

# GLOBAL REPORTING INITIATIVE INDEX BIRLA CARBON 2016

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MAXIMIZING OUR POTENTIAL THROUGH SUSTAINABLE OPERATIONAL EXCELLENCE



This report is in accordance with the Global Reporting Initiative's (GRI) G4 Sustainability Reporting Guidelines at the Comprehensive level.

The data in this report relates to the fiscal year ending March 31, 2016, unless otherwise stated. For a detailed explanation of the indicators, visit the <u>GRI website</u>.

# 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:



# GLOBAL REPORTING INITIATIVE (GRI) INDEX IN ACCORDANCE WITH COMPREHENSIVE G4 GUIDELINES

#### **GENERAL STANDARD DISCLOSURES**

## STRATEGY AND ANALYSIS

0110 (1201				
GENERAL STANDARD DISCLOSURES	SOURCE	NOTES	OMISSIONS	
G4-1	Homepage, Sustainability at Birla Carbon, Interview with CEO and COO Leadership Messages			
G4-2	Homepage, Sustainability at Birla Carbon, Interview with CEO and COO Leadership Messages Our Vision and Strategy Our Key Issues Future-proofing Targets and Progress Governance, Enterprise Risk Management and Business Continuity Committee Ethics and Compliance			

## ORGANIZATIONAL PROFILE

GENERAL STANDARD DISCLOSURES	SOURCE	NOTES	OMISSIONS
G4-3		Birla Carbon	
G4-4	The Story of Carbon Black	Carbon black manufacturer and supplier	
G4-5		Mumbai, India	
G4-6		12 countries (Brazil, Canada, China, Egypt, Germany, Hungary, India, Italy, South Korea, Spain, Thailand and the United States)	
G4-7	Governance	Aditya Birla Group	
G4-8		Markets served are in Europe and Africa, North America, South America, Oceania, South East Asia and the Far East.	
			CONTINUED 🔶

#### ORGANIZATIONAL PROFILE

GENERAL STANDARD DISCLOSURES	SOURCE	NOTES	OMISSIONS
G4-9	Homepage, Our Key Figures http://www.birlacarbon.com/Webpages/about-us- overview.aspx http://www.birlacarbon.com/Webpages/applications- overview.aspx	Total number of employees = 2,535 17 manufacturing sites 2 decanting stations (Wolverhampton, UK, decanting station closed in FY2016) 2 technology centers	
G4-10	<u>GRI Index Appendix: Social Data Table</u>	8	
G4-11	Ethics and Compliance	8	
G4-12	Product Safety and Stewardship Supplier Management		
G4-13		Ceased operations at decanting station in Wolverhampton, UK	
G4-14	Governance, Enterprise Risk Management and Business Continuity Committee Product Responsibility Future-proofing		
G4-15	Our Approach Stakeholder Engagement Future-proofing Governance Product Safety and Stewardship The Big Questions Product Quality Carbon Stewardship Environmental Compliance Water Customer Engagement Employee Engagement	17	
G4-16		International Carbon Black Association (ICBA) World Business Council for Sustainable Development (WBCSD) 17	
		·	CONTINUED 🗭

## IDENTIFIED MATERIAL ASPECTS AND BOUNDARIES

GENERAL STANDARD DISCLOSURES	SOURCE	NOTES	OMISSIONS
G4-17		Our consolidated financial statements include all manufacturing facilities and legal entities worldwide.	
G4-18	<u>Our Key Issues</u> <u>Future-proofing</u> <u>About Our Report</u>		
G4-19		Material aspects are those with indicators reported against in this index.	
G4-20	About Our Report, Boundary		
G4-21	About Our Report, Boundary		
G4-22	<u>Targets and Progress</u> <u>Carbon Stewardship</u> <u>Water</u>	Correction made to calculation method for EN3. No significant impact to data reported.	
G4-23	<u>About Our Report</u>		

## STAKEHOLDER ENGAGEMENT

GENERAL STANDARD DISCLOSURES	SOURCE	NOTES	OMISSIONS
G4-24	Stakeholder Engagement		
G4-25	Stakeholder Engagement		
			CONTINUED 🔶

#### STAKEHOLDER ENGAGEMENT

GENERAL STANDARD DISCLOSURES	SOURCE	NOTES	OMISSIONS
G4-26	Stakeholder Engagement Our Key Issues Governance Ethics and Compliance Product Safety and Stewardship Product Quality Carbon Stewardship Customer Engagement Supplier Management Employee Engagement		
G4-27	Community Engagement See G4-26		

