



BIRLA CARBON SUSTAINABILITY REPORT 2024

Sustainability in Action

Sustainability at a Glance

Today, Birla Carbon's Share the Future sustainability strategy is underway. Our Share the Future strategy will propel us and our customers into the 2030s and beyond, as a future-focused organization with a clear emphasis on ESG and Innovation as our core strategy.

Sustainable Operational Excellence (SOE), our legacy strategy, delivered meaningful results and positioned us to embark on our Net Zero Carbon Emissions by 2050 pathway. Share the Future will emphasize a collaborative approach with our stakeholders and new partners to deliver customer-facing solutions for a sustainable and circular world.

Share the Future is our roadmap to a sustainable future. We prioritize reducing emissions, scaling circularity, operating with an eye toward aspirational sustainability targets, and innovating in growing markets such as energy systems and Sustainable Carbonaceous Material (SCM).

We are delighted to share our 12th sustainability report, Sustainability In Action, spanning the period between April 2023 and March 2024, our 2024 fiscal year (FY). We release this annual report to serve you, our stakeholders, and invite you to share in our year-in-review and learn how Birla Carbon is connecting sustainability-conscious stakeholders through our innovative and environmentally sound products and operations. This report is approved by Birla Carbon's Senior Management Team (SMT) and has been produced in accordance with the GRI 2021 Standards.



Share the Future will emphasize a collaborative approach with our stakeholders and new partners to deliver customer-facing solutions for a sustainable and circular world."

Contents

03
INTRODUCTION

14
OUR APPROACH

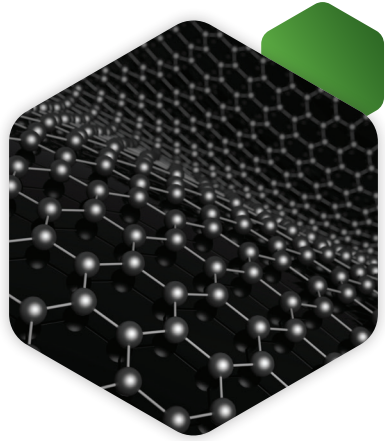
24
INNOVATION

30
ENVIRONMENT

40
SOCIAL

55
GOVERNANCE

FY2024 Highlights



Nanocyl

In FY2024, [Birla Carbon acquired Nanocyl SA](#), a global leader in multi-wall carbon nanotubes. This acquisition expands our presence in the energy systems business and underscores our commitment to a more sustainable future.

[READ MORE](#)



GHG Reduction Target

We have established interim [greenhouse gas \(GHG\) reduction targets](#), in alignment with Science Based Target Initiative chemical sector draft guidelines, to execute our plan to achieve net zero by 2050. We aim to reduce our Scope 1, 2, and 3 (upstream) emissions intensity (MT CO₂/MT product) by 22% by 2030.

[READ MORE](#)



ISCC Plus Certification

All of our plants earned the [International Sustainability and Carbon Certification \(ISCC\) Plus accreditation](#). ISCC is a global sustainability certification system that accredits sustainable feedstocks. Our focus on materials traceability throughout the supply chain underscores our commitment to environmental stewardship and circularity.

[READ MORE](#)



Carbon Black LCA

Recently Birla Carbon completed a cradle-to-gate [carbon black life cycle assessment \(LCA\)](#) in accordance with ISO14040 and ISO14044. Insights from our independently-verified LCA help to make our environmental claims more credible.

[READ MORE](#)



Health and Safety Performance

In FY2024, Birla Carbon achieved a [40% reduction in our total recordable incident rate](#). This success was realized through our strong safety culture and commitment to zero workplace incidents.

[READ MORE](#)



International Women's Day

Birla Carbon celebrates [International Women's Day](#), annually on March 8. We celebrate our women employees and showcase their many contributions. We organize activities and events including inviting personal stories from our global women workforce, inviting guest speakers to lecture on contemporary themes, and arranging fireside chats with our senior leaders.

[READ MORE](#)



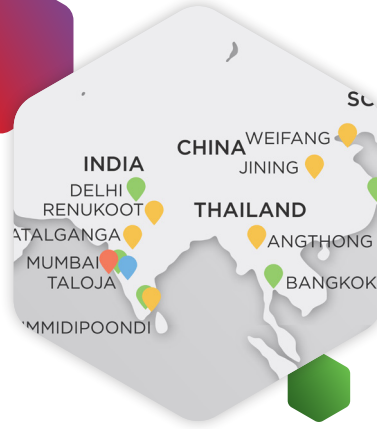
Expansions to Employee Resource Group Options

A motivated and inspired workforce is instrumental to our long term success. We offer women-centric employee resource groups, [Women in Networking \(WIN\)](#) and [Women in Safety and Environment \(WISE\)](#). WIN was created in FY2024 and aims to empower women employees through supportive networking. Launched in FY2023, WISE enables collaboration among women leaders with direct health and safety responsibilities.

[READ MORE](#)


Corporate Sustainability Reporting Directive

The CSRD is considered the gold standard for sustainability report frameworks as it requires companies to assess against 80 ESG disclosure topics. In FY2024 Birla Carbon undertook a double materiality assessment to assess sustainability topics critical to our business and across our value chain. CSRD aligns well with Birla Carbon's vision for a healthy economy, society, environment, and business.

[READ MORE](#)


Growth Plans

We have been listening to our customers expressing their desire to grow around the world. The availability of our unique products is a critical component of their growth plans as we all seek to simplify and secure supply chains. [Birla Carbon is expanding our footprint in Hungary and has already broke ground on two new sites in India and Thailand](#), enhancing our ability to serve customers.



Biofuels Trials

In the past year, our research and development team conducted four production trials with recycled and bio-derived feedstocks and successfully produced ASTM and non-ASTM grades of carbon black. We will continue to build upon our learnings from these trials to scale-up these sustainable carbon blacks and support their adoption in the market.

[READ MORE](#)


Blue Yonder Supply Chain

[Birla Carbon partnered with Blue Yonder](#) to deploy its omnichannel fulfillment solution, which integrates demand forecasting seamlessly into operations planning and enables us to make agile decision to support customer needs. This undertaking represents a significant milestone in that it ensures our company maintains uniform operations planning processes. The implementation of Blue Yonder's solution reinforces our commitment to efficiently operate our plants and align our plans with the needs of our customers.



Continua

Continua™ Sustainable Carbonaceous Material was recognized by the Aditya Birla Group (ABG) and received the Gold Award at ABG's seventh Sustain-Ability Conference in February 2024.

[READ MORE](#)

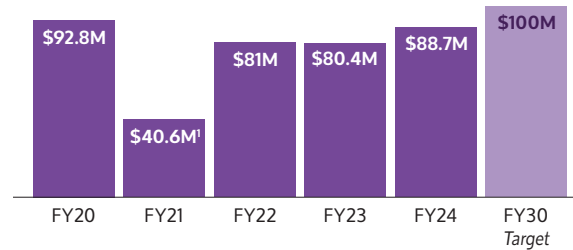
Targets and Progress

To meet our Vision to be the most respected, sustainable, and dynamic global carbon-based business, we have set key performance indicators (KPIs) to track our progress towards FY2030. Over the past year, Birla Carbon has introduced three new KPIs related to emissions, circulatory, and gender representation.

Business Continuity

TARGET: Approximately double our annual capital spending against FY2012 baseline to reach \$100M

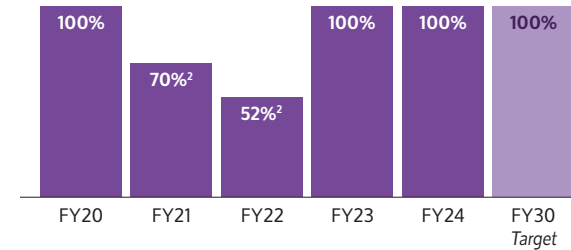
PROGRESS: On track to meet target



Ethics

TARGET: 100% of active employees to receive Code of Ethics training

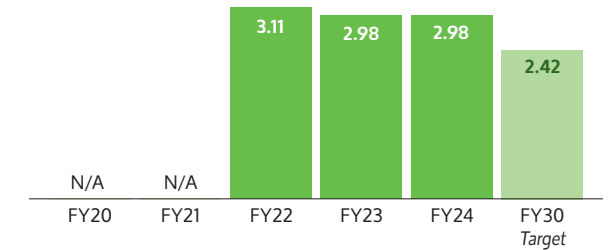
PROGRESS: Target met and retained



Emissions

TARGET: Reduce our Scope 1, 2, and 3 (upstream) emissions intensity (MT CO₂/MT product) by 22% against the FY2022 baseline by 2030

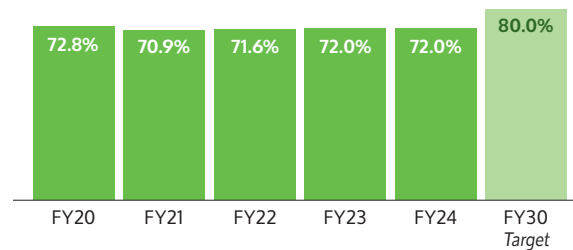
PROGRESS: Behind schedule



Energy

TARGET: Increase our absolute energy conversion efficiency to 80%

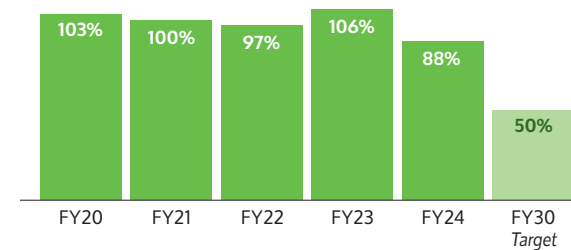
PROGRESS: On track to meet target



Water

TARGET: Reduce our water withdrawal intensity (m³/t carbon black) by 50% versus FY2013 baseline at our high- and medium-risk sites³ (water withdrawal intensity by year)

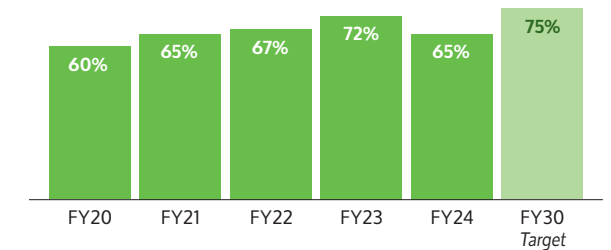
PROGRESS: Behind schedule



Waste

TARGET: 75% waste repurposed, including recycling, reuse and recovery, by 2030

PROGRESS: On track to meet target



¹ FY2021 capital spending was lower than normal due to the COVID-19 pandemic.

² FY2021 and FY2022 saw a drop in the percentage of our employees receiving Code of Ethics training due to the COVID-19 pandemic. We were unable to roll out the training to employees with no access to a computer.

³ KPI includes Egypt, Hickok, Patalganga, Gummidipoondi, Weifang, and Yeosu.

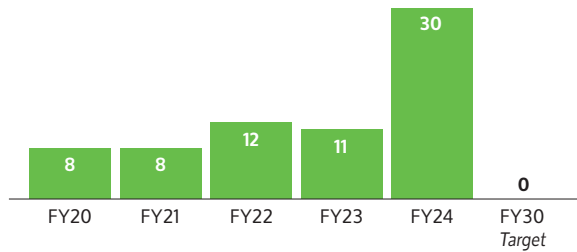
Environment



TARGET: Record zero environmental releases year on year



PROGRESS: Behind schedule



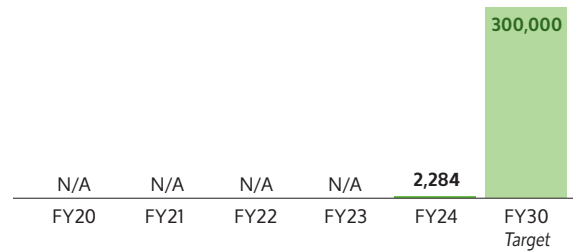
Circularity



TARGET: 300,000 tonnes of end-of-life tires repurposed through Continua™ SCM per year by 2030



PROGRESS: On track to meet target



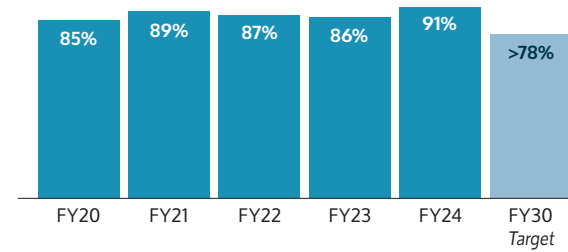
Employee Engagement



TARGET: Remain above the chemical industry annual benchmark for employee engagement⁴ (%)



PROGRESS: Target met and retained



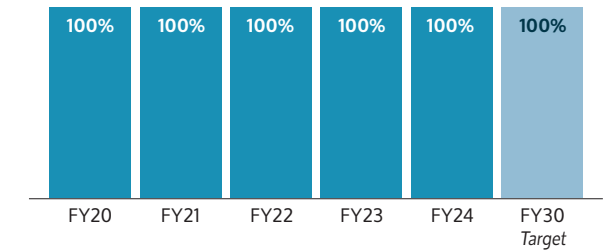
Community Engagement



TARGET: 100% of our facilities participate in community engagement



PROGRESS: Target met and retained



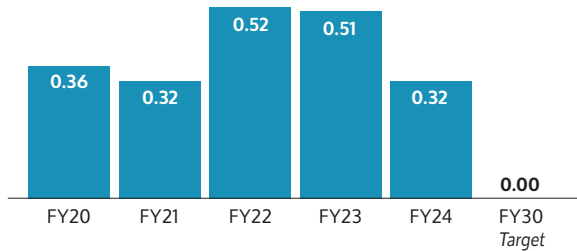
Safety



TARGET: Achieve zero recordable injuries year on year (employee and contractor Total Recordable Incident Rate (TRIR) per 200,000 exposure hours)



PROGRESS: Behind schedule



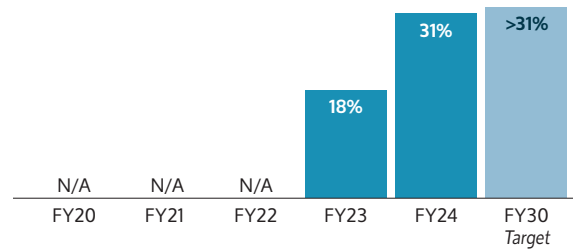
Gender



TARGET: Achieve a higher percentage of women employees hired in the current fiscal year compared to the current percentage of women employees



PROGRESS: On track to meet target



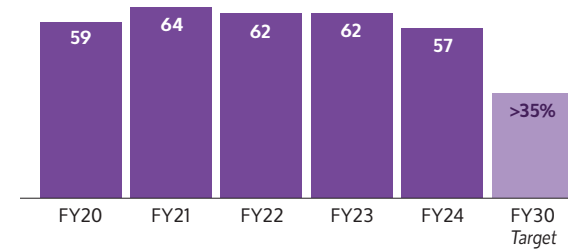
Customer Loyalty



TARGET: Remain above the Net Promoter Score threshold of 35⁵ (score by year)



PROGRESS: Target met and retained



⁴This KPI was amended in FY2020 to exclude the results of the Team Vibes survey. It has also been modified to show results for calendar year rather than financial year, in line with Vibes survey timings.

⁵Net Promoter Scores range from -100 to +100.

A Message from our President and CEO

Welcome to our 12th annual sustainability report for 2024 – **Sustainability in Action.**

Not everybody understands the ubiquity of our carbon-based products. The global market for carbon products is projected to grow through the decade with an increasing emphasis on sustainable and circular products.

As our customers in the consumer products, electronics, construction, energy systems and automotive industries grow to meet increasing global demand, we in turn will support that growth with new capacity and capability, but also become a critical agent to meet the sustainability goals and targets within each of those industries.

With respect to the automotive sector, there is growing concern regarding how to discard used tires. However, we and our partners have proven that it's possible to recycle those tires and close the loop on that value chain. The efficient commercialization of that process is critical to meeting decarbonization and circularity targets. The tire industry's growth and rising adoption of sustainable carbon products across applications are likely to drive the market and create competitive advantages for those who rise to the challenge.

Energy is key to global economic development, as it affects education, productivity, communication, commerce, and quality of life. Developing and developed markets alike target increased use of

renewables like biogas, ethanol, hydrogen, wind, solar, and hydroelectric power. This creates new demand for energy solutions, such as electric vehicles, bikes, and green hydrogen-powered trucks and buses; areas where Birla Carbon's sustainable carbon product portfolio will support the transition while scaling technologies and innovation to meet global demand.

Through Share the Future, Birla Carbon is best and uniquely positioned to create a sustainable bridge between upstream raw materials, to material production, and all the way to end-users to connect circularity throughout this value chain. We believe our commitment to innovation is primed to accelerate and help our customers, and the industry, achieve the levels of sustainable growth demanded by the environment, economy, and society as a whole.

Things are happening faster than they ever have. Innovation is coming faster. Cycles which were earlier 50-60 years, are now 20-25 years. The world has never changed faster than it is now. Birla Carbon's focus on continual innovation will position us well for this rapidly changing future. Future-proofing is a key component of our Share the Future strategy, helping us to adapt to long-term global and social megatrends while building the resilience of our international business. Innovative technologies are poised to disrupt mobility markets and demographic shifts already are affecting the how, when, and where employees go to work or shop.

As global leaders championing decarbonization efforts, Birla Carbon is at the forefront of renewable and bio-based feedstock development to create sustainable carbon products for use in the new global and sustainability-focused economy. Through partnerships, R&D investments, and by focusing on areas where we can be more circular in our processes, Birla Carbon seeks to lead the industry in sustainable materials, addressing climate challenges with resilience and adaptation.



Sustainability is a key component of our value creation framework, and we continue to integrate sustainability into our business systems and strategic planning process across the Company, from the boardroom to the workshop floor. Our products and initiatives help support our mission to create solutions for a smarter, more productive future.

FY2024 has been a year of tremendous and sustained growth for us. We are building two new plants, in India and Thailand to support increasing global and regional demand for sustainable carbon products. Both of these new plants will host a co-generation facility. All 16 manufacturing units of Birla Carbon are certified to the International Sustainability and Carbon Certification (ISCC) Plus standard, a voluntary framework that is applicable for the bioeconomy and circular economy for chemicals, plastics, and renewable feedstock.

We are expanding our energy systems business as part of our commitment and vision toward a more sustainable future and completed the acquisition of Nanocyl SA to support this endeavor.

Within the workforce, we took major strides in safety and diversity. Safety remains the top priority for our business and is foundational to who we are. Building a strong safety culture takes time; we do not pretend to be at the end of our journey. There is always room for improvement at every level as we develop a workspace where everyone sees it as their responsibility to ensure the safety of themselves and those around.

Our Diversity and Inclusion webpage was recently enhanced to include new descriptions of our related activities. Diversity brings a competitive advantage by helping us leverage diverse perspectives

that are reflected through improved innovation, market knowledge, team dynamics, and brand recognition. Our multicultural and diverse workforce is a formidable strength which helps us serve our employees and customers better across the globe.

We want to thank all of our stakeholders for your feedback that has helped to shape our journey. Looking ahead, we are excited about the opportunities to further grow our company with a focus on sustainability. I look forward to updating you on our progress as we continue to deliver impactful and innovative carbon-based solutions for a rapidly changing world.

I invite you to join us on our journey and to Share the Future!



Looking ahead, we are excited about the opportunities to further grow our company with a focus on sustainability. I look forward to updating you on our progress as we continue to deliver impactful and innovative carbon-based solutions for a rapidly changing world."

John Loudermilk
President and Chief Executive Officer
Birla Carbon

A Message from our Chief Legal, Risk, and Sustainability Officer

We are thrilled to embark on the next chapter of our sustainability journey with our Share the Future strategy. Our sustainability strategy is predicated on innovation and corporate social responsibility. Our embodiment of these principles enables Birla Carbon to meet our aspirational commitments, and those of our stakeholders, while bringing sustainability into mainstream discussions of corporate stewardship and responsibility.

At the forefront of our approach is innovation. Innovation drives our business, value to customers, and relevance in the rapidly-evolving marketplace. Innovation is a way of thinking and acting, which allows us to look at the world differently and see current challenges as our future opportunities. In the process, we are then able to shed implicit biases and the tendency to maintain the status quo. Innovation is truly boundless for us as a global business that feeds into a myriad of industries. The goal of innovation for our business is to inspire and empower all of our employees (and customers) to think differently, which instills a culture of innovation at Birla Carbon.

Interspersed across our company is the ambition to improve and innovate, for our customers, for our teams, and for a better future. We foster an environment that draws upon grassroots ideas to improve individuals, processes, products, and public or business interactions. We live on the cutting edge of technology and provide sustainable carbon products that enable consumers to enjoy the durable goods of daily life. We got here through reliance on our employees and stakeholders, all of whom are empowered to be change-makers.

Circularity is core to our identity. We conduct and update our LCAs regularly to quantify our circularity efforts and understand “hotspots” within our process to drive change. Through this approach, we evaluate our environmental impacts from raw material extraction to product end-of-life. Circular thinking guides our approach to innovation as we respond to a growing demand for sustainability by pinpointing material areas of improvement and prioritizing our R&D efforts. Our carbon black product is aligned with our circular principles. It starts life from a low-value, carbon-rich oil residue with limited usage, becoming carbon black with real value. Leading the way for the industry, we have achieved circularity at scale and know there are many more opportunities ahead.

We deploy multiple, ongoing, and aspirational initiatives to drive environmental performance. Circularity is embedded into our business whether from end-of-life tire pyrolysis, through use of bio-based feedstocks, or the sharing of co-generation energy with our neighbors. Birla Carbon has a net zero greenhouse gas emissions target by 2050 and the roadmap to achieve it.

Our employees, suppliers, business partners, and other stakeholders imbue us with the confidence to advocate for growth and to step outside the status quo for a carbon products enterprise. At Birla Carbon, we focus on safety, diversity, engagement, and development. We understand that when employees thrive, so does the business.

To win the respect and admiration of peers and regulators, our business has installed the systems and policies required to ensure we act beyond compliance. Over the past year, we have adopted new sustainability disclosure standards, like the Corporate Sustainability Reporting Directive, that will ensure accountability to deliver on our commitments and targets and concretely align with our global customers and value chain. Stakeholders entrust us with their data and their business – an opportunity we do not take lightly. You are in safe hands when engaging with Birla Carbon.





