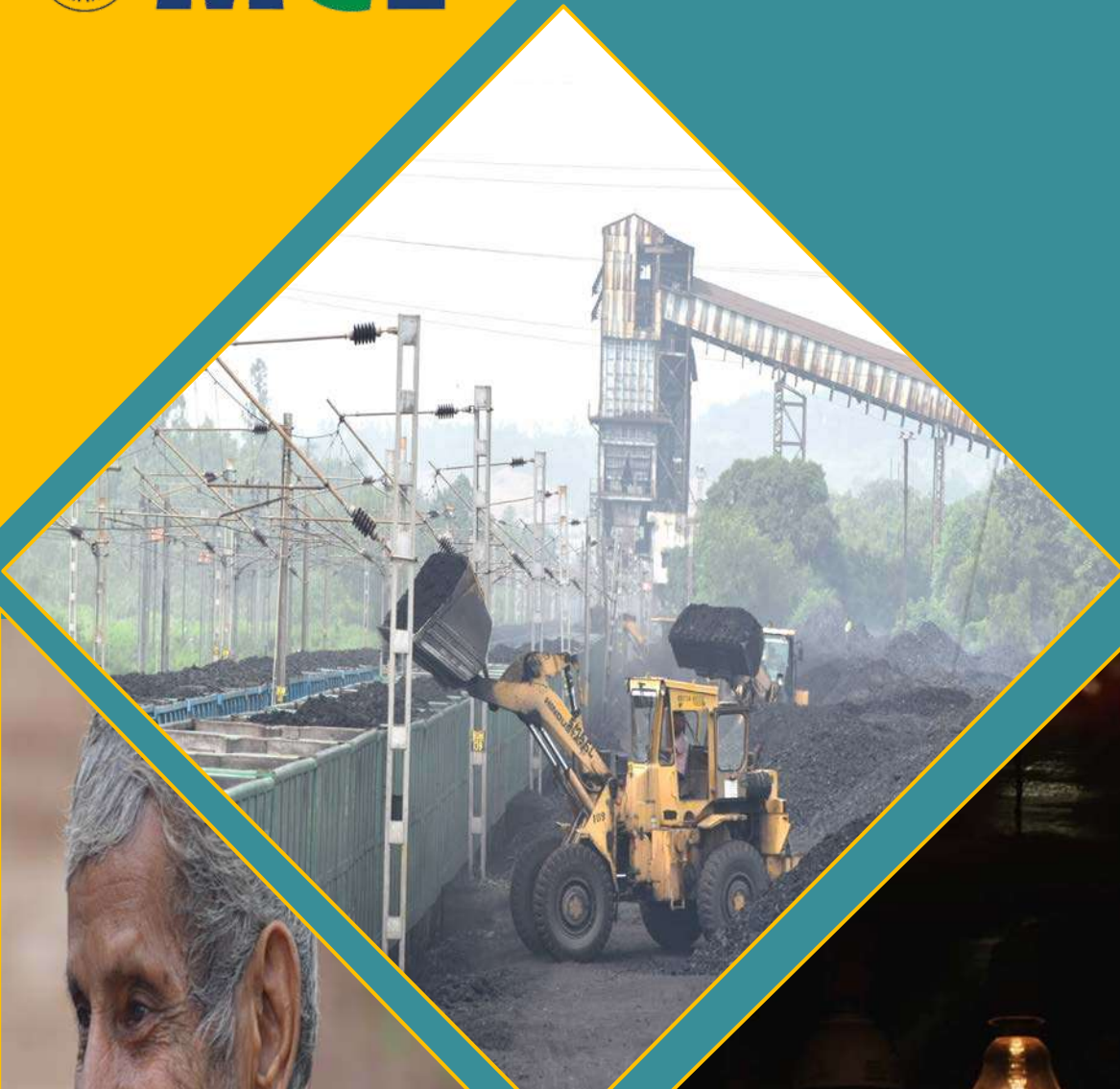




MCL

2017-18

DRIVING THE CHANGE



CSR & SUSTAINABILITY REPORT

GRI- [102-16]



To be one of the leading energy suppliers in the world, through best practices from the mine to market.

To produce & market the planned quantity of coal and coal products efficiently and economically in an eco-friendly manner with due regard to Safety, Conservation and Quality.

2017-18| Inside the cover ^[102-46]

Protecting three pillars of sustainability-Environmental, Social and Economic is our responsibility at Mahanadi Coalfields Limited ^[102-1]. MCL has completed its 27 years of sustainable journey by alleviating the influence of its operations without compromising the ability of future generations to meet their own needs. The 7th annual ^[102-52] Sustainability Report (2017-18) of MCL is presented “in accordance” with core criteria ^[102-54] of latest GRI guidelines including the technical protocols of the Mining and Metals Sector supplement.

In this report of FY 2017-18 ^[102-50], we disclose the sustainability related data of our 21 Mining units, two workshop units, two central hospitals and sales offices, reviewed for completeness and accuracy at the operational level ^[102-56]. We have used the metric system to report data and INR to report currency. The GRI Index on pages 93-97 provides a list of GRI indicators and disclosures (as per the GRI guidelines) and their locations within this report. Some significant changes in terms of acquisition and physical boundaries from the previous reporting period are addressed with a red identification mark at respective data ^[102-49].

Contact Details: ^[102-53]

For details please visit:
<http://www.mahanadicoal.in>

For queries Email us at
Sustainability.mcl@gmail.com

Cover Images

| Railway Siding, Belpahar OCP
| Harvesting Happiness, Kaniha OCP
| Flowering, Basundhara Colony
| Lighting up the darkness



Dear Stakeholders,

Mahanadi Coalfields Limited was founded in 1992 as a subsidiary of CIL. In the 27 years since then, MCL at the service of the nation's energy sector by ensuring greater respect for the environment and a more effective fight against climate change. I'm so privileged to be a part of this 7th Annual Sustainability Report of MCL for the FY 2017-18 in line with the Global Reporting Initiative (GRI) Standards. We keep our stakeholders updated regarding our promise for sustainability.

“Driving the change” is our main energy directive for sustainability rise in value of our products, environmental protection and people's lives. We always strive to invest in eco-friendly mining operations. With all the efforts of MCL employees we achieved 143.02 Mt of coal production, registering a growth of 2.76% against the last year with earning a pre-tax profit of Rs.7339.66 Crores.

Our responsibility for environmental protection is always dynamic with restoration of mined-out areas through effective water and overburden management, biodiversity, afforestation and eco-friendly mine closure. Slowly but steadily, MCL is also entering in to the domain of renewable energy. We already have 2MW solar plant at Headquarter campus. In addition to this installing of solar rooftops over our service buildings, workshops and hospitals at Coalfields are under process. During FY 2017-18, 2.71 lakh saplings have been planted at both the Coalfields, Govt. Land and HQ. We estimate a carbon foot print reduction 1,17,860 Te of CO₂ at the rate of 20 kg per tree per year, due to our green cover. We manage our valuable water resources very efficiently. During this reporting year, our mine water utilisation has been increased by 10.8% and surface water withdrawal has been decreased by 6.99% with respect to previous financial year.

Our CSR activities like environmental sustainability, and activities designed to improve community health, drinking water facilities, sustainable livelihood, sanitation etc. build up positive relationship with our internal and external stakeholders. Some initiatives are actively associated with clean Indian initiatives like “Swachh Bharat Abhiyan-Swachh Vidyalaya Abhiyaan” and women empowerment. Health and safety insurance for our employees including contractor workers in mining continues to improve, but much remains to be done. Adequate infrastructure facilities and other benefits for employees are in place to establish quality of living standards in remote places. In addition, a preventive vigilance mechanism is in place to ensure transparency in our business dealings.

The relentless efforts of stakeholders are recognized and appreciated for our essential way to do the business-Sustainable development.

Sd
R.R.Mishra
(Chairman cum Managing Director)

Message from Director (Tech./Operations)

It is a matter of great pleasure to present you the annual sustainability report for the FY 2017-18. Our vision is to be leading mining company that contributes to the development of business and society through excellence in entrepreneurial talent, technological challenges and customer satisfaction.



Our productivity growth is based on two important factors: systematic improvements in working culture and use of technology in all sphere of mining. Our new capacity projects require large investments and implementation of statutory compliances which takes a considerable time to build and become operational. During this FY 2017-18, our overall system capacity utilisation of UG & OC Mines is 85.4%. Our production during this FY 2017-18 has increased by 2.69% with respect to previous year with Output per Man Shift (OMS) of 24.22 Tonne/Man shift.

With introduction of environment friendly technology-surface miner in most of our OCP' use of CHP got reduced by 8.76% with respect to previous reporting year. To achieve the stakeholder satisfaction, we always strive to maintain the quality (grade) of the product and majorly reach them through rail mode. Our Off-take during 2017-18 was 138.267 MTe. against the target of 150 MTe with gross sales of 22379.91 crore. Our coal analysis results are available on daily basis on our "Quality Portal" since March 2017. We also paved for sustainable energy –built 2MW solar power plant in our Anand Vihar premises which helped us to reduce in our carbon footprint by 18,59,112 kg of CO₂ during this FY 2017-18.

We are one of the CIL's subsidiary, registered for an Integrated Management System conforming to Quality Management (ISO 9001:2015), Environmental Management (ISO 14001:2015) and Occupational Health & Safety Management (OHSAS 18001:2007), to ensure our mining activities to withhold the legal parameters by compiling with environmental norms and standards for long term success.

I thank to all our stakeholders supporting for sustainable goals of MCL.

Sd/-
J.P.Singh
(Director(T/Operation))

Message from Director (Personnel):

Through this report, I take this opportunity to thank our valued internal and external stakeholders whose hard work contributed towards the sustainability goals of MCL for the financial year 2017-18 in an inclusive and sustainable manner.

The rights of people are recognised and made part of the decision making to make MCL a socially sustainable business corporate. We not only give importance to the emerging new projects of our company but also, we provide the best compensation and R&R packages. To our employees, we provide the best amenities, medical facilities, welfare and development programs and conducive and healthy working atmosphere. During this FY-2017-18, Rehabilitation and Resettlement benefits have been provided to 786 numbers of Project affected people. In lieu of plots & Cash Compensation have been provided to 77 numbers of project affected people. The Institute of Natural Resources & Energy Management, a new state of the art training institute is being constructed to groom and nurture the future leaders and also to enhance the skills of the existing employees of the MCL. During the financial year 2017-18, 9142 employees both executives and non-executives were trained at different renowned organisations in India and abroad compared to 8183 employees last year. As per the performance review statistics 100% executives of the company are receiving regular performance appraisals.

We believe in words of Mahatma Gandhi “The best way to find yourself is to lose yourself in the service of others”. As being socially responsible and trying to reach the people at every corner of the society we undertake CSR initiatives. The company has spent Rs. 267 crores against the 2% law-budget of Rs. 123 crores in the FY 2017-18.

This report reflects our efforts to conduct sustainable business operations by demonstrating a strong leadership ability to meet stakeholders’ expectations. Sustainability means conducting business operations in a responsible and accountable manner which MCL has always tried to keep up. I wish all the best to everyone involved in the progress of the company with working towards economic growth as well as creating a positive social and environmental impact.



Sd/-
L.N. Mishra
Director (Personnel)

Message from CVO

The Vigilance Department at Mahanadi Coalfields Limited is a positive addendum to the whole structure of this organization. In the comity of our working pattern, the vigilance department is a pro-active partner in the progress story of the coal sector. As an extended hand of the Central Vigilance Commission, the role of Vigilance Department is to keep an oversight as also being a watchdog so that the procedures and systems, the rules & regulations, the norms and the due process are followed and if needed be, are modified in the best interest of the organization and the nation at large. In this process, the vigilance has donned the role and robe of a preventive advisor and guide to the executive, in the higher management as well as at the cutting edge level of mine management. Technology has been leveraged in a big way to bring about transparency and accountability of working with vigilance being a back seat driver and a propeller for introducing IT initiatives in the field where the actual core activity is conducted. All the 16 open cast projects have been virtually geo-fenced, more than 3000 coal tippers and 1562 other Heavy Earth Movers are under the constant GPS based tracking round the clock in the control rooms in the field areas as well as the Central Corporate Office. The coal carrying vehicles are all RFID tagged which are being identified through RFID readers installed across the mine areas. The weighment is done through 161 automated electronic weighbridges – both for Road and Rail despatch and the weighment are relayed on real time basis to all the control rooms. For better surveillance, a total of 719 CCTV cameras have been installed. For measurement of coal & overburden, we have discarded old generation gadgets and we are now equipped with the state of the art 3 Dimensional Terrestrial Laser Scanners (3D TLS). All the land records in our organization have been digitized. We have a WAN based Coalnet consisting of Personnel, Sales, Financial, Production, Pay Roll, Equipment, Material Management information system. We have also taken the endeavor, in the interest of transparency in working by adopting e-office through digitized office work and e-movement of files, leaving an audit trail of events. All the assets of this PSU including their life expectancy, inventory management, transfer & tracking, repairs & survey off are now in the easily accessible electronic format in the asset management portal. We are also on the path for complete Aadhar Based Biometric Attendance System. The Vigilance Department has been assisting the management by way of studying the weaknesses and loopholes in the existing system and the suggestions for bringing about improvements and changes for an accountable system of administration and execution are proposed in the form of well worked out advisories, 18 such advisories have been issued in the current year.

We have administered CVC's Integrity Pledge for nearly 1.2 lakh persons, raised awareness in 43 Gram Sabhas so far, established integrity club at 16 locations, covered 64 offices, 9 residential areas, 134 Schools & Colleges. We have conducted and attended 40 training sessions in the year under consideration. Special Training Programmes in ethics were conducted in which 307 persons participated. Recently, we have extended our outreach activities to 7,000 tribal children at Kalinga Institute of Social Sciences, Bhubaneswar, 6,400 students of NIT, Rourkela and have been able to reach out to nearly 1.2 lakh Citizens in Odisha State.



Sd/-

Munawar Khursheed , IRPF
Chief Vigilance Officer

Message from Director (Technical/P&P)

It's a great pride to be a part of sustainable business of MCL. Sustainable business practices is our motto leading to better corporate culture, more reliable products and greater long term profitability.

MCL marked its presence in green initiatives through renewable energy sources, eco-friendly surface miner and despatching of coal by transporting through eco-friendly rail and conveyor mode. MCL is always concerned with developing processes that will lead to businesses becoming completely sustainable in the future. During FY 2017-18, the utilization of mine water has been increased by 10.8% with respect to previous year. About 7843.308 Million litres/yr of water is made available for ground recharge, the drawl of surface water has been decreased by 6.99% with respect to previous year. During this year, 2.71 lakh saplings have been planted at our premises and Govt. land. The area under land reclamation has increased from 33.85 Km² to 34.95 Km² against the previous year. Environmental Clearance of 5 expansion projects and for one new project with Forest Clearance of 2 projects have been obtained during this FY 2017-18.



Several infrastructural facilities like coal corridor roads in both the coalfields, and MT hostels and quarters for welfare of employees have been constructed.

MCL believes that, there is no more elegant or efficient designer than nature. Technical aspects such as mine closure planning, pit slopes management, hydrology and hydro-geology closure of entries, reclamation of degraded land by backfilling and plantation etc., are continued as our mission.

We at MCL, strive to create opportunities and plan to work in sustainable way to give best to our stakeholders.

Sd/-

Om Prakash Singh
Director(Technical/P&P)

Message from Director Finance:



I am immensely pleased to know about this great initiative of bringing out the sustainability report of MCL for the year 2017-18.

MCL, which is one of the largest producer of coal in the country sharing burden of energy security, through this report, intends to inform all the stakeholders about its economic, environmental and governance performances.

Our sincere effort is to internalise and improve MCL's commitment to sustainable development in such a way that it is demonstrable for both internal and external stakeholders. As a responsible committed corporate citizen, profit making is not the only motive for the company but it wants to satisfy the stakeholders with due regard to environment and social responsibility.

The management is fully committed to embark upon all the initiatives to fulfil these objectives as responsible.

Just as the financial statements of all the company gives all the stakeholders the sterling performance of the company in economic terms, the sustainability report shall inform all the stakeholders of MCL's commitment to environment and society.

Conveying best wishes to everyone involved in such great success.

Sd/-
K.R.Vasudevan
Director(Finance)

Message from General Manager (Environment & Forest)



I would like to start with saying “Success is walking from failure to failure with no loss of enthusiasm”. We at MCL, make a number of sincere efforts to meet the environmental challenges associated with mining activities. All our efforts with success or shortcomings are incorporated in MCL’s seventh sustainability report prepared by latest GRI guidelines “in accordance” with core criteria.

We at MCL always link environmental responsibilities with our main mining activities. We have committed ourselves in suppressing dust through mobile water tankers both departmental and contractual, fixed sprinklers at railway sidings, haul roads, CT roads and coal stocks, instant shower systems at CHPs and CT roads. A total of 10 fog cannons (Fixed and truck mounted) proposals are under process.

After reaping coal from mother earth, we in return try to plant greenery for sustainable living atmosphere. During this FY 2017-18, 2.71 lakh saplings were planted in both our coalfields and Govt. lands. We take utmost care in preserving the top soil and use it later during reclamation activities. Land reclamation progress of OCPs is monitored regularly by our sister company CMPDI-RIVII. With our green cover, we reduced emissions of 1,17,860 Te of CO₂ at the rate of 20 kg per tree per year. We also trying to reduce of fuel usage in our heavy machineries, departmental vehicles etc., and electricity demand for reduction of Carbon emissions. During this FY 2017-18, we have replaced 7,171 conventional lights with LED lights and coupled up our operations with renewable energy resources.

We also share responsibility for water management at our mine premises. Our progress in developing closed circuit approaches that maximise water conservation and make available for irrigational purposes. During this FY 2017-18, our increased investments towards surface miners proves that our responsibility to environment is never in relaxing mode. Mine sump water resources help to recharge the aquifers. We have established STPs in our colonies and we continue to recycle water from ETPs for vehicle washing. Our solid waste management follows a strict policy of generating less and disposing in safe way. All these efforts help us to achieve EC and FC compliances for projects. We also obtained ECs for 5 expansion projects and one new project and FCs for two projects during this FY 2017-18.

I thank all our stake holders supporting for “**driving the change**” by tackling all responsibilities.

Sd/-

Dr. Abani Kanta Samantaray
General Manager (Environment & Forest)

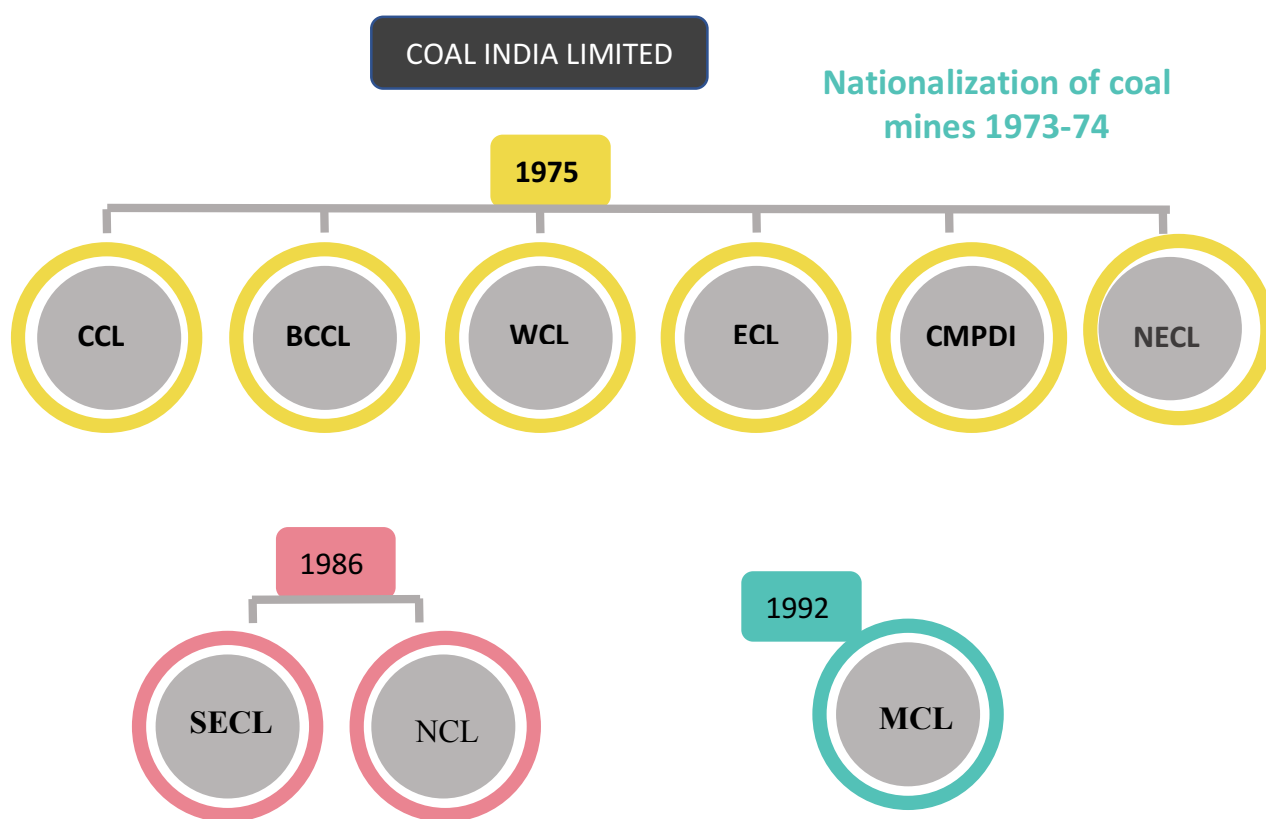
Sustainability report milestones

Our sustainability reporting standards evolved through gradual increase in level of transparency in disclosures to diverse range of stakeholders, local communities, Government, Non-Governmental organizations, investors and others.



Corporate web ^[102-5]

A Maharatna Central Public Enterprise and Govt. of India undertaking, Coal India Limited is our parental company located at Kolkata, West Bengal. Our parent company operates in eight Indian states including Assam, Chhattisgarh, Odisha, Jharkhand, Madhya Pradesh, Maharashtra, Uttar Pradesh, West Bengal and one international unit at Mozambique, South Africa namely Coal India Africana Limitada (CIAL).

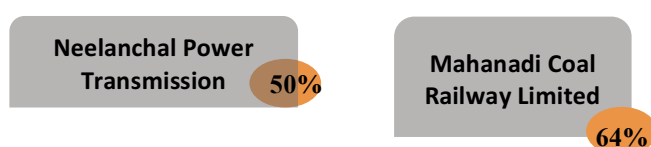


Mahanadi Coalfields Limited has its headquarter at Sambalpur ^[102-3], Western Odisha and operating at Angul district as “Talcher Coalfield” and at Jharsuguda and Sundargarh districts as “IB Valley Coalfield” ^[102-4] with a hold of “Miniratna” Central Public Sector Enterprise mark. We also own three subsidiary companies and two joint ventures.

