



# **GRI INDEX**

#### **BIRLA CARBON 2019**

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

The data in this report relates to the fiscal year ending March 31, 2019, 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:



# Global Reporting Initiative (GRI) index in accordance with Comprehensive GRI Standards

#### GRI 102: GENERAL STANDARD DISCLOSURES 2016 Disclosure number Notes Omissions Source 102-1 Birla Carbon Carbon black manufacturer and supplier. Our product has 102-2 The social value of carbon black not been banned in any markets. 102-3 Mumbai, Maharashtra, India 12 countries (Brazil, Canada, China, Egypt, Germany, Hungary, 102-4 http://birlacarbon.com/locations/ India, Italy, South Korea, Spain, Thailand and United States of America) 102-5 Aditya Birla Group Governance Markets served are in Europe and Africa, North America, South America, Oceania, South East Asia and Far East. Sector served: private, manufactured goods. 102-6 Customers are in the tire, manufactured rubber goods and specialty product industries (plastics, inks, paints and coatings). Total Number of Employees = 2,507 16 Manufacturing Sites 9 Offices 102-7 2 Technology Centers Privately owned company Production capacity of 2Mt/year Selling price depends somewhat on oil price

Disclosure number	Source	Notes	Omissions
Disclosure number	Source	Notes	Omissions
		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.	
102-8	See Appendix: data GRI 102-8	No significant variations in employee numbers reported throughout reporting period.	
		Data compiled by HR heads at each site at the end of fiscal year. No significant assumptions were made when compiling data.	
		8	
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 plant level.	
		No significant changes to operations.	
102.10		No significant changes in the share capital structure or in the location of suppliers.	
102-10		In FY2019, Birla Carbon began screening all vendors and suppliers in our value chain for legal and regulatory risks.  12 17	
	<u>Global recognition</u>		
102-11	Future-proofing		
102-11	<u>Governance</u>		
	Product responsibility		

Disclosure number	Source	Notes	Omissions
	Our approach	17	
	Stakeholder engagement	_	
	Future-proofing		
	<u>Governance</u>		
	<u>Compliance</u>		
102.12	Product responsibility		
102-12	The big questions		
	Product quality		
	<u>Carbon stewardship</u>		
	<u>Water</u>		
	Customer engagement		
	Employee engagement		
		International Carbon Black Association (ICBA)	
		World Business Council for Sustainable Development (WBCSD)	
		Brazilian Chemical Industry Association (ABIQUIM)	
102-13	Stakeholder engagement	Risk Management Society (RIMS)	
		North American Product Safety and Regulatory Committee (NAPSRC)	
		Sustainability Leadership Forum (SLF)	
		17	
102-14	<u>Leadership messages</u>		
	<u>Leadership messages</u>		
	Focusing on what matters		
	Sustainable Development Goals		
102-15	<u>Global recognition</u>		
102-13	Stakeholder engagement		
	Future-proofing		
	Targets and progress		
	About our report		

#### GRI 102: GENERAL STANDARD DISCLOSURES 2016 Disclosure number Source Notes **Omissions Ethics** 16 102-16 Compliance **Ethics** 16 102-17 Compliance 102-18 Governance 16 102-19 Governance Focusing on what matters 102-20 Governance Stakeholder engagement 16 17 <u>Governance</u> 102-21 Customer engagement Employee engagement Each member of Birla Carbon's SMT holds an executive position at Birla Carbon. Stakeholders, with the exception of shareholders, are not represented on the SMT currently. The selection process ensures that all candidates possess the necessary knowledge and expertise of economic, 102-22 http://birlacarbon.com/about/ environmental and social issues pertinent to Birla Carbon. If conflicts of interest arise, these will be self-declared by the members. 16 16 102-23 http://birlacarbon.com/about/dr-santrupt-misra/

Disclosure number	Source	Notes	Omissions
102-24		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).	
102-25	Downloads (see Birla Carbon Code of Conduct)	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.	
102-26	<u>Governance</u>		
102-27	<u>Governance</u>	Specific teams within the business responsible for sustainability-related programs will also provide progress updates direct to the SMT.	

Disclosure number	Source	Notes	Omissions
102-28		Birla Carbon's SMT is evaluated based on the success of the business linked to the 2030 sustainability targets, which cover economic, environmental and social performance. 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 FY2019.	
	Focusing on what matters	16	
102-29	Stakeholder engagement Governance		
102-30	Governance		
102-31	Focusing on what matters Governance		
102-32		Chief Legal, Sustainability and Risk Officer, Joe Gaynor, reviews and approves Birla Carbon's sustainability report.	
102-33	<u>Ethics</u>		
102-34	<u>Ethics</u>		
102-35		Annual compensation matters for all employees in Job Band 3 and above are linked to salaries, annual incentive plan (AIP) and long-term incentive plans (LTIPs), 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 (FY2019). 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.	