Our commitment to sustainability remains central to our growth journey, and we will continue to shape and prepare our organization to thrive in a world where society increasingly demands low-impact and low-carbon solutions..."

We have always abided by regulation and stringent manufacturing demands of our customers. While we adhere to this, we will continue to invest in sustainability and in operational excellence, driving towards a more sustainable future.

There are favorable market tailwinds where sustainable products and solutions are not only welcomed by customers, but also demanded. A result of years of extensive research and development, Continua™ Sustainable Carbonaceous Material (SCM) is a major milestone in Birla Carbon's roadmap to Net Zero. Backed by a robust supply chain, large-scale availability, and an eye for detail, these high-quality sustainable alternatives to traditional carbon blacks are the perfect solution to help your company come closer to achieving its sustainability goals and reducing its carbon footprint. To that end, Birla Carbon has already tested and completed manufacturing runs using renewable feedstocks derived from biomass and tire pyrolysis. Using renewable feedstocks aligns with our commitment to reach net zero carbon emissions by 2050.

As an organization, we have moved toward ISCC Plus certification. All of our plants have earned the accreditation as of FY2024, making all Birla Carbon plants key contributors to circular value chains. At the same time, Birla Carbon aims to minimize its environmental impact by continuously focusing on operational excellence with a clear aim of reducing energy consumption, lowering plant downtimes, and increasing and maintaining efficiency in product handling in the supply chain.

We promote the fair treatment of all people, such that our policies and practices ensure uniform implementation of outcomes at our workplaces. It takes into consideration a person's unique circumstance and adjusts the application in an appropriate manner in order to ensure an equal and fair outcome. We believe that great ideas can come from anywhere, and empowering and enabling a solid and inclusive workforce is key to Birla Carbon's success.

Our commitment to sustainability remains central to our growth journey, and we will continue to shape and prepare our organization to thrive in a world where society increasingly demands low-impact and low-carbon solutions to sustainably manage and maintain critical consumer and enterprise infrastructure. Through strong and effective corporate governance, Birla Carbon's leadership structure promotes a focus on sustainability.

In these pages you can learn about the future-focused actions that Birla Carbon undertakes. Whether you are interested in how our company engages with the communities in which we operate or how we are pioneering new technologies to improve battery performance, extend the useful life of tires, or minimize our carbon footprint, there is something for you in this report. I hope you enjoy reading our 2024 sustainability report and invite you to engage with us on all topics.

Joe Gaynor
Chief Legal, Risk and Sustainability Officer
Birla Carbon





Who We Are

Birla Carbon is one of the largest manufacturers and suppliers of high-quality sustainable carbon products and carbon black additives globally, and a flagship business of the US \$66 billion Aditya Birla Group.

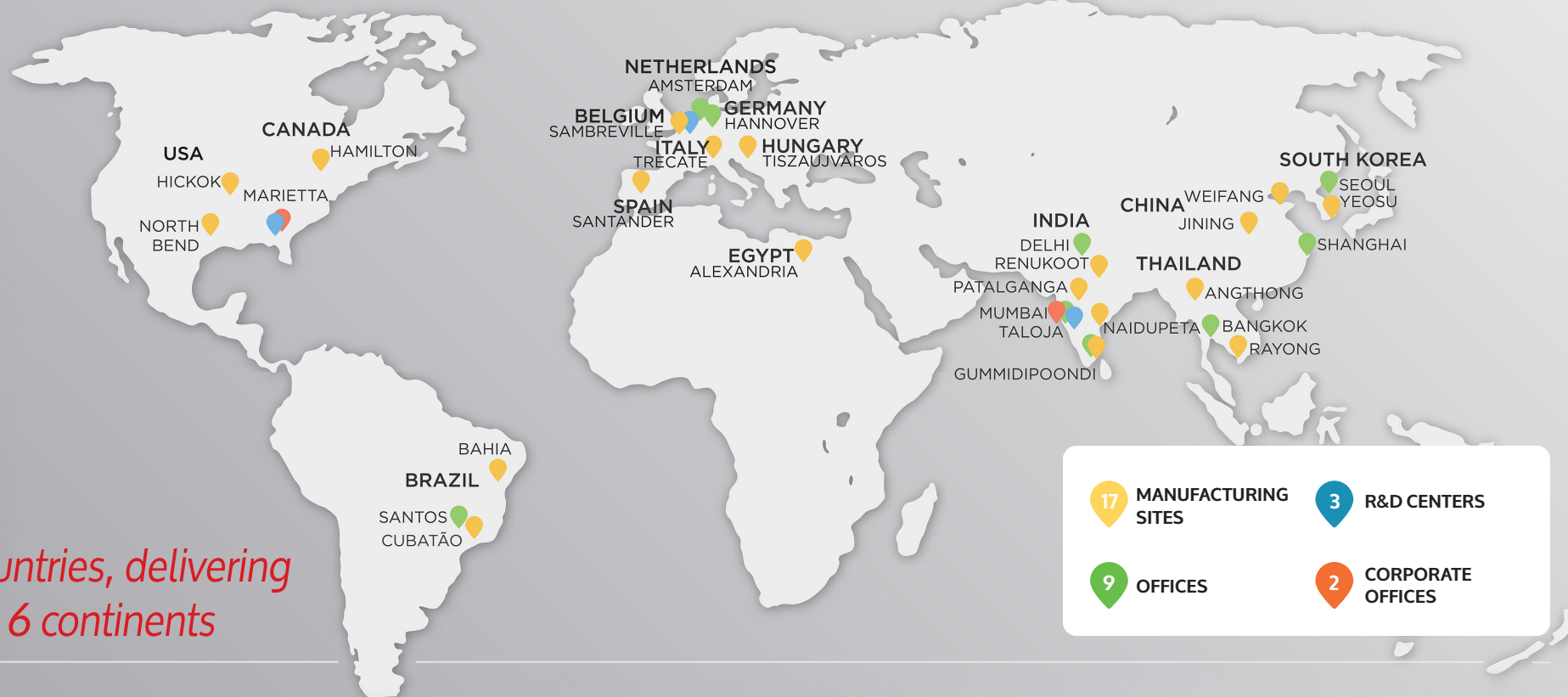
For centuries, carbon black has played a vital, but often overlooked, role in making our lives better, advancing agriculture, aiding safer travel and improving the performance of everyday products. As the world's largest carbon black producer and supplier, we serve customers from across the globe and have an operational footprint that is just as large.

Birla Carbon is focused on investing in sustainability and circularity-driven initiatives fueled by innovation to prepare for the future. Future-proofing is a central element of our Share the Future strategy, enabling us to adapt to long-term global and social trends while enhancing the resilience of our international business.

The acquisition of Nanocyl SA in 2023, is a clear step towards executing the strategy in that direction. Our partnership with Nanocyl SA will enable us to be a significant player in the emerging energy systems space. Through our complementary capabilities, we have developed a wide portfolio of performance

conductive additives that are designed to improve the energy density, power density, and charging speed of lithium ion and lead acid batteries. We also offer performance anode active materials with ultra-high purity, controlled particle-size distributions, and well-defined performance properties for a range of

energy storage applications including automotive EV, portable electronics, power tools, and stationary storage. Nanocyl's experienced team has been pioneers in the field of carbon nanotubes, which are increasingly required to facilitate the green transition and decarbonization opportunities.



Present in 14 countries, delivering solutions across 6 continents

Vision and Purpose Principles

Our Vision is to be the most respected, dynamic, and sustainable global carbon solutions business. Our goal is to harness the power of carbon-based solutions to generate social value. Through our products and initiatives, we aim to contribute to a smarter, more productive, and environmentally-friendly future. As signatories to the United Nations Global Compact (UNGC), we aim to use both our scale and our diversity to fulfill our Vision.

At Birla Carbon, we collaborate closely to create value for our customers by serving as a trusted partner to both industry and consumers. This substantial effort requires us to be responsive to the needs of our customers, employees, society, stakeholders, and most importantly to our future generations who will inherit the environment we shape today. Our Vision and Purpose Principles underscore Birla Carbon's distinctive, effective, and collaborative approach, demonstrating our commitment to delivering reliability and stability to our employees, customers, and communities.

We adhere to five Purpose Principles:

Familiar Bonds, Compound Knowledge, Micro Matters, Beyond Durable, and Challenge Tested. The bonds that bind us are real. In challenging times, our dedication to each other and the communities we serve becomes our greatest strength.

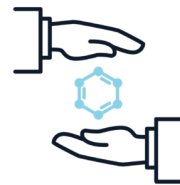
From the production floor to the sales team, our passion for learning has no ceiling. We are constantly searching for a deeper understanding of our products and their applications. It has been over 75 years since

we installed one of the world's first electron microscopes. It was a long-sought look into the mysteries of what makes carbon black strong. With this powerful tool in hand, we shared with the world what we discovered, revolutionizing our industry and leading the way forward.

We at Birla Carbon believe that by empowering our regional teams, we can leverage our strengths and deliver solutions with a global presence. By combining local expertise with our international network, we elevate our knowledge to a worldwide scale.

Each day, both individually and as a company, we embrace the challenge of advancing our practices and improving our approach. We are dedicated to optimizing our processes, enhancing the way we serve our customers, and contributing positively to our communities. This commitment to growth and social responsibility is embedded in our DNA. Every obstacle we face offers us the chance to come up with creative ideas, take care of urgent issues, and demonstrate our commitment. We believe that our greatest challenges and most rewarding achievements are yet ahead of us.

Purpose Principles



Familiar Bonds



Compound Knowledge



Micro Matters



Beyond Durable



Challenge Tested

Awards and Recognition

Global

All of Birla Carbon's carbon black plants have secured **ISCC Plus Certification**. This includes the United States (North Bend and Hickok), Canada (Hamilton), Brazil (Cubatão and Bahia), Italy (Trecate), Hungary (Tiszaújváros), Spain (Santander), Egypt (Alexandria), India (Gummidipoondi, Patalganga, and Renukoot), South Korea (Yeosu), Thailand (Angthong), and China (Jining and Weifang). This achievement highlights our commitment to environmental stewardship and circularity through the provision of advanced products. As we continue to secure certifications globally, we are strengthening our dedication to sustainable and traceable practices, setting industry benchmarks, and moving towards a more sustainable future.

Birla Carbon was honored with two Gold Awards at the Aditya Birla Group 7th Sustainability Conference, held in Mumbai in February 2024.

- 01 Birla Carbon received the first **Gold Award in the Sustainable Product category** for Continua™ SCM, recognizing our commitment to pioneering sustainable solutions.
- 02 The second Gold Award was presented for the **Most Innovative ESG Communication Campaign**, highlighting our excellence in communicating our environmental, social, and governance (ESG) initiatives. These honors highlight our commitment to innovation and sustainability and strengthen our position as an industry leader.

ISCC Plus certification reflects Birla Carbon's commitment to providing sustainable and circular raw materials, highlighting the company's dedication to achieving net zero carbon emissions by 2050, and our role in advancing sustainability.



Europe

In November 2023, the Ministry for Ecological Transition and the Demographic Challenge (MITECO) visited Birla Carbon Spain along with the Business Federation of the Chemical Industry. The purpose of the visit was to understand the facility and its operations along with the production process of a carbon black plant. This visit was a result of the update that was carried out by the European Commission on the best practices within the chemical production sectors. **Birla Carbon Spain pioneered the verification of the new questionnaire issued by the European Commission for the collection of plant-specific safety data for the carbon black sector in Europe.** This activity is part of the European Product Safety Working Group and Regulatory Committee, belonging to the International Carbon Black Association.

Gold Award in the Sustainable Product category for Continua™ SCM at the Aditya Birla Group 7th Sustainability Conference

Africa

In July 2023, Birla Carbon Egypt received a **certificate of recognition for the competition of excellence in the field of sustainable development**, launched by the General Authority for Investment and Free Zones (GAFI) for being one of the leading companies in the field of social responsibility and sustainable development. The celebration took place in the headquarters of the GAFI in Cairo.



Our Approach

Sustainability Strategy

Our Share the Future strategy will propel us and our customers into the 2030s as a future-focused organization with a clear emphasis on innovation and environmental, social, and governance (ESG) as a business strategy that complements customer-facing solutions for a sustainable and circular world.

Share the Future is our roadmap to a sustainable future. We prioritize reducing emissions, scaling circularity, operating at aspirational sustainability standards, and innovating in growing markets, such as energy systems and sustainable carbonaceous materials.

Sustainability influences every decision we make, from designing and operating our plants to interacting with our customers, our employees and the communities in which we operate. Our strategic focus encompasses employee safety, environmental stewardship, efficient utilization of carbon sources, and a dedication of operating in a socially and ethically responsible manner. We have identified the areas where we can have the greatest positive impact, focusing our efforts on what matters most to our stakeholders.



Sustainability influences every decision we make, from designing and operating our plants to interacting with our customers, our employees and the communities in which we operate."



15
ASSESSMENTS AND GOVERNANCE

18
ISSUES AND TRENDS

20
SHARE THE FUTURE

21
STAKEHOLDER ENGAGEMENT

22
CONTRIBUTION TO SUSTAINABLE
DEVELOPMENT GOALS

Assessments and Governance

Assessing Sustainability

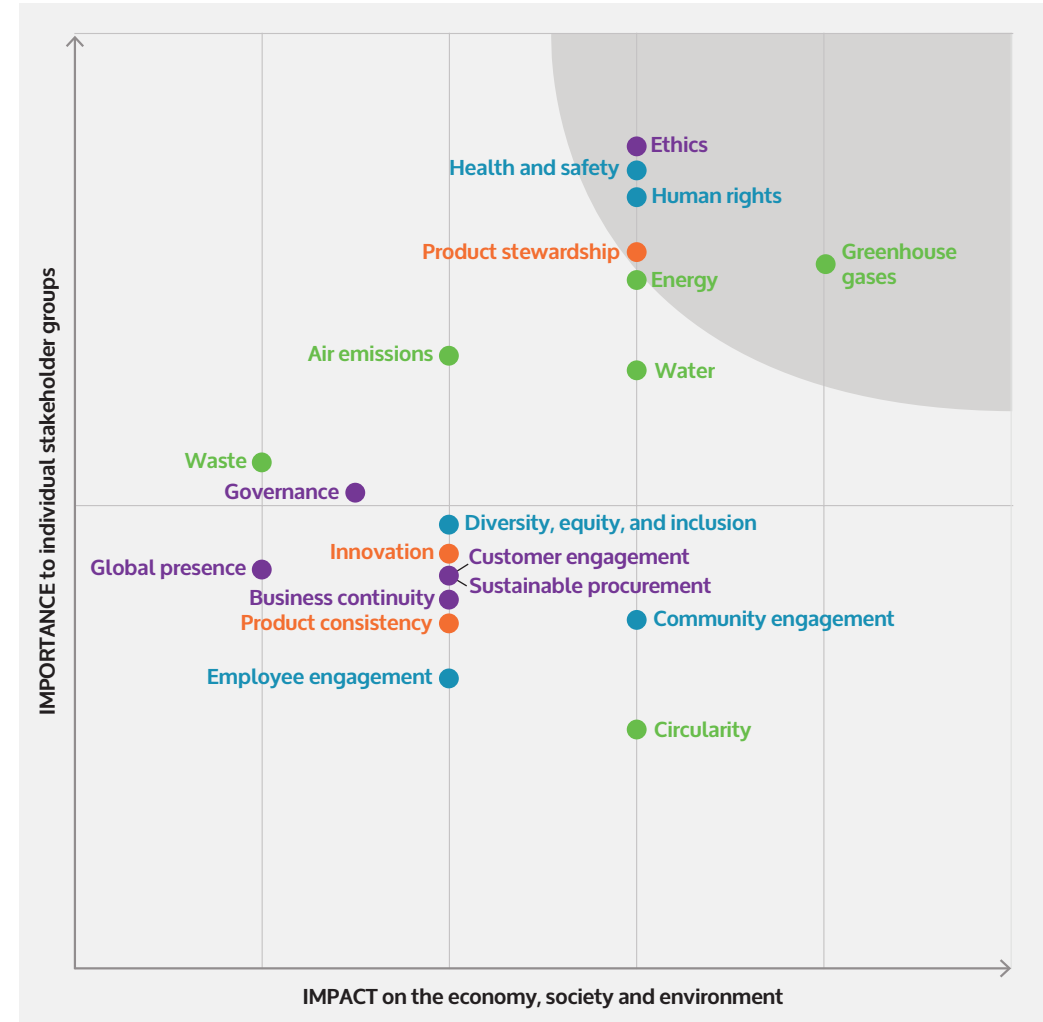
Our Sustainability Steering Committee (SSC) uses quantitative analysis, such as employee surveys and Health, Safety and Environmental (HSE) metrics, and qualitative analysis, such as customer feedback and community input, to determine the materiality of our key sustainability issues. They consider the influence of stakeholder assessments and the significance of our economic, environmental and social impacts. As per the Global Reporting Initiative (GRI) Standards, the SSC attributed each issue to a material topic, whether internal or external, relevant to the organization. Results were subsequently approved by the Chief Legal, Sustainability and Risk Officer, on behalf of Birla Carbon's Senior Management Team.

Focusing on What Matters

The issues described within this report are the outcome of our FY2022 materiality assessment. They have been ranked according to the level of interest of our major stakeholder groups and business impact for Birla Carbon. To effectively consider internal and external impacts, we continually review the challenges that are most relevant to our business.

Our Materiality Matrix

As a result of a formal materiality assessment, we have identified the key issues for Birla Carbon, as defined by our major stakeholder groups.



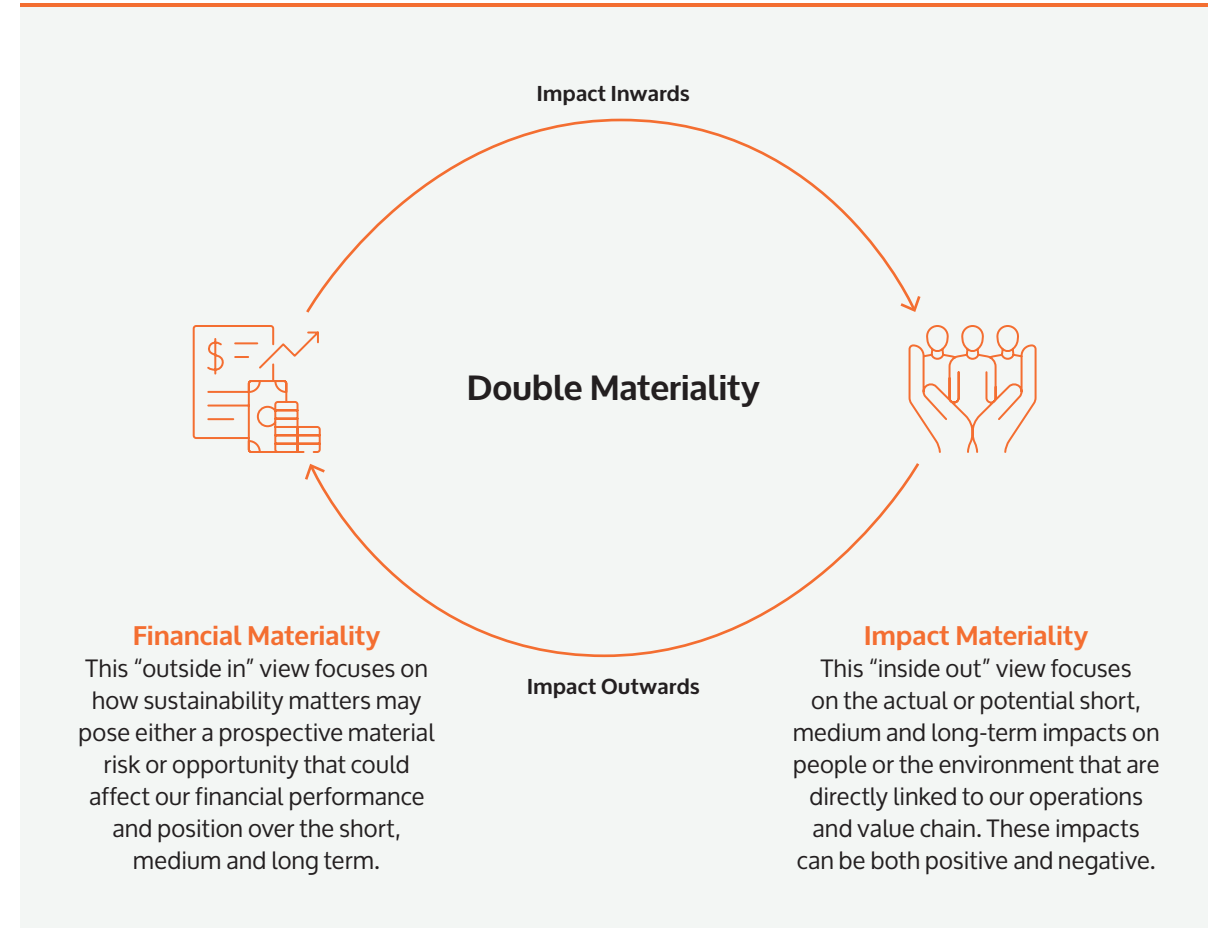
Upcoming Sustainability Disclosures

Separate from our FY2022 materiality assessment, Birla Carbon is preparing to comply with international sustainability disclosure requirements, such as the Corporate Sustainability Reporting Directive (CSRD). The CSRD regulation requires companies to assess more than 80 ESG disclosure topics; it is aimed at increasing corporate transparency and informing sustainable investment decisions. By design, the CSRD in part aims to raise sustainability reporting standards to the same level as corporate financial reporting by mandating disclosures of certain environmental, social and governance topics. The stated purpose of the CSRD aligns with our vision for a healthy economy, society, environment, and business.

The CSRD is considered the gold standard for sustainability reporting frameworks as it considerably enlarges the scope of companies that must disclose sustainability information and brings forward new reporting requirements. The first step in our CSRD process was to conduct a “double materiality” assessment, in which we assess the most important ESG issues for our business. The structure of the double materiality assessment means that something is “material” if it is material under either the impact or financial materiality perspective; it does not have to be both.

