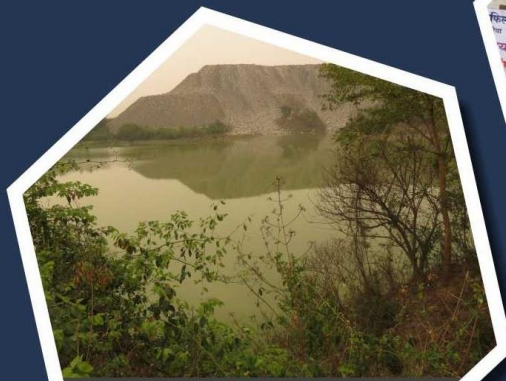




कोल इण्डिया लिमिटेड
Coal India Limited

भारत सरकार का उपक्रम
A Government of India Undertaking
एक महारत्न कंपनी A Maharatna Company



SUSTAINABILITY REPORT

2016-17





Committed to Fulfill Energy Aspirations of the Nation

Vision

To emerge as one of the global player in the primary energy sector committed to provide energy security to the country by attaining environmentally & socially sustainable growth through best practices from mine to market

Mission

To produce and 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

Values

Our core values include equality, justice, transparency and accountability. These are practiced in all spheres of our business activities. As we put emphasis on dual development, the values are monitored for the entire workforce by five Central Trade Unions. Wherever the values are not being followed, the issue is discussed with the management to reach a mutually agreed upon solution. These solutions often have necessary corrective measures that are taken if required.

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Abbreviations

AA	Accountability
APS	Accountability Principles Standard
ASCI	Administrative Staff College of India
ASSOCHAM	The Associated Chambers of Commerce of India
BT	Billion Tonnes
CAAQMS	Continuous Ambient Air Quality Monitoring Stations
CAGR	Compound Annual Growth Rate
CHPs	Coal Handling Plants
CISPA	Coal India Sports Promotion Association
CMPDI	Central Mine Planning and Design Institute
CPSE	Central Public Sector Enterprises
CSR	Corporate Social Responsibility
CVC	Central Vigilance Commission
CVO	Chief Vigilance Officer
DETP	Domestic Effluent Treatment Plant
DGMS	Directorate-General of Mines Safety
DIN	Director Identification Number
EBITDA	Earnings Before Interest, Tax, Depreciation and Amortization
EC	Environmental Clearance
EESL	Energy Efficiency Services Limited
EIA	Environmental Impact Assessment
EMP	Environmental Management Plan
ETF	Exchange-Traded Fund
FICCI	Federation of Indian Chambers of Commerce & Industry
FRI	Forest Research Institute
FSA	Fuel Supply Agreement
GoI	Government of India
GRI	Global Reporting Initiative
HA	Hectare
HQ	Head Quarter
IICM	Indian Institute of Coal Management
ISO	International Standards Organisation
KVAR	Kilo Volt Ampere Reactive
kWh	Kilowatt Hour
KWP	Kilo Watt Peak
LCOE	Levelised Cost of Electricity
LED	Light Emitting Diode
LOA	Letter of Assurances
LTC	Low Temperature Carbonization
LTIFR	Lost Time Injury Frequency Rate
MCP	Mine Closure Plan

MDTP	Mine Discharge Treatment Plants
MM	Mining and Metals
mm	Millimetre
MoC	Ministry of Coal
MoEFCC	Ministry of Environment, Forest and Climate Change
MoL&E	Ministry of Labour& Employment
MoU	Memorandum of Understanding
MRS	Mine Rescue Station
MT	Million Tonnes
MU	Million Units
MTY	Million Tonnes per Year
MVTR	Mine Vocational Training Rules
MWP	Mega Watt Peak
NEERI	National Environmental Engineering Research Institute
NGO	Non-Governmental Organization
OB	Overburden
OHS	Occupational Health and Safety
OHSAS	Occupational Health and Safety Management Systems
PAN	Permanent Account Number
R&D	Research and Development
R&R	Rehabilitation and Resettlement
RPL	Recognition of Prior Learning
RR	Rescue Room
Rs	Rupees
SCP	Special Corporate Plan
SDG	Sustainable Development Goals
SDP	Sustainable Development Policy
SEBI	Securities and Exchange Board of India
SECI	Solar Energy Corporation of India
SMP	Safety Management Plan
SPCB	State Pollution Control Board
T	tonne
TSP	Tribal Sub Plan
UN	United Nations
WIPS	Women in Public Sector

About the Report

Content of the Report

This is the sixth Sustainability Report by Coal India Limited for the financial year 2016-17 with the period of 1st April 2016 - 31st March 2017. This report acts as one of the means of communication aimed at internal and external stakeholders including our employees, Customers, local communities, society at large, government, indigenous people, media, and those with business interests in our company (e.g., shareholders, business partners or industry associations). The key objective behind this reporting is to apprise our stakeholders about the materiality issues, sustainability management, targets and achievements of CIL and to address the concerns raised by our valued stakeholders. Sustainability Report has been compiled as per the guidelines of GRI G4 'in accordance' Core option while the previous year report published in 2015-16 was as per GRI G4 guidelines.

As per Reg.-34(2)(f) of Listing Obligation and Disclosure Requirements (LODR), 2015, top 500 listed companies, in terms of market capitalization, we prepared Business Responsibility Report (BRR) describing the initiatives taken by the company from Environment, Social and Governance perspective. SEBI guidelines stipulates that in case, Report is prepared as per international framework and mapped with BRR, the same would be considered as sufficient compliance.

We are committed to perform in sustainability across the three pillars i.e. economic, environmental and social aspects, in a balanced, reasonable and transparent manner for a long-term interest of all our stakeholders. The Report covers CIL'S role in enhancing sustainability and the three factors People, Planet and Profit. This report deliberates on all matters pertaining to the proper functioning of all our operations and explicitly manage the risks associated with the economic, environmental, and social dimensions. Stakeholder centric goals with a credible commitment and our public accountability is the driving force to set strategic sustainable business goals.

External assurance of the Report is provided by M/s Bureau Veritas (India) Pvt. Limited and their Assurance Statement is a part of this report.

Scope and Boundary

The scope of this year's sustainability report covers CIL and its eight fully owned subsidiaries in India.

- Eastern Coalfields Limited (ECL),
- Bharat Coking Coal Limited (BCCL),
- Central Coalfields Limited (CCL),
- Western Coalfields Limited (WCL),
- South Eastern Coalfields Limited (SECL),
- Northern Coalfields Limited (NCL),
- Mahanadi Coalfields Limited (MCL)
- Central Mine Planning & Design Institute Limited (CMPDIL).

In addition, CIL has a foreign subsidiary in Mozambique, Coal India Africana Limitada (CIAL). The mines in Assam i.e. North Eastern Coalfields is managed directly by CIL. Mahanadi Coalfields Limited, a subsidiary of Coal India Ltd is having five (5) Subsidiaries i.e. MJSJ Coal Limited with MCL share (60%), MNH Shakti Ltd with MCL share (70%), Mahanadi Basin Power Limited with MCL share (100%), Mahanadi Coal Railway Limited with MCL share (50%) and Neelanchal Power Transmission Company Limited a joint venture with MCL share (50%). SECL has two subsidiaries i.e. Chhattisgarh East Railway

Limited with SECL share (64%) and Chhattisgarh East-West railway Limited with SECL share (64%). **Jharkhand Central Railway Limited** is a Joint Venture Company among Central Coalfields Limited, M/s IRCON International Limited and Govt. of Jharkhand in which CCL holds 64% shares.

Reporting Standard

CIL has endeavoured to present the sustainability performance across the three pillars i.e. economic, environmental and social aspects, in a balanced, clear, reliable, accurate, reasonable and transparent manner. The reported data has been reviewed for completeness and accuracy at the operations level. We have represented the quantitative data in the metric system and the currency has been reported as Indian National Rupees. There are three specific restatements of the previous reported information. All the relevant aspects from Indicator Protocol, Sector Supplements and Technical Protocol have been incorporated. The report adheres to the reporting principles of GRI Reporting Guidelines addressing 3 principles of Accountability as per AA1000 APS-2008 namely, materiality, stakeholder inclusiveness, sustainability context and completeness.

Financial performance of the organization is reported on the basis of guidelines provided in the Company's Law. Regular quality, environment, health and safety and CSR audits are conducted by third party against International Standards such as ISO 9001, ISO 14001, OSHAS 18001 and CSR guidelines. Financial Systems have successfully undergone the statutory audits and internal audits. Norms and procedures prescribed for the work place safety under the Ministry of Labour & Welfare (Factories Act), the Ministry of Environment, Forests and Climate Change and Directorate General of Mines Safety are followed.

The GRI Index on pages 96-104 provides a list of GRI indicators and Disclosures (as per GRI G4 'in accordance- Core option criteria guidelines) and their location within this report.

Independent Assurance

M/s Bureau Veritas (India) Pvt. Limited independently reviewed our application of the GRI G4 Guidelines. The Independent Assurance Statement is attached in the end of the Report. We appreciate your feedback and any comments on the report, so we can improve our future reports. You may send/email your feedback, comments or suggestions to

For Further Details, Contact:

Shri Niranjana Das,
Chief General Manager
Environment Division, Coal India Limited,
Coal Bhawan, Premises No. 4, MAR,
Plot No: AF III, Action Area 1A,
New Town, Rajharhat, Kolkata, West Bengal
PIN- 700156

E-mail: cgmenv.cil@coalindia.in

www.coalindia.in

CIN L23109WB1973GOI028844



From Chairman's Desk

Dear Stakeholders,

I take pleasure in presenting the Sixth edition of Coal India's Sustainability Report for 2016-17 prepared in accordance with the latest G4 guidelines of Global Reporting Initiative. This report transparently communicates CIL's balanced approach towards managing economic, environmental and social performance. The report highlights the company's sustainability issues and achievements. CIL endeavours to align its activities in line with Sustainable Development Goals laying emphasis on Environmental Economic and Socio-Cultural Sustainability.

Coal India had put up commendable performance during 2016-17 clocking an incremental growth of 15.39 Million Tonnes (MTs) and 8.82 MTs in coal production and off-take compared to last fiscal, meeting the required coal demand of the country in the process. During the reporting year CIL earned a pre-tax profit of Rs. 14,433.71 Crores. After a temporary hiatus CIL has been on a consistent growth path since last three years in its production and off-take. It is a unified concerted effort from employees at all levels and relationship we share with our stakeholders. Synergy for Energy. Our aim is not only to prevent sustainability related risks but also exploit the opportunities. We are continuously investing in establishing state of art eco-friendly mining operations.

The company's sustainability strategy outline focuses areas that represent the key challenges and opportunities, which are Community, Employee, Water, Biodiversity, Energy, and Land. CIL has established measurable metrics to track its progress and successfully achieving targets. Coal India is conscious of adhering to legal and ethical standards and ensures that systems and practices are deployed across the entire organization.

Through effective environment management we aim to achieve high standards in environment conservation. Water is our material sustainability issue. It is critical to communities and ecosystems, in addition to being an essential part of the mining process. We are committed to protect the existing environment and maintain ecological balance through restoration of water bodies, eco-restoration of mined out areas and dumps, massive afforestation drives, effective waste management and comprehensive monitoring of post mine closure. Specific Power Consumption during 2016-17 was 8.82 kWh/T vis-à-vis 9.23 kWh/T during 2015-16 with a reduction of 4.42%. During 2016-17, 1.66 million trees have been planted in an area spanning more than 661.08 Ha. CIL introduced state-of-the-art Satellite Surveillance to monitor land reclamation and restoration for all opencast projects.

Our employees including contract labours are fundamental to the success of our sustainability strategy and ensuring their health and safety is always at the forefront of what we do. We are increasingly extending focus on identifying and addressing the root causes of serious incidents. New ideas are created in people's minds. We support this process by giving our employees the space they need for free and creative thinking and work, and by supporting them with the right processes and systems wherever it makes sense to do so. We give strong focus to improve the safety performance which has resulted in reducing average fatality rate of 0.09 per MT in 2016-17 against 0.14 in 2015-16.

In the communities where we operate, we made significant progress in establishing uniform measures to assess social risk and performance while implementing effective rehabilitation and resettlement activities. The company aims to minimize negative effects adding value not only to the company but society as a whole. Since inception CIL has been implementing various CSR projects, which then were called Community Development Activities, in health care, education, drinking water, sustainable livelihood, infrastructure development, natural resource conservation, sports at various location of our mines.

CIL is actively associated with “Swachh Bharat Abhiyan- Swachh Vidhyalaya Abhiyaan” for Clean India initiative.

CIL’s sustainability performance received wide recognition at the corporate and subsidiary levels. While not allowing any complacency to creep in our sustainability goals are clearly defined.

The commitment in reducing environmental impact of mining continues unabated with transparency, consultation and engagement of stake holders.

Coal India is committed to the highest standards of Corporate Governance, transparency in operations, disclosure and reporting as required under various laws, regulation, and guidelines.

With best compliments,



(Sutirtha Bhattacharya)
Chairman

Coal for Sustainable Growth

Coal is a vital and irreplaceable part of India's way of life and economy. Coal is an abundant energy source. There are over 860 billion tonnes of proven coal reserves worldwide. This means that there is enough coal to last us around 118 years at current rates of production. In comparison to this, proven oil and gas reserves are equivalent to around 46 and 59 years at current production levels. Coal outlasts oil and gas combined. Three countries Russia, Iran and Qatar control 53% of the world's gas reserves. On the contrary, there are recoverable reserves of coal in almost 80 countries ensuring greater equitability amongst various nations. Coal has been backbone of key materials such as steel, cement and aluminium which are important element for human being existence on the earth. Coal has contributed significant role for the growth of society in the last century. Coal still contributes to 30% of global primary energy consumption. Coal also accounts for 41% of the world's electricity generation. It is the key fuel for generating electricity on almost all continents, with almost all developed and developing countries relying on coal for the stable and secure supply of electricity. There are 1.3 billion people in the world today who live without access to electricity. 2.6 billion people rely on traditional fuels, such as dung and wood, for cooking. A life lived without access to modern energy is a life lived in poverty.

Coal has contributed to provide accessibility of electricity to major sections of society across the world and further preventing forest depletion due to use of wood for fuel purpose. Conservation of forests also act as major sink for carbon dioxide sequestration avoiding global warming impacts due to land use change. Coal is still most affordable, easily accessible and reliable source of power in many countries.

The International Energy Agency (IEA) has predicted that more than half of the on-grid electricity needed to meet their 'energy for all' scenario would need to come from coal. Coal Companies has embarked upon major innovation drives such as promoting to raise average global efficiency of coal plants to 40% would save 2 Gt of CO₂.

The significant mitigation potential of cleaner coal technologies, including high-efficiency low-emission (HELE) coal plants and carbon capture use and storage (CCUS). FutureGen in the USA, a project supported by many coal companies that will upgrade a power plant with oxy-combustion technology to capture approximately 1.1 million tons of CO₂ each year - more than 90% of the plant's carbon emissions. Other emissions will be reduced to near-zero levels. Using safe and proven pipeline technology, the CO₂ will be transported and stored underground at a nearby storage site. In Australia, the COAL21 initiative represents a commitment by the coal industry to reducing GHG emissions from coal mines and coal use – and will spend more than A\$1 billion through the COAL21 Fund to reduce its carbon impact. The funds have come entirely from a voluntary levy from members of the Australian coal industry to develop low emission technologies for coal use, including CCUS. In China, the GreenGen project, an initiative supported by coal producers, is China's signature carbon initiative. At a full build of 650 MW, GreenGen will be the world's largest near-zero emissions coal plant with CCUS technology.

(Excerpts from World Coal Association)

Coal Mining – Industry Outlook

Coal is the second most important energy source, covering 30% of global primary energy consumption. Hard coal and lignite (brown coal) is the leading energy source in power generation with 40% of globally generated power relying on this fuel. Coal plays an important role in the security of supply in developed countries, and is a key enabler for economic growth and development in developing countries while providing affordable and reliable energy. Developing countries are increasingly satisfying their growing energy demands with coal in order to sustain economic growth to reduce energy poverty and to achieve the United Nations (U.N.) sustainable development goals (SDG). The levelized cost of electricity (LCOE) with regards to India shows that coal is expected to remain the most affordable option through to 2035. This is driven by low domestic coal prices and limited gas availability. The link between access to affordable power from coal, economic growth and prosperity is clear. The impact of coal on infrastructure development is more noticeable in developing nations.

The world currently consumes over 7,800 Mt of coal which is used by a variety of sectors including power generation, iron and steel production, cement manufacturing and as a liquid fuel. In 2014, global coal production was approximately 5.7 billion tonnes coal equivalent. About 77% of the coal production was steam coal to be utilised in other industries and for power generation, 13% was coking coal to be used for coke production in the steel industry and 10% lignite. China remains the world's largest coal consumer with a share of 50%. Consumption of steam coal is projected to grow by 20% from 2013 to 2040.

India is the third largest coal producer in the world after China and the US. The total coal production in India was around 626 million tonnes (MT) in FY 2016. Ninety per cent of the domestic production comes from public sector coal producers while only 10% is produced by the private sector. India imported a total of 193 MT in FY 2016, which is equivalent to one-fourth of the domestic coal consumption in the country based on tonnage. Coal is majorly consumed for electricity generation in India (about 64%), followed by steel (8%) and cement (5%) sectors. About 62% of the installed capacity (as of 31 March 2016) in India's power sector is coal based and coal and lignite alone accounted for 77% of the energy produced by primary resources. India, a fast growing country with a tremendous power requirement is dependent on power through coal to ensure energy security and in economic development.

With the economy poised to grow at the rate of 8-10% per annum, energy requirements will also rise at a reasonable level. Foreseeing the high demand of coal in the country, the Government has set a goal of reducing coal imports to zero by 2020. This in turn will help to lower the reliance on expensive coal imports and result in tremendous savings in forex for the country.