Disclosure number	Source	Notes	Omissions
102-36		All compensation actions for employees in Job Band 3 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.	
102-37		Birla Carbon does not consult external stakeholders, other than shareholders, on remuneration policies.	
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 classed as business sensitive and cannot be disclosed due to confidentiality constraints.
102-40	Stakeholder engagement		
102-41	<u>Ethics</u>	8	
102-42	Stakeholder engagement		

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Disclosure number	Source	Notes	Omissions
	Stakeholder engagement	17	
	Focusing on what matters		
	Governance		
	<u>Ethics</u>		
	Product responsibility		
102-43	Product quality		
	<u>Carbon stewardship</u>		
	Customer engagement		
	Supplier management		
	Employee engagement Community engagement		
	<u>Continuity engagement</u>		
102-44	See above		
102-45		Our consolidated financial statements include all manufacturing facilities and legal entities worldwide.	
	Focusing on what matters		
102-46	Future-proofing		
	About our report		
102-47	Focusing on what matters	Material aspects are those with indicators reported against in this index.	
102-48	-		
102-49	About our report		
102-50		Fiscal Year (FY) 2019: April 1, 2018 to March 31, 2019	
102-51		FY2018	
102-52		Annual	
102-53		Dr. Gilles Moninot, Global Sustainability Director birlacarbon.sustainability@adityabirla.com	

Disclosure number	Source	Notes
102-54		This report has been prepared in accordance with the GRI Standards: Comprehensive option.
		GRI Standards are referenced throughout this index.
		Material topics that are reported on but not covered by the GRI standards include:
102-55		<ul> <li>Business continuity</li> </ul>
		<ul> <li>Global presence</li> </ul>
		• <u>Innovation</u>
		<ul> <li><u>Customer engagement</u></li> </ul>
		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
102-56		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 Notes Omissions Source MATERIAL ISSUE: SUSTAINABLE PROCUREMENT **GRI 103: Management Approach 2016** Leadership messages Focusing on what matters Sustainable Development Goals 103-1 Stakeholder engagement Future-proofing About our report Leadership messages Sustainable Development Goals Targets and progress 103-2 Governance Supplier management Downloads Global recognition Targets and progress 103-3 Stakeholder engagement Governance Supplier management **GRI 204: Procurement Practices 2016** 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 204-1

its procurement management and intends to develop the measurement tools to collect this data over the next 12 months.

SPECIFIC STANDAR	RD DISCLOSURES				
Disclosure number	Source	Notes	Omissions		
MATERIAL ISSUE: ETHI	IATERIAL ISSUE; ETHICS				
GRI 103: Management	GRI 103: Management Approach 2016				
103-1	Leadership messages Focusing on what matters Sustainable Development Goals Stakeholder engagement Future-proofing About our report				
103-2	Leadership messages Sustainable Development Goals Targets and progress Governance Ethics Compliance Downloads				
103-3	Global recognition Targets and progress Stakeholder engagement Governance Ethics Compliance				
GRI 205: Anti-Corrupt	ion 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 FY2019.			

SPECIFIC STANDAR	RD DISCLOSURES		
Disclosure number	Source	Notes	Omissions
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 and business partners as part of our standard Terms and Conditions.	
205-3	<u>Ethics</u>	In FY2019, no allegations of corruption were raised.	
GRI 206: Anti-Compet	titive 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	
ENVIRONMENTAL			
MATERIAL ISSUE: SUS	TAINABLE PROCUREMENT		
GRI 301: Materials 201	16		
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-spec material back into our manufacturing process.  The amount of packing material (i.e. pallets, big bags) we use is limited, but we strive to recycle as much as possible. Through our partnership with Repasack® in Europe, we	
		recycled 5.44 tonnes of packaging material.	

SPECIFIC STANDAR	SPECIFIC STANDARD DISCLOSURES					
Disclosure number	Source	Notes	Omissions			
MATERIAL ISSUE; ENEF	RGY					
GRI 103: Management	Approach 2016					
103-1	Leadership messages Focusing on what matters Sustainable Development Goals Stakeholder engagement Future-proofing About our report					
103-2	Leadership messages Sustainable Development Goals Targets and progress Governance Carbon stewardship Downloads					
103-3	Targets and progress Stakeholder engagement Governance Carbon stewardship					
GRI 302: Energy 2016	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	7 12 13				

SPECIFIC STANDAR	RD DISCLOSURES		
Disclosure number	Source	Notes	Omissions
302-3		Birla Carbon's energy consumption intensity in FY2019 was 12.03 GJ/tonne of carbon black. Our organization-specific metric is carbon black production. All types of energy consumed are included in calculation. Only energy consumed within the organization is included in ratio.  7 12 13	
302-4	<u>Carbon stewardship</u>	Birla Carbon's total energy consumption intensity increased in FY2019 as compared to FY2018. However, some projects still resulted in energy consumption reductions as highlighted in our report.  7 12 13	
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: WAT	ER		
GRI 103: Management	t Approach 2016		
103-1	Leadership messages Focusing on what matters Sustainable Development Goals Stakeholder engagement Future-proofing About our report		

