Share the future



GRI Index

Birla Carbon has reported in accordance with the GRI Standards for the period April 1, 2022 to March 31, 2023.

The data in this report relates to the fiscal year ending March 31, 2023, unless otherwise stated.

For a detailed explanation of the indicators, visit the GRI website.

Mapping our material GRI indicators against the United Nations Sustainable Development Goals

We have mapped our existing progress on our most material aspects and indicators against the United Nations (UN) Sustainable Development Goals (SDGs), through the Compass tool developed by the UN.

The following key shows the icons we use in our GRI Index wherever a topic maps with an SDG:

























































Global Reporting Initiative (GRI) Index in accordance with the 2021 Universal Standards

GENERA	GENERAL DISCLOSURES						
Disclosure number	Disclosure title	Source	Notes	Omissions			
ORGANIZA	ATION AND ITS REPORTING PRAC	TICES					
2-1	Legal name		Birla Carbon				
2-1	Nature of ownership and legal form	Governance	Aditya Birla Group				
2-1	Location of its headquarters	Mumbai, Maharashtra, India					
2-1	Countries of operation	http://birlacarbon.com/ locations/	Brazil, Canada, China, Egypt, Germany, Hungary, India, Italy, South Korea, Spain, Thailand and United States of America				
2-2	Entities included in the organization's sustainability reporting		Our consolidated financial statements include all manufacturing facilities and legal entities worldwide.				
2-3	Reporting period		Annual				
2-3	Financial reporting period		The financial reporting period is the same as sustainability reporting.				
2-3	Publication date		Fiscal year (FY) 2023: April 1, 2022 to March 31, 2023				
2-3	Contact point for questions regarding the report		Amy Hickman, Director Sustainability birlacarbon.sustainability@adityabirla.com				
2-4	Restatements of information			Not applicable			
2-5	External assurance		Where available we use recognized methodologies for measuring and presenting our performance data, and have stated where this is not the case. This includes adhering to the Global Reporting Initiative's guidelines where appropriate. While Birla Carbon has not had its sustainability report independently verified this year, our approach to assurance is reviewed annually. Our Senior Management Team (SMT) must approve any decision to seek external assurance.				

Disclosure				
number	Disclosure title	Source	Notes	Omissions
GOVERNA	NCE			
2-9	Governance structure	Governance	16	
2-9	Executive-level responsibility for economic, environmental, and social topics	Focusing on what matters Governance		
2-9	Consulting stakeholders on economic, environmental, and social topics	Stakeholder engagement Governance Customer engagement Employee enagement	16 17	
2-9	Composition of the highest governance body and its committees	http://birlacarbon.com/about/	Each member of Birla Carbon's SMT holds an executive position at Birla Carbon. Stakeholders, with the exception of shareholders, are not represented on the SMT currently. 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.	
2-10	Nomination and selection of the highest governance body		The process for selecting the officers of the SMT involves working with top search firms to select the most qualified candidates based upon their experience and qualifications.	
			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. Stakeholders, with the exception of shareholders, are not consulted during the selection process. For each Birla Carbon entity, the shareholders appoint/reappoint the members of that company's Board of Directors by either an Annual Shareholders Meeting or a Written Consent in lieu of an Annual Shareholders Meeting (as required by the respective country's corporate laws).	
 2-11	Chair of the highest governance body	http://birlacarbon.com/about/ dr-santrupt-misra/	16	
2-12	Role of the highest governance body in overseeing the management of impacts	Governance		

GENERAL DISCLOSURES visclosure					
Disclosure title	Source	Notes	Omissions		
Delegation of responsibility for managing impacts	Governance				
Role of the highest governance body in sustainability reporting		Chief Legal, Sustainability and Risk Officer Joe Gaynor reviews and approves Birla Carbon's sustainability report.			
Conflicts of interest	Downloads (see Birla Carbon Code of Ethics)	All employees, including those in the highest governing body, are required to sign a Code of Ethics (COE) 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 COE training to assist in identification and handling of conflicts of interest. In the rare event that a potential conflict of interest arises within the SMT, members are required to self-declare the conflict, and are then excused from related discussions.			
		16			
Communication of critical concerns	Ethics				
Collective knowledge of the highest governance body	Governance	Specific teams within the business responsible for sustainability-related programs will also provide progress updates direct to the SMT.			
Evaluation of the performance of the highest governance body		Birla Carbon's SMT is evaluated based on the success of the business linked to the 2030 sustainability targets, which cover economic, environmental and social performance. These evaluations take place on an annual basis and will be reviewed by the Aditya Birla Group Chairman. No actions have been required in response to these evaluations in FY2023.			
	Disclosure title Delegation of responsibility for managing impacts Role of the highest governance body in sustainability reporting Conflicts of interest Communication of critical concerns Collective knowledge of the highest governance body Evaluation of the performance of the highest	Disclosure title Delegation of responsibility for managing impacts Role of the highest governance body in sustainability reporting Conflicts of interest Downloads (see Birla Carbon Code of Ethics) Communication of critical concerns Collective knowledge of the highest governance body Evaluation of the performance of the highest	Disclosure title Source Notes Governance Governance Chief Legal, Sustainability and Risk Officer Joe Gaynor reviews and approves Birla Carbon's sustainability report. Conflicts of interest Conflicts of interest Downloads (see Birla Carbon Code of Ethics) All employees, including those in the highest governing body, are required to sign a Code of Ethics (COE) 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 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 COE training to assist in identification and handling of conflicts of interest in the result of interest arises within the SMT, members are required to self-declare the conflict, and are then excused from related discussions. Collective knowledge of the highest governance body Evaluation of the performance of the highest governance body Birla Carbon's SMT is evaluated based on the success of the business linked to the 2030 sustainability targets, which cover economic, environmental and social performance. These evaluations have been required in response to		