We are still processing the results of our double materiality assessment. As such, our Share the Future Strategy and this report, Sustainability in Action, remain informed by our FY2022 materiality assessment. To comply with the CSRD, we anticipate creating a non-financial statement containing details about our sustainability policies, risks, and outcomes.

Our CSRD double materiality assessment generated insights with respect to both financial and impact materiality. We anticipate releasing additional details on process and findings associated with our CSRD assessment in 2026. This process helped us assess our full business and value chain, in order to identify sustainability issues on which we are required to report, both in terms of 1) the “inside-out” positive and negative impacts that Birla Carbon may have on the world; and 2) the “outside-in” business risks and opportunities that ESG issues may have on Birla Carbon (hence the term double materiality).



Our CSRD Assessment Findings

Environment

The assessment underscored our commitments to transition to net zero and further highlights the importance of understanding and mitigating the carbon footprint associated with our manufacturing process. It further reinforced the importance of continuing to manage potential pollutants and tracking emerging issues such as nanoparticle regulations and impacts. Another notable, and yet expected finding, was the realization of the societal benefits, as well as financial impact, of utilizing circular inputs and implementing resource optimization strategies.

Altogether, considerations related to the following environmental topics are ones that Birla Carbon considers to be relevant to our business:

CLIMATE CHANGE
POLLUTION
WATER AND MARINE RESOURCES
RESOURCE USE
CIRCULAR ECONOMY
ECOSYSTEMS

People and Society

Actively mitigating health risks associated with manufacturing sustainable carbon products and nanotubes was a focal point during our assessment. This was not unexpected as the safety of our employees and the customers who use our products is a key area of attention and effort. Related to talent, our results emphasized the importance of ensuring that Birla Carbon has the appropriate subject matter experts and can attract and retain talent to support its business strategy.

Birla Carbon considers our own workforce, workers in the value chain, affected communities, consumers and end-users, as relevant to our business.

HUMAN RIGHTS
EMPLOYEE ENGAGEMENT
DIVERSITY AND INCLUSION
COMMUNITY AND
CUSTOMER
ENGAGEMENT
HEALTH AND SAFETY

Governance

Our assessment highlighted the importance of investing in corporate culture, preventing corruption, and ensuring transparency in line with Birla Carbon's ESG ambitions. As such, business conduct remains a top governance priority.

Altogether, considerations related to the following governance topics are ones that Birla Carbon considers to be relevant to our business:

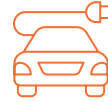
GOVERNANCE
BUSINESS
CONDUCT ETHICS
BUSINESS
CONTINUITY

Issues and Trends

Future-proofing is a key stage in our Share the Future strategy, helping us to adapt to long-term global and social megatrends while building the resilience of our international business. We use horizon scanning and scenario planning to identify external factors that could potentially impact our business, considering the risks and opportunities as we shape our future strategy.

For us, ensuring uninterrupted operations and constant supply of sustainable carbon products 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 headwinds that could affect the global carbon black industry: climate change, oil scarcity, water scarcity, urbanization, sustainable mobility, and closed-loop manufacturing.

Innovation



Mobility

Three transformative mobility revolutions have kicked off: **sharing, electrification and automation**. Electric cars may have positive implications for our industry as they wear through tires more quickly and use carbon black in battery technology.

The effect of **driverless cars** is more uncertain, especially as they may enable a transition to fleet models of shared mobility, replacing ownership and leading to fewer cars and thus reduced carbon black demand.

There is also a growing demand for **walkable and bikeable cities**, with visible efforts worldwide to reduce car use and congestion. By 2030, fleets of on-demand, shareable, driverless electric vehicles may also reduce traffic. The various stakeholders we engaged with on this topic are divided as to whether this will affect carbon black demand or not. Changes to urban planning will, however, undoubtedly generate challenges.



Digitization

The **increasing tethering of devices to the internet** will create a wide network of intelligence nodes that will result in a highly connected world. Connectivity and convergence of new technologies will unleash the full potential of the Internet of Things (IoT) and the launch of multiple innovative applications that will change the way we live, communicate and conduct business.



Automation

Machines learn faster than humans and personal data is a valuable commodity. Nearly two-thirds of all occupations could see a third or more of their constituent activities automated. Anything that moves will be autonomous. Products and processes across logistics, industry, aerospace, smart home infrastructure and vehicles will become fully automated and intelligent. Advancement in **digital infrastructure, manufacturing and autonomous products** will likely transform daily life.



Climate



In response to the Paris Agreement, climate change policy could profoundly shift transportation away from cars by 2030, resulting in a marked impact on our business. Potential carbon taxes could influence oil prices, affecting the availability of our feedstock. However, as a material impact there could be more demand for carbon black as tire components that improve efficiency are prioritized.

Demographic Shifts



Class Growth

The popular definition of a growing middle class implies more consumption in emerging economies. However, premature deindustrialization is already visible in some African and Asian countries, leading to a different, less affluent model of "middle class" that prioritizes access over possession. For Birla Carbon, the fact that a rising middle class may not mean a rise in consumption is a challenge.



Millennials and Gen Z

A new way of living that values access over ownership is emerging. This lifestyle is driven by millennials and, more recently, Generation Z. A key indicator of this is changing car use: using car-sharing services in place of ownership. As millennials will be the dominant generation by 2030, this represents a significant challenge for Birla Carbon.

Resources



Fossil Fuels

Oil availability will inevitably have an impact on our business, as carbon black production requires feedstock that is a byproduct of oil. There is a need for Birla Carbon and others to consider alternative sources over the next decade, particularly in the face of other attractive materials such as silica.



Energy

The global shift from fossil fuels to renewables may impact oil demand and pricing and affect electricity generation or transportation. Any change from traditional energy and transportation systems represents both challenges and opportunities for Birla Carbon in terms of resilience and adaptation.



Circularity

Carbon black is a highly engineered material requiring carbon-rich feedstock. As such, using renewable or recycled sources which contain elements besides carbon in our production process presents significant emissions and environmental challenges. Once incorporated into finished articles made out of rubber or plastics, carbon black is difficult to separate from other materials, making it impossible to recover in its original form. However, through partnerships and by focusing on areas where we can be more flexible in our processes, Birla Carbon seeks to lead the industry in Sustainable Carbonaceous Material (SCM), curving the linear model of our value chain.

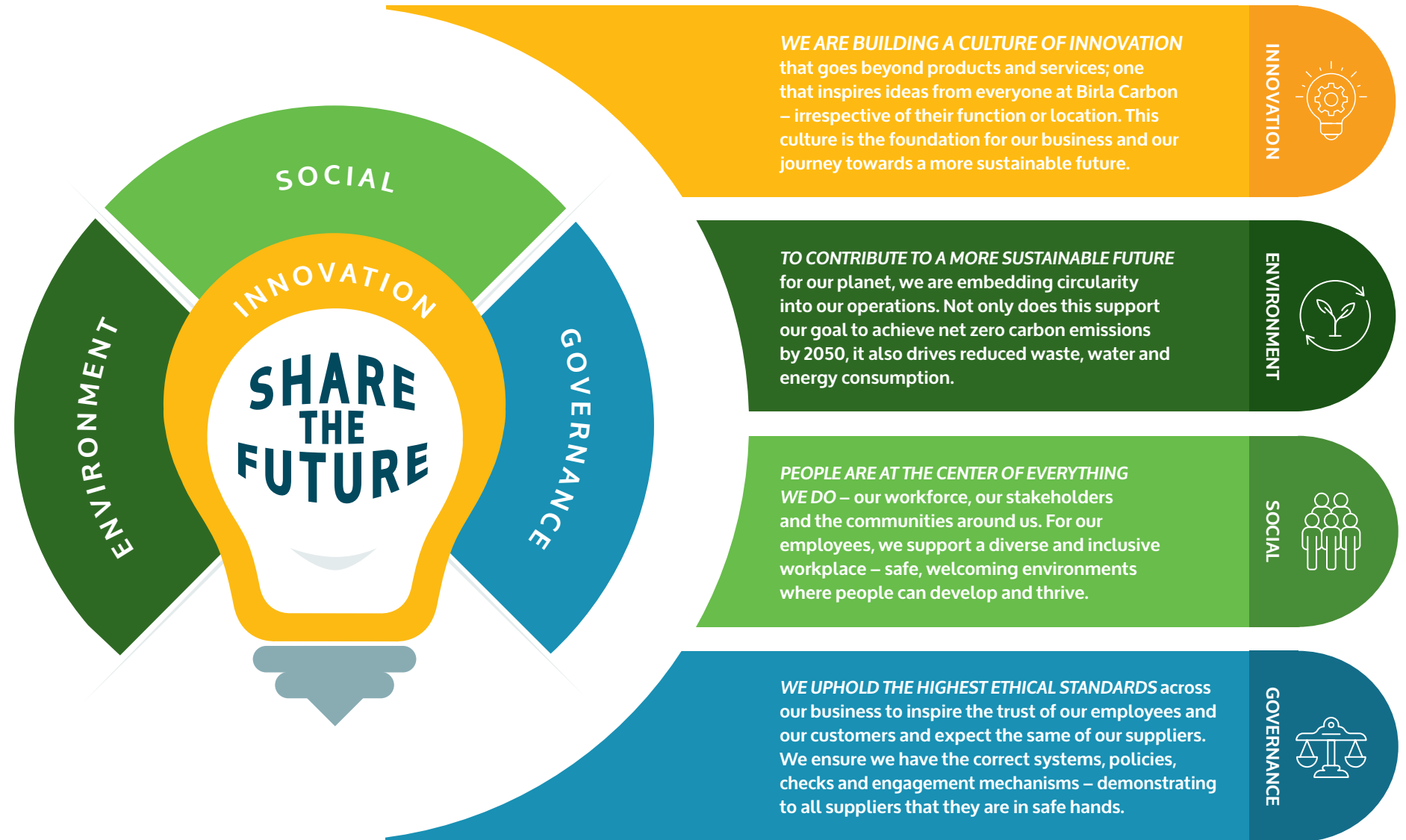


Water

This is a key area for all industries – nearly half the global population is expected to face shortages by 2030. Use reduction and recapture will become increasingly important for Birla Carbon in this timeframe.

Share the Future

We approach everything we do with the future in mind: from employee training and product development to reducing emissions and scaling circularity. Our Share the Future Strategy is a roadmap to results, driving forward our actions to achieve net zero carbon emissions by 2050. We seek to reduce our impact beyond direct operations by supporting, and collaborating with, customers and suppliers to achieve similar sustainable progress.



Stakeholder Engagement

Through our Share the Future Strategy, we engage iteratively with our stakeholders. We are committed to producing a consistent supply of world-class carbon products for our customers, while working to reduce our environmental impact and ensuring our product generates social value.

We aim to develop long-term relationships with customers and, based on our excellent service and high-quality product, become the carbon solutions provider of choice. One way we achieve this is by engaging with customers on key sustainability issues and aligning our sustainability agenda with theirs. Our Global Engagement Managers engage with customers regularly through our Key Account Management program.

We take a local approach to building community relationships to ensure we understand the unique priorities of our global communities. We focus on delivering long-term socioeconomic benefits through our engagement – namely health, education, social support and charitable giving.

We continue to interact with nongovernmental organizations (NGOs) and wider social institutions that are particularly relevant to our business. This engagement takes the form of meetings and participation in events where we share knowledge with our peers.

Core to Share the Future is the successful enablement of our talented workforce. We encourage everyone at Birla Carbon to be their best, so we can be more innovative and efficient in everything we do. Our culture of responsibility promotes the health, safety and wellbeing of our employees and the communities in which we operate. Every two years, we conduct employee feedback surveys to encourage a continual dialogue between managers and employees. Employees may access a hotline to anonymously report any concerns or grievances. We hold internal conferences across various functions to enhance communication and collaboration.

As part of Share the Future, we take leadership through action. We strive to be a responsible steward of the environment by optimizing the conversion of carbon-to-carbon black, minimizing our carbon dioxide emissions and maximizing the recovery of energy generated during our manufacturing process. But more than that, all our processes, from

procurement to recruitment, must be best in class if we are to successfully live out our Share the Future Strategy. As our business depends on suppliers, we work closely with them to develop strong relationships. Our suppliers' behavior reflects on us, so ensuring that they uphold our high ethical standards is vital.



Contribution to Sustainable Development Goals

With manufacturing sites and offices in 14 countries across 6 continents, Birla Carbon works in geographies as far apart as Canada, Brazil, Spain, Egypt and South Korea. As the world’s largest producer of sustainable carbon products, Birla Carbon views its global footprint as more than just access to key markets. It is also an opportunity to invest in the long-term progress of the communities in which we operate.

In 2016, Birla Carbon aligned its sustainability initiatives to the UN Sustainable Development Goals (SDGs). Accordingly, we undertake efforts aligned to our prioritized UN SDG goals and dedicated to building circular business models which are based on partnerships that add value to stakeholders, people and planet. We first mapped our efforts to the UN SDGs in FY2016 and continue to align our progress to global development targets by becoming signatories of the UNGC. This ensures our sustainability progress is coordinated at a global level.



We support the following SDGs through our work:

Economy	Society	Environment

SDG #9
Industry, Innovation, and Infrastructure

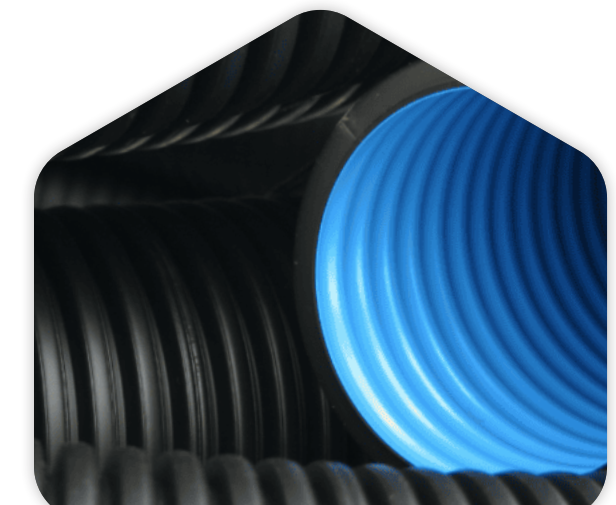
Build resilient infrastructure, promote inclusive and sustainable industrialization and foster innovation.

Our aim is to ensure sustainable and resilient infrastructure in developing countries and enhance local technology, research and innovation through the use of carbon black. Products like Continua™ SCM promote a circular carbon economy by enabling the extraction and repurposing of carbon black from end-of-life tires into new products, such as rubber compounds.

Birla Carbon participated in Plastivision India 2023 at the Bombay Exhibition Center, Goregaon, Mumbai. Plastivision India 2023 is a significant event in the plastics industry that provides Birla Carbon with a valuable platform to showcase our solutions to regional and global customers. This exhibition gave Birla Carbon an opportunity to engage with existing and potential customers and introduce our products to them. Some of the plastic solutions on display at the Birla Carbon booth included Continua™ SCM that highlighted Birla Carbon’s commitment to technical leadership and sustainability.

As a product, carbon black connects and brings additional value to many key areas and industries within our lives. Found within everyday items such as our clothes and the ink on bank notes, it is also a critical element of transportation sectors. Carbon black increases the durability and safety of tires on the road. It also prevents leaks and provides UV protection for water used to irrigate crops. An enabler, carbon black is a key component for its own development as it is found within electrical wires, computers and the technologies that make our lives easier.

In the interest of fostering innovation, our approach to research and development is to empower all our employees – building on our Share the Strength ethos. This open culture has allowed us to expand our product offerings and technologies within our research portfolio.





SDG 12 Responsible Consumption and Production

Ensure sustainable consumption and production patterns.

Efforts to address our resources' sustainability include developing their circularity to reduce our reliance on virgin resources, such as with Continua™ SCM. While our feedstock is a byproduct of another industry, it is also a limited and non-renewable resource, which, in the long term, may have an impact on our consumption. Ensuring our feedstock comes from suppliers close to our facilities reduces our production chain's associated emissions. These commitments to responsible procurement practices support our customers' ambitions to include more renewable and recycled materials in their own products.

Our strategy to reach net zero greenhouse gas emissions supports circularity: Research, Reduce, Replace and Repurpose. Our process starts by giving someone else's waste a second life, and we continue this sustainable approach across resources during the production stage: utilizing energy recovery (70% of our plants are net energy positive), harvesting water for reuse (100% of our sites used recycled process water and/or rainwater in their operations) and reducing and repurposing waste. Our parent company takes the long-term view with us, so we can innovate in ways our competitors can't. It is a willingness to invest in sustaining our future—not just for the next quarter, but for the next quarter century.

We know our responsibility does not end at our facilities. That is why we conduct LCAs by evaluating all environmental impacts in product's entire lifecycle. To achieve a circular economy, we collaborate with our entire value chain to understand our impacts and reduce waste in any form.

We also work closely with our suppliers to ensure the high ethical and sustainability standards within our Supply Chain and Procurement Policy are met. This policy guides our sites to ensure compliance with the relevant legislation and the Birla Carbon Code of Ethics as part of our worldwide approach to sustainable procurement.



SDG 13 Climate Action

Take urgent action to combat climate change and its impacts.

Our approach to combating climate change and its impacts is to focus on carbon stewardship. This encompasses our emissions-reduction efforts and our aim of being net energy positive, which we have been achieving globally since at least FY2016.

Our operations continue to generate emissions. We are always working to reduce these as a priority by focusing on optimizing processes for converting carbon to carbon black. This includes our efforts in incorporating circularity and creating a more sustainable supply chain for our products. We are making these efforts based on product LCA results. Our most recent LCA study was completed in 2024.

We also have key water usage and waste reduction goals, with ambitions to have 75% of waste repurposed, including recycling, reuse, and recovery, by 2030 and a 50% reduction in water withdrawal intensity at our high- and medium-risk sites by 2030 from our 2012 baseline year.

Since establishing our energy conversion KPI, we now recover more energy from our own facilities and consume less energy per tonne of carbon black produced. Much of this energy is used in our manufacturing process, while any surplus is sold to neighboring facilities and local grids. Our Energy and Carbon Policy sets out our commitments to exceed regulations by reducing our energy intensity and carbon footprint.

In the past year, Birla Carbon has partnered with One Tree Planted, a non-profit organization focused on global reforestation. Our donations have supported a project in Brazil, Cacau Amazônia+, in the State of Rondônia. The project aims to reforest 224 hectares of land, or approximately 486,352 trees. We also support watershed reforestation efforts in Thailand, including projects in Mae Na Wong, Nam Kohk, Mae Ta Chang, and Mae Yang Mint.



Over the past year, Birla Carbon is responsible for donating 597 trees, including 257 in Brazil and another 340 in Thailand.

The average tree absorbs an average of 22 pounds of carbon each year for the first 20 years of its life.⁶ We are proud to facilitate this process and eager to continue our contributions and efforts to reforest these and other critical ecosystems.

⁶ <https://onetreepanted.org/blogs/stories/how-much-co2-does-tree-absorb>

Innovation

The world around us is rapidly changing, and adapting to change is an integral part of our business culture. Innovation challenges us to shift our mindset, future-focus our perspectives, and motivates us to strive for continuous improvement.

Our innovation journey challenges employees to transform their ways of thinking and operating. It empowers employees to learn from one another and implement new solutions that bring value to our stakeholders, suppliers, customers, and the communities in which we operate and serve. At Birla Carbon, our culture of innovation is critical for us to deliver on our sustainability strategy because becoming a fully responsible business takes every one of us to Share the Future.



27
RESEARCH AND DEVELOPMENT

27
NET ZERO SOLUTIONS

28
STAKEHOLDER PARTNERSHIPS

29
NANOCYL

We support the following SDGs through our work:





Innovation at Birla Carbon has grown into a key pillar of our sustainability strategy, driving continuous improvement, and transforming our business. Innovation empowers our people, enhances operational efficiency, and reinforces our commitment to environmental stewardship and responsible practices while fostering a culture of innovation that drives these changes from the ground up."

Maria DaSilva
Innovation Project
Coordinator
Birla Carbon



Interspersed across our company is the ambition to improve and innovate, for our customers, for our teams, and for the future of our planet. We foster an environment that draws upon grassroots ideas to improve individuals, processes, products, and public or business interactions. 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.

We continuously invest in and upgrade the technologies of our relatively older plants, while also developing new facilities to support future sustainable business growth, to ensure our operations are as efficient as possible, and to preserve and maintain our competitive advantage. We invest in technology that 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 improved air emissions control and more efficient water management, optimizing our carbon and energy cycles, enhancing plants to create spaces that support health and wellbeing, such as through our Employee Resource Group (ERG) programming.

As a business, we discuss innovation, experience it from different perspectives, and take our learnings to our plants, labs, and offices to implement anew. Globally, we constantly attempt to create change through innovation by thinking differently and collaborating effectively with our stakeholders, customers, suppliers, and the communities in which we operate. While the innovation program has continued to grow from its inception to the present, the continued engagement of our employee base is the key factor in determining the success of the journey. A few recent grassroots successes of ours are shown on the following page.

Birla Carbon Winner of InnoLead's 2024 Impact Awards

Our "Share the Idea" initiative, launched in 2019 fosters a culture of innovation across our global operations. By 2023, this program expanded to over 500 employees across 11 countries, with 7 winning ideas implemented, and 6 others in process. In June 2022, this program went "BIIG" at the Birla International Innovation Gathering at Amsterdam.

About the Awards

InnoLead's Impact Award honors companies that have achieved extraordinary outcomes related to innovation, design, new business models, and new offerings. Launched in 2018, the Impact Awards celebrate the people and teams inside big organizations delivering tangible value and disrupting the status quo with new ideas.



One of our notable projects eliminated single-use plastics – about 150,000 plastic bottles annually, at our Brazil plants, saving \$42,000 a year.



Connected Helmet

Our plant in Spain (Santander) implemented the Connected Helmet Innovation Project in January 2024. This device is attached to the operator's helmet. The device can locate an employee and send a warning when something unusual happens to them (dead man system). Moreover, it grants access to specific rooms like electrical substations and other features that can be programmed when needed. The project has yielded many benefits including enabling the plant to monitor and mobilize resources faster, due to the geolocating technology.

