



# Connected to a Greener Future

BIRLA CARBON  
SUSTAINABILITY  
REPORT 2025





# Sustainability at a Glance

**Birla Carbon’s Share the Future sustainability strategy continues to propel us, and our customers, into the 2030s and beyond, as a future-focused organization with a clear emphasis on sustainability and innovation.**

Share the Future emphasizes a collaborative approach with our stakeholders and new partners to deliver customer-facing solutions for a sustainable and circular world. We prioritize operating safely, reducing emissions, scaling circularity, providing innovations to growing markets, and striving to reach our aspirational sustainability targets.

We are delighted to share our 13th sustainability report, Connected to a Greener Future, which covers the period between April 2024 and March 2025, our 2025 fiscal year (FY). We release this annual report to serve you, our stakeholders, and invite you to learn more about 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.

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# FY2025 Highlights

## Safety Performance

In FY2025, Birla Carbon achieved our lowest Total Recordable Incidence Rate (TRIR) value since 2012 of 0.31 per 200,000 exposure hours, including both employees and contractors. This is a testament to years of dedicated focus and collaboration across the organization.

[Read More](#)

## ISCC Plus Certification

16 of our carbon black plants maintained the [International Sustainability and Carbon Certification \(ISCC\) Plus certification](#).

ISCC is a global sustainability certification system that certifies sustainable feedstocks. Our focus on materials traceability throughout the supply chain underscores our commitment to environmental stewardship and circularity.

[Read More](#)

## Carbon Black LCA

Birla Carbon completed a cradle to gate [carbon black life cycle assessment \(LCA\)](#) in accordance with ISO14040 and ISO14044. This LCA has been 3rd party verified following the guidelines of ISO 14071. Insights from our verified LCA reinforce our environmental position.

[Read More](#)

## 13 Gold Safety Performance Awards

The International Carbon Black Association (ICBA) has honored 13 Birla Carbon sites with Gold level recognition under its Safety Performance Recognition Program, the highest accolade conferred by the association. The recipients include 11 of our manufacturing and 2 R&D centers located across North and South America, Europe, and Asia.

[Read More](#)

## International Women's Day

Birla Carbon celebrates [International Women's Day](#) annually on March 8<sup>th</sup>, to celebrate our women employees and showcase their many contributions. As part of our 2025 International Women's Day celebrations, we hosted an enlightening session by Anna Hemmings MBE, OLY — a two-time Olympian and six-time World Champion, Resilience and High-Performance Specialist & leadership coach. Anna shared her journey and offered valuable insights on leadership skills.

[Read More](#)



# FY2025 Highlights

## Women in Safety and Environment

In 2025, Women in Safety and Environment (WISE), an Employee Resource Group (ERG) supported by Birla Carbon, hosted two impactful events on equity, innovation, and career growth. The first was a Diversity, Equity, Inclusion, and Belonging (DEIB) workshop which addressed gender bias and workplace discrimination, while the second featured Telexos' Vice President of Business Development, who shared insights on innovation and sustainability. These events underscore WISE's dedication to inclusion and professional development, aligning with Birla Carbon's commitment to sustainability and responsible business practices.

[Read More](#)

## Enhanced Code of Ethics training

In FY2025, we enhanced and redesigned our online Code of Ethics training program to better serve our global workforce. The updated program is now available in 14 local languages spoken across manufacturing plants and offices, and features modules dedicated to competition law, data privacy, workplace harassment, prevention of human trafficking and modern slavery, and working with third parties.

[Read More](#)

## FY 2025 Expansion

We continue to engage with our customers to understand their aspirations, including their ambition to expand globally. The availability of our unique products remains a critical component of their growth. In line with our commitment to work together to simplify and secure supply chains, Birla Carbon is expanding its footprint in Hungary and has broken ground on two new sites in India and Thailand - strengthening our capability to serve both regional and global customers.

[Read More](#)

## Asia Post Treatment Plant (APT)

We inaugurated our first post treatment facility featuring advanced technology to deliver high-performance, sustainable carbon black grades for industries like coatings and inks. This facility, in Patalganga, India, marks a major step in innovation, efficiency, and customer-focused solutions, and customers have shown immediate interest by placing orders for specialty grades produced at the new plant.

[Read More](#)

## Continua™ SCM

In the past year, we expanded our production of Continua™ SCM to India. We have since launched and successfully commercialized two grades; Continua™ 8030 and Continua™ 8030P SCM.

In collaboration with our partner in India, we upgraded our tire recycling facility by implementing Operational Excellence practices.

[Read More](#)

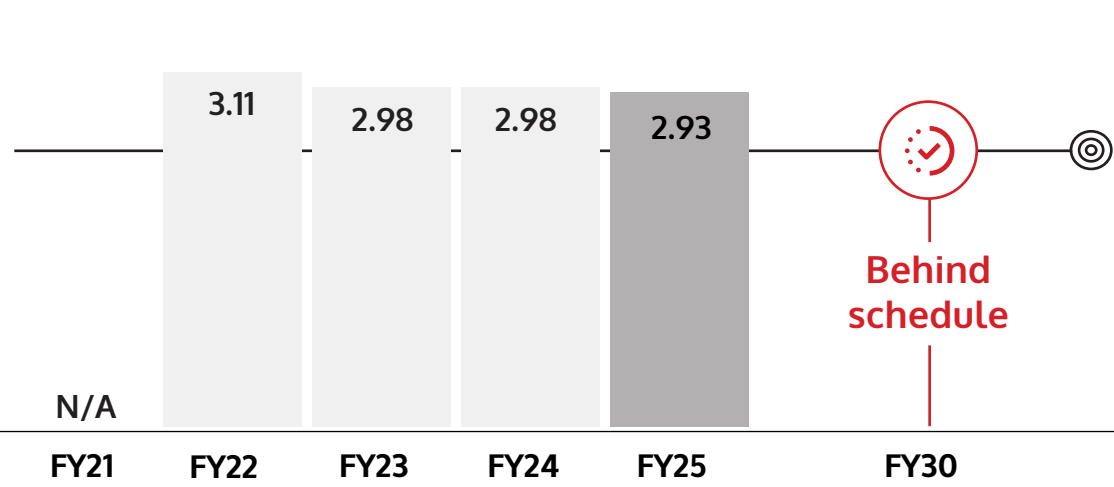


# Targets and Progress

To meet our Vision to be the most respected, sustainable, and dynamic global carbon solutions business, we have set key performance indicators (KPIs) to track our progress towards FY2030.

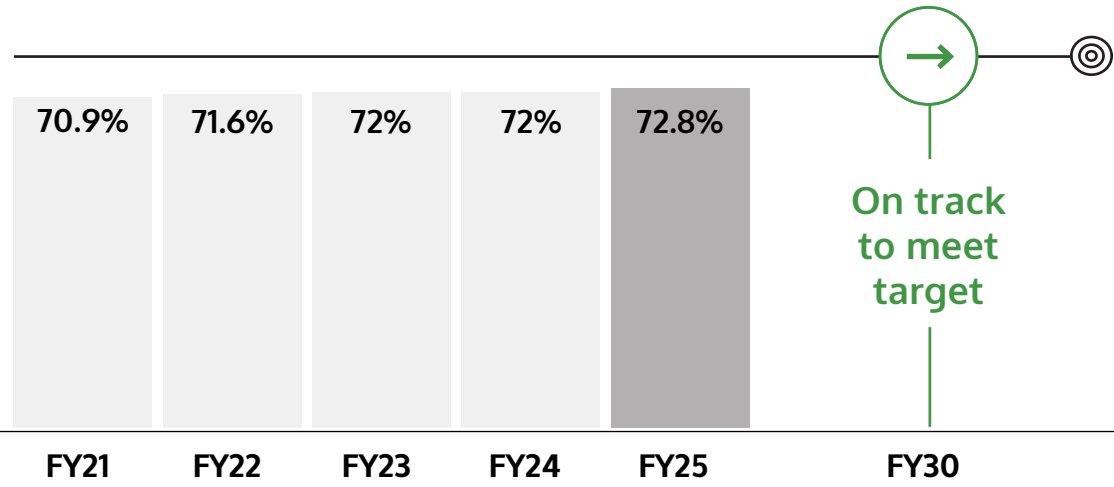
## Emissions

**TARGET:** Reduce our Scope 1, 2, and 3 (upstream) emissions intensity (Mt CO<sub>2</sub> eq. /Mt product) by **22%** against the FY2022 baseline by 2030



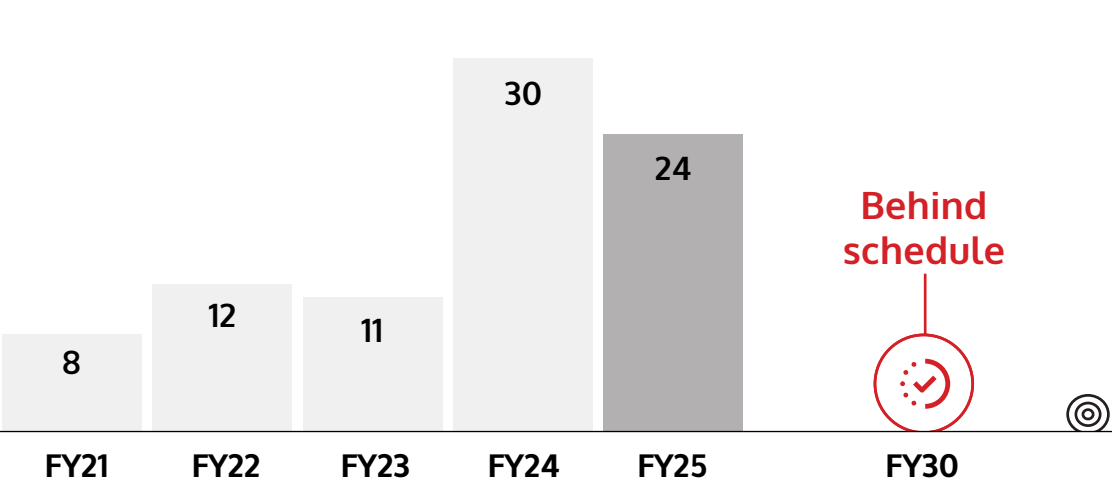
## Energy

**TARGET:** Increase our absolute energy conversion efficiency to **80%**



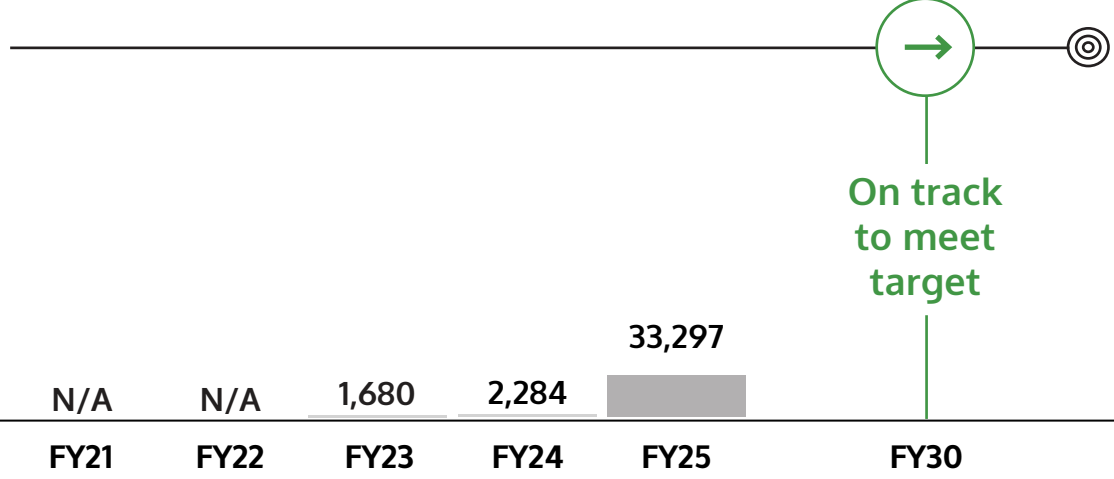
## Environment

**TARGET:** Record **zero** environmental releases year on year



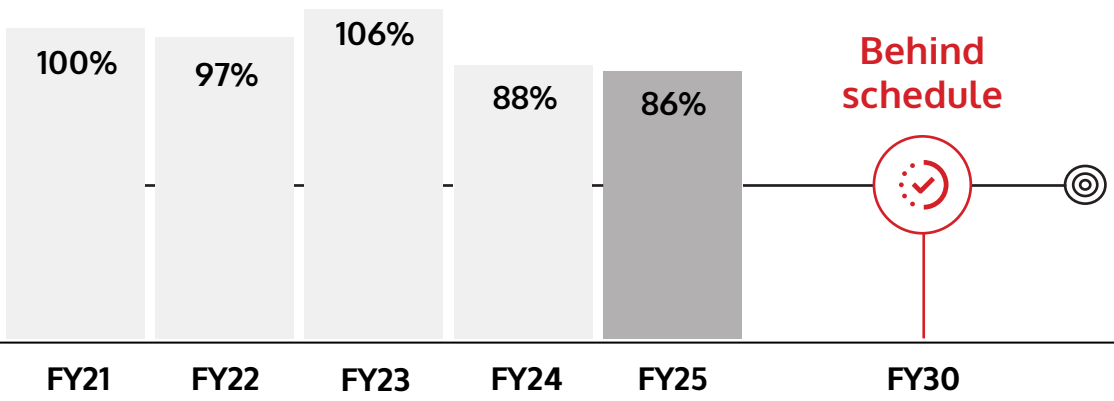
## Circularity

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



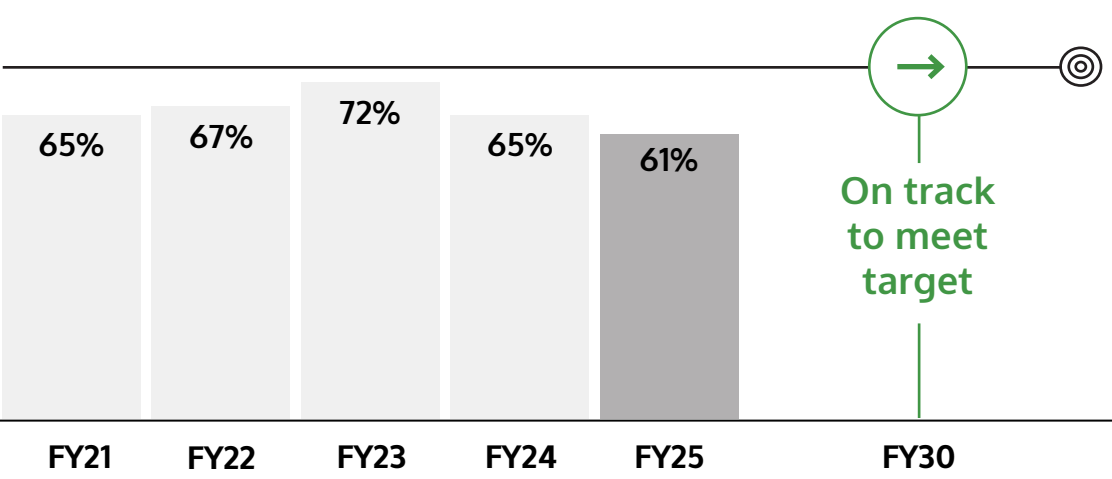
## Water

**TARGET:** Reduce our water withdrawal intensity (m<sup>3</sup>/t carbon black) by **50%** versus FY2013 baseline at our high- and medium-risk sites<sup>1</sup> (water withdrawal intensity by year)



## Waste

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

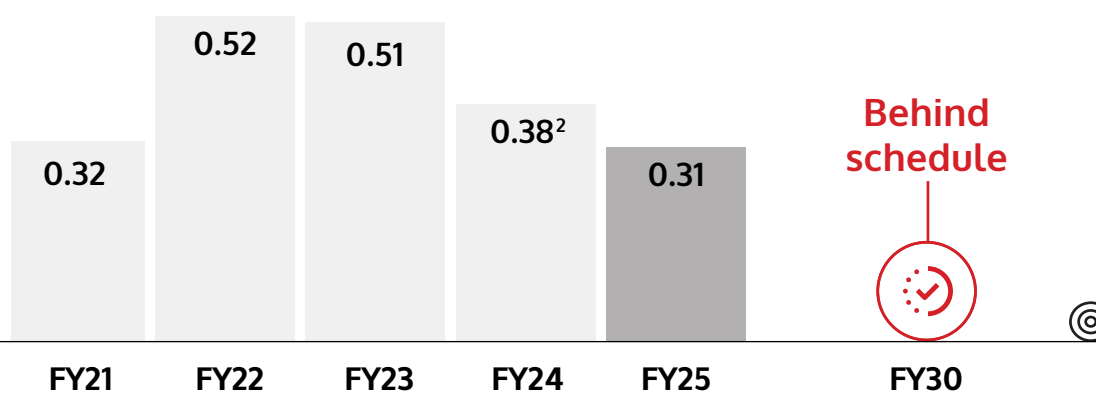


<sup>1</sup> KPI includes Egypt, Hickok, Patalganga, Gummidipoondi, Weifang, and Yeosu.



Safety

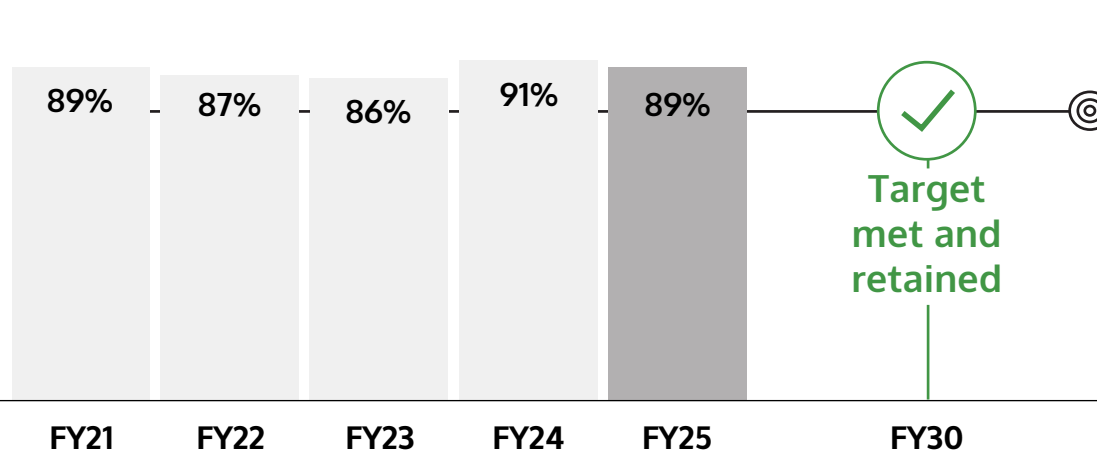
**TARGET:** Achieve **zero** recordable injuries year on year by 2030 (employee and contractor Total Recordable Incidence Rate (TRIR) per 200,000 exposure hours)



<sup>2</sup>The FY2024 TRIR values as reported in the FY2024 Sustainability Report were 0.32 for employees and contractors, respectively. Post the publication, additional cases were added to the evaluation. These cases brought the FY2024 TRIR values to 0.38 for employees and contractors, respectively. This revised value is published here.

Employee Engagement

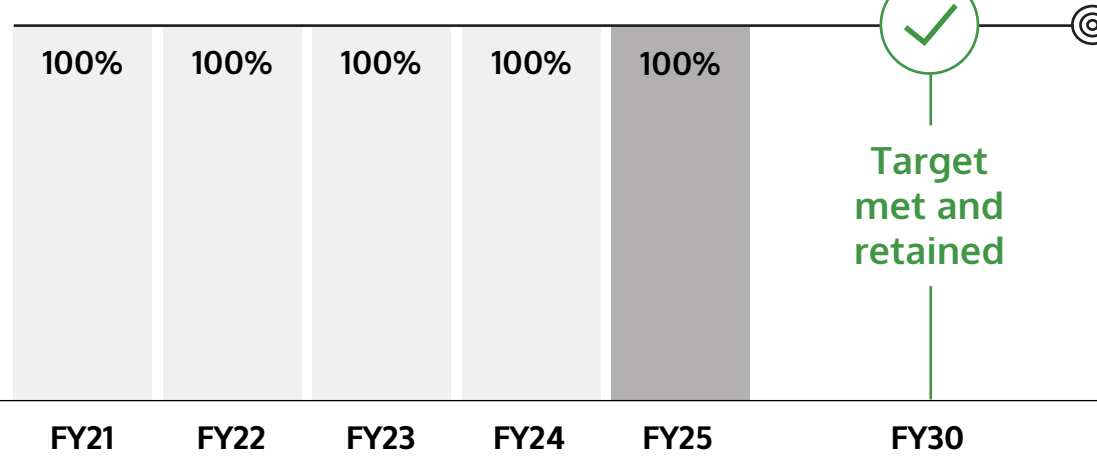
**TARGET:** Remain above the chemical industry annual benchmark for employee engagement<sup>3</sup> (%)



<sup>3</sup>This 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.

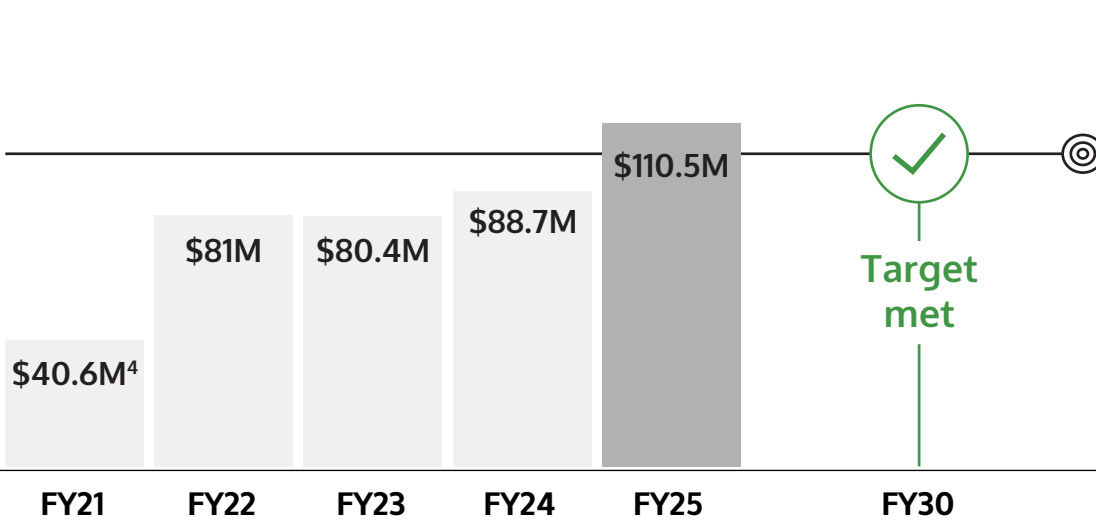
Community Engagement

**TARGET:** 100% of our facilities participate in community engagement



Business Continuity

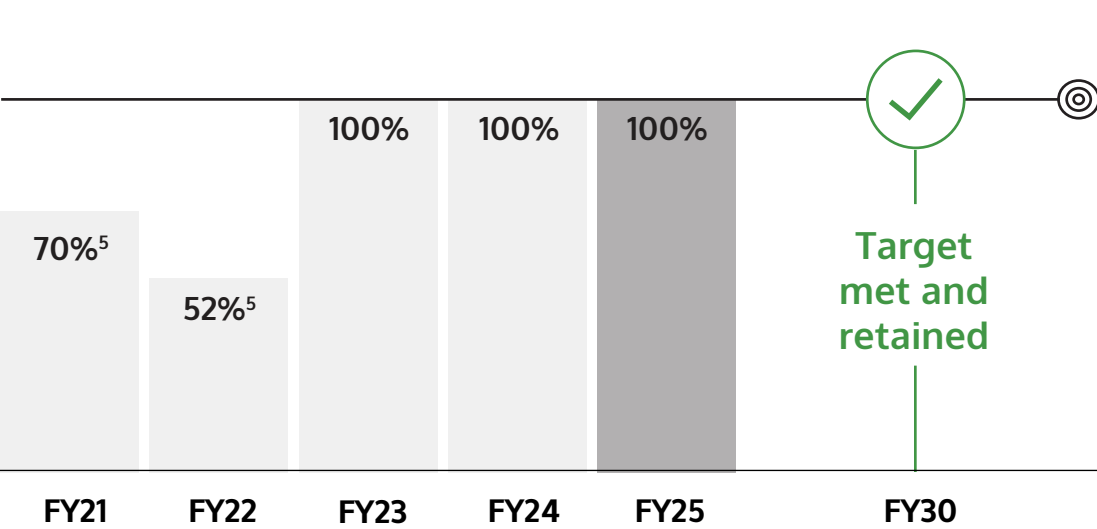
**TARGET:** Approximately double our annual capital spending against FY2012 baseline to reach **\$100M**



<sup>4</sup> FY2021 capital spending was lower than normal due to the COVID-19 pandemic.

Ethics

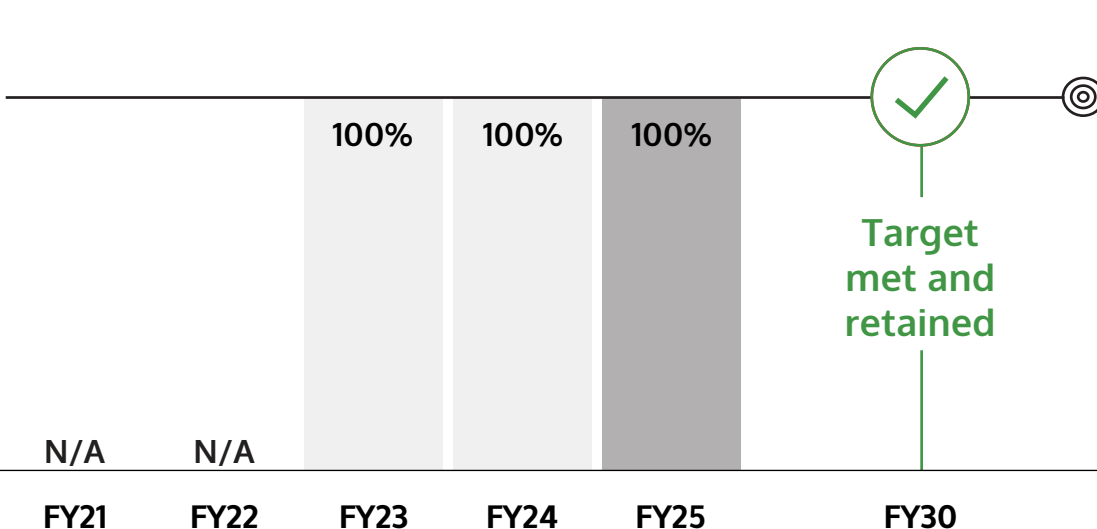
**TARGET:** 100% of active employees to receive Code of Ethics training



<sup>5</sup> 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.