Business Risks and Opportunities

Coal India produces about 84 % of the country's entire coal output. We are the major contributor to power sector with nearly 77% of our supplies power India. More than 100 Thermal Power Stations in the country receive coal from Coal India. Seeing the high demand of coal in the country in future, the Government has set a goal of about 1 billion tonne (Bt) coal production for Coal India Limited (CIL) by

FY 2020. In achieving the said target, major business risks & opportunities that CIL envisages are as follows:

Business risks:

- International coal prices are falling thereby rendering domestic coal more competitive.
- Changing economics of coal generated power in India; renewable energies are becoming cost competitive even as coal faces increased regulatory scrutiny and public opposition
- Pet-coke as a substitute of coal.
- CIL's attempts to access new mining areas will face opposition from local communities and environmental groups. With its reliance on open cast mining, access to new mines are essential for CIL to achieve production targets.
- Difficulties in land acquisition along with increasing trend in prices of land and associated R & R issues are also points of concern for CIL.
- The major quantum of increase in production of CIL is generated from the rise in production of low grades of coal, which is not contributing significantly in the revenues of CIL.
- Low IRR percentage leading to non-viability of new projects

Business opportunities:

- Demand from Power (U) is likely to improve as reforms initiated by the Government start to yield results in a few quarters.
- CIL is continuously aiming to supply coal to the neighbouring countries..
- Land acquisition and environmental clearances for expansion and growth of CIL has been smoothened and prioritized.
- Improved co-ordination with railways also boosted the opportunities for CIL as rake allotment during 2016-17 rose substantially to that in 2015-16.
- Long-term investment by CIL in Key and vital sectors like solar, fertilizer etc
- We are investing in railway infrastructure projects for reliability and affordability of coal for consumers

Coal India Limited - An overview

Coal India Limited (CIL), a Maharatna Central Public Sector Enterprise, and Government of India Undertaking, is the largest coal producer in the world with production of 554.14 million tonnes (MT). “Maharatna’ status is conferred by the Government of India to select state owned enterprises to empower to expand their operations and emerge as global giants. CIL being coal mining corporate comes under the purview of Ministry of Coal, Government of India. Company has made significant contribution to energize entire India and creating socio-economic development across the country since independence. With headquarters, at Kolkata; West Bengal we have our significant footprints all over the Nation. We are producing about 84% of the entire coal output and caters to the coal requirement of the Power, Cement and Steel sectors of the country. . The company developed a roadmap in 2015 for meeting the challenge of achieving 1 BT of coal by FY 2020.

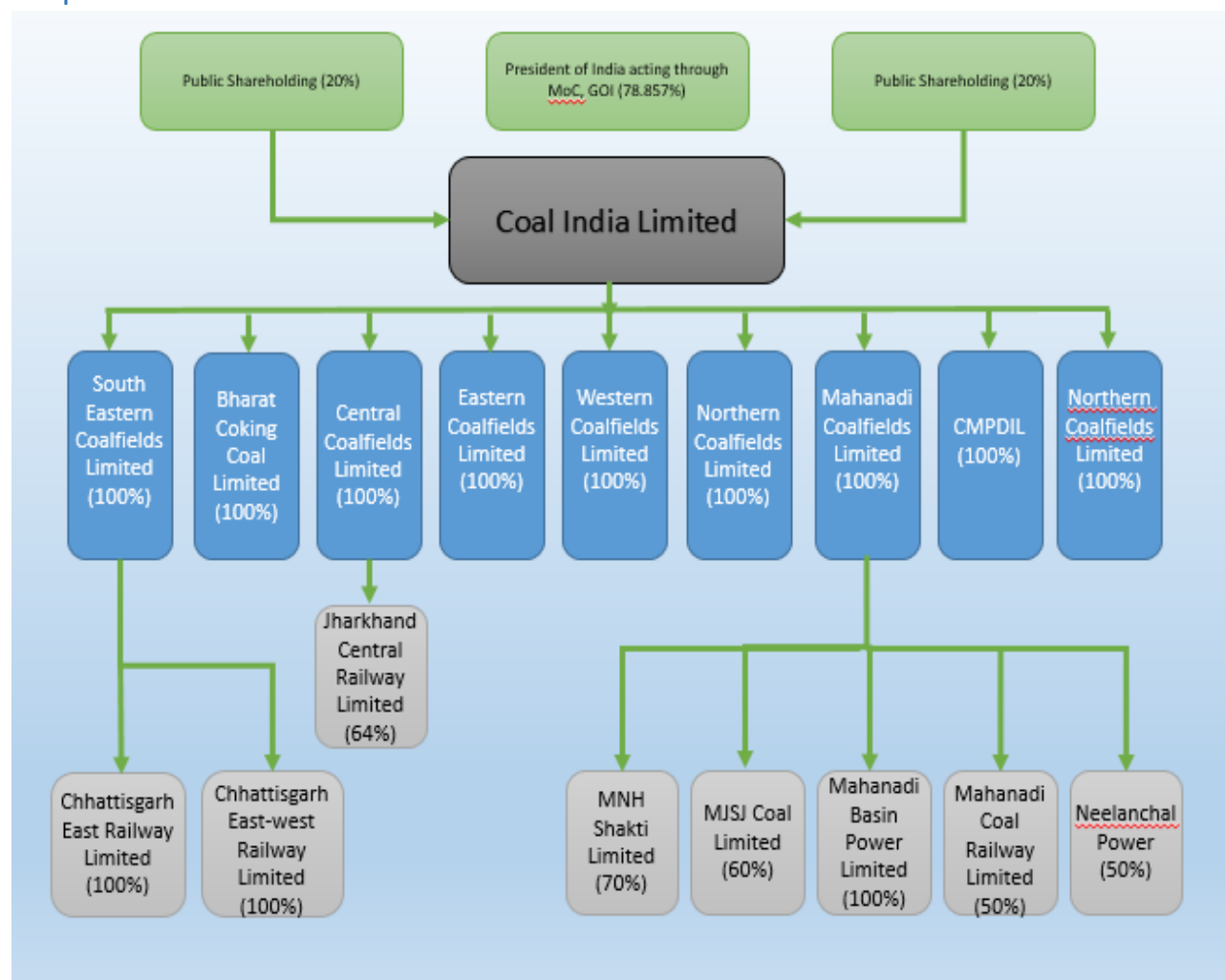
CIL is an apex body with eight wholly owned coal producing subsidiaries along with one Mine Planning and Consultancy Company spread over eight provincial states of India. Being one of the largest corporate employers in the country, CIL has employee strength of 3,10,016 (as on 1st April, 2017). CIL operates through 82 mining areas spread over eight provincial states of India. Coal India Limited has 394 mines (as on 1st April, 2017) of which 193 are underground, 177 opencast and 24 mixed mines. CIL further operates 15 coal washeries, (12 coking coal and 3 non-coking coal) and also manages other establishments like workshops, hospitals, and so on. We have 27 training Institutes, Indian Institute of Coal Management (IICM) is an excellent training centre operates under CIL and imparts multidisciplinary management development programmes to the executives. Others include cement, fertilizer, brick kilns, and a host of other industries. There were no significant changes during the reporting period in size, structure, ownership or reporting boundary.

Organisational Structure

CIL has eight subsidiaries in India with a foreign subsidiary in Mozambique namely Coal India Africana Limitada (CIAL). The government shareholding in CIL stands at 78.857% with the remaining held by institutional investors and individual shareholders.

	Shareholding Pattern (%) 2016-17	Shareholding Pattern (%) 2015-16
Government of India	78.857 %	79.649 %
Other Investors	21.143%	20.351%
Total	100.00%	100.00%

Corporate structure



Product Profile

Coking Coal

Description: When heated in the absence of air, forms coke

Uses: Steel Making and Metallurgical Industries

Semi Coking Coal

Description: Blended with coking coal in adequate proportion to make coke

Uses: As blend-able coal in Steel making, Merchant Coke Manufacturing and other Metallurgical Industries

NLW Coking Coal

Description: With high ash content

Uses: Power utilities and non-core sector consumers

Non Coking Coal

Description: Coal without coking properties

Uses: Thermal grade coal for Power utilities, Cement, Fertilizer, Glass, Ceramic, Paper, Chemical and Brick manufacturing, and other heating purposes

Washed & Beneficiated Coal

Description: Coal after washing and beneficiation

Uses: Manufacturing of hard coke for Steel Making and Power Generation

Middlings

Description: By-product of the three stage coal washing/beneficiation process **Uses:** Power generation, Brick Manufacturing Units, and Cement Plants

Rejects

Description: Products of coal beneficiation process after separation of cleans and/or middlings **Uses:** In Fluidized Bed Combustion (FBC) boilers for Power Generation, Road repairs, Briquette (domestic fuel) Making, Land filling, and more.

CIL Coke/ LTC Coke

Description: Environment friendly product of the Dankuni Coal Complex, obtained through low temperature carbonisation.

Uses: In the furnaces and kilns of industrial units and as domestic fuel by halwais, hotels, and more

Coal Fines/ Coke Fines

Description: Screened fractions of raw feed coal and LTC coke, obtained from the Dankuni Coal Complex and other coke oven plants

Uses: Industrial furnaces and domestic purpose

Tar/ Heavy Oil/ Light Oil/ Soft Pitch

Description: From the Dankuni Coal Complex made using low temperature carbonisation of non-coking coal in vertical retorts

Uses: Furnaces and boilers of Industrial Plants; Power houses, Oil, Dye, Pharmaceutical Industries, and more.

Corporate Governance

CIL has established effective Corporate Governance to make certain a transparent and compliant structure. Our Corporate Governance initiatives are aimed at enhancing value for our diverse stakeholders. The governance practices endorse an ethical and sound conduct of the operations towards our objectives of making a meaningful and affirmative impact on people's lives. Our utmost levels of responsibility make sure that the Board keenly promotes and upholds the entire Company's conduct continuously to unrelentingly towering levels of Corporate Governance. To maintain our corporate responsibility endeavours, we have adopted a governance structure and various management processes which have been appropriately refined over the years to face the potential challenges.

CIL strives to ensure transparency, disclosures and reporting conforms wholly to the laws, systems, regulations and guidelines and infuse ethical conduct throughout the Company. Our internal mechanisms such as oversight of management, independent internal audits, structure of the Board of Directors, etc. forms part of our well established protocols. The Company is committed to an upmost model of Corporate Governance where the Board is accountable to all stakeholders and each member of the Board owes his/her first duty towards protecting and supplementing the interest of the Company.

Corporate Governance has been carried out in accordance with the Companies Act 2013, Clause 49 of the Listing Agreement and SEBI (Listing Obligations and Disclosure Requirements) Regulations, 2015. The Board of Directors are guided by the organization's Vision, mission and values and the Board regularly reviews the performance of the organization on economic, environmental and social issues. The composition of the Board of Directors is a combination of full time Executive Directors, Non-Executive Directors and Independent Directors.

The annual report of the Company along with audited accounts for financial year is presented by the Directors in the Annual General Meeting (AGM). The proceedings of the AGM, including the suggestions, comments and feedback from the shareholders are duly recorded for rationally prioritizing and incorporating in our business planning exercise.

The various Committees of the Board like Audit Committee, Nomination & Remuneration Committee, and Stakeholders' Relationship Committee, Corporate Social Responsibility Committee, etc. keep our corporate governance agenda on track.

The Company also has a Risk Management Committee which oversees the risk management function of the Company. We have a Code of Conduct applicable to Board Members as well as the senior management. There were no instances of non-compliance and no imposition of any penalty or stricture from the Stock Exchange(s) or SEBI in the matter related to capital markets or compliance during the year.

The nomination and fixation of terms and conditions for appointment of Director(s) are made by Government of India. The Non-Executive Directors (other than Government Nominee Directors) are paid only sitting fee for each Board/ Board Sub-Committee Meeting attended by them and no other pecuniary benefit is granted to them. The salary and pay scales of the Whole Time Directors are fixed as per the prevailing rules of the Government.

The various issues pertaining to the management of economic, environmental and social areas are collected, compiled and monitored through the various subsidiaries of our Corporate Office. The agenda papers along with the status report on the economic, environment and social performances including legal compliance are made with the help of information provided by the respective subsidiaries in advance, to the Board for review, comments and suggestions. The feedback from the Board members is analysed by the top management and considered for business decision-making. There were no transactions by the Company of material nature with Promoters, Directors or the Management, Subsidiaries, relatives, etc. that may have potential conflict with the interests of the Company at large.

The Government of India owns 78.86% of the equity and retains voting control in the Company.

Board of Directors

Title	Name of the Director	PAN & DIN	Category (Chairperson/Executive/ Non-executive/ Independent/Nominee)	Date of Appointment
Shri	Sutirtha Bhattacharya	ADZPB7512L & 00423572	Chairperson-Executive	05.01.2015
Shri	Chandan Kumar Dey	ADIPD7247D & 03204505	Executive	01.03.2015
Ms	Loretta Mary Vas	AONPV3369N & 02544627	Non-Executive-Independent	17.11.2015
Shri	Vinod Jain	AAHPJ5235B & 00003572	Non-Executive-Independent	17.11.2015
Dr.	D.C. Panigrahi	AEHPP0456L & 07355591	Non-Executive-Independent	17.11.2015
Dr.	Khanindra Pathak	ADJPP8738Q & 07348780	Non-Executive-Independent	17.11.2015
Shri	Satish Balram Agnihotri	AAXPA8611L & 03390553	Non-Executive-Independent	17.11.2015
Shri	Shyam Nandan Prasad	ABEPP5265F & 07408431	Executive	01.02.2016
Shri	R.K.Sinha	AKGPS1549E & 05351383	Nominee-Non Executive	05.08.2016
Shri	Vivek Bharadwaj	AHRPB7615E & 02847409	Nominee-Non-Executive	30.08.2016
Shri	S. Saran	06607551	Director(Tech)	31.10.2016

The CIL Board operates through various committees that are assigned with specific roles and responsibilities. The various committees include the Audit Committee, the Nomination and Remuneration Committee, the Share Transfer Committee, the Risk Management Committee, the Corporate Social Responsibility Committee and the Stakeholder Relationship Committee.

Corporate Social Responsibility Committee

Sustainable Development Committee including CSR Committee was constituted by the CIL Board of Directors in its 282nd meeting held on 16-04-2012. This committee was reconstituted in 334th CIL Board meeting held on 13-12-2016. This Committee was renamed as CSR Committee in pursuant to the provisions of Section 135 of the Companies Act, 2013 and the Companies (Corporate Social Responsibility) Rules, 2014. In addition to CSR activities this committee will also look after Sustainable Development. During the year 2016-17, three meeting of the committee were held on 27-05-2016, 03-08-2016 & 18-01-2017 respectively. The Corporate Social Responsibility Committee consisted of following members and their attendance was as follows:

Sl. No.	Title	Name of the Director	Status		No. of Meeting attended
1	Dr.	S. B. Agnihotri	Independent Director	Chairman (from 06.01.16)	3
2	Dr.	Khanindra Pathak	Independent Director	Member (from 06.01.16)	3
3	Shri	Vinod Jain	Independent Director	Member (from 06.01.16)	3
4	Shri	R. Mohan Das	Director(P&IR)	Member (till 30.03.17)	3
5	Shri	S. Saran	Member(w.e.f 13.12.16)	Director(Technical)	1
6	Late Shri	N. Kumar	Member(w.e.f 06.01.16 till 18.10.16)	Director(Technical)	2

Code of Conduct

To maintain high standards of business conduct, we have maintained Code of Conduct. This deters any wrongdoing and promote ethical conduct. Our philosophy is to always strive for sustainable business achieving economic growth, social equity and environmental balance through collaborative action, transparency and public reporting. The code of conduct is applicable to Board Members as well as to Senior Members. It mandates to be fair and not to discriminate in the basis of race, gender, religion and the values of equality, tolerance, respect for others. code of conduct demonstrates our commitment to integrity, ethical values and legal compliance. The code touches all aspects of ethical risk even as it sets standards of ethical and legal behaviour by providing guidance on ethical issues. It also provides reporting mechanisms for known or suspected unethical conduct and helps foster a culture of honesty and accountability.

CIL has also prepared and presented the Citizen charter before the Board this year. The highlights of the citizen charter for CIL has been summarized below:

- Citizens:
 - Customers, Vendors, Investors, Government, Society
- Objective:
 - To improve quality of public services and responding to Citizens
- Three broad areas of Charter:
 - Scope of the Charter and General Information
 - Information on management commitment to Citizens
 - Citizens' Service Delivery, to improve delivery by feedback mechanism
- Scope:
 - Show ability to provide quality products & efficient & responsive service
 - Meet requirements of Citizens as per legal, statutory and regulatory requirements
 - Enhance Citizens' satisfaction and continually improve products and service delivery process

Human Rights

As a responsible Corporate Citizen, we recognise the importance of children's rights and have a clear stance on the issue of child labour. As per The Mines Act, 1952, the employment of children below 18 years of age in a mine is prohibited. We follow proper checks and audits as per the Act. We do not make any verbal agreement; instead, all our contracts are in written form with various contractors. This ensures that no children get employed in our coal mines. We are fully committed to abide by the rules on Human Rights across our operations and this reflects in our dealing with our different stakeholders. All suppliers / contractors / vendors who undertake to provide services enter into a comprehensive formal agreement with CIL, which contains stipulations and conditions requiring them to ensure the compliance of various applicable labour statutes in respect of their employees / workers. These include the Payment of Wage Act - 1936, the Minimum Wages Act -1948, Equal Remuneration Act - 1976, the Industrial Dispute Act - 1947, the Employees State Insurance Act - 1948, the Coal Mines Provident Fund and Misc. Provisions Act - 1948, the Child Labour (Prohibition and Regulation) Act - 1986 and the Contract Labour (Regulation & Abolition) Act -1970. CIL ensures that the contractor's labour is treated fairly as per the law. The contractors are advised to pay the wages to its workers through bank and settle the issues in accordance with the law. We are also committed to the principles of the United Nations Global Compact on Human Rights.