## **REPORT PROFILE**

GENERAL STANDARD DISCLOSURES	SOURCE	NOTES	OMISSIONS
G4-28		FY2016 – April 1, 2015 to March 31, 2016	
G4-29		FY2015	
G4-30		Annual	
G4-31	<u>About Our Report, Feedback</u>	Dr. Gilles Moninot, Global Sustainability Director <u>birlacarbon.sustainability@adityabirla.com</u>	
G4-32	About Our Report	In accordance with GRI G4 Comprehensive	
G4-33		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.	
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## GOVERNANCE

COVER W	OVERNANCE			
GENERAL STANDARD DISCLOSURES	SOURCE	NOTES	OMISSIONS	
G4-34	Governance	16		
G4-35	Governance			
G4-36	<u>Our Key Issues</u> <u>Governance</u>			
G4-37	<u>Stakeholder Engagement</u> <u>Governance</u> <u>Customer Engagement</u> <u>Employee Engagement</u>	16		
G4-38	http://www.birlacarbon.com/Webpages/about-us- business-leadership.aspx	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. <b>16</b>		
G4-39	http://www.birlacarbon.com/Webpages/about-us- business-leadership.aspx	16		
G4-40		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).		
			CONTINUED	

#### GOVERNANCE

GENERAL STANDARD DISCLOSU	) RES SOURCE	NOTES	OMISSIONS
G4-41		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 the identification and handling of conflicts of interest. In the rare event that a potential conflict of interest arises within the SMT, members are required to self-declare the conflict, and are then excused from related discussions.	
G4-42	Governance		
G4-43	Governance	Specific teams within the business responsible for sustainability-related programs will also provide progress updates direct to the SMT. 4	
G4-44		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. 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 FY2016.	
G4-45	Our Key Issues Governance	16	
G4-46	Governance		
G4-47	<u>Our Key Issues</u> <u>Governance</u>		

#### GOVERNANCE

GENERAL			
STANDARD	S SOURCE	NOTES	OMISSIONS
G4-48		Chief Legal, Sustainability and Risk Officer, Joe Gaynor reviews and approves Birla Carbon's Sustainability Report.	
G4-49	Ethics and Compliance		
G4-50	Ethics and Compliance		
G4-51		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'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.	No further compensation analysis can be provided, as it is commercially sensitive in the markets where Birla Carbon operates.
G4-52		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.	
G4-53	See G4-51–G4-52	Birla Carbon does not consult external stakeholders, other than shareholders, on remuneration policies.	
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#### GOVERNANCE

GENERAL STANDARD DISCLOSURES	SOURCE	NOTES	OMISSIONS
G4-54			Due to the size of some Birla Carbon business units and the number of employees, compensation data is classed as business sensitive and cannot be disclosed for confidentiality reasons.
G4-55			Due to the size of some Birla Carbon business units and the number of employees, compensation data is classed as business sensitive and cannot be disclosed for confidentiality reasons.

## ETHICS AND INTEGRITY

GENERAL STANDARD DISCLOSURES	SOURCE	NOTES	OMISSIONS
G4-56	Ethics and Compliance	16	
G4-57	Ethics and Compliance	16	
G4-58	Ethics and Compliance	16	

# ECONOMIC

DMA AND INDICATORS	SOURCE	NOTES	OMISSIONS
MATERIAL AS	PECT: INDIRECT ECONOMIC IMPACTS		
G4-DMA	Our Approach Stakeholder Engagement Our Key Issues Future-proofing Governance		
G4-EC7	Community Engagement	3 4 7 10 11	
G4-EC8	Community Engagement	3 4 7 10 11	
MATERIAL AS	PECT: PROCUREMENT PRACTICES		
G4-DMA	Our Approach Stakeholder Engagement Our Key Issues Future-proofing Governance Supplier Management		
G4-EC9			As Birla Carbon has a decentralized procurement approach, local procurement data is not currently available. Birla Carbon recognizes that this is a gap in its procurement management and intends to develop the measurement tools needed to collect this data over the next 12 months.
			CONTINUED

DMA AND INDICATORS	SOURCE	NOTES	OMISSIONS
MATERIAL ASP	PECT: MATERIALS		
G4-DMA	Our Approach Stakeholder Engagement Our Key Issues Future-proofing Governance Carbon Stewardship Supplier Management		
G4-EN1	GRI Index Appendix: Environmental Data Table	12 13	
G4-EN2	<u>The Story of Carbon Black</u> <u>Carbon Stewardship, Sourcing Our Raw Materials</u>	We are unable to use recycled feedstock oil due to its impact on product quality and the nature of our production process.	
MATERIAL ASP	PECT: ENERGY		
G4-DMA	Our Approach Stakeholder Engagement Our Key Issues Future-proofing Governance Carbon Stewardship Supplier Management		
G4-EN3	<u>GRI Index Appendix: Environmental Data Table</u>	<ul> <li>Birla Carbon's energy consumption has been provided in energy intensity values due to the commercial sensitivity of this information in actual values. These values have been modified from those reported in previous years to now include tail gas, hot water and compressed air energy consumption.</li> <li>7 12 13</li> </ul>	
			CONTINUED 🗭