Disclosure number	Disclosure title	Source	Notes	Omissions
2-19	Remuneration policies		Annual compensation matters for all employees in Job Band 5 and above are linked to the annual incentive plan (AIP) and long-term incentive plans (LTIP) which the Chairman approves.	
			These are tied directly to the business' approved annual operating plan and budget that establishes the relevant performance metrics executives will be measured against annually and the performance of the business during the year gone by 2022–23. Each executive's personal performance is measured by a rigorous process of performance management throughout the year and linked, where relevant, to economic, environmental and social performance objectives. Compensation in this context includes, but is not limited to, cash or deferred payments, incentive and equity compensation, benefits, perquisites, employment, retention and/ or termination/severance agreements and any other programs which would be considered compensation by regulatory authorities.	
2-20	Process to determine remuneration		All compensation actions for employees in Job Band 5 and above are subject to the approval of the Chairman of the Aditya Birla Group, assisted by Group Human Resources and the office of the Chief Human Resources Officer (CHRO). The CHRO's office puts together the Compensation proposal for all employees in Job Band 3 and above that includes all the members of the SMT and presents it to the Chief Operating Officer (COO). The COO then forwards the proposals to the Chief Executive Officer (CEO) for his approval, which then is forwarded to the Group Human Resources department. Levels of remuneration are regularly benchmarked against similar positions in related industries through external resources. Mercer was used as Remuneration consultants for this benchmarking and it has no other relationship with Birla Carbon.	
2-21	Annual total compensation ratio			Due to the size of some Birla Carbon business units and the number of employees, compensation data is classified as business sensitive and cannot be disclosed due to confidentiality constraints.

Disclosure				
number	Disclosure title	Source	Notes	Omissions
STRATEGY	, POLICIES AND PRACTICES			
2-22	Statement on sustainable development strategy	Leadership messages		
2-23	Policy commitments	Human Rights Policy	Our Human Rights policy refers to the requirements under the United Nations Global Compact. The policy commitments do stipulate conducting due diligence and respecting human rights as seen in our HR Policy.	
			Our HR policy specifically recognizes internationally proclaimed human rights such as the right to freedom from slavery and torture, freedom of opinion and expression, and the right to work and education. All employees are entitled to these rights, without discrimination. We recognize vulnerable groups such as indigenous peoples, women, migrant workers and other minorities.	
			All policies are approved by the Chief Legal, Sustainability and Risk Officer. All policies are applicable to all Birla Carbon locations under operational control and all Birla Carbon employees. All employees are required to undergo training on our COE and a requirement that all employees acknowledge having received and read the COE. Other policies are posted on our website for access and reviewed every five years for updates. Some policy commitments are captured through sustainability key performance indicators (KPIs) which are communicated internally through quarterly reports such as data privacy and anti-trust training. See specific policies for extension to contractors, vendors and/or customers.	
			https://www.birlacarbon.com/policies-codes-and-certificates/#2376f7065889526ae	
2-24	Embedding policy	Ethics		
	commitments	Human Rights		
2-25	Processes to remediate	Ethics	Please see our Sustainability Report to understand remediation of negative	
	negative impacts	Human Rights	impacts and grievances. Additionally, please refer to our internal audit function and related discussion of it in the report. Our internal audit process investigates possible negative impacts and identifies corrective measures with relevant management teams. Currently, there is not a system in place to assess effectiveness.	
2-26	Mechanisms for seeking advice	Ethics	16	
	and raising concerns	Compliance	-	

GENERAL DISCLOSURES

Disclosure number	Disclosure title	Source	Notes	Omissions
2-27	Compliance with laws and		In FY2023, there were four environmental non-compliances:	
	regulations		 Exceeded air emission norms resulting in forfeiture of bank guarantee of approximately \$600 USD. Site emissions monitoring program was modified to prevent a recurrence. 	
			Inadequate recordkeeping identified during routine wastewater inspection resulting in a fine of \$3,000 USD. Appropriate changes were made to the recordkeeping system to prevent this from recurring.	
			3. Due to failure of an installed particulate monitoring system, site was issued a Notice of Violation. The site has worked with the equipment vendor to update/ correct the equipment issues and with the environmental authorities, with regular updates, to ensure the requirements are being met at all times.	
			 Exceeded wastewater discharge norms in 2021 resulting in a fine of approximately \$1,400 USD paid in 2022. 	
			There were no significant instances of non-compliance with laws and regulations concerning use of products and services in FY2023.	
2-28	Membership associations	ciations Stakeholder engagement	International Carbon Black Association (ICBA)	
			World Business Council for Sustainable Development (WBCSD)	
			Brazilian Chemical Industry Association (ABIQUIM)	
			Risk Management Society (RIMS)	
			North American Product Safety and Regulatory Committee (NAPSRC)	
			European Product Safety and Regulatory Committee (EPSRC)	
			Asian Product Safety and Regulatory Committee (APSRC)	
			Sustainability Leadership Forum (SLF)	
			17	

GENERA	L DISCLOSURES			
Disclosure number	Disclosure title	Source	Notes	Omissions
STAKEHOL	DER ENGAGEMENT			
2-29	Approach to stakeholder engagement	Stakeholder engagement Focusing on what matters Governance Ethics Product responsibility Product quality Carbon stewardship Customer engagement Supplier management Employee engagement Community engagement	17	
2-30	Human Rights	Ethics	8	

