018, we successfully completed the validation of this process, which positions us to implement it in a future lactic acid plant.