Subsidiary Companies

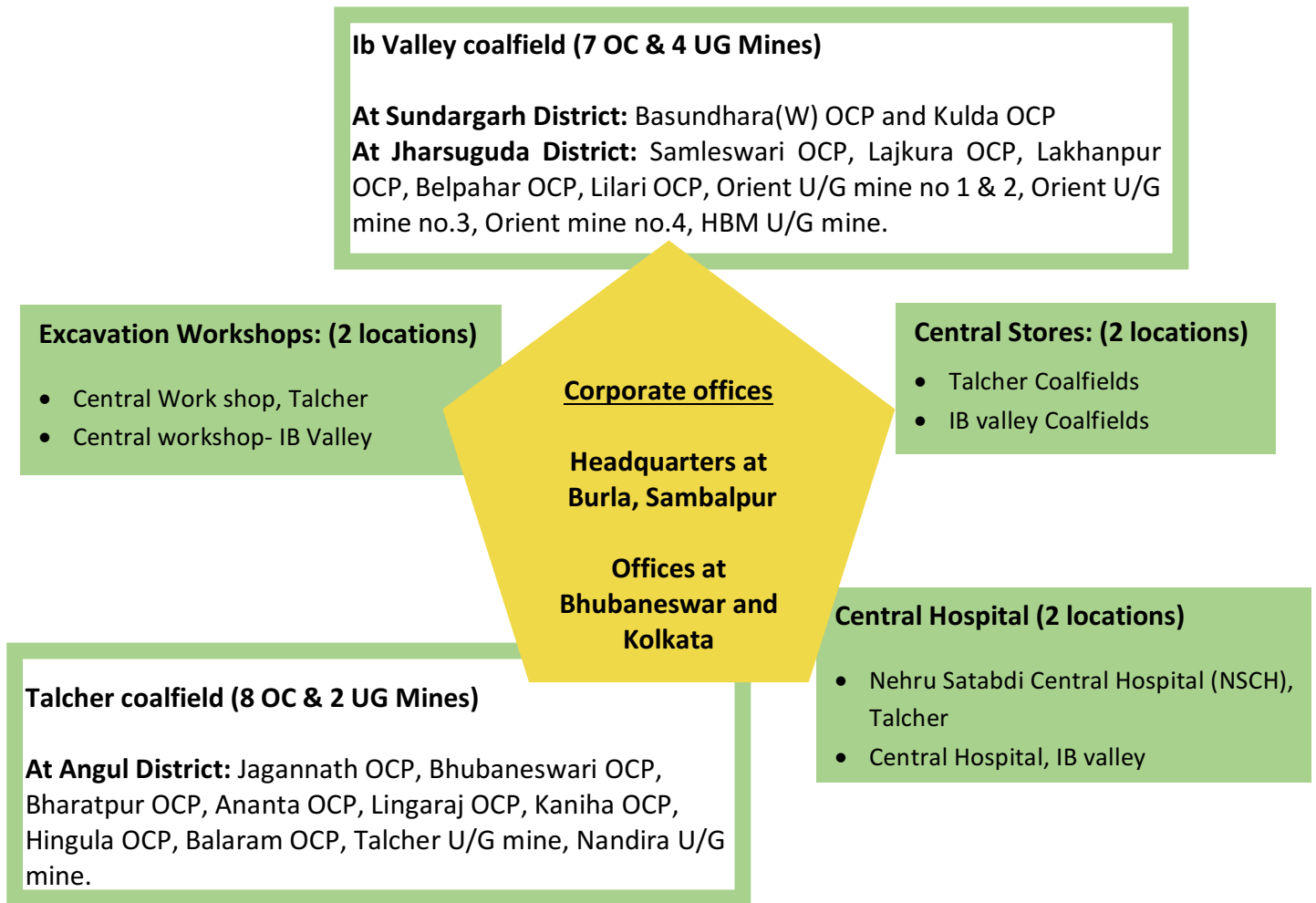
- Mahanadi Basin Power Limited (SPV) 100%
- MJSJ Coal Limited 60%
- MNH Shakti Limited 70%

Joint Ventures

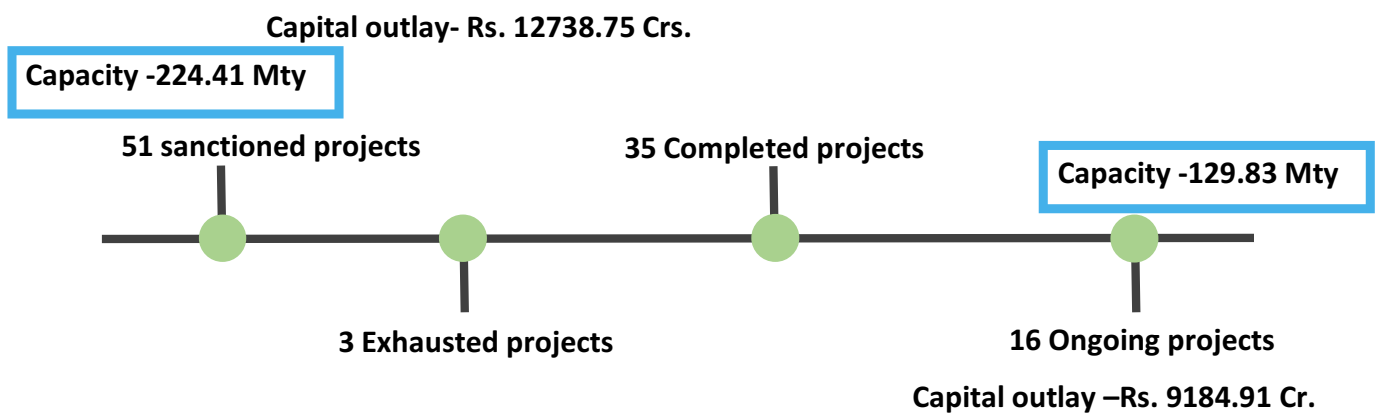


(Neelanchal Power Transmission w.e.f 29.06.2018, it is not in existence)

Functional units ^[102-4]:

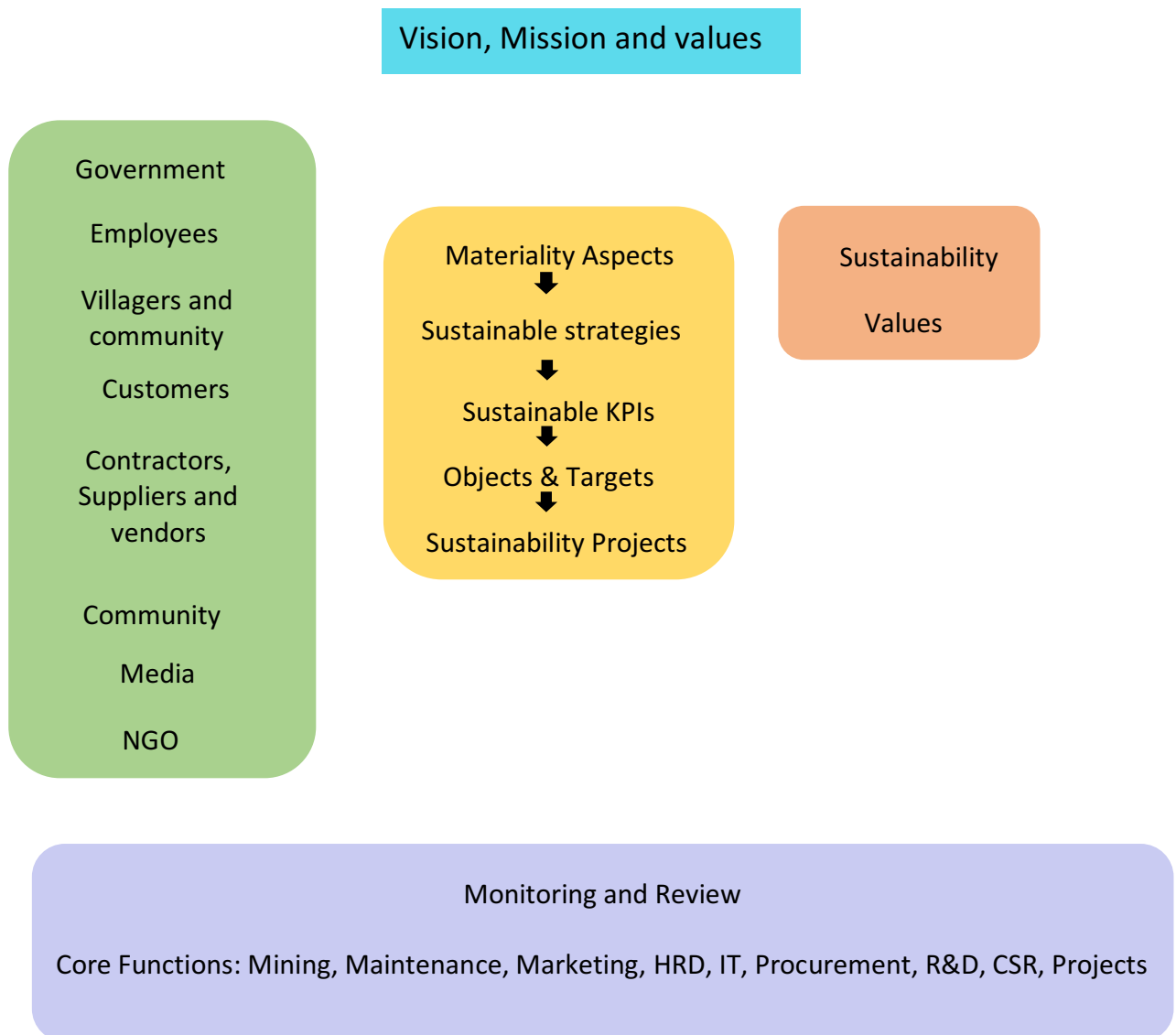


During this FY 2017-18, Coal reserves at Talcher Coalfield and IB valley Coalfield is 16334.368 MT and 15898.460 MT.



Sustainability Balance ^[102-11]:

We follow our parent company's sustainability framework to strengthen our mining as a driver of sustainable development with transparency and culture of integrity, discipline and respect. MCL aligns its activities in line with the United Nations Sustainable Development Goals (SDGs) of 2015. At MCL, we believe "Finding the center of strength within ourselves is in the long run the best contribution we can make to others".



Our services line ^[102-2]

We diversified our services in to power generation, sustainable energy and coal logistics for enhancing the availability of coal and power to the consumer industries along with the main occupation of coal mining.

Power Generation:

We are building up our coal-based thermal power plant of 1,600 (2X800) MW capacity using super-critical technology at Basundhara area, Sundargarh through our subsidiary Mahanadi Basin Power Limited (MBPL) established in 2008. After receipt of firm Coal Linkage & Water allocation, the project will be enlisted by MoEF (as requested by MBPL on 08.10.17) for hearing in forthcoming EAC meeting for consideration for grant of EC. Coal allocation has been granted by CIL as per the recommendation of Standing Linkage Committee (SLC) during CLOA meeting held on 25.08.17. NOC for chimney height has been obtained from Air Authority of India (Dt.30.05.16) and Ministry of Defence (Dt.12.06.17). The proposal for adoption of joint venture mode with NTPC & restructuring of equity capital in MBPL is likely to be put up to the next ESC of our parent company.

Sustainable Energy:

We at MCL, never forget the wealth of Renewable energy resources. During FY 2014-15, we have built our 2MW Photovoltaic Solar Power plant (Captive power plant) at Anand Vihar campus at HQ. A total of 20,65,680 kWh energy was generated during the FY 2017-18.

Coal logistics:

Mahanadi Coal Railway Limited one of our subsidiaries based on an equity participation between MCL, IRCON and IDCO in the ratio of 64:26:10 has dedicated its business in coal logistics for evacuation of coal. Its coal corridor line from Angul-Balaram-Putagadia– Tentuloi-Jarapada is under development process with total expenditure of about Rs. 1,700 Cr. IRCON processed the tendering for civil works and other miscellaneous works and it may be finalized by May 2018. Major non-mining project – JSG sardega railway line of 53.1 km was completed during 2017-18 with a budget of 2500 Cr.

Governance Structure ^[102-18]

Our corporate system is bound together with five core pillars of governance- **Independence, Accountability, Fairness, Transparency and Leadership** to balance the interests of the company as well as the stakeholders. We at MCL facilitate effective, entrepreneurial, prudent management which helps in delivering long term success of business activities. Our conditions of Corporate Governance are as stipulated in Department of Public Enterprise (DPE), Government of India Guidelines.

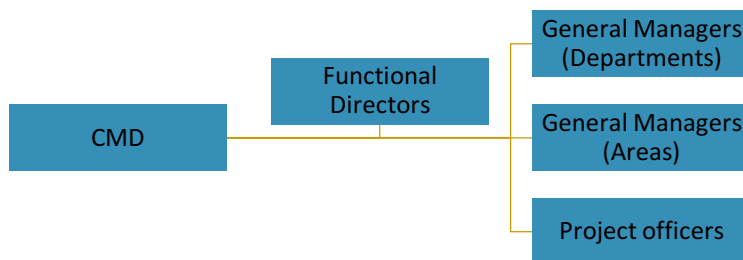
In adherence to the principle of optimum combination of functional, nominated and independent directors on the Board, the Board of Directors of MCL is comprised of 10 (Ten) Directors as on 31.03.2018. "Code of Business Conduct and Ethics"-statutory document adopted by our Board of Directors and our senior management personnel in 2008.



Our corporate structure is in accordance with our parent company and headed by Chairman-cum-Managing Director, an Executive Officer ^[102-23]. Our Functional directors including CMD are appointed by the Hon'ble President of India ^[102-24]. We have Chief Vigilance Officer (CVO) who works closely with MCL. The Performance of highest governing bodies with respect to size and operation of Sustainability concerns is evaluated by Chairman of Coal India and Ministry of Coal on yearly basis ^[102-28]. Besides; Chief Operations Manager, East Coast Railway, Bhubaneswar is also appointed as a Permanent Invitee to the Board. The Functional Directors, by virtue of their possessing the requisite expertise and experience in their respective functional areas, are aware of the business model of the Company as well as the risk profile of the Company's business. The Part-time Directors are fully aware of the Company's business model. However, having aimed at better familiarity with Corporate Governance practices, the Independent Directors are nominated for undergoing training programmes organised by Top Institutions. A suitable Training Policy for Directors in line with DPE Guidelines on Corporate Governance is also in place ^[102-27].

With responsibility for ESG principles, MCL appoints executive-level positions ^[102-20] and process of delegating authority in setting up purpose, value and strategy which is as below:

Process of delegating authority ^{[102-19] [102-26]}:



Executive Employees of all the Departments report to their respective General Managers/HODs at Corporate Office. At Area level, they report to concerned senior executives of their respective department and then senior executives report to the Area General Managers. In the same manner, it is followed at Project Offices.

Committees of the Board ^{[102-22][102-25] [102-29][102-33]}:

MCL believes that a well comprised Committees with proper autonomy and defined scope of work can be an efficient machinery for smooth conduct of business. The Committees meet at regular intervals and address the issues to high governance as early as possible. Meetings of the Committees are also very structured with proper agenda and action taken reports put in place timely. The following are the committees of our company and their scope.

Audit Committee

Reviews the financial statements, internal control system, Govt. Audit and statutory Auditor's report, operational performance, capital structure. During this financial year the committee met eleven times.

Technical Sub-Committee

Evaluation, appraisal and recommendation of projects for approval of MCL Board. During this FY 17-18, this committee met three times.

CSR and Sustainable Development Sub-committee

The scope of work and authority vested with the reconstituted Committee shall be as per Section 135 of the Companies Act, 2013, as per provisions of DPE guidelines and as decided by the MCL Board from time to time. Four times meeting was held during this reporting year.

Sub-Committee for Land oustees

The scope of the Committee will be as per the policy of CIL & provisions of the Companies Act, 2013. No meeting was held during this financial year.

Nomination and Remuneration Committee

The scope of work and authority vested with the Committee shall be as per Section 178 of the Companies Act, 2013 subject to the exemption granted to Govt. Company as per notification in the Official Gazette. One Meeting was held during this financial year.

Risk Management committee

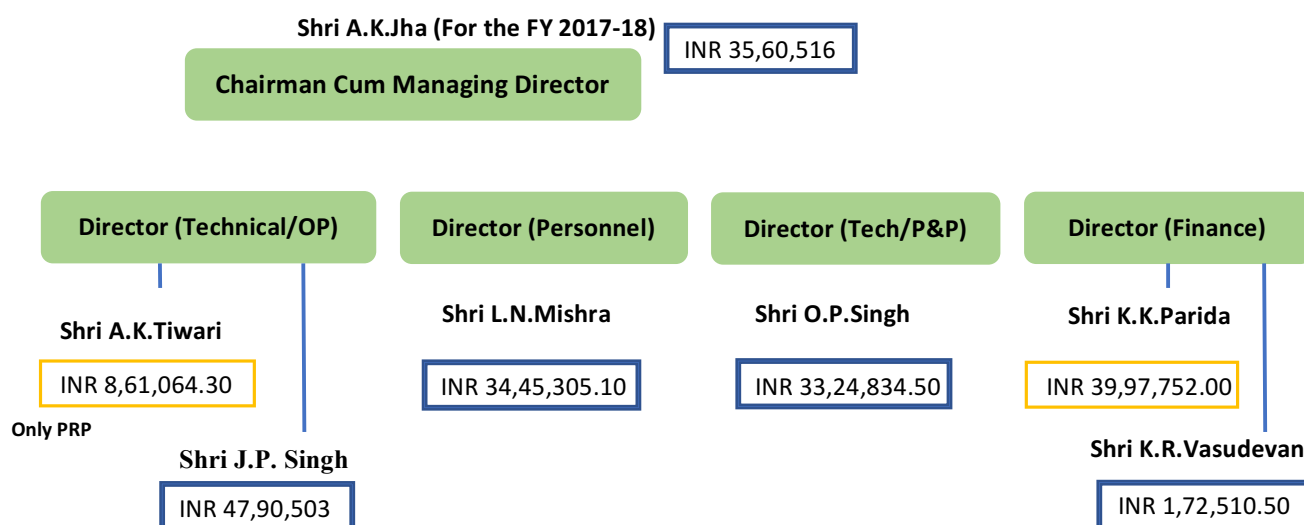
To consider and approve all the cases of employment, cash compensation etc. as per existing norms of R&R Policy being followed by the Company. During this Reporting year eleven times meeting was

^[102-32] The Sustainability Report, including the materiality analysis, is the responsibility of the Chairman of the Board of Directors and is submitted for approval to the Board of Directors. The CSR and Sustainable Development Sub-committee ensures consistency of actions carried out with the principles of the Group's Code of Ethics and with the values adopted by MCL. We ensure to avoid the conflicts with our stakeholders by tracking the bill payments on real time basis (through coal net server) and SMS alerts are being sent to customers regarding details of Road Delivery Order, RDO wise daily dispatches, refund against RDOs etc.,

Employee remuneration and policies [\[102-35\]](#) [\[102-36\]](#) [\[102-37\]](#):

We believe in the sayings of Fayol “each employee must get fair remuneration so that the employee as well as the owner gets the same amount of satisfaction”. The remuneration provided is always in equality with the work done of respective employee so that they can perform better.

As a Govt. of India undertaking, our remuneration is decided by Ministry of Coal. Our Board of Directors and Remuneration Committee does not have any role in deciding the remuneration. During FY 2017-18, the following are the remunerations (salary, performance linked incentive scheme, PF contribution, pension etc.,) of our Functional Directors.



Remuneration is not provided to the Official Part-Time Directors and only sitting fee is provided to Non-official Part Time Directors for attending Board/Committee meetings. In addition to these followings are the remuneration provided to auditors during FY 17-18 which includes reimbursement/payment of travelling expenses on actual basis and applicable GST payable thereon.

Type of Audit	Remuneration (Rs.)
Statutory Audit for the year	40,43,252
Audit for consolidation	97,350
Compliance with conditions of corporate governance	37,400

Ratio of the Total Annual Compensation for the organization [\[102-38\]](#) [\[102-39\]](#)

Year	Median (Excluding Highest paid)		Highest paid		Total Annual Compensation ratio	
	Basic	Gross	Basic	Gross	Basic	Gross
2016-17	272084.01	586840.93	929400	2982495.93	3.41	5.08
2017-18	364980	687621.36	947880	3259403.61	2.59	4.74

Capital structure and Productivity- 2017-18^[102-7]:

Our company has achieved highest ever 143.06 Million Tonnes (MTe.) of coal production during this reporting period with a growth of 2.77% against previous year. Off take of coal during this year was 138.26 MTe. MCL's Gross sales were- INR 22379.91Cr with a decline of 4.54% against previous year. Total realization during 2017-18 was INR 22906.88Cr which works out to be 102.35% on current year's gross sales.

As on 31.03.18

Share capital

INR 980 Cr

Profit After Tax

INR 4761.29 Cr

Equity share capital

INR 706.13 Cr

Profit Before Tax

INR 7339.66 Cr

Profit before tax and Profit after tax achieved in this reporting year are 6.32% and 5.21% more than previous year respectively. Beside all these, we are continuous contributor to the central and state Exchequer. During this reporting year, we contributed INR 8983.49 Cr. The economic performance of our

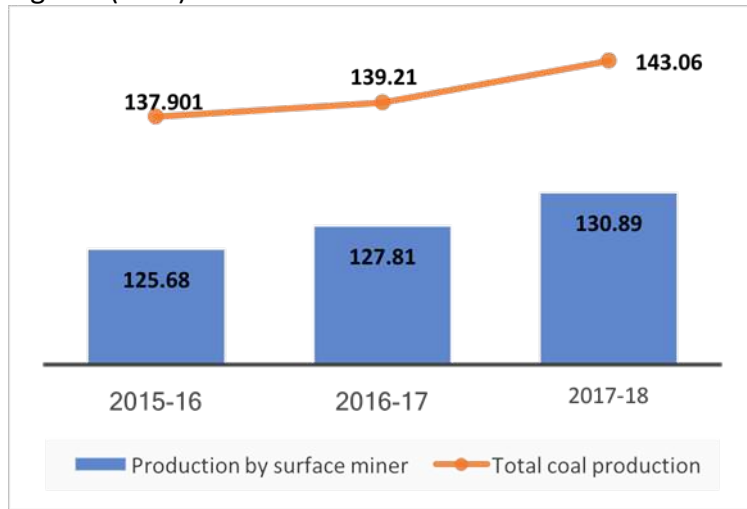
company for last three years is depicted in the graph. The Company has given loan to NLCIL of INR 1000 Cr. during the year 2017-18 @ 7% per annum for meeting the general funding requirements. The amount due to M/s Liebherr France SA, France as on 31.03.2018 stands at INR 7.09 Cr. for supply of four Hydraulic Shovels on deferred credit.



Most of our coal production was cropped out from our opencast mines (OC). Our coal production ensures blast free technology with minimal environmental impact. With our mining excellence from past 27 years there is increase in coal production through surface miners by cutting down the conventional methods like drilling, blasting, crushing which is time consuming, labour intensive. The total coal production (UG & OC) and by surface miner as whole from last three years are depicted in the figures below.

For improvement in productivity we have developed different schemes. Productivity

Figures (MTe)



Improvement Scheme (PIS) was formulated and approved in 2009-10 with the basis of productivity values. This scheme helped us in improving the daily departmental production trips, and maintaining availability and utilization of HEMM. The program also aimed to reduce overtime, in creating a productive environment and encouraging healthy competition amongst the operators and

maintenance personnel. We have File Tracking System, a software developed in Coal-net for tracking the movement of important files across various departments and locations of MCL. With this, our work progress has been enhanced. Till 31st March, 2018 around 50338 files have been processed through this module. We have GPS based vehicle tracking system installed in 1800 of private trucks/tippers engaged in production and internal transportation of coal. This helps in live tracking related to violation of geo-fences, trip, long stoppages, distance traveled etc., which is available in our web link i.e. <http://.mcltvs.in>. Video surveillance cameras are installed in 22 no. of railway sidings and IP cameras installed at 94 in-motion and static road weigh bridges for surveillance.



Surface miner operation at Bharatpur OCP



Permanent Employees: Category-wise and Gender-wise

Employee Category	2017-18			2016-17			2015-16		
	M	F	Total	M	F	Total	M	F	Total
Executives	1781	92	1873	1743	85	1828	1774	87	1861
Non-executives (Technical)	3519	218	4109	3088	239	3327	2984	242	3226
Non-executives (non-technical)	15183	1628	16439	15421	1460	16881	15909	1401	17310
Total	20483	1938	22421	20252	1784	22036	20667	1730	22397

Permanent Employees: Region-wise and Gender-wise

Region	2017-18			2016-17			2015-16		
	M	F	Total	M	F	Total	M	F	Total
Ib Valley Coalfield	7763	577	8340	8043	546	8589	8495	524	9019
Talcher Coalfield	11945	1267	13212	11436	1151	12587	11418	1123	12541
Corporate	775	94	873	773	87	860	754	83	837
Total	20483	1938	22421	20252	1784	22036	20667	1730	22397

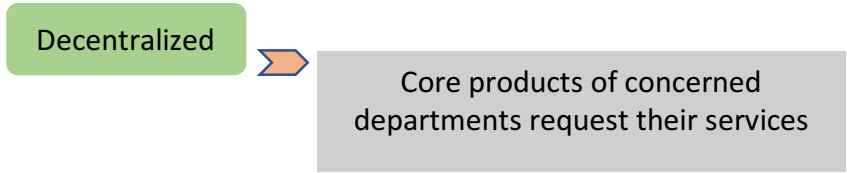
Contractual Employees: Region-wise

Region	FY 2017-18			FY 2016-17			FY 2015-16		
	Male	Female	Total	Male	Female	Total	Male	Female	Total
Talcher Coalfield	9022	75	9183	9097	83	9183	9404	3	9407
Ib Valley Coalfield	7618	43	7661	6952	46	6998	5709	40	5749
Corporate	464	45	509	472	41	513	432	42	474
Total	17104	163	17267	16524	170	16694	15545	85	15630

Supply Chain Management ^[102-9]

It plays an integral part of our business supply activities to maximize customer value and gain competitive advantage in the marketplace. Our inflow and outflow of sustainable products and services involves transparency to tie up healthy bond with supply chain vendors.

Our procurement process.

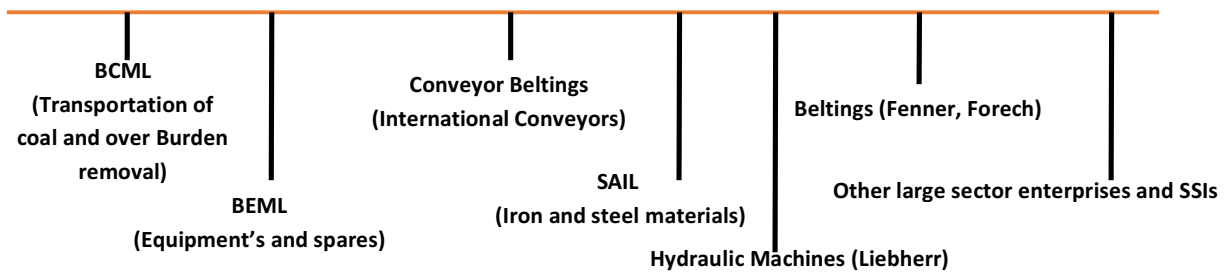


Procurement Head

Materials Management Dept.

The procurement process involves e-tendering where bidders upload their credentials and quotations. From amongst the bidders who meet the qualification criteria, the bidder with an L1 quote is selected, after the acceptance of all our terms and conditions. Bidders link with our company for any work sign a mandate 'integrity pact' before they bid. We thrive for corruption free supply chains; in regard to this our Independent External Monitors (IEM) keeps a track of our vendor practices. Our suppliers even have the privilege of approaching these IEMs. During project tenure and in future our bond with vendors will remain promising with prompt services. Suggestions from vendors are always accepted by our Vigilance Department for any improvements in this process and we resolve their grievances, if any.

Supply chain vendors for our products and services



Drilling Machine at Kulda OCP



Silo at Bharatpur OCP

MCL's Link Associates [\[102-13\]](#):

From the past 27 years, we have been maintaining a long lasting relationship with established companies, as well as emerging companies to protect our rights. With us, there will be always scope for maximizing the strengths to meet the skills our stakeholders demand. Our Company is a member of several industry associates including the Confederation of Indian Industries (CII), sStanding Conference of Public Enterprises (SCOPE), Mining Geological and Metallurgical Institute of India (MGMI), Coal Preparation Society of India (CPSI) and Utkal Chamber of Commerce and Industry Limited (UCCI).



Confederation of Indian Industry



The Mining Geological &
Metallurgical Institute of India



UCCI



During the seminar on “Indian coal mining industry overcoming challenges for the better tomorrow” by MGMI on 30-8-17.