MATERIA	MATERIAL TOPICS					
Disclosure number	Disclosure title	Source	Notes	Omissions		
GRI 3: MAT	TERIAL TOPICS 2021					
3-1	Process to determine material topics	Focusing on what matters				
3-2	List of material topics	Focusing on what matters				
3-3	Management of material topics	Sustainability Report	Please reference our Sustainability Report to view all individual topics material to Birla Carbon as well as our management of all of our material topics.			
GRI 204: P	ROCUREMENT PRACTICES 2016					
204-1	Proportion of spending on local suppliers			Information unavailable. As Birla Carbon has a decentralized procurement approach, local procurement data is not currently available. Birla Carbon recognizes this is a gap in its procurement management and intends to develop the measurement tools to collect this data over the next 12 months.		
GRI 205: A	NTI-CORRUPTION 2016					
205-1	Operations assessed for risks related to corruption		100% of Birla Carbon's plants are analyzed for risks at least every two years by the Internal Audit team. In FY2023, 13 audits were conducted focusing on areas such as inbound and outbound logistics, procure to pay (raw material, spares and services), inventory management (raw material, stores and spares), plant maintenance, statutory compliances, etc. All the audits were conducted on field at units such as Alexandria (Egypt), North Bend (USA), Yeosu (Korea), Cubatão (Brazil), Gummidipoondi and Renukoot (India). Outcomes of these audits were shared with the Senior Management Team. No significant risks related to corruption were identified through the audits in FY2023. The Risk Committee is periodically updated on the key audit findings and their action plan implementation status.			
205-2	Communication and training about anti-corruption policies and procedures		Birla Carbon has communicated and provided training on its anti-corruption policies and procedures (COE) to 100% of its employees, including governance body members and business partners as part of our standard Terms and Conditions (T&Cs). All suppliers, distributors and agents go through T&Cs of purchase.	ur full rapart: Suctainability Papart 201		

MATERIAL TOPICS					
Disclosure number	Disclosure title	Source	Notes	Omissions	
205-3	Confirmed incidents of corruption and actions taken	Ethics	In FY2023, four allegations of corruption were raised. All allegations were investigated and corrective action was taken in two of the cases. We found no evidence of corruption or wrongdoing in the other two cases.		
			16		
GRI 206: AI	NTI-COMPETITIVE BEHAVIOR 2016	5			
206-1	Legal actions for anti- competitive behavior, anti- trust, and monopoly practices		Birla Carbon has not been involved in any legal actions pending or completed during the reporting period regarding anti-competitive behavior, violations of antitrust or monopoly legislation.		
GRI 301: M	ATERIALS 2016				
301-1	Materials used by weight or volume	See Appendix: Data GRI 301-1	12 13		
301-2	Recycled input materials used	Innovation	The use of recycled feedstock oil for the production of furnace carbon black is causing various challenges due to its impact on product quality and the nature of our production process. We have, however, increased our R&D efforts in FY2023 to understand better these challenges and eliminate some technical obstacles.		
			In FY2021, Birla Carbon also partnered with Circtec, the leader in pyrolysis technology and the production of renewable fuels from end-of-life tires. This resulted in the commercialization at pilot scale of our Continua™ sustainable carbonaceous materials in FY2022. Our ambition is now to deliver annually up to 73,000 tonnes of sustainable carbonaceous materials from end-of-life tires. 12 13		
301-3	Reclaimed products and their packaging materials		We recycle as much as possible of our off-spec material back into our manufacturing process.		
			The amount of packing material (i.e. pallets, big bags) we use is limited, but we strive to recycle as much as possible. In FY2023, we were able to reclaim 6,000 super sack bags for reuse and used 820,405kg of bags containing recycled content. Additionally, through our partnership with Repasack® in Europe, we recycled 11.2 tonnes of packaging material. Additionally, we recycled 29.39 tonnes of packing material through our partnership with Interzero®.		

MATERIA	MATERIAL TOPICS					
Disclosure number	Disclosure title	Source	Notes	Omissions		
GRI 302: EI	NERGY 2016					
302-1	Energy consumption within the organization	See Appendix: Data GRI 302-1	Birla Carbon's energy consumption has been provided in energy intensity values due to the commercial sensitivity of this information in actual values. 7 12 13			
302-2	Energy consumption outside of the organization	See Appendix: Data GRI 302-2	7 12 13			
302-3	Energy intensity		Birla Carbon's energy consumption intensity in FY2023 was 11.78 GJ/tonne of carbon black. Our organization-specific metric is carbon black production. All types of energy consumed are included in calculation. Only energy consumed within the organization is included in the ratio. 7 12 13			
302-4	Reduction of energy consumption	Reducing our GHG emissions	Birla Carbon's total energy consumption intensity decreased in FY2023 by 27% from FY2022. 7 12 13			
302-5	Reductions in energy requirements of products and services		7 9 12 13	Information unavailable. Birla Carbon is working to develop and produce new grades of carbon black that are easier to incorporate into customer manufacturing processes and products. While Birla Carbon's customers may measure the corresponding energy gain in their manufacturing processes, Birla Carbon has no access to this information due to the commercial sensitivity of the rubber, plastic or ink formulations. Each manufacturing process varies and it is outside of Birla Carbon's control to consider in a generic formulation all the factors which affect the energy measurement.		

MATERIA	MATERIAL TOPICS					
Disclosure number	Disclosure title	Source	Notes	Omissions		
GRI 303: W	ATER AND EFFLUENTS 2018					
303-1	Interactions with water as a shared resource	Water	6 12			
303-2	Management of water discharge-related impacts	Water	All sites comply with local regulatory requirements for water management and discharge. Plants are audited every two years for compliance with water management standards. We do not have internal requirements. Nine of our plants are zero-discharge facilities. 6 12			
303-3	Water withdrawal	See Appendix: Data GRI 303-3	6 12			
303-4	Water discharge	See Appendix: Data GRI 303-4	All of our sites manage their water discharge in accordance with their discharge permit and local regulatory requirements.			
303-5	Water consumption	Water	a) Water consumption for our manufacturing process for all sites is estimated to be 6,895 megaliters in FY2023.			
			b) Water consumption for our manufacturing process of sites in water-stressed areas is estimated to be 2,636 megaliters.			
			c) Water storage at our sites is not expected to have a significant impact.			
			 d) Water consumption for our manufacturing process is estimated based on internal engineering models. This excludes water consumed for power generation, environmental controls, and steam consumption, and ancilliary activities (i.e. floor washing). 			
GRI 305: EN	MISSIONS 2016					
305-1	Direct (Scope 1) GHG emissions	See Appendix: Data GRI 305-1	3 12 13			
305-2	Energy indirect (Scope 2) GHG emissions	See Appendix: Data GRI 305-2	3 12 13			
305-3	Other indirect (Scope 3) GHG emissions	See Appendix: Data GRI 305-3	Through our product life cycle assessment, Birla Carbon has identified the energy consumption of suppliers and downstream transportation as material, based on where potential energy reductions could be undertaken or influenced by Birla Carbon. 3 12 13			
305-4	GHG emissions intensity	Progress towards our targets Reducing our GHG emissions	3 12 13	Confidentiality constraints. Absolute emission intensity data is commercially sensitive.		