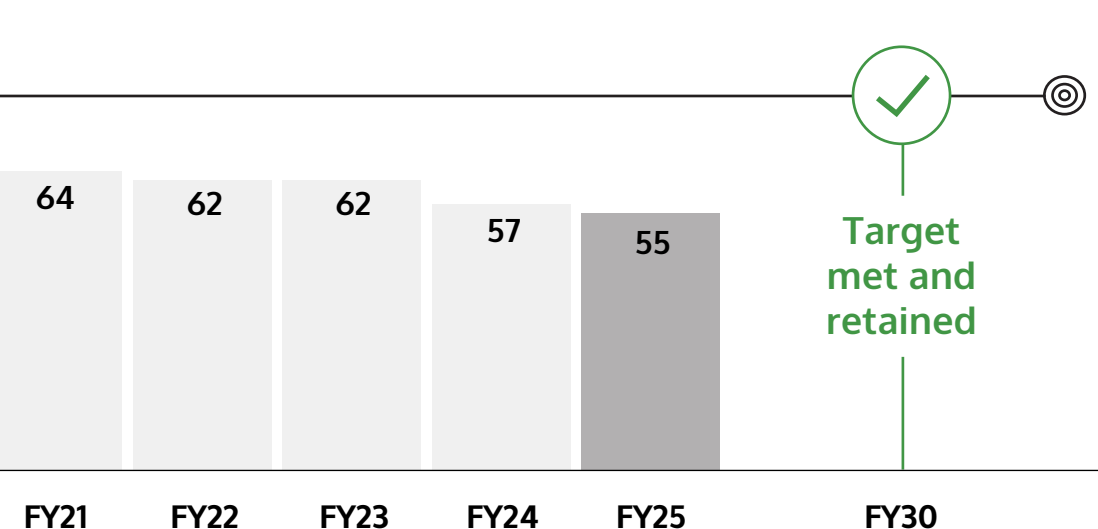
Supplier Screening

**TARGET:** 100% of Birla Carbon suppliers screened through our Navex system against pre-determined ethics, compliance, and risk parameters



Customer Loyalty

**TARGET:** Remain above the Net Promoter Score threshold of **35**<sup>6</sup> (score by year)



<sup>6</sup> Net Promoter Scores range from -100 to +100.



# A Message From Our President and CEO

Welcome to our 13<sup>th</sup> annual sustainability report for 2025 — **Connected to a Greener Future**

The global market for carbon black is projected to grow slowly but consistently throughout the decade, with an increasing emphasis on sustainable and circular solutions. We are committed to supporting that growth by expanding our capacity and capabilities while partnering with our customers to deliver innovative solutions across the value chains we serve.

As we present Birla Carbon's 2025 Sustainability Report — Connected to a Greener Future, I am proud to reflect on a year defined by progress, resilience, and renewed commitment to our purpose, 'Share the Strength'. Our journey continues to be shaped by the evolving needs of our customers, our responsibility to our stakeholders, and our unwavering focus on building a safer, more inclusive, and innovative organization.

The global economy is experiencing historic levels of uncertainty driven by dramatic changes to trade policies and major geopolitical events. This uncertainty breeds an environment of indecision with 'wait and see' becoming the predominant approach. For Birla Carbon, we continue to lean on our purpose, 'Share the Strength,' and follow our strategy to drive growth through innovation in sustainability to keep moving forward.

The year has delivered meaningful achievements and forward momentum. Our 'Share the Future' strategy is now firmly embedded across our business, driving growth and value creation for all stakeholders. We advanced our net zero carbon emissions by 2050 pathway, expanded our global presence, and continued setting benchmarks in safety, inclusion, and operational excellence.

The heart of our business is our people. I'm particularly proud of our best-ever safety performance in terms of injury rate, driven by the relentless effort of our team to build and maintain a strong safety culture. Beyond safety, fostering an inclusive workplace that empowers individuals and promotes true belonging for all is a catalyst for creativity and resilience, driving better outcomes for our people, our customers, and our communities.

We have made substantial investments in the growth of sustainable carbon solutions including a new processing line for Continua™ SCM in Italy, a new production line for post treated specialty products in India, and new capacity for our core carbon black products in Hungary, India, and Thailand that set the benchmark for efficiency. This has been the most ambitious capital investment period in our history, underscoring our commitment

to meeting the world's demand for sustainability-led carbon products.

Looking to the future, we remain focused on the fundamentals that have made Birla Carbon an industry leader. Our commitment to innovation, sustainability, and operational excellence positions us to navigate current challenges while capturing long-term growth opportunities. The global shift toward sustainability represents a fundamental transformation in how business is conducted, and we are proud to be at the forefront of this movement.

We want to thank all our stakeholders for the feedback and collaboration that continue to shape our strategy. I look forward to sharing our progress as we continue our journey to deliver impactful and innovative carbon-based solutions.

Once again, I invite you to join us on our sustainability journey and 'Share the Future' with us!

Sincerely,



**John Loudermilk**

President and Chief Executive Officer  
Birla Carbon



**As we continue to execute our Share the Future strategy, Birla Carbon is positioned to support the next generation of energy systems and accelerate the transition to a clean energy economy.**

**Our commitment to innovation drives us to accelerate the development of sustainable materials and production processes that connect users across the energy value chains."**



# 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 USD \$67 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 one of the world’s largest carbon black producers and suppliers, 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.

We continue to execute our Share the Future strategy by making strategic investments in solutions that support both the circular economy and net-zero transition. In FY2025, we expanded the production of Continua™ Sustainable Carbonaceous Material (SCM) to India through our partnership with tire recycler Finster Black Pvt. Ltd (“Finster”). We have since launched and successfully commercialized multiple Continua grades and approved significant capacity expansions, set to begin in mid-2026.

In addition, our 2023 acquisition of Nanocyl SA has enabled us to become 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 electric vehicle (EV), portable electronics, power tools, and stationary storage.

**Established in 14 countries,  
delivering solutions across  
6 continents**



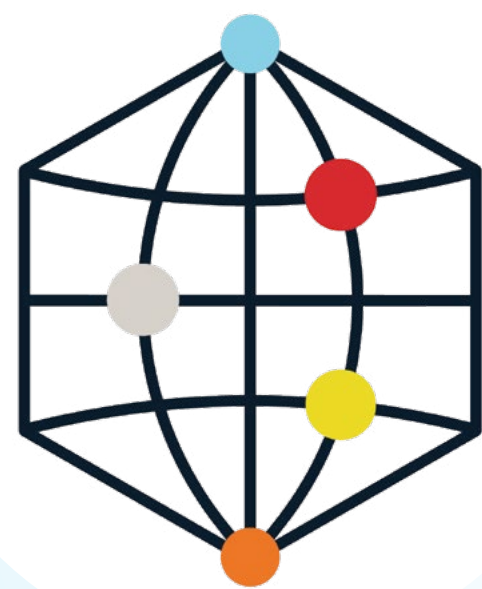
- 19  Manufacturing sites
- 3  R&D sites
- 9  Offices
- 2  Corporate Offices



# Vision and Purpose Principles

**Our vision is to be the most respected, dynamic, and sustainable global provider of carbon-based solutions. We apply the potential of carbon to create social value and enable a more productive and environmentally responsible future. Through our products, partnerships, and initiatives, we deliver solutions that meet today's needs while supporting long-term sustainability. As a proud signatory of the United Nations Global Compact (UNGC), we advance its principles by leveraging our global scale and diverse workforce to turn challenges into opportunities and realize this 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, and other stakeholders



Share The Strength

— and most importantly to 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.

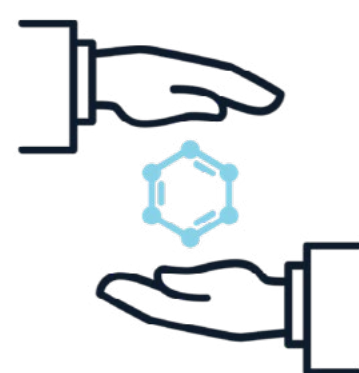
From the production floor to the sales team, our passion for learning has no ceiling. We are constantly searching for a deeper understanding of our products and their applications. It has been over 80 years since we installed one of the world's first electron microscopes — providing a long-sought look 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

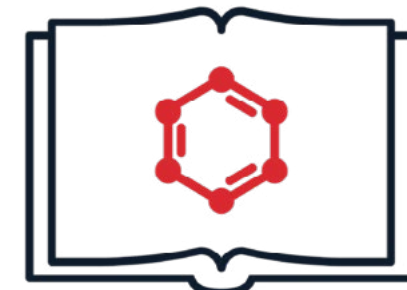
combining local expertise with our international network, we elevate our knowledge to a worldwide scale.

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 generate creative ideas, address urgent issues, and demonstrate our commitment. We believe our greatest challenges and most rewarding achievements are yet ahead of us.

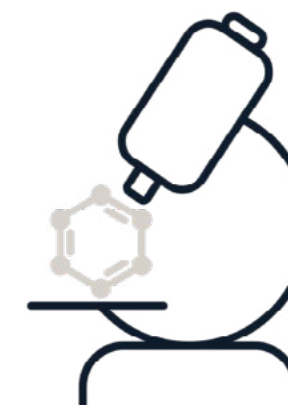
## Purpose Principles



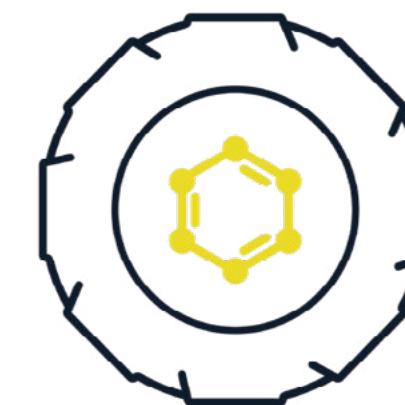
Familiar Bonds



Compound Knowledge



Micro Matters



Beyond Durable



Challenge Tested



# Awards and Recognition

## Global

16 of Birla Carbon's carbon black plants have secured **ISCC Plus Certification**. These facilities are located in 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 (Anghong), and China (Jining and Weifang). ISCC Plus is a certification entity for bio-based, renewable, and circular raw materials that is designed to validate the sustainability of alternative feedstocks and demonstrate compliance with defined sustainability standards. 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.

The International Carbon Black Association (ICBA) has recognized 13 Birla Carbon sites with Gold Safety Performance Awards, making Birla Carbon the leading carbon black manufacturer in the realm of safety performance. This global recognition includes 11 of our manufacturing sites and two of our R&D centers. The ICBA initiated this recognition to acknowledge outstanding safety records and educate policymakers and the public about the carbon black industry's commitment to making employee safety a prerequisite for successful operations.

In November 2024, Birla Carbon was honored with a prestigious SAP ACE Award for finance transformation. The award recognized the efforts and dedication of our team after successfully implementing our global Digitalization of Account Payable & Bank Reconciliation project. This initiative has enabled us to embed automation in our systems, increase operational efficiency, reduce human error, and — most importantly — support early detection of fraudulent activity. The project has set the benchmark for all future digital initiatives within our organization.

## North America

Birla Carbon was honored as the Judges' Choice Winner in the Environmental Impact Project category at the 2025 Environment+Energy Leader Awards. The award recognized Birla Carbon's innovative emissions control project at our North Bend, Louisiana plant. The project effectively reduced sulphur oxide and nitrous oxide (SOx and NOx) emissions by leveraging the natural alkalinity of seawater from the adjacent Gulf Intercoastal Waterway to neutralize sulphur compounds, converting them into naturally occurring salts that can be safely returned to the ocean. Key project achievements include:

- ▶ Greater than 90% annual reduction in SOx and NOx emissions, contributing to improved air quality
- ▶ Avoidance of approximately 650 tonnes of gypsum waste disposal per week
- ▶ Lower GHG emissions by reducing transportation and disposal requirements

In addition, Birla Carbon was honored with InnoLead's prestigious Impact Award for our Birla International Innovation Gathering (BiiG) initiative. [Read more about the InnoLead award and the BiiG initiative in the Innovation section.](#)

*Birla Carbon was honored as the Judges' Choice Winner with the highest scoring Environmental Impact Project at the 2025 Environment+Energy Leader Awards.*



**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 December 2024, Birla Carbon Italy won the Visionari d'Impresa Award for extraordinary results in competitiveness, productivity, and entrepreneurial sustainability. Birla Carbon Italy successfully faced the challenges of the post COVID-19 market, distinguishing itself for an ability to adapt and innovate. The award is a recognition for businesses that stand out in their sector by contributing to the economic development of the territory. Award recipients are selected using a detailed survey that analyzes financial statements filed by over 700,000 companies, to systematically identify the most virtuous and resilient companies in Italy.

## Asia



Birla Carbon Thailand was honored by the Thai Ministry of Public Health in December 2024 with the prestigious Golden Shield Award for being a 'Disease-free Safe and Happy Workplace.' Throughout the year, Birla Carbon Thailand implemented a series of measures to prevent workplace accidents — including conducting annual health check-ups, providing comprehensive safety training, and organizing health promotion activities (e.g., walking and running programs).

In addition to promoting physical health, Birla Carbon Thailand emphasizes the mental well-being of employees by supporting activities that foster happiness within teams — such as annual family parties, motivational sessions, and confidential counseling services.



**Safety is non-negotiable at Birla Carbon, and over the years, we have continued to build and maintain our culture of safety, globally. All our plants maintain the highest safety standards for all employees, which is in many ways built on our purpose to 'Share the Strength'."**

**John Loudermilk**

President and Chief Executive Officer

Birla Carbon





# Our Approach

## Sustainability Strategy

**Our Share the Future strategy continues to propel Birla Carbon and our customers into the 2030s — as a future-focused organization with an 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 in alignment with 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, employees,

and the communities in which we operate. Our strategic focus encompasses employee safety, environmental stewardship, efficient utilization of carbon sources, and a dedication to operating in a socially and ethically responsible manner. We have identified the areas where we can have the greatest positive impact and are focusing our efforts on what matters most to our stakeholders.

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# 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.



## Innovation

**We are building a culture of innovation** that goes beyond products and services; one that inspires ideas from everyone at Birla Carbon — irrespective of their function or location. This culture is the foundation for our business and our journey towards a more sustainable future.

## Environment

**To contribute to a more sustainable future** for our planet, we are embedding circularity into our operations. Not only does this support our goal to achieve net zero carbon emissions by 2050, it also drives reduced waste and lowers water and energy consumption.

## Social

**People are at the center of everything we do** — our workforce, our stakeholders and the communities around us. For our employees, we support a diverse and inclusive workplace — safe and welcoming environments where people can develop and thrive.

## Governance

**We uphold the highest ethical standards** across our business to inspire the trust of our employees and our customers and expect the same of our suppliers. We ensure we have the correct systems, policies, checks and engagement mechanisms — demonstrating to all suppliers that they are in safe hands.



# Assessments and Governance

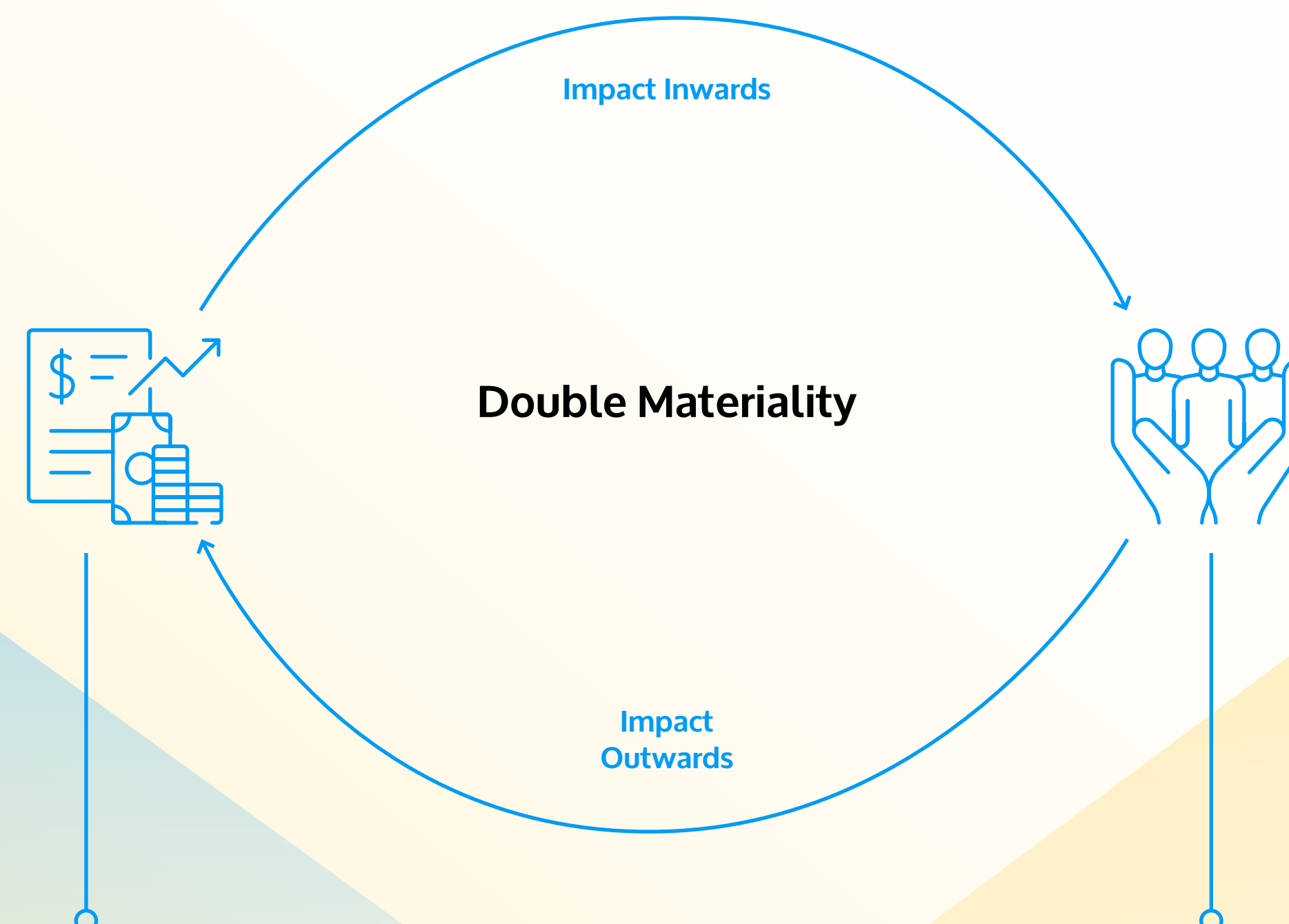
## Assessing Sustainability

Our formal materiality assessment process identifies the sustainability-related issues that are most significant to Birla Carbon and our stakeholders. 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 evaluate and prioritize our key sustainability issues.

While previous assessments were focused on stakeholder impacts only, we updated our materiality assessment process in FY2024 to consider both financial and stakeholder impacts — an approach known as “double materiality.” Double materiality means that a topic can be “material” from a stakeholder impact and/or financial perspective; it does

not have to be both. This updated process helps us more accurately assess our business and value chain to identify the most important sustainability issues, 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 sustainability issues may present to our operations.

Not only is this approach widely recognized as a best practice, but it also prepares Birla Carbon to comply with international regulations that mandate the use of double materiality, such as the EU Corporate Sustainability Reporting Directive (CSRD). Results of our latest materiality assessment were approved by Birla Carbon’s SMT.



### Financial Materiality

This “outside in” view focuses on how sustainability matters may pose either a prospective material risk or opportunity that could affect our financial performance and position over the short, medium and long term.

### Stakeholder Impact Materiality

This “inside out” view focuses on the actual or potential short, medium and long-term impacts on people or the environment that are directly linked to our operations and value chain. These impacts can be both positive and negative.



## Focusing on What Matters

The issues described within this report reflect the outcomes of our FY2024 double materiality assessment. Issues were assessed based on their significance to stakeholders (impact materiality) and business impact to Birla Carbon (financial materiality). To effectively consider internal and external impacts, we continually review the challenges that are most relevant to our business.

## Upcoming Sustainability Disclosures

Building on our FY2024 materiality assessment, Birla Carbon is preparing to comply with international sustainability reporting requirements, including the EU CSRD and Corporate Sustainability Due Diligence Directive (CSDDD). To comply with the CSRD, Birla Carbon is required to publish a sustainability statement containing comprehensive ESG disclosures related to our material sustainability issues. We were initially preparing to publish our first CSRD statement in 2026 (based on the 2025 financial year), but ongoing regulatory changes in the EU are expected to extend our CSRD compliance deadline from 2026 to 2028, and our CSDDD deadline until 2029.

## Environment

The assessment underscored our commitment to transition to net zero and further highlighted 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 track emerging issues such as nanoparticle regulations and impacts.

Another notable yet expected finding included a realization of the societal benefits and positive financial impact of circular production inputs and resource optimization strategies.

Birla Carbon considers the following environmental topics to be relevant to our business:

- ▶ **Climate Change**
- ▶ **Pollution**
- ▶ **Water and Marine Resources**
- ▶ **Resource Use**
- ▶ **Circular Economy**
- ▶ **Ecosystems**



## People and Society

Our assessment also highlighted the importance of mitigating potential health risks associated with manufacturing sustainable carbon products. This was not unexpected, as the safety of our employees, contractors, and the customers who use our products has long been a key area of attention and effort. Our analysis also emphasized the importance of ensuring Birla Carbon has the appropriate subject matter experts and can attract and retain talent to support our business strategy.

Birla Carbon considers the following social topics related to our own workforce, workers in our value chain, affected communities, consumers, and end-users to be relevant to our business:

- ▶ **Health and Safety**
- ▶ **Human Rights**
- ▶ **Employee Engagement**
- ▶ **Diversity and Inclusion**
- ▶ **Community and Customer Engagement**



## Governance

Our assessment reinforced 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.

Birla Carbon considers the following governance topics to be relevant to our business:

- ▶ **Ethics**
- ▶ **Governance**
- ▶ **Business Conduct**
- ▶ **Business Continuity**





# Risks and Trends

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

Ensuring uninterrupted operations and a 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 10 key megatrends that could affect the global carbon black industry in the long-term: mobility, digitalization, automation, class growth, Millennials and Gen Z, climate change, fossil fuels, energy, circularity, and water.

## Innovation



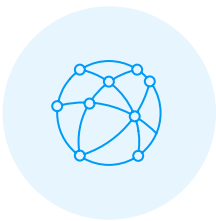
### Mobility

Globally, three transformative mobility revolutions are underway: sharing, electrification, and automation.

Electric cars may have positive implications for our industry, as they wear through tires more quickly than traditional vehicles and use carbon black in battery technology.

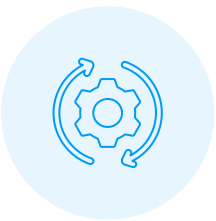
The effect of driverless cars is more uncertain, as they may enable a transition to fleet models of shared mobility, replacing ownership and leading to fewer cars and thus reduced carbon black demand.

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. Stakeholder opinions 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.



### Digitalization

The increased 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. Artificial intelligence (AI)-driven systems will enable real-time data processing and analytics, transforming vast amounts of manufacturing data into actionable insights that help optimize production schedules, predict equipment failures, and streamline supply chain operations.



### Automation

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. The integration of AI technologies such as predictive maintenance and collaborative robots is transforming traditional manufacturing workflows, allowing companies to optimize processes in real-time, while freeing human workers to focus on strategic, high-value activities.



## Demographic Shifts



### Class Growth

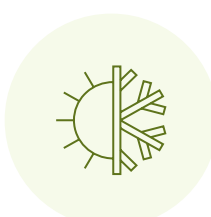
Global economic shifts are redefining what it means to belong to the middle class. Traditionally, middle-class growth in emerging economies has been associated with higher consumption, but premature deindustrialization in some African and Asian countries is shaping a model focused more on access than ownership. For Birla Carbon, this signals that a rising middle class may not simply expand consumption but could instead open opportunities to innovate with solutions that meet evolving needs in new ways.



### 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.

## Climate



Climate change-related policies could profoundly shift consumer transportation away from cars by 2030, resulting in a marked impact on our business. Potential carbon taxes could also influence oil prices, affecting the availability of our feedstock.

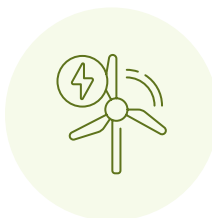
However, as a material impact there could be more demand for carbon black as tire components that improve efficiency are prioritized. The transition to EVs has the potential to drive increased demand for carbon black in tire manufacturing. EV tires require more carbon black than standard passenger tires due to higher torque and heavier battery loads that accelerate tread wear.

## 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 rubber or plastic products, carbon black is difficult to separate from other materials, making it challenging to recover in its original form. However, through partnerships and 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

Water availability is a key focus area for all industries — as nearly half the global population is expected to face water shortages by 2030. Water use reduction and recapture will become increasingly important for Birla Carbon in this timeframe, particularly for facilities located in water stressed areas.

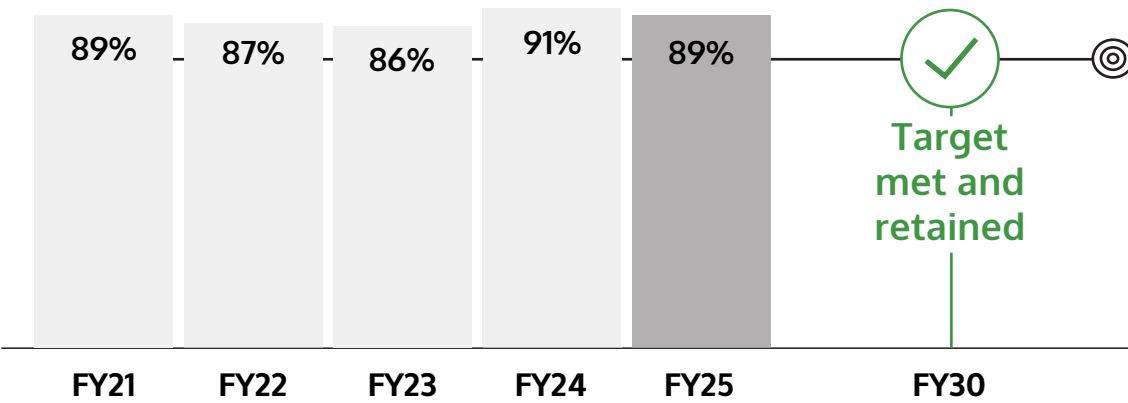


# Stakeholder Engagement

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

## Progress Towards Our Target

**TARGET:** Remain above the chemical industry annual benchmark for employee engagement<sup>4</sup> (%)



We aim to develop long-term relationships with customers and, based on our excellent service and high-quality products, become the carbon solutions provider of choice. We achieve this 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 meet with and participate in events involving non-governmental organizations (NGOs), industry associations, and wider social institutions that are relevant to our business — allowing us to learn from and share knowledge with our peers. Birla Carbon is an active member of the International Carbon Black Association (ICBA), a non-profit organization dedicated to advancing research on the health, safety, and environmental aspects of carbon black. Through our engagement with the ICBA, we supported

the development of the first-ever industry-average Product Carbon Footprint (PCF) for carbon black produced using furnace technology. In addition, as members of the ICBA, we engage with industry regulators around the globe about our latest product developments.