Risk Management [\[102-15\]](#) [\[102-30\]](#) [\[102-31\]](#):

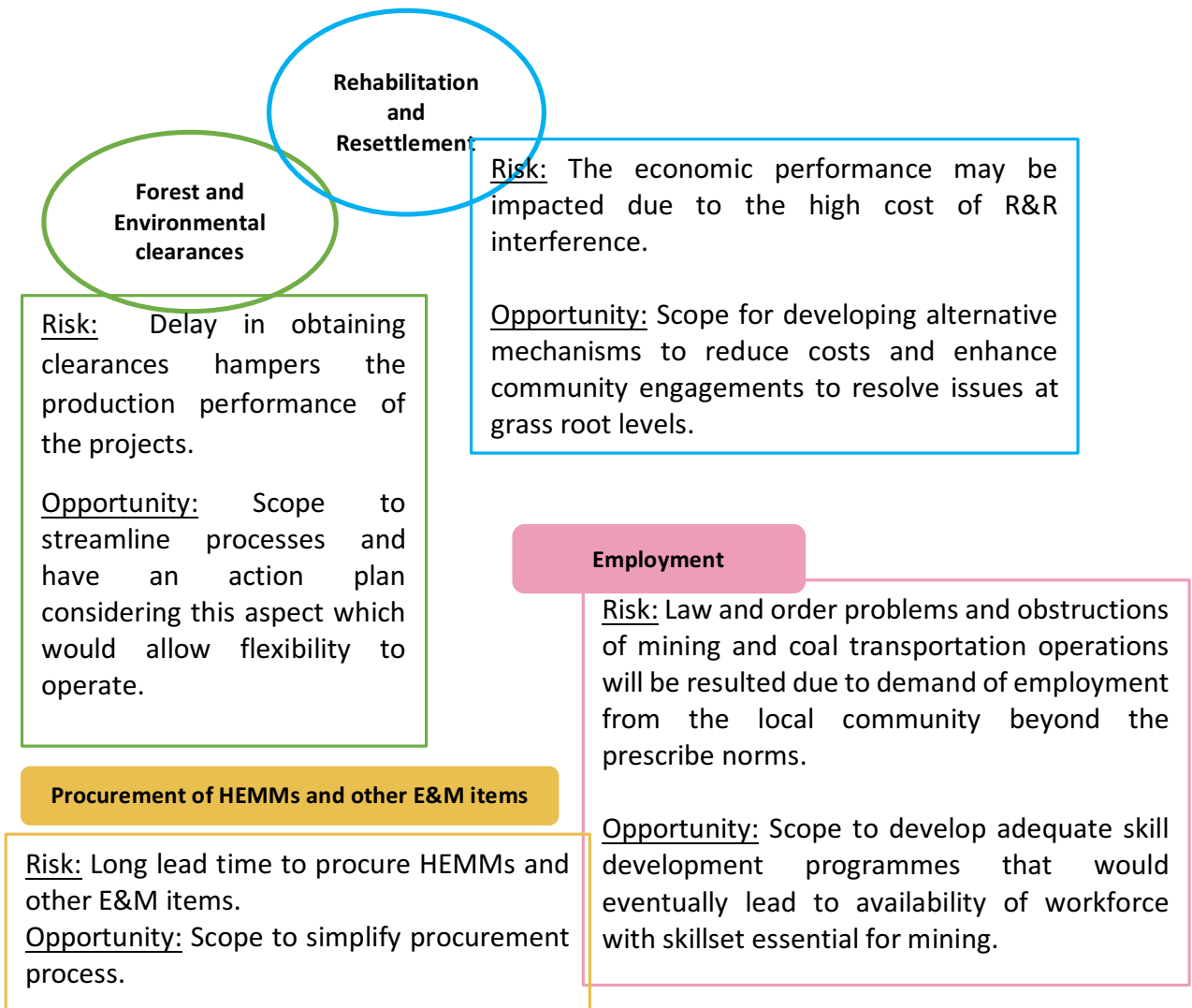
To identify and manage the “extra-Financial issues”-ESG impacts, we begin with traditional materiality assessment. It reflects what stakeholders care about and impacts of our company should be considered for sustainable business, either operationally or financially or for reputational advantage. Our parental company reviews our annual action plan to meet our goals and periodically reviews the progress of the activities we undertake at this end.

We first identify the risk and then analyze to control and review the risks. An effective “Risk Management Committee(RMC)” is in operation to comply with the provisions of the requirements of the Section 134(3)(n) of the Companies Act, 2013. The General Manager (Safety and Rescue) acts as the Chief Risk Officer (CRO) of this Committee and they deal with the matters related to risk management and also suggest the board for any changes required

in risk and management strategy, policies and procedures. We formulate risk management plan very effectively to avoid impulsive reactions and go in to “Fire-fighting” mode to rectify problems that could have been anticipated. This makes our stakeholders for happier and projects less stressed.

Along with this our Environment and CSR departments take several initiative measures to mitigate our impacts on the environment and local community due to our operations. A review meeting to analyze physical and financial progress of the CSR activities is held in every six months by the Board of Directors. We established a three-tier CSR committee i.e., at Area level, Headquarter level and Board level. Independent directors head the committee at Board level where all our functional directors are members. The Director (Personnel) heads the Head quarters level Committee, which constitutes of 9 members and GM (CSR) acting as Nodal Officer. And at area level this Committee is headed by Area General Manager. Our CSR projects are evaluated by external independent agency which show any gaps that may be missed out and shows the results in a more wholesome manner with the external community in focus.

Our key concerns ^[102-34] :



Stakeholder Engagement ^{[102-21][102-40] [102-42] [102-43]}:

We at MCL, consider the opinions and expectations of our external and internal stakeholders to remain relevant to survive in a challenging business environment. Without ongoing participation of stakeholders, it is hard for us to survive, as organisation and where stakeholders are also mutually interdependent. While approaching a stakeholder we first identify then analyse for proper stakeholder management.

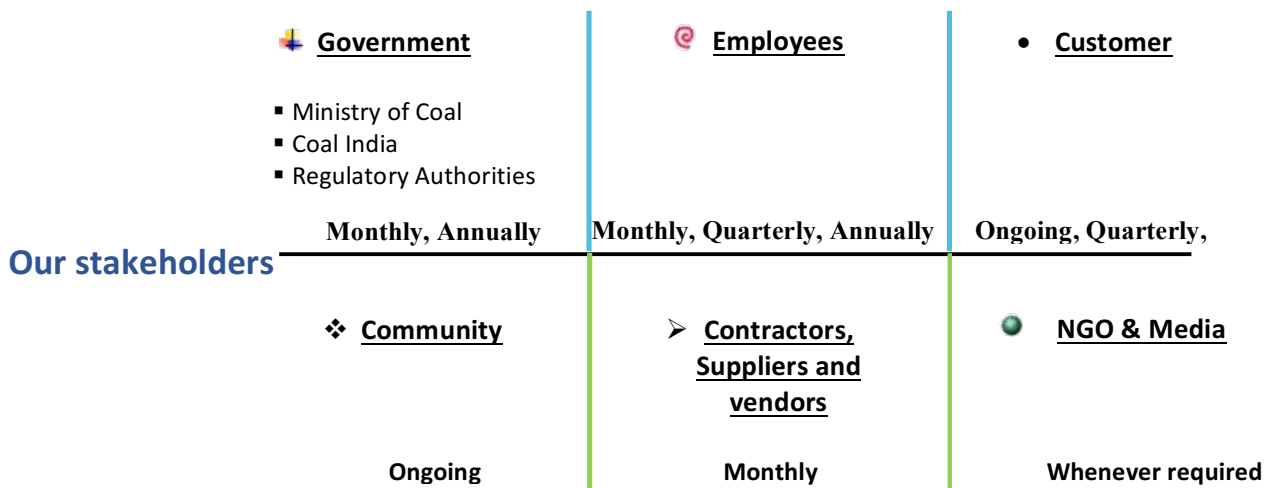
Identification

-By looking organizationally, geographically, or by involvement with various projects and outcomes.
 -Two dimensions- The stakeholder’s influence and dependence on our organisation.




Analysis

-How powerful and organized, communication requirements how often, interests, identify risks of concerns etc.,

We develop a strategy for building supportive programs for the projects for smooth stakeholder management.



Mode of Engagement

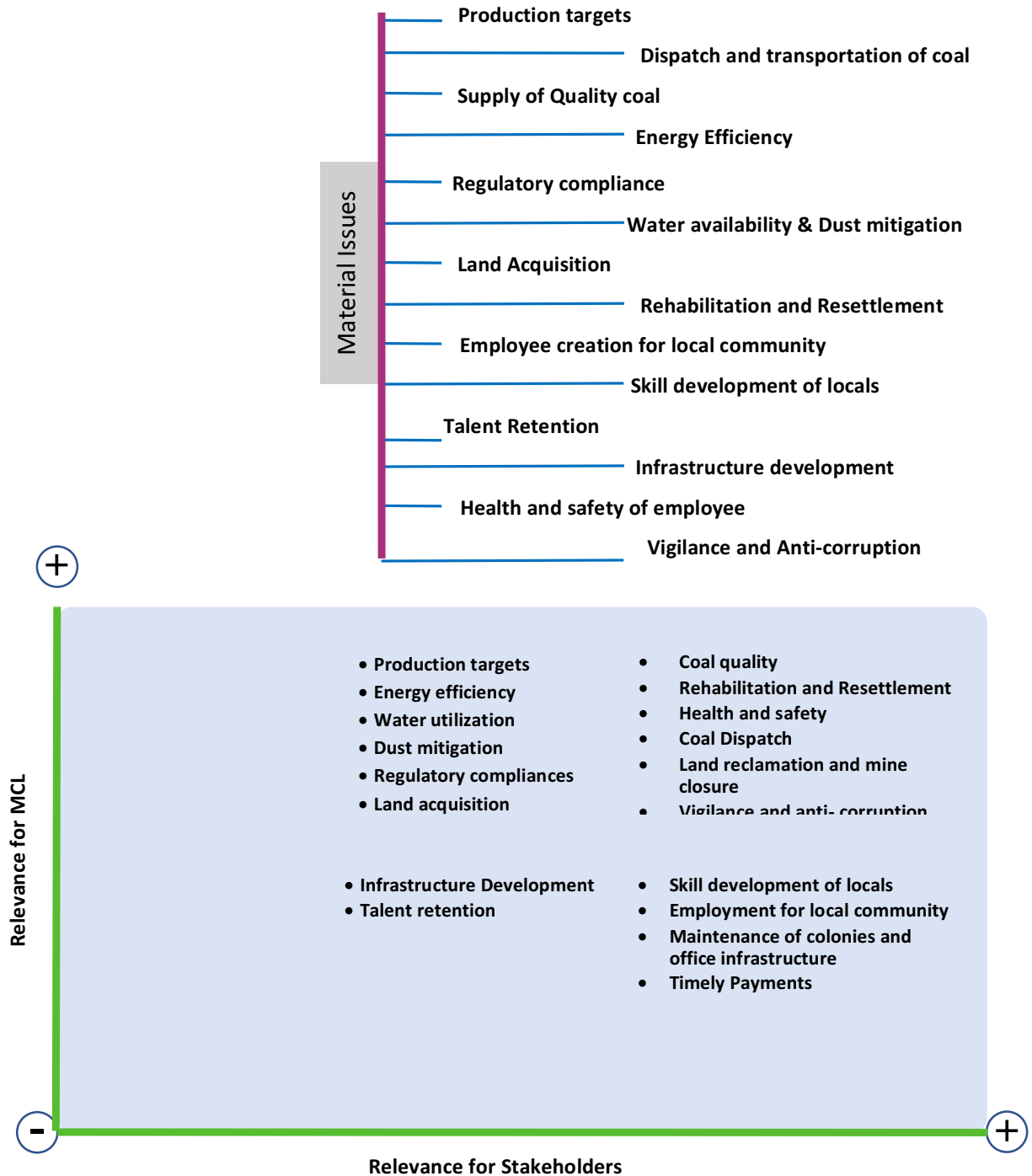
-  Performance reports, Board meetings, Labor meets, Inspection visits, Compliance reports.
-  Vigilance Awareness week, Safety Fortnight, Special Safety drives, World Environment day, Van Mahotsava, Performance Appraisal, Trainings and seminars, Induction meeting off new entrants with senior management, Annual Report, Sustainability Report, Rajbhasha Pakhwada, Monthly co-ordination meetings, Weekly General Managers coordination meetings, Industrial relations meetings with union leaders.
-  Consumer complaints system and RCCC meetings with customers regarding quantity, and time of delivery.

- ❖ Public hearing/ consultation (For new and expansion projects) as and when required, regular meeting in the project regarding rehabilitation and resettlement compensation.
- Regarding quantity of items of supply, supply schedule, NIT conditions by team interactive sessions with concerned people.
- As per the guidelines prescribed by MoEF &CC regarding impacts of mining activities on the community and Environment.



Materiality Survey and Matrix ^[102-47] ^[102-44]:

“Materiality Surveys” serve as the backbone in identifying most material issues involving both internal and external stakeholders and for long term profitability with social justice and environmental care. This materiality analysis will never be missed as it makes sense in realizing that these issues can have a huge impact on returns and opportunities. In the assessment, first material topics are identified which have significance and then we prioritize them in the form of materiality matrix which accounts the standpoint of the company and stakeholders.



Coal Supply ^[102-6]

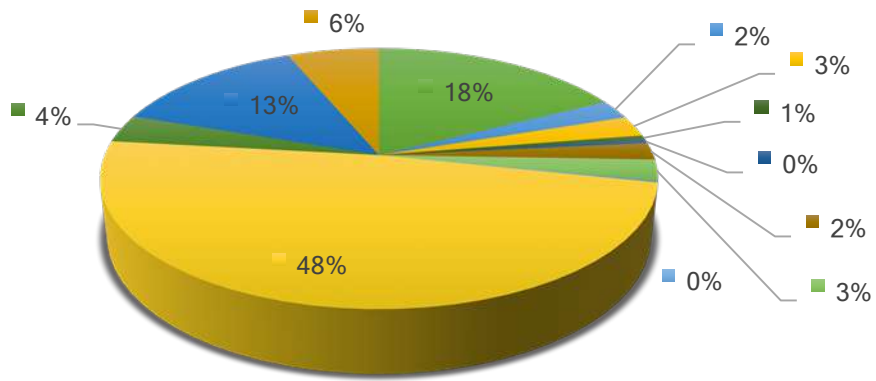
We at MCL, always value the customer's satisfaction by conveying the stability of our product. Building loyalty and trust in the market plays a vital role in our services. During FY 2017-18, company has achieved an offtake of 138.266 MTe in spite of obstruction, bandhs and the restriction imposed by District Administration on all mining operations including transportation of coal to sidings during day hours in summer season. Our energy holder extends its services to various sectors like power (99.273MTe), Cement (0.186MTe), CPP& Others (44.307MTe), Colliery consumption (0.005MTe). As per the directives of the MOC/CIL, the coal will be reached to other customers through e-Auction or FSA. In this reporting period, company had offered 16.398 MTe under spot and other special type of e-auction against this 15.541 MTe was booked by different bidders registering a premium of INR 1214.5 Cr over notified price and signed fifty (50) number of FSAs with consumers. Marketing is like a wheel of fortune, due to force majeure there was a loss in off-take of 16.556 MT but effective loss was 11.734 MT as some mines have dispatched more during this FY 2017-18.

We always track our dispatch system so that demanded quantity of our products reach at our customers in right time. We transport coal through road, merry-go-round (MGR), conveyor belts and railways. In-motion weighbridges at railway sidings, electronic rail bridges and standby weighbridges ensure 100% weighment of our coal supplies. Ferrying covered coal through rail is the most adopted transportation at our company. During FY 2017-18, 64.69% of coal has been dispatched through rail mode with an increase of 1.22% over last year (63.47%^ in previous reporting year).

We frequently deal with the customer issues by interacting, maintain records of complaints at sidings and getting feedback from them for timely and relevant evolution of our systems. We have appointed nodal officers of QC department who continuously monitor the railway sidings during coal loading. The balance quantity of coal after being lifted by customers is used as an indicator of customer satisfaction. When a customer lifts beyond the trigger level, they pay an incentive to MCL. When the supply is below trigger level, MCL pays compensation to the customer. Due to these in-built mechanisms in our selling schemes, fines for non-compliance with laws and regulations concerning the provision of use of product and services, do not apply to MCL ^[419-1].

Our coal supply to different states in India is depicted in the graph below [Figures- Thousand Tones].

State wise Coal dispatch for FY2017-18



- | | | | |
|------------|--------------|---------------|------------------|
| ■ AP | ■ Chatisgarh | ■ Gujarat | ■ Haryana |
| ■ Jharkand | ■ Karnataka | ■ Maharashtra | ■ Madhya pradesh |
| ■ Odisha | ■ Punjab | ■ Tamilnadu | ■ West Bengal |



Before transporting coal by road, they are covered by tarpaulin sheets.

Awards & Accolades

Awards are a sign of quality and recognition we have earned from our customers representing a positive business with a satisfaction of our strengths, weakness and areas in which we can improve.

Corporate Governance

- Best Coal Producing Company award by USA based 'International Brand Consulting Corporation' on the Jury decision & Media Research Group evaluation.
- Conferred with GOLD Medal for excellence in productivity, Quality, Innovation and Management in the field of Industrial Development in the country held at the seminar on "Current Economic Scenario".
- Conferred with "Best Mini Ratna Award" by Dun & Bradstreet PSU Awards 2017
- Awarded the 1st Best Enterprise Award under Miniratna category in the 28th National Meet of Women in Public Sector (WIPS).
- Awarded for outstanding contribution in Vigilance Innovation
- Conferred with "Gold Award" in "Sambad Corporate Excellence Award"
- Our Jagannath Colliery (Talcher coalfields) was conferred with National Safety Award for Mines awarded by Ministry of Labor and Employment Govt. of India for consecutive two years 2013 & 2014 in August, 2017.
- Our parental company awarded us with corporate award for Swachhta Pakhwada 2017 among all subsidiaries of Coal India.
- Awarded for outstanding contribution in the category of best Institutional practice to fight corruption.

Marks of Distinctions

- ✚ Shri A.K. Jha (for FY 2017-18), CMD, MCL was conferred with
 - “Leadership Innovation Excellence Award” in recognition of his achievements & dedication in discharging duties towards corporate sector at the seminar on “Current Economic Scenario”.
 - “Odisha Inc. Business Leadership Award 2017 was conferred upon Shri A. K. Jha, CMD, MCL at Odisha Inc. Awards.
 - “Indian Achievers’ Award for Business Excellence” for his outstanding achievements in Business and Social Service.
 - “Bharat Jyoti Award” by India International Friendship Society.
- ✚ Mr. L.N. Mishra, Director (Personnel), MCL was awarded with “Rourkela Ratna Samman” by Canvas on the occasion of Rourkela Divas for the developments in Industrial Relations and CSR activities.
- ✚ Mr. Munawar Khursheed, Chief Vigilance Officer, MCL awarded with
 - Excellence Award at National Power Summit 2018.
 - “3rd Elets PSU Summit Award – 2017” by the Hon’ble Minister of Steel, Govt. of India.



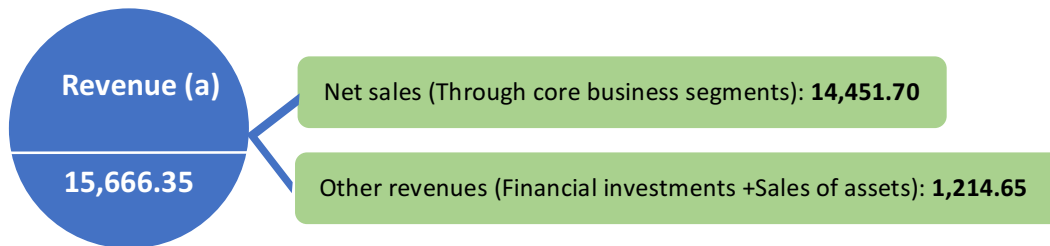
“India’s Best Coal Producing Company award” by USA based ‘International Brand Consulting Corporation’ on the Jury decision & Media Research Group evaluation.

Economic Values

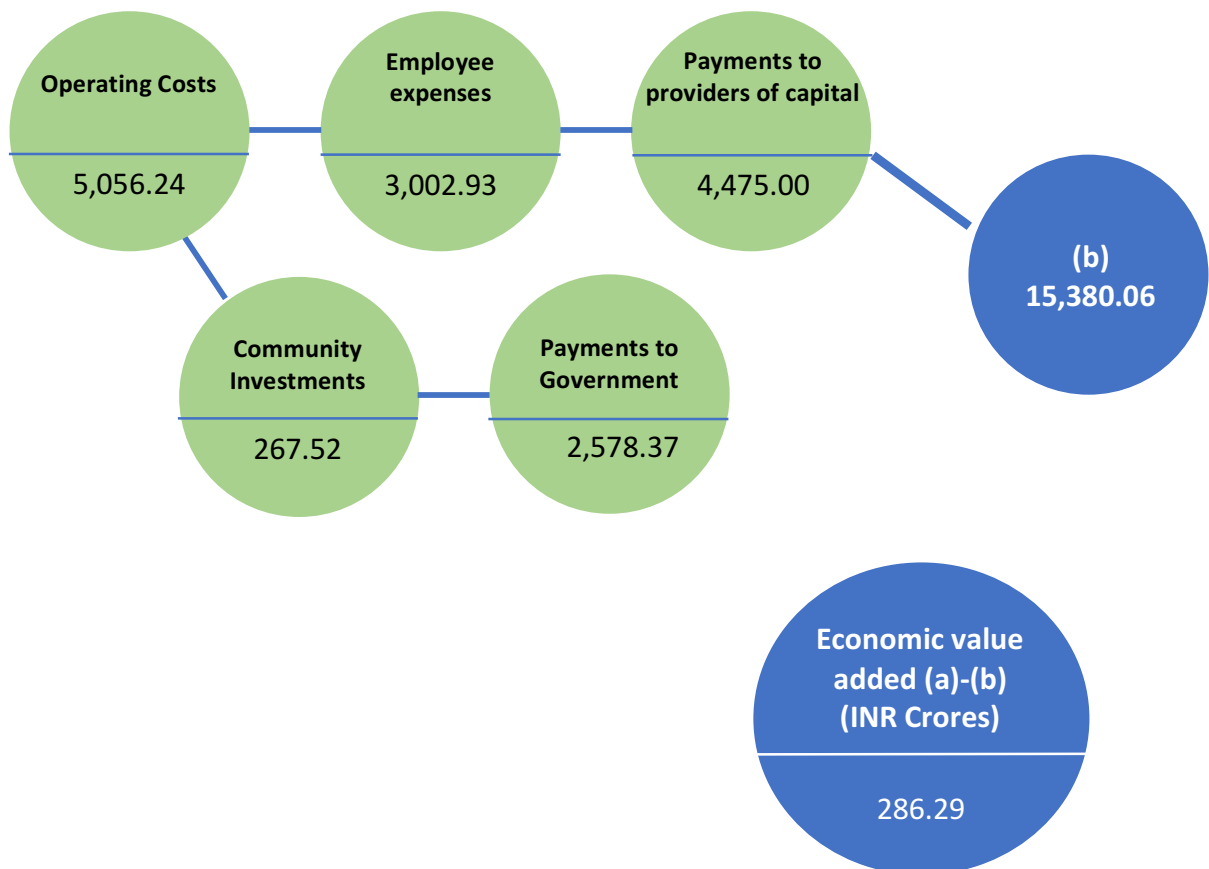
[GRI 201-1; 102-45]

The economic value generated and distributed to stakeholders is shown below.

Economic Value generated (INR in crores)



Economic Value distributed (INR in crores)



[GRI 201-2; 102-45]

We at MCL, have potential to deal with the substantive changes in operations, revenue due to climate change. During 2017-18, our most sustainable investment are surface miners and dust suppression equipment's.

Statement of Environmental Expenditure

Details of Expenditure	2017-18	2016-17	2015-16
Capital Expenditure	INR (lakhs)		
Civil works- plantation and afforestation	0.00	0.00	-
Civil works- Effluent Treatment Plant	126.14	82.06	-
Civil works- Effluent Treatment Plant under construction	0.00	31.51	122.59 [^]
Civil works- Rain Water Catchment	9.25	56.88 [^]	-
Civil works- settling ponds & oil & grease traps	0.00	22.31 [^]	7.62
Surface Miners	1489.49	0.00	0.00
Water Sprinklers	0.00	272.40	0.00
Dust suppression equipment	20.51	5.20	5.39
Vehicles ESMP	0.00		-
Water treatment plants	0.00	19.18	85.11
Environmental monitoring equipment	0.00	12.63	-
Noise level meter	0.00	27.71	-
Other environmental expenses	-	-	0.75
Total Capital Expenditure (A)	1645.39	529.88[^]	221.46[^]
Revenue Expenditure			
Tree plantations	296.74	282.60	126.58
Other Environmental expenses	430.19	751.56	777.31
Water tax/ cess	1338.49	2117.30	189.99
Environmental training and seminars	1.25	0.35	1.11
Environmental monitoring cost for air, water and noise	433.34	549.94	106.15
Environmental- related operations and maintenance- catch/ garland drain/ fencing	26.68	56.12	98.35
Environment- related operations and maintenance – ETP/STP	42.17	33.45	18.83
Environment-related operations and maintenance – mobile and fixed water sprinklers.	75.91	68.65	77.57
Environment monitoring cost	0.77	1.11	3.98
Environmental related operations and maintenance- other dust mitigating equipment	12.35	38.84	22.17
Repair and maintenance for dust suppression measures	50.02	11.83	72.91
Miscellaneous –ground water monitoring, etc.	0.00	0.00	0
Dust suppression measures	25.56	5.94	13.12
Total Revenue Expenditure (B)	2733.47	3917.69	1508.07
Total Expenditure (A+B)	4378.87	4447.57[^]	1729.53[^]

[GRI:201-3]

We at MCL, never compromise the economic well-being of our employees as they deserve to live a healthy, well balanced life. Followings are the employee benefits provided to our employees for their long term strategic financial planning, which is 21% more than the previous year.

[102-45]

Particulars	2017-18	2016-17	2015-16
	(INR Crores)		
Salaries, wages, allowances, bonus and benefits	1,714.94	1,544.75	1497.23
NCWA-X Provision	156.50	146.01	
Executive pay revision provision	93.93	9.78	
Ex-gratia	118.83	112.38	111.11
PRP	16.47	21.09	30.47
Contribution to PF and other funds	223.75	204.91	195.69
Gratuity	411.76	57.38	26.19
Leave encashment	72.75	106.01	59.93
VRS	0.00	0.00	0.27
Workmen compensation	0.49	0.76	0.03
Medical expenses for existing employees	47.29	43.69	39.45
Medical expenses for retired employees	9.44	5.29	6.8
Grants to schools and institutions	32.08	26.04	27.77
Sports and recreation	5.02	7.95	3.84
Canteen and crèche	1.36	1.03	1.06
Power – township	57.83	57.23	57.53
Hire charges of bus, ambulance, etc.	4.54	3.92	3.17
Other employee benefits	35.95	24.03	17.42
Total	3,002.93	2,372.25	2,077.96

[GRI:201-4]

During 2017-18, MCL has received a subsidy of INR 2.05 Crs from Ministry of Coal, Government of India in terms of the Coal Mines (Conservation & Development) Act, 1974 towards reimbursement of expenditure incurred for the sand stowing & protective works.

Market Presence [GRI 202-1]

Fairness in the opportunities

We emphasize fairness in opportunities to all our employees without discrimination on the grounds of gender, race, religion, age, disability, basic wages and other employee benefits. Wages to the non-executives and workers (Engaged in mining activities) are as per the National Coal Wage Agreement (NCWA) and executives of respective grades have

specified range of pay scales as per the recommendation of Pay recommendation committee of Govt. of India.

Our contractual workers

- Engaged in mining activities are paid wages as per recommendation of High power Committee which is midway between the Minimum wages notified by Central Govt. as per the Minimum wages Act, 1948 for workers employed in scheduled employment in non- coal mines and the wages payable to the lowest category of permanent workers i.e Cat-1 of NCWA as on 01.11.2018.
- Engaged in watch and ward activities are paid wages as per the rates circulated by DGR from time to time, which is more than the Minimum Wages notified by Central Govt. as per the Minimum Wages Act,1948.
- Engaged in jobs other than mentioned above minimum wages as notified by Ministry of Labor & Employment, Govt. Of India for the workers employed in scheduled employment for non-coal Mines as per the Minimum Wages Act,1948.

The wages provided to the permanent and contractual workers are more than the minimum wages as per the Minimum Wages Act,1948 and equal for both women and men.