DMA AND INDICATORS	SOURCE	NOTES	OMISSIONS
G4-EN4	<u>GRI Index Appendix: Environmental Data Table</u>	Through our product life cycle assessment (LCA), 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. This LCA was not updated in FY2016 and, therefore, data on energy consumption outside of the organization is not available for this reporting period. However, we do not expect this figure to be too dissimilar from previous years' data. 7 12 13	
G4-EN5		<ul> <li>Birla Carbon's energy consumption intensity in FY2016 was 18.78 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.</li> <li>7 12 13</li> </ul>	
G4-EN6	<u>Carbon Stewardship</u> , <u>Energy: Recovery</u> and Positivity	<ul> <li>Birla Carbon reduced its energy consumption intensity by 0.25</li> <li>GJ/tonne of carbon black in FY2016 as compared to FY2015.</li> <li>All types of energy consumed are included in the calculation.</li> <li>7 12 13</li> </ul>	
G4-EN7	<u>Carbon Stewardship, Energy: Recovery</u> and Positivity	7 9 12 13	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.
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DMA AND			
INDICATORS	SOURCE	NOTES	OMISSIONS
MATERIAL AS	PECT: WATER		
G4-DMA	Our Approach Stakeholder Engagement Our Key Issues Future-proofing Governance Water Supplier Management		
G4-EN8	GRI Index Appendix: Environmental Data Table	6 12	
G4-EN9	Water	<ul> <li>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.</li> <li>6 12</li> </ul>	
G4-EN10	GRI Index Appendix: Environmental Data Table	6 12	
MATERIAL AS	PECT: EMISSIONS		
G4-DMA G4-EN15	Our ApproachStakeholder EngagementOur Key IssuesFuture-proofingGovernanceCarbon StewardshipEnvironmental ComplianceSupplier ManagementGRI Index Appendix: Environmental Data Table	2 42 42	
G4-EN15	GRI Index Appendix: Environmental Data Table	3 12 13	
G4-EN16	GRI Index Appendix: Environmental Data Table	3 12 13	
			CONTINUED <b>→</b>

## ENVIRONMENTAL

DMA AND INDICATORS	SOURCE	NOTES	OMISSIONS
G4-EN17	<u>GRI Index Appendix: Environmental Data Table</u>	Through our product LCA, 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. This LCA was not updated in FY2016 and, therefore, data on energy consumption outside of the organization is not available for this reporting period. However, we would not expect FY2016 data to be too dissimilar from previous years if it was measured. 3 12 13	
G4-EN18	Targets and Progress Carbon Stewardship	3 12 13	Absolute emission intensity data is commercially sensitive.
G4-EN19	Targets and Progress Carbon Stewardship	3 12 13	Absolute emission intensity data is commercially sensitive.
G4-EN20		3 13	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 <sub>2</sub> emissions.
G4-EN21		3 13	Emissions of NOx, SOx 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 ASP	PECT: EFFLUENTS AND WASTE		
G4-DMA	Our ApproachStakeholder EngagementOur Key IssuesFuture-proofingGovernanceEnvironmental ComplianceWaterWasteSupplier Management		
G4-EN22	GRI Index Appendix: Environmental Data Table	3 6 12	

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DMA AND			
INDICATORS	SOURCE	NOTES	OMISSIONS
G4-EN23	<u>GRI Index Appendix: Environmental Data Table</u>	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	
G4-EN24	Targets and Progress	Total number of spills: 2	
		Total volume of spills: unknown quantity of material released to the air	
		Both spills were environmental release to air due to an issue with the bag filter. There was release to the atmosphere of carbon black, that was reported to the local authorities. 3 12	
G4-EN25	GRI Index Appendix: Environmental Data Table	3 12	
G4-EN26		3 6 12	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.
MATERIAL ASP	PECT: COMPLIANCE		
G4-DMA	Our Approach	16	
	Stakeholder Engagement	-	
	Our Key Issues		
	Future-proofing		
	Governance		
	Environmental Compliance		
G4-EN29		Birla Carbon paid \$9,857 (USD) in fines in FY2016. 16	
			CONTINUED <b>→</b>

#### ENVIRONMENTAL

DMA AND INDICATORS	SOURCE	NOTES	OMISSIONS
MATERIAL ASP	ECT: ENVIRONMENTAL GRIEVANCE MECHANISMS		
G4-DMA	Our Approach Stakeholder Engagement Our Key Issues Future-proofing Governance		
G4-EN34		Two neighbor complaints have been raised about environmental impacts in FY2016. One was due to an equipment malfunction; there was an equipment failure that resulted in a visible emission that was reported to the local authorities and to the site as a complaint. The second was due to an issue following some preventative maintenance on equipment, when some carbon black was released into the atmosphere.	

