

GLOBAL REPORTING INITIATIVE INDEX

BIRLA CARBON 2017

OUR PROGRESS ON THE PATH
TO SUSTAINABLE BUSINESS

ADITYA BIRLA



BIRLA CARBON



GRI INDEX

BIRLA CARBON 2017

This report has been prepared in accordance with the GRI Standards at the Comprehensive level.

The data in this report relates to the fiscal year ending March 31, 2017, 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 against 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 it maps with an SDG:



DISCLOSURE

GLOBAL REPORTING INITIATIVE (GRI) INDEX IN ACCORDANCE WITH COMPREHENSIVE GRI STANDARDS

GRI 102: GENERAL STANDARD DISCLOSURES 2016

DISCLOSURE NUMBER	SOURCE	NOTES	OMISSIONS
102-1		Birla Carbon	
102-2	The social value of carbon black	Carbon black manufacturer and supplier. Our product has not been banned in any markets.	
102-3	Mumbai, Maharashtra, India		
102-4	http://birlacarbon.com/locations/	12 countries (Brazil, Canada, China, Egypt, Germany, Hungary, India, Italy, South Korea, Spain, Thailand and the United States)	
102-5	Governance	Aditya Birla Group	
102-6		Markets served are in Europe and Africa, North America, South America, Oceania, South East Asia and Far East. Sector served: private, manufactured goods. Customers are in the tire, manufactured rubber goods and speciality product industries (plastics, inks, paints and coatings).	
102-7		Total number of employees = 2,395 16 manufacturing sites 2 decanting stations 2 technology centers Privately owned company Production capacity of 2Mt/year Selling price depends somewhat on oil price	
102-8	See Appendix: data GRI 102-8	A significant portion of the workforce at our plants in South Asia consists of contractors; these contractors perform work primarily in warehousing, maintenance and construction functions at the plants. No significant variations in employee numbers reported throughout reporting period. Data compiled by HR heads at each site at the end of FY2017. No significant assumptions were made when compiling data.	

GRI 102: GENERAL STANDARD DISCLOSURES 2016

DISCLOSURE NUMBER	SOURCE	NOTES	OMISSIONS
102-9	Supplier management	Our main suppliers consist of raw material and chemical providers, engineering groups for equipment and spare parts, and transportation companies. Apart from feedstock oil, most of our suppliers are managed regionally and even locally at the the plant level.	
102-10		Closed manufacturing plants in Hannover, Germany and Liaoning, China. No significant changes in the share capital structure or in the location of suppliers or relationships with suppliers.	
102-11	Responsible stewardship Future-proofing Governance Product responsibility		
102-12	Our approach Stakeholder engagement Future-proofing Governance Compliance Product responsibility The big questions Product quality Carbon stewardship Water Customer engagement Employee engagement	17	
102-13	Stakeholder engagement	International Carbon Black Association (ICBA) World Business Council for Sustainable Development (WBCSD) Brazilian Chemical Industry Association (ABIQUM) Risk Management Society (RIMS) North American Product Safety and Regulatory Committee (NAPSRC) Sustainability Leadership Forum (SLF) 17	

GRI 102: GENERAL STANDARD DISCLOSURES 2016

DISCLOSURE NUMBER	SOURCE	NOTES	OMISSIONS
102-14	Leadership messages		
102-15	Leadership messages Our key issues Sustainable Development Goals Responsible stewardship Stakeholder engagement Future-proofing Targets and progress About our report		
102-16	Ethics Compliance	16	
102-17	Ethics Compliance	16	
102-18	Governance	16	
102-19	Governance		
102-20	Our key issues Governance		
102-21	Stakeholder engagement Governance Customer engagement Employee engagement	16 17	
102-22	http://birlacarbon.com/about/	Each member of Birla Carbon’s SMT holds an executive position at Birla Carbon and has been in position since the formation of the SMT in 2011. 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. 16	
102-23	http://birlacarbon.com/about/dr-santrupt-misra/	16	

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GRI 102: GENERAL STANDARD DISCLOSURES 2016

DISCLOSURE NUMBER	SOURCE	NOTES	OMISSIONS
102-24		<p>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.</p> <p>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).</p> <p>16</p>	
102-25	Downloads (see Birla Carbon Code of Conduct)	<p>All employees, including those in the highest governing body, are required to sign a Code of Conduct that includes the following language: "Each Employee must avoid at all times any interest that might conflict or appear to conflict with the interests of the Company, or that might deprive the Company of the undivided loyalty of the Employee in business dealings. To this end, an Employee should not become involved in any situation that may create a personal interest in the situation, or place the Employee under an obligation that may interfere with his or her primary duty to serve the Company at all times to the best of his or her ability." Also, each member of the SMT is required to participate in ethics and code of conduct training to assist in identification and handling of conflicts of interest. In the rare event that a potential conflict of interest arises within the SMT, members are required to self-declare the conflict, and are then excused from related discussions.</p> <p>16</p>	
102-26	Governance		
102-27	Governance	<p>Specific teams within the business responsible for sustainability-related programs will also provide progress updates direct to the SMT.</p> <p>4</p>	