Seawater Scrubbing

Since FY2022, we have implemented a novel technology to remove sulfur oxides (SO_x) using seawater. Birla Carbon USA (North Bend) hosts this technology. North Bend is proximal to the Gulf of Mexico and Gulf Intracoastal waterway, a viable water source to operationalize this innovative process. Through this approach, we avoid landfilling millions of pounds of gypsum, a solid waste produced as a byproduct of the wet flue gas desulfurization process.



We are seeing a >95% reduction in nitrogen oxide and sulfur oxide emissions at our North Bend, USA location.

Atex Tablets

During maintenance operations, our technicians need a continuous telephone/radio connection with the control room to get information about issues related to the instrumentation in the field, they also need approval from the control room to carry out certain operations on the equipment involved to test its correct restoration. When our Atex tablets are connected to the local network, it enables autonomous technician function. This helps operators avoid miscommunications and improve information sharing.

The innovation project was implemented in March 2023 by our plant in Italy (Trecate). After a year, the project has proven useful in field activities. The tablets are integrated with our current infrastructure, enabling a seamless interaction between available field technologies.



Research and Development

To better serve our customers, we are expanding our R&D in novel product areas. Areas adjacent to where we currently work, such as conductive, renewable, and recycled solutions, all hold potential for increasing value.

We are investing more in these research channels to proactively address challenges our customers may face in the future. Our three principal R&D Centers are in Belgium (Sambreville), India (Taloja), and the United States (Marietta).

Our R&D centers are dedicated to five areas of expertise:

01 Manufacturing technology

02 Analytical services and quality

03 Product development

04 Process innovation

05 Material innovation

Net Zero Solutions

Chemical products are ubiquitous in modern society. The chemical sector is a large industrial emitter of greenhouse gases. As such, producers face significant challenges and costs in decarbonization. Sustainable solutions for producing carbon black will need to address the dual objectives of lowering greenhouse gas emissions while enhancing the performance of the carbon black products. Birla Carbon's R&D

team is focused on finding low-GHG solutions to produce carbon products and integrating these pathways into manufacturing processes. Recovered carbon black is poised to become a lever for the decarbonization of the tire industry, a significant component of the automotive industry's climate impact. Recovered carbon black is a sustainable material produced through the thermal pyrolysis of used tires.

This technique involves heating tires at high temperatures in the absence of oxygen, decomposing the rubber into carbon black, as well as oils and gases that can be reused or converted into energy. Not only does this process generate a sustainable way to recycle used tires on a large scale, but also it is less carbon emitting than conventional or virgin production processes.



Carbon is a key element to sustain life, however, greenhouse gas emissions have become a challenge to control global warming. Birla Carbon has announced its ambition to be net zero by 2050 and as part of that we are looking at sustainable solutions for producing carbon black to not only lower the greenhouse gas emissions (GHG) but also enhance the performance of the carbon black products."

Deepak Tandon
Director, Technology Scouting
Birla Carbon





Continua™ SCM is Birla Carbon's unique recovered carbon black product. Our R&D teams continue to work with our customer to enhance the performance of Continua™ SCMs in their own products and take advantage of the sustainable benefits it provides as a recycled material.

In the past year, our R&D team conducted four production trials with recycled and bio-derived feedstocks and successfully produced ASTM and non-ASTM grades of carbon black. We will continue to build upon our learnings from these trials to scale-up these sustainable carbon blacks and support their adoption in the market.



While we build on our recycled and bio-derived feedstocks platform to produce different grades of carbon black, analyze them, and support their adoption in the market, we are also exploring means to lower our CO₂ intensity by capturing CO₂ and looking at ways to produce zero emission carbon products."

Deepak Tandon
Director, Technology Scouting
Birla Carbon

Most of our plants are energy positive, meaning they either re-incorporate energy back into plant operations or sell the energy back into the grid.

Stakeholder Partnerships

Part of our Share the Future strategy involves collaborating with our customers on sustainability (e.g., supporting development of eco-friendly tires, reformulations for electronic vehicles tires). A key product innovation goal of our tire customers is to increase the amount of renewable raw materials in their tires through product innovation.

To facilitate these goals, we have developed nanocellulose technologies to improve the sustainability of tire and rubber products. Nanocellulose dispersion composite (NDC) rubber improves tire rolling resistance and thereby fuel economy. NDC enables the achievement of the goal while improving tire properties and performance. We find ways to actively participate in the social, environmental, and economic development of the areas in which we operate and serve. Because innovation is embedded throughout our business, we are highly motivated to realize continuous improvement. To that end, we leverage partnerships and explore new design processes to constantly expand the potential of our product.



Birla Carbon partners with CIRCtec, a leading innovator of pyrolysis technology and producer of renewable fuels from end-of-life tires, to create Continua™ SCM. End-of-life tires are collected by retailers to be recycled by our partner CIRCtec. By using this material, the rubber, plastics, and coatings industries reduce the carbon footprint of their common value chain.

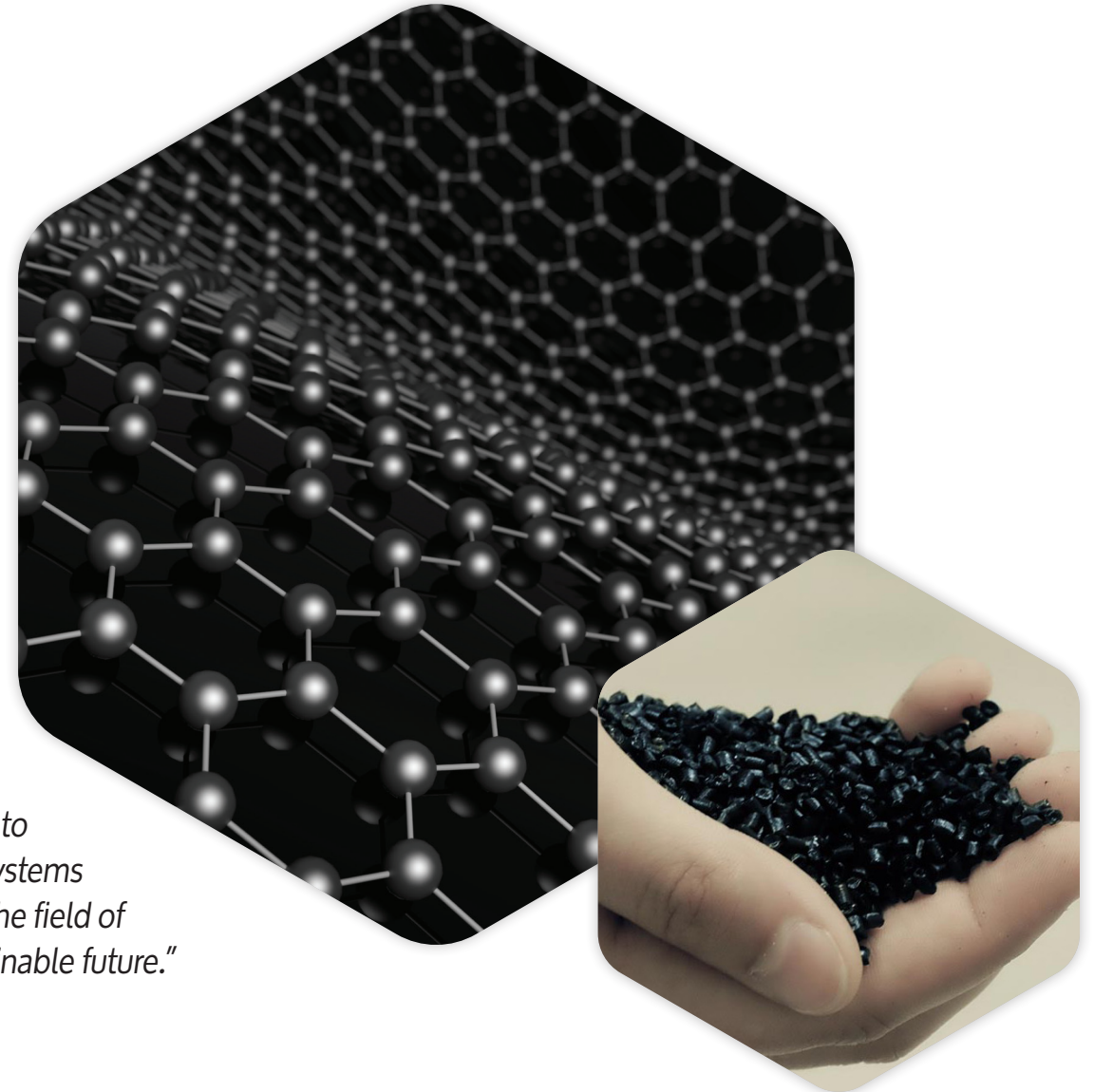
nanocyl

A BIRLA CARBON BRAND

Birla Carbon completed the acquisition of **Nanocyl SA**, a worldwide leader in multi-wall carbon nanotubes (MWCNTs) based in Belgium. The acquisition was announced in October 2023. Nanocyl is one of the pioneers in the manufacturing of industrial MWCNT and is a worldwide industry leader in the field of MWCNT and MWCNT-based formulated products. Nanocyl's industrial strategy focuses on the current challenges of the Energy, Transport, and Electronic markets while developing novel sustainable solutions for the Rubber market.

The acquisition expands Birla Carbon's presence in the Energy Systems market, creating a leadership position in material critical to Li-ion battery performance along with other conductive applications. Birla Carbon's R&D expertise, portfolio of products, and market experience will enable Nanocyl and our products to reach their full growth potential.

Birla Carbon has been nurturing a number of innovation opportunities in its effort to realize its multi-prong sustainability agenda. The acquisition of Nanocyl is a clear step towards executing its strategy in that direction. We anticipate that this partnership will enable Birla Carbon to be a significant player in the emerging energy systems space.



Along with Birla Carbon's and Nanocyl's developments together, we are well positioned to be a significant player in the emerging energy systems space. Our collaboration propels us forward in the field of carbon nanotubes, as we move towards a sustainable future."

Laurent Kosbach
Chief Executive Officer
Nanocyl, A Birla Carbon Brand



Environment

Our business relies on limited natural resources such as oil, gas, and water. We recognize that we have a responsibility to grow our business in a way that uses natural resources wisely, ensuring we remain competitive while preserving the environment for future generations. Our environmental strategy focuses on energy, emissions, water, waste, responsible sourcing, and circularity.

Life Cycle Assessment (LCA)

As one of the world’s leading carbon black manufacturing companies, we create products that contribute to an enhanced standard of living for people throughout the world. Central to our sustainability strategy, Life Cycle Assessments (LCAs) are at the core of our business decision making at Birla Carbon. The LCAs evaluate the product’s entire life cycle and help us to quantify our environmental impact from raw material extraction to end of life.

Over the past decade, we have strategically incorporated LCAs into our operational framework, ensuring that sustainability considerations are embedded in our product design. This ongoing commitment underscores Birla Carbon’s ongoing efforts to minimize the environmental impact and drive continuous improvement in all sustainability practices.

We support the following SDGs through our work:



31
CARBON BLACK LCA

32
CONTINUA SCM™ LCA

33
CIRCULARITY

34
GHG REDUCTION

37
WATER

38
WASTE

39
AIR EMISSIONS



Carbon Black LCA

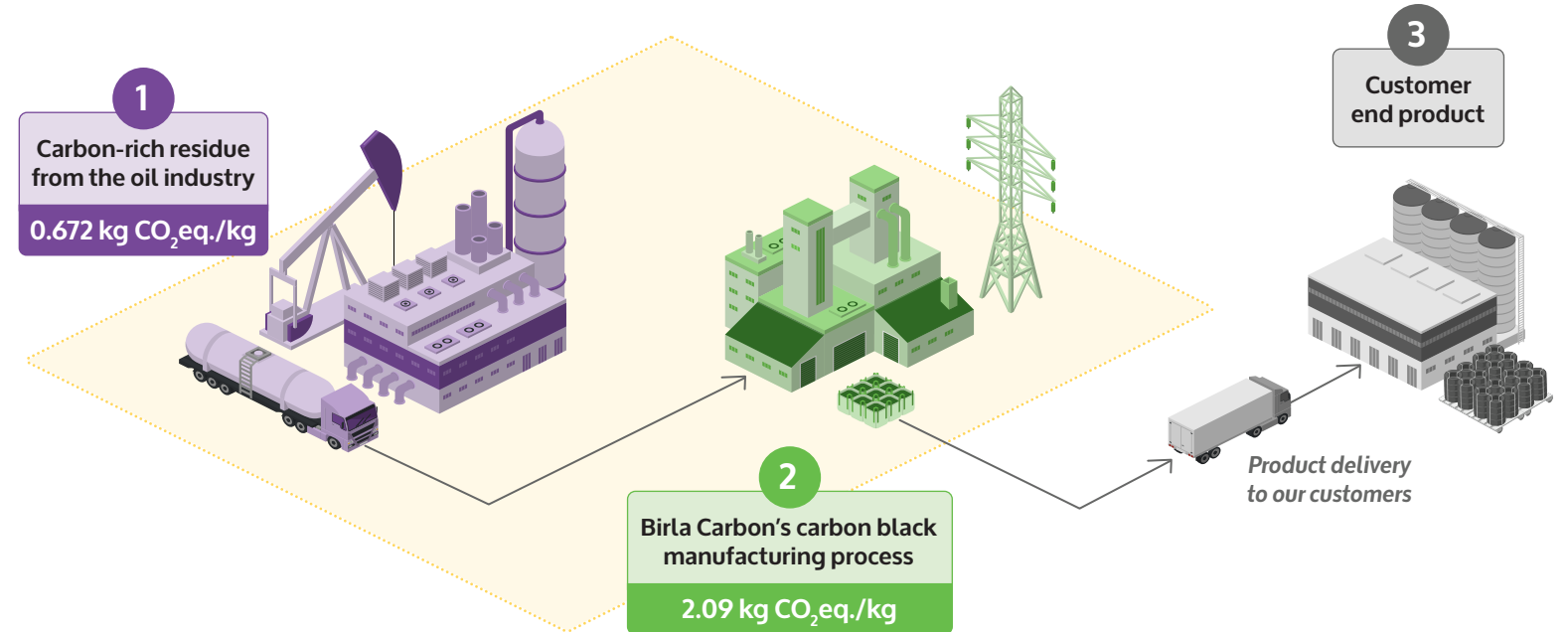
Our recent cradle-to-gate LCA study was conducted in accordance with ISO14040 and ISO14044. Our LCA is conformant with ISO14044, meaning the LCA is verified by an independent third-party reviewer. We recognize the importance of collaborating with our stakeholders to address their overall carbon footprint mitigation strategies. In our commitment to sustainability and transparency, we publicly shared the results of our LCA on our website. This practice fosters trust and ensures open communication with our stakeholders, providing them with clear insights into Birla Carbon's LCA carbon footprints.

Insights from our LCA aid us in credible environmental claims. By conducting the LCA, Birla Carbon is empowered with actionable intel to enhance our sustainability performance and contribute to broader discussions on environmental responsibility within the carbon black industry.



Our [FY2024 Carbon Footprint Statement for Carbon Black](#) is publicly available on our website.

Carbon Black Carbon Footprint (*kg of CO₂ equivalent (CO₂eq.) / kg of carbon black*)



1

We produce carbon black in a reactor through a tightly controlled flame-synthesis process that uses carbon-rich oil residue, and sometimes natural gas, as feedstock.

2

Water is then injected into the reactor, reducing the temperature of the smoke stream, which is routed to a baghouse that separates the light, powdered carbon black from the reactor. This powder is mixed with a binding agent and water to form pellets that allow for efficient transportation to our customers.

3

Carbon black brings numerous benefits to finished articles, including strength, durability and the ability to lower tires' rolling resistance.

Continua™ SCM LCA

In 2021, we launched the Continua™ Sustainable Carbonaceous Material (SCM) brand, that supports us driving circularity at scale. Not only does it increase the recyclability of products such as tires, but our LCA shows that Continua™ SCM offsets 0.73 kg of CO₂eq. per kg SCM produced when system expansion is considered. Continua™ SCM customers will be able to reduce their greenhouse gas emissions by providing circular alternatives over alternative traditional materials.

Our [Continua™ SCM Carbon Footprint Statement](#) is publicly available on our website.



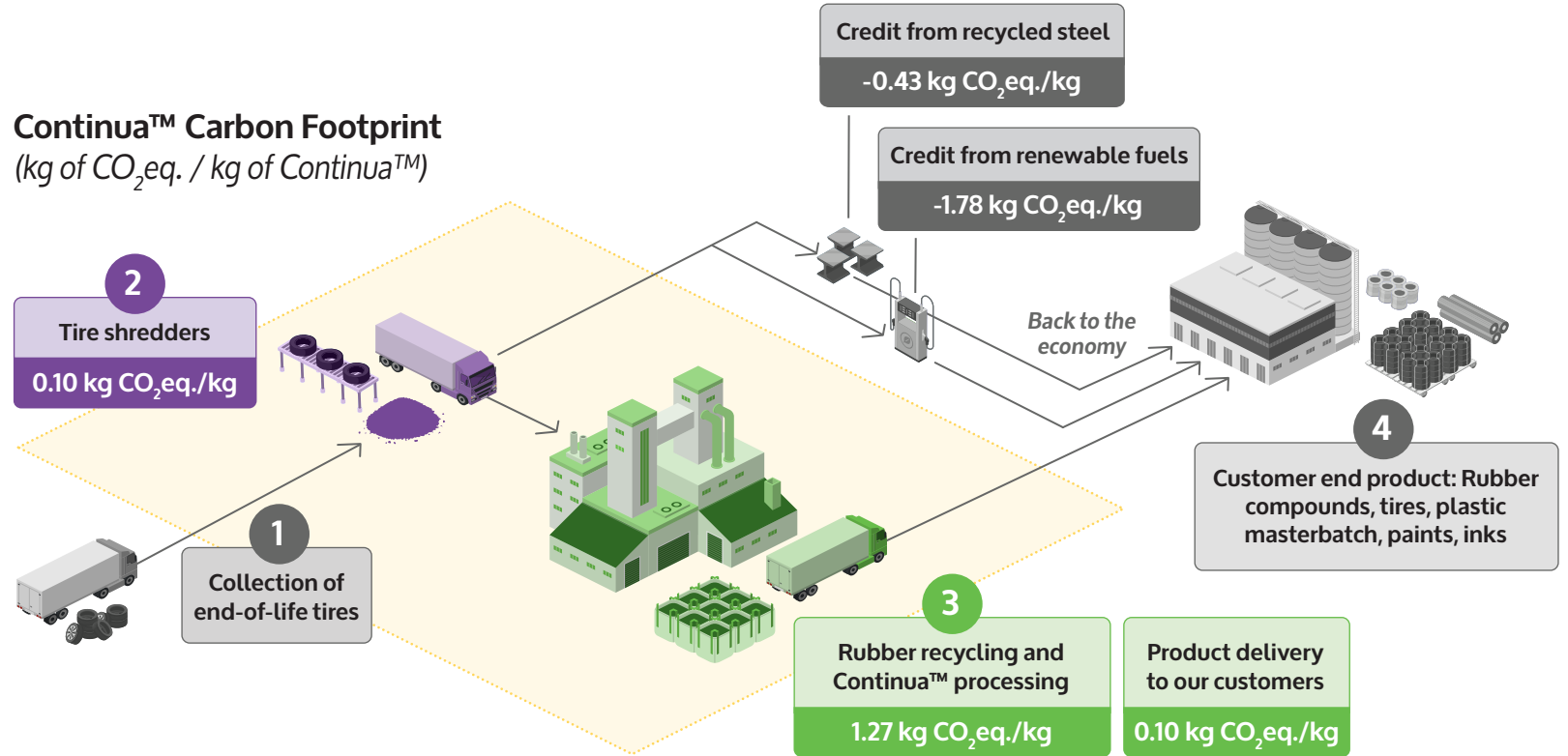
In line with our commitment towards innovation for Sustainability, we are upholding our Continua™ promises. Continua™ 8000 SCM has established itself as a leading Sustainable Carbonaceous Material in the market, with successful commercialization across

dozens of customers. To better support our customers in achieving their sustainability goals, we are enhancing both volume production and quality consistency worldwide."

Anil Nandakumar
Market Development Lead
Continua™ SCM, Birla Carbon



Continua™ Carbon Footprint (kg of CO₂eq. / kg of Continua™)



1 End-of-life tires are collected by retailers to be recycled into Continua™ SCM. By using this material, the rubber, plastics and coatings industries reduce the carbon footprint of their common value chain.

2 The overall recycling process begins by removing the majority of the steel content from end-of-life tires, which are then shredded. The tire shreds are then pyrolyzed.

3 The pyrolysis process involves feeding the shredded tires through a series of high-temperature reactors, which produces several valuable outputs, such as renewable fuels and SCM. The renewable fuels are refined on-site and transported to customers. The SCM is milled and beaded, ready for transportation to customers.

4 The use of SCM by the rubber, plastics and coatings industries increases the volume of sustainable materials used in products and reduces the overall carbon footprint of our common value chain.

Circularity

Continua™ SCM is an unique product by Birla Carbon. Through this, we enable circularity at scale by providing sustainable solutions for tires, mechanical rubber goods, plastics, and coatings industries. It provides performance-enhancing benefits and improved sustainability, marking a significant advancement in sustainable materials within the carbon black industry. SCM represents a pioneering approach in both availability and expertise in sustainable solutions.

To fully realize SCM’s potential, we engage in ongoing collaboration and innovation with our customers, exploring new application possibilities. We are boldly taking risks, embracing uncertainty and stepping out of our comfort zone to accelerate our commitment to “Sharing the Strength.” By pushing our boundaries, we are turning our vision of a circular economy into reality.

Our high-quality sustainable alternatives to traditional carbon blacks are a solution to help stakeholders achieve their sustainability goals and reduce their carbon footprint. These offerings significantly reduce the overall carbon footprint throughout our shared value chain.

Sustainability at scale is one of the key differentiators of Continua™ SCM supported by our technical expertise and reputation as a trusted supplier. Our stakeholders rely on us to deliver circular products that significantly reduce carbon footprints, paving the way for more efficient and cleaner industry value chains.



Over the next five years, we will offer 73,000 tonnes of Continua™ each year for use in a wide range of applications including tires, mechanical rubber goods, plastics, and many more.