## SPECIFIC STANDARD DISCLOSURES

Disclosure number	Source	Notes	Omissions
	<u>Leadership messages</u>		
	Sustainable Development Goals		
103-2	Targets and progress		
103 2	Governance		
	Water		
	<u>Downloads</u>		
	<u>Global recognition</u>		
	Targets and progress		
103-3	Stakeholder engagement		
	Governance		
	Water		
GRI 303: Water and Ef	ffluents 2018		
303-1	Water	6 12	
303-2	<u>Water</u>	All sites are complying with local regulatory requirements for water management and discharge. Plants are audited every two years for compliance with water quality standards. We do not have internal requirements. Nine of our plants are zero discharge facilities.	
303-3	See Appendix: data GRI 303-3	6 12	
303-4	See Appendix: data GRI 303-4	All of our sites manage their water discharge in accordance with their discharge permit and local regulatory requirements.	

# SPECIFIC STANDARD DISCLOSURES

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Disclosure number	Source	Notes	Omissions
303-5		<ul> <li>a) Water consumption for our manufacturing process for all sites is estimated to be 6,700 megaliters in FY2019.</li> </ul>	
		<ul> <li>b) Water consumption for our manufacturing process of sites in water-stressed areas is estimated to be 2,500 megaliters.</li> </ul>	
	<u>Water</u>	<ul> <li>c) Water storage at our sites is not expected to have a significant impact.</li> </ul>	
		<ul> <li>d) Water consumption for our manufacturing process is estimated based on internal engineering models. This excludes water consumed for power generation, environmental controls, steam consumption and ancilliary activities (i.e. floor washing).</li> </ul>	
MATERIAL ISSUE: GHG	CANID AID EMISSIONS		
GRI 103: Management	t Approach 2016		
	<u>Leadership messages</u>		
	Focusing on what matters		
103-1	Sustainable Development Goals		
	Stakeholder engagement Future-proofing		
	About our report		
	- <u> </u>		
	<u>Leadership messages</u> Sustainable Development Goals		
	Targets and progress		
	Governance		
103-2	<u>Life Cycle Assessments</u>		
	<u>Carbon stewardship</u>		
	<u>Air emissions</u>		
	<u>Downloads</u>		

#### SPECIFIC STANDARD DISCLOSURES **Omissions** Disclosure number Source Notes Global recognition Targets and progress Stakeholder engagement 103-3 Governance Life Cycle Assessments Carbon stewardship Air emissions GRI 305: Emissions 2016 3 12 13 305-1 See Appendix: data GRI 305-1 3 12 13 305-2 See Appendix: data GRI 305-2 Through our product Life Cycle Assessment, Birla Carbon has identified the energy consumption of suppliers and downstream transportation as material, based on where 305-3 See Appendix: data GRI 305-3 potential energy reductions could be undertaken or influenced by Birla Carbon. 3 12 13 Targets and progress Confidentiality constraints. Absolute emission intensity data 3 12 13 305-4 is commercially sensitive. Carbon stewardship a) Although Birla Carbon experienced an overall increase in Scope 1 emissions due to increased production, emission reduction initiatives account for a decrease of approximately 840 tonnes of Scope 1 CO<sub>2</sub> emissions. b) Only CO<sub>2</sub> gas is included in the calculation as emissions of other gases are considered negligible in comparison. Targets and progress 305-5 c) Comparisons are made to the previous GRI reporting Carbon stewardship year (FY2018). d) Scope 1 and Scope 2 e) Same as reported in 305-1 and 305-2 3 12 13

SPECIFIC STANDARD DISCLOSURES			
Disclosure number	Source	Notes	Omissions
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 $\mathrm{CO}_2$ emissions.
305-7		3 13	Information unavailable. 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 ISSUE; WAS	TE AND WATER		
GRI 103: Management	Approach 2016		
103-1	Leadership messages Focusing on what matters Sustainable Development Goals Stakeholder engagement Future-proofing About our report		
103-2	Leadership messages Sustainable Development Goals Targets and progress Governance Water Waste Downloads		

#### SPECIFIC STANDARD DISCLOSURES Disclosure number Source Notes Omissions Global recognition Targets and progress Stakeholder engagement 103-3 Governance Water Waste GRI 306: Effluents and Waste 2016 3 6 12 306-1 See Appendix: data GRI 303-4 Gypsum, a byproduct of flue gas desulfurization systems, is now currently included in the values reported in this indicator. Hence, the increase in the reported quantity of non-306-2 See Appendix: data GRI 306-2 hazardous waste. Currently, generated gypsum is reused or recycled by a third-party vendor. 3 12 Birla Carbon recorded eight environmental releases in FY2019. 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. 306-3 Targets and progress In FY2019, we had one release of carbon black to air exceeding regulatory reporting limits. The remaining releases were reported on a voluntary basis to regulatory authorities. 3 12 See Appendix: data GRI 306-4 3 12 306-4 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 306-5 over the next 12 months. 3 6 12