	AL TOPICS			
Disclosure number	Disclosure title	Source	Notes	Omissions
305-5	Reduction of GHG emissions	Progress towards our targets Reducing our GHG emissions	a) Birla Carbon experienced a decrease in Scope 1 emissions of approximately 149,248 tonnes.	
		Reducing our dirid emissions	b) Comparisons are made to the previous GRI reporting year (FY2022).	
			c) Scope 1 and Scope 2.	
			d) Same as reported in 305-1 and 305-2.	
			3 12 13	
305-6	Emissions of ozone-depleting substances (ODS)		3 13	Not applicable. Emissions of ozone-depleting substances are deemed immaterial to Birla Carbon due to the nature of its manufacturing processes and scale of its direct CO ₂ emissions.
305-7	Nitrogen oxides (NOx), sulfur oxides (SOx), and other significant air emissions	See Appendix: Data GRI 305-7	FY22 VOC data is corrected. See Appendix for updated value. 3 13	
GRI 306: W	/ASTE 2020			
306-1	Waste generation and significant waste-	Progress towards our targets Waste	The carbon black production process generates very little landfilled waste overall due to the limited number of raw materials (feedstock oil and water) used in our process.	
	related impacts	Air Emissions	The majority of the hazardous waste is generated from required quality testing/ analysis. The teams are constantly looking at how the use of hazardous materials can be minimized or safer alternatives used for testing and analysis.	
			Some of our ancilliary processes required for environmental compliance such as flue gas desulfurization generate a significant amount of gypsum byproduct. However, we have identified valuable reuse options for gypsum at all of our facilities or are using alternative technologies to eliminate the gypsum byproduct. For the carbon black industry, the majority of potential waste impacts are downstream in our value chain. Approximatley 70% of our carbon black goes into tires which can often have limited opportunities for repurposing. However, with our new Continua TM 8000 product, a carbonaceous material that brings a circular solution to our customers, we see the potential to close the loop fully.	

Disclosure				
number	Disclosure title	Source	Notes	Omissions
306-2	Management of significant waste-related impacts	Progress towards our targets Waste	a) We have implemented a Global Waste Management Standard since 2017 which requires all of our facilities to evaluate and implement waste minimization opportunities on an annual basis. Where we cannot eliminate or reduce a waste stream, we try to find vendors to reuse or recycle the waste. For example, our site in Thailand has identified a vendor for composting their gypsum. We encourage our customers to accept carbon black in bulk delivery systems (i.e. truck or rail car) when possible. We are also exploring opportunities to improve the capacity and quality of packaging takeback and reuse programs at some of our facilities and source biodegradable packaging materials. For example, our Cubatão site reused super sacks for the same grade to reduce packaging waste.	
			b) In line with local regulations and our Waste Management Standard, the HSE Managers at our sites are required to qualify/evaluate companies providing waste transportation and disposal services. This requirement is verified by a third party during our audits conducted every two years.	
			c) Waste is a focal point of our internal compliance auditing process conducted on site every 24 months. Our waste storage and disposal volumes are entered into our Environmental Information Management System (Enablon) by a site representative on a monthly basis. This data is verified by our Global Sustainability Analyst and reported in this index.	
			3 12	
306-3	Waste generated	See Appendix: Data GRI 306-3	3 12	
306-4	Waste diverted from disposal	See Appendix: Data GRI 306-4	3 12	
306-5	Waste directed to disposal	See Appendix: Data GRI 306-5	3 6 12	
GRI 308: SI	JPPLIER ENVIRONMENTAL ASSES	SMENT 2016		
308-1	New suppliers that were screened using environmental criteria	Supplier Management Policy	100% of our critical suppliers, per IATF 16949, have been invited to participate in our environmental criteria screening initiative. 36% of our critical suppliers have been screened using environmental criteria through EcoVadis. All new critical suppliers will be invited to participate.	
308-2	Negative environmental impacts in the supply chain and actions taken		93 of our critical suppliers have been assessed for environmental impacts. None of our suppliers have confirmed negative environmental impacts; however, several of our suppliers did score low on their environmental assessment due to inconclusive documentation on environmental policies, lack of ISO 14001 certification, and limited to no disclosure on environmental metrics. We have not established improvement plans with any of our suppliers yet as we are in the early stages of the assessment process. We have not had reason to terminate any relationship with suppliers yet due to environmental performance.	

MATERIA	MATERIAL TOPICS						
Disclosure number	Disclosure title	Source	Notes	Omissions			
GRI 401: EI	MPLOYMENT 2016						
401-1	New employee hires and employee turnover	See Appendix: Data GRI 401-1	8				
401-2	Benefits provided to full-time employees that are not provided to temporary or part- time employees		Benefits are provided to full-time, part-time, and temporary employees in accordance with local laws and regulations. Birla Carbon endeavors to provide full-and part-time employees with the same level of benefits where appropriate.				
401-3	Parental leave	See Appendix: Data GRI 401-3	8				
GRI 403: O	CCUPATIONAL HEALTH AND SAFE	TY 2018					
403-1	Occupational health and safety management system	Health and safety					
403-2	Hazard identification, risk assessment, and incident investigation	Health and safety	Each site has a process for workers to report incidents, hazards and near-miss events. Reporting hazards and near misses is strongly encouraged and in some plants incentivized. The company has a formal incident reporting and investigation standard. Each site is expected to have a local process for the reporting and investigation of incidents including near misses, consistent with the company standard. Information on incidents is recorded in a central system (Enablon). A daily report of incidents reported in the previous 24 hours is distributed daily to approximately 250 executives and managers globally. Completion of investigations and close-out of findings is tracked; incidents with important learnings for other sites are flagged as High Value Learning Events or shared as safety alerts with other sites. Corrective actions from incident investigations focus both on the immediate conditions and behaviors responsible for the incident, as well as any gaps in the health and safety management system.				
403-3	Occupational health services	Health and safety	The occupational health services (OHS) at the locations perform regular medical surveillance activities to detect potential impacts of occupational exposures, such as noise, dusts and chemicals. The OHS also provides non-occupational health screenings for conditions such as high blood pressure, cholesterol, diabetes, etc. These departments are also the primary source of health education for the sites. These services are readily accessible to employees and in many instances required by law.				