Enabling our talented workforce is core to our Share the Future strategy. We drive a culture of innovation to push us toward and beyond our KPIs. Our culture of responsibility promotes the health, safety, and well-being of our employees and the communities in which we operate. We hold internal cross-functional conferences to enhance communication and collaboration. Every two years, we conduct employee feedback surveys to inform and encourage a continual dialogue between employees and managers. In addition, employees may access a hotline to anonymously report concerns or grievances.

As part of Share the Future, we take leadership through action and work to make all our processes, from procurement to recruitment, best in class. We strive to be a responsible steward of the environment by optimizing the conversion of carbon to carbon black, minimizing our GHG and other emissions, and maximizing the recovery of energy generated during our manufacturing process.

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 five 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 our 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.

To ensure our sustainability progress is coordinated at a global level, in 2016, Birla Carbon aligned our sustainability initiatives to the UN Sustainable Development Goals (SDGs) and became a signatory to the UN Global Compact (UNGC). 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 support the following SDGs through our work:

Economy



Society



Environment







## 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, carbon nanotubes, and other sustainable carbon-based products. Products like Continua™ SCM promote a circular carbon economy by enabling the extraction and repurposing of carbon black from end-of-life tires (ELTs) into new products, such as rubber compounds, tires, plastics, and coatings.

As a product, carbon black connects and brings additional value to many key areas and industries within our lives. It can be found within everyday items such as our clothes and the ink on bank notes. Carbon black is also a critical element of the transportation sector, by increasing the durability and safety of tires on the road. It also prevents leaks and provides UV protection.

As an enabler, carbon black is a key component for its own development — as it is found within electrical wires, computers, and the technologies that fuel innovation to make our lives easier.

In the interest of fostering innovation, our approach to R&D 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.

Birla Carbon's 2023 acquisition of Nanocyl, a worldwide leader in multi-wall carbon nanotubes (MWCNTs), has expanded our presence in the emerging energy systems market. Carbon nanotubes provide unique performance characteristics for a wide range of applications, including lithium-ion battery performance and other conductive applications. Birla Carbon's R&D expertise, portfolio of products, and market experience will enable Nanocyl to reach its full growth potential — enhancing our capacity to support the electrification of the transportation industry and the energy transition, more broadly.



## 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. Birla Carbon engages with suppliers that follow ethical business practices and that prioritize sustainability principles. These commitments to responsible procurement practices support our customers' ambitions to include more renewable and recycled materials in their own products.

Birla Carbon's products also support more responsible energy consumption from downstream energy users. Our carbon nanotube products, offered through our Nanocyl brand, enhance the performance of lithium-ion batteries by improving electrical conductivity, energy density, charging speed, and overall battery lifespan. These benefits translate to significant enhancements in the performance and reliability of electric vehicles and energy storage systems — two key enablers of the transition away from a fossil fuel-based energy system.

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.

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 with our facilities. That is why we conduct life cycle assessments (LCAs) by evaluating all environmental impacts in our products' entire lifecycle. To achieve a circular economy, we collaborate with our entire value chain to understand our impacts and reduce waste in any form.





## 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 to be net energy positive, which we have been consistently achieving globally since FY2016.

As with all manufacturing activities, our operations produce emissions that we are committed to reducing by optimizing our process. 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 FY2025.

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 FY25 we planted 1843 trees in the following geographical locations:

**Undabaso Forest-Spain**-This project prioritized biodiversity recovery through tree planting to restore habitats, enhance water cycles, and support native vegetation.

**Reforestation in the State of California, USA** - Tree planting efforts in California are strengthening ecosystems, lowering wildfire risks, and preserving native biodiversity. Discover three recent reforestation projects making a lasting impact across the state.

**Reforestation projects in India**-Reforestation efforts center on planting fruit trees and mangroves to restore biodiversity, protect coastal areas, and support local communities. These projects improve nutrition, reduce erosion, and build resilience against storms. Three recent initiatives highlight the impact of tree planting across the country.

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**Over the past year, Birla Carbon is responsible for donating 1,843 trees.**

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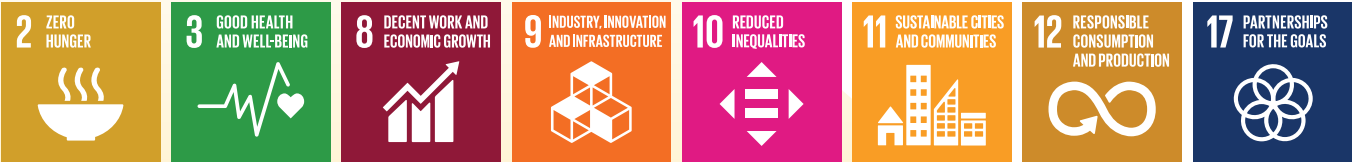
# Innovation

The world around us is rapidly changing, and our ability to adapt to this change is an integral part of our business culture. At Birla Carbon, we embrace change as an opportunity to grow stronger and more resilient. Innovation challenges us to shift our mindset, future-focus our perspectives, and strive for continuous improvement.

Our innovation journey is deeply embedded in how we think and operate. It encourages employees to challenge convention, learn from one another, and implement solutions that deliver value across our ecosystem of stakeholders, suppliers, customers, and communities. At Birla Carbon, our culture of innovation is critical for us to deliver on our sustainability strategy because becoming a fully responsible business requires every one of us to Share the Future.

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We support the following SDGs through our work





# Fostering a Culture of Innovation

**At the heart of our business lies the ambition to improve and innovate — for our customers, our teams, and the future of our planet. We create an environment where ideas spark at every level, strengthening people, processes, products, and the way we engage with the society. This drive pushes us to develop state-of-the-art solutions while deepening our understanding of our products and their applications, ensuring that innovation directly supports our sustainability goals and long-term impacts.**

By harnessing the best technologies, we are improving our products, uncovering new opportunities for carbon black applications, and closely assessing our sustainability

efforts. We continuously invest in, and upgrade, the technologies of our existing 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. These investments in technology will allow us to maximize the efficiency of our manufacturing processes and enhance our environmental performance. Our investments also focus on enhancing site safety and worker protection, reducing our environmental impact through advanced air emissions controls and more efficient water management, optimizing our carbon and energy cycles, and upgrading plant facilities to foster health and well-being, including through initiatives like our Employee Resource Group (ERG) programming.

## Recognizing Excellence in Innovation

In 2024, Birla Carbon was honored with [InnoLead's prestigious Impact Award](#) for our Birla International Innovation Gathering (BiiG) initiative, a testament to the company's deep-rooted commitment to innovation and sustainability across our global operations. The award recognizes organizations that achieve extraordinary outcomes through innovative thinking, new business models, and transformative offerings that drive tangible value and challenge the status quo.

## The "Share the Idea" Initiative

In 2019, Birla Carbon launched Share the Idea, a program designed to safeguard the future of the organization by fostering a culture of innovation and empowering employees to transform their ways of thinking and operating. By 2024, the initiative has engaged over 500 employees across 14 countries, empowering them to contribute ideas that drive operational improvements and sustainability. The program's success is evident: ten winning ideas have been fully implemented, with four additional projects in development.

## Going "BiiG": The Birla International Innovation Gathering

In June 2022, Birla Carbon elevated our innovation journey by launching the Birla International Innovation Gathering (BiiG) in Amsterdam. This event brought together 120 employees from diverse backgrounds, fostering cross-functional collaboration and knowledge exchange. Supported by Systematic Inventive Thinking (SIT), BiiG has become a catalyst for sharing best practices and scaling impactful ideas across the organization. SIT provides a structured framework for innovation, leveraging existing resources to generate solutions and establishing patterns that aim to make innovation more systematic and repeatable.



## Impact on Sustainability and Business

Birla Carbon's innovation culture is closely linked to our sustainability strategy. By encouraging grassroots participation and leveraging global networks, the company continues to deliver solutions that reduce environmental impact, improve efficiency, and enhance stakeholder value. The recognition from InnoLead underscores Birla Carbon's leadership in embedding innovation as a core driver of sustainable growth and operational excellence.

Birla Carbon's journey demonstrates that when innovation is democratized and aligned with sustainability goals, it can deliver measurable business and environmental benefits, setting new benchmarks for the industry.



# Culture of Innovation

## Birla Carbon's First Global Health, Safety & Environment (HSE) Video



In 2024, at our electricity co-generation facility in Brazil, engineer Kaio Ferreira imagined a simple yet powerful way to strengthen safety awareness across Birla Carbon. His vision was to create a Global HSE Video that would speak to the visitors, contractors, and new employees by highlighting essential topics such as the Safe Six occupational health risks, Lockout/Tagout (LOTO), and Personal Protective Equipment (PPE).

What began as Kaio's idea soon grew into a collaborative effort. He brought together a diverse, multi-region team who shared his passion for safety and helped transform the concept into Birla Carbon's first-ever Global Health and Safety Video. To ensure accessibility and impact, the video was fully captioned in local languages and officially launched globally in March 2025.

This project illustrates how our commitment to innovation extends beyond products and processes to include the well-being of our people. It is a reminder that when employees are empowered to lead with purpose, they help strengthen the safety-first culture we strive for every day.

[Read more about our Safe Six, LOTO, and other HSE efforts in the Health and Safety section.](#)



[Read More](#)



**Kaio Rodrigues Ferreira**

Cogeneration Engineer  
Birla Carbon Brazil



**Innovation begins with people. At Birla Carbon, we don't just build solutions, we build trust, purpose, and ownership. The Global HSE Video project was born from a simple idea: that every person, in every plant, deserves to feel safe.**

**What makes Birla Carbon truly innovative is how it empowers individuals to turn these ideas into action. At our Cubatão, Brazil Plant, this mindset is part of our daily commitment, combining technical rigor with care for people.**

**When teams feel seen, heard, and supported, they create solutions that transform how we work and how we care for one another. Sustaining innovation isn't just about tools or programs, it's about believing in people and creating space for them to lead."**



## Digital Incident Reporting

At our Trecate plant in Italy, the Health, Safety, and Environment (HSE) team identified an opportunity to improve how workplace incidents were recorded and addressed. Previously, the process relied heavily on manual spreadsheets and documentation — a method that was not only time-consuming but also prone to inconsistencies in reporting and data management. This, in turn, created challenges for both timely responses and accurate analysis.

Recognizing the need for a more efficient approach, the team set out to create a digital solution that would simplify reporting, ensure reliable data, and empower employees to act more quickly when risks were identified. Working in close collaboration with our Digital & IT team, they successfully designed and implemented a web-based application tailored to the plant's needs. Developed in-house, the new system was cost-effective while providing a host of benefits, including

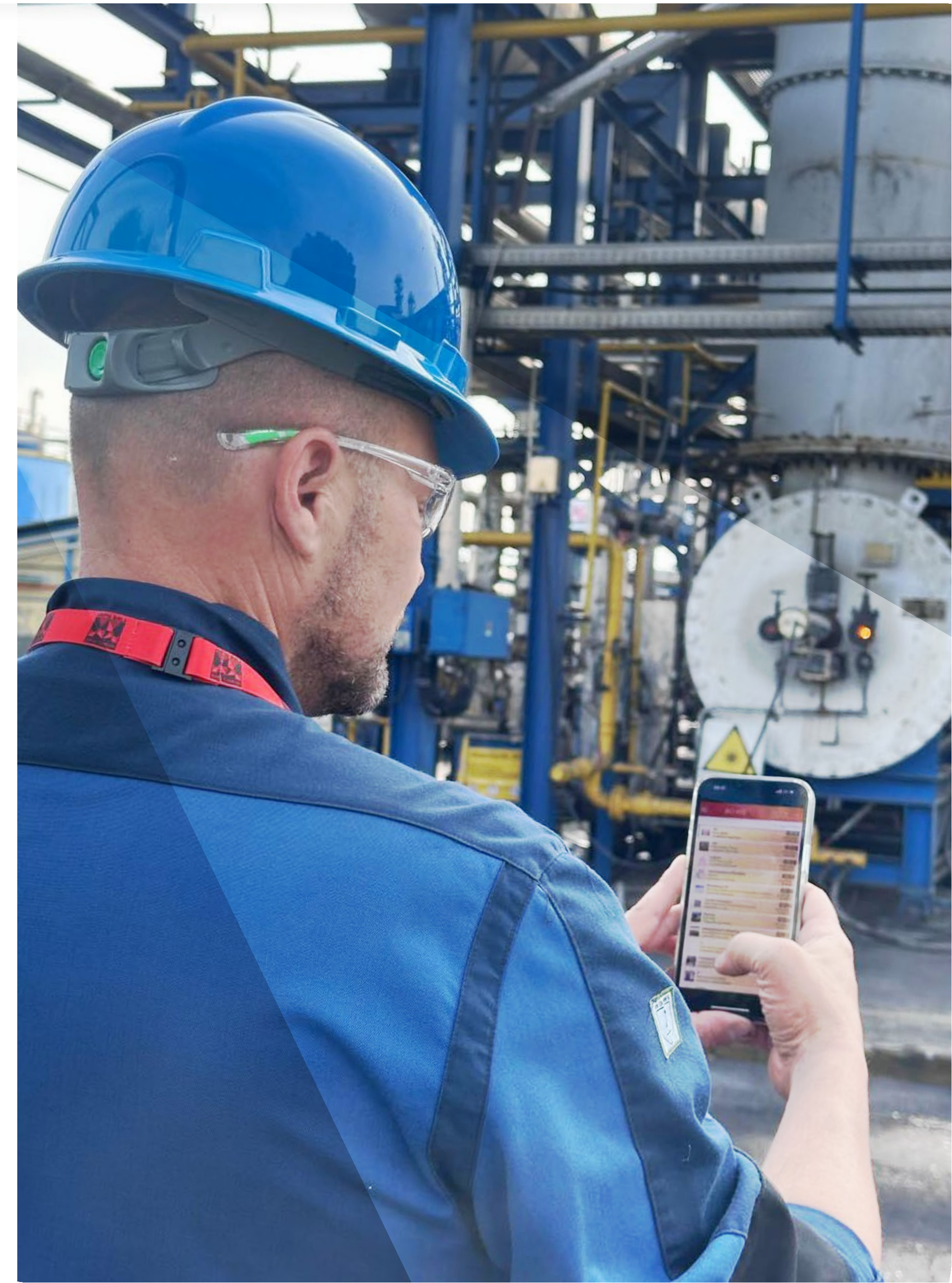
streamlined workflows, more consistent reporting, reduced administrative effort, and enhanced data analysis capabilities. The application also includes a mobile interface in Italian, offering employees a convenient way to report incidents directly from the field and managers the ability to monitor performance indicators in real time.

Launched in early FY2026, the platform has transformed the way incidents are reported and managed, strengthening workplace safety and regulatory compliance. By embracing digitalization, the team not only improved operational efficiency but also reinforced Birla Carbon's broader commitment to sustainability, safety, and well-being through innovative thinking.

[Read more about our digitalization efforts in the Governance section.](#)



[Read More](#)



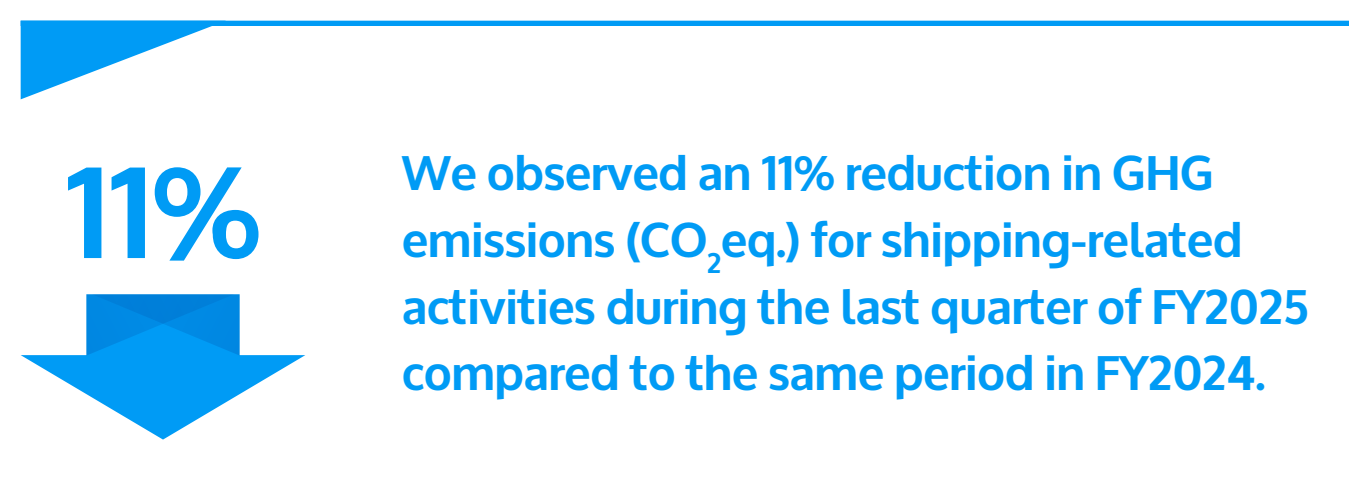


## Optimizing Freight Efficiency and Reducing Emissions

Freight has a substantial impact on our environmental performance as well as our cost structure.. At Birla Carbon Korea, teams came together in 2025 to rethink how we use shipping containers, with the goal of transporting more product per container. Their innovative approach increased load capacity by 9%, equivalent to an additional 1.6 metric tons per each 40-foot container.

This change not only delivered cost savings through more efficient use of shipping resources but also reduced emissions associated with transportation — a clear example of how operational improvements can simultaneously strengthen business competitiveness and support sustainability.

By looking at long-standing processes through a new lens, our teams continue to find creative ways to minimize our footprint, optimize resources, and create lasting value for our customers and the planet.



### EV forklifts to improve Carbon Footprint

Birla Carbon Thailand aimed to reduce carbon emissions across their forklift operations by 500 Mt of CO<sub>2</sub>eq. per year, contributing to the organizational goal of Net-Zero carbon emissions by 2050. In February 2025, the site replaced LPG (liquefied petroleum gas) forklifts with lithium battery-operated EV forklifts. This was complemented by the Process and Warehouse teams implementing a mapping and optimization process, reducing the total number of forklifts from 23 to 20. These efforts resulted in the following outcomes:

- ▶ LPG consumption reduced by 165 Mt per year.
- ▶ Annual emissions reduction of 513 Mt CO<sub>2</sub>eq.
- ▶ Lower operational noise compared to LPG forklifts

[Read more about out GHG reduction efforts in the Environment section.](#)



## Building a Diverse, Equitable, and Inclusive Organization

At Birla Carbon, we are deeply committed to fostering an inclusive organization that mirrors the diversity of the markets we serve. We firmly believe embracing Diversity, Equity, Inclusion, and Belonging (DEIB) provides a competitive advantage, enabling us to unlock innovation, deepen market understanding, strengthen team dynamics, and enhance our brand reputation. Our multicultural and diverse workforce is a powerful asset, allowing us to incorporate a wide range of perspectives and deliver superior service to customers worldwide.

To advance our DEIB objectives, we launched a regional campaign in collaboration with Maite Herrera, EMEA Human Resources Project Manager, and Andrea Tiedemann, Director of Human Resources EMEA. The initiative focused on gathering employee input for our DEIB Action Plan, addressing culture, leadership, learning and development, hiring, and occupational safety. Active engagement across the region, including guided iCoach innovation workshops, helped shape the plan and ensure broad participation. In these sessions, our coaches partnered with our sites to select

relevant topics and apply the SIT method to generate practical solutions to existing challenges. These sessions and workshops engaged 156 employees across six EMEA locations.

The results of the campaign were significant: 95 ideas were submitted, with 48 generated during iCoach sessions and workshops. Ultimately, 47 ideas were selected for implementation, which were incorporated into 17 DEIB projects, reflecting our commitment to continuous improvement. Through these efforts, Birla Carbon continues to build a workplace where innovation thrives and every voice is valued.

[Read more about Birla Carbon's commitment to building a diverse, equitable, and inclusive organization in the Social section.](#)





# Research and Development

To better serve our customers, we are expanding research and development (R&D) in novel product and process areas. Areas adjacent to where we currently work, such as conductive, renewable, recycled solutions and other low-GHG emission carbon products, 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, and to drive our sustainability and growth ambitions. Our three principal R&D Centers are in Belgium (Sambreville), India (Taloja), and the USA (Marietta, Georgia).

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

**01 Manufacturing Technology & Process Innovation**

**02 Analytical Science and Quality**

**03 Product Development**

**04 Material Innovation**

# Net Zero Solutions

**Chemical products are ubiquitous in modern society. The chemical sector is a large industrial emitter of greenhouse gases (GHGs) and, as such, producers face significant challenges and costs on the path to decarbonization.**

Sustainable solutions for producing carbon black will need to address the dual objectives of lowering GHG emissions while enhancing the performance of carbon black products. Birla Carbon's R&D team is focused on developing solutions to produce low-GHG emission products and integrating these pathways into manufacturing processes.

One example pathway, sustainable carbonaceous materials (SCM), is poised to become a lever for decarbonization of the tire industry — a significant component of the automotive industry's climate change impact. SCM 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 SCM, as well as oils and gases that can be reused or converted into energy. Birla Carbon has pioneered this approach with its Continua™ product, Continua is a fully circular material derived from end-of-life tires that advances decarbonization while helping customers meet their sustainability goals, reduce

reliance on virgin feedstocks, and drive circular solutions for the automotive industry

Other decarbonization pathways being investigated by the R&D team include carbon dioxide conversion processes, methane pyrolysis processes, and process electrification. Through innovation and process development work in this space, we continue to strengthen our industry-leading position while helping to reimagine the carbon production processes and facilities of the future.

Building on these innovations, Birla Carbon's net-zero by 2050 goal is expected to drive further progress in sustainable manufacturing and circularity. By setting this long-term target, we aim to foster continuous improvement in operational efficiency, encourage the adoption of low-GHG emission materials, and support the decarbonization efforts of key customer industries. Over time, this commitment is projected to help Birla Carbon and our stakeholders adapt to evolving market and regulatory expectations and contribute to a more sustainable value chain for the global chemical sector.



**The oxidation of carbon into CO<sub>2</sub> to produce energy has been a key technology for the development of human civilization, but the resulting CO<sub>2</sub> emissions are causing great harm to our environment. The manufacture of carbon black also requires energy which contributes to the CO<sub>2</sub> emission problem. Birla Carbon continues to optimize the traditional carbon black manufacturing process to reduce our carbon footprint, while also pursuing new and innovative ways to produce carbon black with lower carbon energy sources."**

**Barry Stagg, Ph.D**

Director of Manufacturing Technology  
Birla Carbon



# Stakeholder Partnerships

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

In the past year, our R&D team conducted four production trials with recycled and bio-derived feedstocks and successfully produced several grades of furnace carbon black. We will continue to build upon our findings from these trials to increase the use of these sustainable carbon blacks and support their adoption in the market to provide more options for our partners.

Birla Carbon continues to establish successful partnerships to advance circularity and sustainability in the tire and rubber industries. In Europe, we collaborate with Cirttec, a leading innovator of pyrolysis technology and producer of renewable fuels from end-of-life tires (ELTs), to create Continua™ SCM. ELTs are collected by retailers to be aggregated and recycled by our partner Cirttec. With our expansion into India, we have partnered with Finster, a pioneer in tire recycling and polymer recovery, to develop and produce a new grade: Continua™ 8030 SCM. Tires are collected and processed by Finster, enabling us to set new benchmarks for sustainability and quality in the region. We are actively pursuing new opportunities worldwide and plan to produce Continua™ SCM in other regions in the years to come, strengthening our leadership in circular materials and delivering innovative solutions for our customers.



Continua™ SCM is Birla Carbon's unique sustainable carbonaceous materials (SCM) product derived from the pyrolysis of end-of-life tires (ELTs). Our R&D teams continue to work with our customers to increase the adoption of Continua™ SCM in their own products and leverage the sustainable benefits it provides as a recycled and circular material.

## Continua™ and the Challenge of Advancing Circularity

As a responsible industry leader, Birla Carbon has witnessed the evolution of tire recycling and its growing importance for global sustainability. In recent years, SCM derived from the pyrolysis of ELTs has been recognized as a new category of materials, distinct from carbon black, with unique compositional character and

regulatory identification codes. This important distinction highlights the fundamental differences between SCM and conventional carbon black — both in composition and legal status. The European Registration, Evaluation, Authorization and Restriction of Chemicals (REACH) regulation now requires a separate registration dossier for SCM, distinct from that of carbon black. Despite these developments, confusion remains in the market due to the continued use of the term "recovered carbon black" (rCB) to describe SCM. This has led to some unfair business practices and regulatory noncompliance, as many stakeholders continue to handle, trade, and transport SCM as though it were carbon black. These practices, even if often unintentional, can undermine market transparency and increase legal risks for companies across the value chain.

We believe it is in the collective interest of the industry to support accurate classification and promote fair business practices. As we move forward, we invite all stakeholders and participants throughout the value chain to bolster efforts toward clarity and consistency in SCM identification and management, as we continue supporting the journey to true circularity.





In 2023, Birla Carbon completed the acquisition of Belgium-based **Nanocyl SA**, a worldwide leader in multi-wall carbon nanotubes (MWCNTs). Nanocyl is a pioneer in the manufacturing of industrial thin MWCNTs and is a worldwide industry leader in the field of MWCNTs and MWCNT-based formulated products. Nanocyl's industrial strategy focuses on the current challenges of the transport and electronics markets, while developing novel sustainable solutions for the energy systems and rubber markets.

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 and next-gen batteries. 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 our effort to realize our multi-prong sustainability agenda. The acquisition of Nanocyl has been a clear step towards executing our strategy in that direction. In synergy with novel carbon products, we anticipate that this partnership will enable Birla Carbon to be a significant player in the emerging energy systems space.