307-1

# SPECIFIC STANDARD DISCLOSURES Disclosure number Notes Omissions Source MATERIAL ISSUE: GOVERNANCE FRAMEWORK GRI 103: Management Approach 2016 Leadership messages Focusing on what matters Sustainable Development Goals 103-1 Stakeholder engagement Future-proofing About our report Leadership messages Sustainable Development Goals Targets and progress 103-2 Governance Compliance Downloads Global recognition Targets and progress Stakeholder engagement 103-3 Governance Compliance **GRI 307: Environmental Compliance 2016** Birla Carbon received two environmental fines in FY2019 for releases to air; the total amount paid in fines was \$19,500.

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SPECIFIC STANDARD DISCLOSURES				
Disclosure number	Source	Notes	Omissions	
SOCIAL				
MATERIAL ISSUE: EMPI	LOYEE ENGAGEMENT			
GRI 103: Management	Approach 2016			
103-1	Leadership messages Focusing on what matters Sustainable Development Goals Stakeholder engagement Future-proofing About our report			
103-2	Leadership messages Sustainable Development Goals Targets and progress Governance Attracting and retaining talent Downloads			
103-3	Global recognition Targets and progress Stakeholder engagement Governance Health and safety			
GRI 401: Employment	GRI 401: Employment 2016			
401-1	See Appendix: data GRI 401-1	8		

SPECIFIC STANDARD DISCLOSURES				
Disclosure number	Source	Notes	Omissions	
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.		
401-3	See Appendix: data GRI 401-3	8		
MATERIAL ISSUE: SAFE	ETY			
GRI 103: Management	t Approach 2016			
103-1	Leadership messages Focusing on what matters Sustainable Development Goals Stakeholder engagement Future-proofing About our report			
103-2	Leadership messages Sustainable Development Goals Targets and progress Governance Health and safety Downloads			
103-3	Global recognition Targets and progress Stakeholder engagement Governance Health and safety			
GRI 403: Occupational Health and Safety 2018				
403-1	Health and safety			

## SPECIFIC STANDARD DISCLOSURES

Disclosure number	Source	Notes	Omissions
103-2	Health and safety	Each site has a process for workers to report hazards and near-miss incidents. Reporting hazards and near misses is encouraged and in some plants incentivized. The company has a formal incident reporting and investigation standard. Each site is expected to have a local process for the reporting and investigation of incidents including near misses. Information on incidents is recorded in a central system (Enablon). A daily report of incidents reported in the previous 24 hours is distributed daily to approximately 250 executives and managers globally. Completion of investigations and close-out of findings is tracked; incidents with important learnings for other sites are flagged as High Value Learning Events or shared as safety alerts with other sites. Corrective actions from incident investigations focus both on the immediate conditions and behaviors responsible for the incident, as well as any gaps in the health and safety management system.	
103-3	Health and safety	The occupational health services (OHS) at the locations perform regular medical surveillance activities to detect potential impacts of occupational exposures, such as noise. The OHS also provides non-occupational health screenings for conditions such as high blood pressure, cholesterol, diabetes, etc. These departments are also the primary source of health education for the sites. These services are readily accessible to employees and in many instances required by law.	
103-4	Health and safety	Employees are involved at the sites based on local regulatory requirements and the discretion of management. Employees don't consult or design the quality management system. All sites have a formal safety and health committee with representation of employees and management. The membership, responsibilities and meeting frequency are all site-specific determinations.	
103-5	Health and safety		
103-6	Health and safety	In addition to non-occupational screening, the on-site clinics are used for the treatment of work-related symptoms as well as minor, non-work-related conditions.	
103-7	Health and safety		

## SPECIFIC STANDARD DISCLOSURES

Disclosure number	Source	Notes	Omissions
403-8	See Appendix: data GRI 403-8	Internal audits are conducted as needed by Corporate H&S but at a minimum of every two years.	
403-9	Our People – <u>Health and safety</u> <u>See Appendix: data GRI 403-9</u>	The company has a formal reporting process and uses common safety and health performance incidence rate metrics. Incidents and exposure hours are recorded monthly in a centralized system and communicated to all sites along with other key performance indicators on a monthly basis.	
403-10	See Appendix: data GRI 403-10	Hazards are identified through routine audits and inspections of the sites and industrial hygiene exposure assessments. Birla Carbon has an internal standard for exposure assessment and complies with any local or country regulatory requirements for exposure assessment and monitoring requirements. Noise is the most prevalent risk for occupational exposure in the work environment. All sites have a comprehensive hearing conservation program that includes annual audiometric testing, noise monitoring at regular intervals, installation of engineering controls to reduce noise levels, and the use of hearing protection by personnel working in areas with elevated noise levels. Contractors may be excluded from medical surveillance requirements (NA and EU historically do not monitor contractors), but are not excluded from protective measures.	