During the reporting period, no cases of anti-competitive behaviour, anti-trust and monopoly practices were filed. Awareness on human rights is included in our training programmes. During the year 2016-17 we don't have any reported case of human rights violation. A more comprehensive Human Rights Policy pertaining to all sectors of CIL has been prepared during this year, wherein child labour has been one of the thrust areas. The Human Rights Policy of CIL has been presented at Board level. Some of the highlights of the human rights policy for CIL are given below:

- Policy articulates the fundamental elements of CIL's approach to Human Rights
- Demonstrates commitment to respect Human Rights, compliance to all applicable labour laws
- Aligned with Universal Declaration of Human Rights and international frameworks
- Policies related to Employment, Health and Safety, Environment and Society also reflect commitment to Human Rights

We have developed a robust electronic surveillance system to keep watch on coal stock and track the coal loaded vehicles.

Vigilance (Anti-corruption)

The vigilance function within the coal India limited is an integral part of the management. The vigilance division of CIL is the nodal section for handling all vigilance matters of the CIL. It believes that with best practices, adequate controls and transparency in place, decisions taken will be professionally, efficiently, effectively and consistently, leading to the corporate excellence. This division is headed by chief vigilance officer (CVO) at the CIL corporate office and is assisted by general manager and group of vigilance officers experienced in various departments of the CIL. In addition to the vigilance division at the CIL corporate office, the subsidiary companies of CIL are headed by CVOs, who report to the CMD of the concerned subsidiary company. The vigilance division arranges vigilance seminars/training programmes/workshops for the benefit of employees working at CIL & its Subsidiaries including IICM-RANCHI, Regional Sales Offices.

The CVO, on the basis of the investigations carried out, provides advice to the management to bring about qualitative improvement in the functioning of the company. The CVO acts as a special advisor to the chief executive in all matters pertaining to vigilance. The CVO is also a link between the company and the agencies like MOC, DOPT, PMO, CBI, CVC, etc. On vigilance matters and also for sharing of the systemic improvements suggested and implemented in the company.

The major work profile of the division comprises: investigation of complaints received from MOC, CVC, PMO, CIL management, individuals and other sources; preventive vigilance like surprise inspections, regular surveillance/scrutiny of procurement and contract files and CTE'S intensive examination reports; scrutiny of property returns of employees and coordination with the central vigilance commission (CVC), chief technical examiner (CTE), central bureau of investigation (CBI), ministry of coal, etc.

There is corruption risk mitigation policy at CIL. The same is available at CIL's website: www.coalindia.in.

During the year 2016-17, 49 intensive examination of works/contracts (major works) were undertaken by CIL(HQ) and its subsidiary companies. In addition, 379 surprise checks were carried out. Besides, 68 departmental inquiries were disposed of which resulted in punitive action against 185 officials. Such examinations/investigations have resulted into initiation of various system improvement measures.

As per directives of Central Vigilance Commission, Vigilance Awareness Week – 2016-17 has been observed in coal India limited, IICM- Ranchi, North Eastern Coalfields-Margherita & Regional Sales Offices across the country besides all the subsidiary companies w.e.f. 31.10.2016 to 05.11.2016 emphasizing the theme of "public participation in promoting integrity and eradicating corruption".

During the week, various activities in order to generate awareness, educate and discuss transparency among Officials/stake holders as well as general public to arrest the root cause & threat of corruption and to promote good governance were organised.

The company trains its employees in anti-corruption policies and procedures. Executives are trained at different stages during their service period through programs organized at various levels. Company has anticorruption policies and procedures in the form of conduct rules, code of conduct, whistle blower policy and various circulars issued time to time the details of training programs organized by vigilance department is given in the preceding paragraph. HRD department may also be consulted for details of training programs.

Percentage of employees trained in organisation's anti-corruption policies and procedure	
Particulars	No of participants
Training Course attended by Vigilance Officials of CIL in different Institutes/Centre's outside company	
(i) Organized a Presentation of Shri Vinaya Varma, Vice President, mjunction-Kolkata, on "Issues in e-procurement and Reverse Auction" at CIL Conference Hall, Kolkata on 08.04.2016 for CIL Officials.	56
(ii) CIL jointly with IMI, Kolkata organized a "Workshop on Effective Vigilance" from 28-30 April 2016 and attended by Vigilance Officials from all over India	39
(iii) Organized a presentation cum session of Shri V K Gupta, Ex. CTE, CVC on "Issues in Contract Management". The session was attended by CVOs & Officials from VSC Member organization in and around Kolkata and Officials of CIL.	60
(iv) Coal India Limited organized a Speech cum session of Shri Arun Kumar, Professor (Retd.), JNU, New Delhi, on "Impact of Black Economy on Governance" on 6th May (Friday) 2016 at 3.30 PM at CIL Auditorium, New Town, Rajarhat, Kolkata.	200
(v) Vigilance, CIL organized a training programme for Executives of NEC, Margherita on "Vigilance in PSUs- CIL Perspective" from 26 & 27.05.2016 at Ledo Club, Margherita, NEC, Assam.	75
(vi) CIL with the help of IC Centre for Governance, New Delhi organized a training programme at Panchgani, Maharashtra on "Ethics in Public Governance" from 24-26 June 2016.	40
(vii) Vigilance Division, CIL organized a training programme for Junior level Managers of CIL on "Vigilance in PSUs- CIL Perspective" on 15.07.2016 at CIL HQ.	38
(viii) CIL with IMI, Kolkata organized a "Workshop on Departmental Inquiries" from 28-30 July 2016. The workshop was attended by Vigilance Officials and IO/POs of CIL & Subsidiaries and other VSC, Kolkata Member organizations.	43
(ix) CIL with the help of IMI, Kolkata organized a Workshop on Departmental Proceedings 28-30 July 2016 at IMI, Kolkata. It was attended by Vigilance Professionals and Other officials of CIL & Subsidiaries.	40
(x) Organized a session/presentation of Shri Surjit Singh, Ex. Commissioner of Departmental Inquiries, CVC, on topic "What vitiates Disciplinary Proceedings" on 28 th July'2016 (Thursday) at CIL HQ.	54
(xi) Vigilance Division, CIL organized a training programme for Junior Level Managers of CIL on "Vigilance in PSUs- CIL Perspective" on 11.08.2016 at CIL HQ.	41
(xii) Organized a training programme on hardcore vigilance activities on topic "Functional Skill Development on Vigilance" for vigilance officials of CIL & Subsidiaries from 22-23 August 2016 at CIL HQ.	42
(xiii) Organized a Speech of Swami Suddhanandaji of Yogoda Society of India on "Bringing out the best from within us and from others" on 1 st September (Thursday) 2016 at 3.00 PM at CIL Auditorium.	246
(xiv) CIL with the help of IC Centre for Governance, New Delhi organized a training programme at IICM, Ranchi on "Ethics in Public Governance" from 12-17 September 2016.	44

(xv) Organized a seminar on “Enhancing Ethical Standards in Public Enterprise” on 05.10.2016 at Hyatt Regency. The Speaker in the event were Shri K V Chowdary, CVC, Shri Anil Swarup, Secretary, MOC, Dr. G D Gautama, State Information Commissioner, WB, Shri Banibrata Basu, State Vigilance Commissioner, WB and Shri Sutirtha Bhattacharya, Chairman, CIL.	200
(xvi) Organized a Speech of Sadhguru of Isha Foundation, Coimbatore on “Inner Management” on 01.11.2016 at CIL Auditorium.	300
(xvii) Vigilance Division, CIL organized a Seminar on “Public Participation in Promoting Integrity and Eradicating Corruption” on 10.11.2016 at CIL Auditorium.	220
(xviii) Organized a Speech of Swami Suparnanandji of Ramakrishna Mission of Culture on " Integrity, Ethics and Corruption – their impact on life"on 16 th December (Friday) at 3.00 PM at CIL Auditorium, New Town, Rajarhat, Kolkata.	225
(xix) CIL with the help of IC Centre for Governance, New Delhi organized a training programme at Panchgani, Maharashtra on “Ethics in Public Governance” from 19-23 December’2016.	36
(xx) Vigilance Division, CIL jointly with VSC, Kolkata Chapter organized a 3 days "Workshop on Effective Public Procurement” for officers of Vigilance and Procurement Division of CIL & Subsidiaries and Officers from All over India from 06.02.2017 to 08.02.2017. The training covers guidelines/issues in public procurement and contracts management in Govt. Organisations and PSUs/PSBs across India.	42
(xxi) Organized a speech on “The Heart of Effective Leadership” by Dr. Amit Mukherjee, Faculty IC Centre of Governance and Leading Orthopedics Consultant, Jamshedpur on 24.03.2017 at CIL Auditorium. The programme was attended by CVOs and Vigilance Professionals of PSUs and PSBs in and around Kolkata and large number of Executives of CIL.	200

Incidents of Corruption and Action taken.

The action taken in response to the incidents of corruption for 2016 are given below:

Subsidiary	Incidents of corruption	Action taken		Remarks	
		No of officials against whom disciplinary action taken up		No of officials against whom Penalty imposed	
		Major	Minor	Major	Minor
BCCL	12	21	20	16	22
CCL	41	25	15	13	26
CMPDIL	5	0	0	0	0
ECL	3	18	23	16	21
MCL	18	24	19	18	22
NCL	20	7	53	6	40
SECL	29	90	4	85	6
WCL	42	68	4	49	5
CIL	29	15	8	7	16
Total	199	268	146	210	158

Preventive Vigilance / Systematic Improvements

To enhance the systematic improvements within our operational and functional boundary, we have arrived at a policy involving a preventive approach. During the reporting period, the following

initiatives have been undertaken to put transparency at the very core of our organisation:

- Improvements in Online Grievance Management System: We are now listed in the online PG Portal. We also have a Grievance Redressal Committee formed both at CIL and the subsidiary HQs. The grievances received in hard copy are scanned and linked to the system. The actions taken by the Departments is reviewed by the committee. Unresolved grievances are escalated to the functional directors.
- Online Bill Tracking System: A new Bill tracking system has been introduced in the coal net system. This system enables the vendors to view the status of their bills even as it helps the senior officers monitor delays in the processing of bills.
- Personnel Division has been advised to create a central repository of service files of executives.
- It is suggested to get the EIS database & applications tested, audited & certified by reputed certification agency for security & complete database management.
- CIL may explore the possibility to tie-up with reputed hospitals/Medical Institutes to provide HAT training & qualification & the duration of the training should at least six months duration.
- Online transfer of EMD amount directly to the dedicated account of Area/Subsidiary/CIL HQ through E-tender portal and automatic refund of EMD to unsuccessful bidders. Alternatively, transfer of EMD amount through RTGS/NEFT to dedicated account of Area/Subsidiary/CIL HQ and necessary information may be filled such as transaction-ID, transaction date and EMD amount in the corresponding field of EMD.
- DPC for promotion
- Procurement of explosives testing of explosives
- Use of 3D TLS for survey of OB & Coal with phasing out of Theodolite.
- Purchase Manual
- Use of UAV & space technology for prevention of Coal pilferage & illegal mining and monitoring of environment, plantation, vegetation & water bodies.

Electronic Surveillance

Besides this, we have developed a robust electronic surveillance system to keep watch on coal stock and track the coal loaded vehicles. The initiatives taken in this regard include:

- GPS/GPRS based VTS (Vehicle Tracking System) on coal transport vehicles
- OITDS (Operator Independent Truck Dispatch System)
- Installation of CCTV at vulnerable points like entry/exit points, coal stock yards, railway sidings, material stores, explosive magazines and important offices
- RFID based boom barriers
- Wide Area Networking for connecting all the mines, projects, sidings, weigh bridges and HQ through dedicated network for
- data transfer and coal net implementation
- Installation of in motion weigh bridges with RFID tags
- Weigh Bridge connectivity for weight tracking
- Geo-fencing of mine areas

Whistle blower policy

To safeguard for protection of employees from reprisal or victimization, we have established the "Whistle Blower Policy" 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. We have a robust mechanism in place to protect whistle-blowers from any kind of harm or retribution.

During the 2016-17, systemic improvements have been rendered to the online grievance mechanism as described in the "Vigilance and Anti- Corruption" section. A total of 327 pending grievances were carried forward from 2015-16 for redressal. Fresh online grievances received in 2016-17 were 4179. In total, 3810 cases were resolved in CIL during 2016-17 and remaining 716 cases were forwarded to the succeeding year for redressal.

Industry Associations

We are member of below mentioned Trade and Chamber/ Association. CIL has engaged with people and industrial associations on myriad forums that have also given us the platform for effective image building. In the sphere of mining activities, we have forged industry associations through these forums and engaged in discussions and insights with corporate projection. This has greatly enhanced our business approach and added value to the shaping of our core vision.



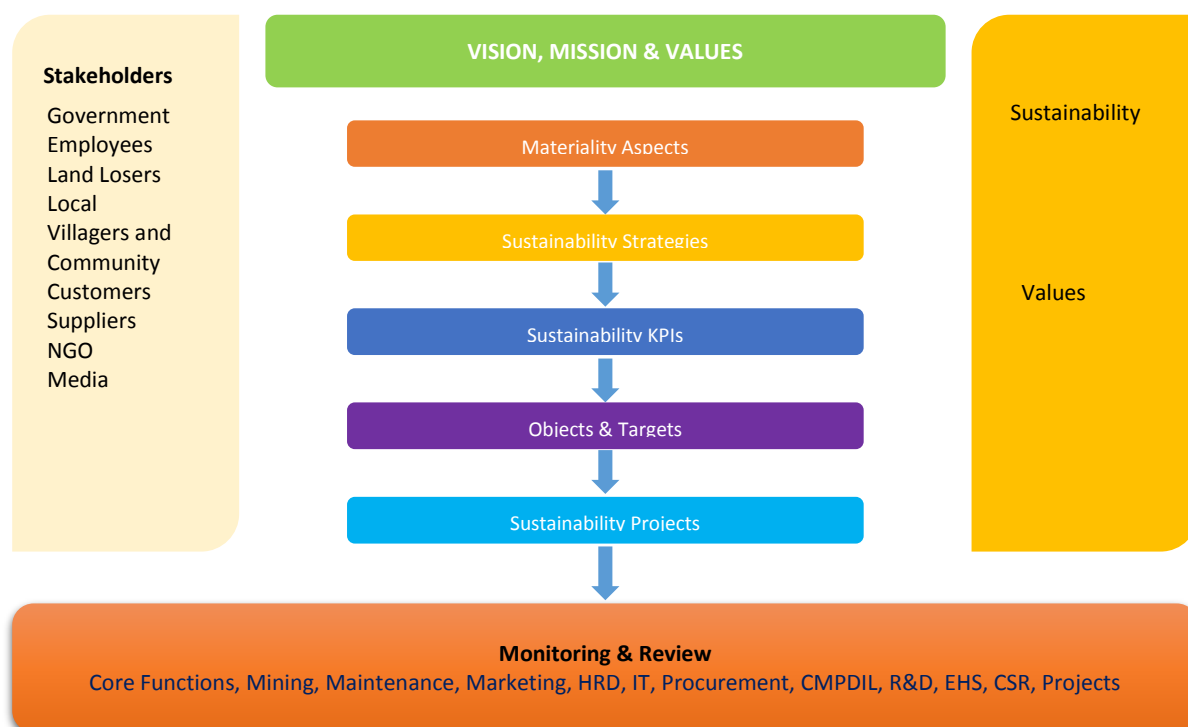
**The
Bengal
Chamber**



Awards and Recognitions

- Chairman, Coal India Limited was conferred the 'Best CEO -PSU' Award in the Sixth edition of the prestigious 'Forbes India Leadership Awards – 2016' in a formal function held on 8 November in Mumbai
- Chairman, Coal India Limited was conferred the 'g-files Governance Award 2016', The award was presented, on 26th November 2016 in New Delhi, by Shri Chaudhary, Birender Singh, Hon'ble Union Minister for Steel, Government of India and Shri Ram Bilas Sharma, Hon'ble Minister, Education and Tourism, Government of Haryana in a formal event.
- Award in Coal & Coal Products by Dun & Bradstreet in 2017.
- Best Implementation of Corporate Social Responsibility by ABP News in 2017.
- Most Efficient & Fast Growing Maharaty Dalal Street Investment Journal Award in Best Maharatna Category by Hindustan PSU Awards in 2016.

Sustainability framework of CIL



Sustainability Performance Assessment

Production and Profits		
Increased coal production	Achieved a production of 554.140 MT of coal, with a growth of 2.90% against last year	
Increase in the over removal	1156.38 Million m ³ OB was removed during 2016-17	
Increase in the coal production off-take	An increase of 1.7 % over last year was seen in the off-take of raw coal with a quantity of 543.319 MT	
Enhanced dispatch of coal & coal Products	During the year, dispatches of coal and coal products registered a growth of 1.6 %.	
Increase in wagon loading	The increase in loading over last year was of 9.1 rakes per day.	
Enhanced drilling performance	CMPDI has achieved drilling of 9.94 lakh meter in 2015-16 and 11.26 lakh meter in 2016-17 through departmental resources and outsourcing, registering a Growth of 13% over previous year.	

Rise in the financial performance of CIL & its subsidiaries	The total profit of CIL and its subsidiaries was Rs.14,433.71 Crores	
Health and Safety		
Achieve reduced fatal incidents	38 cases of fatal incidents with 56 fatalities in 2016	
Reduce Lost Time Injury Frequency Rate(LTIFR)	LTIFR in 2016-17 is 0.301	
Achieve reduced occupational illness cases	No occupational illness cases recorded.	
Reducing rate of fatality & serious injury	Fatality and Serious injury rate per million tons of Coal production are 0.10 and 0.22 respectively for the reporting period.	
Human Resource Management		
Increase in the number of trainings provided to executive and non-executive employees	A total of 1,34,520 employees, both executive and non-executive were involved in trainings during the year which included training in house, outside the company and abroad.	
Focus on Gender Diversity	Female employees constitute 6.78% of the total manpower.	
Hiring of fresh talent	Entry level recruitment to CIL has been done for Management Trainees with 438 people in different disciplines.	

