GLOBAL REPORTING INITIATIVE INDEX

BIRLA CARBON 2015





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

GENERAL STANDARD DISCLOSURES

STRATEGY AND ANALYSIS

GENERAL STANDARD DISCLOSURES	SOURCE	NOTES	OMISSIONS
G4-1	Homepage, Sustainability at Birla Carbon, Interview with CEO and Video interview with COO		
G4-2	Homepage, Sustainability at Birla Carbon, Interview with CEO and Video interview with COO Our approach Our key issues Targets and progress Governance, Enterprise risk management 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		14 countries	
G4-7	Governance	Aditya Birla Group	
G4-8		Markets served are in Europe and Africa, North America, South America, Oceania, South East Asia and Far East	

CONTINUED...



→ ORGANIZATIONAL PROFILE

GENERAL STANDARD			
DISCLOSURES	SOURCE	NOTES	OMISSIONS
G4-9	Our vision, Key facts	Total number of employees: 2,545	
		17 manufacturing sites	
		3 decanting stations (Belgium decanting station closed in FY2015)	
		2 technology centers	
G4-10	GRI Index Appendix: Social Data Table		
G4-11	Ethics and compliance		
G4-12	Product safety and stewardship		
	Supplier management		
G4-13		Closed decanting station in Belgium.	
G4-14	Governance, Enterprise risk management		
	Product responsibility		
G4-15	Our approach		
	Governance		
	Product safety and stewardship		
	The big questions		
	Product quality		
	Carbon stewardship		
	Environmental compliance		
	Water		
	Customer engagement		
	Employee engagement		
G4-16		International Carbon Black Association (ICBA)	

CONTINUED... **→**

GENERAL STANDARD DISCLOSURES

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	Our key issues About our report		
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	Targets and progress Carbon stewardship Water		
G4-23	About our report, Boundary		

STAKEHOLDER ENGAGEMENT

GENERAL STANDARD DISCLOSURES	SOURCE	NOTES	OMISSIONS
G4-24	Our key issues		
G4-25	Our key issues		
	Our key issues Governance Ethics and compliance Product safety and stewardship Product quality Carbon stewardship Customer engagement Supplier management Employee engagement		
G4-27	See above		

REPORT PROFILE

GENERAL STANDARD DISCLOSURES	SOURCE	NOTES	OMISSIONS
G4-28		April 1, 2014 to March 31, 2015	
G4-29		FY2014	
G4-30		Annual	
G4-31	About our report, Feedback	Dr. Gilles Moninot, Global Sustainability Director birlacarbon.sustainability@adityabirla.com	
G4-32	About our report	In accordance (comprehensive) GRI G4. Birla Carbon engaged Environmental Resources Management (ERM) to partner with us to collect and analyze relevant reporting data. ERM consolidated and quantified performance data and independently checked environmental, health and safety, human resources and community engagement data provided by Birla Carbon. Emission calculations and environmental intensity calculations were based on generally accepted reporting principles and with assumptions noted in each relevant section of this report. ERM's support in the development of this report does not constitute a third-party assurance verification of its contents.	
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.	

GOVERNANCE

GENERAL STANDARD DISCLOSURES	SOURCE	NOTES	OMISSIONS
G4-34	Governance		
G4-35	Governance		
G4-36	Our key issues Governance		

→ GOVERNANCE

GENERAL STANDARD			
DISCLOSURES	SOURCE	NOTES	OMISSIONS
G4-37	Governance Customer engagement Employee engagement		
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.	
G4-39	http://www.birlacarbon.com/Webpages/about-us-business-leadership.aspx		
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).	
G4-41		All employees, including those in the highest governing body, are required to sign a Code of Conduct which includes the following language: "Each Employee must avoid at all times any interest that might conflict or appear to conflict with the interests of the Company, or that might deprive the Company of the undivided loyalty of the Employee in business dealings. To this end, an Employee should not become involved in any situation that may create a personal interest in the situation, or place the Employee under an obligation that may interfere with his or her primary duty to serve the Company at all times to the best of his or her ability." Also, each member of the SMT is required to participate in ethics and code of conduct training to assist in identification and handling of conflicts of interest. In the rare event that a potential conflict of interest arises within the SMT, members are required to self-declare the conflict, and are then excused from related discussions.	
			CONTINUED