[GRI 202-2]

We at MCL, refer all the locals are Indian nationals. Our senior management is mentioned in the section [102-18], who always thrive for an improvement in organizations ability to understand local needs like R&R sites, sports facilities, Land reclamation etc., near our operations.

The Value chain

Sustaining infrastructure [GRI 203-1]

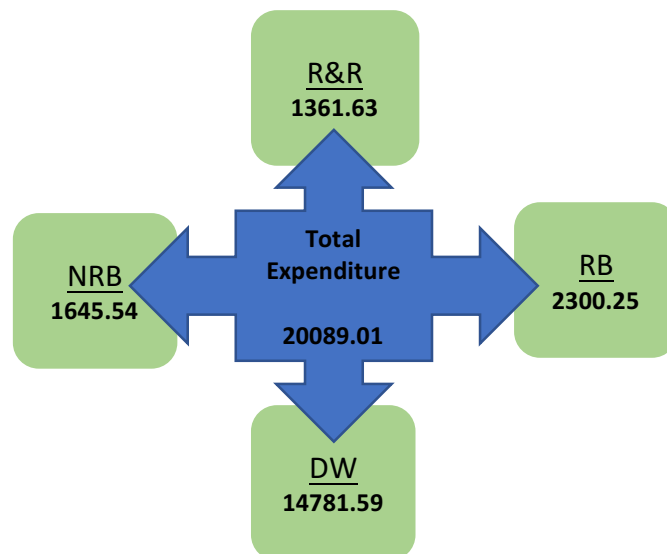
Infrastructure is the fundamental facility we provide for our employees and also to the project affected families at our operation locations.

We regularly renovate and maintain our residential quarters at our locations for quality and better living standards. As mentioned in previous year SD report regarding the phase wise repair works, total 9,408 no's of residential quarters have been repaired till March,2018 MCL. We also invest for our better and safe surroundings like health and welfare centers, sports centers, roads, shopping complexes, canteens, ETPs, STPs, Coal corridors, Rehabilitation sites, railway sidings, etc.,

Some of the major investments during 2017-18 for residential & non-residential buildings, development works, R&R works with their size and duration of activity at MCL are as below.

S.no	Work	Size	Date of commencement	Total expenditure in 2017-18 (INR in Lakhs)
	Residential Buildings (RB)			
1.	Construction of B-type quarters at Nandira substation site for Hingula OCP	108 nos.	02.11.16 (In progress)	1014.92
2.	Construction of family hostel for management trainees at Basundhara Area	48 nos.	07.09.14 (In progress)	345.17
3.	Construction of D-type at MCL, HQ	24 nos.	29.03.16 to 28.06.17 (Completed)	281.86
	Non-residential Buildings (NRB)			
1.	Construction of Hospital at Lakhanpur area	50 nos. bedded	1.08.16 to 31.01.18 (99% completed)	890.43
2.	Construction of project office of kulda OCP at Basundhara area.		05.07.16 to 31.01.18 (completed)	132.08
3.	Construction of ETP for treating discharge of Railway siding of Kaniha OCP		(Completed)	3.72
	Development works(DW)			
1.	Construction of coal corridor passing through Lingaraj OCP (Phase-1) in TCF.		26.07.17 (In progress)	1139.15
2.	Construction and widening of 2 lane & 4 lane road from Banikibahal to Kanika Railway siding		17.12.15 (In progress)	10982.71
	R&R works			
1.	R&R site at village Chettanpalli at BG area.		18.08.16 (In progress)	1017.00

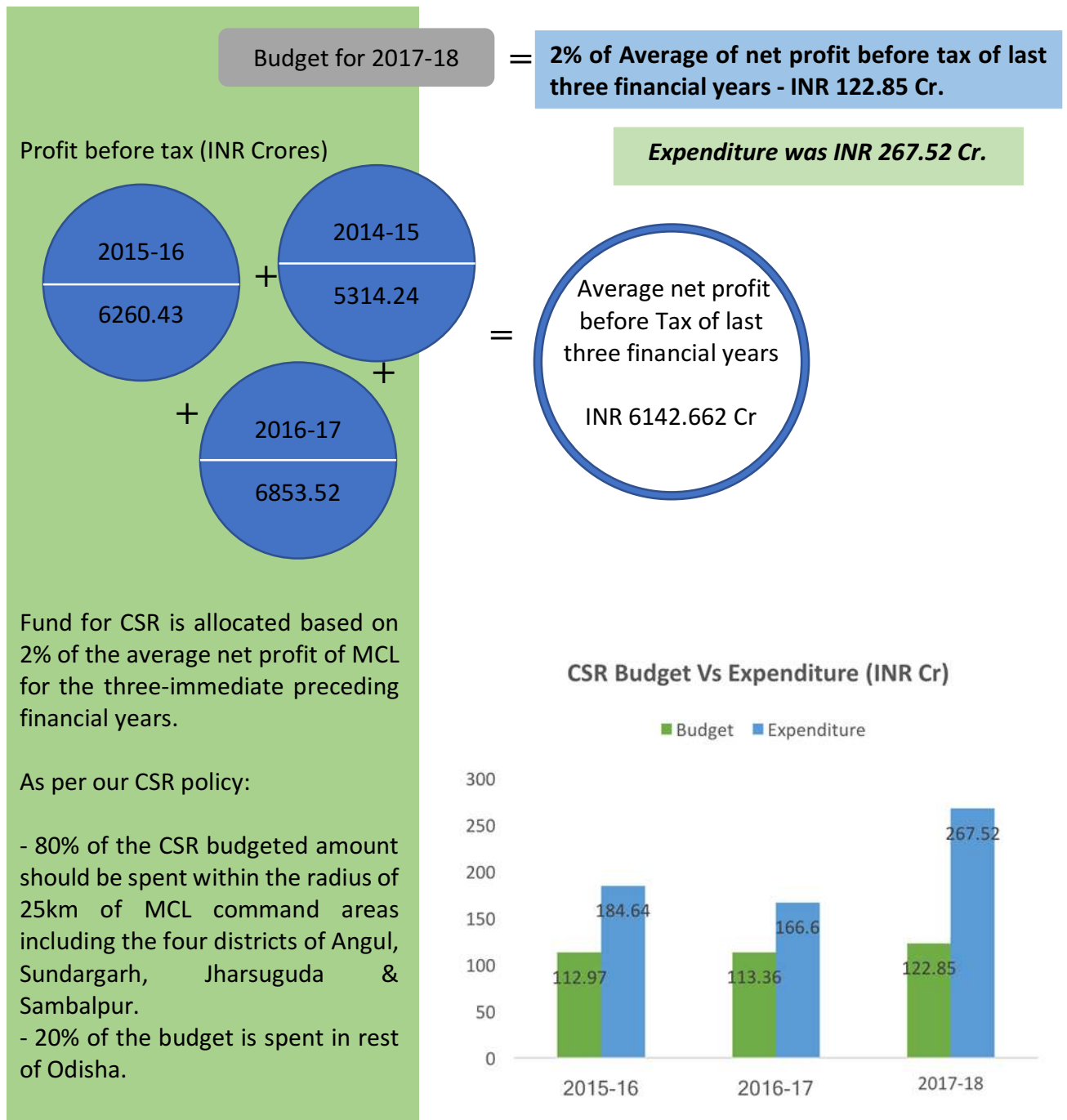
Figures: INR in Lakhs



[GRI:203-2, 413-1, 413-2] Corporate Social Responsibility

Building relationships with local communities

We at MCL, feel responsible to engage with local communities affected by our operations in order to improve surrounding habitats for their social well being affected by our operations. CSR has been built into company culture by making policies and proper strategic procedures for implementation of welfare projects for the communities for addressing their issues. During FY 2017-18, more than 400 welfare activities have been undertaken as per Schedule VII of Companies Act,2013.



Some of the positive indirect economic impacts of the organisation under CSR activities for development of our local communities based on their basic needs ^[413-1]. The size of the projects is provided in terms of monetary values during FY 2017-18 ^[203-2].

INR 34.3592 Cr

Eradicating hunger, poverty and malnutrition, promoting preventive health care and sanitation and making available safe drinking water.

Promoting education, including special education and employment enhancing vocation skills especially among children, women, elderly, and the differently abled and livelihood enhancement projects

INR 214.0038 Cr

INR 0.6551 Cr

Promoting gender equality, empowering women, setting up homes and hostels for women and orphans; setting up old age homes, day care centers and such other facilities for senior citizens and measure for reducing inequalities faced by socially economically backward groups;

Ensuring environmental sustainability, ecological balance, protection of flora and fauna, animal welfare, agro forestry, conservation of natural resources and maintain quality of soil, air and water

INR 2.3384 Cr

Protection of national heritage and culture including restoration of buildings and sites of historical importance of works of art; setting up public libraries; promotion and development of traditional art. and handicrafts;

INR 0.5286 Cr

INR 11.4299 Cr

Rural development projects

INR 4.208 Cr

Training to promote rural sports, nationally recognized sports, Paralympic sports and Olympic sports

CSR Expenditure			
	2017-18	2016-17	2015-16
	INR (lakh)		
Water Supply	870.12	732.19	864.91
Sanitation	70.12	20.10	10.43
Eradication of Poverty & hunger	1.21	0.15	7.27
Healthcare	22.42	42.75	1,390.71
Education	21381.06	12010.72	255.58
Skill Development	19.32	14.20	15.88
Women Empowerment	18.83	0.12	1.52
Welfare of the differently abled and senior citizens	46.69	-	-
Empowerment of SCs/STs	0.00	9.75	16.31
Environmental sustainability	233.84	79.64	131.53
Sports	420.80	456.01	621.88
Protection of National Heritage	52.86	19.56	57.36
Rural Infrastructure Development	479.3	765.34	736.24
Road	654.01	711.73	1,261.04
Electricity	6.81	10.89	-
Other/Miscellaneous	2.87	0.30	23.32
Swachh Vidyalaya Abhiyan (for Construction of toilets) in Odisha by MCL	2472.05	1774.34	13,070.12
Total Expenditure	26752.31	16660.34	18,464.10



Skill development training program for PHD family at Bargarh.

We have representatives from district and state administration of all the indigenous communities to ensure major part of the demography have an equitable representation to carry out formal grievance process. We are disappointed to share that Impact assessment survey during this reporting year have not conducted.

[413-2]

Describe the community around the company's operations. (Location and Community Needs)	Local communities are rural and urban at some places. Major community needs are water supply, health, education and other basic infrastructure like roads, drains. Vulnerability: Infrastructure, Socio-economic, isolation.
Has a social impact assessment been done for the communities that the company operates in?	No
If yes, please attach the report or provide the summary of negative and positive impacts, and recommendations	NA
If no, please answer the following questions	
Is the community at any location of the company's operations exposed to resource stress due to the company's higher than average use of shared resources through: <ul style="list-style-type: none"> • Use of hazardous substances that impact on the environment and human health in general, and specially reproductive health • Volume and type of pollution released • Status as major employer in the local community • Land conversion and resettlement; and • Natural resource consumption. 	<ol style="list-style-type: none"> 1. No Hazardous substance are being used 2. Dust pollution is the major problem but all precautions are being taken to suppress the dust to the maximum possible extent. (Discussed in GRI 306 section) 3. Major employers are in four operational districts. 4. R&R and environmental safeguards are being implemented in the extraction of actual resources (prime operation of company) in a sustainable manner.
If yes, what the locations of operations?	Angul, Jharsuguda, Sambalpur districts of Odisha.



Community halls at Anandpu village, Lingaraj Area and Piplikhani village

^[413-1] Some of the completed and ongoing projects in four districts are listed in tabular form below.

ONGOING PROJECTS	
ANGUL	<ul style="list-style-type: none"> • Construction of 138 nos. Additional Class room buildings in different School taken up through State Authority in Angul District- Rs. 564.42 Lakh • Construction of 134 nos. of Anganwadi Centres taken up through State Authority in Angul District-Rs. 833.48 Lakh • Financial Assistance for construction of 100 seated ST Girls Hostel, Angul- Rs. 82.5 Lakh. • Water supply scheme for 35 nos. villages of Talcher Coal fields, Angul - Rs.56.89 Cr. • Deposit for the construction of 7 nos. PWS works at Talcher Block – Rs 2.10 Cr. • Construction of Fly over (Over rail line) at Ghantapada (Talcher) amounting Rs. 37Cr • Strengthening of bituminous road from Gurudwar to FCI Gate with Both Side Cement Concrete drain and Cement Concrete pavement- Rs.2.31 Cr • 06 Nos of RPWS scheme under Talcher Block in Angul Under CSR of MCL- Rs 16.65 Cr • Improvement and widening & recons of RCC road leading from NH 23 main road towards Kasipur in ward NO 16 of Talcher Municipality – Rs.0.76 Cr
SUNDARGARH	<ul style="list-style-type: none"> • Three Nos. Pipe Water Supply Scheme for Hemgiri, Barpali and Kuisira Village of Hemgir block in Sundargarh District –Rs.1.52 Crore. • Development Works at Sundargarh with value of Rs.8.50 Crore. • RDC approved work in Sundargarh District –Rs.16.29 Crore. • Providing Artificial limbs to persons with Orthopedics disability in Sundergarh district of Odisha in 1st phase under CSR of MCL- Rs. 5Cr
SAMBALPUR	<ul style="list-style-type: none"> • Ropeway Project at Hirakud Dam, Sambalpur – Rs.5.00 Cr. • Water Supply Scheme at Burla, Sambalpur – Rs.8.62 Cr. • Construction of Sports Complex at Burla, Sambalpur – Rs.25.00 Cr • Financial assistance to VSS Medical College, Burla for a CT Scan Machine – Rs. 4.00 Cr. • Sanskrit Kalakendra at Sambalpur with value of Rs.3.37 Crore • RDC approved work in Sambalpur District with value of Rs.276.4 Lakh excluding kalakendra.
OTHER DISTRICTS	<ul style="list-style-type: none"> • Construction of Millennium City Gate at Cuttack – Rs 70.34 Lakh. • Construction of Multipurpose Indoor stadium at Jajpur – Rs 10.22 Cr. • Provision of CSR funds for renovation of toy train and railway track for operation of the toy train in Nandankanan Zoological Park, Bhubaneswar-Rs.3.05 Cr. • Implementation of afforestation activities at BBSR during 2017-18 under CSR fund of MCL through DFO, Chandaka Wildlife Division Rs. 2.07 Cr

ONGOING PROJECTS

JHARSUGUDA

- Construction of Community Centre at Jharsuguda Town – Rs.7.20 Cr.
- Water supply scheme for Brajrajnagar town, Jharsuguda District – Rs.8.88 Cr.
- Setting up of a 100 bedded Cardiac Institute at Jharsuguda-Rs.75.00 Crore.
- Rural Electrification works by up-gradation & addition of Transformers including aided works in 44 peripheral villages of Lakhanpur & Jharsuguda Block of Jharsuguda District.- 1st Installment- Rs. 1.48 Cr.
- Stadium at Jharsuguda along with construction of boundary wall and 4 no's sentry post – Rs. 14.76 Cr.
- RDC approved work at Lakhanpur Block in Jharsuguda District with value of Rs.11.98 Crore.
- Sports, electricity, communication, drinking water, education, digging of ponds, building for community utility & Plantation etc. at Kolabira, Laikerea, Kirmira & Jharsuguda block of Jharsuguda District- Rs. 20 Cr. And additional Rs.6.72Cr for ongoing development works of 4 blocks.
- Implementation of afforestation activities at Jharsuguda district during 2017-18 under CSR fund of MCL through DFO Jharsuguda- Rs 3.99 Cr



Stadium under construction at Jharsuguda

SOME MAJOR COMPLETED PROJECTS

- Ujjaipur bye pass road at Sundargarh district with value of Rs. 17 Cr.
- Balinga- Taparia road at Sundargarh district with value of Rs.28 Cr.
- Rural water supply for 19 Villages at Angul district with a value of Rs. 22 Cr.
- Empowering rural women by re-energizing SHG through solar energy program – in partnership with KIIT at Nuapada with value of Rs. 24 Lac.
- Soubhagya sagar water reservoir, Angul with a value of Rs. 3.5 Cr.
- Construction of Cement Concrete road in ward no 3 and Ward no 16, Angul - Rs 3.10 Cr.
- Development of Village road Badasingha Bahal to Gobra High School, Angul - Rs 1.12 Cr.
- Resurfacing of Bituminous Road and Const of Concrete road in Danara village, Angul – Rs 1.88 Cr.
- Supply of water in different blocks of Jharsuguda - Rs 1.83 Cr.
- Construction of Kalyan Mandap at Jharsuguda Town in Jharsuguda District – Rs 0.98 Cr.
- Construction of Nursing school and Hostel at Ib Valley – Rs. 2.78 Cr.
- Construction of new 100 bedded ward at District Hospital, Angul- Rs.2.85 Cr and additional fund of Rs. 145 lakh with ICU.
- Cremation Ground /Rajghat at Sambalpur- Rs. 1.0 Cr
- Lighting arrangement along sea beach of Puri and Grand puri- Rs. 5.5 Cr.



Medical college campus at Talcher



School for specially abled orphans, Jharsuguda



Kalyan Mandap, Beheramal, Jharsuguda



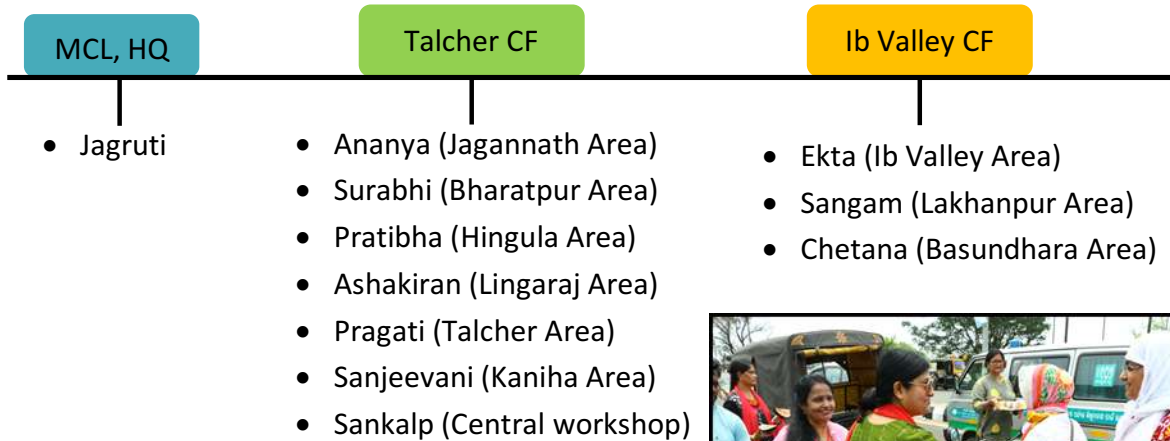
Swachh Vidyalaya Abhiyan- Construction of toilets in Rural Schools



Shri J.P.Singh DT(O) at Swachh Bharat campaign, Burla on 26.09.17

Mahila Mandal- Power to Create, nurture and transform

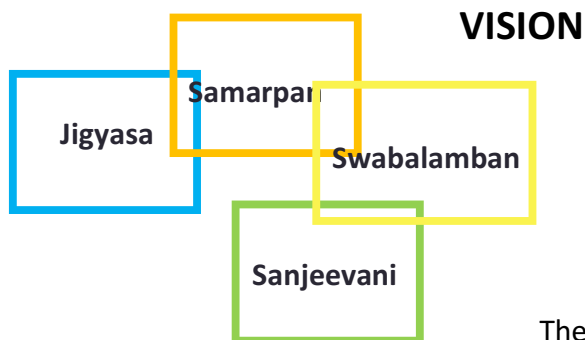
The wives of our senior MCL executives at Head quarter and area levels formed this voluntary group to serve the society. There are 12 groups across various areas that perform as social work groups, each headed by the wife of the senior most executive in the area.



The Mahila Mandals have four target areas of intervention towards social upliftment of marginalized and deprived section of the society: Jigyasa (Education), Sanjeevani (Health), Samarpan (Charity), Swabalamban (Social Empowerment).



Beating the heat-Distribution of watermelons at Anand Vihar chowk



Jigyasa Pariyojana



Nounihal

The projects undertaken by these groups are skill development like computer literacy, driving and stitching, Atta Chaki programme, taking care of girl's health by providing medicines, donating the essential clothes and sweaters to old age groups in Ashrams, organising camps at an interval of three to four months camping for the development of children, providing all essential food products to leprosy people etc.,

We also have a platform WIPS (Women in Public Sector) for growth opportunities of women. Under WIPS different programs and trainings are conducted for the empowerment of women.



Session on Pranik healing conducted by WIPS



Jhumba sessions for women's fitness at MCL, HQ



Dance performance by employees during International women's day



Power yoga sessions for all the employees

During this FY, we have achieved Best Enterprise Award (Under the aegis of SCOPE) at 28th national meet of forum for Women in Public Sector at Guwahati.

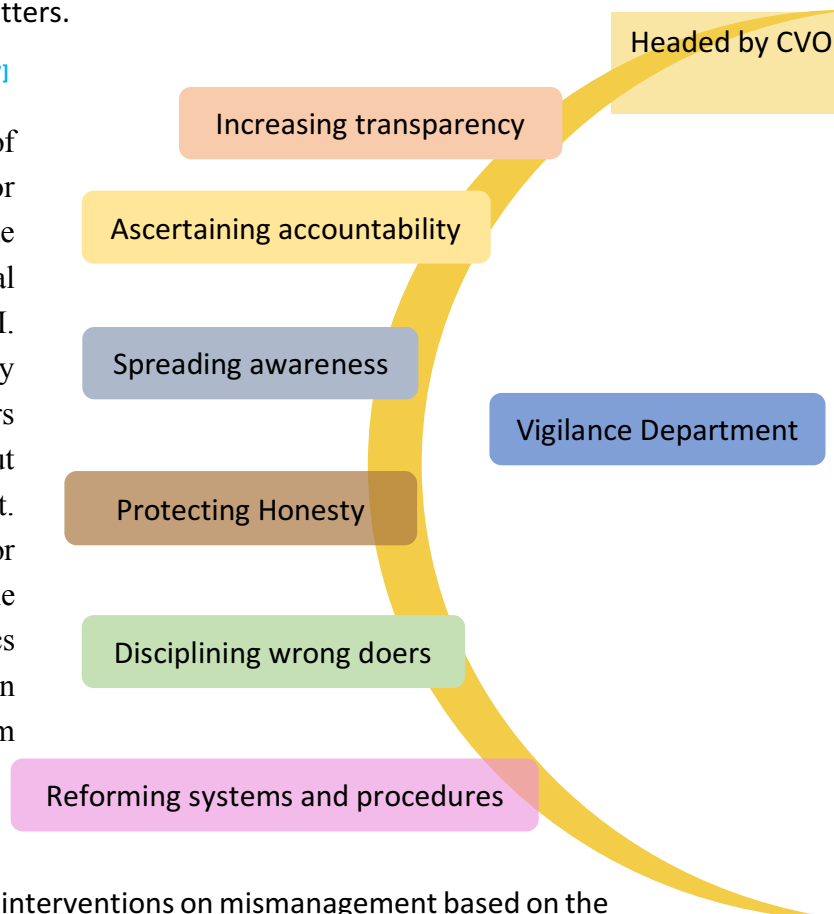


Breaking the Corruption GRI 205

Providing a shield for breaking the corruption for good and effective governance has always been important part of our organization. Our internal control system always ensures not to lower the socio-economic growth and the well-being of the stakeholders in the light of the following points depicted in picture. Vigilance department is the extended hand of CVC assisting our MCL in all the vigilance matters.

Whistle blower mechanism ^[102-16] ^[102-17]

To safeguard for protection of employees from reprisal or victimization, MCL has adopted the "Whistle Blower Policy" of its parental company as per Regulation 22 of SEBI. The clause states that a listed company shall establish a mechanism for directors and employees to report concerns about unethical behaviour to the management. These reports may also include actual or suspected fraud, and violation of the company's code of conduct or ethics policy. MCL has a robust mechanism in place to protect whistle-blowers from any kind of harm or retribution.



We perform specific compliance interventions on mismanagement based on the evidence received via email- cvo.mcl@nic.in and conclusive action may be taken by the CMD or CVO or Chairman of the Audit Committee stipulated by the Whistle blowing procedure. Both internal and external stakeholders can address their grievances through "Online Grievance Redressal (Samadhan)" portal. These grievances are analyzed by Grievance Redressal Cell (GRC) and may be appraised by Chairman of Audit Committee.

We identify the processes that are at risk of corruption, like negotiation with customers, purchase of goods and services, recruitment and employment of personnel, regarding sale related activities, geo-fencing violations, quality check of coal stock yards, e-surveillance units, in-motion weighbridge calibration, coal transportation etc., offences through IT tools and other technologies like Geo-fencing, GPS/GPRS bases vehicle tracking devices, RFID tagging of internal coal transporting tippers, RFID Readers, Weigh bridges, CCTV Camera Surveillance, Control Rooms, Modern Coal Survey & Measurement Gadgets: a)

SURPAC Software b) 3D Terrestrial Laser Scanner (3DTLS) c) Unmanned Aerial Vehicle (UAV Drones), Explosive Testing (VoD Metre), Mobile Applications, Asset Management Portal, Biometric Attendance System, Integrated Fuel Management System, e-Office, Modules of Coal Net, etc. for better surveillance & monitoring in coal mines and offices.

In 2017-18, 88 surprise inspections and 23 regular inspections have been carried out at various field operations to identify the irregularities in various field operations as well as in due system and procedure. Vigilance clearance status in respect of 14,575 employees including the Officers at the level of Directors, Senior Executives and Non-executives had been furnished to the CVC, CIL and MOC with relation to promotion, probation and superannuation matters. Online Vigilance Clearance Module has been implemented in respect of both Executives and Non- executives for furnishing vigilance status online.

GRI 205-1:

In this reporting year, total 24 advisories were issued by the vigilance department for systemic improvement in various business activities/Departments and company as a whole to avoid the risks related to corruption. Some of them are as follows.

- Improvement in functioning of GPS/GPRs based on Vehicle Tracking System.
- Streamlining of the transfers
- Issuance of guidelines for heap-wise stock maintenance in all projects of MCL.
- Security checks in handling of scrap in workshops.
- Timely disbursement of bond money to the management Trainees after completion of 5 years.
- Strict monitoring of functioning of In-motion weigh bridges.
- Formulation of standards for proper decantation and handling of HSD circulated in all the areas of MCL for vigilant action and preventive measures.
- Rotation of employees working in weighbridges at Hingula Area.
- Shortcoming in the working of Samadhan Kendra long with the suggestive measures to be taken therein.
- Regarding preventing an employee of the company from engaging in any outside business, suggesting that the definition of “relatives’ as explained in the CDA rules 1978, may also be incorporated in the certified standing orders applicable to non-executive employees.