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GRI 102: GENERAL STANDARD DISCLOSURES 2016

DISCLOSURE NUMBER	SOURCE	NOTES	OMISSIONS
102-28		<p>Birla Carbon’s SMT is evaluated based on the success of the business linked to the 2020 sustainability targets, which cover economic, environmental and social performance.</p> <p>Birla Carbon’s Regional Presidents are also assessed on safety objectives for their region, which are linked to their remuneration scheme. 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 FY2017.</p>	
102-29	Our key issues Stakeholder engagement Governance	16	
102-30	Governance		
102-31	Our key issues Governance		
102-32		Chief Legal, Sustainability and Risk Officer, Joe Gaynor reviews and approves Birla Carbon’s Sustainability Report.	
102-33	Ethics		
102-34	Ethics		
102-35		<p>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.</p> <p>These are tied directly to the business’s 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. 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 that would be considered compensation by regulatory authorities.</p>	

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GRI 102: GENERAL STANDARD DISCLOSURES 2016

DISCLOSURE NUMBER	SOURCE	NOTES	OMISSIONS
102-36		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, which 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. Remuneration consultants used for this benchmarking have no other relationship with Birla Carbon.	
102-37		Birla Carbon does not consult external stakeholders, other than shareholders, on remuneration policies. 16	
102-38			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.
102-39			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.
102-40	Stakeholder engagement		
102-41	Ethics	8	
102-42	Stakeholder engagement		

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GRI 102: GENERAL STANDARD DISCLOSURES 2016

DISCLOSURE NUMBER	SOURCE	NOTES	OMISSIONS
102-43	Stakeholder engagement Our key issues Governance Ethics Product responsibility Product quality Carbon stewardship Customer engagement Supplier management Employee engagement Community engagement	17	
102-44	See above		
102-45		Our consolidated financial statements include all manufacturing facilities and legal entities worldwide.	
102-46	Our key issues Future-proofing About our report		
102-47	Our key issues	Material aspects are those with indicators reported against in this index.	
102-48		Correction made to 306-2 (formerly G4-EN23) waste data reported in FY2016	
102-49	About our report		
102-50		FY2017, April 1, 2016 to March 31, 2017	
102-51		FY2016	
102-52		Annual	
102-53		Dr. Gilles Moninot, Global Sustainability Director birlacarbon.sustainability@adityabirla.com	
102-54		This report has been prepared in accordance with the GRI Standards: Comprehensive option.	

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GRI 102: GENERAL STANDARD DISCLOSURES 2016

DISCLOSURE NUMBER	SOURCE	NOTES	OMISSIONS
102-55		GRI Standards are referenced throughout this index. Material topics which are reported on but not covered by the GRI standards include: Business continuity Global Presence Innovation Customer Engagement	
102-56		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.	

SPECIFIC STANDARD DISCLOSURES

DISCLOSURE NUMBER	SOURCE	NOTES	OMISSIONS
MATERIAL ISSUE: GOVERNANCE FRAMEWORK			
GRI 103: Management Approach 2016			
103-1	Leadership messages Our key issues Sustainable Development Goals Stakeholder engagement Future-proofing About our report		
103-2	Leadership messages Sustainable Development Goals Responsible stewardship Targets and progress Governance Compliance Downloads		
103-3	Responsible stewardship Targets and progress Stakeholder engagement Governance Compliance		
GRI 307: Environmental Compliance 2016			
307-1		Birla Carbon paid \$7,971 (USD) in fines in FY17. 16	
GRI 419: Socioeconomic Compliance 2016			
419-1		Birla Carbon has not received any significant fines for noncompliance with laws and regulations concerning the provision and use of products and service in FY2017. 16	

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SPECIFIC STANDARD DISCLOSURES



DISCLOSURE NUMBER	SOURCE	NOTES	OMISSIONS
MATERIAL ISSUE: ETHICS			
GRI 103: Management Approach 2016			
103-1	Leadership messages Our key issues Sustainable Development Goals Stakeholder engagement Future-proofing About our report		
103-2	Leadership messages Sustainable Development Goals Responsible stewardship Targets and progress Governance Ethics Compliance Downloads		
103-3	Responsible stewardship Targets and progress Stakeholder engagement Governance Ethics Compliance		
GRI 205: Anti-Corruption 2016			
205-1		100% of Birla Carbon’s plants are analyzed for risk at least every two years by the internal audit department. If compliance issues are discovered, sites may be audited more frequently until findings are corrected. No significant risks related to corruption were identified through the risk assessments in FY2017. 16	
205-2		Birla Carbon has communicated and provided training on its anti-corruption policies and procedures (Code of Ethics) to 100% of its employees, including governance body members. 16	

SPECIFIC STANDARD DISCLOSURES

DISCLOSURE NUMBER	SOURCE	NOTES	OMISSIONS
205-3	Ethics	In FY2017, two allegations of corruption were raised, investigated and found to be without merit. 16	
GRI 206: Anti-Competitive Behavior 2016			
206-1		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. 16	
MATERIAL ISSUE: BUSINESS CONTINUITY			
GRI 103: Management Approach 2016			
103-1	Leadership messages Our key issues Sustainable Development Goals Stakeholder engagement Future-proofing About our report		
103-2	Leadership messages Sustainable Development Goals Responsible stewardship Targets and progress Governance Downloads		
103-3	Responsible stewardship Targets and progress Stakeholder engagement Governance		