→ GOVERNANCE

GENERAL STANDARD DISCLOSURES	SOURCE	NOTES	OMISSIONS
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.	
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 FY2015.	
G4-45	Our key issues Governance		
G4-46	Governance		
G4-47	Our key issues Governance		
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' 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 which 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.

See our full report. Sustainability Report 2013

GENERAL STANDARD DISCLOSURES

→ GOVERNANCE

GENERAL STANDARD DISCLOSURES	SOURCE	NOTES	OMISSIONS
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 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. Remuneration consultants used for this benchmarking have no other relationship with Birla Carbon.	
G4-53	See G4 51–52	Birla Carbon does not consult external stakeholders on remuneration policies.	
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		
G4-57	Ethics and compliance		
G4-58	Ethics and compliance		

CONTINUED... **→**

See our full report. Sustainability Report 2013

SPECIFIC STANDARD DISCLOSURES

ΕŒ	C	O	Ν	Ю	M	IIC

DMA AND INDICATORS	SOURCE	NOTES	OMISSIONS			
MATERIAL AS	MATERIAL ASPECT: INDIRECT ECONOMIC IMPACTS					
G4-DMA	Our approach Our key issues Governance					
G4-EC7	Communities					
G4-EC8	Communities					
MATERIAL AS	PECT: PROCUREMENT PRACTICES					
G4-DMA	Our approach Our key issues Governance Supplier management					
G4-EC9			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.			

SPECIFIC STANDARD DISCLOSURES

ENVIRONMENTAL

DMA AND INDICATORS	SOURCE	NOTES	OMISSIONS			
MATERIAL ASI	MATERIAL ASPECT: MATERIALS					
G4-DMA	Our approach The story of carbon black Our key issues Governance Carbon stewardship Supplier management					
G4-EN1	GRI Index Appendix: Environmental Data Table					
G4-EN2	The story of carbon black Carbon stewardship, Sourcing our raw materials	We are unable to use recycled feedstock oil due to its impact on product quality and due to the nature of our production process.				
MATERIAL ASI	PECT: ENERGY					
G4-DMA	Our approach Our key issues Governance Carbon stewardship Supplier management					
G4-EN3	GRI Index Appendix: Environmental Data Table	Birla Carbon's energy consumption has been provided in energy intensity values due to the commercial sensitivity of this information in actual values.				
G4-EN4	GRI Index Appendix: Environmental Data Table	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.				
G4-EN5		Birla Carbon's energy consumption intensity in FY2015 was 13.78 tonnes of CO_2 -eq/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 ratio.				
G4-EN6	Carbon stewardship, Energy: recovery and positivity	Birla Carbon reduced its energy consumption intensity by 1.11 tonnes of CO_2 -eq/tonne of carbon black in FY2015 as compared to FY2014. All types of energy consumed are included in calculation.				

SPECIFIC STANDARD DISCLOSURES

▶ ENVIRONMENTAL

DMA AND INDICATORS	SOURCE	NOTES	OMISSIONS
G4-EN7	Carbon stewardship, Energy: recovery and positivity		Birla Carbon is working to develop and produce new grades of carbon black which 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.
MATERIAL AS	PECT: WATER		
G4-DMA	Our approach Our key issues Governance Water Supplier management		
G4-EN8	GRI Index Appendix: Environmental Data Table		
G4-EN9	Water	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.	
G4-EN10	GRI Index Appendix: Environmental Data Table		
MATERIAL AS	PECT: EMISSIONS		
G4-DMA	Our approach Our key issues Governance Carbon stewardship Environmental compliance Supplier management		
G4-EN15	GRI Index Appendix: Environmental Data Table		
G4-EN16	GRI Index Appendix: Environmental Data Table		
G4-EN17	GRI Index Appendix: Environmental Data Table		