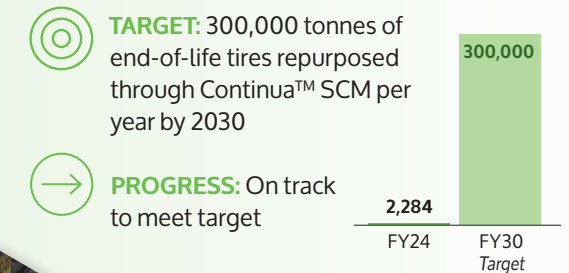
Reprocessing carbon black is also crucial to attaining circularity. Off-grade carbon black is segregated and put through the manufacturing process again till it meets the company’s stringent quality standards. As carbon black has a long shelf life, customers are encouraged to return unused carbon black which is then reprocessed.

Big Bags

During fiscal year 2024, we have partnered with a supplier to pioneer the manufacture of big bags with Continua™ 8000 SCM. Previously the bags were manufactured using traditional carbon black. In India alone, over 29,750 of these bags were used in FY2024. The end-goal of this initiative is to generalize this approach worldwide so that all Birla Carbon products will be delivered to our customers in Continua™ containing packaging in the future. We currently collect and recover used bags to recycle some of the fabrics, and plan on increasing our capacity to do so.

This contributes to our ambition to reach 300,000 tonnes of end-of-life tires repurposed through Continua™ SCM per year by 2030; we are on track to meet this target. Over the past fiscal year, 2,284 metric tonnes of end-of-life tires have been repurposed.

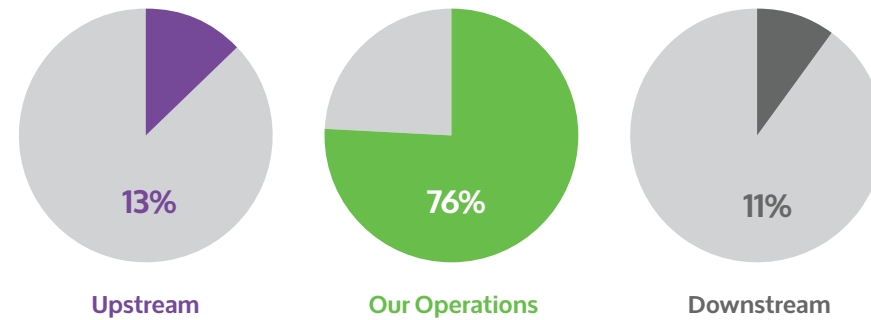
Progress Towards Our Target



GHG Reduction

Our approach to carbon stewardship extends throughout our entire value chain, from raw material extraction to manufacturing, product delivery and product end-of-life. We are committed to reducing our carbon footprint at every stage and embedding circularity into our operations. This commitment supports our goal of achieving net zero carbon emissions by 2050 while also reducing waste, water, and energy consumption.

To guide our greenhouse gas (GHG) emission reduction efforts, we have established interim targets in line with Science Based Target Initiative (SBTi) chemical sector draft guidelines. Utilizing our robust and verified GHG inventory, findings from our LCAs, and our net zero roadmap, we developed a new interim target to net zero by 2050. This target reflects our life cycle approach and commitment not only to consider GHG reduction within our plants, but also throughout our value chain as well.

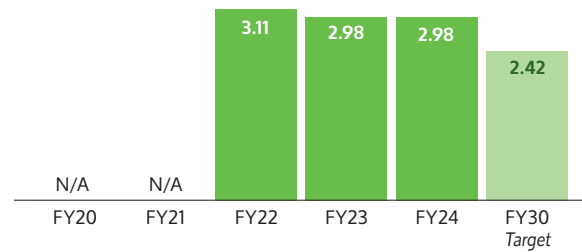


Total Emissions (Scope 1, 2, and 3)
5.6
 million metric tonnes CO₂eq.

Progress Towards Our Target

TARGET: Reduce our Scope 1, 2, and 3 (upstream) emissions intensity (MT CO₂/MT product) by 22% against the FY2022 baseline by 2030

PROGRESS: Behind schedule



Upstream

- 0.89** **Scope 3:** Purchased goods and services (includes raw materials and feedstocks, packaging materials and purchased services)
- 0.05** **Scope 3:** Transportation of purchased materials to Birla Carbon
- <0.01** **Scope 3:** Operation of assets leased by Birla Carbon (i.e. offices and vehicles)
- 0.02** **Scope 3:** Emissions associated with capital purchases (equipment, machinery and construction services)

Our Operations

- 3.70** **Scope 1:** Direct emissions from sources we own or control such as on-site combustion
- 0.06** **Scope 2:** Indirect emissions from the generation of purchased energy such as electricity
- 0.03** **Scope 3:** Emissions related to the production of fuels and energy purchased and consumed by Birla Carbon
- <0.01** **Scope 3:** Waste generated in operations
- <0.01** **Scope 3:** Transportation of employees between their homes and Birla Carbon sites
- <0.01** **Scope 3:** Employee travel for business purposes

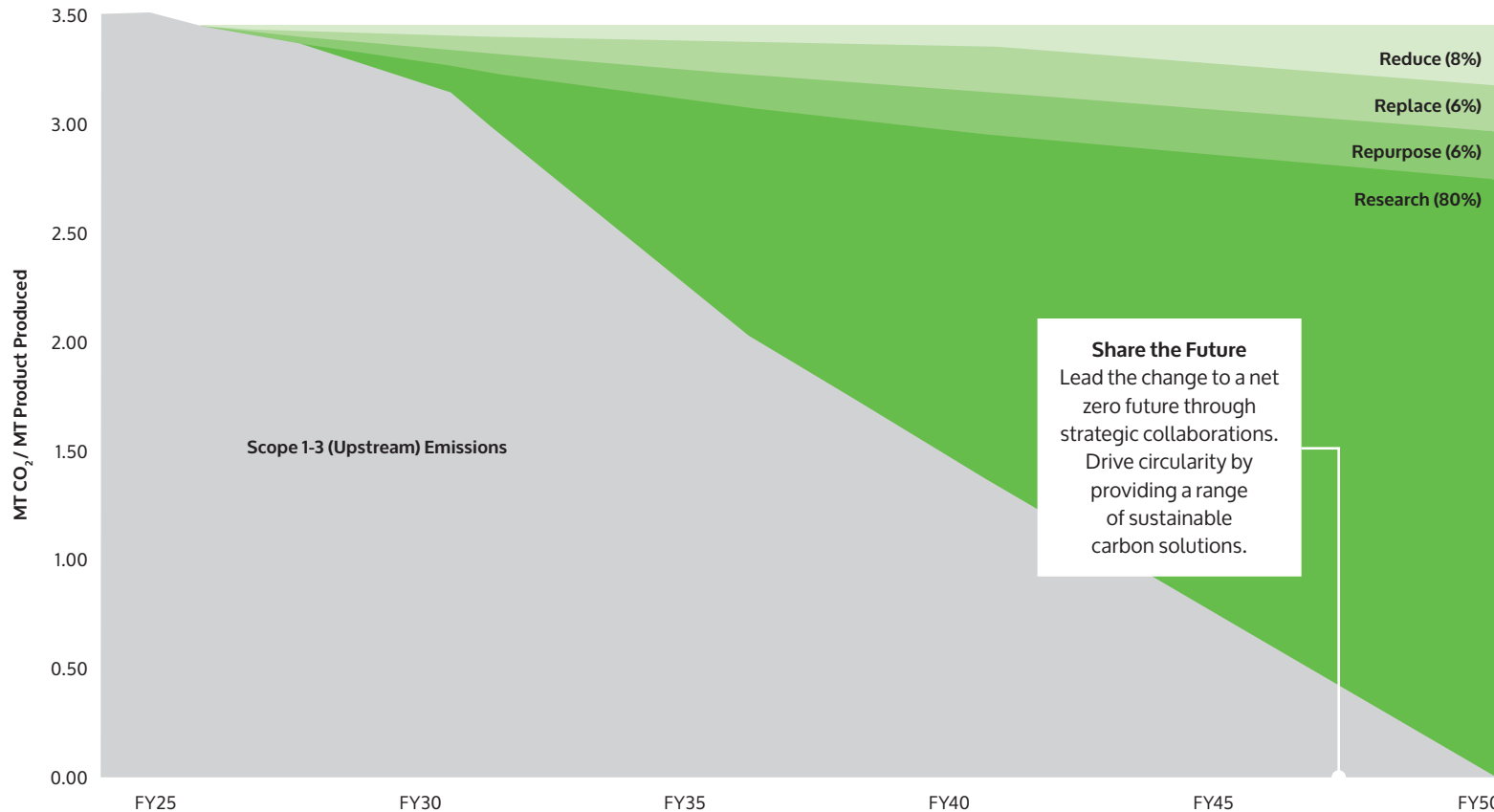
Downstream

- 0.21** **Scope 3:** Emissions from combustion of the tail gas that we sell
- <0.01** **Scope 3:** Emissions from assets owned by Birla Carbon and leased to other entities (i.e. warehousing and storage)
- 0.33** **Scope 3:** Expected end-of-life emissions from all products sold
- 0.26** **Scope 3:** Investments

GHG Reduction

Our strategy for reducing our GHG emissions to achieve net zero remains anchored by the 4Rs: **Research, Reduce, Replace, and Repurpose**. Targeting a reduction in emissions over the coming decades, we will focus on decarbonizing our business and reducing our emissions from our production levels. Achieving this requires industry collaboration, so we are engaging experts and creating long-term partnerships to reach our goal.

Our Net Zero Roadmap



Reduce

Decreasing dependence on traditional processes in manufacturing. Our emphasis is on developing process efficiencies in carbon black production and prioritizing energy efficiencies throughout its operations.



Replace

Substituting with alternative energy and feedstock. Some Birla Carbon locations have introduced renewable energy sources to power parts of their facilities; the focus moving forward will be on adding renewable energy solutions. As previously mentioned, Birla Carbon recently completed four production trials with recycled and bio-derived feedstocks, a contributor to our net zero roadmap.



Repurpose

Determining carbon solutions for sustainability through circularity. Through our Continua™ brand, Birla Carbon leads the industry on sustainability and circularity programs at scale, enabling our customers to develop the next generation of sustainable products.



Research

Innovating our existing processes and looking for new ways to capture and convert carbon. A large part of Birla Carbon's net zero success will come from enablement by future technologies that will capture and convert carbon dioxide into valuable carbon products. Birla Carbon focuses on investment and development of such technologies.

GHG Reduction

Each of our manufacturing locations and offices are pursuing their own sustainability paths. To support their progress, we established employee teams as part of our Share the Future strategy. These teams will focus on sites with the most potential for improvement.

A key component of our net zero target involves leveraging future technologies that capture and convert carbon dioxide (CO₂) into valuable carbon products. We are committed to investing in and developing these technologies and assets. Through this effort, we will reduce our dependency on fossil-fuel based manufacturing processes. We will continue to focus on optimizing processes for converting feedstock into carbon black, and to prioritize energy efficiencies throughout our operations. Additionally, we have an opportunity to replace our current energy and feedstock with low-carbon solutions.

Circularity is one of our core tenets. Throughout this report, we describe how we will repurpose materials employing a circular approach. Through creating more circular products, like Continua™ 8000 SCM, 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. Birla Carbon's net zero ambitions align with the Paris Agreement. We are also aligned with the World Business Council for Sustainable Development's (WBCSD) Tire Industry Project SDG Roadmap⁷, to address the social and environmental impacts of tires by 2050. This supports our environmental commitments as we Share the Strength of our sustainability leadership capabilities for a greener future.



Sustainable Carbon Blacks

In the past year, we conducted four production trials utilizing recycled and bio-derived feedstocks to produce sustainable carbon blacks (SCB). These trials proved our ability to produce high quality ASTM and non-ASTM grades of carbon black with alternative feedstocks. As we scale-up our SCB production capabilities over the coming year, we will conduct an LCA to understand the carbon footprint of SCBs, and we will focus on the safe and sustainable procurement of these new raw materials.



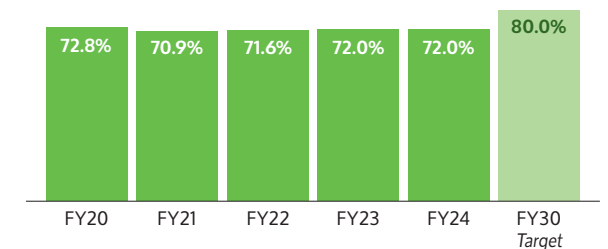
To achieve net zero, technology development must keep pace with our ambitions. The industry must bring solutions forward faster than ever. For Birla Carbon, this means we need to fully leverage our expertise, but we realize that we cannot do this alone. Strategic partnerships are key to achieving net zero GHG emissions."

Marcos Martinez
Director, Process Innovation
Birla Carbon



Progress Towards Our Target

- TARGET:** Increase our absolute energy conversion efficiency to 80%
- PROGRESS:** On track to meet target



⁷<https://www.wbcSD.org/actions/tire-industry-project/>

Water

Birla Carbon’s water strategy considers short, medium and long-term scenarios to improve and mitigate water risks at our facilities. We have integrated water risk management approach into our wider Enterprise Risk Management (ERM) strategy and identified the high-risk sites. The high-risk sites are now incorporating water resource management planning (WRMP) into their business continuity plans.

We strive to minimize our use of fresh and groundwater by seeking opportunities to recycle and reuse whenever possible. The generated wastewater during our manufacturing operations is collected in retention ponds and then redirected for reuse in other processes. As part of our sustainability strategy, we share our water-conservation best practices across all our locations.



We are proud to report that 100% of our manufacturing sites use recycled process water and/or harvested rainwater in their operations.

We have partnered with the World Business Council for Sustainable Development (WBCSD) and the World Resources Institute (WRI) to evaluate water stress levels at our manufacturing sites using the WRI’s Aqeduct™ tool. Additionally, we have supplemented this assessment with an India-specific Water Tool for our facilities located in India.

Our [Water Stewardship Policy](#) aims to protect and conserve water resources through effective management practices and governance. This

approach is guided by a six-step methodology outlined in our policy and is informed by the European Water Stewardship (EWS) Standard, the Alliance for Water Stewardship (AWS) Standard, and the ABG Technical Standard on water management.

Our water-related mitigation plans address both current and potential strategies for managing critical water risks. Potential mitigation measures are implemented with specific deadlines, while existing strategies are reviewed annually as part of our Enterprise Risk Management (ERM) process. Additionally, we encourage our employees to submit innovative water conservation ideas. Birla Carbon regularly evaluates these suggestions and implements them wherever feasible.

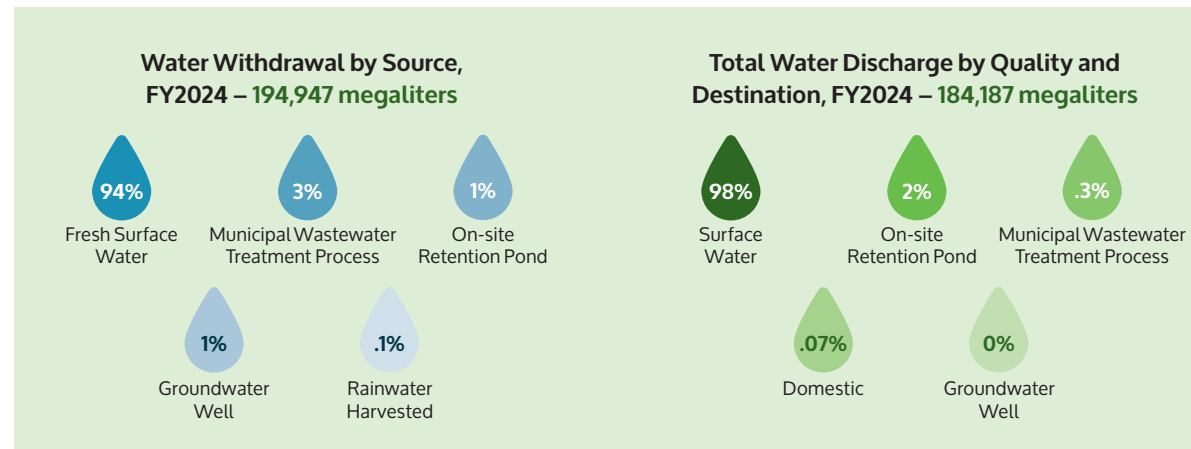
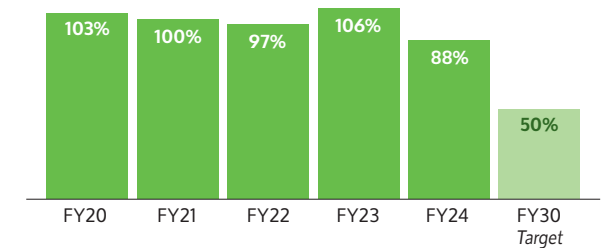
Progress Towards Our Target



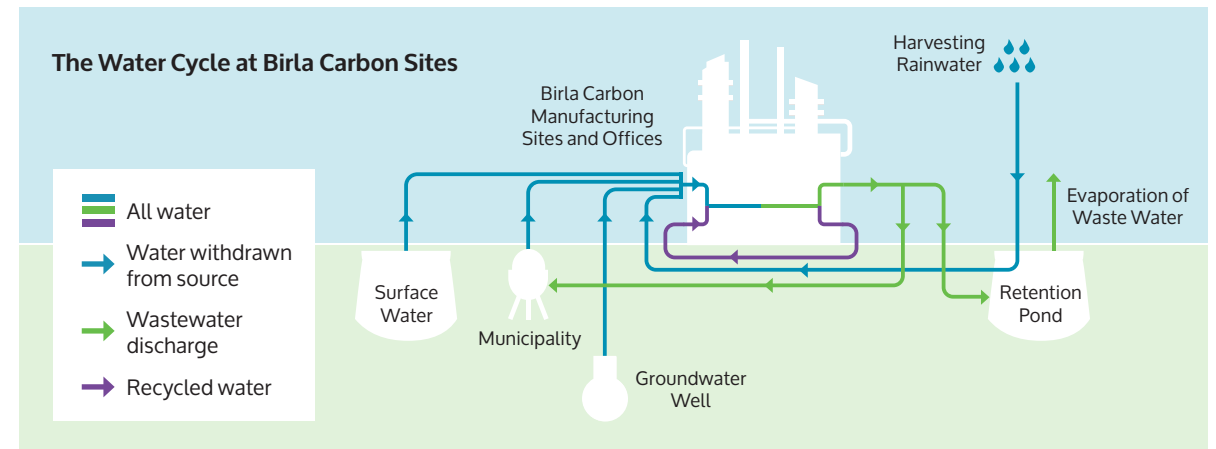
TARGET: Reduce our water withdrawal intensity (m³/t carbon black) by 50% versus FY2013 baseline at our high- and medium-risk sites⁸ (water withdrawal intensity by year)



PROGRESS: Behind schedule



⁸KPI includes Egypt, Hickok, Patalganga, Gummidipoondi, Weifang, and Yeosu.



Waste

Management and minimization of waste is a priority for all Birla Carbon manufacturing sites and offices. Despite the relatively small quantities involved, our industrial processes generate waste, and we are committed to enhancing the circularity within our operations.

Our strategy focuses on reducing waste generation and ensuring that any waste we produce is reused or recycled, whether for the same or a secondary purpose. We adhere to all relevant health, safety, and environmental (HSE) requirements, and we ensure that waste materials are disposed of in the most safe and sustainable manner possible.

We have fully implemented our Waste Management Standard which details the internal procedures for proper accounting, handling, storage, transportation, and disposal of solid and hazardous wastes. This standard defines roles and responsibilities to protect both people and the environment.

Our waste management approach is continually evolving as we enhance our waste identification and accounting practices. We encourage our sites to explore new and updated waste-minimization approaches and standards annually.

Electronic Waste

Birla Carbon's IT team in the United States (Marietta) recycles and donates used technology equipment every year. This effort helps to avoid electronic waste being sent to a landfill or otherwise improperly disposed of. In the past year, Birla Carbon USA donated 30+ laptops, 20+ desktops, 5+ monitors, and projectors with a total value exceeding \$150,000 USD. Through this program we were able to recycle an additional 25+ laptops, 10 desktops, 5 monitors, and 20+ printers, among other e-wastes.

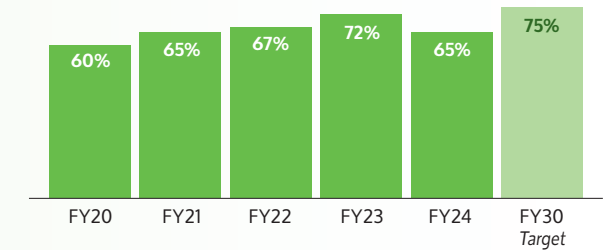


Food Waste

Since 2020, the canteen at our Trecate, Italy facility has been using single-use plates and cups made from fully compostable cellulose pulp. In our Gummidipoondi and Patalganga facilities in India, food waste is composted and repurposed as fertilizer. Additionally, at the Patalganga plant, we promote awareness of food waste by displaying daily updates on the quantity of food discarded.

Progress Towards Our Target

-  **TARGET:** 75% waste repurposed, including recycling, reuse and recovery, by 2030
-  **PROGRESS:** On track to meet target



Reprocessing Off-grade and Unused Carbon Black

When we produce off-grade carbon black, rather than disposing of it, we segregate it and put it through the manufacturing process again until we have a product that meets our stringent quality standards. As carbon black has a long shelf life, customers are also able to return unused carbon black to us so it can be reprocessed. For example, our Italian site has partnered with a supplier that has the capability to repurpose off-spec carbon black in specific plastic and rubber applications. This way, not only are we reducing the waste that we generate, but we are also taking steps to close the loop on our production.





Air Emissions

We are dedicated to minimizing air emissions from our manufacturing processes. Through our commitment to Share the Future strategy, we continually seek out the best processes and technologies to reduce these emissions.

We monitor our air emissions closely to ensure compliance with local regulations wherever we operate. Additionally, we have established policies and procedures to promptly notify local authorities and take necessary actions if emission thresholds are exceeded.