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SPECIFIC STANDARD DISCLOSURES

DISCLOSURE NUMBER	SOURCE	NOTES	OMISSIONS
MATERIAL ISSUE: PRODUCT STEWARDSHIP			
GRI 103: Management Approach 2016			
103-1	Leadership messages Our key issues Sustainable Development Goals Stakeholder engagement Future-proofing About our report		
103-2	Leadership messages Sustainable Development Goals Responsible stewardship Targets and progress Governance Product responsibility The big questions Downloads		
103-3	Responsible stewardship Targets and progress Stakeholder engagement Governance Product responsibility The big questions		
GRI 416: Customer Health and Safety 2016			
416-1		100% of products are assessed for health and safety improvements. 	
416-2		There have been no incidents of non-compliance with regulations and voluntary codes concerning the health and safety impacts of Birla Carbon products in FY2017. 	

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SPECIFIC STANDARD DISCLOSURES

DISCLOSURE NUMBER	SOURCE	NOTES	OMISSIONS
MATERIAL ISSUE: PRODUCT CONSISTENCY			
GRI 103: Management Approach 2016			
103-1	Leadership messages Our key issues Sustainable Development Goals Stakeholder engagement Future-proofing About our report		
103-2	Leadership messages Sustainable Development Goals Responsible stewardship Targets and progress Governance Product quality Downloads		
103-3	Responsible stewardship Targets and progress Stakeholder engagement Governance Product quality		
GRI 417: Marketing and Labeling 2016			
417-1		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		There have been no incidents of non-compliance with regulations and voluntary codes concerning product and service information and labeling in FY2017. 3 8 9 16	
417-3		There have been no incidents of non-compliance with regulations and voluntary codes concerning marketing communications in FY2017. 16	

SPECIFIC STANDARD DISCLOSURES

DISCLOSURE NUMBER	SOURCE	NOTES	OMISSIONS
MATERIAL ISSUE: INNOVATION			
GRI 103: Management Approach 2016			
103-1	Leadership messages Our key issues Sustainable Development Goals Stakeholder engagement Future-proofing About our report		
103-2	Leadership messages Sustainable Development Goals Responsible stewardship Targets and progress Governance Research and development Downloads		
103-3	Responsible stewardship Targets and progress Stakeholder engagement Governance Research and development		
MATERIAL ISSUE: ENERGY			
GRI 103: Management Approach 2016			
103-1	Leadership messages Our key issues Sustainable Development Goals Stakeholder engagement Future-proofing About our report		

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SPECIFIC STANDARD DISCLOSURES

DISCLOSURE NUMBER	SOURCE	NOTES	OMISSIONS
103-2	Leadership messages Sustainable Development Goals Responsible stewardship Targets and progresss Governance Carbon stewardship Downloads		
103-3	Responsible stewardship Targets and progress Stakeholder engagement Governance Carbon stewardship		
GRI 302: Energy 2016			
302-1	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	See Appendix: data GRI 302-2 Life Cycle Assessment	7 12 13	
302-3		Birla Carbon’s energy consumption intensity in FY2017 was 18.26 GJ/tonne of carbon black. Our organization-specific metric is carbon black production. All types of energy consumed are included in the calculation. Only energy consumed within the organization is included in the ratio. 7 12 13	
302-4		Birla Carbon reduced its energy consumption intensity by 0.53 GJ/tonne of carbon black in FY2017 as compared to FY2016. All types of energy consumed are included in the calculation. 7 12 13	

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SPECIFIC STANDARD DISCLOSURES

DISCLOSURE NUMBER	SOURCE	NOTES	OMISSIONS
302-5		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 that affect the energy measurement.

MATERIAL ISSUE: GHG AND AIR EMISSIONS

GRI 103: Management Approach 2016

103-1	Leadership messages Our key issues Sustainable Development Goals Stakeholder engagement Future-proofing About our report		
103-2	Leadership messages Sustainable Development Goals Responsible stewardship Targets and progress Governance Life Cycle Assessments Carbon stewardship Air emissions Downloads		
103-3	Responsible stewardship Targets and progress Stakeholder engagement Governance Life Cycle Assessments Carbon stewardship Air emissions		

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SPECIFIC STANDARD DISCLOSURES

DISCLOSURE NUMBER	SOURCE	NOTES	OMISSIONS
GRI 305: Emissions 2016			
305-1	See Appendix: data GRI 305-1	3 12 13	
305-2	See Appendix: data GRI 305-2	3 12 13	
305-3	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	Targets and progress Carbon stewardship	3 12 13	Confidentiality constraints. Absolute emission intensity data is commercially sensitive.
305-5	Targets and progress Carbon stewardship	3 12 13	Confidentiality constraints. Absolute emission intensity data is commercially sensitive.
305-6	Life Cycle Assessments See Appendix: data GRI 305-6	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	Life Cycle Assessments See Appendix: data GRI 305-7	3 13	Information unavailable. Emissions of NO _x , SO _x and other significant air emissions are monitored on a continuous basis at some sites to ensure each manufacturing plant stays within the regulatory limits. However, the overall data is not collected globally. Collection processes for this data will be reviewed over the next 12 months.
MATERIAL ISSUE: WATER			
GRI 103: Management Approach 2016			
103-1	Leadership messages Our key issues Sustainable Development Goals Stakeholder engagement Future-proofing About our report		

