

Measuring our sustainability efforts



Creating environmentally friendly products

We have developed robust initiatives to quantify our carbon and water footprints at all our global sites and are now working towards minimizing our environmental impact. Globally, Birla Carbon is net energy positive, selling more energy than we buy. To monitor our environmental and health impacts, we have developed a thorough Life Cycle Assessment (LCA) approach for our carbon black. The scope of our LCA is from "cradle to gate": from the moment the raw materials are extracted to the moment the carbon black is delivered to our customers following the International Organization for Standardization (ISO) 14040 guidelines. This enables us to better understand our impact with regard to CO₂ emissions and identify opportunities to reduce our overall carbon footprint.

Our product development efforts are also directed towards reducing the environmental impact of our customer's products, positively contributing to the wider value chain. We have developed new grades of carbon black to help reduce the rolling resistance of tires and increase their durability, and have worked on other grades which require less water to produce and use less time and energy during the incorporation phase.

Tire durability

Vehicle tires are approximately 25% carbon black. You wouldn't be able to drive further than 8,000 km without it.

Being net energy positive

We now recover more energy from our own facilities and consume less energy per tonne of carbon black produced. Much of the energy we recover is used in our manufacturing process, while any surplus is sold to neighboring facilities and local grids in the form of electricity, steam, tail gas or hot water.

Addressing our FY2020 achievements

8%
reduction in direct CO₂ emissions against 2005 baseline

60%
of waste produced in our facilities is repurposed

72.8%
absolute energy conversion efficiency

38%
reduction in environmental releases compared to FY2018

100%
of our sites use recycled process water and/or rain water in their operations

Find out more at sustainability.birlacarbon.com



Measuring our sustainability efforts continued

We are developing and commercializing new carbon black grades to further lower the rolling resistance for the next generation of tires. These tires will consume less energy in vehicle propulsion, resulting in greater fuel economy and thus lower CO₂ emissions.

Ensuring the safety of our carbon black

We thoroughly test our carbon black to ensure it surpasses regulatory health, safety and environmental requirements and that it is of the highest quality. This includes conducting and commissioning product safety studies with renowned third-party institutes through our industry association, the International Carbon Black Association (ICBA).



Developing materials that champion sustainability



Our collaboration with GranBio (formerly American Process Inc.) is working to enhance the sustainability of tires and rubber goods. In February 2020, we announced the introduction of a patent-pending Nanocellulose Dispersion Composite (NDC™) for qualification by tire and rubber companies. This NDC™ masterbatch, the result of a three-year joint development program with GranBio, provides optimal dispersion of nanocellulose in rubber formulations to improve tire rolling resistance and vehicle fuel economy. This innovative material not only enhances the in-service performance of tires, it also improves environmental performance, as nanocellulose is derived from renewable biomass resources, in line with our circularity aspirations.

All manufacturing locations

have increased focus on waste repurposing and using recycled process water and/or rainwater in their operations

