# **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



Scope 1 - Direct emissions from owned or controlled sources



Scope 2 - Indirect emissions from the generation of purchased electricity, steam, heating and cooling consumed



Scope 3 - 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.



## **Net Zero Carbon Emissions by 2050**

Continued



## Our 4Rs approach

#### **RESEARCH**

new ways to capture and convert carbon emissions



Carbon dioxide capture and conversion will be the primary lever we will utilize to achieve net zero.

This is suited to our existing strengths in creating carbonaceous materials and the challenges that hard-to-abate industries like ours face.

### **REDUCE**

the dependence on traditional processes in manufacturing



We will continue to focus on optimizing processes for converting carbon to carbon black and 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.