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SPECIFIC STANDARD DISCLOSURES

DISCLOSURE NUMBER	SOURCE	NOTES	OMISSIONS
103-2	Leadership messages Sustainable Development Goals Responsible stewardship Targets and progress Governance Water Downloads		
103-3	Responsible stewardship Targets and progress Stakeholder engagement Governance Water		
GRI 303: Water 2016			
303-1	See Appendix: data GRI 303-1	6 12	
303-2		Birla Carbon complies with the relevant local regulations on water withdrawal for each of its manufacturing plants. Birla Carbon is not aware of any significant impacts to water bodies as a result of our water withdrawal practices. 6 12	
303-3	See Appendix: data GRI 303-3	6 12	
GRI 306: Effluents and Waste 2016			
306-1	See Appendix: data GRI 306-1	3 6 12	
306-5		Birla Carbon is not aware of any water bodies or related habitats that are significantly affected by its operations but will review potential measurement processes to verify this over the next 12 months. 3 6 12	

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SPECIFIC STANDARD DISCLOSURES

DISCLOSURE NUMBER	SOURCE	NOTES	OMISSIONS
MATERIAL ISSUE: WASTE			
GRI 103: Management Approach 2016			
103-1	Leadership messages Our key issues Sustainable Development Goals Stakeholder engagement Future-proofing About our report		
103-2	Leadership messages Sustainable Development Goals Responsible stewardship Targets and progress Governance Waste Downloads		
103-3	Responsible stewardship Targets and progress Stakeholder engagement Governance Waste		
GRI 306: Effluents and Waste 2016			
306-2	See Appendix: data GRI 306-2	Gypsum, a byproduct of flue gas desulfurization systems, is not currently included in the values reported in this indicator. Currently, only one manufacturing plant is equipped with a flue gas desulfurization system. Birla Carbon is seeking options for recycling this product. 3 12	

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SPECIFIC STANDARD DISCLOSURES

DISCLOSURE NUMBER	SOURCE	NOTES	OMISSIONS
306-3	Targets and progress	<p>Birla Carbon recorded 9 environmental releases in FY2017. Environmental releases may include authorized and unauthorized releases to air, soil and/or water. Where our plants are in close proximity to communities, we voluntarily report releases of carbon black, even if they are below regulatory reporting limits.</p> <p>In FY2017, we had two releases of carbon black to air exceeding regulatory reporting limits. The remaining releases were reported on a voluntary basis to regulatory authorities.</p> <p>3 12</p>	
306-4	See Appendix: data GRI 306-4	3 12	
306-5		<p>Birla Carbon is not aware of any water bodies or related habitats that are significantly affected by its operations but will review potential measurement processes to verify this over the next 12 months.</p> <p>3 6 12</p>	

MATERIAL ISSUE: CUSTOMER ENGAGEMENT

GRI 103: Management Approach 2016

103-1	Leadership messages Our key issues Sustainable Development Goals Stakeholder engagement Future-proofing About our report		
103-2	Leadership messages Sustainable Development Goals Responsible stewardship Targets and progress Governance Customer engagement Downloads		

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SPECIFIC STANDARD DISCLOSURES

DISCLOSURE NUMBER	SOURCE	NOTES	OMISSIONS
103-3	Responsible stewardship Targets and progress Stakeholder engagement Governance Customer engagement		
MATERIAL ISSUE: SUSTAINABLE PROCUREMENT			
GRI 103: Management Approach 2016			
103-1	Leadership messages Our key issues Sustainable Development Goals Stakeholder engagement Future-proofing About our report		
103-2	Leadership messages Sustainable Development Goals Responsible stewardship Targets and progress Governance Supplier management Downloads		
103-3	Responsible stewardship Targets and progress Stakeholder engagement Governance Supplier management		
GRI 204: Procurement Practices 2016			
204-1			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.

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SPECIFIC STANDARD DISCLOSURES

DISCLOSURE NUMBER	SOURCE	NOTES	OMISSIONS
GRI 414: Supplier Social Assessment 2016			
414-1	Ethics and compliance Customer and suppliers Supplier management	Birla Carbon does not systematically conduct human rights screening of our suppliers. We have, however, revised our Supplier Terms and Conditions to include a Business Ethics clause referring to our Code of Ethics. 16 17	
414-2	Ethics and compliance Customer and suppliers Supplier management	Birla Carbon does not systematically conduct impact assessments or human rights screening of our suppliers. We have, however, revised our Supplier Terms and Conditions to include a Business Ethics clause referring to our Code of Ethics. 16 17	
GRI 301: Materials 2016			
301-1	See Appendix: data GRI 301-1	12 13	
301-2	Our product	We are unable to use recycled feedstock oil due to its impact on product quality and the nature of our production process. 12 13	
301-3		We recycle as much as possible our off-specification material back into our manufacturing process. The amount of packing material (i.e., pallets and big bags) we use is limited, but we strive to recycle as much as possible.	Information unavailable. Birla Carbon does not currently have a global measurement system in place for reclaimed product and their packaging materials. We will explore collecting this data globally in the next 24 months.
MATERIAL ISSUE: SAFETY			
GRI 103: Management Approach 2016			
103-1	Leadership messages Our key issues Sustainable Development Goals Stakeholder engagement Future-proofing About our report		