Goals and targets 2016-17	Performance 2016-17	Status
Environment		
Increasing the number of ISO 14001 certified units	In total, 49 units and two companies (MCL & NCL) are certified with the ISO: 14001 standard.	
Energy Consumption and Renewables	Specific power consumption reduced from 9.23 kwh/t to 8.82 kwh/t in 2016-17 Diesel audit and benchmarking carried out in 71 opencast mines CIL has submitted Green Energy Commitment letter to MNRE for developing 1000 MW Solar Power Projects & signed MoU with Solar Energy Corporation Of India (SECI). Around 64000 LED Lights have been fitted (new + replacement) in CIL/Subsidiaries Implementation of solar power plant and roof top solar plant in various locations	
Number of Mine Closure Plans	453 Mine Closure Plans have been prepared	

Continuous R&D	During the year Rs.24.04 crore invested compared to last year of 22.47 crore in R&D. R&D has been done in the field of eco restoration, environmental audits, sustainable coal mining, harnessing solar energy and related areas. Collaborations & MOU's have been signed with various institutes such as FRI, NEERI and others.	
Increased tree plantation for ecological restoration	CIL and all its subsidiaries have planted around 1.66 million trees covering an area over 661.08 ha in 2016-17.	
Community		
Setting up rigorous governance and oversight systems for CSR programs	CIL has entered into and MOU with the Tata Institute of Social Sciences (TISS), a national CSR hub for implementation of CSR activities. Also, CIL has a two tier CSR committee i.e. (a) CSR committee comprising of below board level executives for examination and recommendation of CSR projects, and (b) A board level committee on CSR & sustainable development for further deliberation and approval of CSR projects.	
Develop impactful, community programs - based on experience, studies & community feedback	Some of the major CSR initiatives have been undertaken in the field of water, women empowerment & child education, rural development projects, health, sports, environment, Swachh Bharat and skill development.	

Sustainability Management- CIL

Stakeholder concerns against the business impact allowed for preparation of the materiality matrix which would act as guidance for the top management while integrating the sustainability management within the business strategy. We had ensured inclusive growth by contributing towards the peripheral development as a priority and integrating holistic sustainability management strategy.

CIL believes in working in line with the principles of sustainability while striving to achieve long-term business success on a viable basis. To make this possible, our approach towards mining activities aimed to establish harmony with society and the environment. A key aspect of our sustainable management approach involves deploying sustainable mining practices, ensuring safety and health of the employees and creating value for community.

Sustainability management is an integral part of our business strategy. We leverage business opportunities, minimize risk and seek to overcome social and business challenges such as scarcity of resources and climate change at an early stage. We continuously strive to improve our sustainability performance and further develop our strategy, defining it more precisely. To this end we have established a company-wide strategy cascaded to subsidiary specific sustainability activities and

ensures systematic consideration of stakeholders' requirements. In our sustainability management, we place a special focus on the lasting and effective establishment of a culture of integrity, discipline and respect.

Within the framework of our sustainability management system, we steer our sustainability program in a manner that enables us to verify the implementation of its objectives and thus ensure continuous improvement. Our management and organizational structures support this process by establishing clear lines of responsibility in all subsidiaries. Our sustainability objectives and their management are central components of our sustainability governance system. We review our sustainability targets annually and adjust them as required. In doing so, we also take the changing requirements of our stakeholders into account.

We align our activities in line with Sustainable Development Goals (SDGs). Our sustainability policy lays emphasis on Environmental Sustainability, Economic Sustainability, and Sociocultural Sustainability. Respective functions at corporate and at subsidiaries have been earmarked responsibility to improve the performance in their sustainability dimensions. These form the core areas for implementing relevant projects. The policy is armoured with a set of nine directives that lay the guidelines for development through sustainability practice.

Besides this, we also have an exclusive policy for Corporate Social Responsibility that is aligned with the Companies Act, 2013. The policy acts as a strategic tool for integrating business processes with the social processes for the overall development of the society. Further, the policy also aims at strengthening implementation of welfare projects undertaken by government, through our CSR ventures

We attempt to implement projects in all our locations throughout the country in keeping with the tenets of this policy. For effective management of these ventures we have an established governance framework. The framework is responsible for tracking progress in the implemented projects and ensuring achievement of the set sustainability targets. We also keep ourselves updated with the best practices in the industry and make efforts to meet International Standards.

At CIL, we drive sustainability through a two tiered governance structure. We have two committees, namely, the Board Level Committee on CSR and the CSR Committee. Both the committees are responsible for CSR & SD activities. The Board Level Committee on CSR is responsible for deliberation and approval of CSR projects that are recommended by the CSR committee after their assessment. These committees meet regularly throughout the year to ensure implementation of CSR & SD projects.

Sustainable Development Policy (SDP)

CIL shall promote and pursue sustainable mining integrating Environmental, Socio-Cultural and Economic factors which comprise the basic fabric of sustenance in our society. It shall also incorporate views and opinions of stakeholders ensuring compatibility and implementation.

The objectives of the SDP of CIL shall be in line with the Govt. of India principles and directives on Sustainable Development encompassing mainly three components:

- Environmental Sustainability
- Socio-Cultural Sustainability
- Economic Sustainability

The SDP of CIL affirms its commitments to protect & safeguard the environment and conserve the biodiversity for maintaining the ecological balance besides effecting Socio-cultural and Economic betterment of the surrounding of its operations. In order to do so CIL will ensure the following:

- i) Adopt world class eco-friendly technologies for mining
- ii) Conserve of natural resources by Reducing, Reusing, Recycling, Redefining and Replacing
- iii) Neutralize the impact on environment due to mining through afforestation, rain water harvesting & regeneration of cultivable land and other suitable mitigating measures
- iv) Create Income Generation avenues / skill development programmes for the project affected people
- v) Ensure society a better quality life by providing basic infrastructures and management of the services like water, waste management, health care, education etc
- vi) Organise programmes especially for the project affected Tribal people to maintain their culture, heritage and identity
- vii) Strive to conduct the business in an ethical and transparent manner
- viii) Delegation of Powers to take decisions at the Project level for SD related activities for timely implementation through monitoring / evaluation mechanism
- ix) Create awareness among the stakeholders by incorporating a system of communication for obtaining feedback and assessing the opinions / ideas / suggestions.

Implementation of SD policy requires that subsidiaries and CIL Head Quarters shall prepare an annual action plan detailing the activities to ensure the above strategies are implemented in a planned way with the approval of concerned SD committee. The progress of the activities shall be reviewed periodically by the SD Committee.

Stakeholder Engagement

Stakeholders, by definition, refer to individuals and organisations who are affected by the activities of a company either directly or indirectly and may have an influence over a company's business. Thus, they play a significant role in the overall growth and development of the company. As a responsible corporate citizen we consider it as our responsibility to develop and retain an amicable relationship with all our stakeholders. In practice, we believe in extensive engagements with all our stakeholders throughout the year to understand their concerns and address their issues. The expectations and the concerns of stakeholders & the extent to which the relevant issues are addressed, play a vital role in influencing the sustainable growth of an organisation. We recognise contribution of our stakeholders and assign due importance to their perceptions and concerns. Our philosophy is to respect the perspectives of all stakeholders and prioritise the captured feedbacks received from them for consideration during relevant decision making process in the organisation.

During the reporting period, we engaged with our stakeholders on various platforms that are detailed below. The key concerns that emerged out of these interactions have also been compiled. The information pertaining to stakeholders is periodically updated through formal or informal channel of communication. The perspectives of these high impact stakeholders are taken into consideration while mapping the prioritized sustainability issues across important domains i.e. Economic, Environment, Labour Practices, Human Rights, Social, and Corporate Governance etc.

A structured stakeholder engagement process provides the framework to identify the various risks and concerns in a broader perspective enabling an organisation to develop suitable strategies to address the important issues. The outcome of the stakeholder engagement process is analysed to identify and prioritise the material aspects to be considered by the organisation. We are guided by a comprehensive framework for Stakeholder engagement. The important stakeholders identified are Government (Ministry of Coal) / Government Statutory / Regulatory Authorities, Employees, Land losers, Local villagers and community, Customers, Suppliers, NGO, Media

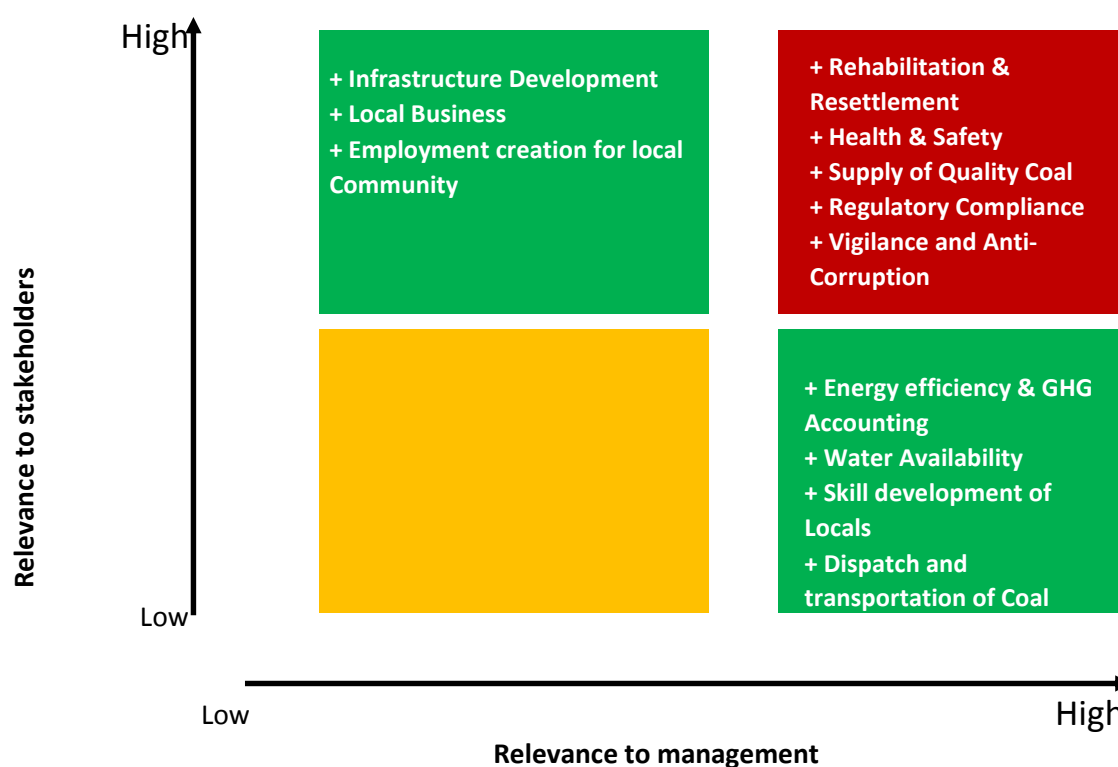
Stakeholders	Mode of Engagement	Key Concerns
Shareholders	Annual General Meeting	Company's performance.
Government (Ministry of Coal) / Government Statutory / Regulatory Authorities	Performance Report (Quarterly& Annually) Board Meetings (at least once a month) Compliance Report Inspections	Performance at every front Policy decisions Abiding by the Law
Employees	Corporate level Industrial Relations meetings with Union leaders (JBCCI) - Five yearly for wage negotiation Employee trainings and seminars Safety Week (Annually) Vigilance Week (Annually)	Job Satisfaction Wage negotiation Promotion Learning and Development Welfare (Housing related matters)
Land losers	Public Hearing / Consultation (For New & Expansion projects) as and when required Regular meeting in the Project	Rehabilitation and Resettlement Compensation
Local villagers and community	Sustainable Development initiatives and CSR activities (on going)	Livelihood options and Job Opportunities Basic amenities Local Infrastructure related concerns including Road, Street lighting, Drinking water,
Customers	NCCC meeting with Industry representatives and Ministries are held under the stewardship of Chairman - Annually. RCCC meetings with Customers - Chaired by CMDs of Subsidiaries and held at subsidiaries - Annually Marketing Team meets the customers frequently Consumer Complaints System (Website - www.coalindia.gov.in)	Quantity and quality of Coal Delivery Time Size of coal
Suppliers	Interactive meetings and sessions during tenders Vendors meet - regularly, at least once in a quarter	NIT conditions Supply schedule Quality of items of supply
NGO	As per the guidelines prescribed by MoEF	Impact of mining activities on the local community
Media	As per the guidelines prescribed by MoEF	Impacts of mining activities on the community and country

Materiality Analysis

Materiality Assessment is the process of identifying, prioritising and defining the aspects that are of highest importance to the stakeholders and the management of a company. This sustainability report covers topics that reflect our most significant sustainability impacts and opportunities. For the purposes of this report, we regard material sustainability topics as those that may affect the long-term success of our business, including our ability to create and preserve economic, environmental and social value, have the potential to influence the perception of communities of society by large, including those that make decisions and assessments based on our sustainability performance. Materiality, in this context, is the threshold at which an issue or interest should be reported.

We have identified focus areas representing the most significant challenges and opportunities facing our company in the area of sustainability, which are the focus and foundation for our sustainability strategy and the framework for this report. Our materiality analysis process allows us to further define our report content by identifying material topics within these focus areas, as well as to identify key risks and opportunities outside these focus areas. Our process is informed by guidance from the Global Reporting Initiative's *Technical Protocol — Applying the Report Content Principles* and from Account Ability's Five-Part Materiality Test.

Our assessment of the material aspects was based on the inputs and various engagements we have had during the year with different stakeholders. We prepared an extensive list of concerns stated by our stakeholders. Based on this list we attempted to prioritise the most material aspects of the stakeholders. These aspects were then assessed qualitatively by our Management Team. Finally, we have come up with a materiality matrix that is an amalgamation of both the stakeholder perspective and management perspective. The materiality matrix determined was plotted on a 2X2 matrix and the aspects were plotted on the basis of their relevance to the management and their significant impact on the stakeholder.



Materiality Issues	Linkage with GRI Aspects	Aspect Boundary (Inside or outside the boundary)
Rehabilitation and Resettlement	Mining sector supplement, Biodiversity, Local Communities	Inside and outside
Supply of quality coal	Product and service labelling	Inside
Health and safety of employee	Occupational Health and Safety	Inside
Regulatory compliance	Compliance	Inside
Vigilance and Anti-corruption	Anti-Corruption	Inside
Energy Efficiency and GHG accounting	Energy , Emissions	Inside
Water Availability	Water	Inside
Skill development of locals	Local communities	Outside
Dispatch and transportation of coal	Transport, Value chain	Outside
Infrastructure Development	Local communities, Indirect economic impacts	Outside
Local Businesses	Indirect economic impacts	Outside
Employment creation for local community	Local Communities	Outside

Key Risks and Mitigation

Material aspects were identified and strategies for effective risk assessment and mitigation program were laid for longevity of our business. The issues both relevant to management and stakeholders of highest priority are mentioned below:

Rehabilitation and Resettlement

Within this context, the mining of coal happens with a process that aims at making the life of the community around the mines, much easier. To begin with, the assessment of the new mining areas happens only after the evacuation of people from these areas takes place. This evacuation happens in phases by relocating the local community with ample compensation for the land that they stand to 'lose' to the larger cause of coal energy production. Opposition from the local communities as well as the environmental groups is dealt with in a sensitive manner so as to meet the land acquisition challenges without intensifying the situation. A trend of increasing land costs and associated R & R issues are tackled by us, in this regard.

We are sensitive to the fact that monetary compensation may not fulfil the emotional chasm that many of these land owners and community dwellers are unable to bridge when they have to relocate. Our efforts in this direction include satisfactory R & R for land out sees with a focus on engaging the local communities and catering to their demands to the best of our abilities. Compensation packages and engagement efforts lie at the centre of our endeavours and policies in this regard. Our hope is to further evolve our R & R system to provide better avenues for the relocated families.

Supply of Quality Coal

Our consumers mainly from Power sector requires supply of coal on time and good quality. Retaining Consumer's loyalty is an important aspect for successfully staying in business. Due to the improved despatch and better quality of coal, import of coal to India had reduced during 2016-17. In this reporting period, we have built Coal Handling Plant of capacity 320 MT/annum, 22 new coal washeries and renovation of 05 existing washeries combined capacity of 123.7 MTPA are in various stages of planning/ commissioning. Surface Miners have been deployed by CIL for selective mining at some of the OCP mines to improve quality of coal. Action is being taken for deployment of more surface miners in other OCP mines where geo-mining condition permits their usage.

Health and Safety

To foster a safe and healthy work environment, we are continuously working for social well-being of stakeholders and in the areas related to mining methods, strata control, and mine safety, etc. We have deployed adequate numbers of trained manpower for ensuring safety in mining operations. A well-structured and multi-disciplinary Internal Safety Organization (ISO) established in all the subsidiaries of CIL to monitor the implementation of CIL's Safety Policy. Continuous and sustained improvement in technological inputs for mining operation and Ensuring workers' participation in every forum for monitoring safety status in mines. Also, Collective commitment and synergetic collaboration of the Management, Employees, the regulator (DGMS) and Trade Unions.

Regulatory compliance

Compliances are a must for any mining organisation. We understand the criticality of deviating from desired regulations in terms of long term continuity of our operations. Hence, for good business conduct we adhere to all essential regulatory norms and meet the necessary compliances. Before the opening of any new project we ensure that we obtain all necessary clearances, including environmental clearances and forest clearances. Prior to that we conduct Environment Impact Assessments and analyse the likely effects on all potential stakeholders in the vicinity and plan for the required mitigation measures, accordingly.

Vigilance and Anti-Corruption

We are geared with the necessary vigilance machinery to prevent such incidents in our organisation. Coal loading and coal transportation areas are prone to coal thefts. For effective monitoring and prevention of the same we have introduced several technologies enabled interventions. In continuation of these efforts, we have also attempted to make systemic improvements and promote a preventive vigilance approach. For the last few years, we have also strengthened our efforts towards creating awareness among employees with enhanced opportunities for open dialogue with them to imbibe a culture of transparency

Economic Performance

Out of India's total coal production in the Financial Year 16-17, the share of CIL is around 84%. So, the impact of CIL on Indian economy can be easily equated with the impact of coal sector in Indian economy. India is the world's third largest energy consumer, and its energy use is projected to grow at a rapid pace supported by economic development, urbanisation, improved electricity access and an expanding manufacturing base. Despite increased growth in other sources, coal will remain the major source of electricity generation. In India's energy sector, coal accounts for the majority of primary commercial energy supply. With the economy poised to grow at the rate of 8–10% per annum, energy requirements will also rise at a reasonable level. One of the primary goals of the Government of India is to ensure that it is able to meet the country's power generation needs. For achieving this goal, CIL needs to play the major role.