# SOCIAL: LABOR PRACTICES AND DECENT WORK

DMA AND INDICATORS	SOURCE	NOTES	OMISSIONS
MATERIAL AS	PECT: EMPLOYMENT		
G4-DMA	Our Approach Stakeholder Engagement Our Key Issues Future-proofing Governance Attracting and Retaining Talent Employee Engagement		
G4-LA1	GRI Index Appendix: Social Data Table	8	
			CONTINUED 🔶

## SOCIAL: LABOR PRACTICES AND DECENT WORK

DMA AND INDICATORS	SOURCE	NOTES	OMISSIONS
G4-LA2		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.	Benefits are managed at a regional level and Birla Carbon does not currently have collection processes in place to measure this at a global level. Birla Carbon will collect this data over the next two years.
G4-LA3	GRI Index Appendix: Social Data Table	8	
MATERIAL ASP	PECT: OCCUPATIONAL HEALTH AND SAFETY		
G4-DMA	Our Approach Stakeholder Engagement Our Key Issues Future-proofing Governance Health and Safety		
G4-LA5		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	
G4-LA6	<u>GRI Index Appendix: Social Data Table</u>	Occupational disease rates are measured and reviewed at an industry level through the International Carbon Black Association (ICBA). Birla Carbon monitors the papers and advice published through the ICBA. 3 8	<ol> <li>Data is not currently collected by gender. However, Birla Carbon will review this as a potential measure over the next 12 months.</li> <li>Absentee rate is not currently measured across all locations. However, Birla Carbon will review this as a potential measure over the next 12 months.</li> </ol>
G4-LA7		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 ICBA on occupational diseases. 3 8	
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#### SOCIAL: LABOR PRACTICES AND DECENT WORK

DMA AND INDICATORS	SOURCE	NOTES	OMISSIONS
G4-LA8		12 of 17 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	
MATERIAL AS	PECT: TRAINING AND EDUCATION		
G4-DMA	Our Approach Stakeholder Engagement Our Key Issues Future-proofing Governance Attracting and Retaining Talent Employee Engagement	4 8	
G4-LA9	<u>GRI Index Appendix: Social Data Table</u>		
G4-LA10	Attracting and Retaining Talent Employee Engagement	8	
G4-LA11	GRI Index Appendix: Social Data Table	4 8	
SUPPLIER ASS	ESSMENT AND LABOR PRACTICES		
G4-DMA	Our Approach Stakeholder Engagement Our Key Issues Future-proofing Governance Supplier Management		
G4-LA14	Ethics and Compliance Customers and Suppliers Supplier Management	16 17	

#### SOCIAL: LABOR PRACTICES AND DECENT WORK

DMA AND INDICATORS	SOURCE	NOTES	OMISSIONS
G4-LA15	Ethics and Compliance Customers and Suppliers Supplier Management	16 17	Birla Carbon does not systematically conduct impact assessments of our suppliers. We have revised our Supplier Terms and Conditions to include a business ethics clause referring to our Code of Ethics.
MATERIAL ASP	ECT: LABOR PRACTICES GRIEVANCE MECHANISM	S	
G4-DMA	Our Approach Stakeholder Engagement Our Key Issues Future-proofing Governance Supplier Management		
G4-LA16		Fifteen grievances about labor practices were filed and addressed through formal grievance mechanisms in FY2016. Four of these grievances were founded and resolved in FY2016. There are no reported labor grievances filed in previous reporting years that were resolved in FY2016.	

## SOCIAL: HUMAN RIGHTS

DMA AND INDICATORS	SOURCE	NOTES	OMISSIONS
MATERIAL ASI	PECT: INVESTMENT		
G4-DMA	Our ApproachStakeholder EngagementOur Key IssuesFuture-proofingGovernanceEthics and ComplianceSupplier Management		
G4-HR1	Environment		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.