#### MATERIAL ISSUE; EMPLOYEE ENGAGEMENT

#### GRI 103: Management Approach 2016

103-1

<u>Leadership messages</u>	
Focusing on what matters	
Sustainable Development Go	als
Stakeholder engagement	
Future-proofing	
About our report	

SPECIFIC STANDARD DISCLOSURES					
Disclosure number	Source	Notes	Omissions		
103-2	Leadership messages Sustainable Development Goals Targets and progress Governance Health and safety Downloads				
103-3	Global recognition Targets and progress Stakeholder engagement Governance Health and safety				
GRI 404: Training and	Education 2016				
404-1	See Appendix: data GRI 404-1				
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: HUM	MATERIAL ISSUE: HUMAN RIGHTS				
GRI 103: Management	GRI 103: Management Approach 2016				
103-1	Leadership messages Focusing on what matters Sustainable Development Goals Stakeholder engagement Future-proofing About our report				

#### SPECIFIC STANDARD DISCLOSURES Notes Omissions Disclosure number Source Leadership messages Sustainable Development Goals Targets and progress 103-2 Governance **Ethics** Downloads Global recognition Targets and progress 103-3 Stakeholder engagement Governance **Ethics** GRI 406: Non-Discrimination 2016 There was one incident of discrimination investigated and

GRI 408: Child Labor 206

406-1

408-1

Through our third-party due diligence screening system we have not identified any suppliers with incidents of child labor. Birla Carbon's Code of Ethics and Supplier Term and Conditions prohibit this.

GRI 409: Forced or Compulsory Labor 2016

Through our third-party due diligence screening system we have not identified any suppliers with incidents of forced or compulsory labor. Birla Carbon's Code of Ethics and Supplier Term and Conditions prohibit this. 409-1





dismissed in FY2019.

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SPECIFIC STANDARD DISCLOSURES						
Disclosure number	Source	Notes	Omissions			
GRI 411: Rights of Indi	GRI 411: Rights of Indigenous Peoples 2016					
411-1		There were no incidents of violations involving rights of indigenous peoples in FY2019.				
GRI 412: Human Right	s Assessment 2016					
412-1		None of our operations have been subject to formal human rights reviews or impact assessments.  16				
412-2		Around 2,500 hours were spent training employees on human rights policies and procedures in FY2019. 100% of employees were trained on human rights policies and procedures in FY2019.				
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.				
MATERIAL ISSUE: COM	IMUNITY ENGAGEMENT					
GRI 103: Management	GRI 103: Management Approach 2016					
103-1	Leadership messages Focusing on what matters Sustainable Development Goals Stakeholder engagement Future-proofing About our report					

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# SPECIFIC STANDARD DISCLOSURES **Omissions** Disclosure number Source Notes Leadership messages Sustainable Development Goals Targets and progress 103-2 Governance Communities Downloads Targets and progress Stakeholder engagement 103-3 Governance Communities GRI 413: Local Communities 2016 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 413-1 appropriate impact assessment approaches over the next two years with the help of its parent company, the Aditya Birla Group. 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.

#### SPECIFIC STANDARD DISCLOSURES Disclosure number Notes Omissions Source MATERIAL ISSUE: SUSTAINABLE PROCUREMENT **GRI 103: Management Approach 2016** Leadership messages Focusing on what matters Sustainable Development Goals 103-1 Stakeholder engagement Future-proofing About our report Leadership messages Sustainable Development Goals Targets and progress 103-2 Governance Supplier management **Downloads** Global recognition Targets and progress 103-3 Stakeholder engagement Governance Supplier management GRI 414: Supplier Social Assessment 2016 16 17 Ethics and compliance 414-1 Customer and suppliers Supplier management Ethics and compliance 16 17 Customer and suppliers 414-2 Supplier management

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# SPECIFIC STANDARD DISCLOSURES Disclosure number Notes Omissions Source MATERIAL ISSUE: PRODUCT STEWARDSHIP GRI 103: Management Approach 2016 Leadership messages Focusing on what matters Sustainable Development Goals 103-1 Stakeholder engagement Future-proofing About our report Leadership messages Sustainable Development Goals Targets and progress 103-2 Governance **Product responsibility** The big questions Downloads Global recognition Targets and progress Stakeholder engagement 103-3 Governance **Product responsibility** The big questions GRI 416: Customer Health and Safety 2016 100% of products are assessed for health and safety improvements.