The government had launched the 'Power for All' campaign in April 2015, under which it plans to provide affordable power to all houses by 2019. India has more than 300 Bt of coal resources, out of which around 90% are non-coking coal. But despite this, non-coking coal accounts for nearly 75–80% of the India's coal imports. In order to meet this massive demand and minimise the imports of coal (especially non-coking coal), the government has put coal production in the country on fast track and has set a target of 1.5 Bt of domestic coal production by FY 2020. To meet this target, the government has set a goal of about 1 Bt coal production for Coal India Limited (CIL) by FY 2020.

India has witnessed a twofold increase in its total raw coal consumption in the last 10 years. Coal is majorly consumed for electricity generation in India (about 64%), followed by steel (8%) and cement (5%) sectors. So, naturally, for the development of the core industrial sectors, the support of Coal India is undeniable.

CIL and its subsidiaries have achieved an aggregate Pre-Tax Profit of Rs. 14,433.71 crores for the year 2016-17 against a pre-tax profit of Rs. 21,589.09 crores in the year 2015-16 (reinstated as Rs. 21439.80). CIL as a group had achieved a total comprehensive income of Rs. 9347.98 crores in 2016-17 (excluding share of minority loss of Rs. 0.25 crore, previous year: Rs. 0.04 crore) compared to Rs. 14,274.33 crores in 2015-16 (reinstated as Rs. 14561.19 crores).

Production of raw coal during 2016-17 was 554.140 MT against 538.754 MT produced in 2015-16 with a growth of 2.85%. Coal production from underground mines in 2016-17 was 31.477 MT compared to 33.786 MT in 2015-16. Production from opencast mines during 2016-17 was 94.32% of total raw coal production. Coal offtake was 543.319 MT with a growth of 1.7% compared to the last year. Due to the improved despatch and better quality of coal, import of coal to India had reduced during 2016-17. It improved the mine geometry and made the mines safer to operate. It also augurs well for more production in 2016-17. In the light of Paris Protocol and consequent upon changes in world energy sector scenario, CIL is looking forward to diversify its operations towards Renewable energy like Solar Power and Clean Energy sources like CMM, CBM, CTL, UCG etc. following the directives of GoI. Following to that mission, MoC/CIL is in the process of formulating 'Vision Document 2030' to decide upon future course of operation for sustainable entity in the nation's energy sector.

Details of special steps taken to enhance production

- Benchmarking of mining operations/equipment.
- Optimizing size and capacity of the mine
- Use of Man riding system in underground mines

- Use of mechanized drilling and roof bolting machines.
- Replacement of tub transport system by belt conveyors in underground mines.
- Advanced shaft sinking methods, provision of high capacity skips in underground mines.
- Maximum use of Mass production underground technology like longwall, continuous miner, road headers etc.
- Bigger sizes of equipment in opencast mines.
- Cutting down the idle time and breakdown time of machinery by better maintenance and timely procurement of spares.
- Correcting mismatch in excavation and transport equipment capacity, by action at corporate level.
- Training of workers for new technology, machinery and maintenance.
- Better discipline at mines and increasing the working hours of men and machinery.
- Standardization of equipment fleet at mine level as well as at company level.
- Introduction of OITDS for all big opencast mines.
- Rapid loading system for coal dispatch.
- Proper monitoring at every level
- Modern communication and reporting system.

The highlights of performance of Coal India Limited Consolidated for the year 2016-17 compared to previous year are shown in the table below:

Financial Parameters	2016-17	*2015-16 (Restated)	2014-15
Revenue (Revenue from operations + Other income)	89323.73	89501.56	80690.71
EBITDA	14028.88	19637.08	18328.58
Depreciation/ Impairment/ Amortization	2910.07	2825.91	2319.80
Profit on sale of assets	4.62	3.39	10.80
Loss on sale of assets	8.60	1.66	5.83
Profit before interest & tax	11114.83	16812.90	16008.78
Interest income	3730.61	5013.06	5577.49
Interest expense	411.73	386.16	7.32
Profit before tax	14433.71	21439.80	21583.92
Tax expense	5165.96	7171.87	7857.30
Profit/(Loss) from discontinuing operations	-0.01	-0.01	-0.01
Share of minority	-1.76	-1.14	0.09
Profit after tax	9265.98	14266.78	13726.70
<p>*Note 1: Figures for Year 2014-15 is as per old Accounting Standards Figures for 2015-16 (restated) and 2016-17 is as per new Accounting standards i.e. Ind AS.</p> <p>Note2: Amount is in INR Crores</p> <p>Note-3: Due to restatement of 2015-16, financials as per Ind AS, the profit after tax stood at Rs. 14266.78 Crore which was reported as Rs. 14274.29 Crore as per previous accounting standard. The restatement effects were due to re-measurement of Mine Closure provisions, reclassification of Gain/Losses on re-measurement of employee benefit plan and restatement effects of prior period adjustment as per Ind AS.</p>			

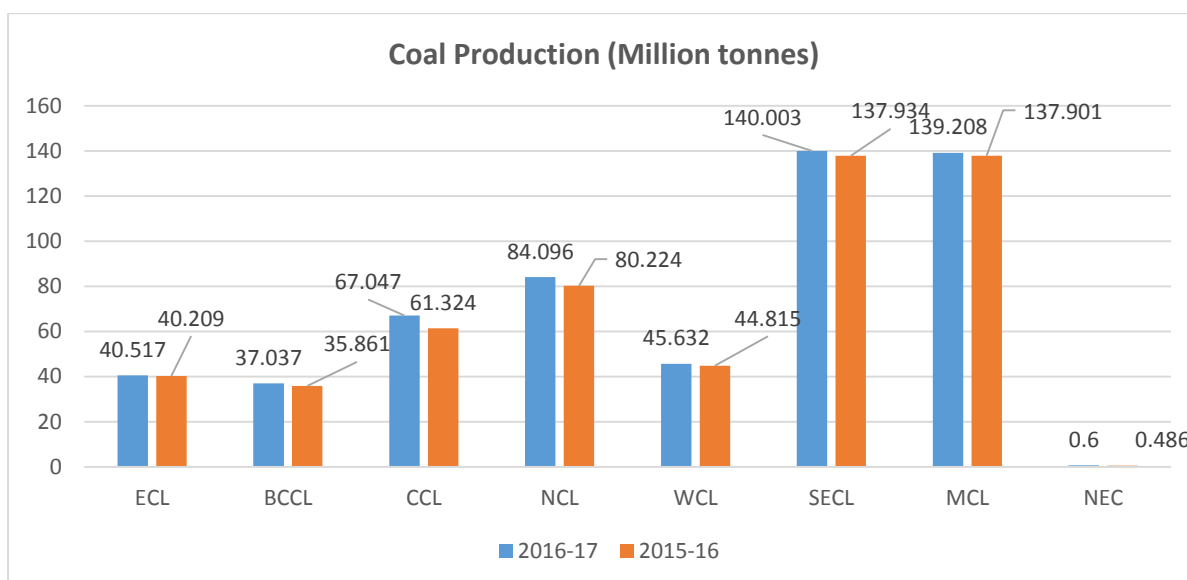
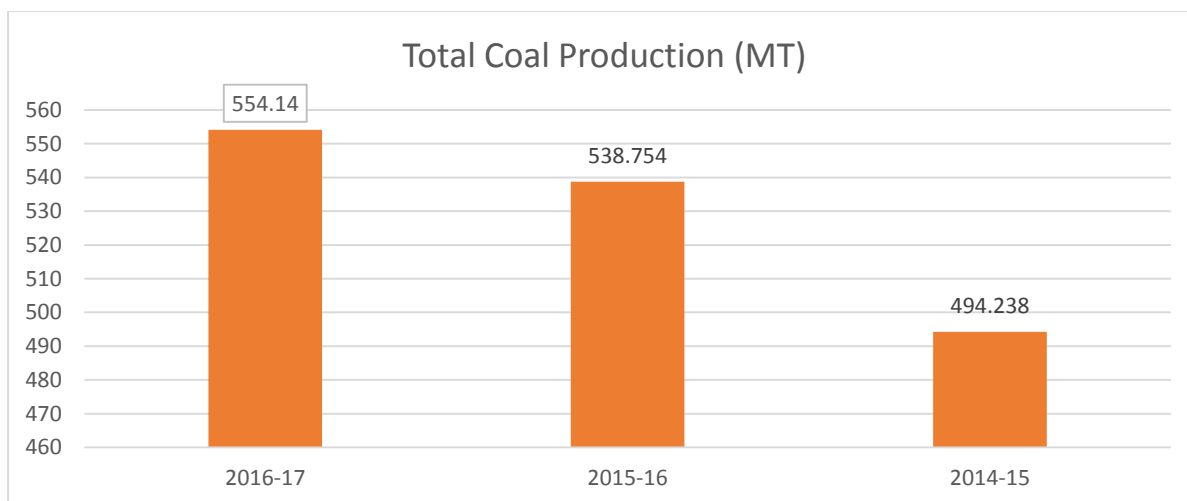
Direct Economic Value Generated (A)	2016-17	**2015-16 (Restated)	2014-15
Revenue (through core business segments)	125048.46	110636.84	97540.21
Other Income (through other sources)	5515.6	5940.58	6570.64
Total	130564.06	116577.42	104110.85
Economic Value Distributed [B]			
Operating cost	32714.3	30648.95	28013.04
Personnel expenses (wages+benefits)	33514.29	30126.78	29874.12
Interest Charges	411.73	386.16	7.32
Taxes and royalties (given to various govt. wherever business units are located)	56666.36	40482.84	33478.81
Dividends (payments to capital providers)	12352.76	17306.84	13074.88
Donations (political parties/politicians)	-	-	-
Community development/CSR investments	489.67	1082.16	298.1
Total	136149.11	120033.73	104746.27
Economic value added (A-B)	-5585.05	-3456.31	-635.42

Note: 1. Amount is in INR Crores.

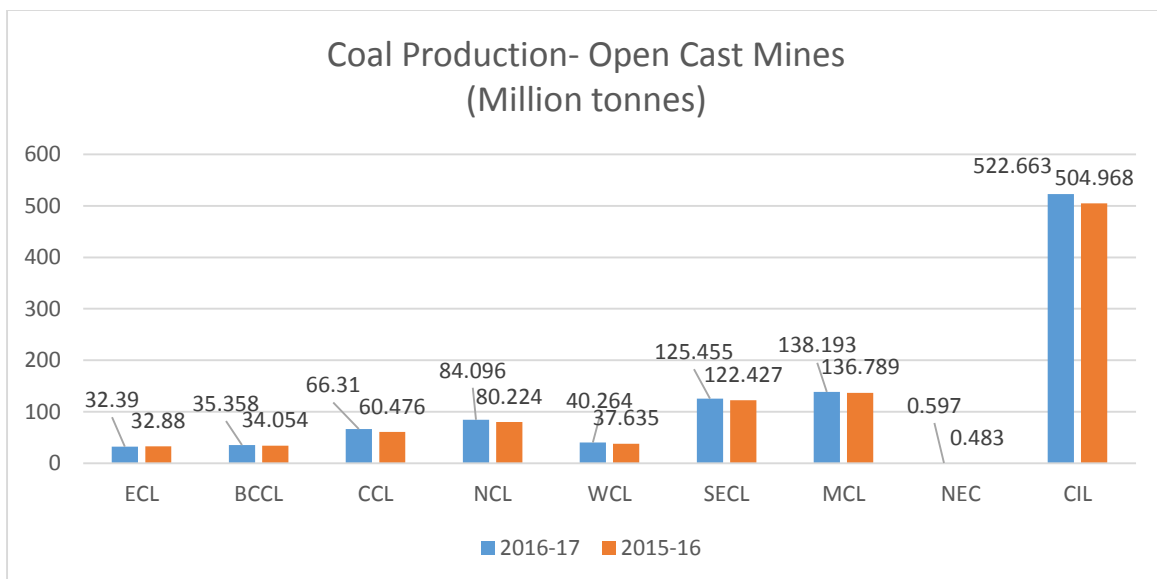
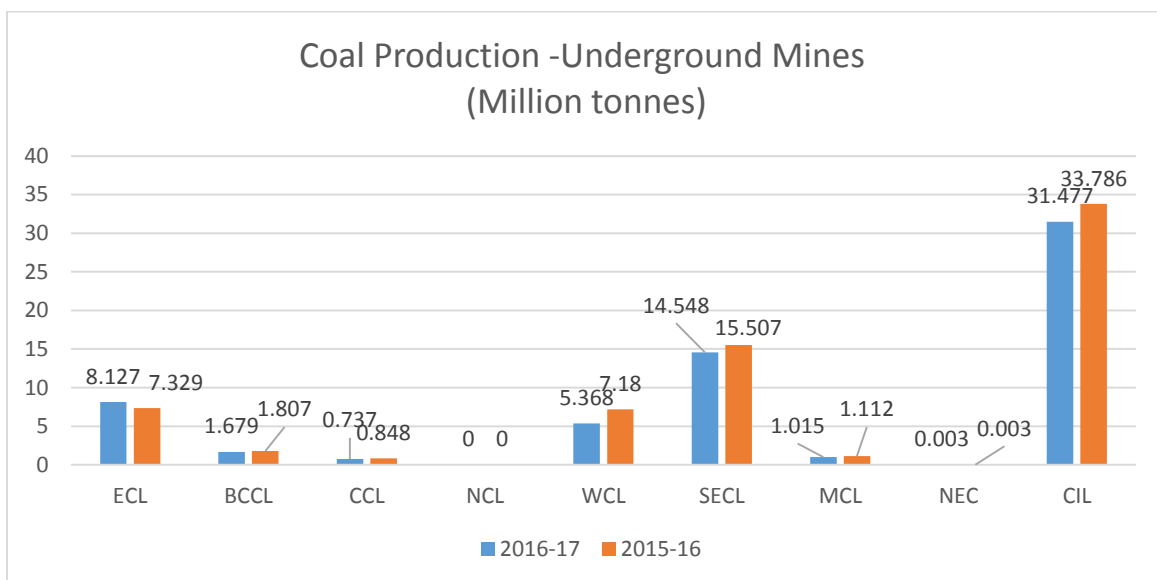
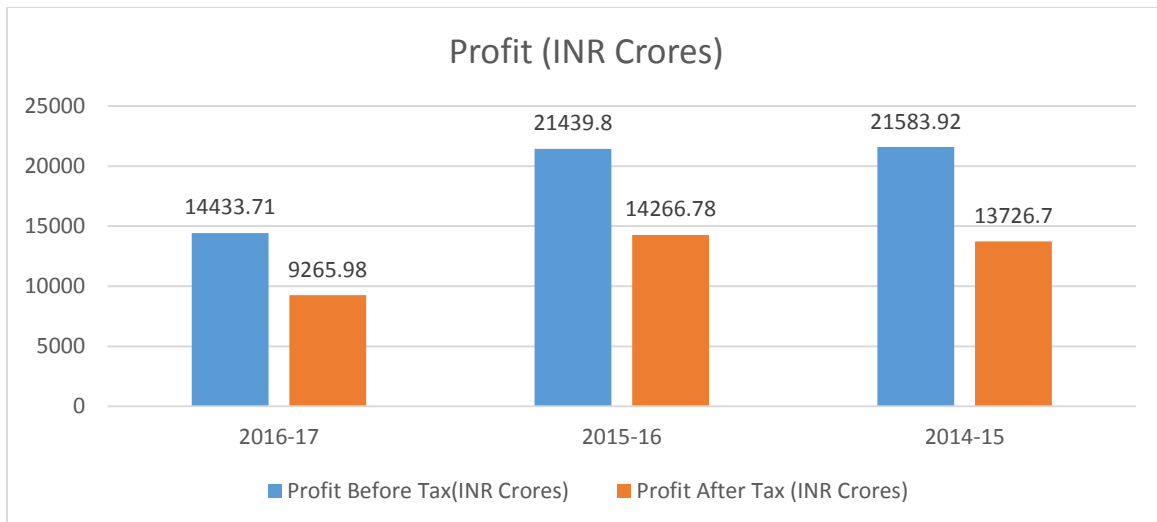
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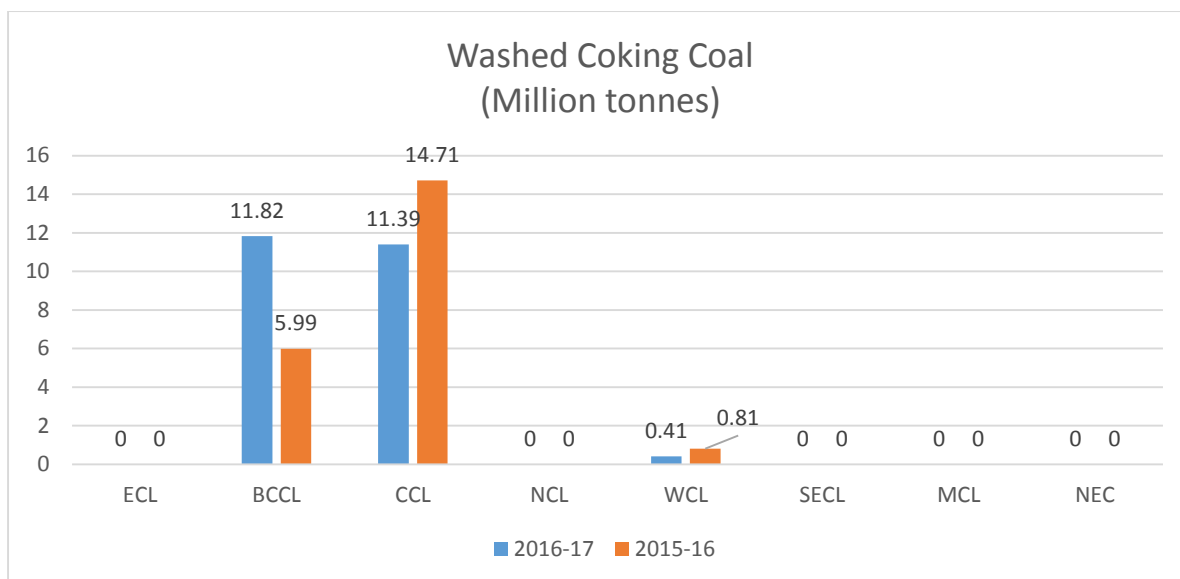
- Revenue (through core business segments) for 2015-16 (Restated) has been restated from previous reported figure as per previous accounting standards for giving effect of prior period adjustment as per Ind AS.
- Other Income (through other sources) for 2015-16 (Restated) has been restated from previous reported figure as per previous accounting standards for recognition of Escrow fund for Mine Closure Plan and interest thereon as per Ind AS.
- Interest charges for 2015-16 (Restated) has been restated for recognition of unwinding of discount on Mine Closure provision as per Ind AS.