MATERIA	MATERIAL TOPICS						
Disclosure number	Disclosure title	Source	Notes	Omissions			
403-4	Worker participation, consultation, and communication on occupational health and safety	Health and safety	Employees are involved at the sites based on local regulatory requirements and the discretion of management. All sites have a formal safety and health committee with representation of employees and management. The membership, responsibilities and meeting frequency are designated by legal requirements and site-specific determinations. Employees are also involved in other safety and health programs and initiatives depending on the site requirements, such as safety inspections, development of job safety analyses and safe work permitting. All employees are engaged globally in health and safety during "Global Safety Week Celebrations & Activities." This engagement helps employees to learn safety in a fun and interesting way as a team.				
403-5	Worker training on occupational health and safety	Health and safety	All sites have a process to ensure that training in a variety of safety and health subjects is provided at regular intervals to comply with regulatory requirements and the requirements of company standards. This training is documented, including methods to verify understanding.				
403-6	Promotion of worker health	Health and safety	In addition to non-occupational screening, the on-site clinics are used for the treatment of work-related symptoms as well as minor, non-work-related conditions. Where needs arise, special services are provided, such as many sites offering on-site vaccination clinics for COVID-19.				
403-7	Prevention and mitigation of occupational health and safety impacts directly linked by business relationships	Health and safety	Birla Carbon maintains a comprehensive product stewardship process to 1) ensure products comply with regulatory requirements where they are manufactured and sold, 2) provide customers with health, safety and regulatory information on our products to allow them to protect their employees and end users of their products and 3) track developing regulatory requirements to ensure that the company can meet these obligations prior to any compliance deadline.				
403-8	Workers covered by an occupational health and safety management system	See Appendix: Data GRI 403-8	Internal audits are conducted as needed by Corporate HS&E but at a minimum of every two years. These audits are used to measure compliance with regulatory requirements and global standards, and measure the overall effectiveness of site H&S management systems. Findings from these audits are tracked to completion. Many sites are also OHSAS 18001/ISO 45001 certified.				
403-9	Work-related injuries	Health and safety See Appendix: Data GRI 403-9	The company has a formal reporting process and uses common safety and health performance incidence rate metrics. Incidents and exposure hours are recorded monthly in a centralized system and communicated to all sites along with other KPIs on a monthly basis. The company also tracks and reports leading indicators monthly, including near-miss reporting, completion of audit findings and HSE programs self-assessment scores.				

MATERIA	AL TOPICS			
Disclosure number	Disclosure title	Source	Notes	Omissions
403-10	Work-related ill health	See Appendix: Data GRI 403-10	Hazards are identified through routine audits and inspections of the sites and industrial hygiene exposure assessments. Birla Carbon has an internal standard for exposure assessment as well as complies with any local or country regulatory requirements for exposure assessment and monitoring requirements. Noise is the most prevalent risk for occupational exposure in the work environment. All sites have a comprehensive hearing-conservation program that includes annual audiometric testing, noise monitoring at regular intervals, installation of engineering controls to reduce noise levels, and the use of hearing protection by personnel working in areas with elevated noise levels. Contractors may be excluded from medical surveillance requirements (NA and EU historically do not monitor contractors), but are not excluded from protective measures.	
GRI 404: T	RAINING AND EDUCATION 2016			
404-1	Average hours of training per year per employee	See Appendix: Data GRI 404-1		
404-2	Programs for upgrading employee skills and transition assistance programs	Attracting and retaining talent Employee engagement	8	
404-3	Percentage of employees receiving regular performance and career development reviews		100% of employees receive regular performance and career development reviews. 4 8	
GRI 405: D	IVERSITY AND EQUAL OPPORTUN	ITY 2016		
405-1	Diversity of governance bodies and employees	See Appendix: Data GRI 2-7 for number of employees by gender, region and type of employment	20% of our senior leadership team is female.	
GRI 406: N	ON-DISCRIMINATION 2016			
406-1	Incidents of discrimination and corrective actions taken		There were no incidents of discrimination in FY2023. 8 16	

MATERIA	MATERIAL TOPICS						
Disclosure number	Disclosure title	Source	Notes	Omissions			
GRI 408: C	CHILD LABOR 2016						
408-1	Operations and suppliers at significant risk for incidents of child labor		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 this.				
GRI 409: F	ORCED OR COMPULSORY LABOR	2016					
409-1	Operations and suppliers at significant risk for incidents of forced or compulsory labor		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 Term and Conditions prohibit this. 8 10 16				
GRI 411: RI	GHTS OF INDIGENOUS PEOPLES 2	016					
411-1	Incidents of violations involving rights of indigenous peoples		There were no incidents of violations involving rights of indigenous peoples in FY2023.				
GRI 413: LC	OCAL COMMUNITIES 2016						
413-1	Operations with local community engagement, impact assessments, and development programs		100% of Birla Carbon manufacturing plants have implemented local community engagement programs including local community development programs and formal local community grievance processes. While a number of Birla Carbon plants are testing ways to measure their community engagement programs, Birla Carbon recognizes this is inconsistent and intends to identify appropriate impact-asssessment approaches over the next two years with the help of its parent company, the Aditya Birla Group.				
413-2	Operations with significant actual and potential negative impacts on local communities		100% of Birla Carbon manufacturing plants would have significant potential negative impacts on local communities if carbon black powder is released in to the local area; however, Birla Carbon has strict controls in place to avoid these impacts from occurring.				