GRI 205-2:

We create awareness among our employees and stakeholders for effective work culture. During this FY 2017-18, vigilance awareness week was celebrated from 30th October to 4th November, 2017 at HQ and in all its Project Areas.

During this week,

- Vigilance Bulletin for the year 2017 was also released along with a specially prepared Hand book on Do's & Don'ts.
- One Act Play on Anti-corruption "Ventilator" by Agraj Natyadal was performed at HQ and areas.
- A bidders meet was organized at MCL, HQ where the stakeholders were given an opportunity to express their views/ grievances/ suggestions on various issues with respect to Civil, Transport and other contracts. This interactive session was held between the General Managers & Staff officers from various disciplines of our company and 75 Nos. of Bidders.
- On 01.11.2017, a RUN for "Corruption Free India" was organized and every employee actively participated in the event.
- Debates and Quiz competition on anti-corruption themes were organized among the employees and ladies of our company in colonies.
- Along with this, some schools from Sambalpur participated in poster presentation and prizes were distributed for their active participation.
- We have circulated Anti-Corruption Slogans to 18221 nos of employees/ executives through SMS service of the BSNL CUG network.
- Our CVO and vigilance team interacted with field executives and employees of both the coalfields and integrity pledge for citizens was also administered.

We are concerned about the queries raised by our stakeholders, during this reporting year we replied 14 parliament questions and 5 RTI queries.



Shri M.Khursed, CVO,MCL deivers integrity pledge during awareness drive against corruption.



Workshop on basic vigilance awareness-03.05.17



Prize distribution at Talcher Area during VAW-

We get our employees trained in accordance with organization’s anti-corruption policies and procedures. During this Financial year, total 107 no’s of our employees were trained in vigilance awareness through MTI, Burla.

GRI 205-3:

We also combat for transparency in our evaluation process. During this financial year, 26 numbers of vigilance cases taken up for investigation, inquiry etc., involving 86 no. of employees. Total 11 no. of cases taken up for departmental proceedings and penalty was imposed in 18 no. of cases involving 119 employees.

GRI 206-1:

Our company takes legal actions for anti-competitive behavior, anti-trust and monopoly practices to promote economic efficiency and sustainable growth. During this reporting year, there was no case of legal ant-competitive behavior and violations of anti-trust and monopoly practice.



Rally for “My vision- corruption free India” along with DAV public school children

GRI 301: Materials

301-1 Materials used by weight or volume

During the reporting year, following are the materials used to produce our primary product by conventional method (i.e. Blasting).

Raw Material Consumption Statistics

Raw materials	2017-18	2016-17	2015-16
Explosives (in tones)			
Permitted Explosives	554.20	523.09	566.19
Large Dia Explosives	2679.43	2127.83 [^]	1,877.24
Bulk Explosives	49218.03	39,660.69	31,667.73
Cast Boosters(PETN/TNT)	69.96	85.20	72.52
Emulsion Booster	51.39		
Total	52573.01	44,524.66	34,183.68
Detonator (In Lakh number)			
CED	0.26325	0.22	0.20
CDD	12.90	12.060	12.80
Cord relay	0.03	0.02	0.03
ED	0.04		
Total	13.23	12.30	13.03
Non-electric detonators (in numbers)	22,50,040	9,79,503	14,55,130
Detonating Fuses (in lakh metres)	3.07	2.86	4.32

301-2 Recycled Input materials used

While extracting coal from mother earth,

1. We take care to fill back the overburden material into the mine voids during mining as per progressive mine closure plan/final mine closure plan. The topsoil of the overburden is preserved separately and sprayed over the dump. Thus the mine void is technically reclaimed. The above operation improves the moisture content, bulk density, pH value and overall nutrient content of the soil and favors soil compaction. The back filled area is then biologically reclaimed by plantation on it. In fact a lower ground level than the original is maintained because of its geological condition (the quantity of coal extracted is more than the OB generated).
2. The water drawn from the mines is settled in large sumps in the mines. Part of it is used for industrial purpose, like washing of HEMM, dust suppression, etc. Part of it is treated and used for domestic purpose.
3. There is no scope for recycling raw materials like explosives used for blasting purposes.

4. Lead acid batteries and burnt oil of HEMMs and transformers are sold to authorised recyclers through open tendering.



Conservation of Top soil at Basundhara(W) OCP



Over Burden Management at Bhubaneswari OCP

GRI 302: Conservation of Energy

The continuous global increase in energy demand, high energy prices and environmental issues related to emission of carbon dioxide pose a substantial Challenge to the mining industry. To carry out mining operations, fuel (HSD) and electricity are our primary energy sources. Our HEMMs (dragline, shovels, surface miners, dumpers, dozers, drills, loading machines, road graders, water sprinklers and cranes) and LMVs for coal production, OB removal and coal transportation utilizes various types of fuels. ^[302-5] Fuel (HSD) and electricity are our primary energy resources utilized to carry out mining operations. We adopt low carbon technologies and alternative renewable energy sources to use these resources in sustainable way. We have developed a framework for efficient management of energy consumption by adopting the following steps-

- Preventing the leakage of hydraulic oil from equipment
- Periodic checking of hoses and their routing
- Periodic overhauling of engines, transmission and hydraulic operated systems
- Adopting surface miners in place of conventional methods of coal extraction,
- Ensuring proper inflation of tyres,
- Regular servicing of self-starters, alternators, and batteries
- Replacing conventional lamps with LED lamps. Till date following conventional lights has been replaced by LED lamps.

S.no	Quantity replaced in nos.	Wattage of LED	Wattage of Conventional lights
1.	5956	19 Watt	40 Watt
2.	500	10 Watt	20 Watt
3.	453	90 Watt	250 Watt
4.	60	45 Watt	150 Watt
5.	180	5 Watt	11 Watt
6.	22	12 Watt	20 Watt

During this FY 2017-18, we have also purchased 300 nos. of 18watt LED tubes.

- Procurement of 5-star air conditioner has been installed in different areas and MCL H/Q.

S.no	AC Type	Quantity (nos.)
1.	1.5T W/TYPE	137
2.	1.5T SPLIT TYPE	93
3.	2T SPLITT TYPE	60

GRI 303: Water – A Valuable Resource Management

Water is a valuable resource in mining industry. It is used for suppression of dust, washing of coal, quenching of fire and cleaning of HEMMs as well as for domestic requirements within our operations. We accept that there is every possibility of change in the water table & pollution of surface water (if discharged without treatment) due to our mining

operations. MCL always tries to make the resources available for the future generations. In this regard,

- To evaluate the sustainability of ground water for our purposes, we understand the chemical composition of groundwater in and around our operative locations in Odisha.
- Regular monitoring of quality and quantity of ground water is being done through a network of 40 nos. of piezometers (17 nos. in IbV CF, 23nos. in TCF) as well as other bore wells in and around our operating locations by CMPDI-RI-VII, one of the subsidiaries of our parental company.
- Water generated through seepage off strata, rainfall, water from OB dumps, coal stockyards and other surface runoff is stored in mine sumps which act as natural water harvesting structures which ensure the ground water recharge in long term. These are created after evacuation of coal from a mine pit and used for domestic as well as industrial purpose.
- **Zero Discharge- back to mother nature**

We at MCL, manage exact quantity of water, the losses due to evaporation and strata seepage, the consumption statistics and finally the surplus water quantity. The excess water is redirected to artificial recharge pits created just below the surface level. Excess quantity of mine water is used for Drinking purposes, Agricultural purposes and for ground recharge. During this FY 2017-18, 7843.308 Million litres/yr of water is made available for ground recharge.

- Treating the mine water and sewage before releasing into any surface water bodies. We are further fulfilling our domestic purposes in Basundhara colony by treating the abandoned Mine sump water.

Positive Water footprint- With drawl ^[303-1], Treatment and Supply:

MCL utilises the surface water, which is more accessible source to fulfil water needs. We put effort to conserve more water. Besides this we even recycle our mine water for our purposes which paves way for sustainable management.

We have our Water Treatment Plants (WTPs) operational in Talcher, Ib Valley, Belpahar and Basundhara under the Integrated Water Supply Scheme (IWSS). These units treat the water withdrawn from surface water sources or mine water sumps and supply for domestic use. The below table is surface water consumption statistics for the last three years. And we witnessed that surface water withdrawal has been decreased by 6.99% with respect to previous reporting year ^[303-2].

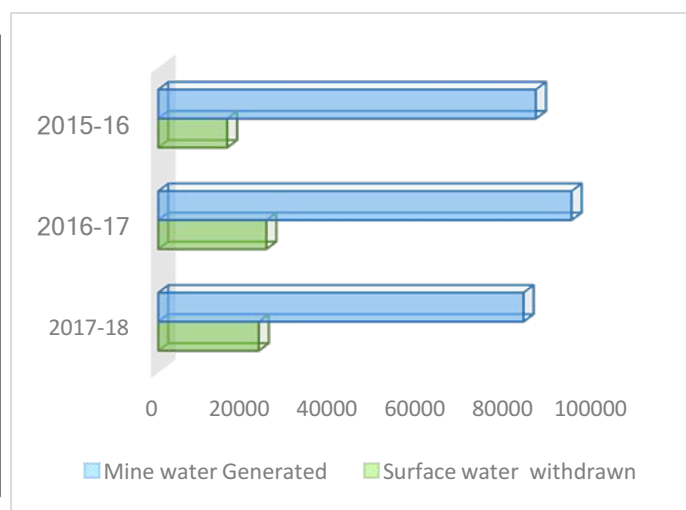
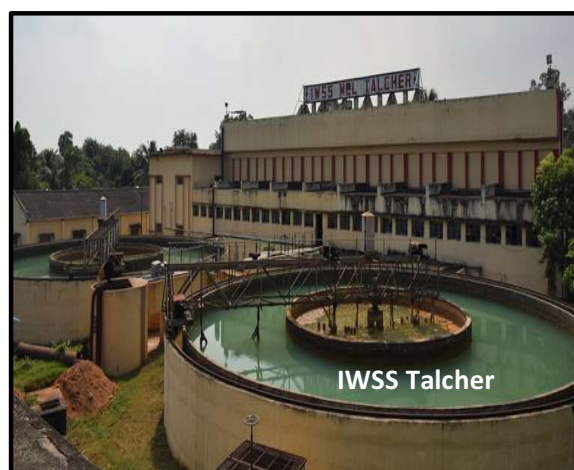
Surface Water Consumption Statistics

Name of Area / Project	Surface Water Sources	Total Water Withdrawn (million litres/year)		
		2017-18	2016-17	2015-16
IWSS Talcher	Brahmani River	5,196.03	10,821.42	10,821.42
IWSS Lakhanpur area	Hirakud Reservoir (Mahanadi)	9,499.94	9,829.49	893.59
IWSS Ib Valley area	Ib River	3,286.27	3,288.42	3,288.42
IWSS Basundhara	Basundhara River	4557.76	326.16	326.16
MCL Headquarters, Burla	Power Channel (Mahanadi)	366.345	364.59	364.59
Total		22,906.36	24,630.08	27,587.36

Volume of mine water generated and utilisation data presented in the mobile app “CoalJal” has been validated by Sambalpur University in respect of 24 mines of MCL during 2017-18. The following table shows the mine water statistics of whole MCL during this financial year.

Mine water Statistics 2017-18 (Million liters/yr) ^[303-3]

Mine water Generated	Mine water utilized			Excess Mine water utilized for ground recharging
	Quantity for Industrial use	Quantity for Domestic use	Quantity for own use	
83233.159	14043.5	5209.097	19252.6	7843.308



Surface water Withdrawal's Mine Water Generated (Million liters/year)

Utilisation of mine water has been increased by 10.8% with respect to previous reporting year. Treated underground mine water is also supplied as water for drinking, domestic and agricultural uses to the surrounding villages of our mining areas. We always try to maximise our storage capacities, maximise recycling and reduce our overall usage to have a positive footprint.



Water harvesting structure at Hingula OCP



Mine water sump at Bharatpur OCP

GRI 304: Connecting with the Tapestry of Life- Biodiversity:

As our mining inevitably disturbs land and water courses ^[304-2], we reclaim the surfaces during and after digging coal is completed i.e. returning the land to useful purposes. Reclaimed mine lands are often more attractive to wildlife and human uses. Our mining operational sites are located in Angul, Jharsuguda and Sundergarh Districts consist of both underground and surface land of 6069.018 Ha as per project monitoring reports of quarter ending 2018^[304-1].

Process of repairing negative effects of mining activities on the environment ^[304-3]:

- **Technical Reclamation**

While progressing with mining we simultaneously fill back the de-coaled voids to its original state with overburden material. Later the top soil materials are replaced on top of the overburden back filled area to restore the soil-quality back to its original state after mining activities. However, complete restoration of soil minerals is impossible, but we at MCL wouldn't leave an opportunity to work for betterment of sustainable future.

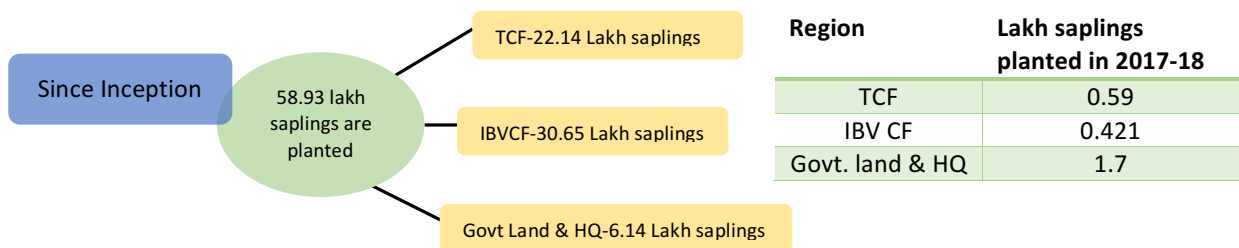
- **Biological Reclamation**

After the soil replacement and stabilization, the land is brought back to life by afforestation. Our plans to return mined areas to a more natural state, focusing on soil, vegetative, wildlife, and/or water management values, plays a major role in guiding reclamation activities.

We at MCL, identified that reclamation activities employ passive means of ecosystem restoration wherein a less intensive management approach is taken and so on.

Environmental degradation created in our surroundings can be reduced by planting more and more trees. They are protective measure for biological land reclamation, carbon sequestration, prevention of dust and for controlling of noise etc., Our operational (i.e external OB dumps, backfilled internal dumps) and residential locations (Townships, offices premises) are planted with mixed indigenous species, fruit bearing, medicinal plants etc., whatever are feasible based on the location.

Sowing happiness and reaping reality





The man behind the development of kulda nursery in the mine premises



Seed ball germination at Kulda Nursery

Plants for the planet 



VAN-MAHOTSAVA- a go-green festival

We celebrated Vanmahotsava at MCL, HQ on 17th July'2017 and at all projects of MCL on different dates. On this occasion at MCL HQ, more than 1000 fruit bearing saplings and medicinal samplings were distributed to nearby ashrams, NGO's & to our employees. A rally was conducted at HQ level and Area levels with involvements of students, employees and locals to create awareness among the people for conservation of life and planted saplings of diverse species.



Joining hands for seed ball festival at Lakhapur



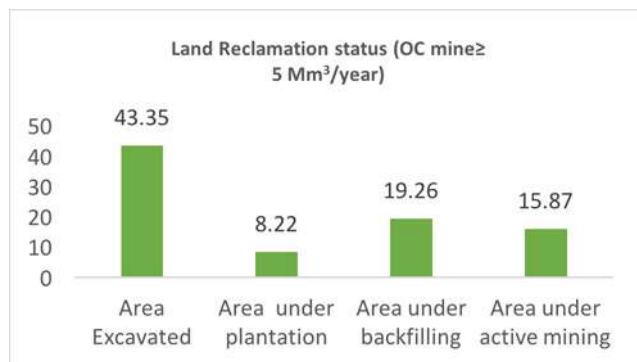
During Van-Mahotsava at MCL, HQ

Back to roots-

Our sister company CMPDI, has been regularly monitoring our land reclamation progress of both the coal fields through remote sensing and prepares an annual report. In association with the National Remote sensing Centre in Hyderabad, CMPDI obtains satellite data for the areas of vegetation, backfilling, and active mining and create maps that are useful for assessing the progressive reclamation status of our de-coaled area.

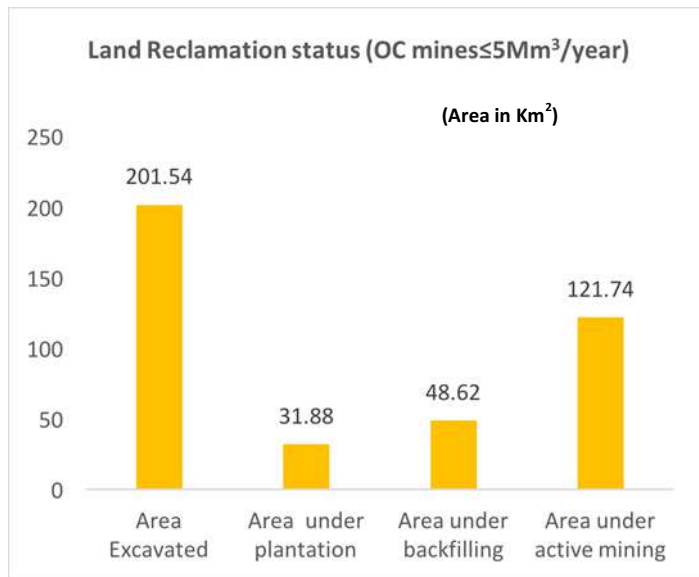
(Area in Km²)

We adopt reclamation process for our open cast mines and sand stowing for stabilization of underground mines. Our responsibility towards environment is never relaxing. During FY 2017-18, land restoration monitoring of 13 opencast mines in both the coalfields producing 5 million cu.m and more (Coal+OB) per year was done and the details are depicted in the beside chart.



We regret to inform that area of biological reclamation has been decreased by 3.92% with respect to previous reporting year. This may be due to fresh overburden dumping on the existing dump yards for want of sufficient dump space. But our technical reclamation has been increased by 8.08%. Total 1.1 Km² area under reclamation as a whole has been increased during this FY 2017-18. The percentage is calculated with respect to 11 OC projects with the same projects included in last year.

During this year, land restoration monitoring of 3 opencast mines in both the coalfields producing less than 5 million cu.m (Coal+OB) per year was also done and the details are depicted in the chart below:



Area of biological reclamation (plantation on excavated area) has increased from 25.13 Ha. to 31.18 Ha. This has been compared with FY 2014-15 as surveillance of land reclamation of OC mines ≤ 5Mm³/year is done once in three years.

Lilari OCP and Anata OCP ranks on top for land reclamation with 77.75% and 82.29% for OC mines ≤ 5Mm³/year and OC mines ≥ 5 Mm³/year.

Our mine water sumps and settling ponds created after mining, holds marine ecosystem. All these efforts towards environment, accepts diversity to all the livings.



Conserving Biodiversity



A local villager fishing at Mine water sump of Basundhara (W) OCP.

MINE CLOSURE ACTIVITIES:

Ministry of Coal, Govt. of India has formulated Mine Closure Plan Guidelines in 2009 and later modified it in the year 2013 which are incorporated in all approved Mining plan. By following the guidelines, we have provision of finances for all the projects. As per the plan, we deposit certain amount annually in an Escrow Account of all our 25 mines. All our mining projects have proper mine closure plan as per statutory requirements. During the reporting period of 2017-18, the balance of fund in Escrow Account was Rs.834.814 Crores including interest.

Up to 80% of the fund deposited in ESCROW account can be reimbursed through progressive mine closure activities. The Yardstick for claim of reimbursement from Escrow Account is as described below.

S.no	Major Closure Activities	% of Total Closure Cost
1.	Dismantling of Structures	
	Service Buildings	0.2
	Residential Buildings, Industrial Structures	2.67 0.3
2.	Permanent fencing of mine void & other dangerous areas	1.5
3.	Grading of highwall slopes	1.77
4	OB Dump Reclamation	
	Handling/Dozing of OB dump & backfilling	88.66
	Technical & Bio-reclamation including plantation	0.4
5	Landscaping	
	Landscaping of the open space in leasehold area	0.3
6	Plantation over cleared area after dismantling.	0.5
	Plantation - quarry area & safety zone	0.2
	Plantation over the external OB dump.	0.02
7	Post closure Environment Monitoring /testing of parameters for 3 years.	
	Air quality	0.22
	Water quality	0.2
8	Entrepreneurship development	0.26
9	Miscellaneous & other Mitigation measures	2
10	Manpower Cost for supervision	0.8
	Total	100

GRI 305: Management of Air Quality - Cleaner air, longer lives

In connection with our operations like cutting, drilling, loading, unloading and transportation of coal and OB dump materials on haul roads, dozing operations at OB dumping yards and heavy vehicles plying on haul roads etc., there is emission of dust particles leading to air pollution in the neighborhood. The type of the machines used for the mining activities, geological conditions and atmospheric conditions like temperature, rainfall and humidity affect the intensity of the emissions. Basic air pollutants that are measured in and around our operational locations and villagers are Suspended particulate matter, PM10, PM2.5, SO_x, NO_x and ensure that they are within the standard limits.

CMPDI-RIVII continuously monitors the air quality once in every fortnight to know the pollution level in and around our projects. The monitoring data for FY 2017-18 is put up in our website under the heading Annual Environmental Monitoring Report submitted as per the Environment (Protection) Amendment Rules. Our active mining is not consistent to one place, with this there are changing footprints in the haul road, the size of tailing sites and waste rock, varying production etc., so our monitoring stations. The monitoring locations are decided in consultation with concerned Regional officer, SPCB and CMPDI-RIVII. We follow NAAQS, 2009 standards (in Residential Areas) and MoEF&CC standards,2000 (in Mining areas) to assess our air quality and take necessary steps to reduce the pollution in future. Our significant air emissions during this FY 2017-18 and comparison with past two reporting years in pictorial form based on site specific are as below ^[305-7]. This is calculated with reference to the paper on “Prediction of dust concentration in opencast coal mines using artificial neuron network” by Bindhu Lal et al.,2012.

Air Quality Data – FY 2017-18

Air Quality Parameters	Talcher Coalfield	Ib Valley Coalfield	Total
Total particulate matter (kg)	95,61033	1,00,16,422	1,95,77,455
SO _x (Kg / Te)	44,282	56,037	1,00,319
NO _x (Kg / Te)	63,288	33,342	96,630
PM 2.5 (Kg / Te)	14,34,155	15,02,463.3	29,36,618



Our TPM and PM 2.5 emissions have reduced with respect to previous reporting year by 3% and 2.56% respectively. All the figures in the air quality emissions units are in kg/Te.

Control Measures:

We take adequate sustainable measures from extraction stage to transportation stage of our product to mitigate the dust emissions.

Over 91.5% of the total coal in MCL was produced by Surface Miners in this reporting year, which is a major step in change of technology to restrict generation of dust at the source. This technology was espoused way back in 1999. Surface miner crushes the coal up to -100mm which paves way for transportation of coal without processing/crushing through coal handling plants. Wet drilling/dust extractors are provided in drill machines in Overburden and where conventional is inevitable in coal benches.

To maintain quality of coal till it reaches to the customer, we adopt coal beneficiation process i.e. crushing of coal produced by conventional method, to proper size (-100mm) at CHPs and FBs. We have two major CHPs, one at Jagannath OCP (2 Mty) and the other at Bharatpur OCP (3.5 Mty) and 10 mini CHPs. Fixed sprinklers and misters are fitted at unloading/receiving points, crushing and discharge points of CHPs and FBs to (bring down our conventional coal produced to the required size) reduce the dust significantly.

We have established ecofriendly transportation mode i.e. through rail/MGR/Belt mode (81%). In rail mode, per rake carrying capacity is around 3,800Te, which is equal to around 240 to 250 trucks, each carrying 15-16 Te coal. Rake loading facility and Rail Infrastructure are being strengthened. Coal through rail mode is dispatched through 21 sidings and 3 MGRs at present. Average numbers of rakes per day is 65 rakes. Construction of one new railway siding no. 10 at Balram OCP is in progress. Fixed sprinklers in adequate numbers have been provided and in operation in all the railway sidings for dust suppression during wagon loading activities. Mobile Water Tankers have also been provided to cater to the temporary place of dust generation in and around sidings.

We have provided fixed sprinklers, mobile tankers (both departmental and contractual) for control of dust on coal transportation roads. 103 numbers of mobile water tankers (Ranging from 8KL to 34KL) are in operation in both the coalfields to control the dust emission. We invariably use tarpauline sheets to cover coal while transporting through road. A separate dedicated coal transportation corridor is (about 20.99 km in TCF and 17.03 km in IBCF) under construction for bypassing residential areas, schools and other human habitation areas. Eco-friendly dispatch systems, like SILO/Tube conveyor, of capacity 61MTPA are under construction, which will significantly reduce the dust pollution.

Four Coal Washeries of Capacity 10 Mty each for washing of coal to get coal of ash less than 35% ash content is to be established in first phase. Status of EC and FC is given below.

Washeries	EC and FC status
Hingula Washery	EC obtained vide letter no. J-11015/67/ 2013-IA-II(M)Dt-28/10/2015.
Jagannath Washery	EC obtained vide letter no. J-11015/203/ 2015-IA-II(M)Dt-31/08/2016 and Amendment in EC Dt.15/02/2017.
Ib valley Washery	EC obtained vide letter no. J-11015/171/ 2015-IA-II(M)Dt.30/03/2017 and Amendment in EC Dt.15/06/2017.
Basundhara Washery	EC and FC are in progress

Manual sweeping and collection of spillage and dust along coal transportation roads:

Three numbers of heavy-duty truck- mounted vacuum-operated mechanical road sweepers are in operation for sweeping and collection of spillage over coal and dust over pucca coal transportation roads at Talcher & Ib Valley Coalfields. Procurement of mist blower cum road fogger on hiring basis for all the areas is under process.



Carbon footprint:

We ensure to reduce carbon emissions due to our primary work. Adopting Surface miners in place of conventional methods and increasing green cover are our sustainable measures. There is an estimated reduction of 1,17,860 Te of CO₂ at the rate of 20 kg per tree per year, due to our green cover.



[302-1] [302-2] During this reporting year, our carbon emissions was recorded as TCO₂ due to fuel consumption in our departmental (Scope 1) and contractual vehicles (Scope 3) and our electricity consumption (Scope 2). We regret to inform that our carbon equivalents of electricity consumption and fuel consumption has been increased with respect to previous year [305-5]. The energy consumption of this reporting year has been increased with respect to previous year [302-4] due to considerable increase in coal production.