SPECIFIC STANDARD DISCLOSURES

▶ ENVIRONMENTAL

DMA AND INDICATORS	SOURCE	NOTES	OMISSIONS
G4-EN18	Targets and progress Carbon stewardship		Absolute emission intensity data is commercially sensitive.
G4-EN19	Targets and progress Carbon stewardship		Absolute data for reductions in emissions is commercially sensitive.
G4-EN20			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.
G4-EN21			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 ASF	PECT: EFFLUENTS AND WASTE		
G4-DMA	Our approach Our key issues Governance Environmental compliance Water Waste Supplier management		
G4-EN22	GRI Index Appendix: Environmental Data Table	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.	
G4-EN23	GRI Index Appendix: Environmental Data Table	The waste disposal method is determined by Birla Carbon except for landfill disposal which is a default of the waste disposal contractor. 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 of this product.	

SPECIFIC STANDARD DISCLOSURES

▶ ENVIRONMENTAL

5144 4115			
DMA AND INDICATORS	SOURCE	NOTES	OMISSIONS
G4-EN24	Targets and progress	Total number of spills: 4	
		Total volume of spills: approximately 5m ³	
		One environmental release to air resulted in minor dust issue in a neighboring village. Another environmental release to air impacted a neighboring aluminium company and homes; a penalty was paid for this incident (see EN29). Another environmental release to air resulted in an exceedance of opacity permit limits. One reportable release to soil occurred in FY2015; all released material was recovered.	
G4-EN25	GRI Index Appendix: Environmental Data Table		
G4-EN26			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	ECT: COMPLIANCE		
G4-DMA	Our approach		
	Our key issues		
	Governance		
	Environmental compliance		
G4-EN29		Birla Carbon paid \$193,799 (USD) in fines in FY2015.	
MATERIAL ASP	ECT: ENVIRONMENTAL GRIEVANCE MECHANISMS		
G4-DMA	Our approach		
	Our key issues		
	Governance		
G4-EN34		No formal grievances have been raised about environmental impacts in FY2015.	

SPECIFIC STANDARD DISCLOSURES

SOCIAL: LABOR PRACTICES AND DECENT WORK

DMA AND INDICATORS	SOURCE	NOTES	OMISSIONS			
MATERIAL ASF	MATERIAL ASPECT: EMPLOYMENT					
G4-DMA	Our approach Our key issues Governance Attracting and retaining talent Employee engagement					
G4-LA1	GRI Index Appendix: Social Data Table					
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					
MATERIAL ASF	PECT: OCCUPATIONAL HEALTH AND SAFETY					
G4-DMA	Our approach Our key issues 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.				
G4-LA6	GRI Index Appendix: Social Data Table	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.	 Data is not currently collected by gender; however, Birla Carbon will review this as a potential measure over the next 12 months. Absentee rate is not currently measured across all locations; however, Birla Carbon will review this as a potential measure over the next 12 months. 			
			CONTINUED			

SPECIFIC STANDARD DISCLOSURES

SOCIAL: LABOR PRACTICES AND DECENT WORK

DMA AND INDICATORS	SOURCE	NOTES	OMISSIONS
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.	
G4-LA8		12 of 17 Birla Carbon sites have formal agreements with trade unions which cover health and safety. On average 100% of relevant health and safety topics are covered by these agreements.	
MATERIAL ASF	PECT: TRAINING AND EDUCATION		
G4-DMA	Our approach Our key issues Governance Attracting and retaining talent Employee engagement		
G4-LA9	GRI Index Appendix: Social Data Table		
G4-LA10	Attracting and retaining talent Employee engagement		
G4-LA11	GRI Index Appendix: Social Data Table		
SUPPLIER ASS	ESSMENT AND LABOR PRACTICES		
G4-DMA	Our approach Our key issues Governance Supplier management		
G4-LA14	Customer and suppliers Supplier management		
G4-LA15	Ethics and compliance Customer and suppliers Supplier management		Birla Carbon does not currently conduct impact assessments of our suppliers. We are planning to invite all of our partners and suppliers above a region-specific threshold to uphold the principles of our Code of Ethics.