**Alicia RuI, Ph.D**

Energy BU Manager

Nanocyl, A Birla Carbon Brand



**Sustainability implies changes of habits at industrial and economical levels. Nanocyl is deeply committed to positively contribute to this global effort for the benefit of the planet, its natural resources, its current inhabitants, and future generations, especially regarding our future with the use of conductive carbon in Energy applications."**

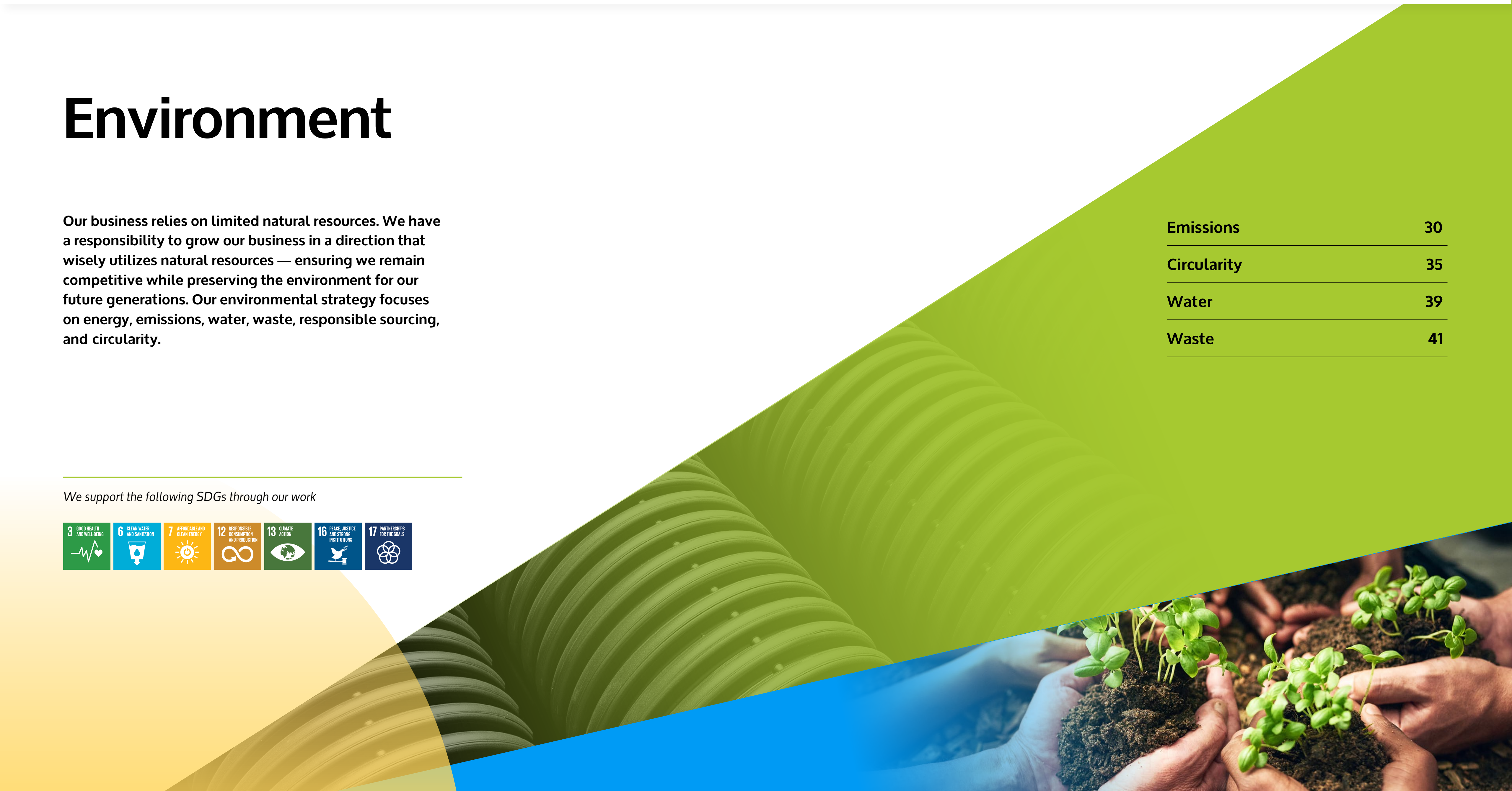


# Environment

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

Emissions	30
Circularity	35
Water	39
Waste	41

We support the following SDGs through our work





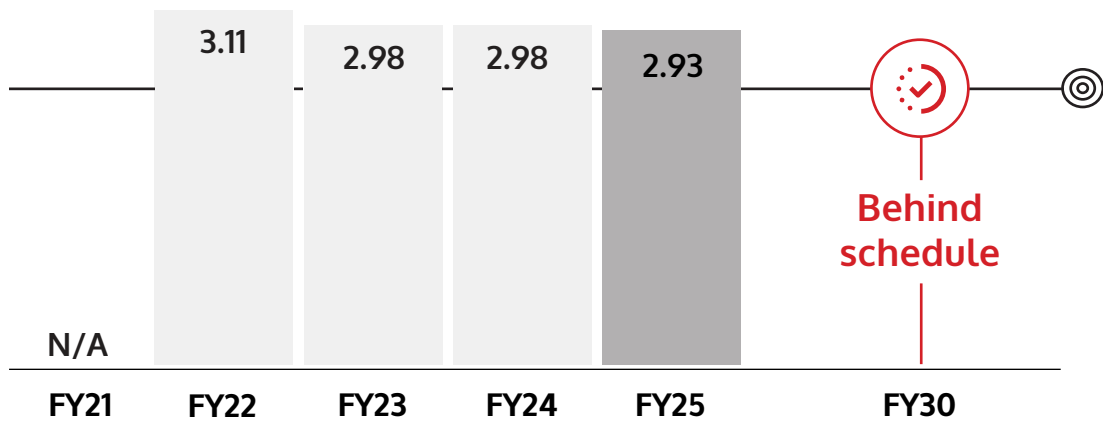
# Emissions

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 to 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 emission reduction efforts, we have established an interim target to reduce our Scope 1, 2, and 3 (upstream) emissions intensity (Mt CO<sub>2</sub> eq. /Mt product) by 22% against our FY2022 baseline by 2030. We developed this interim target by utilizing our robust and verified GHG inventory, findings from our LCAs, and our net-zero roadmap. This updated target reflects our life cycle approach and commitment not only to consider GHG reduction within our plants, but throughout our value chain as well.

## Progress Towards our Target

**TARGET:** Reduce our Scope 1, 2, and 3 (upstream) emissions intensity (Mt CO<sub>2</sub> eq. /Mt product) by **22%** against the FY2022 baseline by 2030



Total Emissions  
(Scope 1, 2, and 3)  
**5.35** million metric tonnes CO<sub>2</sub>eq.



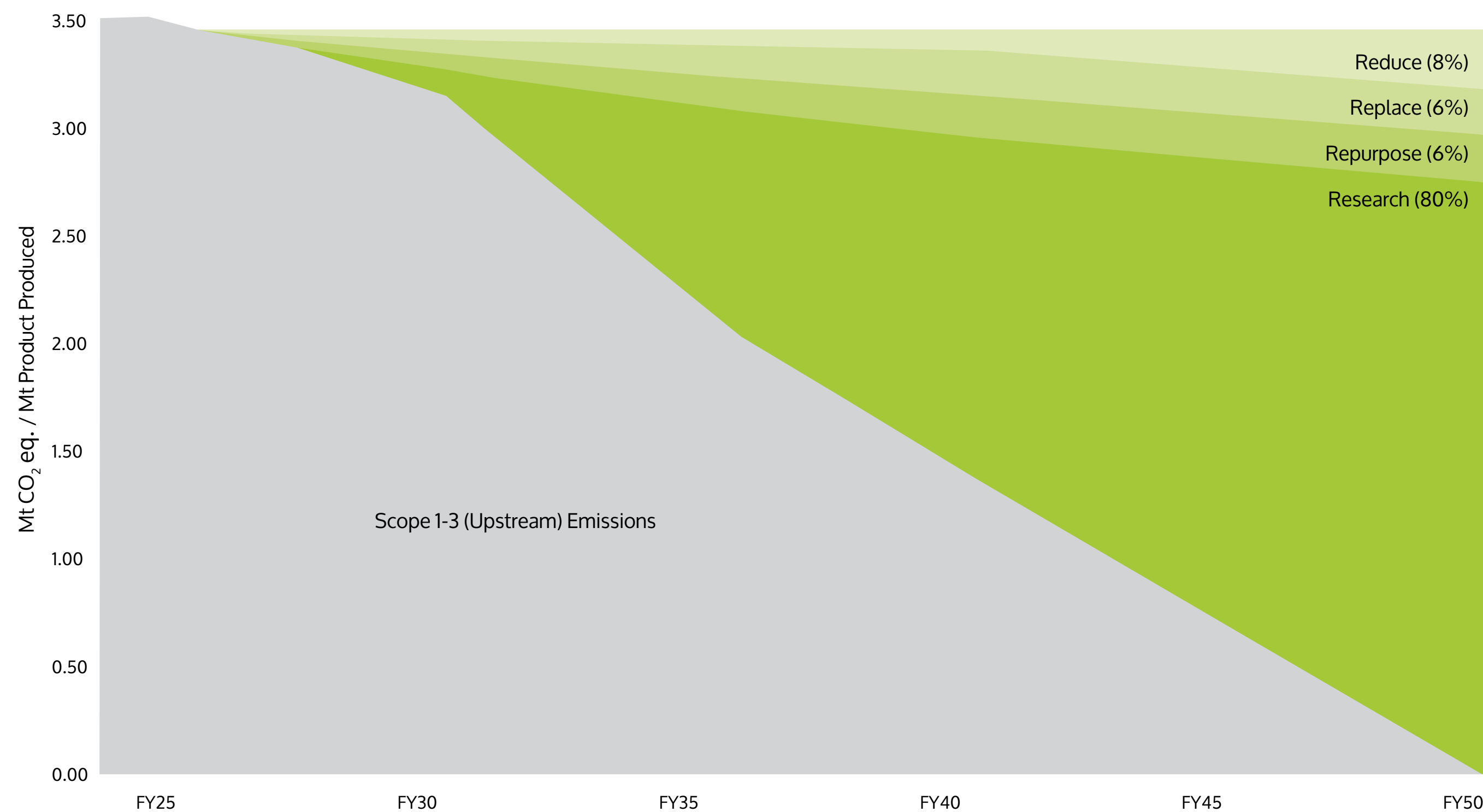
- |                 |  |                 |  |                 |   |
|-----------------|--|-----------------|--|-----------------|---|
| <b>0.84</b>     | <b>Scope 3:</b> Purchased goods and services (includes raw materials and feedstocks, packaging materials and purchased services) | <b>3.57</b>     | <b>Scope 1:</b> Direct emissions from sources we own or control such as on-site combustion                     | <b>0.21</b>     | <b>Scope 3:</b> Emissions from combustion of the tail gas that we sell  |
| <b>0.05</b>     | <b>Scope 3:</b> Transportation of purchased materials to Birla Carbon  | <b>0.05</b>     | <b>Scope 2:</b> Indirect emissions from the generation of purchased energy such as electricity                 | <b>&lt;0.01</b> | <b>Scope 3:</b> Emissions from assets owned by Birla Carbon and leased to other entities (i.e. warehousing and storage) |
| <b>&lt;0.01</b> | <b>Scope 3:</b> Operation of assets leased by Birla Carbon (i.e. offices and vehicles)   | <b>0.03</b>     | <b>Scope 3:</b> Emissions related to the production of fuels and energy purchased and consumed by Birla Carbon | <b>0.32</b>     | <b>Scope 3:</b> Expected end-of-life emissions from all products sold   |
| <b>0.04</b>     | <b>Scope 3:</b> Emissions associated with capital purchases (equipment, machinery and construction services)                     | <b>&lt;0.01</b> | <b>Scope 3:</b> Waste generated in operations  | <b>0.21</b>     | <b>Scope 3:</b> Investments   |
|                 |  | <b>&lt;0.01</b> | <b>Scope 3:</b> Transportation of employees between their homes and Birla Carbon sites                         |                 |   |
|                 |  | <b>&lt;0.01</b> | <b>Scope 3:</b> Employee travel for business purposes  |                 |   |



## Our Net-Zero Roadmap

Our strategy for reducing our GHG emissions to achieve net zero remains anchored by the 4Rs: **Reduce, Replace, Repurpose, and Research**. 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.



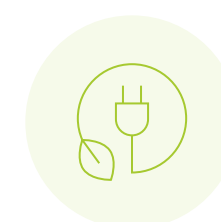
### Reduce (8%)

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



### Repurpose (6%)

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



### Replace (6%)

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



### Research (80%)

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. Our business focuses on investments in and the development of such technologies.



We drive company-wide initiatives, such as yield improvement and energy reduction, while empowering each of our manufacturing locations and offices to pursue additional projects tailored to their local and regional priorities. To support this effort, we have established employee teams as part of our Share the Future strategy. These teams 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 (CO<sub>2</sub>) 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.

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 Roadmap<sup>7</sup> 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

We continue to conduct 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 increase 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 innovative raw materials.

## Advancing Industry Standards: Carbon Black LCA and Product Carbon Footprint (PCF)

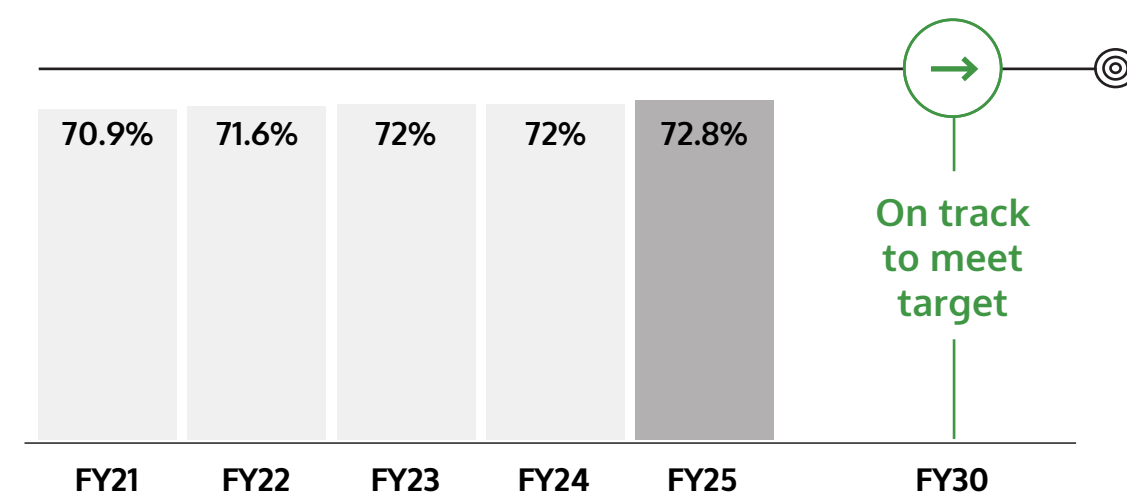
Birla Carbon is an active member of the International Carbon Black Association (ICBA). The ICBA is a scientific, non-profit corporation founded in 1977 that comprises of carbon black industry leaders and is dedicated to advancing research on the health, safety, and environmental aspects of carbon black production and use.

Furnace carbon black (CB) represents 95% of the volume manufactured by ICBA members and is the main processing technology used on the market. The release of an average cradle-to-gate PCF for furnace carbon black marks a significant step forward in the association's commitment to support downstream industries in meeting their sustainability and decarbonization goals, as well as eco-design efforts. Through this initiative, the ICBA aims to provide a reliable, science-based reference point for customers' PCF calculations, promoting consistency and transparency in sustainability reporting across the value chain.

The ICBA launched a collaborative initiative in 2024 to develop a Product Category Rule (PCR) for carbon black. This PCR will be designed to standardize how LCAs are performed across the carbon black industry. Standardization is important because the assumptions and boundaries set during LCA modeling can greatly impact the LCA results and conclusions. By creating this PCR, the ICBA aims to make product-level LCA and PCF data more credible and comparable across the industry.

### Progress Towards Our Target

**TARGET:** Increase our absolute energy conversion efficiency to **80%**



1000  
MWh



**Energy Saving: 1000 MWh energy savings achieved in last 12 months in Patalganga plant by replacing FD fan with turbo FD fan and replacing TH cooling water pump with energy efficient pumps and IE3 motors.**

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





## Carbon Black LCA Leadership

As a world leader in carbon black manufacturing, we create products that contribute to an enhanced standard of living for people throughout the world. Life Cycle Assessments (LCAs) are central to our sustainability strategy and at the core of business decision-making. LCAs allow us to evaluate each product's entire life cycle by quantifying the environmental impact, from raw material extraction to end-of-life.

Our FY2024 cradle-to-gate LCA study was conducted in accordance with ISO14040 and ISO14044 and 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 line with 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.

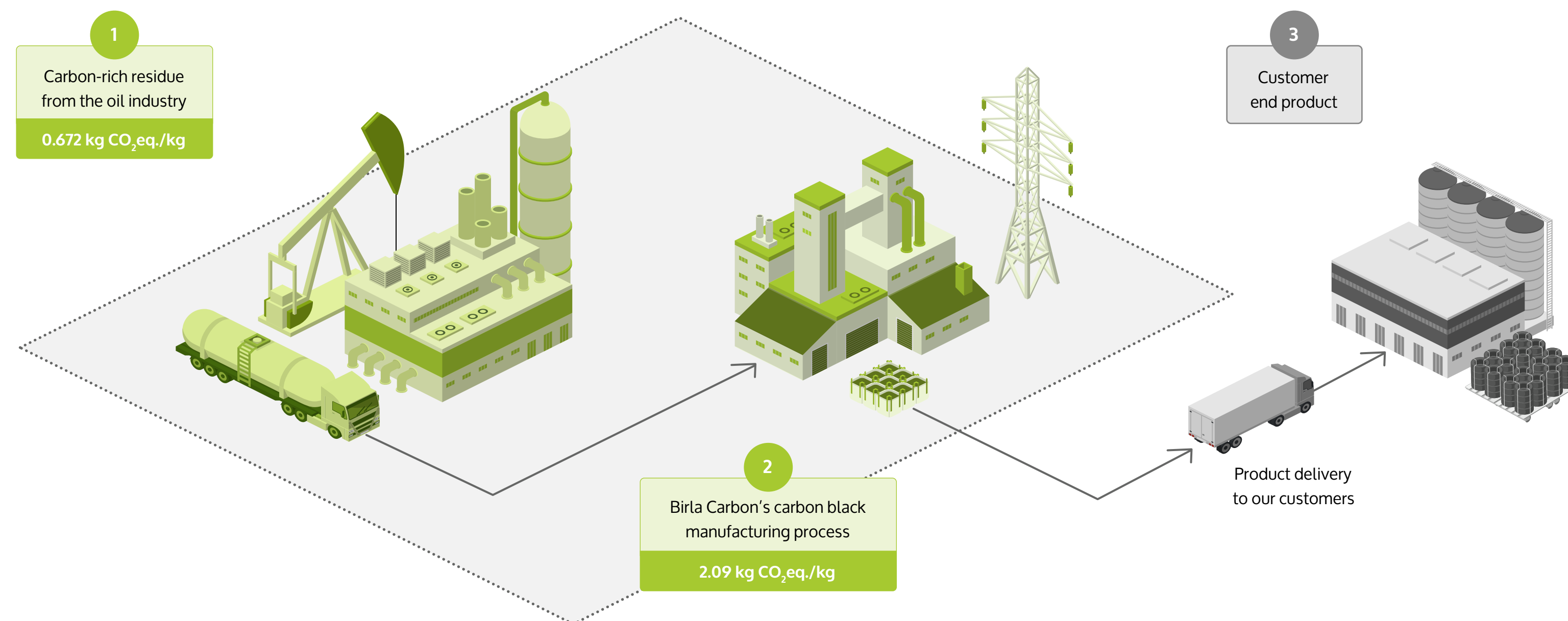
Insights from our LCA support credible environmental claims and informed decision-making. By conducting LCAs, Birla Carbon gains actionable insights to enhance sustainability performance and actively contribute to broader industry discussions. These insights are also being woven into our business planning, ensuring that sustainability considerations shape both strategic and operational decisions.

**Our FY2024 Carbon Footprint Statement for Carbon Black is publicly available on our website.**



**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.**

## Carbon Black Carbon Footprint (kg CO<sub>2</sub>eq. / 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.



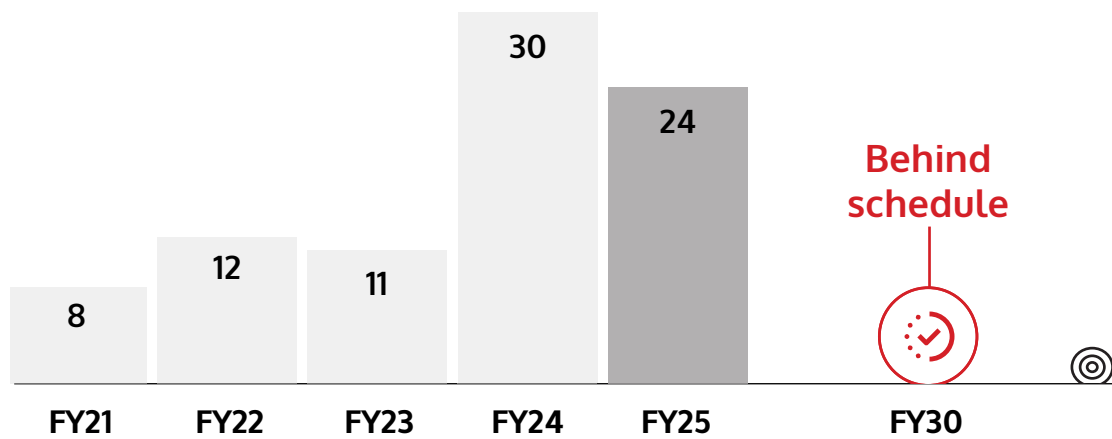
## Air Emissions

We are dedicated to minimizing non-GHG air emissions from our manufacturing processes and business operations. Through our commitment to the 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.

### Progress Towards Our Target

**TARGET:** Record **zero** environmental releases year on year



FY2025 comment: 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 to reporting any and all emissions, no matter how small or insignificant. We are using this more aggressive approach with regard to any release to truly minimize the impact on our neighbors and the environment.

### 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 such technologies and assessing how they can be implemented across our operations.

Our Birla Carbon Thailand facility is currently installing advanced emissions control equipment to address evolving regulatory requirements. This new equipment will deliver emissions reductions exceeding 90% in SOx, 80% in NOx, and 85% in particulate matter on the associated systems. Birla Carbon Canada is actively evaluating various desulfurization technologies to significantly lower SO<sub>2</sub> emissions. The project in Canada is expected to be operational by mid-2028. Both initiatives reflect the company’s ongoing commitment to environmental compliance and sustainable operations. Since FY2022, we have implemented a novel technology to reduce SOx and NOx emissions. Through the seawater scrubber emission reduction project, we have achieved substantial NOx savings. At the same time, we recognize that these technologies can also increase the amount of waste generated, which remains a key issue we continue to address.

### Seawater Scrubbing

Since FY2022, Birla Carbon USA (North Bend, Louisiana) has adopted seawater scrubbing — an innovative technology that uses seawater to effectively remove sulfur dioxide (SO<sub>2</sub>) and oxides of nitrogen (NOx) from emissions. Located near the Gulf of Mexico and the Gulf Intracoastal Waterway, the North Bend facility benefits from a convenient and sustainable water source for this process. The technology continues to maintain emissions well below the current permit limits while eliminating the need to landfill millions of pounds of gypsum, a solid byproduct generated during traditional wet flue gas desulfurization. This advanced approach continues to achieve more than 90% reductions in both nitrogen oxide (NOx) and sulfur dioxide emissions (SO<sub>2</sub>) compared to conventional methods.

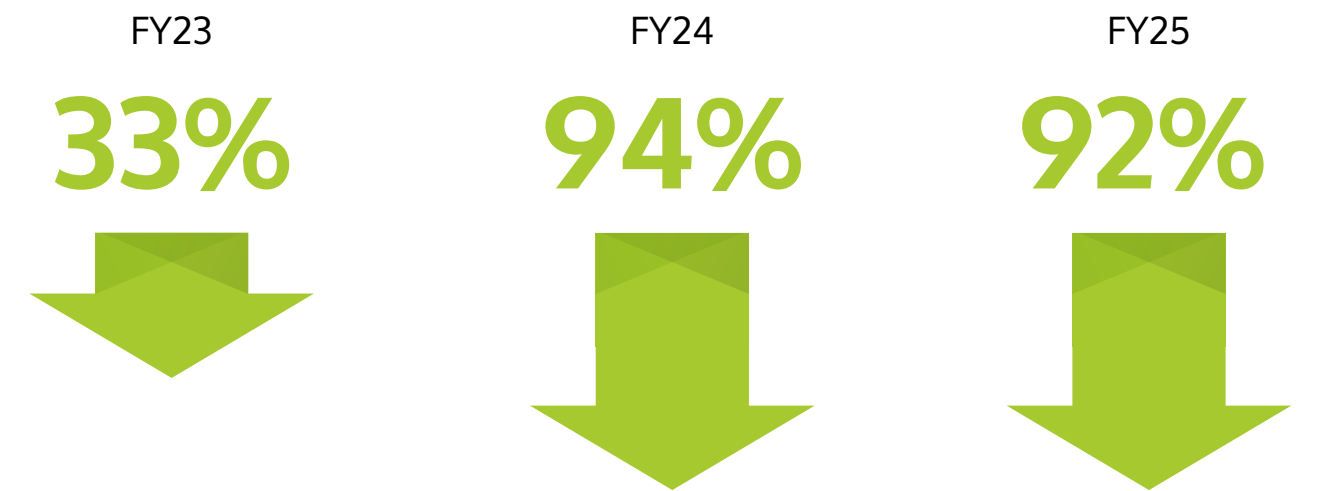
**Read about more of Birla Carbon’s leading innovation efforts and investments in the Innovation section.**



[Read More](#)



### NOx Emission Reduction at North Bend Plant from FY2022 Baseline (%)





# Circularity

Continua™ SCM is a unique family of products that enables circularity at scale by developing the next generation of sustainable solutions for tires, mechanical rubber goods, plastics, and coatings industries. It provides performance-enhancing benefits by boosting product longevity and can replace virgin carbon black in selected applications, thereby reducing greenhouse gas emissions and diverting end-of-life materials from going to landfill.

Our high-quality circular alternatives to traditional carbon blacks are a solution to help stakeholders achieve their sustainability goals. These offerings significantly reduce the overall carbon footprint across our shared value chain. Delivering sustainability at scale is one of the key differentiators of Continua™ SCM, made possible by our technical expertise and reputation as a trusted supplier.

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

Over the next five years, we intend to offer over 100,000 tonnes of Continua™ SCM globally each year for use in a wide range of applications, including tires, mechanical rubber goods, plastics, and many more. As part of this effort, we have already actively expanded our reach across Europe and Asia. A key milestone will be the start of tire char production at the new Dutch facility in November 2025, with an initial capacity of 13 ktpa (kilotonnes per annum). This material will be converted into Continua™ SCM at our advanced facility in Italy. With our partner, we plan to expand this facility up to 73 ktpa within the next five years.