TCO₂ Emissions



GHG emissions are calculated with reference to

- http://www.in.undp.org/content/dam/india/docs/low_carbon_lifestyles.pdf
- Emission factors as used for Genpact by PwC (attachment) http://www.in.undp.org/content/dam/india/docs/low_carbon_lifestyles.pdf
- http://cbalance.in/wp-content/uploads/2014/04/cBalance_CCL_Coal_LCCF_report_23_March2014_v0.3.pdf

[302-1][302-2][305-1] [305-2] [305-3] **Energy Consumption and GHG Emission Trend**

Particulars	Energy Consumption (GJ)			TCO ₂ emissions		
	2017-18	2016-17	2015-16	2017-18	2016-17	2015-16
Scope 1	17,36,668	16,70,685.90	17,66,664.96	1,27,058.85	1,22,956.14	1,29,321.92
Scope 2	10,93,931.06	10,87,492.90	10,82,214.00	2,49,173.19	2,47,706.72	2,46,504.30
Scope 3	51,98,966.44	30,24,170.12	28,64,555.17	3,77,737.38	2,00,197.31	2,13,893.76
Total	80,29,565.40	57,82,348.92	57,13,434.13	7,53,969.41	5,70,860.16	5,89,719.99

Renewable energy resources - carbon free electricity:

Our Anand Vihar premises at HQ is having most potential solar power plant of 2.016MW peak capacity. Our solar power plant earned 2046 number REC during this financial year. And it helped us to reduce in our carbon footprint by 18,59,112 kg of CO₂^[305-5]. The status regarding installation of solar rooftop power over our service building, workshop and hospitals in both the coalfields as disclosed in previous reporting year is that the survey has been conducted and detailed project report is under preparation by M/SECI (Solar energy corporation of India) for 15 nos. services. We have installed solar panels at our Belpahar training institute depicted in the figure.



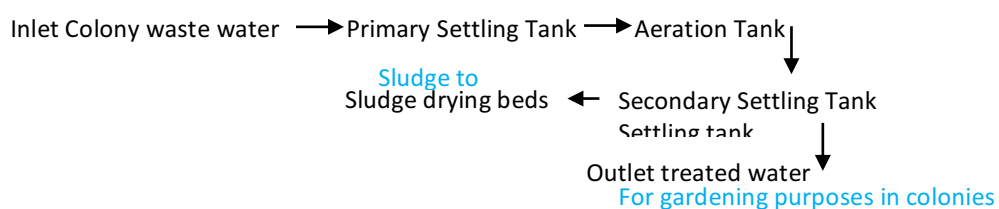
GRI 306: Recycling of effluents and waste management

306-1: water discharge by quality and destination.

Waste Water produced in our mining and residential areas, is treated in treatment plants and then disposed in surface water bodies or reused for internal purposes.

At Townships: We have established and operate 9 nos. Sewage Treatment Plants (STPs)

Treatment process:

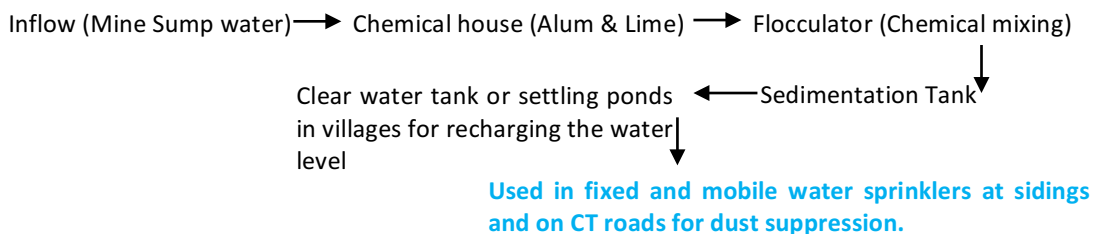




Usage of Effluent from STP Lajkura for vegetable gardening.

- To trap the silt from mine establishments runoff and natural drainage: 22 nos. Mine drainage treatment plants (MDTPs), they act as settling ponds. We have created garland drains and catch drains around the quarry boundary and OB dumps

Treatment Process:

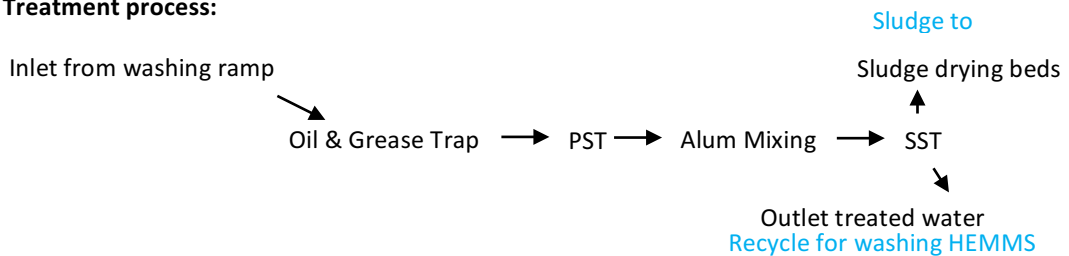




Sedimentation tank at MDTP, Iajkura OCP

- At HEMM workshops: There are 13 no's workshop effluent treatment plants (WETPs) assisted with oil and grease traps (OGTs) for removal of oil and grease as well as the oil sludge from the waste water generated after cleaning our HEMMs. Our WETPs run with Zero-discharge strategy i.e. treated water is completely reused in the workshop.

Treatment process:



During monsoon seasons, it might be infeasible for recycling because of large quantity of mine water and surface runoff. This leads to discharge in to surface water bodies or nearby nallahs after necessary treatment to meet the discharge standards [306-5]. CMPDI-RI-VII carries out monitoring of air, water and noise quality in and around our operational and residential locations every fortnightly.



306-2: Waste disposal Statistics

Waste Category		Quantity Disposed Off through e-auction		
		2017-18	2016-17	2015-16
Hazardous	Burnt Oil (kL)	915.25	98.00	126.00
	Battery (numbers)	3,219.00	5,624.00	1,808.00
	Miscellaneous items	Nil	1,806.00	-
Non-Hazardous	Drill bits (Numbers)	837	823.00	-
	Tyres (Numbers)	398.00	345.00	1,619.00
	Iron and steel (MT)	4229.00	1,431.00	1,550.00
	Empty drums (Numbers)	870	1,100.00	2,554.00
	Vehicles (Numbers)	49	30.00	70.00
	Miscellaneous items (MT) (Ceiling's Fans)	750	5.00	17.15

During this financial year, there are no significant oil, fuel, chemicals, wastes spills on soil or water surfaces in our operational locations ^[306-3].

GRI 307: Statutory Compliances

We are committed to all the statutory environmental compliances. We are equipped with sufficient statutory staff and officers at MCL HQ, all the areas and projects for compliance of all the prevailing statutory laws on environmental protection and sustainability of our projects. These regulations extend to every facet, including the company's interactions with its employees and stakeholders within legal parameters to hold our business sustainable. We are in constant touch with various environmental laws in force in India to keep abreast with any changes that need to be incorporated, since the law is very dynamic and rules keep on changing from time to time. The following are the compliances we adhere to for our operations.

Forest Clearances:

As per Forest (Conservation) Act, 1980 & its Amendments, (MoEF&CC), grants Forest Clearance required for using Forest land for non- forest purpose. During this financial year, we obtained stage –I FCs for Ananta Extn. OCP (240.672 Ha) and Garjanbahal OCP (88.89 Ha) and stage –II FCs for Hingula-II OCP(450.53 Ha) and Garjanbahal OCP (88.89 Ha).

Environmental Clearances:

As per EIA Notification, 2006 (Notified under Environment Protection Act 1986), we obtain ECs from MoEFF& CC operating/constructing a new or expanding our coal mining projects or washeries.

During this reporting year, we have obtained TORs for Kulda Expansion OCP(10 TO 15 Mty), Jagannath OC Expansion(6 to 7.5 Mty) and Basundhara(w) Extension OCP(8.75 Mty). ECs of Kaniha OC Expn.(10 TO 14 Mty), Garjanbahal OCP(New) (13 Mty),Ananta OCP Expansion Project Phase-III (Amendment in EC- 12 to 20 Mty), Bhubaneswari OC Expansion (25 to 28Mty), Lakhanpur Opencast (Phase-II) (18.75 to 21 Mty), Kulda Expansion OCP (10 to 14 Mty).

EC available for MCL mines on 01.04.2018



EC granted during this Reporting year



Consent to Establish/Operate (CTE/CTO):

“CTE/CTO” under Water & Air Acts has been obtained from the State Pollution Control Board (SPCB), Govt. of Odisha for all the operating mines of MCL and one Rly Siding.

Hazardous Waste Authorization:

“Authorisation” under Hazardous Waste (Management & Trans boundary Movement) Rules, 2016 has also been obtained from the SPCB, Govt. of Odisha, by all operating mines. The used batteries and recovered burnt oil & grease are auctioned to authorised re-processors. Half-yearly return for batteries and annual return for other Hazardous Wastes were submitted to the SPCB, Govt. of Odisha as per the Statute.

Submission of Form-V:

For preparation of Environmental Statements in Form-V under Rule-14 of Environment (Protection) Rules, 1986, Environmental Audit was conducted by multi-disciplinary team of Officers, for each of the 22 operating mines during the year. The said reports were submitted for all the 22 operating mines were submitted, timely to SPCB vide letter Dtd. 14.09.2017.

Half-yearly compliance:

Half-yearly reports of compliance of the Environment clearance conditions with regard to all the operating mines having Environmental Clearance under EIA Notification, 2006 were submitted to MoEF&CC, Eastern Region Office, Bhubaneswar and to MoEF & CC, New Delhi timely during 2017-18.

^[307-1] Despite of all the measures taken for complying all the statutory regulations, we disappoint to share that during this reporting year we faced a legal notice on coal production of 17 mines beyond granted EC capacity with a penalty of Rs.8297.775 Cr raised by DDMS with WP© no.114 of 2014 of the supreme court of India. With respect to this, the Hon'ble Revisional Authority has been pleased to pass interim stay in exercise of power under rule 55(5) Mineral Concession Rules, 1960 till further order.

MCL People

GRI 401

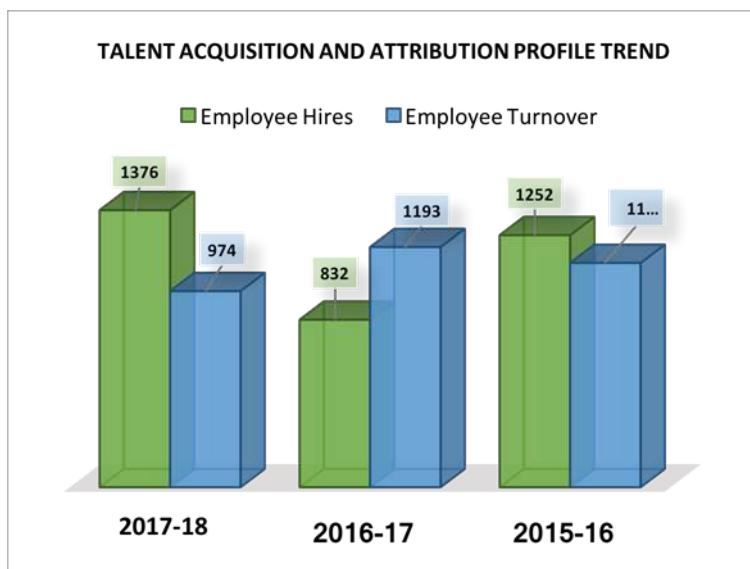
Enabling Growth with our Employee Force

We at MCL believe in “Human resource is the most important asset of an organization”. Our Human resources department supports the organization growth through active participation of our people and scaling through sustainable HR practices. Applying to, working at and leaving our organization will always remain a satisfied experience -by removing barriers, fixing defects and enabling self-service which can help employees do meaningful work.

Our strategic focus is building strength upon Leadership Skills, Performance and Innovation, Talent Acquisition and Sustainable Advantage. We nurture best talents and leaders in the job market with the help of modern performance management system and innovations for the development of organization.

Our key employee retention strategies focus on right resource for Hiring, Orientation and Onboarding, Training and Development, Internal Communication, Performance Evaluations, Pay Benefits, Termination and Outplacement. During this FY 2017-18, our manpower strength is 22,425 comprising of 1,877 Executives and 20,548 Non-Executives. With respect to previous reporting year our manpower strength is 1.73% more which is depicted in the graph below.

We at MCL, maintain harmonious relation by three tier IR system mechanism i.e. at Project level, Area level and Corporate level for achieving higher growth. Depending upon the issue and delegation of power, the grievances /demands of employees were resolved at different levels of IR system. Despite of remote location of our sites, we provide all the necessities to our employees for healthy and sustainable living.



Employee hires and turnovers of the company for FY 2017-18 by Gender wise, Age group and Region wise are depicted in graphs on page no:69.

GRI 401-1

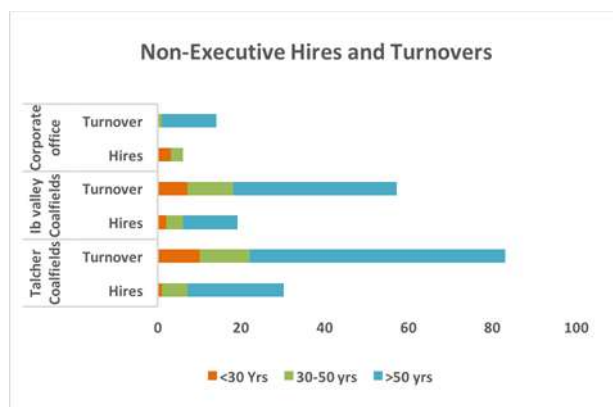
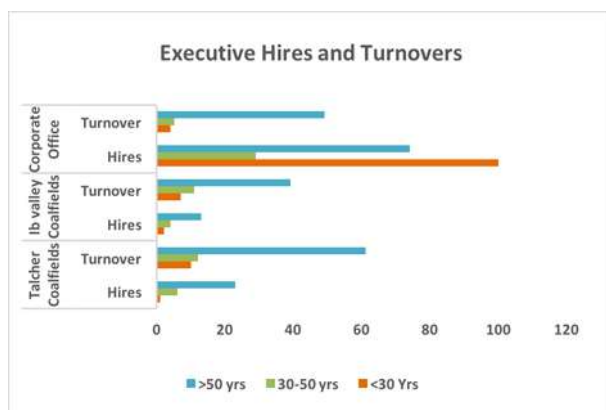
Employee Hires Statistics (Gender-Wise breakup)

Employee Hire Category	FY 2017-18						FY 2016-17						FY 2015-16					
	Executives		Non-executives		Total		Executives		Non-executives		Total		Executives		Non-executives		Total	
	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F
Appointment under NCWA - 9.3.0 (in case of death)	0	0	104	30	104	30	0	0	69	30	69	30	0	0	48	23	48	23
Appointment under NCWA - 9.4.0 (in case of permanent disability)	0	0	1	0	1	0	0	0	1	1	1	1	0	0	1	0	1	0
Appointment under land oustees	0	0	725	236	725	236	0	0	309	62	309	62	0	0	695	60	695	60
Fresh recruitment	103	8	14	0	117	8	62	0	166	5	228	5	85	9	191	28	276	37
Re-instatement	0	0	3	0	3	0	0	0	1	0	1	0	0	0	1	1	1	1
Transfer from other company	138	3	7	0	145	3	111	5	9	0	120	5	37	0	5	0	42	0
Appointment against (SFVRS)	0	0	4	0	4	0	0	0	1	0	1	0	0	0	68	0	68	0
Total	241	11	858	266	1099	277	173	5	556	98	729	103	122	9	1009	112	1131	121

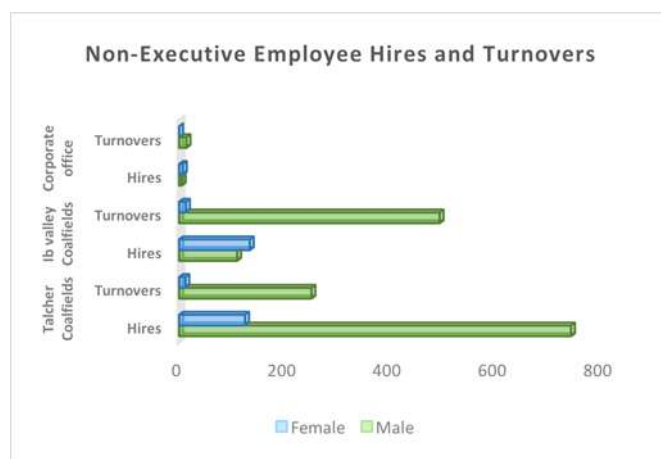
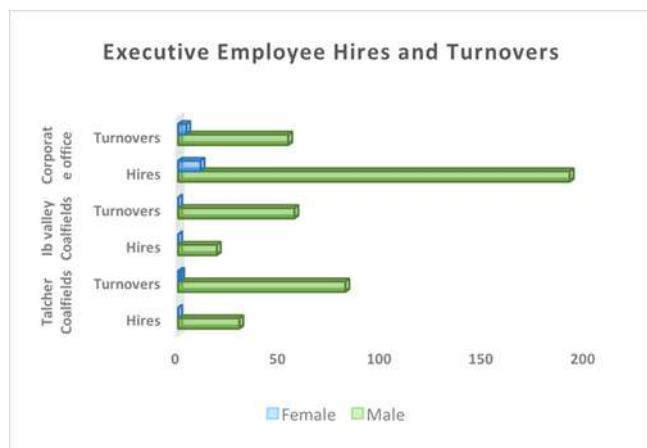
Employee Turnover Statistics (Gender-Wise breakup)

Employee Turnover Category	FY 2017-18						FY 2016-17						FY 2015-16					
	Executives		Non-executives		Total		Executives		Non-executives		Total		Executives		Non-executives		Total	
	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F
Death	4	0	48	4	52	4	2	0	127	4	129	4	3	0	119	2	122	2
Dismissal	0	3	4	0	4	3	0	0	6	0	6	0	2	0	8	0	10	0
Resignation	28	1	10	3	38	4	32	3	15	2	47	5	23	2	10	1	33	3
Retirement	60	1	594	18	654	19	65	0	699	23	764	23	65	1	617	25	682	26
Removal / Termination	2	0	21	0	23	0	15	1	70	1	85	2	14	1	106	0	120	1
ESS / VRS	0	0	0	0	0	0			10	0	10	0	0	1	69	1	69	69
Medically unfit	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	0
Transfer to other company	99	3	1	0	100	3	90	3	24	1	114	4	39	4	1	0	40	4
Total	193	8	678	25	871	33	204	7	941	41	1145	48	146	8	863	97	1009	105

Employee Hires and Turnover by Age group and Region wise for FY 2017-18



Employee Hires and Turnover by Gender wise and Region wise for FY 2017-18

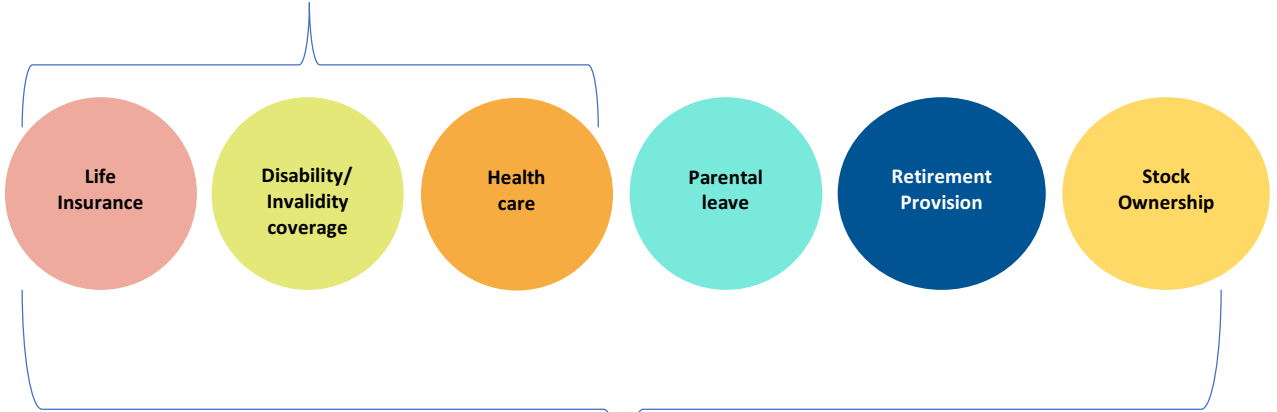


GRI 401-2: Employee Benefits

Benefits are a cornerstone of an employee value proposition as they drive loyalty. We provide benefits as per the Employee Compensation Act (1920), for both permanent and contractual Employees.

Some of the standard benefits exclusively for permanent employees are Leave travel allowance, Group Personal Accident Insurance Scheme, Maternity benefit to female employees, Settlement Allowance, Gratuity, Post Retired Medical Benefit Scheme, Compensation for the dependents of employees who passed away in the mines. We never say goodbye to our employees even after they retire from their services, there are a range of contribution plans (Provident Fund and Pension Fund) that continue to support our employees financially.

For Contractual Employees



For Permanent Employees



Yoga classes during International yoga day



Singing competition during Environmental week-17

GRI 401-3 Parental leave:

Our employees are benefited with parental leave whenever there is a need for it. During this financial year 2017-18, we could furnish the parental leave data only from few areas of our operational locations mentioned below. We are trying to include all the related data in the next reporting year. All the employees returned to work after their parental leave (100%).

Area	Bharatpur	Ib Valley	Talcher Area	CH,Talcher	CW Talcher	MCL HQ
Male	5	-	-	-	-	-
Female	-	14	2	4	2	1

Shielding our employees with Right Safety and Incredible Health

We at MCL, has embraced a culture of “safe mining” and have improved communications to help workers prepare and improve safety practices. It is our passion to keep workers safe. It is our mission for all of our employees to think safety and put worker’s safety first.

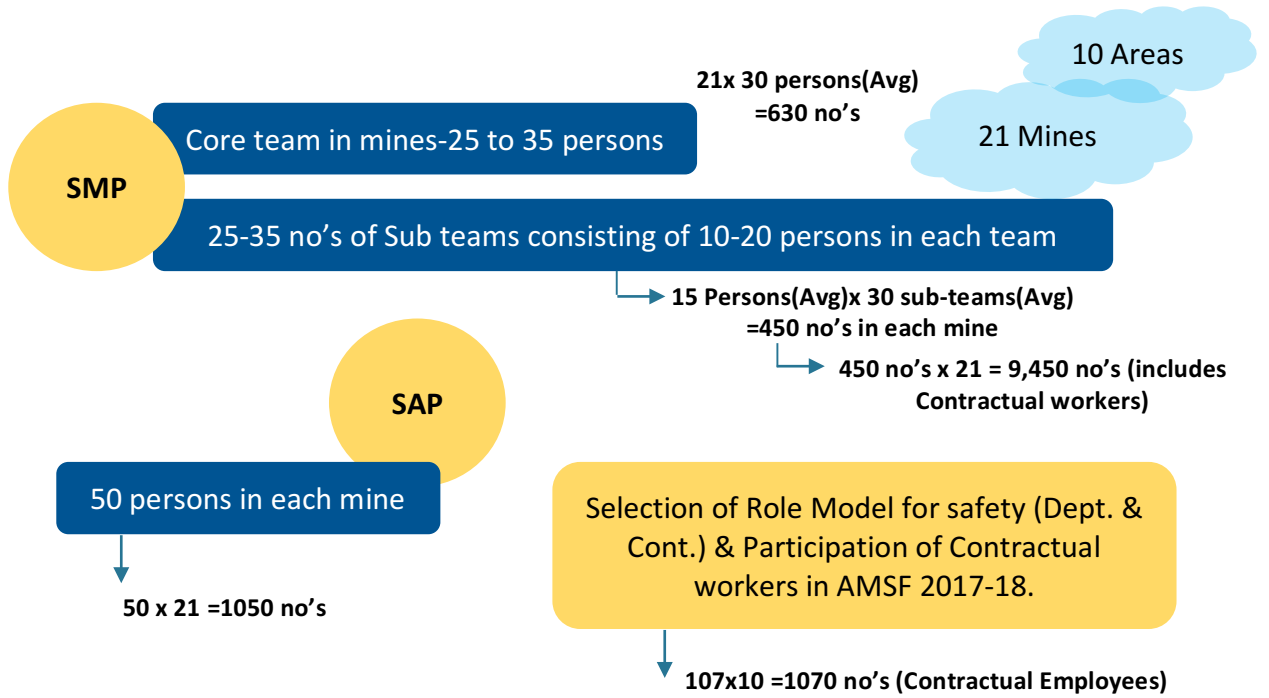
Our Safety Management Plan (SMP) (I.e. Development, Implementation & Audit) is developed and implemented in each mine of the company. It is self-regulative in nature where more number of workers including contractual workers are involved in this process of Hazard identification and chalking out of control plan. It was also audited for all the mines of MCL and was submitted to DGMS in Dec-2017. We also have Integrated Management System (IMS) accredited with OHSAS 18001:2007- Occupational Health and Safety Management, ISO 9001:2008- Quality Management System, and ISO 14001:2004-Environment Management System.

GRI 403-1: Worker’s Health and Safety Committees:

At our organization, we have parent company Safety Board, Company level Safety Committee, Area level Safety Committees and Project level Safety Committees for monitoring, to collect feedback and advise on occupational safety & health programs. These committees are in effect based on the recommendations of 11th Safety Conference, Standing Committee in safety in coal mines. In addition to the statutory inspections by the Mine officials appointed under the provisions of the Coal Mines Regulations, 1957 & Coal Mines Regulations, 2017, safety standards of the mines are also monitored by Workmen’s Inspectors (appointed under the Mine Rule, 1955), Pit Safety Committee at mine level (constituted under the Mine Rule, 1955), Area Level Tripartite safety committees and Company Level Tripartite safety committees. All these committees met on 22.09.17 for joint consultations on safety matters of the company. During celebration of “Meri Company, Mera Gaurav” from 15th Oct-15th Nov,2017, we organized safety drive by carrying out street plays and videos on mine accidents vis-à-vis safe practices etc.,

Around 29% of workers whose work, or workplace is directly under the control of organization are actively involved in health and safety. This percentage by considering the employees working for SMP, Sensitization of workers (Departmental & Contractual), SAP (Safety awareness programme) and is furnished as follows.

Inputs and Evaluation



Output

Total number of employees involved in management of worker's health and safety is $9,450 + 1050 + 1070 = 11,570$ no's.

% of worker's involvement is $(11,570 / 39,698) * 100 = 29\%$



Safety sign Boards at Hingula & Lakhanpur OCP

403-2: A) Types of injury & Rates of injury, occupational diseases, lost days, and absenteeism, and number of work-related fatalities for all employees.