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SPECIFIC STANDARD DISCLOSURES

DISCLOSURE NUMBER	SOURCE	NOTES	OMISSIONS
103-2	Leadership messages Sustainable Development Goals Responsible stewardship Targets and progress Governance Health and safety Downloads		
103-3	Responsible stewardship Targets and progress Stakeholder engagement Governance Health and safety		
GRI 403: Occupational Health and Safety 2016			
403-1		100% of Birla Carbon employees are represented in formal joint management–worker health and safety committees that help monitor and advise on occupational health and safety programs. Each plant has a health and safety manager who oversees worker safety, while all employees are involved in direct health and safety discussions with their line managers and are responsible for health and safety decisions. 8	
403-2	See Appendix: data GRI 403-2	3 8	
403-3		Birla Carbon is not aware of any occupational activities within its operations that cause a high incidence or high risk of specific diseases. However, Birla Carbon monitors the research published by the International Carbon Black Association (ICBA) on Occupational Diseases. 3 8	
403-4		12 of 16 Birla Carbon sites have formal agreements with trade unions that cover health and safety. On average, 100% of relevant health and safety topics are covered by these agreements. 8	

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SPECIFIC STANDARD DISCLOSURES

DISCLOSURE NUMBER	SOURCE	NOTES	OMISSIONS
MATERIAL ISSUE: EMPLOYEE ENGAGEMENT			
GRI 103: Management Approach 2016			
103-1	Leadership messages Our key issues Sustainable Development Goals Stakeholder engagement Future-proofing About our report		
103-2	Leadership messages Sustainable Development Goals Responsible stewardship Targets and progress Governance Attracting and retaining talent Downloads		
103-3	Responsible stewardship Targets and progress Stakeholder engagement Governance Health and safety		
GRI 401: Employment 2016			
401-1	See Appendix: data GRI 401-1	8	
401-2		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. 8	
401-3	See Appendix: data GRI 401-3	8	
GRI 404: Training and Education 2016			
404-1	See Appendix: data GRI 404-1		

SPECIFIC STANDARD DISCLOSURES

DISCLOSURE NUMBER	SOURCE	NOTES	OMISSIONS
404-2	Attracting and retaining talent Employee engagement	8	
404-3		100% of employees receive regular performance and career development reviews. 4 8	
MATERIAL ISSUE: HUMAN RIGHTS			
GRI 103: Management Approach 2016			
103-1	Leadership messages Our key issues Sustainable Development Goals Stakeholder engagement Future-proofing About our report		
103-2	Leadership messages Sustainable Development Goals Responsible stewardship Targets and progress Governance Ethics Downloads		
103-3	Responsible stewardship Targets and progress Stakeholder engagement Governance Ethics		

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SPECIFIC STANDARD DISCLOSURES

DISCLOSURE NUMBER	SOURCE	NOTES	OMISSIONS
GRI 406: Non-Discrimination 2016			
406-1		There were no incidents of discrimination in FY2017. 8 16	
GRI 408: Child Labor 206			
408-1		No operations or suppliers are considered as having significant risk for child labor. Birla Carbon's Code of Ethics and Supplier Term and Conditions prohibit this.	
GRI 409: Forced or Compulsory Labor 2016			
409-1		No operations or suppliers are considered as having significant risk for incidents of forced or compulsory labor. Birla Carbon's Code of Ethics and Supplier Term and Conditions prohibit this. 8 10 16	
GRI 411: Rights of Indigenous Peoples 2016			
411-1		There were no incidents of violations involving rights of indigenous peoples in FY2017. 16	
GRI 412: Human Rights Assessment 2016			
412-1		None of our operations have been subject to formal human rights reviews or impact assessments. 16	
412-2		Around 2,400 hours were spent training employees on human rights policies and procedures in FY2017. 100% of employees were trained on human rights policies and procedures in FY2017. 4 16	
412-3		Birla Carbon does not systematically include human rights clauses in investment agreements. We have however revised our Supplier Terms and Conditions to include a Business Ethics clause referring to our Code of Ethics. 17	

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SPECIFIC STANDARD DISCLOSURES

DISCLOSURE NUMBER	SOURCE	NOTES	OMISSIONS
MATERIAL ISSUE: COMMUNITY ENGAGEMENT			
GRI 103: Management Approach 2016			
103-1	Leadership messages Our key issues Sustainable Development Goals Stakeholder engagement Future-proofing About our report		
103-2	Leadership messages Sustainable Development Goals Responsible stewardship Targets and progress Governance Communities Downloads		
103-3	Responsible stewardship Targets and progress Stakeholder engagement Governance Communities		
GRI 413: Local Communities 2016			
413-1		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 assessment approaches over the next two years with the help of its parent company, the Aditya Birla Group.	
413-2		100% of Birla Carbon manufacturing plants would have significant potential negative impacts on local communities if carbon black powder is released into the local area. However, Birla Carbon has strict controls in place to avoid these impacts from occurring.	