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SPECIFIC STANDAR	SPECIFIC STANDARD DISCLOSURES			
Disclosure number	Source	Notes	Omissions	
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 FY2019.  3 8 9 16		
MATERIAL ISSUE: PROI	DUCT CONSISTENCY			
GRI 103: Management	Approach 2016			
103-1	Leadership messages Focusing on what matters Sustainable Development Goals Stakeholder engagement Future-proofing About our report			
103-2	Leadership messages Sustainable Development Goals Targets and progress Governance Product quality Downloads			
103-3	Global recognition 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		

SPECIFIC STANDAR	RD DISCLOSURES		
Disclosure number	Source	Notes	Omissions
417-2		There have been no incidents of non-compliance with regulations and voluntary codes concerning product and service information and labeling in FY2019.	
417-3		There have been no incidents of non-compliance with regulations and voluntary codes concerning marketing communications in FY2019.	
MATERIAL ISSUE: GOV	/ERNANCE FRAMEWORK		
GRI 419: Socioeconon	nic Compliance 2016		
419-1		Birla Carbon has not received any significant fines for non-compliance with laws and regulations concerning the provision and use of products and services in FY2019.	
OTHER MATERIAL ISS	GUES		
MATERIAL ISSUE: CUS	TOMER ENGAGEMENT		
GRI 103: Managemen	t Approach 2016		
103-1	Leadership messages Focusing on what matters Sustainable Development Goals Stakeholder engagement Future-proofing About our report		

Targets and progress

Governance Downloads

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See our full report: <u>Sustainability Report 2019</u>

## SPECIFIC STANDARD DISCLOSURES Disclosure number Notes Omissions Source Leadership messages Sustainable Development Goals Targets and progress 103-2 Governance <u>Customer engagement</u> Downloads Targets and progress Stakeholder engagement 103-3 Governance <u>Customer engagement</u> MATERIAL ISSUE: BUSINESS CONTINUITY GRI 103: Management Approach 2016 Leadership messages Focusing on what matters Sustainable Development Goals 103-1 Stakeholder engagement Future-proofing About our report Leadership messages Sustainable Development Goals

#### SPECIFIC STANDARD DISCLOSURES Disclosure number Notes Omissions Source Targets and progress Stakeholder engagement 103-3 Governance MATERIAL ISSUE: GLOBAL PRESENCE GRI 103: Management Approach 2016 Leadership messages Focusing on what matters Sustainable Development Goals 103-1 Stakeholder engagement Future-proofing About our report Leadership messages Sustainable Development Goals Targets and progress 103-2 Governance http://birlacarbon.com/about/#\_global Downloads Global recognition Targets and progress 103-3 Stakeholder engagement Governance http://birlacarbon.com/about/#\_global

### SPECIFIC STANDARD DISCLOSURES

Disclosure number	Source	Notes	Omissions
MATERIAL ISSUE: INNC	OVATION		
GRI 103: Management	Approach 2016		
103-1	Leadership messages Focusing on what matters Sustainable Development Goals Stakeholder engagement Future-proofing About our report		
103-2	Leadership messages Sustainable Development Goals Targets and progress Governance Research and development Downloads		
103-3	Targets and progress Stakeholder engagement Governance Research and development		

### APPENDIX: DATA

## GRI 102-8 Information on employees and other workers

Employee numbers FY2019	South America				Europe and Africa		Total male	Total female	Total				
	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female			
Full-time	213	24	537	20	482	143	373	79	551	75	2,156	341	2,497
Part-time	0	0	0	0	0	0	0	0	1	2	1	2	3
Permanent employees (full-time + part-time)	213	24	537	20	482	143	373	79	552	77	2,157	343	2,500
Temporary	0	0	2	0	0	0	4	0	0	1	6	1	7
Contractors/supervised	12	7	928	46	230	46	2	2	39	4	1,211	105	1,316

## GRI 301-1 Materials used by weight or volume

Raw materials used	Unit	FY2017	FY2018	FY2019
Natural gas	kNm³	125,489	143,612	155,139
Oil feedstock	tonnes	2,451,843	2,581,289	2,684,441

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

### APPENDIX: DATA

## GRI 302-1 Energy consumption within the organization

Energy consumption intensity	Unit	FY2017	FY2018	FY2019
Oil (non-production)	GJ/t <sub>carbon black</sub>	0.09	0.09	0.08
Natural gas (non-production)	GJ/t <sub>carbon black</sub>	0.65	0.58	0.66
Electricity consumption	GJ/t <sub>carbon</sub> black	1.65	1.69	1.68
Steam consumption	GJ/t <sub>carbon black</sub>	5.06	4.94	4.99
Tail gas consumption	GJ/t <sub>carbon black</sub>	4.63	4.59	4.62
Compressed air consumption	GJ/t <sub>carbon black</sub>	0.01	0.01	0.01
Hot water consumption	GJ/t <sub>carbon</sub> black	0.02	0.01	0.01
Electricity sold	GJ/t <sub>carbon</sub> black	1.17	1.27	1.27
Tail gas sold	GJ/t <sub>carbon</sub> black	2.10	2.14	2.04
Steam sold	GJ/t <sub>carbon</sub> black	3.03	3.07	3.05
Hot water sold	GJ/t <sub>carbon black</sub>	0.00	0.00	3.05
Net energy use	GJ/t <sub>carbon black</sub>		5.43	5.68
Total energy consumption	GJ/t <sub>carbon black</sub>	12.11	11.91	12.03
	<del></del>			