Safety Statistics

Category	FY 2017-18						FY 2016-17						FY 2015-16					
	Region wise				Gender		Region wise				Gender		Region Wise				Gender	
	Overall	TCF	IBV	HQ	M	F	Overall	TCF	IBV	HQ	M	F	Overall	TCF	IBV	HQ	M	F
Number of fatalities	3	2	1	0	3	0	6	4	2	0	6	0	2	1	1	0	2	0
Employees																		
Rates of Injury (IR)	0.0126	0.0025	0.0101	0	0.0126	0	0.0207	0.00774	0.0129 1	0	0	0	0.0009	0.0007	0.0002	0	0.0009	0
Occupational Disease Rate (ODR)	0.0025	0.0025	0	0	0.0025	0	0	0	0	0	0	0	0.0009	0.0002	0.0007	0	0.0009	0
Lost Day Rate (LDR)	2.0303	0.9975	1.0328	0	2.0303	0	1.98082	0.98912	0.9917	0	1.98082	0	2.9473	1.6666	1.1814	0.1069	3.2354	0.2335
Absentee Rate (AR)	0.1356	0.0799	0.0504	0	0.1239	0.0117	5.75	5.75	5.75	0	5.75	5.75	0.245	0.2386	0.2723	0.0118	0.2473	0.1965
Independent Contractors																		
Rates of Injury (IR)	0.0025	0.0025	0	0	0.0025	0	0.00258	0	0.0025 8	0	0.00258	0	0	0	0	0	0	0
Occupational Disease Rate (ODR)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Lost Day Rate (LDR)	0	0	0	0	0	0	0.01033	0.01033	0	0	0.01033	0	2.0833	1.2611	0.7661	0.056	2.0721	0.0112
Absentee Rate (AR)	0.1044	0.0550	0.0463	0.0031	0.1034	0.0009	5.75	5.75	5.75	5.75	5.75	5.75	0.3333	0.3333	0.3333	0	0.3333	0

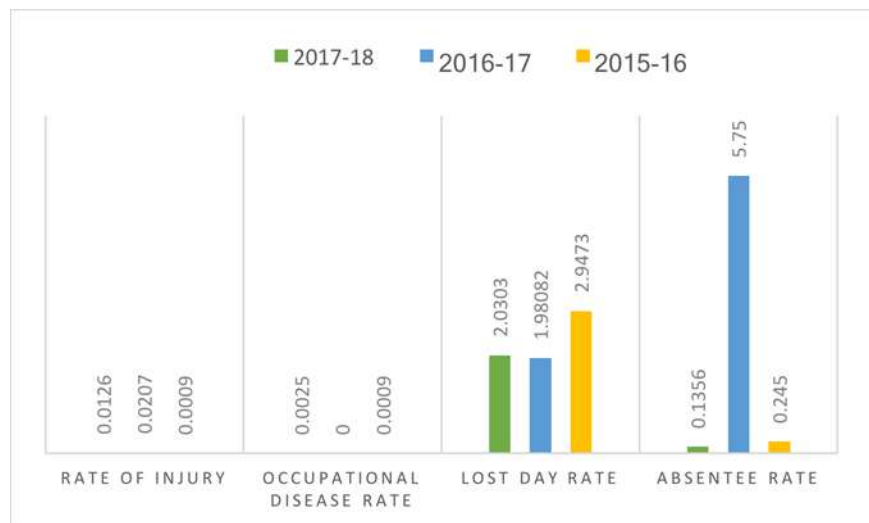
* While calculating lost days, scheduled work days has been considered.

The safety trends of Permanent and Independent contractors for last three years is depicted in the form of graph as below.

Safety Trends- Permanent Employees



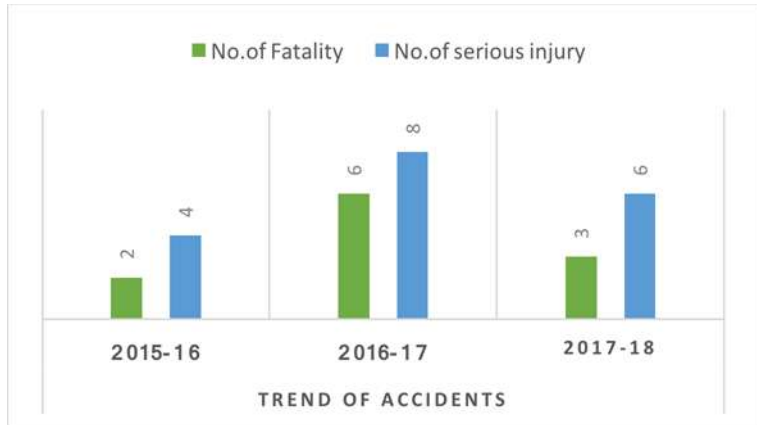
Safety Trends- Independent Contractors



B) Types of Injury, Injury Rate and work related fatalities, for all workers (excluding employees) whose work, or workplace, is controlled by the organization.

	Region wise				Gender	
	Overall	TCF	IBV	HQ	Male	Female
Injury Rate(IR)	0.0151	0.0050	0.0101	0	0.0151	0

The graph beside depicts the trend of accidents with respect to last three years. This shows our improvement in safety measures. During investigation, it was revealed that some injuries were due to negligence. We have taken necessary disciplinary actions on those who found guilty.



403-3: Protection of our workers with high incidence or high risk of diseases related to their occupation

To lessen exhaustion in long and arduous travelling in U/G Mines, we have man-riding systems (Chair lift type and Mine Car type) operating at Orient Mine no 1&2, Orient Mine no.3, Hirakhand Bundia Mine and Nandira colliery. This facility enhances efficiency of workers at work place in underground mines. Our system of evacuation of coal in underground mines by coal tubs has been replaced by conveyor belts to reduce the dangers associated with track mining.

Noxious and inflammable gases are potential threats in underground mines. We have installed tele-monitoring systems in three degree II mines to have information on accumulation of noxious and inflammable gases before hand. Our effective dust suppression system for improved visibility and prevention of occupational diseases is in vogue (Discussed in GRI: 306).



Display of different initiatives taken at MCL mines during safety Fortnight

403-4: Our formal agreements with trade unions

Company level Safety Board meetings, Bipartite Safety Committee Meetings, Tripartite Safety Committee Meetings, etc. have been conducted regularly in which all the trade unions actively participated. Resolutions for betterment of safety in mines and health of work persons have been passed based on mine inspections, experiences of work persons, incidents and accidents in mines and implemented. We focus more on protecting our human resource and the equipment/assets. Training, Diligence and proper safety equipment are instrumental elements in reducing our workplace accidents and injuries.

Training:

Management Training Institute (MTI) at MCL HQ, Belpahar Training Institute (BTI) at Lakhanpur, Mining, Excavation & Engineering Institute (MEETI) at Talcher field and Group Vocational Training Centers in both the coal fields have been established and operating efficiently. These institutes play important role in imparting training on safe practices in mines.

During 2017-18,

- As per requirement 16 dumper operators were imparted Simulator training at Northern Coalfields Limited, Singrauli.
- 16 work persons were imparted initial training in Rescue & Recovery operation.
- 185 Rescue trained persons were imparted Refresher training in Rescue & Recovery operation at MRS, Orient Area and RRRT, Talcher Area. These rescue trained persons were medically examined and found to be fit.
- In addition to this, training and emergency support was extended to private U/G mines, i.e. Gare Palama IV/4 of M/s. Hindalco Industries Limited, Raigarh Region.

Apart from training sessions, we organized Annual Safety Fortnight at MCL from 06/02/18 to 19/02/18. On this occasion, mining projects and workshops of MCL are awarded with trophies and shields for their safety driven works to comply with statutory requirements. On 17.01.18, first aid competition was held where 17 teams participated which constitutes of five ladies' teams representing from Orient Area, Ib valley Area, Lakhanpur Area, Jagannath Area & CWS (Talcher).

Diligence:

We have Mines Rescue Station, Orient Area in IB valley Coalfields and a RRRT, Talcher Area in Talcher Coalfields to deal with emergency situations in the mines. Our Mines Rescue Station & RRRT attended 24 number of emergencies/fire-fighting operations, one at Nandira U/G mine, 09 numbers at different mine premises and 14 numbers not related to any mining activity but arising in nearby society/civil township during 2017-18. Some of the emergencies controlled by our rescue teams are as follows

1. Fire at Surface Coal Stock in mine no-2, Orient Area on 17.03.18.
2. Fires in waste paper stock inside the Mill Boundary at Orient Paper Mills, Brajrajnagr on 01.03.18.
3. Fire in electric transformer and power cable at Remja Power House, Brajrajnagar on 23.04.17.
4. Fire in dumper engaged in transportation of coal between Samleswari and Lakjura mines coal transport road on 22.08.17.

We have procured one station wagon in context with safety of our employees this FY. Supply Order has been placed for one gas chromatograph and six no's of oxygen booster pumps and many more.

Proper safety equipment:

All the employees are provided with the safety gadgets/personal protective equipment such as helmets; safety foot wears, safety goggles, ear plugs, ear muffs, hand gloves, dust masks etc. for protection against injuries and ill-health. During 2017-18, 41007 pairs of mining shoes & 13606 pairs of gumboots were procured and provided to work persons.

Safety precautions at our different mine areas

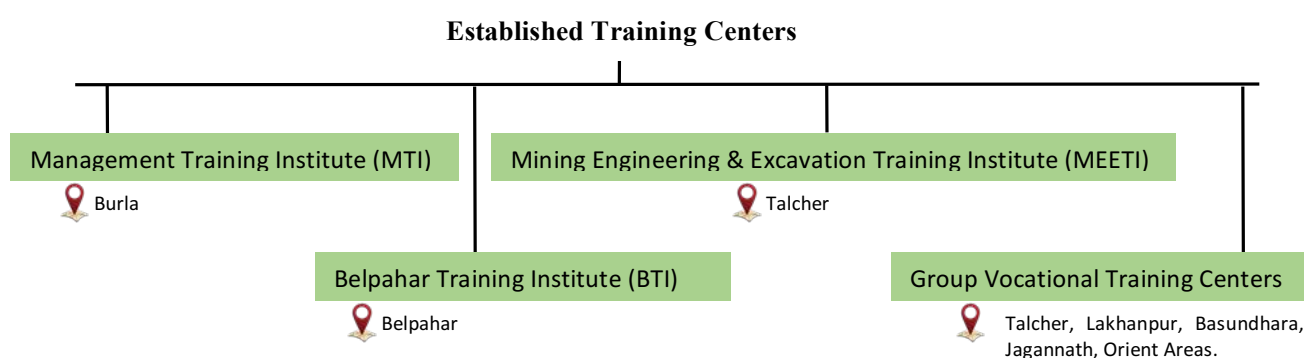
Regular medical examination of workmen and supervisors are conducted for detecting diseases so that they can be treated in time. During 2017-18, Periodical Medical Examination(PME) of 5993 Departmental employees & 2138 Contractual work persons was carried out at PME Centers of MCL. These initiatives build confidence in our employees to work harder with more pride for their company. We also comply with ILO code of practices under the Mines Act-1952, The Mine Rules-1955, The Coal Mines Regulations-2017 and other relevant statutes so far.



Tutelage and Management- Better knowledge for better use.

GRI 404-

We provide opportunities for our employees to expand the knowledge base by training, which improves business performance, better customer service, better work safety practices and Productivity improvements. We nurture the newly recruited young generation and also senior employees with trainings in various areas relevant to our industry before they perform in their responsible positions at various external organizations like IICM, IIMs, IITs, NITs and other renewed trainings on India and Abroad. Internal trainings are also provided to our employees at our established training centers.



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

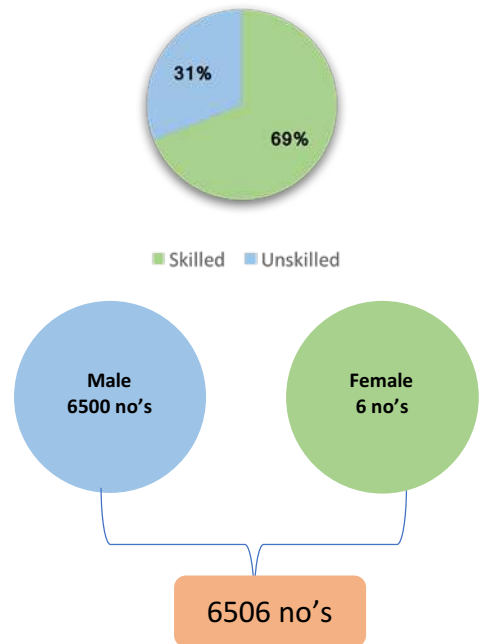
Training Statistics Trend

Description		2017-18		2016-17		2015-16	
		No. Trained	Training Hours	No. Trained	Training Hours	No. Trained	Training Hours
Executive	Male	1098	27.21	1761	22.5	1604	27.93
	Female	46	21.65	91	19.32	123	29
	Total	1144	26.98	1852	22.4	1727	28.01
Non-executive	Male	7417	50.80	8092	37.29	8948	44.05
	Female	581	47.89	483	36.96	545	34.36
	Total	7998	50.59	8575	37.27	9493	43.49
Non-executive	Skilled	4642	50.80	6006	36.27	6943	39.84
	Unskilled	3356	47.89	2569	39.59	2550	53.46
	Total	7998	50.59	8575	37.27	9493	43.49

To be noted the employee training trend values enclosed here include all type of training programs irrespective of period (Ex. One, two days and so on). In the previous reported year, the employee trend figure shown was with respect to trainings of more than 5 days of duration[^].

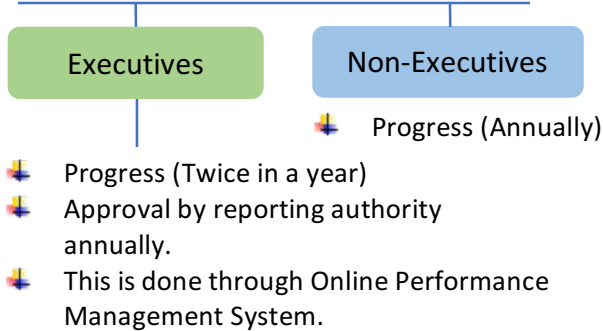


Contractual Employees Training Statistics 2017-18



We have implemented performance review of our permanent employees except apprentices (as deployed under the Apprentices Act), for encouraging their communications, dealing with existing and upcoming problems, to identify their goals for better work culture. It will help our employees especially, to know where they stand in their progress which paves way for more hard work.

Performance Appraisal of Employees



During the training program organized by MTI

GRI 404-2:

Human resource development through training is an integral part of our company's corporate policy to develop our human resources in line with development of science and technology to fulfill the demand of production and profit.

Mentor-Mentee Scheme:

In accordance with CILs scheme of mentor mentee, MCL has appointed 23 number of mentors from different disciplines and 107 number of mentees (Assistant Manager in E-3 grade) for enhancing their professional skill growth and managerial competency. Accordingly, all the identified mentors were sent to Indian Institute of Coal Management, Ranchi for Mentorship Training. On Dt.19.01.18, mentor mentee training programme was organized, where 17no's of mentors and 62 no's mentees attended at MCL, HQ.

Mining Sirdar Training:

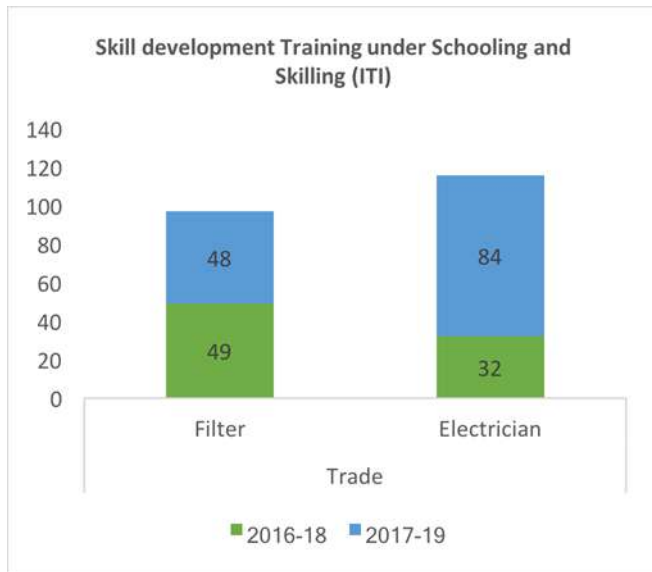
This unique scheme was targeted at providing an opportunity to PAPs and people belonging to SC/ST category for enhancing their skills ensuring their employability as mining supervisor. Thirty PAPs and/or SC/ST candidates have qualified for this training. They have been imparted necessary training BTI, Lakhanpur with approval of fund from CSR head.

Imparting Training under Apprentices, Act, 1961 (Amended 2016):

Under this scheme, Post Graduate Practical Training (PGPT)/ Post Diploma Practical Training (PDPT) of one year duration is imparted to engineering graduates/diploma holders in our mines to make them conversant with the mining industry. During 2017-18, two PGPTs from TCF and IB coalfields and 195 no's of PDPTs against 200 no's notified seats from Talcher and Orient areas have been engaged for a period of one year. Due to closure of Talcher Colliery of Talcher Area, 5 no's of seats could not be engaged for PDPTs. 205 number of ITI passed outs from different it is of Odisha State have been engaged as apprentice trainees for one year in our company. There are also training programmes like HEMM training for land oustees to be posted in mines, Safety Management training, Computer awareness programme, etc.

S.no	Year	Nos. of ITI passed outs engaged as Apprentice	Nos. of PDPTs engaged	Nos. of PGPTs engaged
1.	2017-18	205	195	02
2.	2016-17	182	200	04

In our 155th MCL board meeting dt.05.02.14, decision has been taken to sponsor new appointed candidates to different empaneled institutes for their schooling and skilling for a duration of 2 years under skill Development Programme. The following graphs depict skill development training for different trades and institutions for the years 2016-18 and 2017-19.



GRI: 404-3

Performance Review statistics

Description	Employee Type: Executives						2015-16		
	2017-18			2016-17			Male	Female	Total
	Male	Female	Total	Male	Female	Total			
Total Number of employees	1781	92	1873	1743	85	1828	1774	87	1861
Total number of employees receiving regular performance appraisals	1781	92	1873	1743	85	1828	1774	87	1861
Percentage	100%	100%	100%	100%	100%	100%	100%	100%	100%

Performance Review statistics

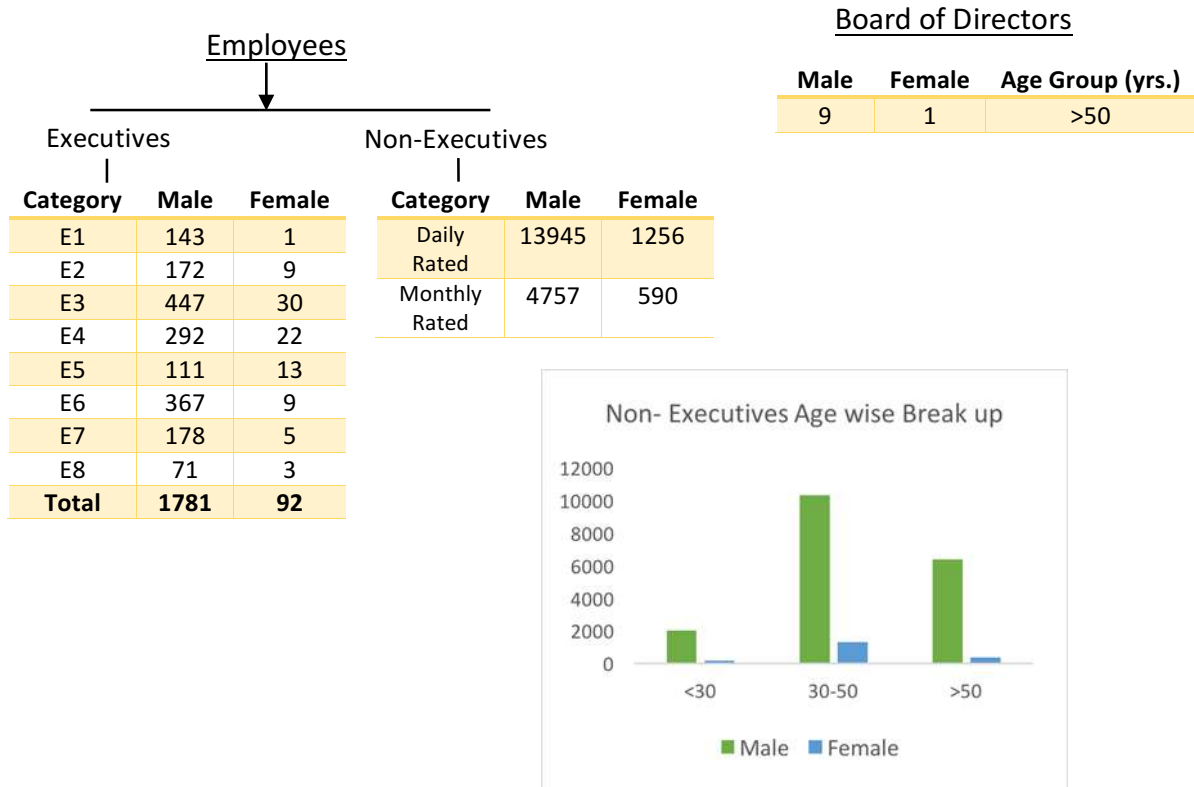
Description	Employee Type: Non-Executives						2015-16		
	2017-18			2016-17			Male	Female	Total
	Male	Female	Total	Male	Female	Total			
Total Number of employees	18072	1846	20208	18509	1699	20208	18893	1643	20536
Total number of employees receiving regular performance appraisals	9213	1418	10631	8012	1376 [^]	9388 [^]	6737	551	7288
Percentage			52.60			46.45 [^]			35.48

Diversity and Equal opportunity

GRI 405

We at MCL believe that excellence doesn't distinguish any gender, race, religion, age and basic salary or for any characteristic or class protected by law. This leads us in recognizing talent and good management. Our diversity in decision-making in the company is gradually enhancing. True gender balance in our organization especially for mining operations is still a long way. In day to day office activities, we have diversity and balanced work culture leading to improvement in economic growth and national productivity. Career growth for women and men are always equal within our organization. Also, all our women employees are involved in development activities for the society and for personal growth through a platform WIPS (women in Public Sector).

405-1: Diversity of Governing Bodies and Employees



Female workforce Statistics

Permanent workforce has increased around 8.8% with respect to previous year.

But Contractual workforce has decreased around 4.11% with respect to previous year.

^ Necessary changes in the Pervious SD report|16-17, - Female Permanent workforce and contractual work force had increased around 3.12% and 100% with respect to FY 15-16.

405-2: Equal Remunerations

For non-executive employees, we adopt the National Coal Wage Agreement (NCWA) and specified pay scales for executive employees as per the national standards. The ratio of basic salary for women to men is 1:1 for each employee category at all our mining areas and corporate office.

The essence of Sustainability: Human Rights

GRI [406] [407] [408] [409]

Our daily sustainable operations are bridged upon this blue print of human rights. We respect the human rights of all our employees, customers, and communities that reside in our domain. To refine the practices, we challenge ourselves by engaging with the people who are affected by our operations.

We at MCL are committed for effective implementation of human right policies. In result to this during this financial year there were no reported instances of human rights violations. We don't endorse any form of forced, compulsory or child labour directly or through our contractors at our operational locations and corporate office ^[408-1, 409-1]. To ensure the same, our contract management cell (CMC) has human rights clauses in built in all vendor contracts. There are no incidents of discrimination on the grounds of race, color, sex, religion, political opinion, national extraction, and social origin ^[406-1].

For smooth running of our organization we involve all the employees in decision-making. They remain our backbone which contributes to overall growth. This in turn keeps our employees loyal to us.

Our four trade unions are covered under the collective bargaining agreement and also take part in participative management in all areas of operation like safety, welfare and committees required Mines Act and rules, through their representatives. During FY 2017-18, 20548 employees (91.6%) were covered under this collective bargaining ^[102-41]. We always strive to ensure that collective bargaining right of our workers are not violated ^[407-1].



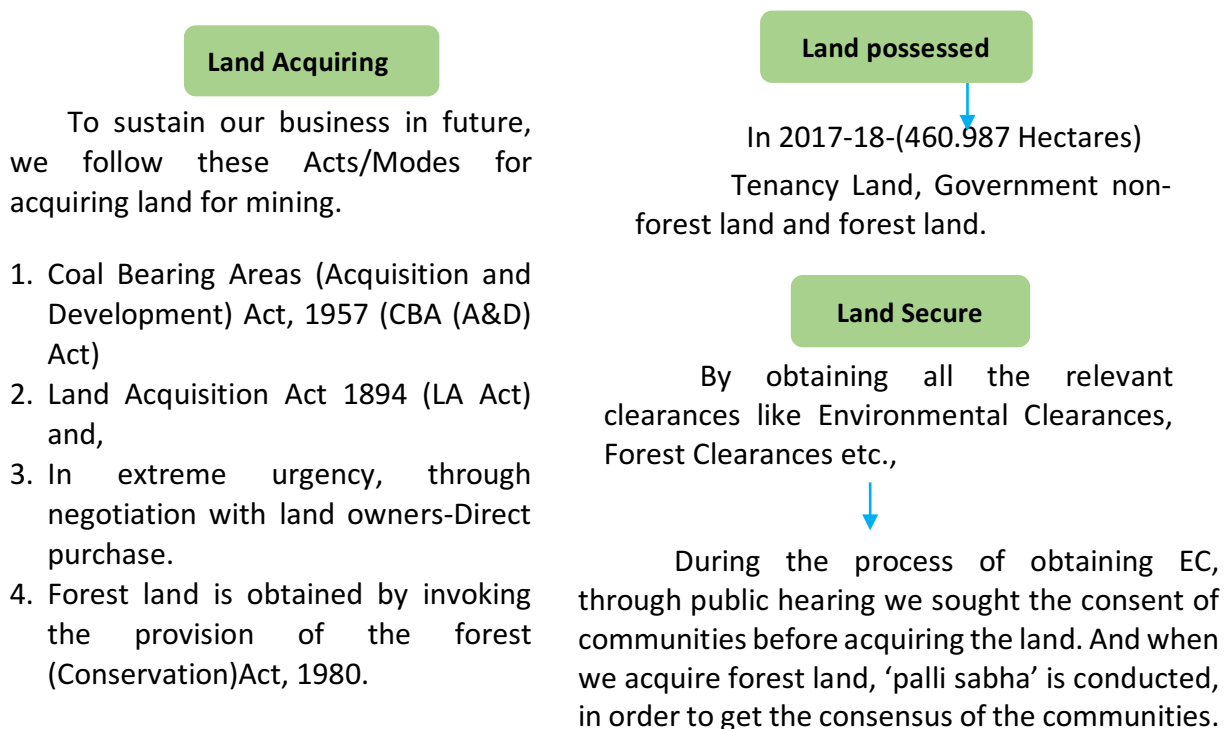
Computer training for children



Happiness- During distribution of comforter at Burla village

[413-2] Right to Fair compensation and Transparency in Land Acquisition and Rehabilitation and Resettlement:

Coal mining industries are probably the most inevitable prospect for Indian economy in order to ensure energy security for our country. Land is the main input for all our activities like starting a new project, expansion of existing mines, setting up of washeries or diversification to power plants. However, we understand that it acquires not simply a sizable tract of coal bearing land but in addition it disrupts the whole ecosystem and its perennial resources of sustainable livelihood which cannot be tackled at one go. The earlier means of livelihood of local communities like physical assets, human capabilities, and economic activities have been disrupted after displacement. But we at MCL, never carry out involuntary land acquisition which leads to unpleasant relationships with our main stakeholders.



