

# Net Zero Carbon Emissions by 2050

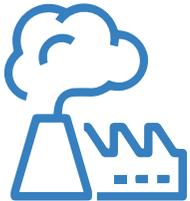


As a natural progression in Birla Carbon's leadership in the area of Sustainability & Circularity, we intend to bring down our net carbon emissions to zero by 2050, a first in the carbon black industry.

## Not just Aspirational, but Achievable

Over 160 years of extraordinary innovation in the carbon black industry coupled with decades of focus on achieving Sustainability makes this net-zero goal not just aspirational, but achievable. By creating a league of partnerships with leading sustainability solution providers, we are exploring new and advanced technologies that will be used to achieve the goal. Our approach to carbon stewardship extends throughout our entire value chain, from raw material extraction to manufacturing, product delivery and product end-of-life.

## The Scope of our Intentions



Direct emissions from owned or controlled sources



Indirect emissions from the generation of purchased electricity, steam, heating and cooling consumed



Other indirect emissions that occur in the value chain

A majority of our carbon footprint reduction is expected to come from Scope 1 and 2 based on our direct and indirect emission reduction initiatives. A smaller portion of our reduction will come from scope 3 based on the operations of upstream and downstream industries in the value chain.



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Continued



## Our 4Rs approach

### RESEARCH

new ways to capture and convert carbon emissions



A significant part of our net-zero target will come from future technologies that will capture and convert carbon dioxide into valuable carbon products. We will focus on the investment and development of such technologies and assets.

### REDUCE

the dependence on traditional processes in manufacturing



Emphasis on process efficiencies that will convert carbon to carbon black. In addition, we will continue to prioritize energy efficiencies throughout our operations. To date, 80% of our manufacturing facilities are housing co-generation facilities for the conversion of waste gases to energy for export to the electrical grid.

### REPLACE

with alternative energy and feedstock



We will focus on adding more renewable energy solutions, and shifting a portion of our production to alternative feedstocks derived from biomass. We are evaluating alternative fuels for heating our reactors and to serve as feedstock for producing carbon black and other carbonaceous materials.

### REPURPOSE

materials through a circular approach



Through creating more circular products, like Continua™ 8000, we will enable our customers to develop the next generation of sustainable products. Our carbon black boosts product longevity, preventing end-of-life materials going to landfill.