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## SOCIAL: HUMAN RIGHTS

DMA AND INDICATORS	SOURCE	NOTES	OMISSIONS
G4-HR2		Around 3,659 hours were spent training employees on human rights policies and procedures in FY2016. 100% of employees were trained on human rights policies and procedures in FY2016.	
MATERIAL ASP	PECT: NON-DISCRIMINATION		
G4-DMA	Our Approach Stakeholder Engagement Our Key Issues Future-proofing Governance Ethics and Compliance Employee Engagement		
G4-HR3		There was one incident of discrimination in FY2016. The incident was investigated by Birla Carbon and an employee was dismissed as a result of the investigation. The incident is no longer subject to action.           8         16	
MATERIAL ASP	PECT: FORCED OR COMPULSORY LABOR		
G4-DMA	Our Approach Stakeholder Engagement Our Key Issues Future-proofing Governance Ethics and Compliance Supplier Management	8 10 16	
G4-HR6		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 Terms and Conditions prohibit this. 8 10 16	
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## SOCIAL: HUMAN RIGHTS

DMA AND						
INDICATORS	SOURCE	NOTES	OMISSIONS			
MATERIAL ASP	MATERIAL ASPECT: INDIGENOUS RIGHTS					
G4-DMA	Our Approach Stakeholder Engagement Our Key Issues Future-proofing Governance Ethics and Compliance	8 10 16				
G4-HR8		There were no incidents of violations involving rights of indigenous peoples in FY2016.				
MATERIAL ASP	ECT: SUPPLIER HUMAN RIGHTS ASSESSMENT					
G4-DMA	Our Approach Stakeholder Engagement Our Key Issues Future-proofing Governance Ethics and Compliance Supplier Management	8 10 16				
G4-HR10		8 10 16	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.			
G4-HR11		8 10 1 <u>6</u>	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.			
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#### SOCIAL: HUMAN RIGHTS

DMA AND INDICATORS	SOURCE	NOTES	OMISSIONS
MATERIAL ASP	PECT: HUMAN RIGHTS GRIEVANCE MECHANISMS		
G4-DMA	Our Approach Stakeholder Engagement Our Key Issues Future-proofing Governance Ethics and Compliance Employee Engagement	8 10 16	
G4-HR12		There were no human rights grievances filed in FY2016. One human rights grievance was filed in 2014 and resolved in FY2016. 8 10 16	

# SOCIAL: SOCIETY

DMA AND INDICATORS	SOURCE	NOTES	OMISSIONS
MATERIAL ASP	PECT: LOCAL COMMUNITIES		
G4-DMA	Our Approach Stakeholder Engagement Our Key Issues Future-proofing Governance Communities	3 4 10 11	
G4-SO1		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 that 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.	
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## SOCIAL: SOCIETY

DMA AND INDICATORS	SOURCE	NOTES	OMISSIONS
G4-SO2		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. Refer to G4-EN24 regarding impacts on local communities.	
MATERIAL AS	PECT: ANTI-CORRUPTION		
G4-DMA	Our Approach Stakeholder Engagement Our Key Issues Future-proofing Governance Ethics and Compliance		
G4-SO3		<ul> <li>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.</li> </ul>	
G4-SO4		Birla Carbon has communicated its anti-corruption policies and procedures to 100% of its employees.	
G4-SO5		There was one confirmed incident of corruption in FY2016. The corrective action included dismissal of the employee.	
MATERIAL AS	PECT: ANTI-COMPETITIVE BEHAVIOR		
G4-DMA	Our Approach Stakeholder Engagement Our Key Issues Future-proofing Governance Ethics and Compliance		

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#### SOCIAL: SOCIETY

DMA AND INDICATORS	SOURCE	NOTES	OMISSIONS
G4-SO7	<u>Governance and Ethics</u> <u>Our Key Figures</u>	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 ASP	ECT: COMPLIANCE		
G4-DMA	Our Approach Stakeholder Engagement Our Key Issues Future-proofing Governance Ethics and Compliance		
G4-SO8		Birla Carbon has not received any significant fines or non-monetary sanctions for noncompliance with laws and regulations, with the exception of those reported in EN29. 16	

## SOCIAL: PRODUCT RESPONSIBILITY

DMA AND INDICATORS	SOURCE	NOTES	OMISSIONS
MATERIAL ASP	PECT: CUSTOMER HEALTH AND SAFETY		
G4-DMA	Our Approach Stakeholder Engagement Our Key Issues Future-proofing Governance Product Safety and Stewardship The Big Questions	3 8 16	
G4-PR1		<ul><li>100% of products are assessed for health and safety improvements.</li><li>3 8 9 16</li></ul>	

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## SOCIAL: PRODUCT RESPONSIBILITY