MATERIA	AL TOPICS			
Disclosure number	Disclosure title	Source	Notes	Omissions
GRI 414: SU	JPPLIER SOCIAL ASSESSMENT 201	6		
414-1	New suppliers that were screened using social criteria	Ethics Compliance Stakeholder engagement	16 17	
414-2	Negative social impacts in the supply chain and actions taken	Ethics Compliance Stakeholder engagement	16 17	
GRI 416: CU	JSTOMER HEALTH AND SAFETY 20	016		
416-1	Assessment of the health and safety impacts of product and service categories		100% of products are assessed for health and safety improvements. 3 8 9 16	
416-2	Incidents of non-compliance concerning the health and safety impacts of products and services		There have been no incidents of non-compliance with regulations and voluntary codes concerning the health and safety impacts of Birla Carbon products in FY2023. 3 8 9 16	
GRI 417: M	ARKETING AND LABELING 2016			
417-1	Requirements for product and service information and labeling		Through Safety Data Sheets (SDS) Birla Carbon's product labeling includes the content and safety guidance on use and disposal of the product. 3 8 9 16	
417-2	Incidents of non-compliance concerning product and service information and labeling		There have been no incidents of non-compliance with regulations and voluntary codes concerning product and service information and labeling in FY2023.	
417-3	Incidents of non-compliance concerning marketing communications		There have been no incidents of non-compliance with regulations and voluntary codes concerning marketing communications in FY2023. 16	

GRI 2-7 Information on employees and other workers

Employee numbers FY2023	Americas		As	Asia		Europe, Middle East and Africa		Total female	Total
	Male	Female	Male	Female	Male	Female			
Full time	575	116	856	143	389	137	1,820	396	2,216
Part time	249	17	0	0	0	1	249	18	267
Permanent employees (full time + part time)	824	133	856	143	389	138	2,069	414	2,483
Temporary	16	2	1	0	1	1	18	3	21
Contractors/supervised	0	1	660	75	7	2	667	78	745

GRI 2-8 Workers who are not employees

Employee numbers FY2023	Amei	ricas	As	ia	Europe, M and A		Total male	Total female	Total
	Male	Female	Male	Female	Male	Female			
Contractors/supervised	0	1	660	75	7	2	667	78	745
Interns	12		2	3	2	4			59

GRI 301-1 Materials used by weight or volume

Raw materials used	Unit	FY2019	FY2020	FY2021	FY2022	FY2023
Natural gas	kNm³	155,139	142,102	136,127	155,224	139,576
Oil feedstock	tonnes	2,684,441	2,503,495	2,461,375	2,921,176	2,834,935

Note:

Raw materials are nonrenewable and sourced from external suppliers. The data is calculated through direct measurement.

GRI 302-1 Energy consumption within the organization

Energy consumption intensity	Unit	FY2021	FY2022	FY2023
Oil (non-production)	GJ/t _{carbon} black	0.16	0.14	0.12
Natural gas (non-production)	GJ/t _{carbon} black	0.90	0.92	0.60
Electricity consumption	GJ/t _{carbon black}	1.77	1.78	1.43
Steam consumption	GJ/t _{carbon black}	4.82	5.16	5.15
Tail gas consumption	GJ/t _{carbon black}	4.66	8.16	4.47
Compressed air consumption	GJ/t _{carbon black}	0.00	0.00	0.00
Hot water consumption	GJ/t _{carbon black}	0.00	0.00	0.00
Electricity sold	GJ/t _{carbon black}	1.17	1.35	1.38
Tail gas sold	GJ/t _{carbon black}	1.89	1.72	1.73
Hot water sold	GJ/t _{carbon black}	0.00	0.00	0.00
Steam sold	GJ/t _{carbon black}	3.08	2.80	2.84
Net energy use	GJ/t _{carbon black}	6.17	10.29	5.83
Total energy consumption	GJ/t _{carbon black}	12.31	16.16	11.78

Notes:

Site-specific gross calorific value (GCV) used for natural gas.

Used conversion factor of 3.841 to convert MWh to MKCal for power.

Used conversion factor of 780 to convert MWh of steam to MKCal.

Tail gas conversion factors varied by site.

Water heating conversion factors varied by site.

Compressed air conversion factors varied by site.

Used conversion factor of 4.187 to convert MKCal to GJ.

GRI 302-2 Energy consumption outside the organization

Energy consumption intensity	Unit	FY2023
Upstream: Extraction, transportation, refining and distribution of raw materials	GJ/t _{carbon black}	9.5
Downstream: Transportation and distribution of products	GJ/t _{carbon black}	1.9

Note:

With the sun setting on the Quantis Scope 3 tool, we elected to use U.S. EPA EEIO model for Scope 3 calculations. Scope 1 and 2 methodology remains the same as in previous years.