Our acquisition of coal bearing lands and their concerns are mostly located in remote of Odisha. We always try to resolve their grievances, provide compensations to landholders and simultaneously for growth of our company in sustainable manner.

Our R&R policy **Of Govt. of Odisha, for remuneration of those who lose their land and for the project affected families.**

Grievance Redressal of land oustees:

For addressing the Grievances, we act on the advice of

- **CBA Part Time Tribunal (under the CBA [A&D] Act,1957), or the civil court (Under LA Act,1894)**
- **Rehabilitation & Peripheral Development Advisory Committees (RPDAC) and**
 - There are three committees one each in Angul, Jharsuguda and Sundargarh Districts under the chairmanship of the Revenue Divisional Commissioner (Northern Division), Sambalpur, in which CMD, MCL and concerned Area Chief General Managers/General Managers are the members.
 - Their sub-committees consist of the local Hon'ble MP, Hon'ble MLA, collector & SP of concerned District, Director (Personnel), MCL and CGMs/GMs of MCL's areas.
- **Project Level Rehabilitation and Resettlement Committee(PLRRC)**

CBA	Handling disputes related to compensation paid for land.
RPDAC & its Sub-committees	Handling issues of displaced community through regular monitoring and review of sub-committees redress individual cases taken up by local administration and senior management of MCL.
Project Level Rehabilitation and Resettlement Committee	Handling disputes at local level under the chairmanship of District Collector.

During this reporting year, there are no significant incidents of violations involving rights of indigenous people ^[411-1] and MCL hasn't funded to any political party ^[415-1].

[411-1]

Attributes	Comments
Total number of Identified incidents of violations involving the rights of indigenous people during the reporting year.	NIL
Status of the incidents and actions taken with reference of the following <ul style="list-style-type: none"> • Incident reviewed by the organization • Remediation plans being implemented 	NIL
Remediation plans that have been implemented, with results reviewed through routine internal management review processes	NIL
Incidents no longer subject to action	NIL

While trying to achieve our outputs, there may be disputes and difficulties faced by MCL also from indigenous people. There are three opencast projects at Basundhara area situated around tribal population. In some cases, the PAFs are reluctant to shift to available resettlement site where basic amenities have been provided as per R&R policy on the following plea:

- The PAF's avoid shifting and demanding more employments beyond norms.
- Resettlement site is located at a distant place from their existing village.
- Persons who are not in priority categories for rehabilitation benefit are also resorting to wildcat strikes to pressurise MCL for getting employment beyond norms.
- Eligible persons who have been offered employment are also obstructing mining operations and coal transportation demanding for joining employment without handing over physical possession of land and dwelling house/structures.
- In addition to this in some situations, we are not able to shift the PAF's/Villagers to resettlement sites due to unavailability of land by the state Govt. And they have advised MCL for direct purchase of land for resettlement process, which is not becoming feasible.

Trends of Resettlement:

Prominent R&R sites

In Talcher Coalfield:

Handidhua, Ghantapada, Kuio Jungle, Danara, Gurujang, Bouldpur, Baghmara, Balanda and Patharmunda.

In Ib Valley Coalfield:

Tikilipara, Barpali, Ganesh Nagar, Jagannath Nagar, Khadam, Belpahar, Sanjob, Chhattanpalli, Sarangijharia, Badkhalia.

Basic Benefits

Drinking water, Electricity, roads, shopping complexes, schools, drainage facilities, boundary wall etc.,

On the decision of our Board of Directors we at MCL, provide infrastructural facilities like electricity, water, roads, drainage and boundary wall at a place other than resettlement site where 20 or more displaced families prefer to settle on their own choice. Project affected families have a choice of opting the best which fulfils their needs. If the eligible land oustees of a PAF is not interested for rehabilitation/ employment provided as per Govt. of Odisha R&R policies of 1989,1998 &2006 may opt any one of the following compensations

Cash Compensation

- In lieu of employment- Rs.16 lakh.
- In lieu of plot to PAF- Rs.6 lakh- (MCL policy)
- 10 decimal of land of fully developed resettlement site.

Annuity

- Rs. 12000/- per month In lieu of employment or cash compensation till the age of 60 years of claimant. There is a provision for increasing the annuity amount of Rs.1000/- once in every two years.

Establishment Assistance

Financial assistance up to Rs. 3,162,00/-

MCL Policy

- House building- Rs.2,55,000
- Maintenance allowance for one year- Rs. 40,800
- Temporary shed- Rs. 17,000
- Transport allowance- Rs. 3,400

Incentives

This is our policy for early vacation and handing over home and agricultural land.

S.no	Stipulated period of shifting	Amount per family
1.	Within 30 days	Rs. 1,00,000/-
2.	Within 31 to 60 days	Rs. 75,000/-
3.	Within 61 to 90 days	Rs. 50,000/-

Equivalent to Indira Awas Yojana

Ex-gratia

- Rs. 1,20,000/- for families who have lost their dwelling house only in Govt. land is being paid in addition to the cost of structure.
- Additional Cash incentive of Rs. 25,000/-, Rs. 15,000/- and Rs. 10,000/- for shifting within the stipulated time period

During this FY-2017-18, Rehabilitation and Resettlement benefits (like EMP/CC/Annuity) have been provided to **786no's** of Project affected people. And in lieu of plots/CC have been provided to **77no's** of project affected people. The project wise breakup of the benefits provided are as below.

TCF 565 no's

Area	Project	Employment	CC/MC	Annuity	Total
Hingula	Balram OCP	319	14	-	333
	Hingula OCP	22	-	-	22
Jagannath	Jagannath OCP	4	1	-	5
	BBSRI OCP	18	18	-	36
Lingaraj	Lingaraj OCP	16	9	-	25
Kaniha	Kaniha OCP	134	6	-	140
Bharatpur	Bharatpur OCP	3	1	-	4

IBV CF

221 no's

Area	Project	Employment	CC/MC	Annuity	Total
Lakhanpur	Lakhanpur OCP	41	3	-	44
	Basundhara (E&W) OCP	5	11	-	16
Basundhara	Kulda OCP	-	1	-	1
	Garjanbahal OCP	8	22	-	30
	Siarmal OCP	52	76	2	130

TCF

12 no's

Area	Project	Plots provided	CC	Total
Hingula	Balram OCP	4	1	5
Lingaraj	Lingaraj OCP	-	2	2
Kaniha	Kaniha OCP	-	3	3
Bharatpur	Bharatpur OCP	2	-	2

IBV CF

65 no's

Area	Project	Plots provided	CC	Total
Basundhara	Basundhara (E&W) OCP	-	11	11
	Kulda OCP	-	4	4
	Garjanbahal OCP	-	6	6
	Siarmal OCP	-	44	44

Barpalli R&R site



GRI [416] (Customer Health and Safety):

Throughout the lifecycle of our product we always try to produce lesser impact outputs on customer health and safety. Mostly our coal is extracted by environment friendly surface miner. As a mining company, we are responsible from production to despatch of coal and then it is left to consumer agencies to handle the material. Our consumers are also aware of the sustainability practices while using our product.

During this financial year, we achieved a coal production of 143.05 Million Te against the target of 150 Million Te. Hence, percentage of significant product and service categories for which health and safety impacts are assessed for improvement comes to 95.37% ^[416-1].

[416-2]

Attributes	Comment
Non-compliance with regulations resulting in a fine or penalty	1 no.
Non-compliance with regulations resulting in warning	3 nos.
Incidents of non-compliance with voluntary codes	NIL

GRI 417-Marketing and Labelling:

MCL incorporates responsibility for the products and services offered to the consumers. To build up strong place in the market, we supply best quality of coal to power houses and other customers. We always thrive to maintain our quality through several initiatives. We always encourage our consumers for checking and supervising personally the coal loading system arrangement at Sidings as well as at Coal Analysis Laboratories. We also interact with consumers on regular basis to improve their satisfaction level and address their concerns. During this FY 2017-18, there are no incidents of non-compliances regarding marketing communications ^[417-3].

The sampling and analysis of coal is conducted in accordance with BIS procedure as per the guidelines of the fuel supply agreement (FSA) before we despatch the coal to our customers based on their need. The consumers are divided in to heat intensive and non-heat intensive categories or core (Regulated sectors) and non-core (Non-regulated sector). As our product is dispatched in bulk quantity through road, conveyor belts and railway sidings it is impossible to pack & label our product ^[417-1]. There are no incidents of non-compliance concerning product and service information and labeling ^[417-2]. For better transparency and Consumer satisfaction CIMFR has been deployed as an independent 3rd Party Sampling Agency based on the directives of MoC/CIL to carry out the activities for collection and Analysis of coal being supplied to IPP & Power utility consumers. In non-regulated sectors like CPP, Sponge &

cement sector etc., Linkage Auction, other e-Auction schemes, consumers of non-power sectors are being covered in Third Party sampling by Quality Council of India/IIT-ISM. With all these efforts, we manage to retain our position in the Indian coal market and we do not participate in sale of banned and disputed products. After analysis in our NABL accredited laboratories with the help of Auto Bomb Calorimeters & Auto Proximate Analysers, TPS informs the GCV of coal despatched to both seller and buyer.

We have ten coal analysis laboratories in our coalfields. Prior to 2017-18, three coal analysis laboratories of Ib Valley, Bharatpur and Jagannath Areas had been NABL accredited. During 2017-18, coal analysis laboratory of Hingula Area and Kaniha Area have been conferred with NABL accreditation certificate. Necessary steps have been initiated for obtaining NABL accreditation for analysis laboratory of remaining Areas in phased manner. An independent Central Govt. agency CCO, Kolkata to assess the quality of coal by stringent sampling procedure at seam, stock, siding & tipper samples and declared as appropriate grade annually.



To develop awareness on quality at grass root level, “QUALITY DRIVE” was observed from January to March 2018 in all Areas. Frequent inspections of workings, sidings and coal analysis laboratories are being done regularly by QC Department. In case of any discrepancy or fault found during inspection, the same are communicated to the concerned GM of the Area for information and taking corrective measures. In all sidings/ loading points bound paged registers have been kept for consumers present at the time of loading to give their suggestions in respect of quality/sizing & other facilities. Frequent inspections are done by CCO officials regarding complaints and to check the grade of the sample.

Meet the pride of MCL's Safety & Rescue

A.K. Singh, General Manager, Safety & Rescue Dept.

Here we introduce to Shri A.K. Singh, General Manager (Safety & Rescue) of MCL. He is a graduate Mining Engineer from Indian School of Mines Dhanbad. After graduation, he joined Coal India in the year 1985 and served in different capacities as Colliery Manager, Project officer, Area General Manager and General Manager (Production). He has rich experience of working in underground mines of Madhya Pradesh and Chhattisgarh and in highly mechanised mega opencast projects in MCL, Odisha. He has also worked in Corporate office in MCL as Technical Secretary to Director Technical and General Manager (Production).



While working as Area General Manager of Basundhara Area (2012-15) he played vital role in liquidating huge coal stock of ROM coal (80 lakh Tonnes), developing infrastructure such as Road, Rail, multi-storeyed quarters for employees, Stadium, Hospital, Market Complex, Staff Hostel etc. During his period, old practice of road sale of coal by only six-wheeler trucks come to an end and multi axle trucks (18/22 wheelers) were introduced which reduced truck density for coal movement.

As General Manager (Safety & Rescue) of MCL he took initiatives to bring safety awareness among employees with special focus on contractual workmen. Safety Management Plan for all the mines were prepared, approved and implemented. During Safety Fortnight celebration in Feb'18, participation of contractual workmen increased to 95% from 30% in the previous year.

He believes that safety is not a slogan but a way of life. safety never takes a holiday and we should not learn from safety by accident. For achieving Zero Harm it is very important that every employee and stakeholder is involved in ensuring safety.

The cost of accident is huge and cannot be compensated by money. A health and a safety problem can be described by statistics but cannot be understood by statistics. It can only be understood by knowing and feeling the pain, anguish and depression and shattered hopes of the victim and of wives, husbands, parents, children, grand parents and friends. Only those with close experiences of life altering personal damage can have this understanding.

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	203-2	Significant indirect economic impacts	31	
GRI 204 (Procurement Practices)	204-1	Proportion of spending on local suppliers		We are working towards including this clause
GRI 205 (Anti-Corruption)	205-1	Operations assessed for risks related to corruption	42	
	205-2	Communication and training about anti-corruption policies and procedures	42-43	
	205-3	Confirmed incidents of corruptions and action taken	44	
GRI 206 (Anti-competitive Behavior)	206-1	Legal actions for anti-competitive behavior, anti-trust, and monopoly practices	44	

SPECIFIC STANDARDS

GRI Standard and Title	Disclosure No.	Disclosure Title	Page No.	Omission (if any)
GRI 301 (Materials)	301-1	Materials used by weight or volume	45	
	301-2	Recycled input materials used	45	
	301-3	Reclaimed products and their packaging materials	NA	
GRI 302 (Energy)	302-1	Energy consumption within the organization	59-60	
	302-2	Energy consumption outside the organization	59-60	
	302-3	Energy intensity		We are working towards including this clause
	302-4	Reduction of energy consumption	60	
	302-5	Reductions in energy requirements of products and services	47	
GRI 303 (Water)	303-1	Water withdrawal by source	48	
	303-2	Water sources significantly affected by withdrawal of water	48	
	303-3	Water recycled and reused	49	
GRI 304 (Biodiversity)	304-1	Operations sites owned, leased, managed in, or adjacent to, protected areas and areas of high biodiversity value outside protected areas	51	
	304-2	Significant impacts of activities, products and services on biodiversity	51	
	304-3	Habitats protected and restored	51	
	304-4	IUCN Red list species and national conservation list species with habitats in areas affected by operations	None	
GRI 305 (Emissions)	305-1	Direct (Scope 1) GHG emissions	60	
	305-2	Energy indirect (Scope 2) GHG emissions	60	
	305-3	Other indirect (Scope 3) GHG emissions	60	
	305-4	GHG emissions intensity		We are working towards including this clause
	305-5	Reduction of GHG emissions	60-61	
	305-6	Emissions of Ozone- depleting substances		
	305-7	Nitrogen oxides (NO _x), sulfur oxides (SO _x), and other significant air emissions	57	
GRI 306 (Effluents and waste)	306-1	Water discharge by quality and destination	61	
	306-2	Waste by type and disposal method	64	
	306-3	Significant spills	64	
	306-4	Transport of hazardous waste	None	
	306-5	Water bodies affected by water discharges and/or runoff	63	
GRI 307 (Environmental Compliance)	307-1	Non- compliance with environmental laws and regulations	66	
GRI 308 (Supplier Environment Assessment)	308-1	New suppliers that were screened using environmental criteria		We are working towards including this clause in the supplier selection criteria
	308-2	Negative environmental impact in the supply chain and actions taken	None	

SPECIFIC STANDARDS

GRI Standard and Title	Disclosure No.	Disclosure Title	Page No.	Omission (if any)
GRI 401 (Employment)	401-1	New employee hires and employee turnover	67-68	
	401-2	Benefits provided to full-time employees that are not provided to temporary or part-time employees	69	
	401-3	Parental leave	70	
GRI 402 (Labor/Management Relations)	402-1	Minimum notice periods regarding operational charges		We are working towards including this clause
GRI 403 (Occupational Health and Safety)	403-1	Workers representation in formal joint management-worker health and safety committees	71-72	
	403-2	Types of injury and rates of injury, occupational diseases, lost days, and absenteeism, and number of work-related fatalities.	73-74	
	403-3	Workers with high incidence or high risk of diseases related to their occupation.	75	
	403-4	Health and safety topics covered in formal agreements with trade unions	76	
GRI 404 (Training and Education)	404-1	Average hours of training per year per employee	78-79	
	404-2	Programs for upgrading employee skills and transition assistance programs	79-80	
	404-3	Percentage of employees receiving regular performance and career development reviews.	81	
GRI 405 (Diversity and Equal opportunity)	405-1	Diversity of governance bodies and employees	82	
	405-2	Ratio of basic salary and remuneration of women to men	83	
GRI 406 (Non-Discrimination)	406-1	Incidents of discrimination and corrective actions taken.	83	
GRI 407 (Freedom of Association and collective Bargaining)	407-1	Operations and suppliers in which the right to freedom of association and collective bargaining may be at risk	83	
GRI 408 (Child Labor)	408-1	Operations and suppliers at significant risk for incidents of child labor.	83	
GRI 409 (Forced and Compulsory Labor)	409-1	Operations and suppliers at significant risk for incidents of forced or compulsory labor	83	
GRI 410 (Security Practices)	410-1	Security personnel training in human rights policies or procedures.	None	
GRI 411 (Rights of Indigenous People)	411-1	Incidents of violations involving rights of indigenous peoples	85	
GRI 412 (Human Rights Assessment)	412-1	Operations that have been subject to human rights reviews or impact assessments	None	
	412-2	Employee training on human rights policies or procedures.		There is no specific training on human policies but as a part of our training programs we include fundamentals and importance of human rights
	412-3	Significant investment agreements and contracts that include human rights clauses or that underwent human rights screening	None	
GRI 413 (Local Communities)	413-1	Operations with local community engagement, impact assessments, and development programs	32	
	413-2	Operations with significant actual and potential negative impacts on local communities	34,84	

SPECIFIC STANDARDS

GRI Standard and Title	Disclosure No.	Disclosure Title	Page No.	Omission (if any)
GRI 414 (Supplier Social Assessment)	414-1	New suppliers that were screened using social criteria		We are working towards including this clause in the supplier selection criteria
	414-2	Negative social impacts in the supply chain and actions taken	None	
GRI 415 (Public Policy)	415-1	Political contributions	85	
GRI 416 (Customer Health and Safety)	416-1	Assessment of health and safety impacts of product and service categories.	90	
	416-2	Incidents of non-compliance concerning the health and safety impacts of products and services.	90	
GRI 417 (Marketing and Labelling)	417-1	Requirements of product and service information and labelling	90	
	417-2	Incidents of non-compliance concerning product and service information and labeling	90	
	417-3	Incidents of non-compliance concerning marketing communications	90	
GRI 418 (Customer Privacy)	418-1	Substantiated complaints concerning breaches of customer privacy and losses of customer data	None	
GRI 419 (Socioeconomic Compliance)	419-1	Non-compliance with laws and regulations in the social and economic area	22	

GLOSSARY

AR	Absentee Rate
BCCL	Bharat Coking Coal Limited
BCML	Bhubaneswari Coal Mining Limited
BDO	Block Development Officer
BEML	Bharat Earth Movers Limited
BOM	Build Operate Maintain
BT	Billion Tonne
BTI	Belpahar Training Institute
CBA	Coal Bearing Areas
CCL	Central Coalfields Limited
CCTV	Closed-circuit Television
CDD	Coal Delay Detonators
CED	Copper Electric Detonator
CESU	Central Electricity Supply Utility of Orissa
CGM	Chief General Manager
CHP	Coal Handling plant
CIAL	Coal India Africana Limitada
CIL	Confederation of Indian Industries
CIL	Coal India Limited
CIMFR	Central Institute of Mining and Fuel Research
CISTEA	Coal India Schedule Caste/ Scheduled Tribe Employees Association
CMAL	Coal Mines Authority Limited
CMC	Contract Management Cell
CMD	Chairman cum Managing Director
CMPDI	Central Mine planning and Design Institute
CO ₂	carbon Dioxide
CPA	Critically Polluted Area
CPCB	Central Pollution Control Board
CPSE	Central Public Sector Enterprise
CPSI	Coal Preparation Society of India
CRO	Chief Risk Officer
CSR	Corporate Social Responsibility
CVO	Chief Vigilance Officer
D.G.	Diesel Generator
DGMS	Directorate General of Mines Safety
DGPS	Differential Global Positioning System
DPE	Directorate of Public Enterprises
DPR	Detail Project Report

EC	Environmental Clearance
ECL	Eastern Coalfields Limited
E&M	Electrical & Mechanical
ETP	Effluent Treatment Plant
FC	Forest Clearance
FSA	Fuel Supply Agreement
FY	Financial Year
GCV	Gross Calorific Value
GENXT	Generation Next
GHG	Green House Gas
GJ	Giga Joules
GM	General Manager
Govt.	Government
GPS	Global Positioning System
GRC	Grievance Redressal Cell
GRI	Global Reporting Initiative
GVTO	Government Officer
Ha	Hectare
HBI	Hirakhud Bundia Inclined
HEMM	Heavy Earth Moving Machinery
HOD	Head of Department
HPC	High Power Committee
HQ	Head Quarter
HR	Human Resources
HRC	Hingir Rampur Colliery
HRD	Human Resource Development
HSD	High Speed Diesel
ICC	Internal Complaints Committee
IDCO	Infrastructure Development Corporation
IED	Industrial Engineering & Design
IEM	Independent External Monitors
IIM	Indian Institute of Management
IIT	Indian Institute of Technology
IME	Initial Medical Examination
IMS	Integrated Management System
INR	Indian National Rupee
IR	Rates of Injury
ISO	International Standards Organisation
ISTD	Indian Society of Training and Development
IWSS	Integrated Water Supply Scheme
JCC	Joint Consultative Committee
KL	Kilolitre
Km	Kilo metre

Km ²	Square Kilometre
KVAR	Kilovolt-Ampere Reactive
kWh	Kilowatt Hour
L	Litres
L&R	Land and Revenue
LDR	Lost Day Rate
LED	Light Emitting Diode
LHD	Load Haul Dumper
Ltd	Limited
m ³	Cubic Metre
M.Cu	Million Cubic Meter
M.Te	Million Tonne
MBPL	Mahanadi Basin Power Limited
MCL	Mahanadi Coalfields Limited
MDTP	Mine Discharge Treatment Plant
MEETI	Mining Engineering & Excavation Training Institute
MGMI	Mining Geological and Metallurgical Institute of India
MGR	Merry Go Round
MIMSR	Mahanadi Institute of Medical Science and Research
MINREM	Institute of Natural Resources and Energy Management
mm	Millimetre
mm ³	Million Cubic Metre
M&M	Materials Management
MOC	Ministry of Commerce
MoC	Ministry of Coal
MOEF	Ministry of Environment & Forest
MoU	Memorandum of Understanding
MOSPI	Ministry Of Statistics and Program Implementation
MP	Madhya Pradesh
MEME	Micro, Small and Medium Enterprises
MT	Million Tonne
MTI	Management Training Institute
MTY	Million Tonne per Year
MW	Megawatt
NABL	National Accreditation Board for Testing and Calibration Laboratories
NCDC	National Coal Development Corporation
NCL	Northern Coalfields Limited
NCWA	National Coal Wage Agreement
NGO	Non-Governmental Organisation
NIOS	National Institute of Open Learning
NIT	National Institute of Technology
NoC	No Objection Certificate
NoX	Oxides of Nitrogen

NPTCPL	Neelanchal Power Transmission Company Private Limited
N & R	Nomination and Remuneration
NSCH	Nehru Shatabdi Central Hospital
OASME	Orissa Assembly of Small and Medium Enterprises
OB	Over Burden
OC	Open Cast
OCP	Open Cast Project
ODR	Occupational Disease Rate
OGT	Oil and Grease Traps
OHSAS	Occupational Health and Safety Assessment Series
OITDS	Operator Independent Truck Despatch System
OMS	Output per Man shift
PAFs	Project Affected Families
PAP	Project Affected People
PDPT	Post Diploma Practical Training
PFCC	Power Factor Correction Capacities
PGPT	Post Graduate Practical Training
PIS	Productivity Improvement Scheme
PLRCC	Project Level Rehabilitation and Resettlement Committee
PM	Particulate Matter
PME	Periodic Medical Examination
PMS	Performance Management System
P&P	Project & Planning
PPE	Personal Protective Equipment
PRP	Performance Related Pay
QC	Quality Control
RCCC	Regional Coal Consumers Council
R&D	Research and Development
R&R	Resettlement and Rehabilitation
REC	Renewable Energy Certificate
RFID	Radio Frequency Identification
RLS	Rapid Loading System
RMC	Risk Management Committee
RPDAC	Rehabilitation & Peripheral Development Advisory Committees
SAIL	Steel Authority of India Limited
SA 8000	Social
SCOPE	Standing Conference of Public Enterprises
SC/ST	Scheduled Caste/ Scheduled Tribes
SD	Sustainable Development
SDL	Side Discharge Loader
SECL	South Eastern coalfields Limited
Sox	Oxides of Sulphur
SPCB	State Pollution Control Board

SPV	Special Purpose Vehicle
S&R	Safety & Rescue
SSI	Small Scale Industries
STP	Sewage Treatment Plant
tco ₂ e	Tonnes of Carbon Dioxide Equivalent
Te	Tonne
TISS	Tata Institute of Social Sciences
TPM	Total Particulate Matter
UCCI	Utkal Chamber of Commerce and Industry Limited
UG	Underground
UDM	Universal of Drill Machine
UHF	Ultra High Frequency
UNGC	United Nations Global Compact
VRS	Voluntary Retirement Scheme
VTS	Vehicle Tracking System
W	Watt
WCL	Western Coalfields Limited
WETP	Water Effluent Treatment Plant
WIPS	Women in Public Sector
WTPs	Water Treatment Plants

Feed Back Form: MCL's SD REPORT 2017-18.

We value your feedback as it helps us to improve what we do and how we communicate. Please help us by taking a few minutes to complete this feedback form.

1. Were you able to find the information you needed? YES/NO
2. Do you think the report covered all of the important issues relating to sustainability? YES / NO
Are there any specific issue(s) you would like to see covered in our Sustainability Report?

Please specify

3. Which sections of our Sustainability Report were you most interested in? (Please tick all that apply)

Our Strategy Social Performance Environment Performance
Economic Performance Any other, please specify

4. Which of the following best describes you?

Employee Stakeholder Customer Industry Supplier Student
NGO / Charity Other (please specify)

5. Clarity of information provided in the report.

High Medium Low

6. Quality of design and layout of the report:

Excellent Good Average Poor

7. Would you like to tell us anything else about sustainability at MCL?

Name: _____

Designation: _____

Organization: _____

Email: _____

You may also mail /email your feedback to this address:

GM (Environment),
Mahanadi Coalfields Ltd
Email: sustainability.mcl@gmail.com
Ph: +91 6632113769

Mahanadi Coalfields Ltd., sincerely thanks you for your valuable feedback



Surface Miner operations at Bharatpur OCP

Unveiling the Sustainability report | 2016-17 in presence of the Board of Directors



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