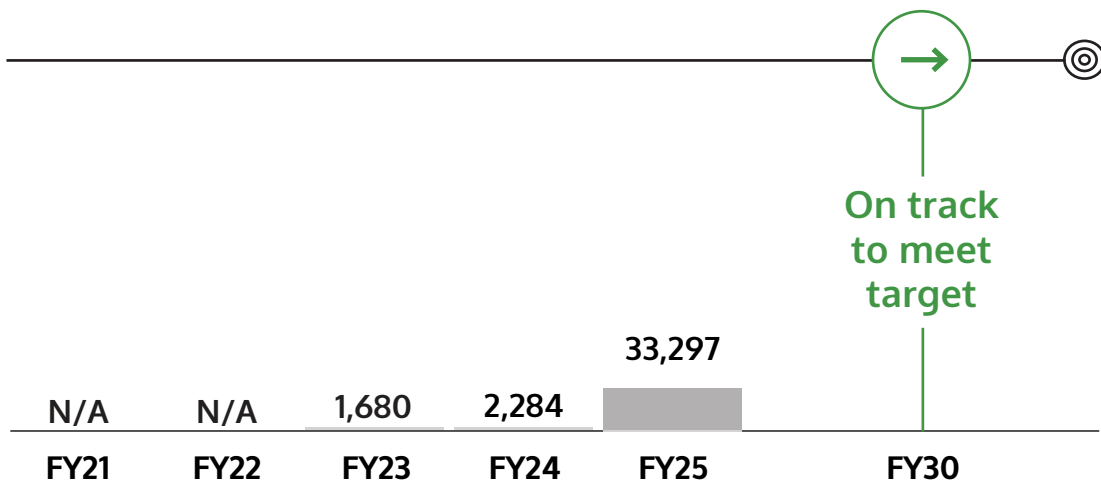
Our Continua™ Sustainable Carbonaceous Materials (SCM) are now available in India. Our partnership with Finster in India has yielded successful commercialization of Continua™ 8030 and Continua™ 8030P SCM, supported by a robust Quality Management System and strong HSE practices with a clear focus on continuous improvement. This pioneering circularity approach at scale delivers sustainable benefits for tires, plastics, and MRG products. It empowers our customers in the region to contribute to a more circular economy and embrace sustainable production practices.”



**Deepak Kogata**  
Finster Project Coordinator  
Birla Carbon

## Progress Towards Our Target

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



100,000  
tonnes of  
Continua™ SCM

Over the next five years, we will offer 100,000 tonnes of Continua™ SCM globally each year for use in a wide range of applications, including tires, mechanical rubber goods, plastics, and many more.



## Continua™ SCM LCA

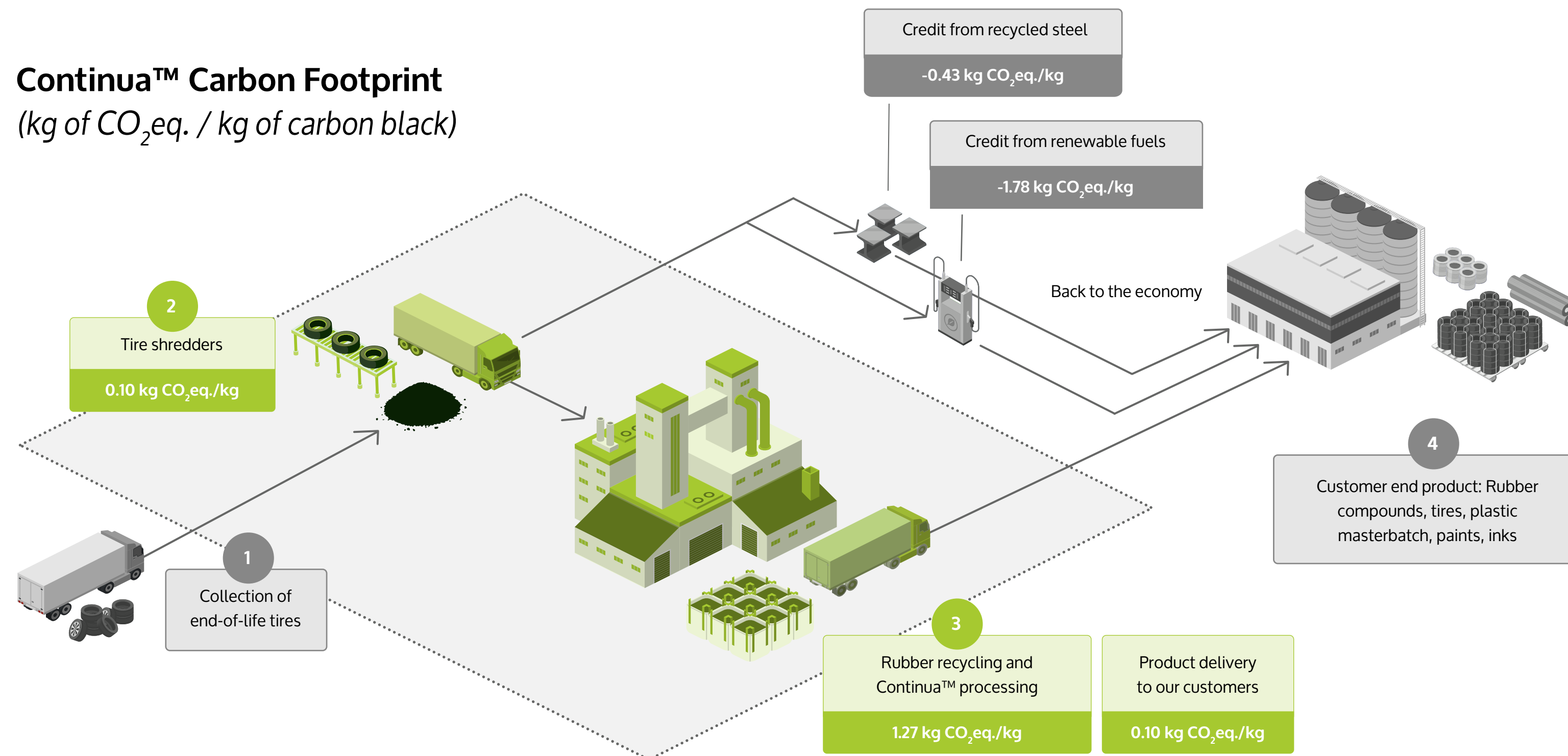
Our Continua™ Sustainable Carbonaceous Material (SCM) is a breakthrough innovation designed to drive circularity at scale. This material not only enhances the recyclability of end-use tire products but also delivers quantifiable life cycle benefits. According to our LCA results, Continua™ SCM offsets approximately 0.73 kg of CO<sub>2</sub>eq. for every 1 kg of Continua™ produced based on a system expansion modeling approach. By offering a high-quality circular alternative to conventional carbonaceous materials, Continua™ SCM empowers our customers to significantly reduce their GHG emissions and move toward more sustainable production practices.

In October 2024, we expanded our production of Continua™ SCM to India through our partnership with Finster. We have since launched and successfully commercialized two grades; Continua™ 8030 and Continua™ 8030P SCM. Our collaboration with Finster has been instrumental in upgrading our tire recycling facility, and we expect to begin expanding capacity at the facility in mid-2026. In partnership with Finster, we have implemented robust Operational Excellence practices across production, Health, Safety, and Environment (HSE), and our Quality Management System (QMS). We plan to update our LCA during FY2026 to account for these expansions and process improvements.

**Our Continua™ SCM Carbon Footprint Statement is publicly available on our website.**



## Continua™ Carbon Footprint (kg of CO<sub>2</sub>eq. / kg of carbon black)



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.



## Big Bags

We partner with a supplier to pioneer the manufacturing of big bags — soft industrial containers for transporting dry, bulk materials — with Continua™ SCM. Previously, the bags were manufactured using traditional carbon black. In India alone, over 15,000 of these bags were used in FY2025. The goal of this initiative is to standardize 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 (ELTs) repurposed through Continua™ SCM per year by 2030; we are on track to meet this target. Over the past fiscal year, 33,297 tonnes of ELTs have been repurposed.

### Big Bag Cleaning and Reuse Process:

At our Cubatão site in Brazil, we have successfully implemented a robust big bag cleaning and reuse process. This initiative is part of our ongoing commitment to sustainability, cost optimization, and operational efficiency. To date, more than 44,000 big bags have been recovered and reused through this program. The process involves the inspection, cleaning, drying, and safe reconditioning of used big bags, allowing them to be reintegrated into our logistics cycle without compromising safety or product quality.

### Benefits of this Initiative:

- ▶ **Environmental Impact Reduction:** Reusing big bags significantly reduces the volume of solid industrial waste generated, contributing directly to the plant's waste minimization and circular economy goals.
- ▶ **Cost Savings:** When the life cycle of the bags is extended, recurring costs associated with the continuous purchase of new packaging materials are eliminated.
- ▶ **Sustainability Alignment:** This practice reinforces Birla Carbon's global commitment towards sustainability and supports the Share the Future strategy.
- ▶ **Operational Efficiency:** The reuse process is fully integrated into the plant's operations, ensuring minimal disruption and contributing to leaner supply chain practices.
- ▶ **Reduced Carbon Footprint:** Manufacturing fewer new big bags leads to lower energy consumption and Green House Gas (GHG) emissions across the supply chains.
- ▶ **Quality Assurance:** All reused big bags undergo a standardized cleaning and quality control protocol, maintaining high safety and hygiene standards.





## Sustainable Packaging with Recycled Content

As part of our commitment to reducing environmental impact and promoting circularity in our operations, Birla Carbon, Italy has undertaken a targeted initiative to increase the recycled content in our packaging materials. This initiative focuses on incorporating a minimum percentage of recycled plastic into various packaging formats, reducing reliance on virgin materials and extending the life cycle of resources.

- ▶ Big bags with 30% recycled plastic from recovered big bags
- ▶ Protective covers made with recycled plastic
- ▶ Regenerated or second-life pallets extending their usable life and minimizing waste
- ▶ Wrapping film with 60% recycled plastic
- ▶ Small bags with 30% recycled material (currently in the testing phase to ensure performance and quality standards are met)

This initiative by Birla Carbon not only supports waste reduction and resource efficiency but also aligns with our broader sustainability strategy fostering a closed-loop system across our value chain.



**Virendra Singh, Ph.D**

Director, Materials Innovation  
Birla Carbon



At Birla Carbon, we are redefining the carbon cycle by transforming how carbon materials are produced, utilized, and recycled. We recognize that this challenge cannot be met alone, hence we are collaborating across the value chain and with our partners to achieve our common goal of net zero emissions. By engaging with technology partners, suppliers, customers, and communities, we are advancing towards a more resilient, low-carbon future.”



# 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 a 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 wastewater generated during manufacturing operations is collected in retention ponds and redirected for reuse in other processes. As part of our sustainability strategy, we share our water-conservation best practices across all our locations. 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 Aqueduct tool. This collaboration enabled us to systematically assess water-related risks across our global operations and inform our water stewardship and risk mitigation strategies. In FY2025, we established a

Water Stewardship Committee to develop a strategy and actionable roadmap aimed at reducing our overall water footprint and strengthening resilience across all operations. Additionally, we engaged three pilot sites that are advancing water measurement methodologies and technologies. The insights from these pilot sites help us advance efforts to reduce our water footprint.

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

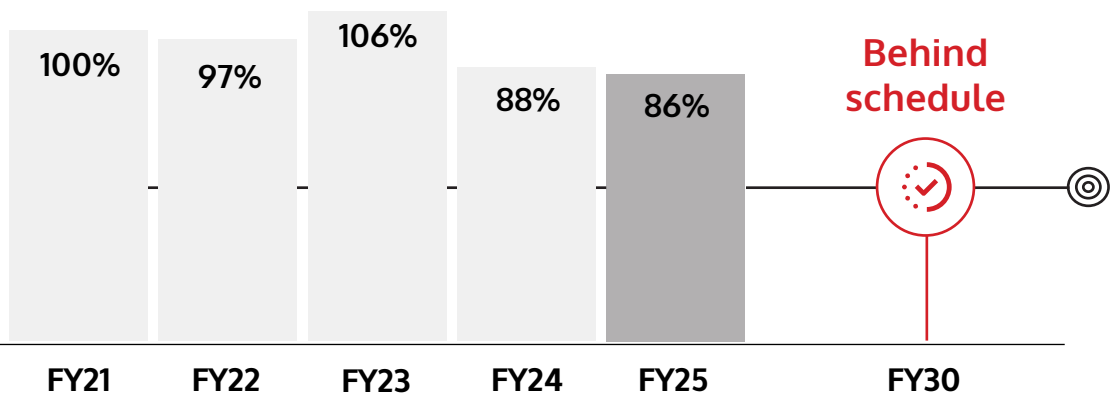
Water Stewardship (EWS) Standard, the Alliance for Water Stewardship (AWS) Standard, and the ABG Technical Standard on water management.

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, which we evaluate and implement wherever feasible.

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

## Progress Towards Our Target

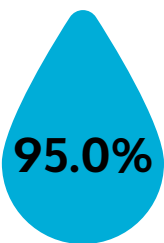
**TARGET:** Reduce our water withdrawal intensity (m³/t carbon black) by **50%** versus FY2013 baseline at our high- and medium-risk sites<sup>8</sup> (water withdrawal intensity by year)



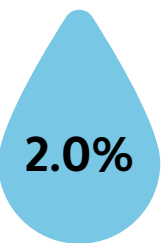
<sup>8</sup> KPI includes Egypt, Hickok, Patalganga, Gummidipoondi, Weifang, and Yeosu.

### Water Withdrawal by Source FY2025

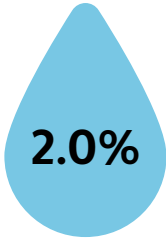
258,558 megaliters



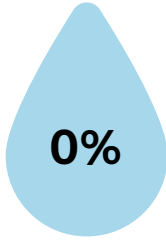
Fresh Surface Water



Municipal Wastewater Treatment Process



Groundwater Well



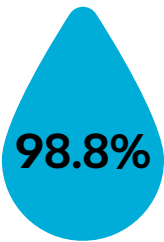
Rainwater Harvested



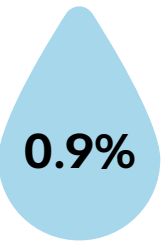
On-site Retention Pond

### Total Water Discharge by Quality and Destination FY2025

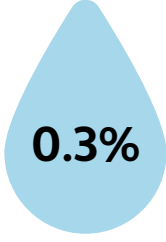
245,418 megaliters



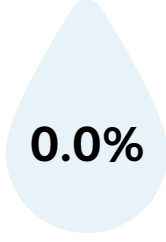
Fresh Surface Water



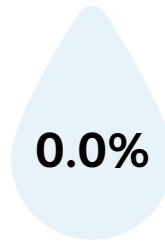
On-site Retention Pond



Municipal Wastewater Treatment Process



Domestic



Groundwater Well



## Water Initiatives and Innovations: Birla Carbon India

Below are some recent water initiatives that have been implemented at our India plants:

### Waste Utilization/Minimization:

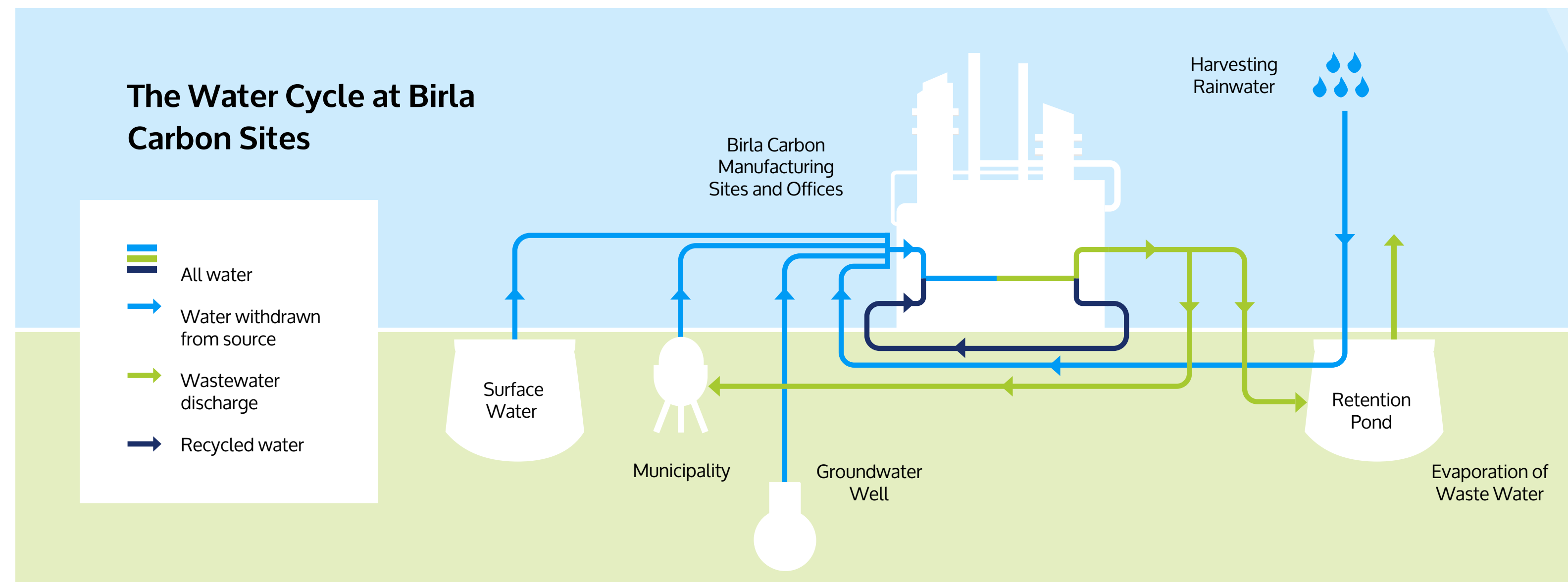
Wastewater skimmed oil 100% reused and wastewater treatment sludge 100% reused by neighboring industry.

**Water Conservation Effort:** Implemented a water reuse system, utilizing floor cleaning water as makeup for Cooling Tower and Venturi Scrubber. This initiative resulted in a daily saving of 20 kl of fresh water.

**3R Principles:** Through continuous initiatives and adherence to the 3R principles (reduce, recycle, and reuse), water consumption has reduced from 5.06 m<sup>3</sup>/Mt CB in FY22 to 4.42 m<sup>3</sup>/Mt CB in FY25.

**Electro De-ionization:** Electro de-ionization (EDI) installed in DM water plant and usage of resins eliminated.

**Sewage Water Collection:** All sewage water from the plant and township collected and reused after treatment.





# 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.

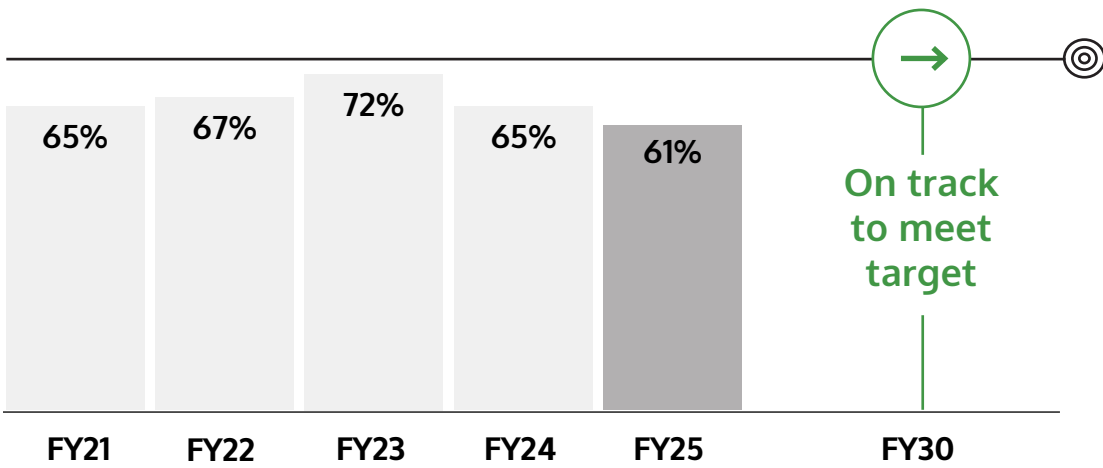
Our strategy focuses on reducing waste generation and ensuring that any waste we produce is reused or recycled, whether for the same or a secondary purpose. We adhere to all relevant HSE requirements and ensure waste materials are disposed of in the safest and most sustainable manner possible.

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, and we encourage our sites to explore new and updated waste-minimization approaches and standards annually.

## Progress Towards Our Target

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



\*FY2025 comment: Our decrease in repurposed waste for FY2025 is due to an increase in cleanup activities around our Hamilton (Canada) plant as well as cleaning around a settling pond at our Santander, Spain facility, resulting in more carbon black being sent to non-hazardous landfill. At both Santander and our Hungary site, we also increased our disposal of hazardous waste, including sludge generated during the cleaning of oil storage tanks and absorbents that have been in contact with hydrocarbons.

### Packaging Recycled through Repasack® Takeback Program in Europe (tonnes)

Through our partnership with Repasack®, we are able to recycle packaging material in Europe annually.

2022	2023	2024
5,201	2,285	4,461

## Electronic Waste

Birla Carbon’s IT team in the USA (Marietta, Georgia) recycles and donates used technology equipment every year. This effort helps to avoid electronic waste being sent to a landfill or otherwise improperly disposed. In the past year, Birla Carbon USA donated 22 laptops, 12 desktops, 8 monitors, and 4 printers. Through this program, we were able to recycle an additional 29 laptops, 20 desktops, 51 monitors, and 12 printers, among other e-waste.

## Food Waste

In India, we manage food waste based on local needs and resources. In Renukoot, food waste generated by the colony and guest houses is regularly collected and disposed of by the municipal council; at Gummidipoondi, all food waste is collected daily and provided to a local cattle farm outside our premises; and at the Patalganga plant, canteen waste is sent to the local Gram Panchayat, a self-governance institution. Through these site initiatives, we strive to minimize food waste and support our local communities.

## Reducing Single-use Plastics

Since 2020, the canteen at our Trecate, Italy facility has been using single-use plates and cups made from fully compostable cellulose pulp. In FY2025, Birla Carbon Brazil launched an internal initiative to reduce single use plastic waste by distributing reusable bottles and cups to approximately 500 employees at our manufacturing plant and regional office. Employees signed their name on a banner in the cafeteria to pledge their support for the initiative and highlight the impact of collective behavior change on waste reduction. The initiative helped reduce our single-use plastic consumption by 135 cups per day, equaling a total reduction of 48,600 cups per year.

## Reprocessing Off-grade and Unused Carbon Black

When we produce off-grade carbon black, rather than disposing of it, we segregate it and let it undergo 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 encouraged to return unused carbon black to us so it can be reprocessed. For example, our Italian site partners with a supplier that repurposes off-spec carbon black in specific plastic and rubber applications. This approach enables us to minimize waste generation while establishing a circular production model.



# Social

**At Birla Carbon, our HR strategy is designed to ensure 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 for Birla Carbon. Our talent philosophy is woven into our HR strategy, forming a seamless connection with our overarching business strategy.

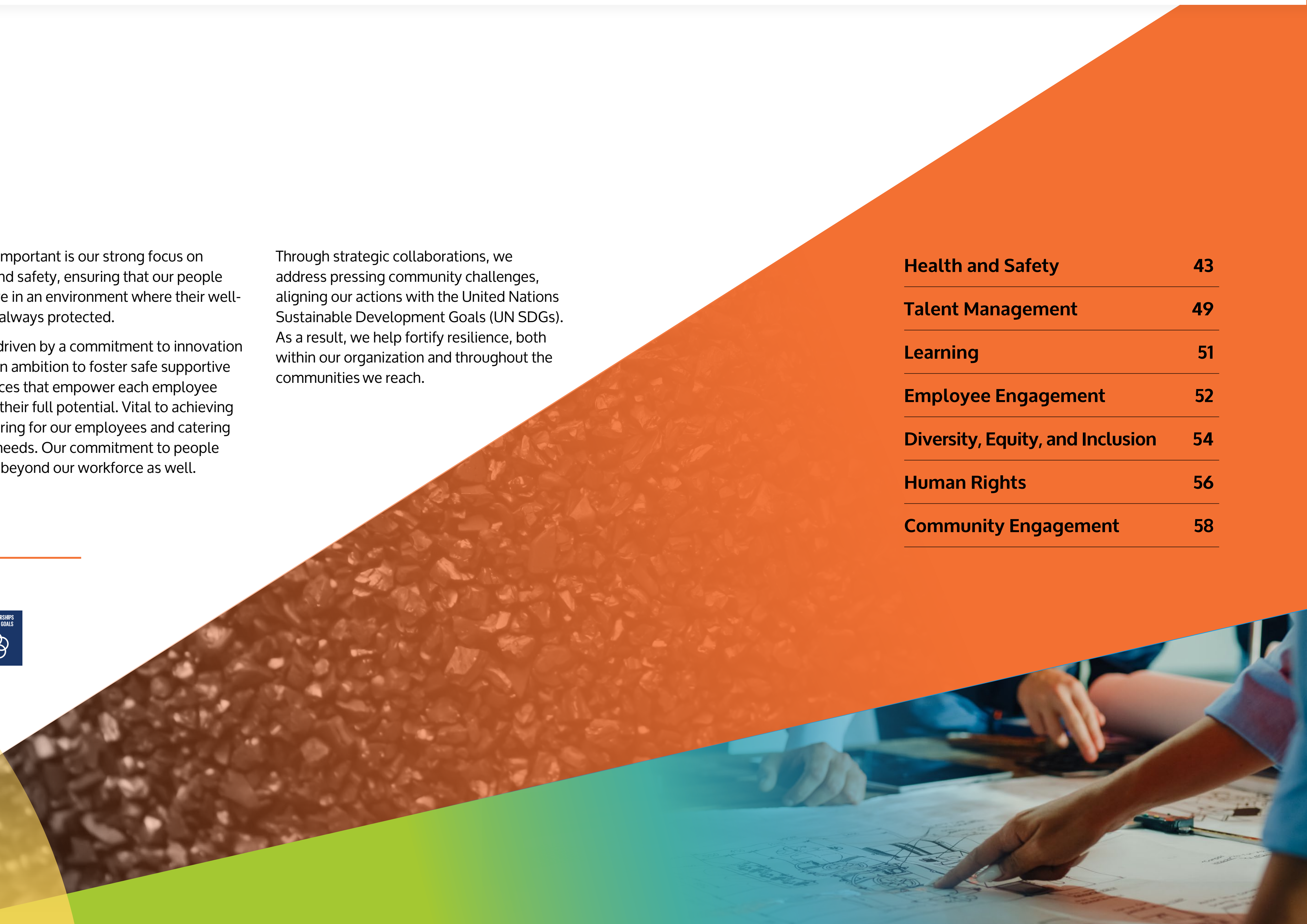
Equally important is our strong focus on health and safety, ensuring that our people can thrive in an environment where their well-being is always protected.

We are driven by a commitment to innovation and by an ambition to foster safe 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. Our commitment to people extends beyond our workforce as well.

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.

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We support the following SDGs through our work





# Health and Safety

**At Birla Carbon, safety is non-negotiable. It is built into our policies, embraced across all levels of our organization, and guides every decision we make. We proactively identify risks and implement preventive measures to ensure the protection of our people and partners. Safety is not just a standard — it is a daily commitment that we uphold without compromise.**

Embedding health and safety in our business 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 safety-related incidents in the workplace because, for us, zero is the only acceptable number.

