

# Future-proofing Birla Carbon, sustainably

## Developing our business for the future

We never stop searching for a deeper understanding of our products and their applications. We continue to innovate state-of-the-art processes. Through harnessing the best technologies, we are improving our product, uncovering new opportunities for carbon black applications and closely assessing our sustainability efforts.

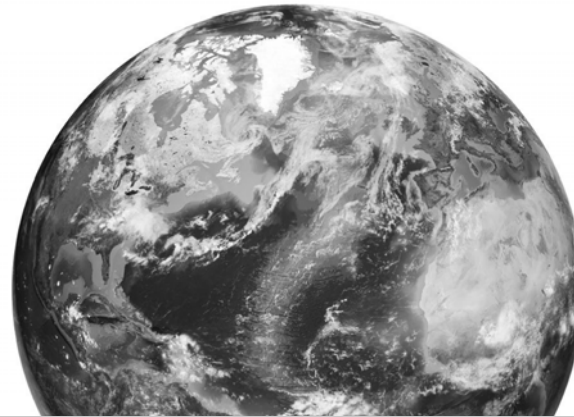
Our customers are always our main priority. To better serve them, we are expanding our R&D beyond carbon black, discovering new sustainable solutions for reinforcing, conductive and colorant agents in the form of materials and technologies. We are investing more in these research channels to proactively address problems our customers may face in the future.



## Research and development

## Planning for the future

For us, ensuring uninterrupted operations and constant carbon black supply for our customers are priorities. Our Enterprise Risk Management (ERM) system helps us anticipate business risks so we can mitigate operational impacts through site-specific Business Continuity Plans. We have identified six future trends that could affect the global carbon black industry.



### Climate change

Aiming for Net Zero Carbon Emissions by 2050.



### Oil scarcity

Availability of oil and volatile prices.



### Water scarcity

Half of the global population to experience shortages by 2030.



### Urbanization

Increasing and changing consumption patterns.



### Sustainable mobility

Changes in transport preferences and technologies.



### Closed-loop manufacturing

Growing preference for recycled, renewable materials.



## Innovation

Our Innovation Ambassador Network (IAN) will be an integral part of driving a sustainable culture of innovation at Birla Carbon. The network is made up of 23 individuals from diverse functional areas and locations. These champions of innovation serve as representatives for their sites and will help shape the business of tomorrow.

## R&D Centers

Our two principal R&D Centers are in Taloja (Maharashtra, India) and Marietta (Georgia, USA). Our R&D centers are dedicated to five areas of expertise: manufacturing technology; analytical services and quality; product development; process innovation; and material innovation.

## Collaboration

In partnership with GranBio, we have also released a Nanocellulose Dispersion Composite (NDC™). This material increases the renewable content of tires and rubber goods, allowing our customers to achieve their sustainability goals and Birla Carbon to further drive our commitment to environmental stewardship.



# Future-proofing Birla Carbon, sustainably continued



## Sustainable development of our business

We have recently increased our investments, not only in marketing and customer knowledge, but also throughout our organization. We have allocated additional resources to the development of emerging technologies, as we focus more heavily on future solutions. As part of this, we are looking into building a circular economy business while developing new forms of carbon black which could, in the future, drive value for our customers.

We want to be the clear leader in our industry, respected by our customers, communities and competitors. But more than simply being respected, innovative and dynamic, we must also prioritize being sustainable. Sustainability is a collective effort in which we must engage all our stakeholders, taking into consideration how we contribute to, and protect, the world as well as our long-term investments. We are using sustainability as a lens through which to determine which products and relationships we pursue, with a focus on developments which will drive efficiency and environmental protection.

## Investing in R&D

We continuously invest in and upgrade our older plants, while also developing new facilities, to support future sustainable business growth and to ensure our operations are always as efficient as possible. In FY2023, we invested 4% of our profits in state-of-the-art technology which will allow us to maximize the efficiency of our manufacturing processes and to enhance our environmental performance.

These investments include:



Improving site safety and protective measures for workers.



Minimizing our environmental impact through better air emission control and more efficient water management.



Optimizing our carbon and energy cycles.



Enhancing plants to create spaces which support employee health and wellbeing.



4% of profit reinvested in research and development in FY2023