CONTINUED... ▶

SPECIFIC STANDARD DISCLOSURES

	COCIAL.	LADOD	DDACTICEC	AND DEC	CENT WORK
ь.	3UCIAL:	LABUK	LLYAC LICES	AND DEC	LEINI WUKK

DMA AND INDICATORS	SOURCE	NOTES	OMISSIONS
MATERIAL ASF	PECT: LABOR PRACTICES GRIEVANCE MECHANISM	S	
G4-DMA	Our approach Our key issues Governance Supplier management		
G4-LA16		Nine grievances about labor practices were filed and addressed through formal grievance mechanisms in FY2015. Eight of these grievances were resolved in FY2015. There are no reported labor grievances filed in previous reporting years that were resolved in FY2015.	

SOCIAL: HUMAN RIGHTS

DMA AND INDICATORS	SOURCE	NOTES	OMISSIONS				
MATERIAL ASI	ATERIAL ASPECT: INVESTMENT						
G4-DMA	Our approach						
	Our key issues						
	Governance						
	Ethics and compliance						
	Supplier management						
G4-HR1			Birla Carbon does not currently include human rights clauses in investment agreements. We are planning to invite all of our partners and suppliers above a region-specific threshold to uphold the principles of our Code of Ethics.				
G4-HR2		Around 1,259 hours were spent training employees on human rights policies and procedures in FY2015. 100% of employees were trained on human rights policies and procedures in FY2015.					
MATERIAL ASI	PECT: NON-DISCRIMINATION						
G4-DMA	Our approach						
	Our key issues						
	Governance						
	Ethics and compliance						
	Employee engagement						

SPECIFIC STANDARD DISCLOSURES

SOCIAL: HUMAN RIGHTS

DMA AND INDICATORS	SOURCE	NOTES	OMISSIONS		
G4-HR3		There were no incidents of discrimination in FY2015.			
MATERIAL ASP	ECT: FORCED OR COMPULSORY LABOR				
G4-DMA	Our approach Our key issues Governance Ethics and compliance Employee engagement				
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 policy prohibits this.			
MATERIAL ASP	ECT: INDIGENOUS RIGHTS				
G4-DMA	Our approach Our key issues Governance Ethics and compliance				
G4-HR8		There were no incidents of violations involving rights of indigenous peoples in FY2015.			
MATERIAL ASP	ECT: SUPPLIER HUMAN RIGHTS ASSESSMENT				
G4-DMA	Our approach Our key issues Governance Ethics and compliance Supplier management				
G4-HR10			Birla Carbon does not currently conduct human rights screening of our suppliers. We are planning to invite all of our partners and suppliers above a region-specific threshold to uphold the principles of our Code of Ethics.		
G4-HR11			Birla Carbon does not currently conduct human rights screening of our suppliers. We are planning to invite all of our partners and suppliers above a region-specific threshold to uphold the principles of our Code of Ethics.		

SPECIFIC STANDARD DISCLOSURES

SOCIAL: HUMAN RIGHTS

DMA AND INDICATORS	SOURCE	NOTES	OMISSIONS
MATERIAL ASF	PECT: HUMAN RIGHTS GRIEVANCE MECHANISMS		
G4-DMA	Our approach Our key issues Governance Ethics and compliance Employee engagement		
G4-HR12		There were no human rights grievances filed in FY2015.	

SOCIAL: SOCIETY

DMA AND INDICATORS	SOURCE	NOTES	OMISSIONS
MATERIAL ASF	PECT: LOCAL COMMUNITIES		
G4-DMA	Our approach Our key issues Governance		
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 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.	
G4-SO2		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. Refer to G4-EN24 regarding impacts on local communities.	