Our commitment to zero incidents is yielding noteworthy results, with multiple Birla Carbon sites achieving outstanding performance. As of September 2025, our Alexandria (Egypt) and Trecate (Italy) locations

have each achieved nearly 1,500 days with zero recordable incidents and our Santander (Spain) and Patalganga (India) locations have both achieved over 2,000 days. These accomplishments are a testament to the dedication and teamwork at these facilities. As part of a multi-year strategic plan, the Zero Incidents Program has become a cornerstone of ongoing efforts to continuously improve safety standards and practices.

Despite celebrating these achievements, we also recognize and are managing ongoing challenges. These include raising the profile of health and safety in local cultures, ensuring that all contractors comply fully with all our policies and procedures, and communicating safety messages in an appropriate and relevant way across all our global locations. We recognize that different cultures may have different expectations or norms related to safety. Our strategy is based on internal standards that meet or exceed regulatory requirements in the most advanced safety-focused areas and incorporate recognized best practices to set a consistent bar for safety excellence globally.

Building a strong safety culture takes time; we do not pretend to be at the end of our journey. Our culture of safety is created by engaged individuals who actively manage their risks every day. Our aim is to foster a culture where all employees are aware of the risks they face and actively take care of others: when someone observes someone at

risk, we want them to stop and take action to help avert accidents.

In 2024, we expanded our health, safety, and environmental (HSE) roles to include two new Regional HSE Managers, adding a corporate HSE resource in the Asia region for the first time. 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 locations.

In FY2025, Birla Carbon achieved our lowest TRIR value since 2012 — a testament to years of dedicated focus and collaboration across the organization. Our TRIR of 0.31 is eight times better than industry average compared to the 2023 Bureau of Labor Statistics TRIR average, which is 2.6 according to our manufacturing industry classification. Our transformation started several years ago with the launch of Birla Carbon’s Tactical Business Plan, which identified key sites for targeted, high-impact safety initiatives to reinforce core responsibilities and accountability at every level. At the same time, we sharpened our internal compliance audits by focusing on 10 critical areas to ensure robust safety standards: the Safe Six, plus Work Permits, Contractor Management, Above Ground Storage Tanks, and Waste Management. The HSE and HR teams partner on training and onboarding programs that equip employees with the knowledge and confidence to prioritize safety every day.



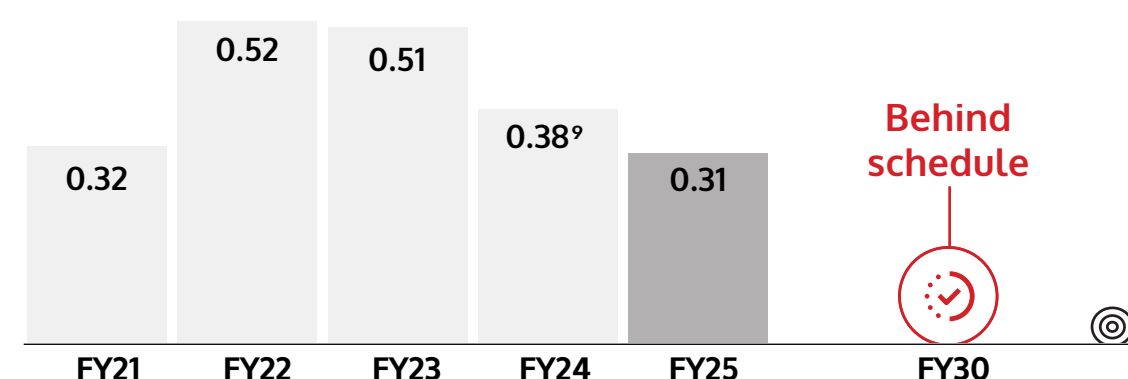
**Ayman Ibrahim**  
Compliance Manager  
Birla Carbon Egypt



**At Birla Carbon Egypt, safety and environmental stewardship are the foundation of our sustainable vision. Through strong leadership, including direct involvement from our Managing Director, we’ve fostered a culture where everyone takes ownership of safety. Over three years, employee training tripled, reporting doubled, and lost time incidents dropped to zero, thus transforming challenges into achievements. Our efforts have earned national and international recognition, including awards from Egypt’s Minister of Labor and the IACB. Protecting people and the environment go hand in hand, and we are committed to sustainable operations through rigorous monitoring, improved waste management, and continuous improvement for a better future.”**

## Safety

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



\*The FY2024 TRIR values as reported in the FY2024 Sustainability Report were 0.32 for employees and contractors, respectively. Post the publication, additional cases were added to the evaluation. These cases brought the FY2024 TRIR values to 0.38 for employees and contractors, respectively. This revised value is published here.

**FY2025 was a strong year for our safety performance, with a total recordable incident rate of 0.31, our lowest recorded value since 2012.**



## Birla Carbon is Routinely Recognized as a Champion of Workplace Safety

In 2024, the International Carbon Black Association (ICBA) awarded **Gold Certificates of Recognition to 13 Birla Carbon sites** for achieving outstanding safety performance, recognizing Birla Carbon as an industry leader in workplace safety. This recognition included 11 of our manufacturing sites and two Research and Development (R&D) Centers. Birla Carbon achieved the highest award count among the six ICBA member companies. Our facilities that received this award include Marietta and Taloja Technical Centers, Camaçari, Cubatão, Egypt, Gummidipoondi, Hickok, Hungary, Italy, Jining, Renukoot, Spain, and Thailand.

Also in 2024, Birla Carbon Thailand received the prestigious **Golden Shield Award** at the national level for being a 'Disease free - Safe and Happy Workplace.' The awards ceremony was organized by the Ministry of Public Health and was attended by various industry stakeholders.

FEIQUE (Business Federation of the Spanish Chemical Industry) recognized Birla Carbon Spain for achieving a **zero accidents rate in 2024** at our site in Santander. This is the second consecutive year our Santander location has earned this recognition. The award was presented by the Spanish Confederation of Business Organisations (CEOE) in Madrid.

In 2024, Birla Carbon Spain (Santander) was also honored with the prestigious **COASHIQ (Business Association for Safety, Hygiene, and the Environment in the Chemical Industry) Safety Management Award**, which recognized our achievement of zero safety accidents. Santander has received this recognition for three consecutive years. 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.



## Safety Action Team: Transforming Safety Culture at Birla Carbon Alexandria

**In response to a challenging year, our Alexandria (Egypt) team established a Safety Action Team. This initiative requires all members of leadership — including Operations, HR, Finance, and Legal — to conduct weekly audits of permitted work to assess compliance with safety program requirements. Previously, participation in safety audits was limited to the HSE team.**

During these audits, leaders are expected to address identified deficiencies and recognize employees and contractors who demonstrate exemplary safety practices. Each leader presents their findings at a weekly meeting, highlighting observed conditions, corrective actions taken, and resulting action plans.

Key focus areas for each site include auditing work permits to verify compliance with safety procedures; engaging with workers and contractors to reinforce the safety culture; identifying gaps; and implementing corrective actions.

Additionally, daily morning meetings are held in various locations throughout the facility, allowing for spontaneous evaluations of housekeeping and safety conditions in those areas. This approach has led to improved organization and cleanliness, as well as the prompt identification and correction of unsafe conditions or behaviors before they escalate into incidents.

By expanding audit responsibilities beyond the HSE team and integrating daily safety discussions throughout the facility, the Alexandria team has fostered a proactive safety culture that is now driving outstanding improvements in workplace organization, compliance, and incident prevention.





## E-Permitting System

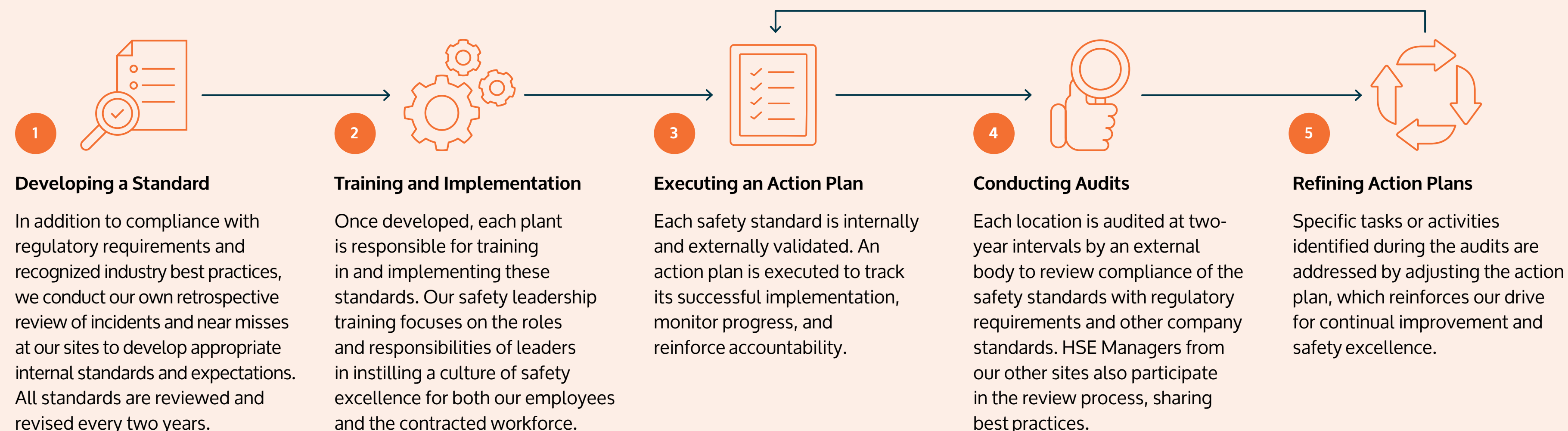
Work permitting is the last opportunity to identify risks and hazards by the personnel involved before beginning a task. Our e-permitting system for issuing work permits was born from an employee recommendation and is operationalized by our Health, Safety, and Environment (HSE) team. The software enables employees to issue work permits in a way that will increase safety and efficiency and decrease risks, allowing users to quickly and easily incorporate key information, lessons learned from specific jobs or equipment, and equipment-specific requirements into each permit. The tool's user-friendly interface further strengthens our permitting system and makes the overall process more efficient.

Birla Carbon Canada (Hamilton) was our first plant to implement the new process, with roll-out to our facilities in the USA, Brazil, India, Spain, Italy, Egypt, Thailand, and Korea in FY2026. Our remaining sites such as China and Hungary have unique requirements and thus have their own e-permitting tools. Ensuring 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.

## Safety Management

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

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





## Birla Carbon Celebrates HSE

Between April 22–26, 2024, Birla Carbon celebrated the International Labour Organization's World Day for Safety and Health at Work. We achieved global participation from 17 manufacturing locations, two corporate offices, nine sales offices, and three R&D centers.

The Safety Themes of the week were: Safe Actions, Mental Health, Creating Safe Habits, and Future Effects.

The key points that we emphasized 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, and celebrating employee safety contributions. During the event, we also launched a safety campaign in partnership with our Innovation team. We leveraged the Share the Idea platform hosted by HYPE Innovation, to invite employees to share innovative ideas and practical solutions for enhancing HSE practices at Birla Carbon sites. The HSE team, in collaboration with subject matter experts (SMEs) from across the organization, reviewed all submissions. The most impactful ideas aligning with our HSE objectives were implemented in FY2025.

**Employees across 13 different global locations submitted 100 HSE enhancement ideas, of which three were adopted and fully implemented in FY2025.**



## Global Health, Safety, and Environment Conference



Birla Carbon hosted our 2025 Global HSE Conference in Bangkok, Thailand. The event's theme, "Lead the Change for HSE Excellence," brought together key HSE leaders from across all Birla Carbon locations, as well as members of the Senior Management Team (SMT). SMT members included our CEO, CFO, CMO-Asia, CLO, and Chief Expansion Officer.

A special leadership panel, featuring senior executives, discussed the company's 5-year HSE vision and identified potential barriers to progress. The panel also outlined Birla Carbon's strategic shift from being a carbon black business to a leading global carbon-based enterprise, while emphasizing the crucial role HSE leaders and managers will play in this transformation.

The conference covered a wide range of important topics, including:

- ▶ Process Safety Management
- ▶ HSE and Digitalization
- ▶ High Energy Control Assessments (HECA)
- ▶ Safety Challenges in the SCM Business
- ▶ Managing Contractor Risks
- ▶ HSE and Sustainability
- ▶ A Glimpse into Upcoming Global Safety Week 2025 Initiatives
- ▶ A Strategic 3-Year HSE Improvement Plan

In addition to Birla Carbon colleagues, the conference welcomed participants from external industry forums, companies, and institutions. It provided a valuable platform for networking and collaboration, where attendees lived our spirit of "Sharing the Strength" by highlighting pressing HSE issues and exchanging innovative approaches to process improvement and best practices.



## The Safe Six: Key Health and Safety Risks

We encourage everyone working at our sites to make a personal safety commitment to reinforce 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 sessions and through our Gyanodaya Virtual Campus Learning App. Our micro-learning modules provide a full training program for employees, delivered 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 Safety

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.

In addition to regular training on the Safe Six, our workers are empowered with Stop Work Authority (SWA). The SWA program provides employees and contractors the ability to stop work in unsafe conditions or if continuation of unsafe behaviors would result in serious injury. This is essential because it authorizes all employees to take immediate action, regardless of their role. SWA helps prevent the emotional impact of incidents in the workplace and strengthens our safety culture.

Our safety mascot, Xiang, was created during a Global Safety Week contest by the child of a colleague at our Weifang plant. Xiang symbolizes both safety and our culture of family engagement.





## Serious Injury and Fatality Initiative

We strive to keep everyone who enters a Birla Carbon site safe. The Serious Injury and Fatality (SIF) initiative focuses on high-risk tasks and situations. It has an important emphasis on the 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.<sup>10</sup>

We actively monitor and investigate incidents with SIF potential and promptly share findings with all sites via safety alerts. Where appropriate, we implement and track global corrective actions to ensure timely completion. Insights gained from Birla Carbon's role in developing an SIF standard for the broader Aditya Birla Group (ABG) have contributed to the ongoing enhancement of near-miss reporting practices across all our facilities.

<sup>10</sup> A Close Call. A Narrow Escape., National Safety Council, 2018. <https://www.nsc.org/getmedia/d5b9c38c-03f3-4848-ae33-4eec302a83ad/near-miss-st-eng-sp.pdf.aspx>



### Lone Worker Alert System

Our plant in Santander (Spain), has launched an innovative Connected Helmet project. This initiative integrates a smart device into operators' helmets, enabling real-time location tracking and automatic alerts in case of unusual activity — functioning as a Lone Worker Alert System. Additionally, the platform facilitates controlled access to restricted areas such as electrical substations and can be customized to support other operational needs. The implementation of this geolocation technology has delivered significant benefits, including enhanced visibility of personnel and faster mobilization of resources across the site.

# 35%



**Contractor Total Recordable Incidence Rate (TRIR) decreased from 0.26 in FY2024 to 0.17 in FY2025, a 35% reduction.**

## 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. In FY2025, we began developing a worker management module which will enable us to deliver more directed training to contractors before they enter Birla Carbon facilities, aiming to further reduce the contractor TRIR of 0.17 and the Lost-Workday Case Rate of 0.15. The module is set to be deployed in FY2026.

In FY2025, Birla Carbon expanded our partnership with Avetta, a third-party risk management provider, to include our sites in Brazil. Avetta collects information from contractors, including safety incidence rates, insurance coverage, and HSE program proficiency, based on Birla Carbon specifications. The information is evaluated and scored, with each contractor assigned a rating. Only those contractors that meet Birla Carbon's requirements qualify to work in the plants. The process has saved the sites time qualifying and selecting contractors.

## Safety Training Incentives

As part of our annual incentive plan, we have introduced a new component tied to the completion of required safety training, which accounts for 5% of an employee's total potential bonus. Every bonus-eligible employee — including executive leadership — must fulfill these training requirements to receive this 5% safety bonus allocation.



## High Energy Control Assessments (HECA)

As part of our Serious Injury and Fatality (SIF) reduction strategy, we introduced the HECA process in 2024 — an automated tool designed to help sites assess the effectiveness of controls for high-energy tasks via a mobile application. This proactive approach enables teams to evaluate direct controls before work begins, ensuring risks are minimized at the source. To further strengthen our risk management framework, we developed a Severity Index based on a comprehensive analysis of incidents and near misses from the past three years. Moving forward, the insights from these assessments will serve as a key performance indicator, guiding continuous improvement and accountability across our operations.

## Lockout-Tagout Workshop Initiative

As part of our ongoing Serious Injury and Fatality (SIF) reduction strategy, Birla Carbon launched a targeted, hands-on Lockout-Tagout (LOTO) workshop in local languages during FY2025. These sessions, conducted at both our facilities in China and our site in Ang Thong, Thailand, focused on the control of hazardous energies and are designed to build site-level subject matter expertise. Trained personnel are empowered to cascade the knowledge throughout their respective facilities and support corporate efforts to monitor program effectiveness.

Building on the success of this initiative, we are preparing to expand the program, with upcoming training sessions planned for five of our locations in India, followed by a rollouts across our operations in Brazil, North America, and Europe.



# 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 in all the geographies that we operate in 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), Development Pitstop, and Coaching and Mentoring initiatives. Our commitment to talent development, however, 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) globally.

% of Employees with Personal Development Plans		
Bi-annually all our employees update their personal development plans.		
FY23	FY24	FY25
100%	100%	100%

**Avijit Roy**  
SVP, Global Human Resources  
Birla Carbon



**At Birla Carbon, our commitment to Sustainability starts with our people. By investing in talent, we build a resilient, future-ready workforce that drives inclusive and responsible growth. Our efforts are focused on cultivating an aspirational, inclusive workplace that empowers diverse talent, across all the geographies we operate. Through a robust talent management framework, encompassing identification, segmentation, and focused development, we ensure every individual’s potential is recognized and nurtured. By fostering a culture of shared learning and growth, Birla Carbon endeavors to be a future-focused, people-centric organization, where every voice is heard, and every idea drives our ongoing progress towards collective success.”**



## 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 our Diversity, Equity, and Inclusion (DEI) practices as a great place to work for diverse workers in the industry



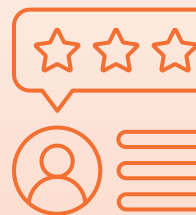
**Culture and Engagement**  
Enabling a culture for empowered and engaged employees



**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, and we want to share how we make a difference in the world. This story, though, is not about our discoveries or solutions; we believe the most compelling narrative comes from the voices of our people. We are committed to amplifying the firsthand experiences of the employees and colleagues who embody the values of the Aditya Birla Group and Birla Carbon. By celebrating our diverse workforce, we provide genuine insight into the organizational culture and growth opportunities that characterize careers at Birla Carbon. 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 makes 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: Inclusivity Prism; Career Kaleidoscope; 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 prospective talent, 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.



**Inclusivity Prism**  
Empowering journey of women employees

**Career Kaleidoscope**  
Inspiring development and growth opportunities

**Lens of an Engineer**  
Aspirational path for engineers at our plants and R&D centres



# 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 builds employee knowledge and capabilities by facilitating planned learning inputs and learning on demand. We endeavour to align the learning interventions with the business' strategic agenda, with a focus on organization capability building. Birla Carbon's learning strategy is designed to empower 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 Fuel for Future. Through Fuel for Future, we utilize the AI powered GVC (Gyanodaya Virtual Campus) platform to curate and share engaging content every week in the form of learning collateral like leader videos, articles, eLearnings etc. that enable employees deep dive on skills that align with the development and business needs. We leverage a variety of

learning tools (e.g., quizzes, trivia, gamified modules) to elevate the employee learning experience. To make learning accessible to all employees, we also curated our learning platform to deliver learning channels in the local language.

We have made significant strides in augmenting our 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, gain exposure to diverse business functions, and develop 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 program 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 and conduct all training from a centralized source. The platform records all learning activities and includes an online library of over 12,000 courses available in multiple languages to all employees at no cost.



**Simon Hwang**

Technical Training Manager

BuildTech, Birla Carbon



**BuildTech serves as a solid foundation, thoughtfully constructed through collaborative efforts. It plays a vital role as a structural tool for capturing and accumulating technical tacit knowledge and experience, actively supporting continuous improvement efforts at carbon black manufacturing sites. I would like to take this opportunity to express my sincere gratitude to the 50+ BuildTech subject matter experts for their remarkable contributions to developing training modules, and to the Communities of Practice (CoPs) leaders for their dedicated leadership in successfully driving these communities thus far."**



# 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.

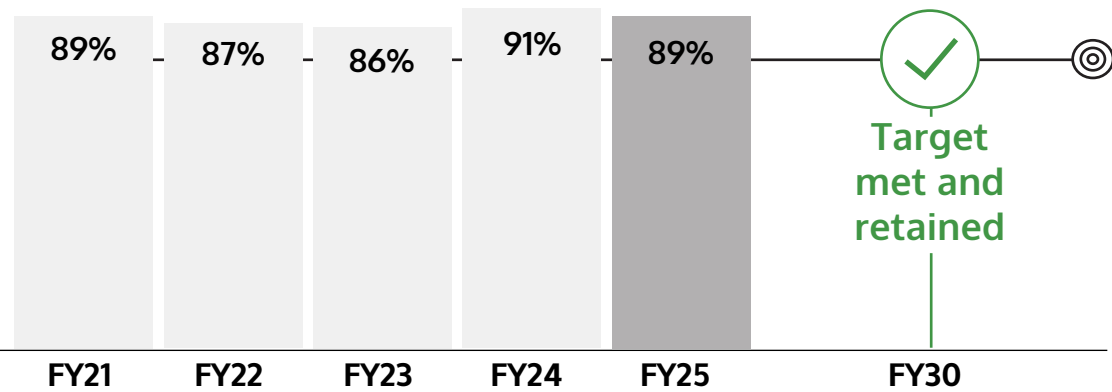
We have a diverse workforce with a broad geographical spread, and we seek to engage all our people as we support them and their lifestyle. Every two years, we conduct an employee engagement survey, called the Vibes survey.

The Vibes survey provides valuable feedback for 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 FY2025, with a 96% response rate. The survey results indicate that we continue to achieve or outpace industry benchmarks for employee engagement, highlighting that employees are proud to work for Birla Carbon, and feel respected while finding our leadership team approachable. The results have been distilled into action plans in each region and unit. We continue to work on these action plans and track our progress over the next year.



## Employee Engagement

**TARGET:** Remain above the chemical industry annual benchmark for employee engagement<sup>11</sup> (%)



<sup>11</sup>This 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.



## Cultural Activity Spotlight

### Birla Carbon North Bend: First Family Fun Day

In October 2024, Birla Carbon North Bend held its first Family Fun Day at Centerville Park, welcoming employees and their families for a day of games, music, and food. Highlights included bounce houses, obstacle races, face painting, and a dunk tank featuring the General Manager. Local partners provided food and prizes, and the event fostered stronger connections among colleagues and their families.

### Birla Carbon Gummidipoondi: Pongal Celebration

In January 2025, Birla Carbon Gummidipoondi celebrated the vibrant festival of Pongal, welcoming employees and their families to a day of traditional festivities and camaraderie. The gathering engaged participants of all ages in friendly competition through spirited games such as sack races, musical chairs, tug of war, and Kabaddi. Celebrated by the Tamil community, Pongal is a time to give thanks for nature’s bounty and marks the beginning of the auspicious Tamil month of Thai. The event at Gummidipoondi was a memorable occasion, strengthening community bonds and celebrating cultural heritage.



## Employee Benefits and Well-Being

In addition to our strong commitment to health, safety, and workplace culture, Birla Carbon provides a comprehensive benefits package designed to help our employees and their families live safe, healthy, and fulfilling lives. Our benefits include competitive health insurance (medical, dental, and vision), pre-tax retirement benefits with company match, life and disability insurance, paid time off, and a variety of wellness resources. These offerings help employees manage their physical, mental, and financial well-being and support them at every stage of life both inside and outside of work. We believe that supporting our people’s well-being is central to building a strong, resilient, and engaged workforce.

### Number of Employees Enrolled in Medical Insurance (USA only)

USA employees enrolled in Cigna medical insurance

FY22	FY23	FY24	FY25
302	317	318	325

## 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.





# Diversity, Equity, and Inclusion

At Birla Carbon, we believe that diversity, equity, and inclusion are essential to building an aspirational workplace and driving long-term success. Our DEI strategy focuses on fostering inclusion across our global workforce, with particular emphasis on gender and generational diversity.

At the core of our DEI strategy, these are the five key pillars:

- 01 Tapping into diverse resource-pool hiring
- 02 Facilitating varied platforms and opportunities to strengthen engagement
- 03 Focusing on capability building of managers and the organization at large
- 04 Offering flexible rewards in line with life stage requirements
- 05 Providing employees a connected workplace

Oversight of DEI rests with our business-level Diversity Council, which sponsors global initiatives, monitors implementation across regions, and reviews performance metrics to track progress. The Council plays a pivotal role in ensuring accountability and alignment across the organization. Through these efforts, we are embedding inclusion into every stage of the employee experience, strengthening our culture, and reinforcing our commitment to equal opportunity. By continuously listening to our employees and adapting to their needs, we strive to create a workplace where diversity is celebrated, and inclusion is lived every day.





## Employee Resource Groups (ERGs) and other Employee Engagement Activities

We are committed to fostering an inclusive and supportive environment for all employees. In line with this vision, women-led ERGs have been established across our regions to create support networks and provide opportunities for professional growth.

Our two global women-focused ERGs, Women in Safety & Environment (WISE) and Leading and Inspiring Female Talent (LIFT), are focused on empowering women through shared learning, professional development, and contributions to business success. This year, WISE hosted two events. The first event was a Diversity, Equity, Inclusion, and Belonging workshop, addressing gender stereotypes, biases, and strategies for overcoming discrimination in the workplace. The second featured the Vice President of Business Development at Telexos, who shared her career journey and insights on innovation,

sustainability, and entrepreneurship through an interactive session. Both events reflected WISE's commitment to fostering inclusion and professional growth within the organization. These initiatives align with Birla Carbon's broader focus on sustainability and responsible business practices, as highlighted in Birla Carbon's Sustainability initiatives.

In EMEA, the focus of ERG has been on work-life balance, with a renewed team structure to ensure active participation. The ERG is fostering open dialogues, exploring ways to address members' concerns through coaching, and planning to hold speaker sessions.

In Asia, Women in Networking (WIN) is supporting the development of women through networking, mentorship, and collaboration. Activities include fireside chats with senior women leaders and a speaker session on building strong workplace relationships. This year, WIN Asia arranged a three-week step challenge, during which six teams achieved a total combined step count of 8,486,321. The challenge promoted employee wellbeing and reinforced Birla Carbon's commitment to health and wellness in the workplace.

These ERGs are a testament to the power of collective action, as women across Birla Carbon continue to lead, inspire, and create an inclusive future for everyone.