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SPECIFIC STANDARD DISCLOSURES

DISCLOSURE NUMBER	SOURCE	NOTES	OMISSIONS
MATERIAL ISSUE: GLOBAL PRESENCE			
GRI 103: Management Approach 2016			
103-1	Leadership messages Our key issues Sustainable Development Goals Stakeholder engagement Future-proofing About our report		
103-2	Leadership messages Sustainable Development Goals Responsible stewardship Targets and progress Governance http://birlacarbon.com/about/#_global Downloads		
103-3	Responsible stewardship Targets and progress Stakeholder engagement Governance http://birlacarbon.com/about/#_global		

APPENDIX: DATA

GRI 102-8 INFORMATION ON EMPLOYEES AND OTHER WORKERS

EMPLOYEE NUMBERS FY2017	SOUTH AMERICA		SOUTH ASIA		SOUTH EAST ASIA AND FAR EAST		NORTH AMERICA		EUROPE AND AFRICA		TOTAL MALE	TOTAL FEMALE	TOTAL
	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female			
Full-time	213	25	572	20	414	90	360	67	564	65	2,123	267	2,390
Part-time	0	0	1	0	0	0	0	0	0	0	1	0	1
Permanent employees (full-time + part-time)	213	25	573	20	414	90	360	67	564	65	2,124	267	2,391
Temporary	0	0	2	0	0	0	0	0	0	2	2	2	4
Contractors/supervised	9	0	1,026	48	117	31	3	0	30	4	1,185	83	1,268

GRI 301-1 MATERIALS USED BY WEIGHT OR VOLUME

RAW MATERIALS USED	UNIT	FY2015	FY2016	FY2017
Natural gas	kNm ³	179,461	156,470	125,489
Oil feedstock	tonnes	2,438,409	2,445,700	2,451,843

Note: Raw materials are non-renewable and sourced from external suppliers. The data is calculated through direct measurement.

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APPENDIX: DATA

GRI 302-1 ENERGY CONSUMPTION WITHIN THE ORGANIZATION

ENERGY CONSUMPTION INTENSITY	UNIT	FY2015	FY2016	FY2017
Total energy consumption	GJ/t _{carbon black}	19.03	18.79	18.26
Oil	GJ/t _{carbon black}	0.02	0.02	0.03
Natural gas	GJ/t _{carbon black}	0.49	0.57	0.40
Electricity consumption	GJ/t _{carbon black}	7.39	7.24	7.28
Steam consumption	GJ/t _{carbon black}	6.18	6.12	5.74
Tail gas consumption	GJ/t _{carbon black}	4.90	4.80	4.75
Compressed air consumption	GJ/t _{carbon black}	0.04	0.04	0.05
Electricity sold	GJ/t _{carbon black}	4.49	4.40	5.16
Tail gas sold	GJ/t _{carbon black}	2.04	1.78	2.12
Hot water sold	GJ/t _{carbon black}	0.33	0.40	0.17
Steam sold	GJ/t _{carbon black}	2.57	3.01	3.08
NET ENERGY USE	GJ/t _{carbon black}	9.60	9.19	7.72

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.

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APPENDIX: DATA

GRI 302-2 ENERGY CONSUMPTION INTENSITY OUTSIDE THE ORGANIZATION

ENERGY CONSUMPTION INTENSITY	UNIT	FY2015	FY2016	FY2017
Upstream: Extraction, transport, refining and distribution of raw materials	GJ/tonne _{carbon black}	24	Not available	15.10
Downstream: Transportation and distribution of products	GJ/tonne _{carbon black}	0.89	Not available	1.50

Note: Scope 3 emissions were determined as part of a Life Cycle Assessment (LCA). Data required for the LCA was obtained directly from Birla Carbon's manufacturing plants, ecoinvent (v3), and the Greenhouse Gases, Regulated Emissions, and Energy Use in Transportation (GREET) Model (2013).

Results

IMPACT	UNIT	BIRLA CARBON FY17 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 2.5eq	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	2090	1500
Mineral, fossil and renewable resource depletion	Sb eq	0.01	0.05

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

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APPENDIX: DATA

GRI 303-1 WATER WITHDRAWAL BY SOURCE

WATER WITHDRAWAL BY SOURCE	UNIT	FY2015	FY2016	FY2017
Surface water	m ³	6,581,739	7,116,414	7,329,432
Ground water	m ³	4,347,320	4,950,663	4,956,247
Rainwater and water recycled from other plant operations	m ³	2,808,987	3,299,460	3,652,108
Wastewater from other organizations	m ³	0	0	0
Municipal water supplies	m ³	5,151,789	4,496,812	3,633,199
Total	m ³	18,889,835	19,863,349	19,570,986

Note: Surface water, ground water 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.