CONTINUED... ▶

SPECIFIC STANDARD DISCLOSURES

SOCIAL: SOCIETY

DMA AND INDICATORS	SOURCE	NOTES	OMISSIONS
MATERIAL ASF	PECT: ANTI-CORRUPTION		
G4-DMA	Our approach Our key issues Governance Ethics and compliance		
G4-SO3		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.	
G4-SO4		Birla Carbon has communicated its anti-corruption policies and procedures to 100% of its employees.	
G4-SO5		There were no confirmed incidents of corruption or actions taken in FY2015.	
MATERIAL ASF	PECT: ANTI-COMPETITIVE BEHAVIOR		
G4-DMA	Our approach Our key issues Governance Ethics and compliance		
G4-SO7	Governance and ethics, Our key figures	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.	
MATERIAL ASF	PECT: COMPLIANCE		
G4-DMA	Our approach Our key issues Governance Ethics and compliance		
G4-SO8		Birla Carbon has not received any significant fines or non- monetary sanctions for non-compliance with laws and regulations with the exception of those reported in EN29.	

SPECIFIC STANDARD DISCLOSURES

SOCIAL: PRODUCT RESPONSIBILITY

DMA AND INDICATORS	SOURCE	NOTES	OMISSIONS
MATERIAL AS	PECT: CUSTOMER HEALTH AND SAFETY		
G4-DMA	Our approach Our key issues Governance Product safety and stewardship The big questions		
G4-PR1		100% of products are assessed for health and safety improvements.	
G4-PR2		There have been no incidents of non-compliance with regulations and voluntary codes concerning the health and safety impacts of Birla Carbon products in FY2015.	
MATERIAL AS	PECT: PRODUCT AND SERVICE LABELING		
G4-DMA	Our approach Our key issues Governance Product safety and stewardship		
G4-PR3		Through Safety Data Sheets Birla Carbon's product labeling includes the content and safety guidance on use and disposal of the product.	
G4-PR4		There have been no incidents of non-compliance with regulations and voluntary codes concerning product and service information and labeling in FY2015.	
G4-PR5	Customer engagement		
MATERIAL AS	PECT: COMPLIANCE		
G4-DMA	Our approach Our key issues Governance		
G4-PR9		Birla Carbon has not received any significant fines for noncompliance with laws and regulations concerning the provision and use of products and service in FY2015.	

APPENDIX: DATA

ENVIRONMENTAL DATA

RAW MATERIALS USED	UNIT	FY2013	FY2014	FY2015
Natural gas	kNm³	175,444	167,151	179,461
Oil feedstock	tonnes	2,460,489	2,444,960	2,438,409

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

ENERGY CONSUMPTION INTENSITY	UNIT	FY2013	FY2014	FY2015
Total energy consumption	GJ/t _{carbon} black	14.95	14.89	13.78
Oil	GJ/t _{carbon black}	0.02	0.03	0.02
Natural gas	GJ/t _{carbon black}	1.59	1.76	0.66
Electricity consumption	GJ/t _{carbon} black	7.42	7.13	6.94
Steam consumption	GJ/t _{carbon black}	5.93	5.98	6.15
Electricity sold	GJ/t _{carbon} black	4.93	5.51	4.73
Tail gas sold	GJ/t _{carbon} black	2.34	2.41	1.74
Hot water sold	GJ/t _{carbon black}	0.36	0.36	0.35
Steam sold	GJ/t _{carbon} black	4.04	3.19	2.36
NET ENERGY USE	GJ/t _{carbon} black	3.28	3.42	4.60

Notes:

Site-specific gross calorifc 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.