DMA AND INDICATORS	SOURCE	NOTES	OMISSIONS
G4-PR2		There have been no incidents of noncompliance with regulations and voluntary codes concerning the health and safety impacts of Birla Carbon products in FY2016. <b>3 8 9 16</b>	
MATERIAL AS	PECT: PRODUCT AND SERVICE LABELING		
G4-DMA	Our Approach Stakeholder Engagement Our Key Issues Future-proofing Governance Product Safety and Stewardship	3 8 9 16	
G4-PR3		<ul> <li>Through Safety Data Sheets (SDS), Birla Carbon's product labeling includes the content and safety guidance on use and disposal of the product.</li> <li>3 8 9 16</li> </ul>	
G4-PR4		There have been no incidents of noncompliance with regulations and voluntary codes concerning product and service information and labeling in FY2016.	
G4-PR5	Customer Engagement		
MATERIAL AS	PECT: COMPLIANCE		
G4-DMA	Our Approach Stakeholder Engagement Our Key Issues Future-proofing Governance	16	
G4-PR9		Birla Carbon has not received any significant fines for noncompliance with laws and regulations concerning the provision and use of products and services in FY2016. 16	

# ENVIRONMENTAL DATA

RAW MATERIALS USED	UNIT	FY2014	FY2015	FY2016
Natural gas	kNm <sup>3</sup>	167,151	179,461	156,470
Oil feedstock	tonnes	2,444,960	2,438,409	2,445,700

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

ENERGY CONSUMPTION INTENSITY	UNIT	FY2014	FY2015	FY2016
Total energy consumption	GJ/t <sub>carbon</sub> black	19.78	19.03	18.79
Oil	GJ/t <sub>carbon black</sub>	0.03	0.02	0.02
Natural gas	GJ/t <sub>carbon black</sub>	0.68	0.49	0.57
Electricity consumption	GJ/t <sub>carbon</sub> black	7.79	7.39	7.24
Steam consumption	GJ/t <sub>carbon black</sub>	6.06	6.18	6.12
Tail gas consumption	GJ/t <sub>carbon</sub> black	5.19	4.90	4.80
Compressed air consumption	GJ/t <sub>carbon</sub> black	0.03	0.04	0.04
Electricity sold	GJ/t <sub>carbon black</sub>	4.60	4.49	4.40
Tail gas sold	GJ/t <sub>carbon</sub> black	2.25	2.04	1.78
Hot water sold	GJ/t <sub>carbon</sub> black	0.35	0.33	0.40
Steam sold	GJ/t <sub>carbon black</sub>	2.78	2.57	3.01
NET ENERGY USE	GJ/t <sub>carbon</sub> black	9.80	9.60	9.19

#### Notes:

Energy consumption intensity calculations revised to include tail gas and compressed air consumption. Updated values provided for FY2014 and FY2015.

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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## ENVIRONMENTAL DATA

ENERGY CONSUMPTION INTENSITY OUTSIDE THE ORGANIZATION	UNIT	FY2014	FY2015	FY2016
Upstream: Extraction, transport, refining and distribution of raw materials	GJ/t <sub>carbon</sub> black	21	24	Not available
Downstream: Transportation and distribution of products	GJ/t <sub>carbon black</sub>	1.0	0.89	Not available
Note: If measured, the FY2016 data would not be expected to be dissimilar from the	e previous years.			
WATER WITHDRAWAL BY SOURCE	UNIT	FY2014	FY2015	FY2016
Surface water	m <sup>3</sup>	7,090,908	6,581,739	7,116,414
Ground water	m <sup>3</sup>	3,672,874	4,347,320	4,950,663
Rainwater and water recycled from other plant operations	m <sup>3</sup>	1,164,692	2,808,987	3,299,460
Wastewater from other organizations	m <sup>3</sup>	-	0	0
Municipal water supplies	m <sup>3</sup>	4,049,910	5,151,789	4,496,812
Total	m <sup>3</sup>	15,978,384	18,889,835	19,863,349

some locations and are estimated at others based on rainfall data for the area.

WATER RECYCLED AND REUSED	UNIT	FY2014	FY2015	FY2016
Total volume	m <sup>3</sup>	1,164,692	2,808,987	3,299,460
Total volume as a percentage	%	7	15	17
				CONTINUED 🕩

#### **ENVIRONMENTAL DATA**

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.