### International Women's Day

Birla Carbon celebrated International Women's Day 2025 with inclusive initiatives recognizing women across all roles. Highlights included a CEO video message, a flipbook of SMT messages, and \$25 gift cards for all women employees. A second flipbook showcased the hobbies of 50 women, and a video featured their favorite aspects of working at Birla Carbon. An inspiring session by resilience expert Anna Hemmings was a key event. Regional ERGs hosted various sessions, and local units held office gatherings. The celebration was promoted through mailers, posters, and social media.



### World Inclusion Day – October 10, 2024

Birla Carbon celebrated World Inclusion Day 2024 with a range of engaging activities across all locations. The event was launched with a CEO video message and a CHRO email emphasizing the importance of inclusion. Local celebrations included addresses by CXOs/GMs and inclusion-themed games. A video featuring employee stories and a Word Cloud mailer with insights from employees highlighted what inclusion means at Birla Carbon.



### WellVerse

WellVerse is Birla Carbon's wellness program designed to promote holistic well-being across physical, emotional, social, and financial dimensions for all employees. Central to the initiative is Wellness Wednesday, a weekly initiative promoting employee well-being through articles, podcasts, videos, assessments, or toolkits. Monthly themes feature fun activities such as quizzes and puzzles, with Applause points awarded to top performers. WellVerse offers 24/7 digital access to self-help tools and professional counselling in local languages. The program also includes a Care Now program and extends support to employees' families, reinforcing Birla Carbon's commitment to a healthy and resilient workforce.





# Human Rights

We respect human rights in all our business activities and recognize that risks vary across regions. Our aim is to take proactive steps to prevent and address potential impacts on the rights of the people we employ, do business with, and engage within our communities.

Human rights are a fundamental element of both our [Code of Global Business Ethics and Compliance Standards \(COE\)](#) and [Supply Chain and Procurement Policy](#). We strive to comply with, and exceed, laws and regulations wherever we operate, and adhere to international standards.

Birla Carbon has a robust, long-standing set of policies, codes, and procedures addressing our obligations to treat team members, customers, and suppliers with dignity and respect. We expect that our contractors, vendors, and suppliers will do the same. These include Birla Carbon’s Code of Ethics as well as the company’s global Hotline program.

Additionally, Birla Carbon maintains a dedicated [Human Rights Policy](#) and a [Prohibition of Forced Labor and Child Labor](#) as well as policies ensuring [Equal Opportunity and Freedom from Discrimination, Harassment, and Other Abusive Situations](#). These policies shape our interaction with employees, contractors, vendors, suppliers, and others through whom we conduct business and underline our commitments in line with the UNGC Ten Principles, of which we are a signatory.

Our ethics and compliance policies and practices are guided by international and industry-leading standards, such as UNGC and national and local laws, including workplace safety laws, human rights laws, and labor/employment standards laws. Birla Carbon takes seriously our responsibility to establish and utilize due diligence practices that help safeguard the human rights of others, and we address any infringements if they occur.

Confirmed Child and/or Forced Labor Incidents			
FY22	FY23	FY24	FY25
0	0	0	0

Through our third-party due diligence screening system, we have not identified any suppliers with incidents of child labor or forced or compulsory labor. Birla Carbon’s COE and Supplier Terms and Conditions prohibit child labor in any form.





Grievance Measures

Birla Carbon’s Code of Global Business Ethics and Compliance Standards

Birla Carbon’s Code of Ethics sets out our values and responsibilities. It reflects our commitment to: (i) conducting business ethically and in accordance with all applicable laws; (ii) adhering to standards of safety and care for the protection of our Employees, the public, and the environment; and (iii) promoting these policies through education, supervision, and regular reviews. Our Code places special emphasis on the importance of fostering an environment of open and honest communication and encourages employees to speak up when confronted with compliance, ethics, legal, or other concerns.

Hotline Program

Birla Carbon maintains an ethics and compliance Hotline and an associated online reporting resource as part of our whistleblower program. Our Hotline program reinforces our culture of open communication, giving employees and other stakeholders the opportunity to anonymously report concerns. Allegations of policy breaches or any non-compliant and unethical activities are taken seriously.

Our Hotline is available to all employees, suppliers, contractors, consultants, and any other stakeholders who may confidentially report concerns online, by toll-free number, text, or email. Retaliation for good faith reporting is strictly prohibited, as outlined

in our Code of Conduct. We require 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, reporting channels are available in local languages at all offices and manufacturing sites.

Our Hotline is run by an independent third party 24 hours a day, 365 days a year, and any issues are escalated to our Deputy General Counsel/Compliance Director. 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 issue, reports are investigated by a team of auditors and/or HR professionals, tracked, and followed up on as warranted.

Commitment to Human Rights

By implementing these policies, codes of conduct for colleagues and suppliers, comprehensive compliance and monitoring standards, and mechanisms for reporting grievances or potential violations, Birla Carbon puts into action our commitment to healthy, safe, and respectful working conditions throughout our organization and our supply chain.

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 communication and conflict-resolution measures in place for our employees to make their concerns known.

Confirmed Corruption Incidents

FY22	FY23	FY24	FY25
2	2	0	0

Our goal is to continually strive for zero confirmed corruption incidents.

Sites Unionized/Covered by a Collective Bargaining Agreement (%)

FY22	FY23	FY24	FY25
59%	59%	59%	59%

Grievances Received	FY20	FY21	FY22	FY23	FY24	FY25
Hotline calls (total)	17	24	22	33	21	15
Calls investigated	16	24	17	28	20	13
No further action needed	6	13	9	5	12	6
Resolved through collective bargaining	5	4	0	0	0	0
Corrective actions	5	2	7	17	8	7
Formal community greivances	0	0	0	0	0	0
Human rights grievances filed and resolved	1	0	0	1	1	2





# Community Engagement

Birla Carbon engages closely with the communities in which it operates and serves, to understand and help 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.

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



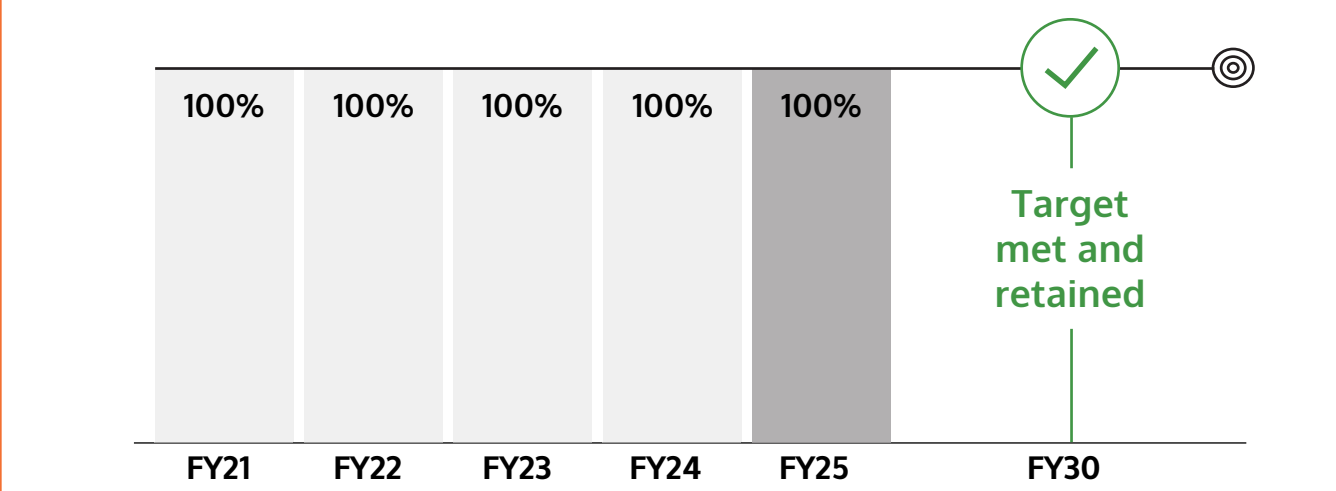
Through addressing our communities’ most pressing challenges, we are helping to make local people, and Birla Carbon, more resilient.

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 [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.

## Community Engagement

**TARGET: 100%** of our facilities participate in community engagement



**Giving and caring for the underprivileged and looking out for the planet and its finite resources are our responsibilities. As a leading global conglomerate, sustainability is an integral part of value creation and business practices. Our continuous endeavour is to embed the ethos of circularity, responsibly using natural resources, and working in harmony with communities. Birla Carbon embodies these Group values."**

**Mrs. Rajashree Birla**

Chairperson  
Aditya Birla Centre for Community Initiatives and Rural Development





## Social Impact Programs

### Sustainable Livelihoods

#### Brazil



In December 2024, employees from Birla Carbon Brazil came together to support children and the elderly in their local communities. Through the collective efforts of volunteers across three locations, they organized the collection and donation of toys, hygiene products, milk, and other essential items for two non-governmental organizations: the Pequeno Luca Institute and the Ceza. The initiative benefited 80 children during the Christmas celebrations.

#### USA



Birla Carbon partners with Kennesaw State University in Georgia. Now in its 11th 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. Birla Carbon and relevant stakeholders are exploring ways to expand the partnership and support more students.

#### Canada



In December 2024, Birla Carbon Canada (Hamilton) continued their commitment to community support by organizing a holiday food drive and presenting CAD \$1,000 to the Hamilton Food Bank. With food insecurity affecting thousands in the region, the Hamilton team collected over 120 pounds (over 50 kgs) of food and hygiene products, along with additional cash donations that enabled Food Share Hamilton to purchase even more nutritious food for local families in need. Beyond these efforts, the team is expanding its outreach by supporting a local elementary school with healthy meals and organizing a clothing drive to provide formalwear for students attending their high school graduation celebrations.

#### Terence Norman

North America HR Head  
Birla Carbon



**Our commitment to Corporate Social Responsibility is rooted in close engagement with the communities we serve, across our global locations. Each of Birla Carbon's sites develops unique social impact programs, tailored to the specific development priorities of their region. Our approach is guided by listening, understanding, and responding to the voices of those located within the communities in which we operate, fostering lasting, mutually beneficial partnerships with local communities. Aligned with our Group Purpose and Values, we ensure our efforts address real needs and create positive, sustainable change."**



Social Impact Programs

Access to Healthcare

India



In June 2024, Birla Carbon Renukoot organized a free mega health camp at Kodri village as part of our ongoing Corporate Social Responsibility (CSR) health and wellness initiatives. The camp provided free medical consultations from multi-specialist doctors, medical investigations, and medicines to over 500 locals and distributed nearly 400 mosquito nets to prevent malaria and dengue. In addition, a vaccination camp was held for children, following pediatricians’ recommendations. The event was well supported by Birla Carbon Renukoot’s management and medical team, who worked together to improve healthcare access and raise awareness about the importance of health and hygiene in the local community.

Italy

Birla Carbon Italy continued their commitment to employee wellness and community engagement. In November 2024, Birla Carbon Italy sponsored a 5 km run-walk for the International Day for Violence Against Women and hosted a health awareness session with “LILT” (Italian League for the fight against tumors) doctors on the risks of smoking and the importance of cancer screening. Additionally, in December 2024, 23 local high school students visited the Trecate plant for a tour and company presentation, strengthening ties with the community and inspiring the next generation.



Egypt



In December 2024, Birla Carbon Egypt celebrated the International Day for People with Disabilities at its rehabilitation center in Amreya. The event brought together children and staff for a joyful day of gifts and sweets, recognizing the center’s ongoing support for over 500 differently abled children from 50 villages. Established in 2022, the center continues to expand its free services, including physiotherapy, to improve the lives of local families.

Quality Education

USA

In May 2024, Birla Carbon North Bend donated new desktop computers to Virgil Browne Glencoe Charter School as part of our community outreach. The team also partnered with a local vendor to provide complimentary snow cones during the school’s end-of-year celebration, strengthening ties and introducing students to Birla Carbon and the work we do.

Thailand

In August 2024, Birla Carbon Thailand donated computer sets to students from nine local schools in Angthong province, supporting digital education and career development. The event brought together 35 students, 10 teachers, and community leaders, with Birla Carbon Thailand reaffirming our commitment to empowering youth through technology and ongoing community support.

China



As part of Birla Carbon Jining’s CSR efforts, the employees visited Ershilipu Middle School to deliver a cybersecurity education session for students. The team donated refurbished computers to support IT learning and engaged students through interactive games that reinforced online safety. The school principal praised the initiative for enriching students’ digital skills. This initiative reflects Birla Carbon Jining’s dedication to community well-being and the values of the Aditya Birla Group, fostering stronger ties and promoting digital literacy among local youth.



## Social Impact Programs

### Community Infrastructure

#### Brazil



In August 2024, Birla Carbon Brazil partnered with the City of Cubatão to revitalize two local squares: Ednaldo Moreira dos Santos (FUSCA) Square and Dr. Gervásio Benavides Square. This included new LED lighting, playgrounds, sports courts, and upgraded landscaping, transforming previously closed spaces into vibrant community hubs. The project, inaugurated with local officials and Birla Carbon employees, reflects Birla Carbon's commitment to supporting social infrastructure and improving the quality of life in the communities where it operates.

#### USA



In July 2024, employees of Birla Carbon Marietta, Georgia came together to support the Salvation Army's annual Summer Day Camp Program. Through their efforts, the team delivered 200 fully packed school backpacks to the Salvation Army Community Center, ensuring that over 50 campers received essential supplies as they were preparing for their return to school. Remaining backpacks were distributed by the Salvation Army staff to children in underserved neighborhoods, further extending the program's positive impact throughout the community.

#### Italy



In October 2024, Birla Carbon Italy supported the Collodi Nursery School in Trecate by donating outdoor tables and benches to enhance the school's play area. During the inauguration, students performed songs, including a heart-warming performance by an autistic student, highlighting the school's commitment to inclusion and diversity. Birla Carbon Italy also received recognition for their ongoing support of the ASD San Giuseppe association, providing sports equipment and launching a mini-basketball project, as well as for donations to Liceo Scientifico Antonelli in Novara to support scholarships for students in need.





# Governance

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

Our organization continues to focus on developing our cross-functional teams. 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, suppliers, 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.

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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, suppliers, customers, and communities. Additionally, the SMT exercises risk management for Birla Carbon and oversees our sustainability efforts and progress. Our SMT engages with stakeholders, including suppliers and customers, to confirm adherence to our baseline expectations established through policies such as our [Supply Chain and Procurement Policy](#) and [Product Stewardship Policy](#). From these, we operationalize supplier due diligence and risk assessments.

The Senior Management Team includes:

- ▶ John Loudermilk, President and Chief Executive Officer
- ▶ Eleven Chief Functional Officers and Senior Vice President & Corporate Controller; Sales, Marketing & Sustainability; Asia Manufacturing; Asia Expansion; Americas, Europe and Africa Manufacturing; Finance; Digital and Information; Human Resources; Legal; Research and Development (R&D); and CEO - Nanocyl

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

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 on 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.

## Key Developments in FY2025

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	Aligned with sustainability disclosure best practices, stakeholder expectations, and commitment to transparency
Re-evaluation of Sustainability KPIs	
Re-evaluated KPIs and updated to include new targets for sustainable procurement; Reconstructed Sustainability Steering Committee (SSC) to include new members and reassess objectives	Routinely monitored performance indicators to help us advance our sustainability goals; Expanded reach of SSC across the business
Sustainability Engagement	
Increased internal employee engagement on sustainability topics to better integrate sustainability in all functions	Empowered employees to drive change and raised employee voices; Developed a sustainability communications and employee engagement strategy to address these issues
Water Stewardship	
Established a Water Stewardship Committee to develop a strategy and actionable roadmap aimed at reducing our overall water footprint and strengthening resilience across all operations	Engaged three pilot sites that are advancing water measurement methodologies and technologies
Digital and IT	
Azure Data Lake cloud-based platform enabling centralized reporting and analytics	Improved data availability and internal reporting capabilities and auditability of data
Net Zero	
Formally associated our Net Zero ambition within our Enterprise Risk Register	Enabled us to monitor potential physical and transition climate risks (i.e., policy, legal, market, technology, reputational risks)



## Sustainability Steering Committee

The 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 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 Sustainability Team, subject matter experts (SMEs), employees with relevant expertise, and occasionally third-party advisors. These teams identify opportunities to integrate sustainability further into the business and help develop action plans for implementing these initiatives. Altogether, the SSC includes representatives from each of the functional or operational areas of our business, such as finance, human resources, supply chain, operations, R&D, 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.

## 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 that support 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 decarbonization 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 an SME from each business area and a CSC leader who guarantees the committee is making informed decisions. The committee collaborates with external partners as well as our stakeholders to stay informed of global carbon-related regulations and evaluate their potential impact on our decarbonization strategy and overall business.

## Internal Audit Committee

Auditing is a key tool in our ongoing endeavor to maintain robust governance structures and processes. Our Internal Audit function operates independently, providing objective assurance to add value and strengthen our 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 FY2025, 19 audits were conducted, focusing on areas such as:

- ▶ Service contract
- ▶ Warehouse management
- ▶ Inbound and outbound logistics
- ▶ Project execution
- ▶ HR & payroll

All on-site audits were conducted at Birla Carbon's Angthong (Thailand), Tiszaújváros (Hungary), Cubatão and Camacari (Brazil), Jining (China), Weifang (China), Gummidipoondi, Patalganga, Naidupeta, 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.

## Water Stewardship Committee

Water is an essential input to Birla Carbon's manufacturing activities, and it is becoming increasingly important to our customers and stakeholders. As physical and financial water risks continue to increase, Birla Carbon is focused on embedding water reduction efforts across our business. In FY2025, we established a Water Stewardship Committee (WSC) to develop a strategy and roadmap for achieving our water reduction goals and strengthening our position as a leader in sustainability. The committee is responsible for driving the adoption and integration of our water reduction strategy throughout business decisions and operations, implementing tools to aid in ongoing tracking and decision making (e.g., water meters, dashboards, etc.), communicating our progress to stakeholders, and monitoring water-related regulations globally. The WSC is comprised of SMEs from several business areas and a WSC leader who is accountable to our SMT for the overall success of the initiative.

In the short term, the WSC has been tasked with developing a feasible water reduction pathway that drives solutions via the 4Rs:

- ▶ **Reduce** — the dependence on water uses through process efficiencies
- ▶ **Recycle** — through creating water circular solutions
- ▶ **Remove** — the need for water in our process through non-liquid solutions or safe, alternative liquids
- ▶ **Research** — to discover new technologies and/or new methods to lower water dependency



# 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 while 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.

Throughout FY2025, we have invested \$1.6 million USD in capital improvements related to risk management. As part of these efforts, specialized risk engineers visit each site twice annually to identify risks to property and ongoing operations. One visit is focused on fire and natural hazards, and the second on critical equipment and machinery. In

FY25, these risk improvement expenditures included the purchase of critical spares for sites to minimize business interruption, the installation of additional detection and suppression systems, and the installation of protective structures to prevent flooding and contain spills, among other measures. We also work closely with our process technology and corporate engineering functions to coordinate recommendations related to protection of turbine generators and combustion controls on boilers, incinerators, and dryers. We have also established a robust system for tracking completion rates

of identified risk controls through our risk management information system.

100% of sites are required to review and update all of their risks annually, including their business continuity plan connected to the risk. This approach allows us to evaluate and act on site-specific risks and use the findings to update our Business Continuity Planning process. In FY2025, we upgraded our risk management software to fully digitize the Business Continuity Management process. Information on risks, associated

controls, and business continuity plans are all managed through a single platform.

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 the likelihood, volatility, and potential financial impact of each risk. Risk registers are managed by Regional Risk Officers, with information displayed in heat maps and dashboards for ease of access.



**At Birla Carbon, effective risk management is central to our resilience and competitiveness in an ever-evolving environment. Through proactive risk mitigation and insurance strategies, we safeguard our financial stability and ensure continuity of supply and delivery, even under adverse circumstances. Birla Carbon’s global insurance programs empower us to address diverse risks while serving customers seamlessly in every market we serve.”**

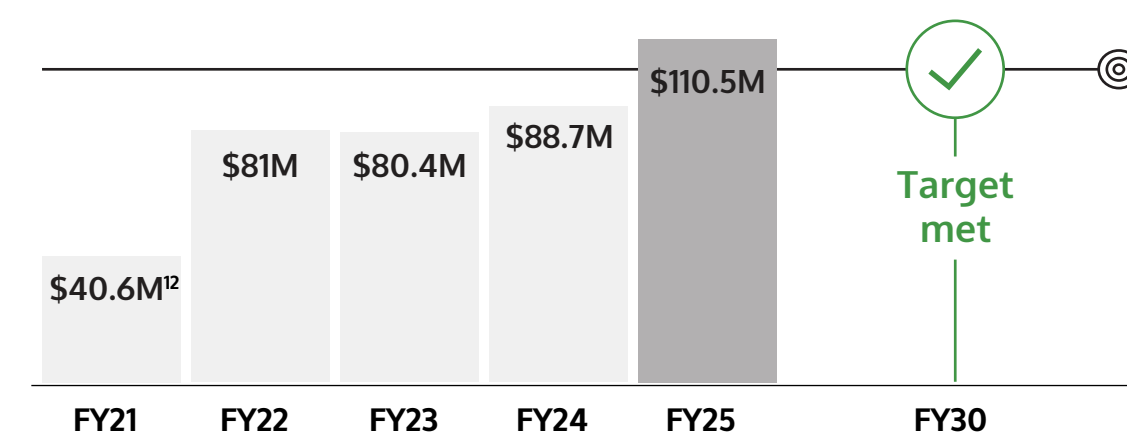
**Ankit Kohli**

Senior Manager, Global Insurance  
Birla Carbon



## Progress Towards Our Target

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



<sup>12</sup> FY2021 capital spending was lower than normal due to the COVID-19 pandemic.

## Sites Required to Assess and Update Risks\* (%)

FY23	FY24	FY25
100%	100%	100%

\*Risks cover all areas of ESG, including, business ethics, safety, human rights, and environmental



# Information Security

**Birla Carbon is committed to constantly improving our information security practices and is focused on a “Security with Simplicity” 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 proactive mitigation mechanisms into our new technology introduction process. These strategies help us provide uninterrupted and reliable services to our customers.

Birla Carbon maintains robust information security standards across our global operations. 100% of our core infrastructure is ISO 27001 certified — including SAP, email, and other business critical applications. In addition, all Birla Carbon plants have been certified by the International Automotive Task Force, a technical standard for quality management systems in the automotive sector.

Since FY2021, Birla Carbon has adhered to NIST 800-53 standards, a universally accepted information security framework. We perform regular self-assessments against all controls and have improved significantly in this area. We anticipate further improvements into FY2026 as we continue to implement actions and procedures under the NIST framework to minimize the impact of a potential cyberattack and be able to quickly restore our systems and services to normal operation.

Our core initiatives are focused on strengthening the security of manufacturing systems, increasing end-user awareness, preventing data leakage, and reinforcing foundational cybersecurity practices. In FY2025, IT Security conducted desktop

exercises to test responses to potential IT security events. We also aim to adopt integrated, multi-capability tools to reduce complexity, enhance operational effectiveness, and support our digital transformation journey. We take pride in the fact that our existing technologies have successfully safeguarded Birla Carbon against a range of targeted cyberattacks. Our processes are designed to incorporate security measures from the beginning of any initiative, rather than as an afterthought. This proactive approach ensures that we are always ahead of potential risks and vulnerabilities, maintaining the integrity and safety of our projects.

From a governance perspective, we are committed to implementing industry-standard defense measures, policies, and oversight procedures. Our Digital & IT (D&IT) Council, which feeds directly into our SMT and is comprised of representative leaders from business functions, ensures we leverage the latest innovative technology and provides governance and oversight to make sure our D&IT strategy and integration are aligned with business and sustainability goals.

# Digitalization

**At Birla Carbon, digitalization is an integral part of our business strategy and is deeply integrated into our operations and sustainability ambitions.**

We have made significant investments in digital transformation across our global network — e.g., deploying advanced enterprise-wide software like Blue Yonder’s cloud-native Sales & Operations Planning platform and the Azure cloud-based data platform to centralize our operational reporting, including sustainability reporting and analytics. These investments are rooted in our commitment to operational excellence, safety, and environmental stewardship, and are designed to help us navigate the complexities of a rapidly evolving marketplace.

Our digital transformation journey aims to simplify, enhance, and tightly integrate our lead-to-order and order-to-cash processes. Our digital platforms also enable us to benchmark and monitor our internal sustainability initiatives — tracking GHG emissions, water usage, and waste management with improved precision supported by our newly launched sustainability data lake.

The insights generated through these digital systems are invaluable. For example, by analyzing our cradle-to-gate LCAs, we can identify opportunities to further optimize our carbon footprint through the evaluation of various data sets. We are not only deploying digital solutions to analyze data but also to democratize information internally with the help of generative AI-based solutions. Birla Carbon’s proactive and comprehensive investment in digitalization is helping us lead the way and drive meaningful progress for our stakeholders and the environment.

**Read more about our digitalization efforts in the Innovation section.**



**Read More**



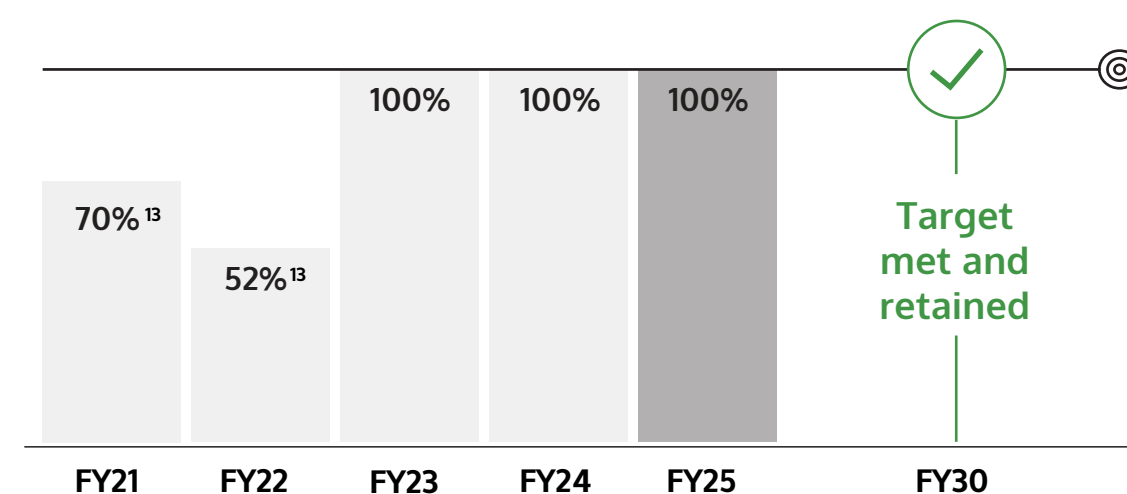


# Business Ethics and Compliance

At Birla Carbon we are committed to compliance with international laws, standards, codes of conduct, and our own rigorous business principles. 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.

## Progress Towards Our Target

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



<sup>13</sup> 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.

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 the 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.