LIFE CYCLE ASSESSMENTS

Impact categories

Category	Unit	Abbreviation
Ozone layer depletion	Trichlorofluoromethane equivalents	CFC-11 eq
Human toxicity (cancer effects and non-cancer effects)	Comparative toxic units	CTUh
Particulate matter	Particulate matter 2.5 equivalents	PM 2.5 eq
Photochemical ozone formation	Non-methane volatile organic compound equivalents	C ₂ H ₄ eq
Acidification	Hydrogen ion equivalents	mole H+ eq
Terrestrial eutrophication	Nitrogen equivalents	mole N eq
Freshwater eutrophication	Phosphorus equivalents	P eq
Freshwater ecotoxicity	Comparative toxic units	CTUe
Land use	Carbon deficit	SOC
Mineral, fossil and renewable resource depletion	Antimony equivalent	Sb eq

LIFE CYCLE ASSESSMENTS continued

Results

Impact	Unit	Birla Carbon FY2017 Global	Ecoinvent database for carbon black ¹
Ozone layer depletion	CFC-11 eq	0.15E-03	1.1E-03
Human toxicity, cancer effects	CTUh	1.9E-06	42.2E-06
Human toxicity, non-cancer effects	CTUh	2.3E-05	25.0E-05
Particulate matter	PM 2.5 eq	0.11	4.10
Photochemical ozone formation	C ₂ H ₄ eq	0.91	6.09
Acidification	mole H+ eq	1.59	13.2
Terrestrial eutrophication	mole N eq	1.99	15.8
Freshwater eutrophication	P eq	-0.012	0.178
Freshwater ecotoxicity	CTUe	621	573
Land use	SOC	2,090	1,500
Mineral, fossil and renewable resource depletion	Sb eq	0.01	0.05

¹http://www.ecoinvent.org/database/database.html

GRI 303-3 Water withdrawal

Water withdrawal by source from all areas	Unit	FY2019	FY2020	FY2021	FY2022	FY2023
Fresh surface water	megaliters	7,518	7,223	6,585	25,914	202,7491
Groundwater	megaliters	5,070	4,992	4,221	4,377	3,393
Seawater/brackish water	megaliters	0	0	0	0	0
Produced/process water	megaliters	0	0	0	0	0
Third party	megaliters	4,973	4,340	5,177	5,991	5,923

Note:

Surface water, groundwater and municipal water volumes are directly measured via metering. Rainwater and water recycled from other plant operations are directly measured via metering at some locations and are estimated at others based on rainfall data for the area.

¹ The increase in withdrawal of fresh surface water is for the operation of air pollution control equipment. The SOx scrubber requires water to be cycled through it from an intracoastal waterway; all of the water is returned to the intracoastal waterway in like condition.

Water withdrawal by source from water-stressed areas	Unit	FY2019	FY2020	FY2021	FY2022	FY2023
Fresh surface water	megaliters	1,820	1,729	1,455	1,789	2,082
Groundwater	megaliters	994	982	328	445	435
Seawater/brackish water	megaliters	0	0	0	0	0
Produced/process water	megaliters	0	0	0	0	0
Third party	megaliters	2,165	1,696	2,483	2,967	3,117

Note:

Surface water, groundwater and third-party water volumes are directly measured via metering. Rainwater and water recycled from other plant operations are directly measured via metering at some locations and are estimated at others based on rainfall data for the area.

Water withdrawal by water quality	Unit	FY2019	FY2020	FY2021	FY2022	FY2023
Freshwater (<1,000 mg/L total dissolved solids (TDS))	megaliters	17,562	16,554	15,983	36,282	212,065
Other water (>1,000 mg/L TDS)	megaliters	0	0	0	0	0

GRI 303-4 Water discharge

Water discharge by destination for all areas	Unit	FY2019	FY2020	FY2021	FY2022	FY2023
Fresh surface water	megaliters	2,362	3,039	3,029	21,339	199,051
Groundwater	megaliters	0	0	0	0	0
Seawater/brackish water	megaliters	0	0	0	0	0
Third party	megaliters	415	623	577	683	685

Notes:

Surface water, groundwater and third-party water volumes are directly measured via metering. Rainwater and water recycled from other plant operations are directly measured via metering at some locations and are estimated at others based on rainfall data for the area. The increase in discharge of fresh surface water is for the operation of air pollution control equipment. The SOx scrubber requires water to be cycled through it from an intracoastal waterway; all of the water is returned to the intracoastal waterway in like condition.

Water discharge by quality for all areas	Unit	FY2019	FY2020	FY2021	FY2022	FY2023
Freshwater (<1,000 mg/L TDS)	megaliters	2,362	3,039	3,029	21,339	199,051
Other water (>1,000 mg/L TDS)	megaliters	0	0	0	0	1
Water discharge by quality for water-stressed areas	Unit	FY2019	FY2020	FY2021	FY2022	FY2023
Freshwater (<1,000 mg/L TDS)	megaliters	496	597	634	687	701

GRI 305-1 Direct (Scope 1) GHG emissions

Unit	FY2019	FY2020	FY2021	FY2022	FY2023
tCO ₂ -eq	3,398,741	3,151,354	3,177,044	3,806,644	3,657,396

Notes:

Only CO₂ is included in the calculation, as emissions of other gases are considered negligible in comparison.

No biogenic CO₂ emissions.

FY2005 is taken as the baseline year because this is the first year reliable direct GHG emission data was available for all plants. Base year Scope 1 emissions were 3,523,847 tonnes of CO₂-eq.

Emission factors for all facilities, with the exception of those in India, are sourced from 2006 Intergovernmental Panel on Climate Change (IPCC) Guidelines for National Greenhouse Gas Inventories, Default Emission Factors for Stationary Combustion in Manufacturing Industries and Construction. Emission factors for facilities in India are sourced from the Central Electricity Authority (CEA).

Consolidation approach for emissions is based on operational control.

Process Scope 1 emissions are calculated using a mass balance methodology. Stationary combustion emissions are calculated through Enablon.

GRI 305-2 Energy indirect (Scope 2) GHG emissions

U	Unit	FY2021	FY2022	FY2023
to	tCO ₂ -eq	86,950	87,605	81,041

Notes:

Market-based energy indirect GHG emissions not applicable.

Only CO₂ is included in the calculation, as emissions of other gases are considered negligible in comparison.

Base year emissions not applicable for absolute Scope 2 emissions.

Emission factors for purchased electricity are sourced from the International Energy Agency (IEA). Emission factors for purchased steam, compressed air and hot water are sourced from the European Life Cycle Database (ELCD) based on fuel type, as shown on the next page.

Consolidation approach for emissions is based on operational control.

Scope 2 emissions are calculated through Enablon.