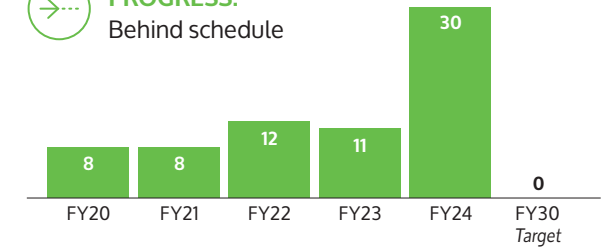
Investing in Technology

We continue to invest in and promote technological improvements, such as state-of-the-art filter materials that ensure maximum containment and recovery of carbon black dust. In addition, we are evaluating the technologies and assessing how they can be implemented across our operations. A balanced approach is key: technologies for air emissions control can have high water and energy requirements, so implementation must be considered in a holistic way and on a case-by-case basis.

Progress Towards Our Target

TARGET: Record zero environmental releases year

PROGRESS: Behind schedule



Due to the proximity of some of our facilities, where the neighbors are now at our property boundary, we have taken an extremely aggressive approach on reporting any and all emissions, no matter how small or insignificant. Our internal standard is to report any release of carbon black greater than one pound to ensure we can identify and correct any leakage quickly. We are using this more aggressive approach with regard to any release to truly minimize the impact on our neighbors and the environment.



Social

At Birla Carbon, our HR strategy is designed to ensure that we engage our employees and offer opportunities to help build successful careers through a wide range of learning and development opportunities.

Attracting, developing and retaining talented employees is a key priority and our talent philosophy is also intricately woven into our HR strategy, forming a seamless connection with our overarching business strategy.

We are driven by a commitment to innovation and by an ambition to foster supportive workplaces that empower each employee to meet their full potential. Vital to achieving this, is caring for our employees and catering to their needs, and this same commitment to people goes beyond our workforce. Through strategic collaborations, we address pressing community challenges, aligning our actions with the United Nations Sustainable Development Goals (UN SDGs). As a result, we help fortify resilience, both within our organization and throughout the communities we reach.

We support the following SDGs through our work:



41
HEALTH AND SAFETY

49
DIVERSITY, EQUITY, AND INCLUSION

45
TALENT MANAGEMENT

51
HUMAN RIGHTS

48
EMPLOYEE ENGAGEMENT

52
COMMUNITY ENGAGEMENT



Health and Safety

We hold health and safety in high regard and it is a key area of attention and effort. We continue to focus on creating a safety culture and mindset of safety excellence throughout all levels of our organization.

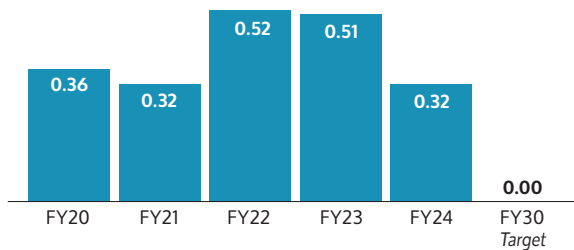
Progress Towards Our Target



TARGET: Achieve zero recordable injuries year on year (employee and contractor Total Recordable Incident Rate (TRIR) per 200,000 exposure hours)



PROGRESS: Behind schedule



This starts with our leadership setting clear expectations for working safely, providing the necessary resources, incentivizing the right behaviors and holding people accountable for their actions. Our vision is to realize zero incidents in the workplace, because for us Zero is the only acceptable number when it comes to safety related incidents.



FY2024 was a strong year for our safety performance, with a 40% reduction in our total recordable incident rate.



The challenges we face include raising the profile of health and safety in the local cultures where it may not be viewed as a priority, ensuring that all contractors comply fully with all our policies and procedures, and communicating safety messages in an appropriate, relevant way in different markets. Our strategy focuses on introducing and revising global standards, developing tools to help our sites implement these standards, and using audits to identify programs and cultural gaps and apply systemic corrective actions.

Building a strong safety culture takes time; we do not pretend to be at the end of our journey. There is always room for progress at every level as we develop a workspace in which we take responsibility for the safety of every one of our employees. Our culture of

safety is created by engaged individuals who actively manage their risks every day and our aim is to create a culture where all employees are aware of the risks they face and take active care of others: when someone observes someone at risk, we want them to stop and take action to help avert accidents.

Our workers are empowered with Stop Work Authority (SWA). The SWA program provides employees and subcontractors the ability to stop work in unsafe conditions or if continuation of unsafe behaviors would result in serious injury. It is essential because it authorizes all employees, despite their role. It stops the emotional impact of incidents in the workplace and builds our safety culture.



Safety must become a culture itself and to this end, we are focusing on various safety, environment, and health programs and processes. In addition, we are further strengthening safety towards zero accidents with the goal of going home safely. Birla Carbon Korea is routinely recognized as a champion of workplace safety. Our Yeosu unit has implemented HSE related value systems and the team is in charge of planning and promoting work related to these key pillars, so that all workers, including employees and partners can work safely and be healthy."

Jaegwang Lee
HSE Manager
Birla Carbon Korea

Birla Carbon is routinely recognized as a champion of workplace safety.

In September 2023, Birla Carbon India (Patalganga) was awarded with the **Safety Innovation Award 2023** by The Institution of Engineers in New Delhi. Patalganga was selected through a two-stage screening process and was granted the Safety Innovation Award 2023 in the Chemicals & Fertilizers Industries category.



In 2023, Birla Carbon Spain (Santander) was honored with the prestigious **COASHIQ (Business Association for Safety, Hygiene, and the Environment in the Chemical Industry) Safety Management Award**, which recognized its achievement of zero safety accidents. We thank COASHIQ for this honor and all our team members for their commitment to excellence in safety management. We will continue striving to maintain and exceed these standards in the future, reaffirming our position as leaders in the chemical industry.

E-Permitting System

Work permitting is the last opportunity to identify risks and hazards by the personnel involved before beginning a task. The e-permitting system for issuing work permits was born from an employee recommendation and is operationalized by our Health, Safety, and Environment (HSE) team. The software enables employees to issue work permits in a way that will increase safety and efficiency and decrease risks.

Birla Carbon Canada (Hamilton) was the first plant to implement the new process, with other sites to follow. Ensuring that our work teams can identify and address the risks and hazards of each job is key to ensuring the safety of the individuals involved in the work. The new electronic work permitting system allows key information and lessons learned on particular jobs/equipment, as well as equipment-specific requirements, to be quickly and easily included in the work permit, combined with the ease-of-use of the new electronic permitting tool which will help strengthen our overall permitting system and make permitting more efficient.



FEIQUE (Business Federation of the Spanish Chemical Industry) has awarded Birla Carbon Spain for achieving a **zero accidents rate in 2023** at its site in Santander. The award was presented by the Autonomous Safety and Health Commission of Chemical Industries of Spain.

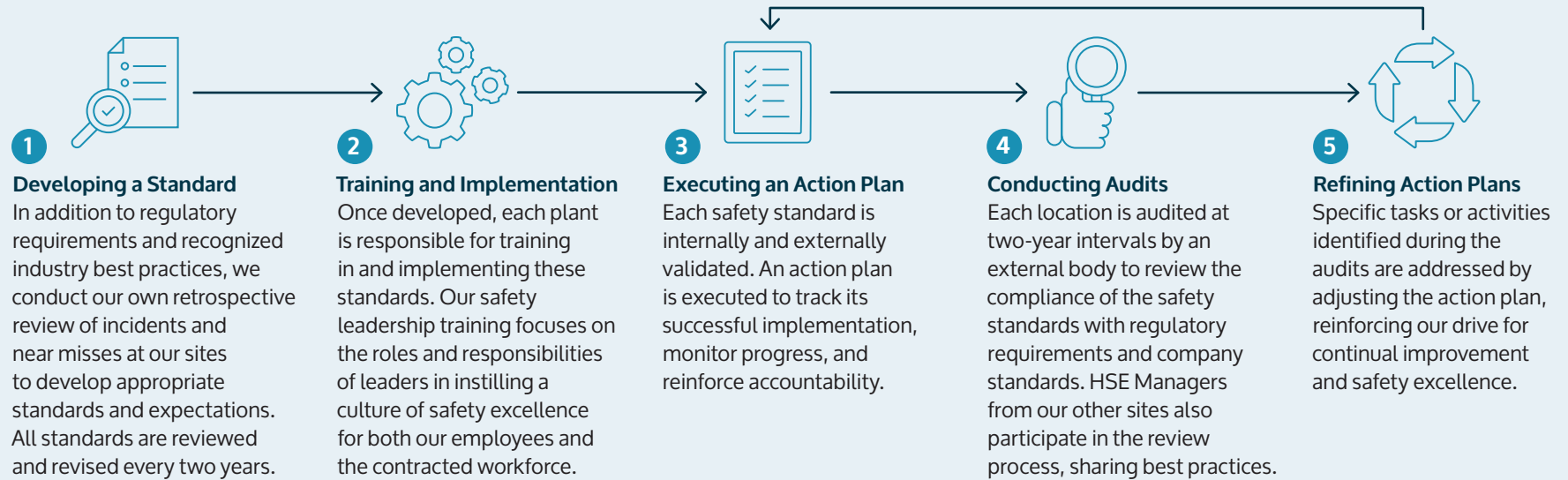


Health and Safety Programs

We prepare our people as much as possible to identify and manage the safety risks they might face while working in our facilities. This preparation includes adherence to clear standards, processes for issuing work permits, education, training, auditing and follow-ups to reinforce accountability.

Safety Management

Our approach to safety and health management involves a methodical, five-step process to ensure that each standard is entirely applicable to our operations.



World Health and Safety Week

Between April 24th – 28th, 2024, we celebrated the International Labour Organization’s World Day for Safety and Health at Work. We achieved global participation from 16 manufacturing locations, two corporate offices, and Birla Carbon sales offices.

The Safety Theme of the week was:

“Do what is right, not what is easy!”

The key points that we messaged across our global team included reviewing lessons learned from past incidents, identifying methods to promote near-miss reporting, generating grassroots plant-specific safety improvement ideas, celebrating employee safety contributions, and ideating on how to make safety fun and interesting.

Participants enjoyed a full agenda including:

- A welcome video recorded by the Senior Management Team to demonstrate safety commitment and leadership
- Authoring individual safety commitments on banners that hang in common areas
- Training on Safety Quickbooks, our simplified Global HSE reference book
- Attendance at daily safety toolbox talks focused on specific topics
- Filming and viewing of plant-specific safety scenario videos (2-3 minutes each)
- Safety skills assessments whereby employees practiced responding to fictitious incident scenarios and were assessed for timing and accuracy
- A “hazard hunt” game where employees identified hazards across operating departments and noted possible countermeasures
- Video creation with family members to celebrate personal safety commitments and reinforce the importance of safely returning to the home each day



Altogether, a total of 3,000 employees and contractors participated in the event and approximately 380 employees were recognized over the course of the week.

The Safe Six: Key Health and Safety Risks

We encourage everyone working at our sites to make a personal safety commitment to change the overall safety culture of our business, including consideration of The Safe Six. These six key occupational health risks are a central component of our Serious Injury and Fatality (SIF) initiative and represent areas where high precision is essential to prevent a serious injury or fatality.

All our employees receive regular training related to the Safe Six critical areas, including online and through our Gyanodaya Virtual Campus Learning App. Our micro-learning modules provide a full training program for employees in short, bite-sized segments that can be viewed over a mobile phone or other portable devices.



Working at Height

Use all prescribed personal protective equipment (PPE) for the task, including fall protection when work is performed at heights of above two meters.



Hot Work

Secure a hot work permit and follow permit precautions when performing any spark-producing work, such as grinding or welding.



Lockout/tagout (LOTO)

Isolate and verify all types of energy, including electrical, hydraulic, pneumatic and stored, when performing maintenance on equipment. Follow line-breaking procedures when opening equipment that may contain hazardous materials.



Mobile Equipment

Be aware of limitations and safety requirements, including the one-meter rule, for operating or working around mobile equipment such as forklift trucks.



Confined Space

Follow procedures for identifying and controlling risks prior to and during an entry into a confined space to ensure it is safe to enter.



Electrical

Enable all employees to recognize potential electrical hazards and risks; develop systems and procedures, including the use of specialized protective equipment, to reduce the potential risks of arc flash and electrical shock for persons qualified to service and maintain plant electrical systems.



Serious Injury and Fatality Initiative

We strive to keep everyone who enters a Birla Carbon site safe. SIF focuses on high-risk tasks and situations. It has an important emphasis on identification of risks and hazards, focusing on minimizing the hazards to the greatest extent possible. According to the Campbell Institute at the National Safety Council, 85% of all serious injuries and fatalities are preceded by near-miss events.

We continue to track and investigate events with SIF potential and share these results with all sites through

safety alerts. Where necessary, global corrective actions are implemented and tracked to completion. In 2022, we updated our internal standard on SIF prevention in line with learnings from Birla Carbon's participation in the development of a SIF standard for the Aditya Birla Group (ABG).



High Energy Control Assessments (HECA)

As a part of our SIF reduction efforts, we have introduced our HECA process as a tool for sites to review the controls in place for high energy tasks. This process evaluates the effectiveness of direct controls to minimize risk before a task begins. We have also created a Severity Index of the past three years of incidents and near misses.



TRIR decreased from 0.51 in FY2023 to 0.32 in FY2024, a 40% decline.

Protecting Our Contractors

Improving our HSE performance demands that we work closely with contractors who may not currently work to the same standards we expect from our employees. Contractor safety was a key focus for audits conducted in FY2023 due to the increase in incidents in FY2022. In FY2024, we also maintained focus on the importance of contractor management. our contractor TRIR was 0.32 and the LWCR was 0.22.

In FY2022, our sites in North America renewed our contract with Avetta, a third-party risk management provider, to improve the qualification process. Avetta collects information from contractors, including safety incidence rates, insurance coverage and HSE programs, based on Birla Carbon specifications. The information is evaluated and scored, with each contractor assigned a rating. Only those that meet Birla Carbon requirements qualify to work in the plants. The process has saved the sites time in qualifying and selecting contractors.

Talent Management

We believe that we achieve the best results when we are open to other perspectives and work together to make a difference. To maintain our industry-leading position, we seek to engage and attract bright minds in the countries where we operate.

We aim to be an employer of choice in every geography we operate in. We place emphasis on targeted internal movement and continual engagement with our employees. Our progress as a company is driven by both the expertise of our seasoned carbon black professionals and the continual exchange of ideas with the next generation of engineers and scientists. For this purpose, we continue building partnerships with local colleges and universities and invite interns to gain realistic work experience with us.

Our talent philosophy is intricately woven into our HR strategy, forming a seamless connection with our overarching business strategy. We have a robust talent management framework encompassing talent identification, segmentation, and development processes.

High-potential individuals are identified and nurtured through specialized programs such as Skills Enhancement and Accelerated Learning (SEAL), Shadow Board participation, Development

Assessment Centre (DAC), and Coaching and Mentoring initiatives. However, our commitment to talent development extends beyond this select group. We offer developmental opportunities to all employees, facilitating career growth through avenues like job rotations and participation in Management Development Programs. This integrated approach not only strengthens our talent pipeline but also ensures that all our employees can thrive and contribute to our organizational success.

We build effective partnerships with colleges and universities through our participation in the ABG Leadership Program (ABGLP). The cohort is offered global project opportunities in varied business functions, such as Operations, Marketing, Finance and HR. We have also developed effective partnerships with engineering colleges to hire under the Engineering Leadership Program (ELP's) globally.



At Birla Carbon, we aim to be the employer of choice in every geography where we operate. To achieve this, we have a robust talent management framework encompassing talent identification, development processes and exclusive financial grants. We nurture talent and provide opportunities within the business and the Group for individuals to succeed in their professional careers."

Venkatachalam H. Kadayam
Chief Human Resources Officer
Birla Carbon

Our HR Vision and Strategy

Birla Carbon creates an aspirational workplace for diverse groups of people. It focuses on five key pillars. These pillars are supported by action plans that are equipped to achieve our HR goals for the year.



Employer of Choice

Recognized for its DEI practices as a great place to work for diverse workers in the industry



Culture and Engagement

Enabling a culture for empowered and engaged employees



Career and Talent

Providing avenues for career velocity and building a talent pipeline to support business growth



Capability Building

Business-critical capability for a future-ready organization



Consumer-Grade Experience

Differentiated and personalized employee experience built through digital enablement of HR processes



Birla Carbon Kaleidoscope

Across the corporate universe, businesses are talking about the value their branding brings to the market. Whether the benefits are tangible or intangible, everyone wants to tell their story.

Birla Carbon is no different. We, too, want to tell our story of how we make a difference in the world. This story, though, is a little different. It is not about who we are or what we want to be. This story is not about our discoveries and our solutions. **This story is about our experience!**

We want to share with our listeners - what it means to work at Birla Carbon. We want our employees and colleagues who represent the values of the Aditya Birla Group and Birla Carbon to tell their stories firsthand. We want our listeners to hear about their experience!

Diversity, Equity, and Inclusion (DEI) plays a key role in our overall business and sustainability strategies. To be diverse in engaging our employee groups, to be an equal opportunity business for our employees, and to be an inclusive company where every voice is heard, can be one of the key factors that make the difference in an organization's growth story.

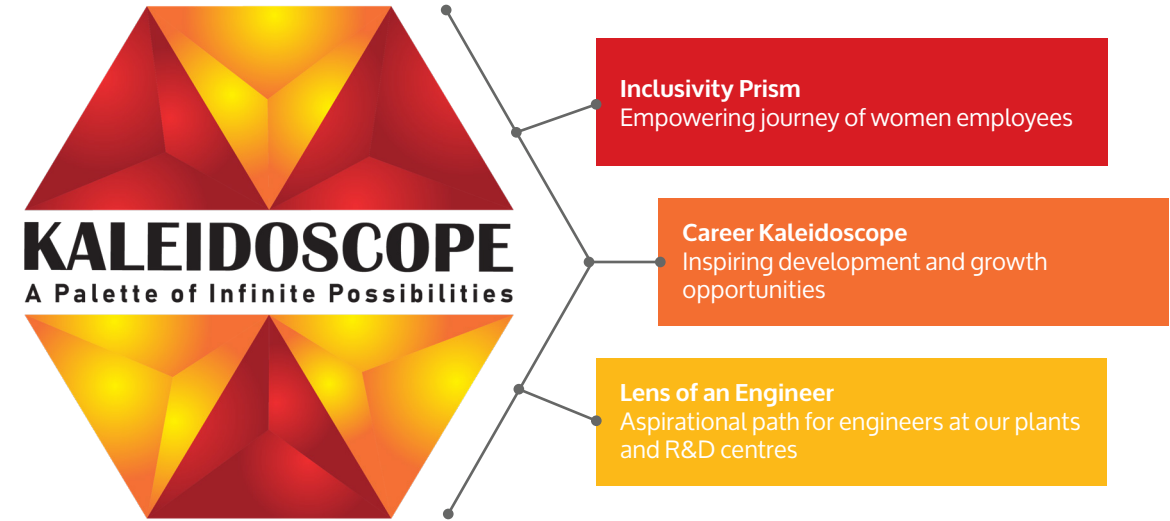
To witness the Birla Carbon Growth story, one needs to view it through a Kaleidoscope – the **Birla Carbon Kaleidoscope - A Palette of Infinite Possibilities**.

It represents a transformative journey where vibrant opportunities and diverse experiences converge to create an expansive palette of possibilities. The tagline "A Palette of Infinite Possibilities" encapsulates the wide array of opportunities articulated through three distinct themes of:

- 01 Inclusivity Prism**
- 02 Career Kaleidoscope**
- 03 Lens of an Engineer**

Every month, we feature a story from different countries under one of the above themes to offer a glimpse of diverse opportunities, showcase employee stories highlighting geographical spread and diversity to communicate a strong and positive employer brand.

Birla Carbon is active across our social media accounts, including [LinkedIn Affiliated Pages](#). We continuously aim to educate the public, grow our audience, and enhance our brand recognition. In countries where English is not the primary language, our robust social media presence helps us better engage with potential future employees.



This initiative has been well-received across various social media platforms. Employee stories on #BirlaCarbonKaleidoscope themes have emerged as top performing posts on LinkedIn in the last 4-5 months consecutively. We believe the efforts will continue to enhance our external brand perception as we expand our coverage by showcasing employee stories across the global footprint of Birla Carbon. I would like to take a moment to express my deepest gratitude to our participants for their incredible contributions in sharing personal stories and exciting career journeys. By acting as ambassadors, our teams have showcased the values and cultures that make Birla Carbon a unique and special place to work. These stories have built a strong connection internally and have resonated with others beyond the business, reflecting the true spirit of what it means to be part of a truly inclusive organization."

Avijit Roy
SVP, Global Human Resources
Birla Carbon



Learning

From the plant floor to the sales floor, our passion for learning has no ceiling. We encourage our people to continue to learn throughout their careers by providing multiple opportunities and platforms to fit their needs, enabling them to meet career aspirations and perform successfully.

At Birla Carbon, our HR strategy is designed to ensure that every employee has access to a wide range of learning opportunities. The Learning & Development Team develops knowledge and capabilities of people and enables its use for the benefit of the organization by facilitating planned learning inputs and learning on-demand. The endeavor is to align the learning interventions with the business' strategic agenda with a focus on organization capability building. Birla Carbon's learning strategy is aimed towards empowering employees to take ownership of their development plans.

The classroom learning opportunities are offered through Gyanodaya and Gyanodaya-West. To enhance our learning offerings, we introduced our in-house curated programs under **RALLY (Learning and Recognition Ally)**. Through RALLY, we utilize the AI powered GVC (Gyanodaya Virtual Campus) platform to provide engaging content in the form of videos, e-learning, articles, self-assessment modules, etc., that align with the development and business

needs. We leverage a variety of learning tools (e.g., quiz, trivia, gamified modules) to elevate the learning experience of employees. Also, to make learning accessible to all employees, learning channels in local language have been curated in the learning platform.

We have made significant strides in augmenting the technical skill development through the launch of **"BuildTech" – Birla Carbon's Technical Academy**. BuildTech serves as a comprehensive hub for technical training and provides collaborative learning environments through a Community of Practice for various technical groups. It is instrumental in establishing a robust technical training infrastructure, supporting the development of our talent pipeline, and advancing our Share the Strength mission.