GHG EMISSIONS				UNIT				FY	2014	FY20	15	FY2016
DIRECT GHG EMISSIONS (SCOPE 1)												
Direct GHG emissions in metric tonnes of $CO_2$ equ	uivalent (base	eline 2005)		t <sub>CO2</sub> -ec	7			3,22	2,271	3,194,6	56	3,229,498
<b>Notes:</b> Only CO <sub>2</sub> gas is included in the calculatio reliable direct GHG emission data was available for	n, as emissio or all plants.	ns of other g	ases are cons	idered negli	gible in comp	barison. FY20	05 is taken as	s the baseline	year becaus	se this is the f	rst year from	which
ENERGY INDIRECT GHG EMISSIONS (SCOPE	2)											
Gross energy indirect GHG emissions in metric tor	nnes of $CO_2$	equivalent		t <sub>CO2</sub> -ec	7			39	9,478	360,24	19	320,027
Notes: Only CO <sub>2</sub> 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.							ole energy					
OTHER INDIRECT GHG EMISSIONS (SCOPE 3)	1											
Gross other indirect scope 3 GHG emissions				t <sub>CO2-ec</sub>	7			1,13	8,484	1,245,5	52 N	ot available
<b>Notes:</b> The calculation includes the upstream extr be expected to be dissimilar from the previous yea		oort, refining	and distribut	ion of feedst	tock materials	and the dov	wnstream dist	tribution to ci	ustomers. If r	neasured, the	FY2016 data	would not
CONVERSION FACTORS BY REGION (t <sub>CO2-eq</sub> /GJ)	NORTH	I AMERICA	SOUTH AMERICA		EUROPE A			ND AFRICA	S	OUTH EAST	ASIA AND FAR EAST	South Asia
Description	United States	Canada	Brazil	Italy	Hungary	Spain	Germany	Egypt	Korea	China	Thailand	India
Power	0.11	0.11	0.11	0.07	0.07	0.07	0.07	0.07	0.11	0.11	0.11	0.11

CONVERSION FACTORS BY REGION (t <sub>CO2-eq</sub> /GJ)	NORTH	AMERICA	SOUTH AMERICA		SOUTH EAST ASIA ANE EUROPE AND AFRICA FAR EAST			ASIA AND FAR EAST	SOUTH ASIA			
Description	United States	Canada	Brazil	Italy	Hungary	Spain	Germany	Egypt	Korea	China	Thailand	India
Power	0.11	0.11	0.11	0.07	0.07	0.07	0.07	0.07	0.11	0.11	0.11	0.11
Natural gas	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07				
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
Tail gas			0.07						0.07	0.07		
Compressed air					0.07	0.07						
Hot water						0.07						
District water heating							0.07					
Liquid fuel										0.08	0.08	0.08
											CONTI	NUED 🔶

#### ENVIRONMENTAL DATA

EMISSION FACTORS (EF) FOR FUEL COMBUSTION <sup>1</sup>	STANDARD EF		LCA EF
Туре	(t <sub>CO2</sub> /MWhe)	(t <sub>CO2-eq</sub> /MWhe)	(t <sub>CO2</sub> -eq/GJ)
Motor gasoline	0.249	0.299	0.08
Gas oil, diesel	0.267	0.305	0.08
Residual fuel oil	0.279	0.31	0.09
Anthracite	0.354	0.393	0.11
Other bituminous coal	0.341	0.38	0.11
Sub-bituminous coal	0.346	0.385	0.11
Lignite	0.364	0.375	0.10
Natural gas	0.202	0.237	0.07
Municipal wastes (non-biomass)	0.33	0.33	0.09
Wood	0.403	0.405	0.11

<sup>1</sup> Standard CO<sub>2</sub> emission factors (from IPCC, 2006) and CO<sub>2</sub>-equivalent LCA emission factors (from ELCD) for most common fuel types.

TOTAL WATER DISCHARGE BY QUALITY AND DESTINATION	UNIT	FY2014	FY2015	FY2016
Sanitary wastewater discharge	m <sup>3</sup>	133,631	128,812	140,838
Industrial wastewater discharge to on-site collection pond	m <sup>3</sup>	77,670	2,740,131	2,969,995
Industrial wastewater discharge to natural body of water	m <sup>3</sup>	467,802	825,755	930,074
Industrial wastewater discharge to municipal waste water treatment plant	m <sup>3</sup>	348,723	435,931	321,317

**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. The FY2015 data has been reviewed and adjusted based on new information.