Trade Receivables i.e. net coal sales for the year was Rs. 11463.70 Crores compared to Rs. 8521.88 Crores in the previous year. No financial assistance has been received from the government except for some reimbursement for expenses on sand stowing and protective works.



** It includes 4.480 MT from Gare Palma IV/2&3 OC and 0.844 MT from Gare Palma IV/1 OC for which Coal India Ltd. was appointed akin to a designated custodian w.e.f. 01.04.2015 (through SECL)*





The key strategies of CIL are as follows:

(i) Critical Railway Links:

In order to achieve the planned growth in production and evacuation in future, CIL has undertaken three major Railway Infrastructure Projects, implemented either by Railways or JV Companies formed with IRCON representing Railways, Subsidiary Company representing CIL and concerned State Government. The three major Railway Infrastructure Projects are: Tori- Shivpur-Kathotia New BG Line, Jharsuguda- Barpali- Sardega Rail Link and East Rail Corridor and East- West Rail Corridor. Tori- Shivpur railway line is catering to North Karanpura Area of CCL. It is Planned to evacuate about 32 MTY of coal. Jharsuguda- Barpali- Sardega Rail Link is Catering to the coalfields of MCL. This Rail line shall evacuate 70 MTY of coal from the coalfields of MCL. The evacuation of coal of Mand- Raigarh and Korba – Gevra Coalfields of SECL, shall be through East Rail Corridor and East- West Rail Corridor respectively. In all, about 180 MTY of coal shall be evacuated through these two corridors.

(ii) Acquisition and Possession of land:

In all subsidiaries of Coal India, the major portion of land is acquired under the Coal Bearing Areas (Acquisition & Development) Act, 1957. During 2016-17, notification under section 9 (1) has been issued for 3086.69 Ha and notification under section 11 (1) has been issued for 4196.69 Ha. During 2016-17, 3826.19 Ha of land has been taken in possession in different subsidiaries of Coal India.

(iii) WEB Based Online Monitoring System:

Web based online monitoring of coal mining projects costing more than Rs 100 Crores has been introduced in Coal India. Exercise for 69 projects costing more than Rs 150 Crores and capacity 3.0 MT and above have so far been completed during the year 2016-17. Additionally, monitoring of 67 coal mining projects costing more than Rs 150 Crores with Project monitoring software MS Project have also been started in Coal India limited during the year 2016-17. Crucial issues are also being uploaded by CIL and its subsidiary companies on the MOC e-CPMP portal and MOC is vigorously following up with the state governments and other associated ministries by holding meetings with concerned officials to expedite EC & FC approvals.

IV) Technology Development

- (a) Exploration capacity is planned to be augmented with more use of hydrostatic drills, geophysical loggers, 2D/3D Seismic Survey Technology and Optimization of number of coring boreholes based on the complexity of geology of the block.
- (b) Introduction of high capacity equipment, Operator Independent Truck Dispatch Systems, Vehicle Tracking System using GPS/GPRS, CHP and SILOS for faster loading and monitoring using laser scanners have been planned to augment coal production from opencast mines.
- (c) Introduction of Continuous Miner Technology on large scale, Long Wall Technology at selected places, Man Riding system in major mines and Use of Tele - monitoring techniques have been envisaged to increase production from underground mines.
- (d) Coal India is envisaged for foreign collaboration with a view to
 - Bring in proven and advanced technologies and management skills for exploiting UG and OC mines, coal preparation and related activities.
 - Exploration and exploitation of Methane from Coal bed, abandoned mine, ventilation air, shale gas, coal gasification, etc.
 - Locating overseas countries interested in Joint Venture in the field of coal mining with special thrust on coking coal mining.

The priority areas included acquisition of modern and high productive underground mining technology, introduction of high productive opencast mining technology, improvement in working in underground in difficult geological conditions, fire control and mine safety, coal preparation, application of 3D seismic survey for exploration , extraction of coal bed methane, coal gasification, application of Geographical Information System, satellite surveillance, subsidence monitoring, environmental control, overseas ventures in coal mining.

Foreign Collaboration: New Areas

- Underground Coal Gasification (UCG):
- Shale Gas
- Coal Mine Methane (CMM)
- Dynamic planning of large capacity opencast mines
- Mine Rehabilitation & Reclamation of Indian coal mines
- Advanced Dry Coal Beneficiation technology
- Introduction of a new underground mining technology at North-Eastern Coalfields in Assam
- Capacity Building for CMPDI Lab
- Ventilation Air Methane (VAM)
- SIMTARS engagement in Mining simulation, Explosion testing and Mining safety training
- Review Mining Simulation technologies from Immersive Technologies, Australia
- Dry Coal Beneficiation
- Slope Stability Monitoring
- Subsidence Measurement & monitoring using DINSAR Technology

v) Role of HR

HR division is spearheading the translation of HR Vision 2020 into action for capability building through recruitment of multi-disciplinary professionals, skill up- gradation of existing workforce, leveraging IT and revision of HR policies.

vi) Coal Washing - A step towards quality improvement

To make the product better quality, CIL has decided to bring in consistency in quality by setting up of 22 new coal washeries and renovation of 05 existing washeries combined capacity of 123.7 MTPA are in various stages of planning/ commissioning..

vii) System Improvements

Introduction of e-procurement of equipment and spares, e-tender of work and services, implementation of Coal Net, establishment of connectivity, revision of guidelines and manuals, use of GPS for monitoring operational efficiency in road transport of coal have been planned to improve the overall system.

Coal Transportation

In the year 2016-17, CIL dispatched 543.159 MT of Coal & Coal Products against the AAP target of 598.031 MT i.e., an achievement of 90.8%. CIL has dispatched 8.5 MT of coal and coal products more than last year with a growth of 1.6%. 425.397 MT of coal and coal products, including despatches under special forward e-auction to power was despatched to the power utilities against the target of 450.990 MT i.e., an achievement of 94.3%. This is 12.3 MT more than last year's dispatch of 413.109 MT, which also includes despatches under special forward e-auction to power, resulting in a growth of 3%.

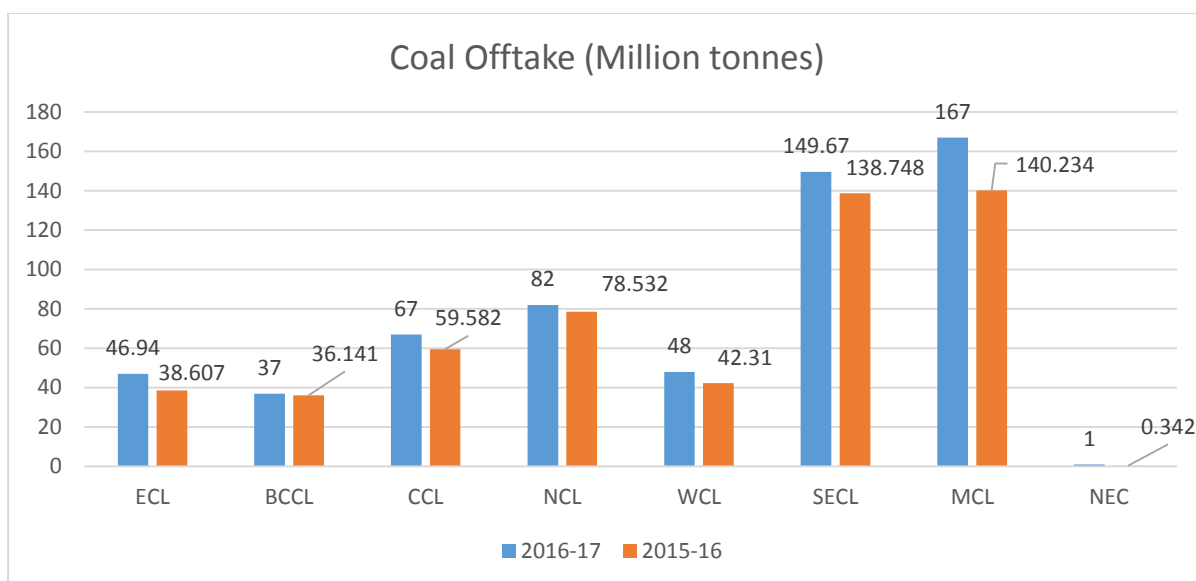
Overall dispatch by Non-Rail mode had been 91.9% of the target. Growth in despatches via Rail mode was 4.1 % whereas in the overall Non-Rail mode it decreased by -1.4 %. Road despatches decreased by -0.6% compared to the previous year. Movement by MGR also decreased by -3.5% compared to last year. Despatches through other modes, like belt & rope increased by 5.7 % compared to the last year.

Overall wagon loading materialization was 90.9 % of the target. This was achieved due to sustained efforts and regular coordination with railways at different levels. The increase in loading over last year was of 9.1 rakes per day. Wagon loading could have been even better but for the regulated lifting by Power Utilities almost in all the subsidiaries; less demand for higher grade coal from ECL and SECL, intermittent law and order problem in CCL and MCL also affected rail dispatch performance.

Coal Marketing

Supply of coal was made to various consumers including Power Sector under the applicable provisions of New Coal Distribution Policy. Due to overall deficit in availability of coal considering the projected coal production from domestic sources and commitments made through signing of FSAs/issuance of Letter of Assurances (LOA), supplies under FSAs has been pegged at various level of commitments (trigger). Power sector being the major consuming sector having significant importance in the economy, supplies to power sector has been guided as per the various Government directives and policies.

Off-take of raw coal continued to maintain its upward trend and reached 543.319 million tonnes for fiscal ended March 2017, surpassing previous highest figure of 534.496 million tonnes achieved during the last year, i.e., an increase of 1.7 % over the last year. The overall raw coal off-take achieved was 90.8 % of the Annual Action Plan Target. In the year 2016-17, ECL, CCL, NCL, MCL and NEC could outperform their achievement of last year.



Power houses started the year with huge stock of 38.7Mt and regulating intake preferred to consume from stock. Wagon availability also sporadically affected offtake at different subsidiaries. Some places logistic bottleneck had also come in the way of augmenting off-take. TPPs were particularly reluctant to take coal from Cost Plus Sources. Some of the initiatives undertaken to enhance off-take are as follows

- Regular co-ordination with Railway Board to optimize use of logistics resources available in the subsidiary coal companies, analysing inputs of the subsidiaries to identify alternate source for coal movement wherever and whenever required to achieve overall sectoral targets and mitigating critical fuel requirement of consuming sectors, particularly power stations.
- Coordination with MOC for various long and short-term policy decisions to overcome coal movement constraints for power and non-power sector consumers and taking operational decisions for moving coal from various sources on contingent situations to meet critical requirements of consuming sectors, particularly power utilities etc.
- Periodic Meetings and follow ups with Power producers in addressing issues relating to coal movement.
- Source Rationalization of coal linkage for optimizing coal movement as per the requirement of the consumers and logistics.
- Logistics is one of the major hurdles in reaching coal to the consumers. Capacity constraints both in terms of track and rolling stock are coming in the way for achieving the requisite growth. In order to boost-up the rail transport system following initiatives have been taken:
- SPVs by the coal companies with the State Governments and Railways for creating rail infrastructure -- two SPVs have already been formed at Chhattisgarh for creating rail connectivity at Korba/Raigarh. Similarly, SPVs were also incorporated at Jharkhand and Odisha for similar initiatives on 31st August'2015.
- Three major last mile rail connectivity projects at Jharkhand, Odisha and Chhattisgarh have been brought under PMO monitoring mechanism to ensure commissioning as per the schedule.
- Special attention is given for improving coal distribution network for small and medium and other sector consumers. CIL organized meeting with State Governments to streamline the process of nominating distribution agencies by them.
- Coal companies started supplying 100 mm crushed coal to its consumers w.e.f. January'2016.

Special E-Auction Schemes

From the year 2015-16 Special Forward E-Auction scheme, which was introduced by MOC for meeting the coal requirement of Power plants, is being continued. During 2015-16 & 2016-17, around 13.8 MT & 47 MT coal was booked by consumers under this scheme of e-auction respectively. A similar scheme for consumers in the non – power sector was also launched as Exclusive E-auction scheme for non-power. During 2015-16 & 2016-17, around 1.5 MT & around 6.2 MT coal was booked by non-power consumers under this e-auction respectively. Special Spot e-auction was also conducted once in 2016-17 with the objective for liquidating coal stock especially from the high stock mines and to provide scope for procuring coal at a competitive price by the consumers of non-specified end use. Around 6.2 MT coal was booked in this e-auction.

Web Portal for MSME Sector

The web portal “Coal Allocation Monitoring System” was launched on 17th March’2016 by Minister of State with independent charge for Power, Coal and New & Renewable Energy along with the officials from Ministry of Coal and Coal India Limited at New Delhi. The portal aims to ease the conduct of business for small and medium sector consumers having annual requirement of less than 10,000 tonnes of coal. The portal will make the system of distribution of coal to such consumers through State Nominated Agencies, more transparent. It has the following advantages:

- Ease of doing business for consumers
- Accountability on the part of the Govt. and its enterprises
- 24 x 7 access of information on supply and distribution of coal in public domain
- Online registration and feedback system for consumers for improving the system
- Transparent coal distribution
- State and consumer awareness
- Peer audit among stakeholders

Customer Satisfaction

Our motto and core driving principle is to identify and deliver the needs of consumer and adopt a consumer centric approach to provide better service to consumer. For enhanced customer satisfaction, special emphasis given to Quality Management. Attuned to this objective, it was decided that 2017-18 will be declared as Quality year. In order to monitor quality right at the coalface, Officer in charge of mining have been given target to contain grade slippages within 10%. Another giant step to ensure proper quality was independent assessment of grades of 871 mines/ loading points/ fractions through various academic institutes of national repute by CCO. Based on the analysis reports received from these institutions, CCO finalized the grades of different mines/sidings for the year 2017-18. Although the results of re-gradation of about 49% mines/ loading points/ fractions were not encouraging, correction, enhance confidence of consumers’. In order to monitor coal quality internally, a portal has been designed by CIL to capture entire life cycle of sample. With the help of portal, analysis of coal quality on regular basis will be possible.

CIL has built up coal handling plant capacity of about 320 MT per annum so as to maximize dispatches of crushed/ sized coal to Power sector. CIL is supplying (-) 100mm sized coal to all power plants w. e. f. 01.01.2016 except those at pit head. In addition, mobile crushers have been installed to meet the

additional crushing requirement. Emphasis has been given for maximum production through surface miners. For this, surface miners have been deployed for production of coal in mines wherever technically / commercially feasible.. Deployment of this technology at OCP mines is bound to improve coal quality. At present 75 Surface Miners are working in opencast mines. In addition, the Washeries at BCCL, CCL, WCL and NCL have crushing/ sizing facilities to the tune of about 36.8 million tonnes. 22 new coal washeries and renovation of 05 existing washeries are in various stages of planning/ commissioning. Measures like picking of shale/stone, selective mining by conventional mode, adopting proper blasting procedure/technique for reducing the possibility of admixture of coal with over-burden material & improved sizing of coal etc. are being taken. For those mines having large inter bands of shale/stone, installation of deshaler has been planned. Joint/ Third Party sampling & analysis is in vogue for major consuming sectors e.g. power utilities, steel, cement and sponge iron. Entire supplies to Power sector are covered under third party sampling / analysis, large consumers having annual quantity of 0.4 MT or more and having FSA covered under sampling. For the first time, sampling facility has been extended to consumers of Special e-Auction for power sector and Linkage Auction through IIT-ISM and QCI. Consequent to issuance of Letter of Intent, these agencies have been advised to enter into tripartite agreement with consumers and the coal companies to start the process.

Area laboratories of subsidiary coal companies have been equipped with 121 Bomb Calorimeters for accurate and transparent results of analysis of coal samples. 28 labs. across the subsidiary cos. have already got NABL accreditation and another 27 labs, accreditation process is underway. It is expected that standardization of the process as per NABL standard will go in a long way to enhance customers' confidence about the process of assessment of coal quality and facilitate quality monitoring. The guidelines/ SOP issued by MoC vide letter dated 26.11.2015 on third party sampling at loading ends has already been implemented through Central Institute of Mining and Fuel Research (CIMFR). Sampling for almost entire quantity covered under FSA is continuing across various loading points of coal companies.

Electronic weighbridges with the facility of electronic printout have been installed at rail loading points to ensure that coal dispatches are made only after proper weighment. For this purpose, Coal Companies have installed 157 rail weighbridges in the Railway Sidings and 569 road weighbridges for weighment of trucks. Coal Companies have also taken action for installation of standby weighbridges to ensure 100% weighment. 24 Auto Mechanical Samplers (AMS) are also working in subsidiary coal companies for coal sampling, eliminating chances of biasness in sampling process. Procurement of further AMSs is under process. The process has already been initiated to deploy Augur Sampling for drawing more representative samples. 01 online analyser in each subsidiary company has been envisaged on trial basis.

In order to ensure consumer satisfaction and resolve consumer complaints, special emphasis has been given to quality management and redressal of consumer complaint. On-line filing and redressal of complaints has been initiated. Percentage of consumer complaints resolved is 99.42 % during the year 2016-17.