**Richard Paris**

Deputy General Counsel  
Birla Carbon



At Birla Carbon, ethics and compliance are not just policies — they are personal. Every decision we make, every partnership we build, and every innovation we pursue is guided by our deep-rooted commitment to doing what's right. As a global leader in carbon black, we recognize the responsibility we carry — not only to our customers and communities, but to future generations. Our culture of integrity empowers our people to speak up, act responsibly, and lead with purpose. This is how we build trust, drive sustainable progress, and ensure that our legacy is one of both performance and principle."



## Conducting Business With Ethics

To ensure high ethical standards across our operation, all employees must complete formal training on our Code of Global Business Ethics and Compliance Standards (Code of Ethics) and confirm their understanding of and compliance with our Code of Ethics. Our Code of Ethics addresses policies on fair competition, antitrust, freedom from discrimination and harassment or other abusive situations, and anti-money laundering, among other topics. 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.

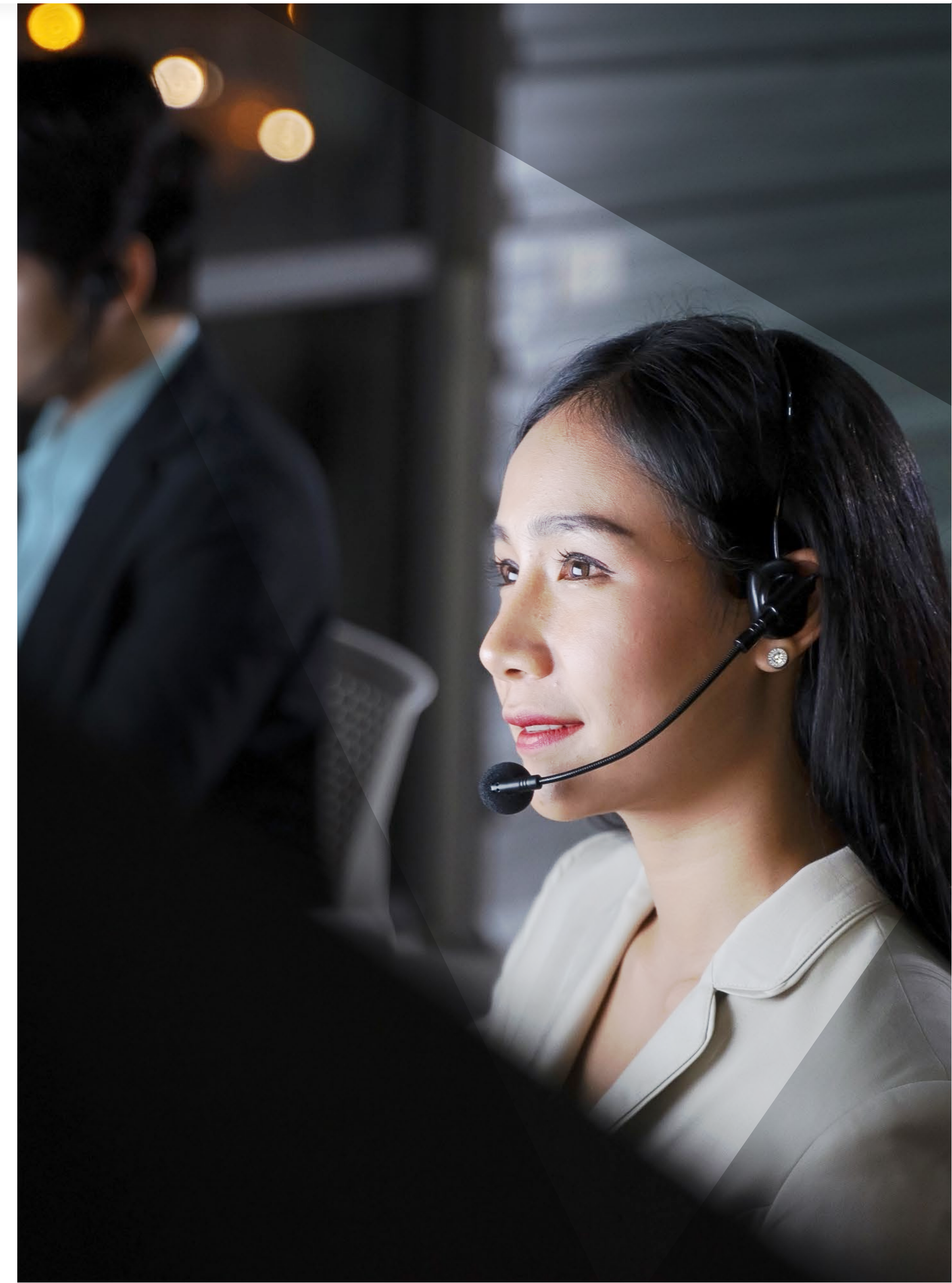
In FY2025, we enhanced and redesigned our online Code of Ethics training program to better serve our global workforce. The updated program is now available in 14 local languages spoken across our manufacturing plants and offices. It features modules dedicated to:

- ▶ **Competition Law**
- ▶ **Data Privacy**
- ▶ **Workplace Harassment**
- ▶ **Prevention of Human Trafficking & Modern Slavery**
- ▶ **Working with Third Parties**
- ▶ **Sustainable Procurement Module**

We encourage our employees to voice 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 that enable 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 any issues are escalated to our Deputy General Counsel/Compliance Director. 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 in the local language at all our plants and offices and 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 Due Diligence and Sustainable Procurement

**At Birla Carbon, we are committed to building and maintaining a sustainable, reliable, and legally compliant supply chain. We expect our external partners to uphold the same standards of ethics, integrity, and transparency that we follow internally.**

All suppliers are required to sign Birla Carbon’s Terms and Conditions of Purchase, which include a link to our Code of Ethics translated into local languages, and to comply with all applicable laws, regulations, and company policies. Our Legal Department manages these policies and reviews them regularly to ensure they remain current.

To strengthen accountability, we have established a comprehensive sustainable procurement strategy, supported by our [Supply Chain and Procurement Policy](#), [Code of Ethics](#), and a new Standard Operating Procedure (SOP) that formalizes how we interact with suppliers. This framework covers environmental and labor law compliance, resource conservation, renewable energy use, water stewardship, employee safety, working conditions, respect for human rights, and the elimination of child and forced labor. The sustainability, legal, and procurement teams review and amend these policies on an ongoing basis to ensure they reflect evolving standards and expectations.

Our supplier due diligence combines environmental, social, and governance (ESG) screening with compliance risk monitoring. More than 75% of our feedstock suppliers disclose sustainability KPIs publicly through annual reports. To enhance this transparency, we developed an ESG supplier questionnaire that will be rolled out to 100% of our critical suppliers. The results will generate scorecards which will be recorded in our supplier management system, helping us evaluate and prioritize business relationships. We also partner with EcoVadis to assess key suppliers against environmental and social performance criteria, ensuring alignment with our sustainability goals.

To safeguard compliance, we employ NAVEX RiskRate®, an automated due diligence platform that continuously screens all vendors against sanctions and watch lists, politically exposed persons lists, and adverse media coverage. Vendors are assigned a risk rating of Green, Yellow, or Red. Any red flag triggers an internal review led by our Legal Department, and when necessary, enhanced due diligence by external compliance counsel.

Depending on the outcome, the vendor may be cleared, monitored with additional controls, or disengaged. Currently, 14,864 (90%) active members are green-flagged. Only 210 (1%) active vendors received red flags, of which 159 have been cleared or approved, while the others have either been denied, terminated, or remain under review.

Through this integrated approach of merging ESG evaluation with compliance monitoring, we ensure that all of our critical suppliers are screened on environmental and social criteria while maintaining rigorous oversight of legal and ethical risks across our global supply chain.

**Since the inception of our supplier screening program in 2019, we have screened 100% of our vendors and are continuing to monitor 16,541 active vendors.**

## Critical Suppliers Screened on Environmental Criteria

100% of our critical suppliers, per International Automotive Task Force 16949, have been invited to participate in our environmental criteria screening initiative.

Critical Suppliers Screened on Environmental Criteria\* (%)

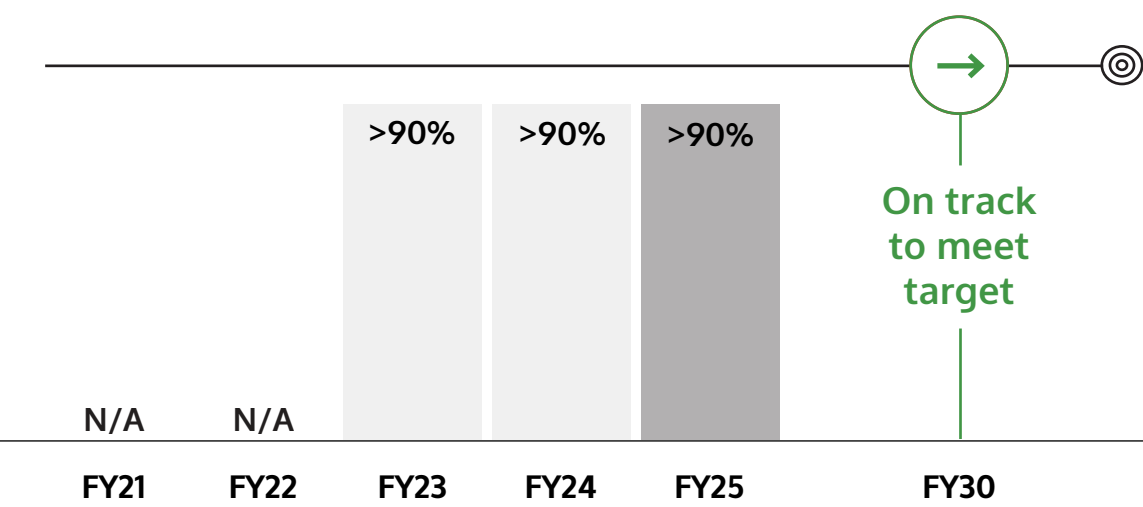
FY23	FY24	FY25
100%	100%	100%

\*per International Automotive Task Force 16949



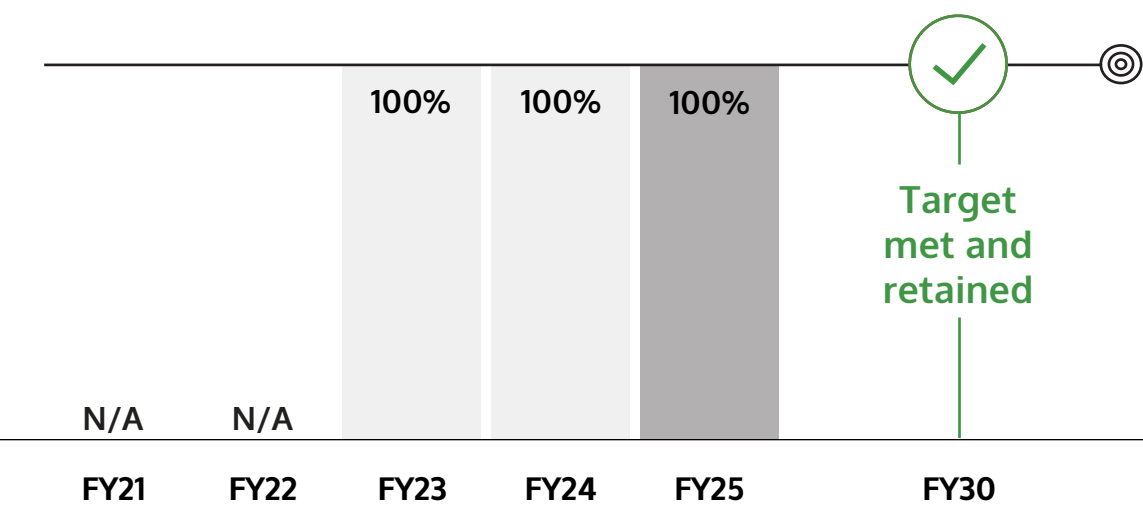
## Sustainable Procurement

**TARGET: 100%** of Birla Carbon suppliers having formally acknowledged Birla Carbon’s purchasing terms & conditions which include detailed code of conduct and compliance guidelines



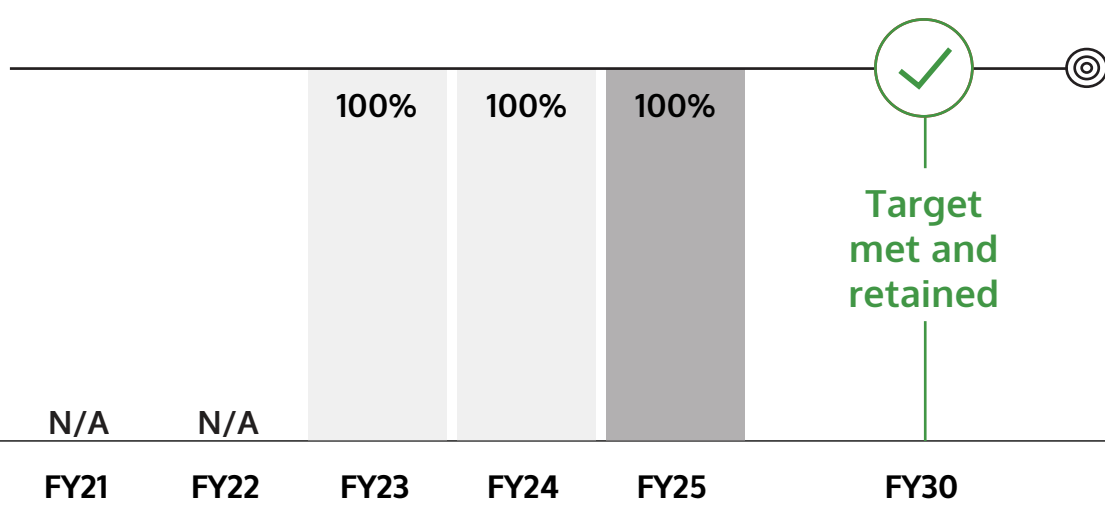
## Supplier Monitoring

**TARGET: 100%** of of existing suppliers actively monitored through our NAVEX platform on an ongoing basis for red flags



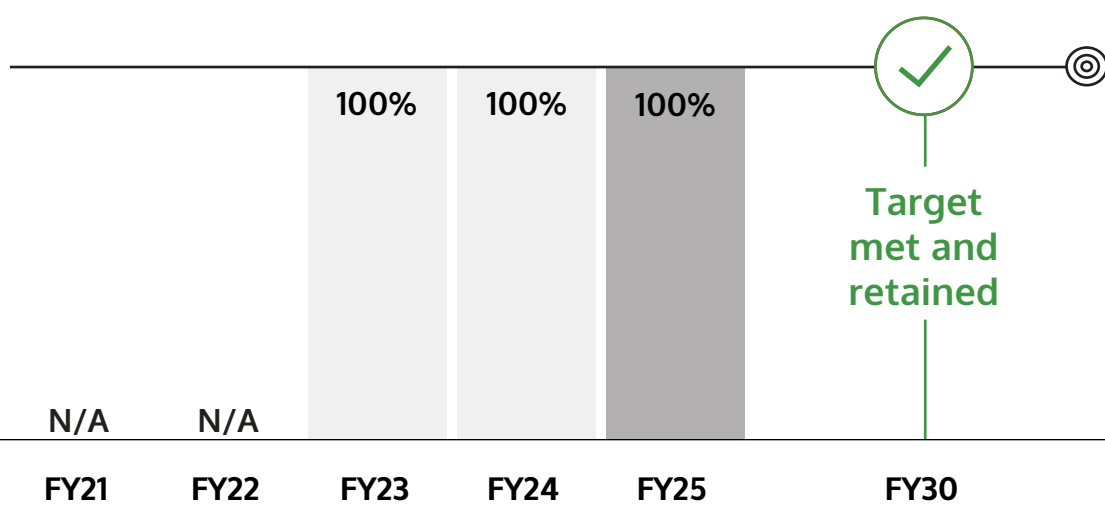
## Supplier Screening

**TARGET: 100%** of Birla Carbon suppliers screened through our Navex system against pre-determined ethics, compliance, and risk parameters



## Procurement Training

**TARGET: 100%** of Birla Carbon employees receive training on procurement policies and practices



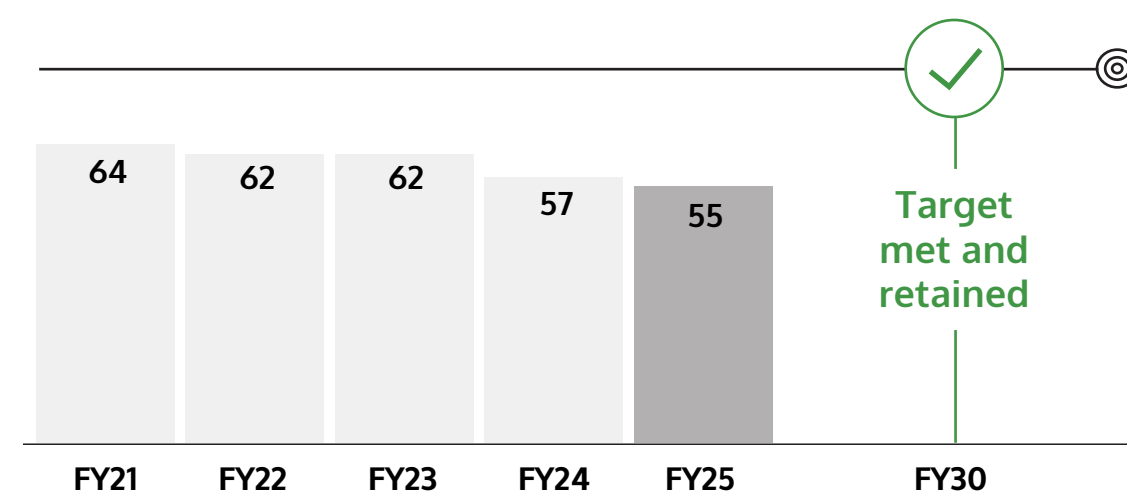


# Product Responsibility

The carbon industry, which includes carbon black, carbon nanotubes, and other carbonaceous materials, 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 toward 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.

## Progress Towards Our Target

**TARGET:** Remain above the Net Promoter Score threshold of 35<sup>14</sup> (score by year)



<sup>14</sup> Net Promoter Scores range from -100 to +100.

Our approach to product responsibility spans two key areas: safety and stewardship. Ensuring that carbon black products remain safe for our customers and for our employees tops our 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, sales and marketing processes — 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, Georgia (USA), where they are logged into the laboratory information management system, ensuring full traceability.

The Standard is enforced at our manufacturing facilities by our on-site 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 Stewardship Steering Committee to oversee these efforts. The Committee meets quarterly to review the status of certified products based on commercial requirements.

Our stewardship approach to carbon nanotubes (CNTs) 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.





## Product Safety

Birla Carbon is committed to investing in R&D 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 is based on a foundation of world-class facilities and engagement with industry peers, focusing 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. The key to this is providing robust scientific evidence that finished articles containing carbon black do not release toxic carcinogenic compounds related to polycyclic aromatic hydrocarbons (PAHs) and heavy metals. We therefore conduct both PAH and metals testing to ensure these materials are certified as being below prescribed limits. There are many methods to test for impurities in carbon black, but only one approach offers the sensitivity and selectivity needed to accurately detect PAHs. Birla Carbon has led the way in advancing standards for PAH measurement, such as helping to develop ASTM standards for the carbon black industry.

Although carbon black is not defined as a respiratory irritant, carbon black dust is considered a combustible dust in some jurisdictions 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 through gentle scrubbing with mild soap and water. If carbon black has been spilled or requires cleaning up, dry vacuuming is the preferred method. As carbon black is fully embedded within the polymer matrix of rubber and plastic, consumers are not typically exposed directly to it in finished products.

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. Birla Carbon holds a leadership role on the ICBA's Board of Directors as well as regional Product Stewardship and Regulatory Committees. Through the ICBA, we openly engage with industry regulators worldwide about the latest developments around our products.

**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.**

## 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.

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 (ANSES) in coming years. This is part of the European Chemicals Agency's Community Rolling Action Plan (CoRAP) to determine whether any health or safety risks exist with carbon black. Other countries, including Korea, Taiwan, Turkey, the UK, and Brazil, have also introduced regulations similar to REACH. While complying with several regulatory frameworks presents a challenge, 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, while meeting all necessary customer and regulatory requirements. These dedicated groups engage with our customers on a daily basis to ensure 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 devise innovative solutions, improve our quality assurance (QA) processes, and strengthen our information-sharing program for quality issues.

This approach aims to prevent the recurrence of quality issues at the same or other manufacturing facilities. It also helps improve communication and awareness of quality initiatives for the benefit of all manufacturing sites.

Our commitment to quality is demonstrated by the certifications held across our global operations. 16 Birla Carbon manufacturing plants, including our newly inaugurated Birla Carbon SCM India, hold ISCC Plus certification. In addition, every plant is International Automotive Task Force 16949 certified for automotive quality management, and both Nanocyl and Birla Carbon SCM India are ISO 9001 certified, with SCM India achieving this shortly after inception. These certifications enable us to deliver consistent, high-quality products through robust risk assessment and process controls. This is further strengthened by our adoption of the International Automotive Task Force Core Tools, which drive proactive risk management, process reliability, and continual improvement for our customers.

Our plant laboratories are regularly audited by our Global Quality 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, Georgia (USA), Taloja, India, and Sambreville, Belgium. Birla Carbon's dedication to maintaining best practices ensures our laboratories meet the highest global standards.



## Focus on Product Consistency

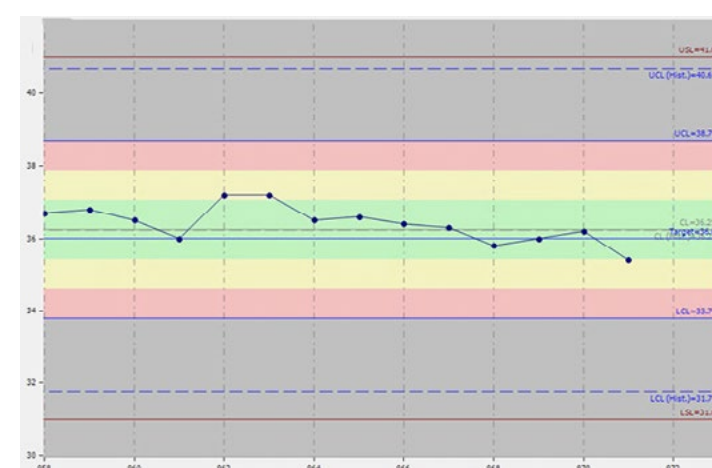
Birla Carbon customers expect a product that consistently meets the highest quality standards. For carbon black, these standards focus on four key areas:

- ▶ **Colloidal properties** – those related to the carbon black's morphology (microscopic physical characteristics)
- ▶ **Physical form** – the bead quality (size and hardness) of carbon black
- ▶ **Cleanliness** – the purity of our product
- ▶ **Service** – meeting customer requirements, ensuring on time delivery, and providing the correct packaging.

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. Our testing facilities are regularly monitored for compliance as well.

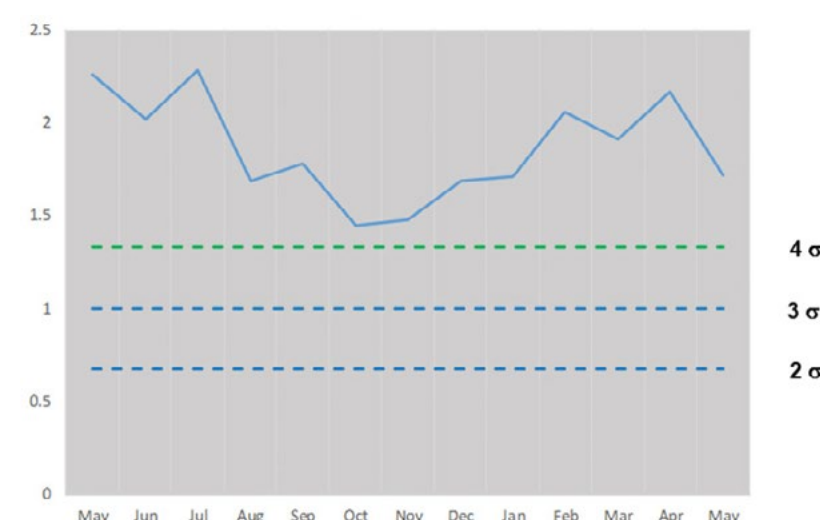
Based on customer requirements, we define upper and lower specification limits for each test. Our products only leave our factories when all required parameters have been tested, and the products are certified within the customer's limits. Our manufacturing processes utilize statistical process controls to help produce the highest quality products. Important properties are analyzed using a process capability index (Cpk), a statistical measure of a process' reliability. A Cpk level of 1.33 or greater indicates that a process will meet customer requirements.

Iodine Number Test

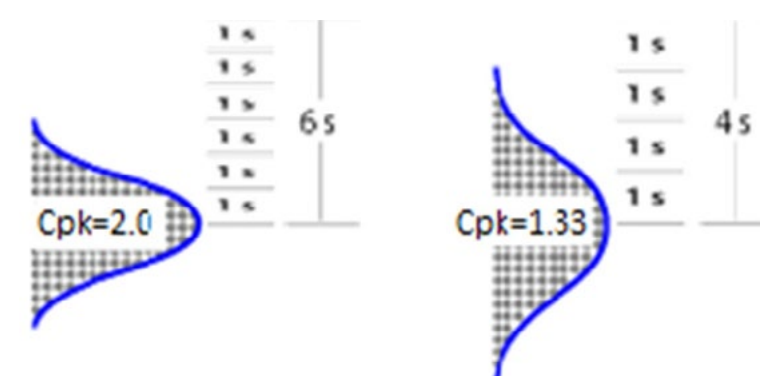


Observation

Monthly Cpk



6-Sigma 4-Sigma



Number of Global Product Recalls

FY23	FY24	FY25
0	1	1



BIRLA CARBON - MARK OF EXCELLENCE

The Birla Carbon Quality logo represents a 'Mark of Excellence' in Quality.



The 'Q' is divided into two parts, representing 'C' for carbon black on the left and Birla Carbon on the right.



The tick mark, which converts to a leaf, provides for two aspects of quality - the mark of excellence through innovation and the drive towards sustainability and circularity.



**16 Birla Carbon manufacturing plants, including our newly inaugurated Birla Carbon SCM India, hold ISCC Plus certification. We are committed to driving sustainability with innovation, based on the foundation of operational excellence. Keeping this in mind, a cross-functional team led by Quality and Sustainability groups worked diligently for more than a year to gain this ISCC Plus achievement. We hope that the entire ecosystem (including all our stakeholders) will benefit from this certification, which will contribute to our mutual sustainability goals."**

### Julio Fernández

Global Quality Manager – EMEA

Birla Carbon







# 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:

## Gib Hordes

Head of Sustainability & Strategy

Birla Carbon

[birlacarbon.sustainability@adityabirla.com](mailto:birlacarbon.sustainability@adityabirla.com)