GRI 303-3 WATER RECYCLED AND REUSED

WATER RECYCLED AND REUSED	UNIT	FY2015	FY2016	FY2017
Total volume	m ³	2,808,987	3,299,460	3,652,108
Total volume as a percentage	%	15	17	19

Note: 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.

GRI 305-1 DIRECT (SCOPE 1) GHG EMISSIONS

DIRECT (SCOPE 1) GHG EMISSIONS	UNIT	FY2015	FY2016	FY2017
Direct GHG emissions in metric tonnes of CO ₂ equivalent (baseline 2005)	tCO ₂ -eq	3,194,666	3,229,498	3,307,831

Notes: Only CO₂ gas 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 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.

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APPENDIX: DATA

GRI 305-2 ENERGY INDIRECT (SCOPE 2) GHG EMISSIONS

ENERGY INDIRECT GHG EMISSIONS (SCOPE 2)	UNIT	FY2015	FY2016	FY2017
Gross energy indirect GHG emissions in metric tonnes of CO ₂ equivalent	tCO ₂ -eq	360,249	320,027	302,650

Notes: Market-based energy indirect GHG emissions not applicable. Only CO₂ gas is included in the calculation, as emissions of other gases are considered negligible in comparison. 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 2 emissions were 392,470 tonnes of CO₂-eq.

EMISSION FACTORS BY REGION (MT CO ₂ e/GJ)	NORTH AMERICA		SOUTH AMERICA	EUROPE AND AFRICA					SOUTH EAST ASIA AND FAR EAST			SOUTH ASIA
	United States	Canada	Brazil	Italy	Hungary	Spain	Germany	Egypt	Korea	China	Thailand	India
Steam	0.07	0.07	0.11	0.07	0.07	0.07	0.07	0.07	0.11	0.11	0.11	0.11
Compressed air					0.07	0.07						
Hot water						0.07						
District water heating							0.07					

EF FOR FUEL COMBUSTION FROM EUROPEAN LIFE CYCLE DATABASE (ELCD)	LCA EF	
Type	(tCO ₂ -eq/MWhe)	(tCO ₂ -eq/GJ)
Motor gasoline	0.299	0.08
Gas oil, diesel	0.305	0.08
Residual fuel oil	0.31	0.09
Anthracite	0.393	0.11
Other bituminous coal	0.38	0.11
Sub-bituminous coal	0.385	0.11
Lignite	0.375	0.10
Natural gas	0.237	0.07
Municipal wastes (non-biomass)	0.33	0.09
Wood	0.405	0.11

Consolidation approach for emissions is based on operational control. Scope 2 emissions are calculated through Enablon.

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APPENDIX: DATA

GRI 305-3 OTHER INDIRECT (SCOPE 3) GHG EMISSIONS

OTHER INDIRECT GHG EMISSIONS (SCOPE 3)	UNIT	FY2015	FY2016	FY2017
Gross other indirect scope 3 GHG emissions	tCO ₂ -eq	1,245,552	Not available	1,184,211

Notes: Only CO₂ gas is included in the calculation as emissions of other gases are considered negligible in comparison. No biogenic CO₂ emissions. The calculation includes the upstream extraction, transport, refining and distribution of feedstock materials and the downstream distribution to customers. 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 tonnes of CO₂-eq. Scope 3 emissions were determined as part of a Life Cycle Assessment (LCA). Data required for the LCA was obtained directly from Birla Carbon's manufacturing plants,ecoinvent (v3), and the Greenhouse Gas, Regulated Emissions, and Energy Use Transportation (GREET) Model (2013). The source of emissions factors and GWP rates is ILCD midpoint v1.0.10, August 2016.

GRI 305-6 EMISSIONS OF OZONE-DEPLETING SUBSTANCES AND 305-7 OTHER SIGNIFICANT AIR EMISSIONS

Impact categories

CATEGORY	UNIT	ACRONYM
Ozone layer depletion	Trichlorofluoromethane	CFC-11
Human toxicity (carcinogenic and non-carcinogenic)	Comparative toxic units	CTUh
Particulate matter	Particulate matter 2.5 equivalents	PM 2.5eq
Photochemical ozone formation	Non-methane volatile organic compound equivalents	NMVOC eq
Acidification	Hydrogen ions equivalents	molc H+ eq
Terrestrial eutrophication	Nitrogen equivalents	molc N eq
Freshwater eutrophication	Phosphorus equivalents	P eq
Freshwater ecotoxicity	Comparative toxic units	CTUe
Land use	Carbon deficit	C deficit
Mineral, fossil and renewable resource depletion	Antimony equivalent	Sb eq

GRI 306-1 WATER DISCHARGE BY QUALITY AND DESTINATION

TOTAL WATER DISCHARGE BY QUALITY AND DESTINATION	UNIT	FY2015	FY2016	FY2017
Sanitary wastewater discharge	m ³	128,812	140,838	142,712
Industrial wastewater discharge to on-site collection pond	m ³	825,755	930,074	877,418
Industrial wastewater discharge to natural body of water	m ³	2,740,131	2,969,995	2,844,705
Industrial wastewater discharge to municipal wastewater treatment plant	m ³	435,931	321,317	328,568

Notes: The water treatment method varies between plants but typically includes settling and often times neutralization, pH control, flocculation, clarifying and dechlorination as needed. Any water recycled is used by Birla Carbon. Some Birla Carbon plants were not measuring/estimating the volume of water discharged to the on-site collection pond in FY2014. This has caused previously reported volumes to appear artificially low in comparison to FY2015. Correction made to FY2015 and FY2016 data.