We designed a **SEAL (Skills Enhancement and Accelerated Learning)** journey program to engage emerging professionals through an immersive developmental experience that focuses on building functional, behavioral, and contemporary skills. This program aims to make the first 10 years at Birla Carbon, a professionally enriching and memorable experience for the participants. SEAL employs a 70:20:10 development methodology providing learning-based opportunities to develop personal leadership skills, exposure to diverse business functions, and development of modern interpersonal skills, respectively. Participants receive ample feedback related to their functional skillset and are offered additional support via peer and mentor interactions. The program concludes with a capstone project and job shadowing to solidify the learning experience.

This comprehensive approach to employee development underscores our commitment to nurturing talent and fostering growth within our organization. Birla Carbon firmly believes that investing in our employees' learning and development is key to our continued success.

By combining the best of local learning with our worldwide network, we can take our expertise to global levels. Our enterprise learning management system is designed to enhance employee skill levels, encourage employees to apply the knowledge gained to real-world situations and conduct all trainings from a centralized source. The platform records all learning activities,



and an online library of over 1,000 courses including courses from Coursera and Skillssoft that is available to all employees at no cost. Courses are provided in multiple languages, covering a range of topics – both functional and behavioral.

Global and Local Employee Recognition

There are several programs across units, regions and business through which we recognize individuals and teams who go above and beyond their defined roles. The **APPLAUSE platform**, our first real-time online global recognition program, was launched in FY2020. APPLAUSE offers a common platform where any employee can recognize their colleagues across the organization, irrespective of location, function or level. The categories of recognition are tied to our Purpose and Values, to which all employees across the globe can relate. A wide range of redeemable online gift options are available, sourced from local vendors, which makes the platform eco-friendly and diverse. Exceptional individual and team performance are recognized through our Performance Recognition in Delivering Excellence (PRIDE) program, which includes monetary rewards for outstanding contributions to the business.

Employee Engagement

Maintaining a motivated and inspired global workforce is instrumental to our success and learning how our employees feel is crucial for developing as an organization.

We have a diverse workforce with a broad geographical spread, and we seek to engage all our people as we support them and their lifestyles. Every two years, we conduct our employee engagement survey, called the Vibes survey.

The Vibes survey provides valuable feedback from management, which helps us develop and execute action plans in specific areas that are tracked at local, regional and global levels. We conducted

our most recent Vibes survey in FY2024, with a 95% response rate. The survey shows that we are now achieving, or scoring higher than the industry benchmark for employee engagement, highlighting that employees are proud to work for Birla Carbon. The results have been distilled into action plans in each region and unit. We continue to work on the action plans and track the progress thereof over the next two years.



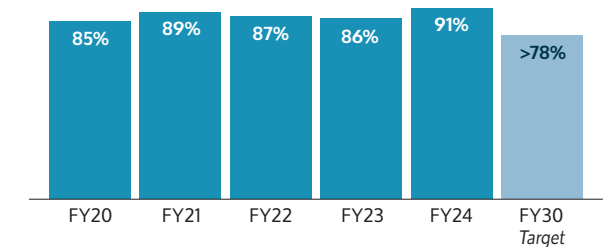
Cultural Activity Spotlight

In early February 2024, Birla Carbon Brazil hosted an event at the Cubatão and Camaçari plants, as well as the Santos office, where employees' children were invited to visit their parents' workplaces. The Cubatão plant welcomed 60 children who were then engaged in several activities, including a plant tour. They also had the chance to view their parents' workplaces during this trip. The next day, it was time for the children of the Santos office to pay a visit to that location.

They were received with a welcome beverage, and all employees at the office participated during their day-long trip. The children enjoyed a surprise visit from popular superhero and children film characters. It was a great experience for all the employees involved. The program has been welcomed very well by our employees and their children, and organizing this visit and bringing the children to their parent's place of work was a step in bringing their families closer.

Progress Towards Our Target

- TARGET:** Remain above the chemical industry annual benchmark for employee engagement⁹ (%)
- PROGRESS:** Target met and retained



⁹This KPI was amended in FY2020 to exclude the results of the Team Vibes survey. It has also been modified to show results for calendar year rather than financial year, in line with Vibes survey timings.

Employee Resource Groups (ERGs)

A women centric ERG has been created for the women in Asia. This ERG is called WIN@Birla Carbon. The vision of this ERG is to energize, engage, empower all women employees through a supportive community networking platform to share experiences, learn and develop together, cultivate strong bonding with each other and create an inclusive environment.

Globally, WISE (Women in Safety & Environment) is a women empowerment group within Birla Carbon, that supports women employees in collaborative learning, celebrates each other's strengths, and finds resources to grow and improve members as strong women leaders. Members of the WISE group work together to make changes to themselves and their respective sites. Membership is open to all Birla Carbonwomen colleagues. It represents a great networking opportunity and offers tangible benefits to women from different cultural backgrounds with diverse professional experiences.

WISE Mission Statement

"Women empowering women in the HSE space to foster an inclusive community for professional growth, bring awareness to current challenges, and position women as future leaders of the organization."

The WISE ERG has been beneficial in that it is our first global platform that connects women across functional areas and geographies. For example, those interested in developing their own health and safety capabilities are connected with current women team members who themselves are in roles focused on safety and environmental health.

Women colleagues who participate in WISE can take advantage of career and community opportunities, such as gaining access to senior women in leadership for mentoring or training, attending network events beyond their immediate function, and otherwise increase their overall competencies by honing transferable proficiencies in communication, collaboration, organizational management, and interpersonal skills. Moreover, WISE members create and enjoy a mutual sense of belonging and empowerment.



WIN
@ BIRLA CARBON
Engage. Empower. Energize!



Human Rights

We respect human rights in all our business activities but acknowledge that there are varying risks in different regions. Our aim is to take proactive steps to prevent and address any negative impacts we may have on the rights of the people we employ, do business with, or interact with.

The issue of human rights is a major element of both our [Code of Global Business Ethics and Compliance Standards](#) and [Supply Chain and Procurement Policy](#). We strive to comply with, and exceed, laws and regulations wherever we operate, as well as adhering to international standards. Our [Human Rights Policy](#) sets out our commitments in line with the UNGC principles, of which we are a signatory. It covers key issues such as due diligence, employee and stakeholder engagement, diversity and equal opportunities, forced labor and child labor.

Grievance Measures

We request that our employees voice any concerns or grievances they have about our operations, other employees or our products, and we expect our contractors and suppliers to do the same. To this end, we provide reporting channels enabling them to do so. Our hotline is available for any Birla Carbon stakeholder to anonymously report, via telephone, text message or email, any illegal or non-compliant behavior they observe. The hotline is run by an independent third party 24 hours a day, 365 days a year, and escalates issues to our Internal Audit Department and Chief Legal Officer. Employees may ask questions concerning actual or potential situations, and calls made to the hotline are handled in full compliance with local law. Depending upon the issues, these are then investigated by a team of auditors and/or HR professionals. The hotline is available at all our plants and offices.

Antitrust and Anti-corruption

We are committed to complying with antitrust and anti-corruption laws in all locations where we conduct business, and we intend to uphold competitive free enterprise while prohibiting payments or promises to pay anything of value to obtain or retain business.

Collective Bargaining Agreements

We are committed to absolute fairness when it comes to employee concerns such as wages, working hours, benefits and conflict-resolution processes. As such, we sign legally binding collective bargaining agreements to ensure we operate fairly and consistently with all our staff. Some of our sites are unionized. If conflicts occur, we have communications and conflict-resolution measures in place for our employees to make their concerns known.

Due Diligence in Our Supply Chain

We understand the importance of building a sustainable supply chain, and we expect our external partners to adhere to the same standards

and principles of ethics and integrity as we do. It is vital that every member of our supply chain demonstrates responsibility and transparency. All major suppliers receive a copy of our [Code of Ethics](#) in their own language, which they must review prior to the request-for-proposal stage. We require all our suppliers to sign Birla Carbon's [Terms and Conditions](#) (T&Cs) of Purchase. Our Purchasing Policies require use of these standard T&Cs.

We ensure that all new vendors are vetted via NAVEX Global's RiskRate® system. Birla Carbon will not engage with any new vendor with a RiskRate® red flag. We also work with EcoVadis to screen our key suppliers and rate them based on sustainability performance to ensure alignment with our own sustainability goals.

Grievances Received	FY20	FY21	FY22	FY23	FY24
Hotline calls (total)	17	24	22	33	21
Calls investigated	16	24	17	28	20
No further action needed	6	13	9	5	12
Resolved through collective bargaining	5	4	0	0	0
Corrective actions	5	2	7	17	8
Formal community grievances	0	0	0	0	0
Human rights grievances filed and resolved	1	0	0	1	1



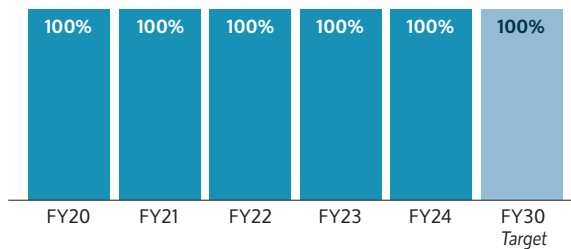
Community Engagement

Birla Carbon engages closely with communities in which it operates and serves, to understand and address the region's priorities. Our social investment programs, developed in partnership with local community groups, are designed to support the requirements of the local people and deliver long-term socio-economic benefits to the people in the region.

Progress Towards Our Target

TARGET: 100% of our facilities participate in community engagement

PROGRESS: Target met and retained



Through our efforts, and in alignment with the United Nations Sustainable Development Goals (UNSDGs), we provide targeted programs, focusing on:

Sustainable Livelihoods



Access to Healthcare



Quality Education



Community Infrastructure



Through addressing our communities' most pressing challenges, we are helping to make local people, and Birla Carbon, more resilient.

All our operating sites have individualized social impact programs, unique to their local needs, depending on the development priorities of the region. A region's engagement approach includes community needs assessments, regular communication and interaction, and a collaborative development attitude towards the social programs. Our community strategy is driven by community officers in each plant across the business and is governed by plant managers.

Our [Birla Carbon Stakeholder Engagement Policy](#) includes clear standards for our sites to aim for when it comes to engaging with their local stakeholders, including embedding the principles of inclusiveness, transparency, materiality, completeness and cultural appropriateness in all engagement activities. Our approach to engaging with communities includes building lasting, mutually beneficial partnerships with the people impacted by our operations.

Social Impact Programs

Sustainable Livelihoods

Brazil

In December 2023, the employees of Birla Carbon Brazil participated in the donation of food, toys, and other products for children and families of two local organizations. With the engagement of the volunteers and other employees at the three locations, they collected around 600 items, which were shared with families from the community and attended by two charity centers.

Kennesaw, Georgia, USA

Birla Carbon partners with Kennesaw State University in Georgia. Now in its 10th year, we have pledged \$65,000 to offer scholarships to students. Since inception, Birla Carbon has supported 103 researchers through this partnership, building a credible reputation with the university's College of Science & Mathematics. Discussions with relevant stakeholders are being held on how to grow the partnership to support more students in partnership with Birla Carbon.



Birla Carbon Brazil

Social Impact Programs

Access to Healthcare

Hungary

In August 2023, the Hungary team participated in a charity half marathon run in the Bükk Mountains, to support the regional children’s hospital. Twenty employees took part in the different mountain marathon distances: 21 km, 10.5 km, 5 km, and an 800 meter family run. All the runners performed successfully, and Birla Carbon secured first and second place in the 21 km and 5 km runs. Overall, Birla Carbon Hungary emerged as the most successful team among the other supporting companies in the region.

Hungary charity half marathon



Patalganga health check-up camps



India

In September 2023, Birla Carbon Patalganga organized various health check-up camps under its local CSR health and hygiene initiative. The hospital medical team screened 120 patients during the event and performed various medical tests to a historically under-resourced community. Where required, the patients were provided with medicines as per the doctor’s prescription.

Italy

In 2023, Birla Carbon Italy provided multifunctional games to an elementary school in Trecate. We also collaborated with “LILT” (Italian League for the fight against tumors) and organize an information session on the prevention of female tumors and offered free breast examination visits. Every year, Birla Carbon Italy collaborates with the AIED an association that deals with violence against women, as mentioned in the feature on [International Women’s Day](#).

Italy plant and LILT information session



Social Impact Programs

Quality Education

Canada

Birla Carbon Canada supported the 2056 Robotics Team from one of its local high schools in the Hamilton area that had been competing in the annual FIRST Robotics Championship. Birla Carbon contributed a total of US\$ 1,000 as the “bronze” level sponsor for the team. FIRST was created to inspire young people to become science and technology leaders by engaging them in exciting mentor-based programs that build science, engineering, and technology skills, that inspire innovation, and that foster a well-rounded life including self-confidence, communication, and leadership where high school students showcase their brilliance in Science, Technology, Engineering and Math (STEM).

China

Birla Carbon China contributed to the neighboring Ershilipu Junior Middle School to support youth literacy. Our team contributed to the infrastructure improvement of the school’s library, laboratory, and tutored students. Our company was thanked with a scroll featuring traditional calligraphy. The inscription implies that Birla Carbon has high morals that display generosity and selflessness, inclusiveness, and humility.

Supporting youth literacy at Ershilipu Junior Middle School



Hungary

In August 2023, the employees of Birla Carbon Hungary donated school bags, exercise books, pencil cases, and drinking bottles for the kids who needed these items. The team demonstrated the importance of diversity and equity by choosing different colors, and a variety of stationery items, which co-relate to the different children and their unique talents within a classroom. In each of the backpacks, the employees also placed the social value of carbon black storybook for each child to introduce carbon black and its role in our daily lives. The kit had a special motivational note for each child, sharing the importance and the value of learning and keeping an open mind.



Hungary school supplies donations

Community Infrastructure

India

Additionally, our team at Birla Carbon Gummidipoondi organized a summertime festival in its neighboring village. The event hosted school-age children residing nearby. A total of 217 children participated in the week-long event which included activities like games, a cooking competition, science-related activities, skits, dances, and debates. Throughout the event, the staff helped communicate valuable youth messages like the importance of health and hygiene, educational ambition, and regular exercise.

Marietta, Georgia, USA

In December 2023, the employees of Birla Carbon Marietta, USA, generously participated in the Salvation Army Angel Tree Program. With the help of the donors, volunteers, and staff, the Salvation Army Marietta Corps filled and distributed Christmas gifts to over 1,700 angels (i.e., children between the ages of 0-12 and seniors who are 65 years of age and above). The 2023 campaign engagement and support garnered from the employees was very encouraging and positive.

Salvation Army Angel Tree program



Governance

Our success depends on the strong, effective, and responsive management of all our global operations.

We are developing our organization to place a greater focus on cross-team functionality. While we continue to support efficient decision-making that is responsive to local needs, we are also promoting more active communication between functional leaders.

Our governance system is structured to focus on customers, markets, and operational excellence while driving our culture of innovation. Consistent with our Share the Future strategy, the system builds on our spirit of collaboration to drive global consistency and rapid adoption of best practices across all aspects of our business.



56
GOVERNANCE MECHANISMS

59
BUSINESS ETHICS AND COMPLIANCE

61
SUPPLIER MANAGEMENT

62
PRODUCT RESPONSIBILITY

We support the following SDGs through our work:



Governance Mechanisms

The legal entities that comprise Birla Carbon are governed by a Board of Directors and led by our Senior Management Team (SMT). Our SMT plays a crucial role in shaping our impact on the environment, economy, and communities. The SMT ensures integrity across operations and enforces the high ethical standard expected of our employees, stakeholders, customers, and communities. Additionally, the SMT also exercises risk management for Birla Carbon and oversees our sustainability efforts and progress.

Our SMT engages with stakeholders and supply chains to confirm adherence to our baseline expectations established through policies such as our [Supply Chain Procurement Policy](#) and [Product Stewardship Policy](#). From these, we operationalize supplier due diligence and risk assessments.

The Senior Management Team (SMT) includes:

- John Loudermilk, Chief Executive Officer
- Twelve Chief Functional Officers and Senior Vice Presidents (Sales & Marketing; Asia Manufacturing; Americas, Europe and Africa Manufacturing; Finance; IT; HR; Legal/Sustainability/HSE; Research and Development; and Nanocyl)

The Chief Sustainability Officer (CSO) is a member of the SMT and has two roles: firstly, overseeing and communicating the work of the Sustainability Steering Committee described below to the SMT, and secondly, acting as the guardian of sustainability principles and best practices and supporting the SMT in their adoption.

Sustainability Steering Committee

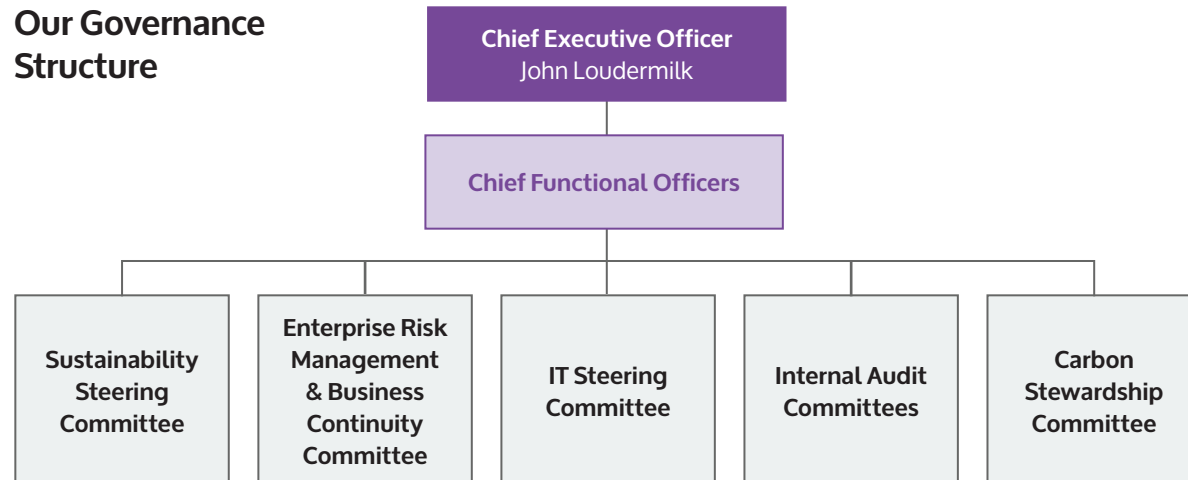
The Sustainability Steering Committee (SSC) guides our sustainability strategy, ensuring it aligns with the Aditya Birla Group's sustainability vision and approach. Established in 2021, the SSC reports on its activities through our annual Sustainability Report, quarterly meetings with the Senior Management Team (SMT), and occasional updates to Birla Carbon employees.

The SSC also plays a key role in incorporating sustainability concepts into our strategic business decisions. The SSC tackles specific issues through dedicated working groups, each composed of the Global Sustainability Director, the Sustainability Manager, Subject Matter Experts (SMEs), employees with relevant expertise, and occasionally third-party advisors. These teams identify areas of

opportunity for integrating sustainability further into the business and help develop action plans for implementing them. Altogether, the SSC includes representatives from each of the functional or operational areas of our business including finance, human resources, supply chain, operations, research and development, environment, health and safety, quality, marketing and sales, and corporate communications. The functional representatives present their respective ideas and plans to the entire SSC, which promotes the best proposals to the SMT for final review and consideration.

Each member of Birla Carbon's SMT holds an executive position at Birla Carbon. The process for selecting the officers of the SMT involves working with top search firms to select the most qualified candidates based upon their experience and qualifications. The selection process ensures that all candidates possess the necessary knowledge and expertise of economic, environmental and social issues pertinent to Birla Carbon. While gender and diversity are important considerations, the selection process ensures that all candidates possess the necessary knowledge and expertise of economic, environmental, and social issues pertinent to Birla Carbon. If conflicts of interest arise, these will be self-declared by the members.

Our Governance Structure



Key Topics Discussed in FY2024

Decisions Made	Impact on Business
Reporting	
Agreed to take a proactive approach to CSRD related compliance and other reporting related disclosures; Formally added CSRD obligations into our Enterprise Risk Register	Alignment with sustainability disclosure best practices, stakeholder expectations, and commitment to transparency
Re-evaluation of Sustainability KPIs	
Updated interim carbon targets to include all scope emissions and evaluate a more recent baseline year; Re-evaluated remaining KPIs and updated to include new targets for Circularity and Gender	Decision-useful and right-sized performance indicators are routinely monitored and trended to help us advance our sustainability goals
Sustainability Engagement	
Increasing internal employee engagement on sustainability topics to better integrate sustainability in all functions	Employee voices are raised to the top and employees are empowered to drive change
Water Risk Assessment	
Updated risk assessment, finalized new water standard, and published action plan	Avoid contributing to depletion of finite groundwater reserves
Digital and IT	
Data lake integrations	Improved data availability and internal reporting capabilities
Net Zero	
Formally associated our Net Zero ambition within our Enterprise Risk Register	Enables us to monitor potential physical and transition climate risks (i.e., policy, legal, market, technology, reputational risks)

Carbon Stewardship Committee

By the nature of our business, we have our own carbon stewardship responsibility, and we are choosing to lead through bold commitments and industry-first initiatives to ensure a more sustainable future. Our aim is to constantly innovate and evolve our capabilities through our purpose, Share the Strength, and to have a positive impact on the ecosystem and society.

Our Carbon Stewardship Committee (CSC) is responsible for developing and implementing strategies to minimize GHG emissions and promote carbon neutrality within Birla Carbon. This, in turn, supports our customers in meeting their own sustainability goals, and helps to reduce climate change risks. The committee is tasked with establishing credible interim targets, decarbonization strategies, and annual carbon roadmaps to assist with our net zero ambition. The CSC is comprised of a SME from each business area and a CSC leader who guarantees the committee is making informed decisions. The committee will collaborate with external partners as well as our stakeholders to stay informed of global carbon-related regulations and their potential impact on our decarbonization strategy and overall business.

Internal Audit Committee

Auditing is a key tool in the ongoing endeavor to maintain robust governance structures and processes. Our Internal Audit function operates independently, providing objective assurance to add value and improve our organization's operations. Through a

risk-based approach, the Internal Audit team conducts regular audits across the business, covering financial, compliance and operational reviews.