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#### ENVIRONMENTAL DATA

WEIGHT OF WASTE BY TYPE AND DISPOSAL METHOD	UNIT		FY2015		FY2016	
		HAZARDOUS	NON-HAZARDOUS	HAZARDOUS	NON-HAZARDOUS	
Reuse	tonnes	0	0	2	4	
Recycling	tonnes	10	2,118	64	842,792	
Composting	tonnes	0	0	0	0	
Recovery, including energy recovery	tonnes	0	0	0	13	
Deep well injection	tonnes	0	0	0	0	
Landfill	tonnes	106	5,036	22,446	2,401,150	
On-site storage	tonnes	0	0	0	0	
Incineration (mass burn)	tonnes	318	76	104	122	

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

WEIGHT OF WASTE TRANSPORTED, IMPORTED, EXPORTED, OR TREATED WASTE DEEMED HAZARDOUS	UNIT	FY2014	FY2015	FY2016
Hazardous waste transported	tonnes	517	434	22,616
Hazardous waste imported	tonnes	0	0	0
Hazardous waste exported	tonnes	0	0	0
Hazardous waste treated	tonnes	171	10	64
Percentage of hazardous waste shipped internationally	%	0	0	0

# SOCIAL DATA

EMPLOYEE NUMBERS (FY2016)	FEMALE	MALE	TOTAL
Total workforce	3,565	431	3,996
Full-time	2,177	343	2,520
Part-time	5	2	7
Temporary	3	5	8
Contractors/supervised	1,380	81	1,461
Employees (non-contractors/non-supervised)	2,185	350	2,535
South America	254	20	274
South Asia	1,832	74	1,906
South East Asia and Far East	456	110	566
North America	314	132	446
Europe and Africa	709	95	804
RETURN TO WORK AND RETENTION RATES AFTER PARENTAL LEAVE (FY2016)	FEMALE	MALE	TOTAL
Employees entitled to parental leave	333	1,169	1,502

Employees entitled to parental leave	333	1,169	1,502
Employees who took parental leave	12	17	29
Employees who returned to work	10	17	27
Employees in employment 12 months after returning to work	6	13	19
Return to work rate of employees who took parental leave	83%	100%	93%
Retention rate of employees who took parental leave	50%	76%	66%
			CONTINUED 🜩

## SOCIAL DATA

EMPLOYEE HIRES AND EMPLOYEE TURNOVER (FY2016)	TOTAL HIRES	HIRE RATE (%)	TOTAL TURNOVER	TURNOVER RATE (%)
Age: Under 30 years	48	2	33	1
Age: 30–50 years	112	4	75	3
Age: Over 50 years	48	2	26	1
Europe and Africa	61	8	45	6
North America	41	9	31	7
South Asia	13	2	39	6
Southeast Asia and Far East	31	7	19	4
South America	26	10	0	0
Female	29	8	17	5
Male	143	7	117	5

TYPE OF INJURY, RATES OF INJURY AND TOTAL NUMBER OF WORK-RELATED FATALITIES (FY2016)	TYPES OF INJURY	TRIR	LOST TIME CASE	FATALITIES
EMPLOYEES				
Europe and Africa	Foot ligament tear, laceration to eyebrow, laceration to thumb tip	0.43	0.29	0
North America	Bug bite, heat exhaustion, scratched retina, lower back strain, pinched fingers, burn to arm	1.31	0.65	0
South Asia		0	0	0
South East Asia and Far East		0	0	0
South America	Laceration to right arm	0.42	0	0
				CONTINUED 🜩

## SOCIAL DATA

TYPE OF INJURY, RATES OF INJURY AND TOTAL NUMBER OF WORK-RELATED FATALITIES (FY2016)	TYPES OF INJURY	TRIR	LOST TIME CASE	FATALITIES
CONTRACTORS				
Europe and Africa	Burn to foot, fractured leg	0.67	0.67	0
North America	Impact to knee and ribs	1.73	1.73	0
South Asia		0	0	0
South East Asia and Far East	Laceration to hand, laceration to thumb tip	0.13	0	0
South America	Fractured foot	0.27	0.27	0
AVERAGE HOURS OF EMPLOYEE SENIOR	MIDDI F			

AVERAGE HOURS OF EMPLOYEE TRAINING (FY2016)	SENIOR MANAGEMENT	MIDDLE MANAGEMENT	PROFESSIONAL	TECHNICAL	ADMINISTRATIVE	PRODUCTION	MAINTENANCE
Female	57	37	52	41	32	31	18
Male	54	41	57	39	24	44	43
PERCENTAGE OF EMPLOYEES RECEIVING REGULAR PERFORMANCE AND CAREER DEVELOPMENT REVIEWS FY2016	SENIOR MANAGEMENT	MIDDLE MANAGEMENT	PROFESSIONAL	TECHNICAL	ADMINISTRATIVE	PRODUCTION	MAINTENANCE
Female	100	100	100	83	83	64	75
Male	100	100	100	78	85	69	69