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APPENDIX: DATA

GRI 306-2 WASTE BY TYPE AND DISPOSAL METHOD

WEIGHT OF WASTE BY TYPE AND DISPOSAL METHOD	UNIT	FY2016		FY2017	
		HAZARDOUS	NON-HAZARDOUS	HAZARDOUS	NON-HAZARDOUS
Reuse	tonnes	2	4	1	5
Recycling	tonnes	65	1,944	73	1,416
Composting	tonnes	0	0	0	0
Recovery, including energy recovery	tonnes	0	9	0	24
Deep well injection	tonnes	0	0	0	0
Landfill	tonnes	320	9,204	116	9,883
On-site storage	tonnes	0	0	0	0
Incineration (mass burn)	tonnes	104	122	113	107

Note: The waste disposal method is determined by Birla Carbon except for landfill disposal, which is a default of the waste disposal contractor. Correction made to hazardous and non-hazardous waste data reported in FY2016 due to unit error.

GRI 306-4 TRANSPORT OF HAZARDOUS WASTE

WEIGHT OF WASTE TRANSPORTED, IMPORTED, EXPORTED, OR TREATED WASTE DEEMED HAZARDOUS	UNIT	FY2015	FY2016	FY2017
Hazardous waste transported	tonnes	434	387	190
Hazardous waste imported	tonnes	0	0	0
Hazardous waste exported	tonnes	0	0	0
Hazardous waste treated	tonnes	10	64	113
Percentage of hazardous waste shipped internationally	%	0	0	0

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APPENDIX: DATA

GRI 401-1 NEW EMPLOYEE HIRES AND EMPLOYEE TURNOVER

EMPLOYEE HIRES AND EMPLOYEE TURNOVER (FY2017)	TOTAL HIRES	HIRE RATE (%)	TOTAL TURNOVER	TURNOVER RATE (%)
Age: under 30 years	14	25%	12	21%
Age: 30–50 years	31	7%	13	3%
Age: over 50 years	5	2%	9	3%
Europe and Africa	5	4%	4	3%
North America	11	5%	10	5%
South Asia	10	4%	9	4%
South East Asia and Far East	23	18%	10	8%
South America	1	1%	1	1%
Female	8	7%	7	7%
Male	42	6%	27	4%

GRI 401-3 PARENTAL LEAVE

RETURN TO WORK AND RETENTION RATES AFTER PARENTAL LEAVE (FY2017)	UNIT	FEMALE	MALE	TOTAL
Employees entitled to parental leave	number	191	745	936
Employees that took parental leave	number	12	27	39
Employees that returned to work	number	10	26	36
Employees in employment 12 months after returning to work	number	8	16	24
Return to work rate of those who took parental leave	%	83%	96%	92%
Retention rate of employees who took parental leave	%	67%	59%	62%

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APPENDIX: DATA

GRI 403-2 TYPES OF INJURY AND RATES OF INJURY, OCCUPATIONAL DISEASES, LOST DAYS, AND ABSENTEEISM, AND NUMBER OF WORK-RELATED FATALITIES

EMPLOYEE INJURY RATES	TYPE OF INJURY	TRIR	LOST TIME CASE	FATALITIES
Europe and Africa	Incidents related to slips and falls	0.34	0.34	0
North America	Incidents related to slips and falls and impacts (pinched, hit, dropped, etc.)	1.12	0.45	0
South Asia		0	0	0
South East Asia and Far East	Incidents related to exposure (chemicals, temperature, etc.) and impacts (pinched, hit, dropped, etc.)	0.76	0.76	0
South America	Incidents related to impacts (pinched, hit, dropped, etc.)	1.24	0.41	0

CONTRACTOR INJURY RATES	TYPE OF INJURY	TRIR	LOST TIME CASE	FATALITIES
Europe and Africa	Incidents related to slips and falls and exposure (chemicals, temperatures, etc.)	0.67	0.33	0
North America		0	0	0
South Asia	Incidents related to impacts (pinched, hit, dropped, etc.)	0.14	0	0
South East Asia and Far East	Incidents related to a fall	0.08	0.08	0
South America	Incidents related to impacts (pinched, hit, dropped, etc.)	0.69	0	0

GRI 404-1 AVERAGE HOURS OF TRAINING PER YEAR PER EMPLOYEE

AVERAGE HOURS OF EMPLOYEE TRAINING FY2017	SENIOR MANAGEMENT	MIDDLE MANAGEMENT	JUNIOR MANAGEMENT	NON-MANAGEMENT
Female	21	19	40	42
Male	26	46	49	57