ENERGY CONSUMPTION INTENSITY OUTSIDE THE ORGANIZATION	UNIT	FY2013	FY2014	FY2015
Upstream: Extraction, transport, refining and distribution of raw materials	GJ/t _{carbon} black	21	21	24
Downstream: Transportation and distribution of products	GJ/t _{carbon} black	0.90	1.0	0.89

APPENDIX: DATA

▶ ENVIRONMENTAL DATA

WATER WITHDRAWAL BY SOURCE	UNIT	FY2013	FY2014	FY2015
Surface water	m³	7,318,627	7,090,908	6,581,739
Ground water	m ³	3,697,334	3,672,874	4,347,320
Rainwater and water recycled from other plant operations	m³	655,556	1,164,692	2,808,987
Wastewater from other organizations	m³	0	-	0
Municipal water supplies	m ³	3,869,884	4,049,910	5,151,789
Total	m³	15,541,401	15,978,384	18,889,835

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.

WATER RECYCLED AND REUSED	UNIT	FY2013	FY2014	FY2015
Total volume	m ³	655,556	1,164,692	2,808,987
Total volume as a percentage	%	4	7	15

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	FY2013	FY2014	FY2015
DIRECT GHG EMISSIONS (SCOPE 1)				
Direct GHG emissions in metric tonnes of CO ₂ equivalent (baseline 2005)	t _{CO2} -eq	3,328,388	3,222,271	3,194,666

Notes:

Only ${\rm CO_2}$ gas is included in the calculation as emissions of other gases are considered negligible in comparison.

FY2005 is taken as the baseline year because this is the first year reliable direct GHG emission data was available for all plants.

ENERGY INDIRECT GHG EMISSIONS (SCOPE 2)				
Gross energy indirect GHG emissions in metric tonnes of CO ₂ equivalent	t _{CO2} -eq	395,522	399,478	360,249

Notes:

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.

OTHER INDIRECT GHG EMISSIONS (SCOPE 3)				
Gross other indirect scope 3 GHG emissions	t _{CO2} -eq	1,248,575	1,138,484	1,245,552

Note: The calculation includes the upstream extraction, transport, refining and distribution of feedstock materials and the downstream distribution to customers.

APPENDIX: DATA

▶ ENVIRONMENTAL DATA

TOTAL WATER DISCHARGE BY QUALITY AND DESTINATION	UNIT	FY2013	FY2014	FY2015
Sanitary wastewater discharge	m ³	93,190	133,631	128,812
Industrial wastewater discharge to on-site collection pond	m ³	7,800	77,670	3,291,415
Industrial wastewater discharge to natural body of water	m ³	409,603	467,802	142,966
Industrial wastewater discharge to municipal waste water treatment plant	m ³	294,761	348,723	435,931

Note: 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.

WEIGHT OF WASTE TRANSPORTED, IMPORTED, EXPORTED, OR TREATED WASTE DEEMED HAZARDOUS	UNIT	FY2013	FY2014	FY2015
Hazardous waste transported	tonnes	3,162	517	434
Hazardous waste imported	tonnes	0	0	0
Hazardous waste exported	tonnes	0	0	0
Hazardous waste treated	tonnes	86	171	10
Percentage of hazardous waste shipped internationally	%	0	0	0

WEIGHT OF WASTE BY TYPE AND DISPOSAL METHOD	UNIT		FY2014	FY2015		
		HAZARDOUS	NON-HAZARDOUS	HAZARDOUS	NON-HAZARDOUS	
Reuse	tonnes	0	0	0	0	
Recycling	tonnes	3	977	10	2,118	
Composting	tonnes	0	0	0	0	
Recovery, including energy recovery	tonnes	171	85	0	0	
Deep well injection	tonnes	0	0	0	0	
Landfill	tonnes	279	9,494	106	5,036	
On-site storage	tonnes	0	0	0	0	
Incineration (mass burn)	tonnes	64	106	318	76	

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

APPENDIX: DATA

▶ ENVIRONMENTAL DATA

CONVERSION FACTORS BY REGION (t _{CO2-eq} /GJ)	NORTH	I AMERICA	SOUTH AMERICA EUROPE AND AFRICA						EAST ASIA	INDIA		
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

EMISSION FACTORS (EF) FOR FUEL COMBUSTION ¹	STANDARD EF		LCA EF
Туре	(t _{CO2} /MWhe)	$(t_{CO_2-eq}/MWhe)$	(t_{CO_2-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

 $^{^{1}}$ Standard CO₂ emission factors (from IPCC, 2006) and CO₂-equivalent LCA emission factors (from ELCD) for most common fuel types.