Managing Supply Chain

CIL plans and executes as a socially responsible company. We promote local suppliers which plays an important role in developing local economy. These local partnership acquaint us on exploited

resources and their protection. We ensure that suppliers and contractors are screened as per statutory labour practices.

Initiation of E- tendering Procurement Mechanism

As we engage with world class suppliers, we try to come up with strategies which help in making the system hassle free and strengthen our supply chain. For the same, we have initiated an e –tender procurement proceeding being done after confirmation of eligibility criteria and TPS from the Technical Department. This mechanism allows supply is being made directly to the subsidiary companies as per their requirement from time to time. Vendor selection is done when the party meets the eligibility criteria and accepts the commercial terms & conditions of the NIT.

We are also undertaking various vendor engagement initiatives where vendors are invited for their active participation which includes the buyer seller meet which is organized by the Vigilance Division from time to time for awareness of the Procurement System adopted towards procurement of goods at CIL level. We organize pre-bid meetings with the vendors from time to time for awareness of the system as the vendors of equipments in demand such as HEMM, Explosives and OTR Tyres are limited. In addition, regular training of the new system of procurement to the vendors is also being provided by us.

Digital India

CIL and its subsidiaries have utilized communication and Information technology and implemented many systems to achieve faster strategic decision making and optimal utilization of available resources for enhancing production and productivity. Systems have been introduced to minimize pilferage of coal and also to increase transparency for the satisfaction of its stakeholders. In this regards following key initiatives have been taken:

- E-office application for CIL and its Subsidiaries will be introduced in 2017-18. The project intends to enhance the business process management of the organization and aims to improve production, productivity, and increase transparency by replacing the old manual process with an electronic file system.
- The subsidiaries have Coal Net and other Information systems in place for obligatory accounting, finance, payroll, material management system and other business functions.
- Coal India is also in the process of implementation of ERP. The detailed project report for the same is ready and steps are in progress for implementation.
- GPS based Operator Independent Truck Dispatch System (OITDS) with high speed Data and Voice communication is implemented in the targeted eleven Open cast projects to optimize operation of HEMM to enhance the production and productivity of the mine.
- GPS/GPRS based Vehicle Tracking System across all major mines of Coal India has been implemented at different subsidiaries along with Geo-fencing, boom barriers and RF-ID system to monitor coal transportation and to minimize pilferages.
- Electronic Surveillance through CCTV at weighbridges, workshops, coal dumps and other strategic locations has been implemented and process has been initiated to cover all projects.
- In order to improve coal dispatch, electronic weighbridges are connected with Central Servers of respective subsidiaries and initiatives have been taken for implementing online generation of Challans/invoices.

- E-Auction of coal, E-procurement and Reverse auction systems for all goods, works and services have been implemented to speed up procurement process and to achieve transparency in the system.
- E-payment to employees and vendors, E-filing of grievances are in operation to embark upon the business process through IT initiatives.
- Corporate Mail Messaging System is in place for corporate email IDs to all the officers of Coal India and its Subsidiaries.
- In order to meet the demanding business process, state-of-art IP based EPABX with support of convergent technology for voice and data, Radio communication System and UG communication system at different locations of Coal India and its subsidiary companies are operational.
- The Web Portal of Coal India is in place in English and Hindi encompassing the features like Tender publication, Vigilance corner, Investor centre, Customer corner, etc. to facilitate all stake holders.
- Multi-Protocol Layered Switching (MPLS) based Video Conferencing between CIL, Subsidiaries, CIL HQ, CIL Office, Delhi and MoC for enhancement of decision making process for better production and productivity has been successfully implemented. CIL and subsidiaries have also implemented Video Conferencing connectivity with External agencies across the globe.
- CIL has implemented in-house online portals for Performance evaluation, quality analysis, Vigilance clearance, Land Information System, filing of Annual Property Return through web enabled system. Mobile Apps have been developed for public dissemination of information.
- State-of-art Tier-III Data Center has been established in New building of the corporate office of Coal India Limited for facilitating future IT applications

Environment Performance

Coal India's Commitment on Environmental Sustainability

CIL, since it is inception has been leveraging technology to minimize environmental externalities. We have practiced responsible mining to promote environmental sustainability and longevity of natural resource. From the day of CIL's foundation, we knew that environmental sustainability will not be optional in future, this stewardship and pioneering approach makes CIL a reputed and model in mining industry. CIL is a perfect blend of ecological performance and urban energy requirement with futuristic planning and management of environment and resources. We also developed infrastructure to augment coal and washed coal production with latest technology to reduce environmental burdens due to our mines operation.

Beyond environmental compliance, we are directly engaging with local stakeholders along with industry body involvement in decision making and their participation in environmental conservation to bring balance between business purpose and nature. This equitable commitment of CIL with others helps conserve flora and fauna. All initiatives are taken to control pollution of land, water and air. This forms the basis for various environmental initiatives by CIL. Pro-active measures have been taken to conserve and fructify on collective environmental investments by all in present and future generations.

By bringing Global Sustainable Development Framework into practice and assessing environmental impacts by our actions, we have taken ourselves way ahead of others in the sustainability curve. We are continually doing gap analysis to align with international standards and evolving on all fronts.

Coal India Limited (CIL) has an ambitious goal to cater to the energy requirement of the country by producing 615 MT of coal as per the XII Plan projections by FY 2016-17, which is about 6.4% annual average growth rate over what is being produced today. This production is to be achieved with due consideration and compliance of the stringent environmental stipulations. One of the most important statutory provisions, which have a direct impact on increasing the production, is the compliance of EIA Notification 2006. At the same time, a number of new statutes have come into force making the environment compliance as one of the most important requirement for the company. With mine planning, design and operations that emanate from the same, we try and imbibe a responsible stance with the help of EMP or Environment Management Plans and clearances that are built into the way we function from start to finish. Our commitment is based on environmentally ethical and socially sustainable growth even as we keep the economic angle in strong perspective.

CIL has a dedicated strength of 349 executives and 278 non-executives to look after the environmental aspects.

Sustainable Mining

Mining is a process which requires extraction of soil within the surface and beneath resulting in removal of natural resources. We may not adjourn our socio-economic needs but practice to have optimal utilization of resources to have sustainable environment. Striking a balance with human needs with nature has been need of mining industry.

Global requirement for energy in last few decades has resulted extraction of non-replenish able natural resources. With finite sources of coal, the responsibility to conserve and do friendly mining by Coal companies globally resulted in joining hands sharing best practices and adopting sustainable practices for environment protection. Government of countries and Global Coal Association have joined hands in hands to bring awareness in sustainable mining practices and sharing their best R&D systems. Successful mining of the prospect and must do restoration of the mined land with minimal environmental impact requires extensive environmental management plans in the course of mine closure planning. Mining industry with profits in one hand and socio-economic balance in other hand encourage Sustainable Mining.

CIL is aware of limited non-renewable fuels and taken responsibility to restore mother earth. The rehabilitation and resettlement policy of Coal India ensures better relocation, cost of shifting, employment and rehabilitate them with consultative and transparent process. Best and latest practices followed globally is adopted by us to make mining environmental friendly.

CIL has signed MoU with National Environmental Research Institute (NEERI), Nagpur to carry out studies, monitoring and collaborative research work for "Sustainable Coal Mining in CIL". NEERI is also studying on the effectiveness of supplying de-shaled/dry-beneficiated / washed coal (reduction in ash content by 5-6%) to power plants following all pollution control measures. NEERI will submit environment management plan for mitigation of impact on regional environmental quality due to supply of deshaled / dry –beneficiated coal to power plants in context of prevailing pollution control practices.

Impacts due to mining are not only related to environmental but also social. During mining and post mining, risks of land usage by the community in “as is” form needs a lot of attention and commitment. The major impact due to mining are:

- Soil degradation
- Pollution of the water
- Dump of unusable waste
- Removal for Flora and Fauna
- Noise pollution
- Air pollution
- Deforestation
- Harm to Marine life

Entrusting a huge responsibility of responsible mining CIL has imbibed the Sustainable environmental culture across all it’s subsidiaries in India and globally. The strategy enacted to mitigate environmental burden due to mining activities by CIL:

- Protection of existing environment and maintaining ecological balance
- Restoration of water bodies and creating mined area for rain water harvesting
- Creating artificial water ponds and picnic spots
- Emphasis on afforestation
- Comprehensive monitoring post mine closure
- Fencing of the mines to avoid mishappening
- Preventing access to mined locations
- Waste management and proper dumping of mined waste

Within our special ventures for environment protection and preservation, we have aimed to act in a responsible manner by adhering to the regulatory norms and standards laid down by the higher echelons of power and authority. Accordingly, we also have a Corporate Environmental Policy that guides us as far as our environmental initiatives go. Third party certifications like the prestigious ISO 9001, ISO 14001 and OHSAS 18001 help us in aligning ourselves with the environment around and within for sustainable practices within and outside the coal mines. Below table mentions the companies and units who are ISO 9001,ISO 14001,ISO 17025,ISO 27001,ISO 50001 and OHSAS 18001.

Name of company	No. of units certified					
	ISO 9001	ISO 14001	OHSAS 18001	ISO 17025	ISO 27001	ISO 50001
BCCL	--	--	--	2	--	
CCL	--	--	--	2	--	
CMPDIL	1	--	3	4	4	
ECL	--	--	--	3	--	
MCL	1	1	1	3	--	
NCL	1	1	1	1	--	
SECL	4	2	2	9	--	
WCL	41	--	--	8	--	
CIL	1	--	--	--	--	1
Total	49	4	7	32	4	1
Total	4 cos. + 45 units	2 cos. + 2 units	2 cos. + 5 units	32 labs	4 units	1 co

We do not venture into new expansion projects without obtaining the necessary environment

clearances as well as an EIA/EMP that will take care of the needful. Also, we take pollution control measures even as we indulge in mining operations so as to maintain acceptable levels of the environment's major physical attributes including the air, water, hydrogeology, noise, land, flora and fauna and the nearby population. During the year 2016-17, the CMPDI has prepared 15 Form - I and formulated 22 drafts of EIA/EMPs, 17 environmental clearances were also obtained from MoEF for different Projects/Group of Mines, Washeries and Sand mining projects of CIL. Our major focus has also been on creating awareness within the organisation regarding the importance and the way forward for these initiatives with the celebration of the World Environment Day in all our subsidiaries. Apart from this, we also regularly post banners and thoughts on the notice boards to communicate these points on a formal and informal basis.

No known incidents of noncompliance in terms of environment protection and standards have been reported during this reporting year. We have managed to post precious manpower directly to the fields of operation to work closely with the local communities and make compliance a regular affair. "Benefitting from each other", forms the core principle when it comes to improved disclosure through annual reporting on the compliances.

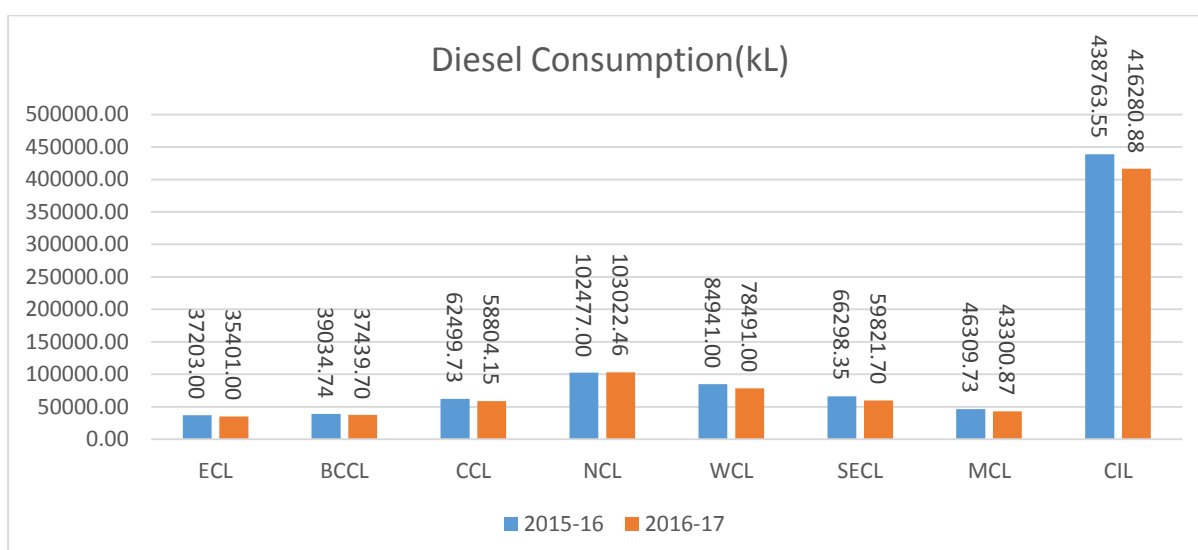
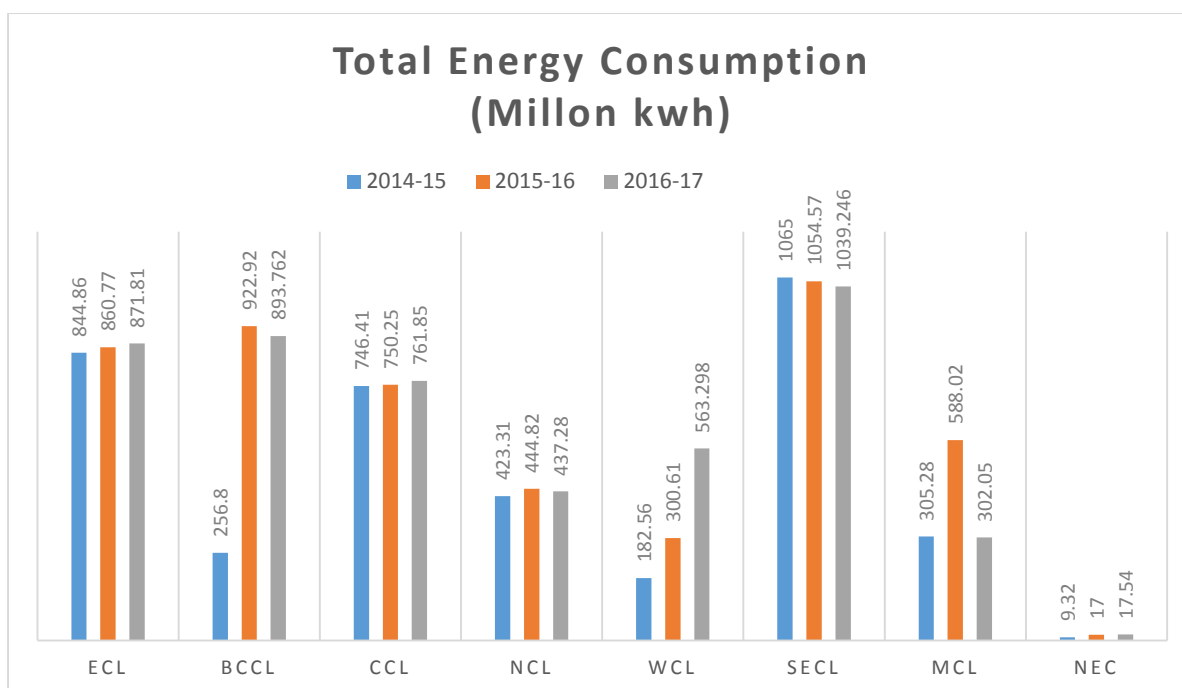
Energy

India being a developing country has its dynamic energy requirement, almost 70% of electricity generation is through thermal plant. A small amount of energy comes from Green Energy or nuclear energy, leading to dependency on Coal as a fuel to produce energy for industrial and social requirements.

Fulfilling the energy requirement and leaving a greener footprint is the prime moto of CIL. We have focused on continually identifying opportunities to improve energy efficiency. CIL has mined on inorganic opportunities and created opportunities for energy sources. CIL developed faith and capital opportunity to villagers near mines by providing the same energy to restore the developed biodiversity by CIL and created awareness.

Coal being a non-renewable energy source should be mined considering the energy requirement. CIL's commitment to conserve environment, mine as per human requirements without overexploiting the natural resources makes it Sustainable on all Economic, Social and Environmental aspects.

Coal mining operations are energy intensive and involve the use of high amounts of fuel and electricity. While the fuel consumption is due to the usage in our HEMMs, an insignificant quantity of the same is also used for the DG sets.



Adopting Energy efficiency programs and conservation of energy

Conservation of energy always remains a priority area and CIL/Subsidiaries have extensively exercised various measures towards reduction in specific energy consumption.

Coal production during 2016-17 is 554.14 Million Tonne (MT) vis-à-vis 538.75 MT during 2015-16 with a growth of 2.9% from previous year. Electricity consumption has, however, reduced during the same period 2016-17 (4886.83 Million Units) vis-à-vis 4971.13 Million Units (MU) during 2015-16 with a reduction of 1.7% in absolute terms.

Specific Power Consumption (kWh/T) during 2016-17 is 8.82 kWh/T vis-à-vis 9.23 kWh/T during 2015-16 with a reduction of 4.42% from previous year.

CIL/Subsidiaries endeavour to maintain this trend of reduction in specific power consumption (KWh/T) every year w.r.t previous year.

Some of the salient measures taken by CIL/Subsidiaries for energy conservation are as stated below:

(i) CIL/Subsidiaries have broadly taken the following measures, inter alia to conserve energy:

- CMPDIL HQ has undertaken energy conservation studies in 2016-17 and carried out Diesel Audit & Benchmarking of specific diesel consumption as well as Electrical Audit & Benchmarking of specific electrical energy consumption in various opencast and underground mines situated in different subsidiaries of Coal India Limited by Bureau of Energy Efficiency (BEE) accredited Energy Auditors.
- Diesel Audit and Benchmarking carried out by CMPDIL in 71 opencast mines in different subsidiary companies of CIL revealed for an aggregate saving potential of approx. 16750 kilo litre/year in diesel consumption.
- These 71 opencast mines are selected having composite capacity (Coal+OB) of 1.0 million m³ or more in ECL, 2.0 million m³ or more in BCCL, WCL, CCL and 5.0 million m³ or more in NCL, SECL and MCL respectively.