By conducting comprehensive audits across all business units and functions, the Internal Audit team identifies potential risks and areas for improvement. The insights and recommendations provided by the Internal Audit function are instrumental in driving continuous improvement, enhancing our operational resilience, and ensuring alignment with our strategic objectives.

In FY2024, 21 audits were conducted, focusing on areas such as:

- Inbound and outbound logistics
- Capex Management
- Procure to pay (Raw Material, Spares and Services)
- Inventory management (Raw Material, Stores and Spares)
- Plant maintenance
- Statutory compliances

All on-site audits were conducted at Birla Carbon's Alexandria (Egypt), North Bend (USA), Hamilton (Canada), Angthong (Thailand), Tiszaújváros (Hungary), Yeosu (Korea), Jining (China), Weifang (China), Gummidipoondi, Patalganga and Renukoot (India) sites. The outcomes of these audits were shared with the SMT. Regular updates are provided to the Risk Committee on key audit findings and the progress of action plan implementation

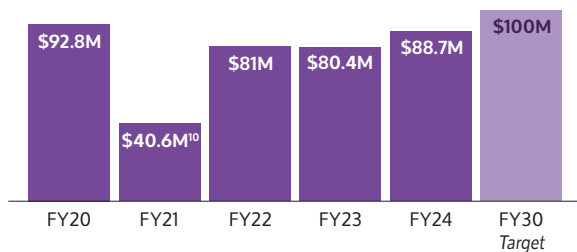
Enterprise Risk Management

Our Enterprise Risk Management Committee (ERMC) consists of Birla Carbon’s leadership team and Enterprise Risk Management (ERM) functional heads. The ERMC sets the strategic direction for risk management; the Regional Risk Officers and site SMEs focus on management of site risks that align with the overall strategy. Regional risk officers and site-specific subject matter experts develop comprehensive frameworks and guidelines that align with Birla Carbon’s overall strategy. We also engage with members from our engineering, finance, legal, IT, HR, sustainability, and other business areas, to identify and mitigate risks that span across locations and functions.

Progress Towards Our Target

TARGET: Approximately double our annual capital spending against FY2012 baseline to reach \$100M

PROGRESS: On track to meet target



¹⁰ FY2021 capital spending was lower than normal due to the COVID-19 pandemic.

Birla Carbon has a Risk Engineering Committee that meets quarterly, evaluates physical improvements for risk management, and prepares capital requests where required. The committee also assists sites with non-capital recommendations related to inspections, testing and maintenance of critical assets, protective devices, and safety systems. We also work closely with our corporate engineering function on various projects, such as those to strengthen safety testing of production equipment.

Throughout FY2024, we have invested more than \$6.6 million USD in capital improvements related to risk management. As part of these efforts, we conducted a comprehensive review of all site risk factors and used the findings to update our Business Continuity Planning process. We continue to make improvements for key risk exposures including turbine generators and combustion controls. We have also established a robust system for tracking completion rates of identified risk controls through our risk management information system.

Employees are encouraged to report any risks they identify. This includes reporting any near-miss safety incidents, unethical activities, or other observed risky behaviors. These risks are documented and prioritized through a Risk Register based on likelihood of that risk, volatility, and potential financial impacts. Risk registers are managed by Regional Risk Officers, with information displayed in heat maps and dashboards for ease of access.



Today, businesses face a variety of risks in an environment of constant change. It is important that Birla Carbon maintains a robust enterprise risk management process at the site to strengthen resiliency of site operations and business processes, and to ensure supply chain continuity for our customers."

Steve Brenske
Director of Corporate Safety
Birla Carbon





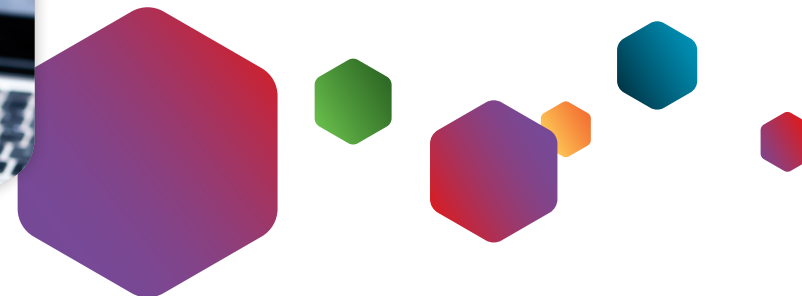
Information Security

Birla Carbon is committed to constantly improving its information security practices and is focused on a "Security First" culture. The ever-evolving threat landscape makes it essential for us to invest in the right people and technologies so we can safeguard our critical assets.

At Birla Carbon, keeping our information systems and digital technology secure and operationally available with optimal performance is of extreme importance. Security is integral to our digital journey and while we are continuously focused on preventative mechanisms, we have also built mechanisms in our new technology introduction process for proactive mitigation. These strategies help us provide uninterrupted and reliable services to our customers.

Our core initiatives focus on enhancing the security of manufacturing systems, raising end-user awareness, preventing data leakage, and excelling in fundamental practices. In governance, Birla Carbon intends to implement industry standard defense measures, policies, and procedures. We will also look to adopt standardized tools with multiple capabilities to reduce complexity, increase effectiveness, and support digital transformation. We are proud that our current technologies have effectively protected Birla Carbon from various targeted cyberattacks.

The Digital & IT (D&IT) Council ensures we leverage the latest innovative technology and provides governance and oversight to make sure our D&IT strategy and integration is aligned with business and sustainability goals. The D&IT Council, which feeds directly into the SMT, is made up of representative leaders from business functions.



Business Ethics and Compliance

We are committed to compliance with international laws, standards, codes of conduct, and our own rigorous business principles. Compliance is also a basic customer and stakeholder expectation. As responsible stewards of the world around us, we not only comply with all applicable laws where we operate, but we also adopt best practices and internationally recognized standards that guide our work and allow us to take greater industry leadership.

Our ethics approach addresses issues that influence our business activities: human rights, antitrust and anti-corruption, grievance measures, and collective bargaining, among others. We ensure that ethical conduct is embedded across our operations, and we expect all our employees, contracted workers, and external partners to do the same.

All employees, including those in the highest governing body, are required to sign a [Code of Ethics](#) which includes the following language: "Each employee must avoid at all times any interest that might conflict or appear to conflict with the interests of the Company, or that might deprive the Company

of the undivided loyalty of the Employee in business dealings. To this end, an employee should not become involved in any situation that may create a personal interest in the situation or place the Employee under an obligation that may interfere with his or her primary duty to serve the Company at all times to the best of his or her ability." Also, each member of the SMT is required to participate in ethics and code of conduct training to assist in identification and handling of conflicts of interest. In the rare event that a potential conflict of interest arises within the SMT, members are required to self-declare the conflict, and are then excused from related discussions.

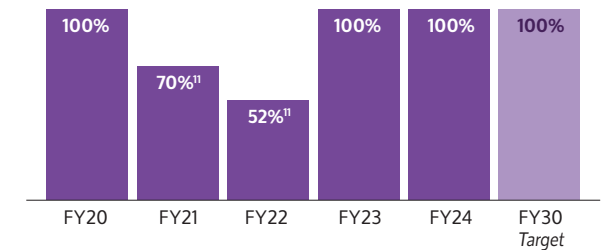
Progress Towards Our Target



TARGET: 100% of active employees to receive Code of Ethics training



PROGRESS: Target met



At Birla Carbon, our commitment to business ethics and compliance isn't just a policy – it's a cornerstone of our corporate identity. We have implemented policies, procedures, and programs to ensure that every decision we make and every action we take reflects our dedication to integrity, transparency, and accountability. By embedding these principles into our daily operations, we not only safeguard our reputation, but we also build trust with our customers, employees, business partners, and stakeholders, fostering a culture where ethical behavior is not merely an aspiration but the norm."

Richard Paris
Director of Compliance
Birla Carbon

¹¹ FY2021 and FY2022 saw a drop in the percentage of our employees receiving Code of Ethics training due to the COVID-19 pandemic. We were unable to roll out the training to employees with no access to a computer.

Conducting Business with Ethics

All employees must complete training on our Code of Global Business Ethics and Compliance Standards (Code of Ethics) and acknowledge receipt and understanding of the Code. Additional policies are posted on our website for access and reviewed every five years for updates. Some policy commitments are captured through sustainability performance indicators, which are communicated internally through quarterly reports. Examples of such commitments include data privacy and anti-trust training.

To ensure high ethical standards across our operation, we provide formal training to every employee, who must confirm their understanding and compliance to our [Code of Ethics](#). The [Code of Ethics](#) addresses our policies on fair competition, antitrust, freedom from discrimination and harassment or other abusive situations, and anti-money laundering, among other topics.

We encourage our employees to voice any concerns or grievances they have about our operations, other employees, or our products, and we expect the same from our contractors and suppliers. To this end, we provide reporting channels enabling them to do so. Our hotline is available for any Birla Carbon stakeholder to anonymously report, via telephone or an online reporting portal, any illegal or non-

compliant behavior they observe. The hotline is run by an independent third party 24 hours a day, 365 days a year, and escalates issues to our Internal Audit Department and Chief Legal Officer. Stakeholders, including employees, contractors, and customers, may ask questions concerning actual or potential situations, and calls made to the hotline are handled in full compliance with local law. Depending upon the issues, these are then investigated by our Legal Department using a team of auditors and/or HR professionals or other investigators as needed and appropriate to the situation. The hotline is available at all our plants and offices accessible everywhere we operate.

Achieving our goals depends on operational integrity and how our people behave. We expect all our employees to align with our values: Integrity, Commitment, Passion, Seamlessness, and Speed. It is fundamental that we uphold these values at all levels and that we adhere to the fair business and labor practices our stakeholders expect.

We are committed to complying with antitrust and anti-corruption laws in all locations where we conduct business, and we uphold competitive free enterprise while prohibiting payments or promises to pay anything of value to obtain or retain business.



Supplier Management

We understand the importance of building and maintaining a sustainable supply chain, and we expect our external partners to adhere to the same standards and principles of ethics and integrity as we do. It is vital that every member of our supply chain demonstrates responsibility and transparency.

The most basic requirement of our supply chain is that it be reliable and legally compliant. We have established robust internal standards and principles to guide our employees, business partners, and suppliers to meet our expectations that it also is ethical. Our diverse business partners include vendors, service providers, consultants, contractors, distributors, and agents. We require all our suppliers to sign Birla Carbon's [Terms and Conditions](#) (T&Cs) of Purchase, which includes a link to our [Code of Ethics](#) translated into the local languages where we operate, which stipulates that they must comply with all applicable laws, regulations, and governmental requirements, as well as Birla Carbon's rules and policies including the ethical principles set forth in our [Code of Ethics](#).

Birla Carbon sets supplier expectations through our [Supply Chain and Procurement Policy](#) and [Code of Ethics](#). These documents require suppliers to comply with local environmental and labor laws and outline additional standards for resource conservation, renewable energy use, water stewardship, employee safety, respect for human rights, and the elimination of child and forced labor throughout the supply chain. This is just one aspect of our broader sustainable procurement strategy, which we implement across our global buyer and supplier network. Our internal Procurement Policies mandate thorough due diligence screening for all suppliers and require them to adhere to our [Terms and Conditions of Purchase](#).

To ensure efficient and reliable due diligence, we use NAVEX's RiskRate, an automated and continuous screening tool. RiskRate checks if third parties are subject to trade sanctions, listed on government watch lists, involved in fraud, bribery, or corruption, or have been subject to government investigations or adverse media coverage.

The RiskRate screen checks a list of existing third-party company names against 500+ sanctions and watch lists (including those maintained by the U.S. Treasury Department's Office of Foreign Asset Control, European Union, United Nations, and His Majesty's Treasury), politically exposed persons lists, and for exposure to adverse media from over 60,000 global publications. Based on the results of the Basic Screen, the third-party record will be populated with an initial risk assessment rating of Green, Yellow or Red, along with any alerts identified. We will not authorize business with any prospective business partner who receives a red flag unless our Legal Department first has cleared the prospective vendor via enhanced due diligence. We continue to conduct daily monitoring of every third-party with whom we transact with the risk rating automatically adjusted if/when warranted by new alerts.

Our Legal Department reviews all vendors that have received red flags by engaging with the business contact responsible for the relationship - typically a Purchasing Manager in the case of suppliers, contractors, and vendors; and a Sales Manager for agents and distributors. In some instances, the issue leading to a red flag can be resolved and the third-party cleared. For example, a red flag might be triggered as a false positive if a vendor has a name similar to a sanctioned entity or individual but is otherwise unrelated.

If the internal discussions do not resolve the issue, we engage with a law firm that specializing in corporate compliance to conduct enhanced due diligence on the third party. Based on the results of such enhanced due diligence investigation, we either clear the red flag, terminate the relationship, or take other measures at the direction of legal counsel.



Since the inception of the program in 2019, we have screened and are continuing to monitor 15,592 active vendors. 14,140 (91%) are green-flagged. Only 184 (1%) of active vendors received red flags. 118 red-flagged vendors have been cleared or approved.



Product Responsibility

The carbon black industry is set for a transformative future, as it continually evolves to enhance sustainability, efficiency, and performance through advancements in materials and processing. Ongoing innovations in the industry, such as the development of sustainable products, adoption of innovative processing technologies, and emphasis on circular economy principles in product design are expected to drive progress in achieving these goals. Additionally, the increased adoption of digitalization and automation technologies to optimize production processes and improve transparency throughout the supply chain is further propelling the industry toward a more sustainable future.

The company's approach to product responsibility spans two key areas: safety and stewardship. Ensuring that carbon black products remain safe for customers' uses tops the agenda. Product safety is how we help our customers handle and use carbon black effectively and safely. We also have specific safety and health programs to protect our employees. Product stewardship is about ensuring our carbon black complies with applicable health and safety requirements and global regulations for end uses by customers. Our [Product Stewardship Policy](#) is publicly available.

We continue to build a culture of product stewardship throughout our operations, creating an environment in which our people feel comfortable seeking advice and support. We encourage employees to stop, think and ask about what they are doing at all stages of product development and production changes.

Our Product Stewardship Standard requires enhanced testing intervals for all products and provides a robust description of which actions will prompt product re-testing at a manufacturing site. Each site is required to send samples of the carbon black it is producing to our world-class laboratory in Marietta, USA, where they are logged into the laboratory information management system, ensuring full traceability.

The Standard is enforced on site by our product stewards, who monitor progress and employee training through annual assessments. Our Management of Change Standard ensures we formally document any changes that could potentially impact our product. Our standards include testing requirements for certified products, and we set up a Product Review Committee to oversee these efforts; it meets at least quarterly to review the status of certified products based on commercial requirements.

Our stewardship approach to carbon nanotubes (CNT) is largely the same as that of carbon black, graphite, or any other of our sustainable carbon products. At this time, there are no food or skin contact use-cases for CNTs. As a result, managing the potential environmental and user impacts of CNTs is easier relative to other products in our portfolio.

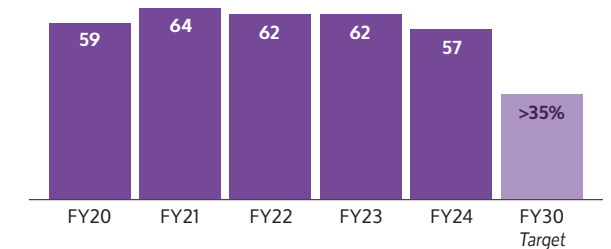
Progress Towards Our Target



TARGET: Remain above the Net Promoter Score threshold of 35¹² (score by year)



PROGRESS: Target met and retained



¹²Net Promoter Scores range from -100 to +100.

Product Safety

Birla Carbon is committed to investing in research and development so we can improve the technical and environmental performance of our products. This will help our customers meet their own high production standards and the regulatory requirements of the markets in which they operate. Our approach, which is based on a foundation of world-class facilities and engagement with industry peers, focuses on process innovation, product development, and product safety and stewardship.

Carbon black plays an important role in many food and human-contact applications, so product safety is a vital part of the manufacturing process. Key to this is providing robust scientific evidence that finished articles containing carbon black do not release carcinogenic compounds related to polycyclic aromatic hydrocarbons (PAH). We therefore conduct both PAH and metals testing to ensure these materials are certified as being below prescribed limits. There are many methods for testing for impurities in carbon black, but only one approach for testing for PAH with the sufficient sensitivity and selectivity is required.

Birla Carbon has led the way in advancing standards for PAH measurement.



Peer-reviewed research has shown that carbon black is neither a toxin nor a carcinogen, and there is no evidence of any long-term adverse health effects on our employees.

Although carbon black is not defined as a respiratory irritant, carbon black dust is considered a combustible dust that is dispersed easily in the air and therefore should be handled carefully. It may cause drying of the skin with repeated and prolonged contact but can easily be washed from the skin using mild soap and water, along with gentle scrubbing. If carbon black has been spilled or requires cleaning up, dry vacuuming is the preferred method. As the material is fully embedded in the polymeric matrices of rubber and plastic, consumers are not directly exposed to carbon black through products placed on the market.

Birla Carbon is an active member of the [International Carbon Black Association \(ICBA\)](#), a scientific association that sponsors, conducts, and participates in investigations, research and analyses relating to the health, safety, and environmental aspects of the production and use of carbon black. Through the ICBA we can openly engage with industry regulators about the latest developments around our products.

Investing in Health and Safety

We ensure all our internal and external customers are fully informed about the safety of our products, focusing on product characteristics, approved uses, and health and environmental risks. Any information gaps are proactively identified through our testing program. All business areas contribute to the consistency and compliance of our carbon black from a product stewardship perspective, offering input as to what can be improved.

Birla Carbon has been an active member of the [CB4REACH](#) consortium since its inception over 10 years ago. The consortium addresses the regulatory issues of our product related to the REACH (Registration, Evaluation, Authorization and Restriction of Chemicals) regulations.

For instance, we are diligently preparing for the substance evaluation process due to be carried out by the French Agency for Food, Environmental and Occupational Health & Safety. This is part of the European Chemicals Agency's Community rolling action plan to determine whether any health or safety risks exist with carbon black. Other countries, including Korea, Taiwan, Turkey, the UK and India, have also introduced regulations similar to REACH. While this presents a challenge in terms of complying with several regulatory frameworks, we are stepping up to meet the deadlines for aligning with all new standards.





Product Quality

We aim for all our carbon black and carbon-based products to deliver top quality and performance, whether used in tires, plastics, inks, or coatings. Our innovation and technology group works with our technical service teams in each region of the world to help us consistently supply carbon black to our customers with the highest levels of quality and performance to meet all necessary customer and regulatory requirements. These dedicated groups engage with our customers on a daily basis to ensure that all their carbon black needs are met.

We report on quality-related KPIs that are communicated internally through regional and global quarterly reports: Net Promoter Score (NPS), complaints and process reliability. These KPIs will help us continue to improve our QA processes, information-sharing program for quality issues and for devising solutions.

The aim of this approach is to prevent re-occurrence of quality issues at the same or other manufacturing facilities. It will also help improve communication and awareness of quality initiatives for the benefit of all manufacturing sites.

Our plant laboratories are regularly audited by our Quality Technology group and assessed twice a year through an international proficiency testing program – the Laboratory Proficiency Rating System (LPRS). This program, organized by ASTM International, provides



us with an opportunity to internally compare our laboratories with nearly 100 industry laboratories worldwide. If LPRS detects any anomalies or deviations, we initiate internal investigations with support from our three world-class central laboratories located in Marietta, USA, Taloja, India, and in Sambreville, Belgium. This dedication to maintaining best practice ensures our laboratories meet the highest global standards.

Focus on Product Consistency

Birla Carbon customers expect a product that consistently meets the highest quality standards. For carbon black, these standards focus on three key areas:

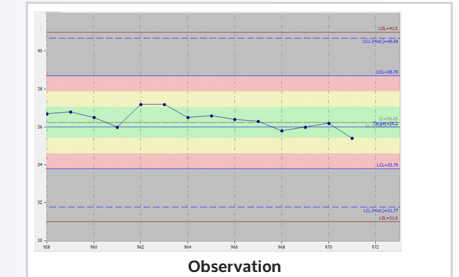
- **Colloidal properties** – or those related to the carbon black’s morphology (microscopic physical characteristics)
- **Physical form** – referring to the bead quality (size and hardness) of carbon black
- **Cleanliness** – the purity of our product

At Birla Carbon, we rigorously test our carbon black through internationally recognized test procedures and participate in the development of testing standards. All Birla Carbon laboratories undertake industry-wide proficiency testing to ensure daily performance checks against the reliability of measurements. The testing facilities are regularly monitored for compliance as well.

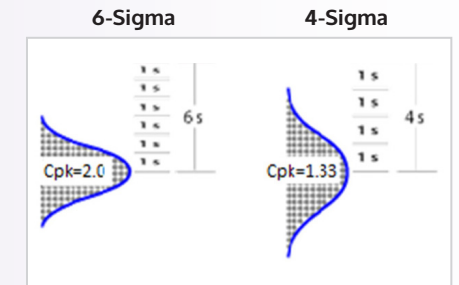
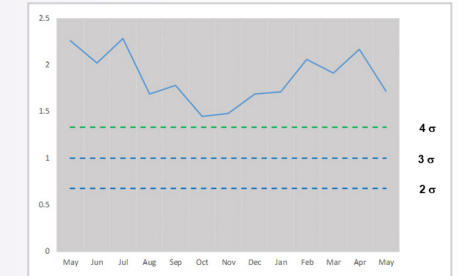
Based on customer requirements, we define upper specification limits and lower specification limits for each test. Our products only leave our factories when all the required parameters have been tested and the products are certified within the customer’s limits.

Our manufacturing processes utilize statistical process control to help produce the highest quality products. Important properties are analyzed using a process capability index (C_{pk}), a statistical measure of a process’ reliability. A C_{pk} level of 1.33 or greater indicates that a process will meet customer requirements.

Iodine Number Test



Monthly C_{pk}



Feedback

Feedback on our report is an essential component of our commitment to our strategy. Comments are reviewed by our Sustainability Steering Committee and will, in many cases, be incorporated into future reports.

Please send your feedback to:

Emma Maltos
Sustainability Engagement Manager
Birla Carbon

birlacarbon.sustainability@adityabirla.com