GRI 305-3 Other indirect (Scope 3) GHG emissions

Gross other indirect Scope 3 GHG emissions	Unit	FY2019	FY2020	FY2021	FY2022	FY2023
	tCO ₂ -eq	Not available	1,830,931	Not available	2,025,020	2,074,032

Notes:

No biogenic CO₂ emissions.

FY2013 is taken as the baseline year because comprehensive and reliable energy data was not available for all plants in previous years. Base year Scope 3 emissions were 1,248,575 tCO₂-eq.

With the sun setting on the Quantis Scope 3 tool, we elected to use U.S. EPA EEIO model for Scope 3 calculations. Scope 1 and 2 methodology remains the same as in previous years.

GRI 305-7 Emissions

Nitrogen oxides (NOx), sulfur oxides (SOx) and other significant air emissions	Unit	FY2022	FY2023
Gross NOx	tonnes	4,286	4,336
Gross SOx	tonnes	25,408	18,406
Gross volatile organic compounds (VOC)	tonnes	143	110
Gross particulate matter (PM)	tonnes	954	775

Notes:

The air emissions were measured through a direct continuous emissions monitoring system. Where direct emissions are measured, emission factors are sourced based on local regulatory requirements and guidelines.

The default methodology was direct measurement. Emissions were calculated using a mass balance when direct measurement was not available.

GRI 306-3 Waste generated

Waste generation	Unit	FY2021	FY2020	FY2021	FY2022	FY2023
Total waste generated	tonnes	26,710	24,563	25,579	35,659	41,769
Hazardous waste	tonnes	4,910	2,775	715	1,580	1,129
Non-hazardous waste	tonnes	21,800	21,788	24,864	34,078	40,641

Note:

The spike in our waste generation was caused by a one-time oil storage tank cleanout, which does not represent our everyday operations.

See our full report: Sustainability Report 2023

GRI 306-4 Waste diverted from disposal

Weight of waste by type and disposal method ¹	Unit	FY20	19	FY20)20	FY20)21	FY20)22	FY20)23
		Hazardous	Non- hazardous								
Reuse	tonnes	0	2,002	98	2,449	-	1,576	72	1,252	143	3,757
Recycling	tonnes	1	8,959	3	8,332	52	8,128	21	10,167	46	25,586
Composting	tonnes	11	1	-	2,895	-	6,600	-	11,730	-	0
Total	tonnes	12	10,962	101	13,676	52	16,304	93	23,149	189	29,343

¹The waste disposal method is determined by Birla Carbon except for landfill disposal, which is a default of the waste disposal contractor.

GRI 306-5 Waste directed to disposal

Weight of waste directed to disposal	Unit	FY20	19	FY20	20	FY20)21	FY20)22	FY20)23
		Hazardous	Non- hazardous								
Incineration	tonnes	164	487	905	165	87	174	212	210	235	237
Incineration (with recovery)	tonnes	0	0	0	0	2	-	50	11	33	0
Landfill	tonnes	4,734	10,352	1,769	7,948	575	8,386	1,226	10,708	672	11,064
Total	tonnes	4,898	10,839	2,674	8,113	664	8,560	1,488	10,929	940	11,300

GRI 401-1 New employee hires and employee turnover

Employee hires and employee turnover FY2022	Total hires ¹	Hire rate	Total turnover	Turnover rate
Age	80	9.3%	55	6.4%
Age: under 30 years	14	1.6%	6	0.7%
Age: 30–50 years	57	6.7%	44	5.1%
Age: over 50 years	9	1.1%	5	0.6%
By Group	80	9.3%	55	6.4%
Americas & Europe Manufacturing	28	3.3%	22	2.6%
Asia Manufacturing	22	2.6%	16	1.9%
Corporate Functions Office	19	2.2%	10	1.2%
Sales & Marketing Office	11	1.3%	7	0.8%
By Gender	80	9.3%	55	6.4%
Female	23	2.7%	17	2.0%
Male	57	6.7%	38	4.4%
Total	80	9.3%	55	6.4%

Total employees (management) = 857

¹ Total hires include internal and external hires.

GRI 401-3 Parental leave

Return to work and retention rates after parental leave FY2022	Female	Male	Total
Employees entitled to parental leave	235	1,221	1,456
Employees that took parental leave	17	29	46
Employees that returned to work	11	28	39
Employees in employment 12 months after returning to work	8	24	32
Employees returning from parental leave in the prior reporting period	8	23	31
Return-to-work rate of those who took parental leave	65%	97%	85%
Retention rate of employees who took parental leave	88%	60%	65%
		· · · · · · · · · · · · · · · · · · ·	

GRI 403-8 Workers covered by an occupational health and safety management system

Employee coverage	Number	Percentage
Those covered by an occupational health and safety (OHS) management system	2,504	100%
Those covered by an OHS management system that has been internally audited	2,504	100%
Those covered by an OHS management system that has been audited or certified by an external party		100%

Contractor coverage	Number	Percentage
Those covered by an OHS management system	745	100%
Those covered by an OHS management system that has been internally audited	745	100%
Those covered by an OHS management system that has been audited or certified by an external party	745	100%

Note:

No workers have been excluded.

GRI 403-9 Work-related injuries

	Employees	Workers who are not employees but whose work is controlled by the organization (contractors)
Number and rate of fatalities as a result of work-related injury	0	2/0.08
Number and rate of high-consequence work-related injuries (excluding fatalities)	11/0.47	7/0.28
Number and rate of recordable work-related injuries	13/0.56	9/0.37
Main types of work-related injuries	Slips, trips and falls	Slips, trips and falls
Number of hours worked	4,606,799	4,844,533

GRI 403-10 Work-related ill health

	Employees	Workers who are not employees but whose work is controlled by the organization
Number of fatalities as a result of work-related ill health	0	0
Number of cases of recordable work-related ill health	3	0
Main types of work-related ill health	COVID-19	N/A

GRI 404-1 Average hours of training per year per employee

Average hours of employee training FY2023	Senior management	Middle management	Junior management	Non- management
Female	3	7	16	15
Male	7	15	24	14