#### 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.

#### APPENDIX: DATA

### GRI 302-2 Energy consumption outside the organization

Energy consumption intensity	Unit	FY2017	FY2018	FY2019
Upstream: Extraction, transport, refining and distribution of raw materials	GJ/t <sub>carbon black</sub>	15.10	Not available	Not available
Downstream: Transportation and distribution of products	GJ/t <sub>carbon</sub> black	1.50	Not available	Not available

**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 Gas, Regulated Emissions and Energy Use Transportation (GREET) Model (2013).

#### LIFE CYCLE ASSESSMENTS

#### 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

## APPENDIX: DATA

### LIFE CYCLE ASSESSMENTS continued

#### Results

			_
Impact	Unit	Birla Carbon FY2017 Global	Ecoinvent database for carbon black <sup>1</sup>
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 <sub>2</sub> H <sub>4</sub> eq	0.91	6.09
Acidification	mole H+ eq	1.59	13.2
Terrestrial eutrophication	mole N eq	1.99	15.8
Freshwater eutrophication	Peq	-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

<sup>&</sup>lt;sup>1</sup> http://www.ecoinvent.org/database/database.html

#### APPENDIX: DATA

#### GRI 303-3 Water withdrawal

Water withdrawal by source from all areas	Unit	FY2017	FY2018	FY2019
Fresh surface water	megaliters	7,329	7,546	7,518
Groundwater	megaliters	4,956	5,068	5,070
Seawater/brackish water	megaliters	0	0	0
Produced/process water	megaliters	3,652	3,813	3,328
Third party	megaliters	3,633	4,407	4,973

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

Water withdrawal by source from water-stressed areas	Unit	FY2017	FY2018	FY2019
Fresh surface water	megaliters	1,635	1,606	1,820
Groundwater	megaliters	998	1,030	994
Seawater/brackish water	megaliters	0	0	0
Produced/process water	megaliters	1,643	1,492	1,216
Third party	megaliters	1,935	2,195	2,165

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

Water withdrawal by water quality	Unit	FY2017	FY2018	FY2019
Freshwater (<1,000 mg/L TDS)	megaliters	15,919	17,021	17,562
Other water (>1,000 mg/L TDS)	megaliters	0	0	0

### APPENDIX: DATA

## GRI 303-4 Water discharge

Water discharge by destination for all areas	Unit	FY2017	FY2018	FY2019
Fresh surface water	megaliters	2,845	2,808	1,833
Groundwater	megaliters	0	0	0
Seawater/brackish water	megaliters	0	0	0
Third party	megaliters	329	345	415

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

Water discharge by quality for all areas	Unit	FY2017	FY2018	FY2019
Freshwater (<1,000 mg/L TDS)	megaliters	2,845	2,808	1,833
Other water (>1,000 mg/L TDS)	megaliters	0	0	0
Water discharge by quality for water-stressed areas	Unit	FY2017	FY2018	FY2019
Freshwater (<1,000 mg/L TDS)	megaliters	514	413	496

#### APPENDIX: DATA

#### GRI 305-1 Direct (Scope 1) GHG emissions

Direct (Scope 1) GHG emissions	Unit	FY2017	FY2018	FY2019
a. Direct GHG Emissions (Scope 1)	t <sub>CO2</sub> -eq	3,307,831	3,624,311	3,698,216

#### Notes:

- b. Only CO<sub>2</sub> gas is included in the calculation as emissions of other gases are considered negligible in comparison.
- c. No biogenic CO<sub>2</sub> emissions.
- d. 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 CO<sub>2</sub>eq.
- e. Emission factors for all facilities are sourced from 2006 IPCC Guidelines for National Greenhouse Gas Inventories, Default Emission Factors for Stationary Combustion in Manufacturing Industries and Construction.
- f. Consolidation approach for emissions is based on operational control.
- q. Process Scope 1 emissions are calculated using a mass balance methodology. Stationary combustion emissions are calculated through Enablon.

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

Direct (Scope 1) GHG emissions	Unit	FY2017	FY2018	FY2019
a. Indirect GHG Emissions (Scope 2)	t <sub>CO2</sub> -eq	106,297	84,355	97,094

#### Notes:

- b. Market-based energy indirect GHG emissions not applicable.
- c. Only CO<sub>2</sub> gas is included in the calculation as emissions of other gases are considered negligible in comparison.
- d. Base year emissions not applicable for absolute Scope 2 emissions.
- e. Emission factors for purchased electricity are sourced from IEA. Emission factors for purchased steam, compressed air and hot water are sourced from ELCD based on fuel types as shown on the next page.
- f. Consolidation approach for emissions is based on operational control.
- q. Scope 2 emissions are calculated through Enablon.