APPENDIX: DATA

SOCIAL DATA

FEMALE	MALE	TOTAL
366	3,047	3,413
300	2,230	2,530
1	4	5
7	3	10
58	810	868
308	2,237	2,545
20	217	237
44	1,237	1,281
138	515	653
78	350	428
86	728	814
	366 300 1 7 58 308 20 44 138	366 3,047 300 2,230 1 4 7 3 58 810 308 2,237 20 217 44 1,237 138 515 78 350

RETURN TO WORK AND RETENTION RATES AFTER PARENTAL LEAVE (FY2015)	FEMALE	MALE	TOTAL
Employees entitled to parental leave	342	940	1,282
Employees who took parental leave	14	12	26
Employees who returned to work	14	11	25
Employees in employment 12 months after returning to work	8	4	12
Return to work rate of employees who took parental leave	100%	92%	96%
Retention rate of employees who took parental leave	57%	33%	46%

CONTINUED... ▶

26

See our full report: <u>Sustainability Report 2015</u>

APPENDIX: DATA

SOCIAL DATA

EMPLOYEE HIRES AND EMPLOYEE TURNOVER (FY2015)	TOTAL HIRES	HIRE RATE (%)	TOTAL TURNOVER	TURNOVER RATE (%)
Age: Under 30 years	65	3	44	2
Age: 30–50 years	74	3	70	3
Age: Over 50 years	6	0.2	39	1.5
Europe and Africa	29	4	25	3
North America	37	9	26	6
South Asia	35	6	53	8
Southeast Asia and Far East	32	6	26	5
South America	12	5	23	10
Female	27	1	26	1
Male	118	5	127	5

TYPE OF INJURY, RATES OF INJURY AND TOTAL NUMBER OF WORK-RELATED FATALITIES (FY2015)	TYPES OF INJURY	TRIR	LOST TIME CASE	FATALITIES
EMPLOYEES				
Europe and Africa	Burns to face and hands, back spasms, bruise and contusion	0.26	0.26	0
North America	Strained back, hearing shift, jammed finger, fractured ankle, fractured finger, pinched fingers	1.32	0.56	0
South Asia		0	0	0
South East Asia and Far East	Burns to face and hands	0.46	0.46	0
South America		0	0	0

CONTINUED... ▶

APPENDIX: DATA

SOCIAL DATA

TYPE OF INJURY, RATES OF INJURY AND TOTAL NUMBER OF WORK-RELATED FATALITIES (FY2015)	TYPES OF INJURY	TRIR	LOST TIME CASE	FATALITIES
CONTRACTORS				
Europe and Africa	Ankle sprain, fractured ankle	0.21	0.21	0
North America		0	0	0
South Asia	Fall from height, fractured leg, laceration on finger	0.95	0.71	2
South East Asia and Far East	Laceration to fingers	1.1	0	0
South America	Laceration to fingers, fractured finger	0.4	0.2	0

AVERAGE HOURS OF EMPLOYEE TRAINING (FY2015)	SENIOR MANAGEMENT	MIDDLE MANAGEMENT	PROFESSIONAL	TECHNICAL	ADMINISTRATIVE	PRODUCTION	MAINTENANCE
Female	37	41	25	26	30	20	19
Male	46	46	46	40	23	35	29
PERCENTAGE OF EMPLOYEES RECEIVING REGULAR PERFORMANCE AND CAREER DEVELOPMENT REVIEWS FY2015	SENIOR MANAGEMENT	MIDDLE MANAGEMENT	PROFESSIONAL	TECHNICAL	ADMINISTRATIVE	PRODUCTION	MAINTENANCE
Female	79	83	81	63	79	50	36
Male	95	95	77	75	80	60	60