#### APPENDIX: DATA

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

Other indirect GHG emissions (Scope 3)	Unit	FY2017	FY2018	FY2019
a. Gross other indirect Scope 3 GHG emissions	t <sub>CO<sub>2</sub>-eq</sub>	1,184,211	Not available	Not available

#### Notes:

- b. Only CO<sub>2</sub> gas is included in the calculation as emissions of other gases are considered negligible in comparison.
- c. No biogenic CO<sub>2</sub> emissions.
- d. The calculation includes the upstream extraction, transport, refining and distribution of feedstock materials and the downstream distribution to customers.
- e. 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 CO<sub>2</sub>eq.
- f. Emission factors are summarized in the table below.
- g. 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 impact assessment method used to quantify the global warming potential (GWP) impact was IPCC 2007 GWP 100a V1.02.

EF for fuel combustion from European Life Cycle Database (ELCD)	LCA EF	
Туре	(tCO <sub>2</sub> -eq/MWhe)	(tCO <sub>2</sub> -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

### APPENDIX: DATA

## GRI 306-2 Waste by type and disposal method

Weight of waste by type and disposal method <sup>1</sup>	Unit	FY2017		FY2017 FY2018		18	FY2019	
		Hazardous	Non- hazardous	Hazardous	Non- hazardous	Hazardous	Non- hazardous	
Reuse	tonnes	1	5	17	1,482	0	2,002	
Recycling	tonnes	73	2,246	100	4,401	1	8,959	
Composting	tonnes	0	0	0	0	0	0	
Recovery, including energy recovery	tonnes	0	24	15	21	0	0	
Deep well injection	tonnes	0	0	0	0	0	0	
Landfill	tonnes	116	10,582	1,545	18,757	4,734	10,352	
On-site storage	tonnes	0	0	14	NM	80	NM	
Incineration (mass burn)	tonnes	113	107	91	611	163	488	

#### Note:

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

## GRI 306-4 Transport of hazardous waste

Weight of waste transported, imported, exported or treated waste deemed hazardous	Unit	FY2017	FY2018	FY2019
Hazardous waste transported	tonnes	190	1,645	4,735
Hazardous waste imported	tonnes	0	0	0
Hazardous waste exported	tonnes	0	0	0
Hazardous waste treated	tonnes	113	91	152
Percentage of hazardous waste shipped internationally	%	0	0	0

### APPENDIX: DATA

# GRI 401-1 New employee hires and employee turnover

Employee hires and employee turnover FY2019	Total hires	Hire rate	Total turnover	Turnover rate
Age: under 30 years	24	3%	2	0%
Age: 30–50 years	39	4%	40	5%
Age: over 50 years	4	0%	13	1%
Europe and Africa	8	1%	7	1%
North America	29	3%	15	2%
South Asia	6	1%	7	1%
South East Asia and Far East	21	2%	22	3%
South America	3	0%	4	0%
Female	13	1%	9	1%
Male	54	6%	46	5%

### GRI 401-3 Parental leave

Return to work and retention rates after parental leave FY2019	Female	Male	Total
Employees entitled to parental leave	299	1,064	1,363
Employees that took parental leave	16	37	53
Employees that returned to work	15	36	51
Employees in employment 12 months after returning to work	16	34	50
Return to work rate of those who took parental leave	94%	97%	96%
Retention rate of employees who took parental leave	100%	92%	94%

### APPENDIX: DATA

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

Employee coverage	Number	Percentage
Those covered by an occupational health and safety management system	2,507	100%
Those covered by an OHS management system that has been internally audited	2,507	100%
Those covered by an OHS management system that has been audited or certified by an external party	2,507	100%

Contractor coverage	Number	Percentage
Those covered by an occupational health and safety management system	1,316	100%
Those covered by an OHS management system that has been internally audited	1,316	100%
Those covered by an OHS management system that has been audited or certified by an external party	1,316	100%

Any workers excluded? No

## GRI 403-9 Work-related injuries

Employee coverage	Employees	Workers who are not employees but work is controlled by the organization (contractors)
Number and rate of fatalities as a result of work-related injury	0	0
Number and rate of high consequence work-related injuries (excluding fatalities)	5	6
Number and rate of recordable work-related injuries	8	13
Main types of work-related injuries	Slips, trips and falls	Slips, trips and falls
Number of hours worked	4,850,546	5,713,948

## APPENDIX: DATA

## GRI 403-10 Work-related ill health

Employee coverage	Employees	Workers who are not employees but work is controlled by the organization
Number of fatalities as a result of work-related ill health	0	0
Number and of cases of recordable work-related ill health	0	0
Main types of work-related ill health	0	0

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

Average hours of employee training FY2019	Senior management	Middle management	Junior management	Non- management
Female	14	35	38	39
Male	24	44	51	34