Likewise, Electrical Audit and Benchmarking carried out in 08 mines (07 opencast mines and 01 underground mine) revealed for an aggregate saving potential of approx. 110 million units/year.

- A MoU has been signed between CIL (Coal India Limited) and EESL (Energy Efficiency Services Limited) on 08.02.2016 for implementation of Energy Efficiency Projects in CIL and its Subsidiaries.
Accordingly, high watt luminaries / conventional light fittings are being replaced with low power consuming LEDs (of appropriate wattage) in majority of the places for street lighting, Office and other work places, townships etc., thereby creating huge saving potential in electricity consumption. Around 64000 LED Lights have been fitted (new + replacement) in CIL/Subsidiaries for better conservation of energy.
- Air Conditioners (AC) and Refrigerators of 5 Star Rating are procured against replacement of old conventional ACs and refrigerators. Use of Super Energy Efficient Air Conditioners (AC) are also being explored at places having technical capability of saving energy 30% more than the 5 star-rated ACs.
- Energy audit of selected mines / office buildings by CMPDIL / External Agency.
- Installation of power capacitors of appropriate kVAR rating to maintain higher power factor to avail maximum benefit on power factor incentive from power supply agency as well as reduction in Maximum Demand. Aggregate Power Factor maintained at CIL subsidiaries is as high as 95% during 2016-17.
- Auto timer based on-off switches in most of the street lighting / CHPs and township areas to ensure avoiding unnecessary power consumption during odd hours thereby saving in electricity consumption.
- Construction of strata bunkers in underground (UG) mines to eliminate idle running of belt conveyors thereby saving electricity.
- Re-organization of LT (Low Tension) overhead line by Aerial Bunched Cable to avoid unauthorized power tapping.
- Monitoring of load pattern and demand side management of supply points limiting maximum demand wherever practicable by staggering avoidable load from peak hours to off-peak hours.
- Elimination or reduction of stage pumping as far as practicable.
- Re-organization of power distribution system.
- Power supply to underground mines by laying cables directly through bore holes wherever feasible.

The above measures taken for energy conservation are indicative only and not exhaustive.

Specific Energy Consumption

Specific energy consumption trend clearly shows the measures and effectiveness by the programs by CIL and its subsidiaries.

Division	Power Consumption (Million KWh)	Sp. Consumption (KWh/T)
ECL	871.81	21.52
BCCL	893.76	24.13
CCL	761.85	11.36
NCL	437.28	5.20
WCL	563.30	12.34
SECL	1039.25	7.42
MCL	302.05	2.17
NEC	17.54	29.18
CIL	4886.84	8.82

An achievement by all subsidiaries in the reducing the Specific Power Consumption, NEC in 2016-17 has substantially reduced by 17.27% compared to previous year.

Even though Coal Production had increase by 2.9% in 2016-17 compared to 2015-16. Electricity consumption has however reduced to 4886.83 Million Units vis-à-vis 4971.13 Million Units during 2015-16 with a reduction of 1.7% in absolute terms. Specific Power Consumption (kWh/T) during 2016-17 is 8.82 kWh/T vis-à-vis 9.23 kWh/T during 2015-16 with a reduction of 4.42%. CIL/Subsidiaries endeavour to maintain this trend of reduction in specific power consumption (kWh/T) every year w.r.t previous year.

Solar Energy-Alternative energy sources

CIL / Subsidiary Companies are also pursuing use of alternative energy sources. CIL has signed MoU with Energy Efficiency Services Limited (EESL) to promote energy efficiency provisions in CIL and its subsidiary companies. CIL has taken steps for using LED lights substituting CFL lights to promote, Green Initiatives taken by GOI, CIL has submitted Green Energy Commitment letter to MNRE for developing 1000 MW Solar Power Projects. For implementation of these projects, CIL has signed MoU with Solar Energy Corporation of India (SECI). In the 1st phase, tender was floated for setting up of 2x100 MW Solar PV Project in the state of Madhya Pradesh. But, due to current downward trend in prices of solar projects and availability of land in Madhya Pradesh Solar park the tenders were cancelled and SECI was advised to go for retendering of above projects. CIL's initiatives has resulted in installation of 3 MW(Approx.) capacity in CIL HQ and its Subsidiary Companies.

Various steps have been taken for utilizing solar power as alternate sources of energy.

- In kilo-watt scale, roof top solar plants are in successful operation at various places since their commissioning. Such plants are in operation at Corporate Office of Coal India Ltd, New town, Kolkata (160 kWp), CMPDIL HQ Campus, Ranchi (200 kWp), Sodepur (5 kWp) and Bankola (30 kWp) at ECL, Central Repair Shop, Barkakana (25 kWp) at CCL, Nagpur Area (80 kWp) and Ballarpur area (60 kWp) at WCL respectively.
- In megawatt scale, one ground-mounted solar power plant (2.016 MWp) is in operation at MCL HQ premises since its commissioning on 13.10.2014.

- In CCL, work order for solar power plant of capacity 400 kWp on the roof top of Darbhanga House, CCL HQ, Ranchi has already been issued to M/s BHEL. Another such plant of capacity 50 kWp has been approved for Kathara Area on the roof top of Executive Hostel Building.
- In kilo-watt scale, roof top solar power plants have been identified for their commissioning at ECL (aggregate capacity: 60 kWp), MCL (150 kWp) and CMPDIL RI-VI (50 kWp) respectively.
- In mega-watt scale, WCL has planning for installation of 1.257 MWp and 50 MWp solar power projects.

Air Emissions

Mining operations often use explosives that are employed for blasting as well as machinery that has to be deployed for mining and vehicular movement and transportation of coal and OB. We endeavour to keep generating SO_x and NO_x within statutory limit. Yet, we monitor these parameters on a regular basis so as to ensure that the emissions are within specified limits and standards.

We monitor the ambient air quality in and around the mine site on a fortnightly basis with a Continuous Ambient Air Quality Monitoring Station. Four locations in SECL now enjoy the installation of these station with CAAQMSs are being installed at three locations in BCCL, one in WCL and 10 in NCL. CIL has agreed to install 16 CAAQMS in the different cities of country as decided by CPCB. During the year, the emissions from different monitoring stations have been recorded and are elucidated in the table on the right.

We are also taking initiatives to mitigate the dust that is generated during the operations of drilling; blasting, loading, coal transportation of coal and related activities.

Since mining process includes drilling, blasting, cutting, materials handling, crushing, ore processing etc which creates lot of pollution, CIL used latest technology and conveyor for proper material movement. To reduce the emissions, CIL has engineered water sprinkling at appropriate places. Administrative measures ensured that same workers are not exposed to the environment for long by rotational work routine of employees. The measures taken are based on the environmental management Plans (EMP) already prepared before commencement and enhancement of coal production within the coal mines.

We ensured proper safety guards are provided to employees who are in the front line of control and directly getting the exposure to dust.

Under the project, tele-robot has been developed and field trial conducted at Khottadih mine of ECL. The developed robot is capable of monitoring environmental parameters viz. percentage of CO₂, CH₄, O₂ and also humidity & temperature. The real time graphical-user-interface (GUI) based navigational camera is capable of displaying the status of robot and 3D representation of operational environment in the underground mines from sensor data.

The parameters monitored as required by regulatory authorities are Suspended Particulate Matter (SPM), SO_x and NO_x. To ensure compliance across various operating units of CIL, these parameters are monitored. As per the stipulations of MoEF, the monitoring of PM under 10 micron and 100 micron are being done in and around the mine areas, residential and village areas. Value of the parameters are in mostly found within the limit of stipulated standards. Continuous Ambient Air Quality Monitoring Stations have been installed at 4 locations in SECL and 01 location of WCL.

Greenhouse Gas Measurement and Reporting

As an environmentally aligned organisation, we are aware that climate change is one of the most critical challenges of our times. We have a great responsibility towards providing affordable energy to the entire nation without leaving a damaging carbon footprint with reliable and secure practices.



Air Pollution control measures

To control and reduce dust generation during drilling, blasting, loading and Coal transportation, Coal India Ltd. has taken up various initiatives based on the Environmental Management Plans (EMP) which were already prepared before commencement /enhancement of production of coal mines. This EMP is prepared keeping in mind the impact on existing environment and forest due to coal mining projects through Environment Impact Assessment (EIA) study of each project.

Concentration of SO₂ and NO_x in the CCL Areas for the year 2016-17

Sl. No.	Area Name	SO ₂ (µg/m ³)	NO _x (µg/m ³)
1	KDH OCP	< 25	< 6 to 7
2	Piparwar OCP	< 25	< 6 to 8
3	Rajrappa OCP	< 25	< 6
4	Ashok OCP	< 25	< 6 to 7
5	Urimari OCP	< 25	< 6
6	Bokaro OCP	< 25	< 6 to 6
7	Kathara OCP	< 25	< 6

Permissible Limits :	SO₂	80
24 hr average	NO_x	80

Suitable water spraying systems for arresting fugitive dust in roads, washeries, CHPs, Feeder Breakers, Crushers, coal transfer points and coal stock areas are being installed. Mist spray systems have been introduced along conveyor routes, transfer points and on bunkers. Mobile water sprinkling has been provided in all the haul roads of OC mines. In addition to these, the projects are enhancing the water sprinkling through engagement of contractual water tankers. Automatic sprinklers have also been installed in CHPs. Some of the important initiatives are also mentioned below:

- Mobile sprinklers have been installed along haul roads to control dust generated by truck

and dumpers movements.

- Optimum level of loading of coal in trucks and railway wagons to avoid spillage on roads and rail.
- Covering of coal trucks by tarpaulin is being followed to avoid spillage of coal particles during transport.
- Blacktopping, repairing and strengthening of haul roads are regularly and scientifically carried out.
- Plantation in surroundings of active mining areas and along the hauls roads are carried out to create green buffers/green belts in and around the mines.
- In order to reduce the dust pollution due to road transportation eco-friendly mode of transport are being introduced. Transportation to thermal power stations, who consume more than 80% of thermal coal are carried out by rail / series of belt conveyors. Rail heads are constructed and made available nearer to mine so as to reduce road transportation. CIL have constructed / are constructing integrated CHP for rapid loading of wagons and trucks.
- Tube conveyors mode of transportation is also being introduced in some mines for transportation of coal to thermal power plants. The wall/sides of CHPs are also covered by side cladding with GI Sheet to control pollution at source.
- To contain dust emission at source itself, dust extractors / wet drilling systems are being undertaken.
- Controlled blasting and habitation away from the mines have been introduced as far as possible.
- Adoption of modern technologies like Surface Miners and Continuous Miner at different subsidiaries of CIL in which blasting of overburden and coal have been eliminated, thus generation of lesser air borne pollution as compared to conventional mining have During the year 2016-17, CIL has produced about 46.11% (i.e. 255.534 MT) of its production from open cast mines through Surface miners. Continuous miners contributed about 4.689 MT in the production from underground mines.
- The quality of Ambient air in and around the mine site is being monitored fortnightly. The required and stipulated numbers of ambient air quality monitoring stations are maintained, as per environmental rules and regulations of Environment (Protection) Act, 2006, and its reports are regularly submitted to SPCBs and MoEF & CC.
- The concept of 'Continuous Ambient Air Quality Monitoring Stations' (CAAQMS) are being introduced and are installed / being installed in large mines of CIL.

Green Belt Development

We have adopted the Green Belt Development as a part of our mitigation measures for air pollution. As an imperative step towards creating a more positive impact, tree plantation is being conducted on a regular basis on reclaimed land in back filled & OB dump areas with plantation in and around mines, road sides, townships and residential areas, and other available vacant spaces. Further, the implementation of a conservation plan for the protection of flora & fauna is being carried out as per Environmental Clearance (EC). This is being done in addition to the compensatory afforestation for diverted forest in terms of mining for the degraded forest. These areas have been marked by the State Forest Departments. The plantation has created man made forests in mining areas where there was minimum forestation. This improves the ecological balance by maintaining stability in the ecosystem services available and what we use for our business.

A Green Belt is developed through an extensive tree plantation program every year by the subsidiaries of Coal India Ltd. Avenue plantation, plantation on the OB dumps, plantation around mines, residential colonies, and available land is undertaken in existing as well as new projects.

During 2016-17, 1.66 million trees have been planted in an area spanning more than 661.08 Ha. till 31.03.2017 subsidiaries of Coal India Ltd planted about 94.015 million plants since inception covering an area of 37557.458Ha.

PLANTATION IN CIL						
SUBSIDIARY	DURING 2015-16		DURING 2016-17		TILL 2016-17	
	No.	Ha.	No.	Ha.		
ECL	250000	100	257500	103.00	7498800	3004.49
BCCL	28648	94.44	100000	41.2	4247257	3504.96
CCL	117775	47.11	66225	26.5	7852755	4871.088
WCL	0	0	125900	50.55	18394948	6671.75
SECL	743175	297.27	589000	235.60	25676018	10270.4
NCL	370605	111	380000	146.85	23403155	6916.72
MCL	173303	69.32	138000	55.2	5229691	2091.88
NEC	4000	0	5620	2.3	1713129	226.17
CIL	1687506	719.14	1662245	661.20	94015753	37557.458

CIL has engaged Indian Council of Forestry Research & Education (ICFRE), Dehradun for **Environmental Audit of 20 no. OC Mines of CIL** which is intended for third party inspection, verification of the existing levels of pollution vis-a-vis the laid down standards and to delineate the compliance status of major projects in addition to the inspection carried out by the statutory authorities like CPCB/SPCB etc. ICFRE has submitted final report for 3 mines of MCL and 01 mine of BCCL. ICFRE is conducting study for the remaining mines

Vegetation cover mapping of 6 coalfields viz. Jharia, Talcher, Bishrampur, Wardha, Kamptee and Makum have been completed during the year 2016-17 for assessing the regional impact of coal mining on land/vegetation cover in the span of 3 years to take remedial measures required, if any.

CIL has also engaged Rain Forest Research Institute for preparation of Bio –diversity Management Plan, Regional Wild life plan and carrying capacity study for Makum coalfields of Assam.

Water Conservation

The United Nations General Assembly in July 2010, declared access to clean water and sanitation a must for human beings. The global effort to bring down the water usage primarily for mineral processing, dust suppression and sludge.

The quality of living environment desires efforts to restore water in its surface and subsurface. The obligation to conserve and harvest water has been imbibed at CIL to make them a responsible corporate. We have doing rain water harvesting in our facilities to top up the water requirement at mines location.

Owing to commitment to conserve water we have been reusing mine water for domestic purposes. Water consumption pattern. Water which pumped out from the underground and open cast mines are being contaminated with suspended particles. Some small quantity of water being contaminated during washing and cleaning of HEMM. CIL also takes initiative by treating this water.

With the identification of needs for conservation and effective utilization of the natural resources, CIL is committed towards providing eco-friendly facilities to the communities with sustainable development activities in the peripheral villages. The objective of CIL is for maximum utilization of Mine Water for the community use. Accordingly, steps have been taken up for making water available round the year to the community for irrigation and other domestic uses. There are 15, 04, 47 Rain Water Harvesting Projects of ECL, WCL and NCL respectively which also serve as a source of water for the community. Through all its projects, CIL is reaching a total number of 8.9 Lakh beneficiaries.

Acknowledging the fact that the ponds, hand pumps and wells are the only source of water for the villagers, the project will be planned in a way that is beneficial for the villagers. This will ensure that there is availability of water round the year for their day to day and more importantly, their agricultural needs. The ponds that have been constructed and renovated can be used for allied activities such as Fisheries, as well. After completion of the work it will be handed over to the local administrative arrangements like Panchayats and Gram Sabhas to be owned and managed by the community so that persistent use of the same continues.

Mine Water Management

Treatment of contaminated water is a constant effort that we undertake at CIL. This is due to the fact that water which is pumped out from the underground and open cast mines is contaminated with suspended particles and the water used for cleaning of HEMMs gets contaminated too. The treated water is routed to the local villages after mine consumption. Also, the quality of the final effluent is monitored with the use of relevant Indian standards.

The treated water is being supplied to the local villages after mine consumption, Quality of the final effluent is monitored in terms of the relevant Indian standards.

- Domestic Effluent Treatment Plant (DETP): The domestic effluent from major residential colonies is treated in DETP either by activated sludge method or by extended aerated lagoons.
- Mine Discharge Treatment Plants (MDTP) are installed in mines for treatment of mine water. Strata seepage water in mines first gets accumulated in the mine sump which provides for initial settlement of suspended particles. The supernatant water from the sump is then pumped out on surface and treated in surface sedimentation tank, which provides for second stage settlement. The treated mine water is then used partly within the mine premises for dust suppression, firefighting, plantation, washing and further treated as per drinking water standard for supply to company township and nearby villages through pressure filter / RO. etc. After ensuring maximum re-use within and around mine premises the excess treated mine pumped out water is released onto local nalla / streams which is used by the surrounding local population especially for agricultural use.
- In order to assess the impact of mining activities on ground water, quarterly monitoring of ground water levels is being carried out in and around the coal mines covering the buffer zone (i.e. 10 Kms radius). Further, recharging of ground water is also taken up within mine premises as well as in nearby villages through rainwater harvesting, digging of ponds/development of lagoons, desilting of existing ponds/tanks etc.
- Regular monitoring of mine effluent, workshop effluent, and domestic effluent is carried out every fortnight as per Environment (Protection) Rule – 2006. Reports of the same are regularly submitted to SPCBs and MOEF.

MINE WATER UTILIZATION 2016-17 (Quantity in Lakh Cum/year)											
Subsidiary	Quantity of average mine discharge	Total Quantity for own use			Community use			Total Quantity	Current % use	Beneficiary	
		Domestic	Industrial	Total	Domestic	Agriculture	Total			Population (No.)	Land in Ha
A	B	C	D	E	F	G	H	I=E+H	J=I/B*100	K	L
ECL	529.07	120.76	183.16	303.92	83.24	43.75	126.99	430.91	81.45	403553	0
BCCL	1198.96	220.95	168.41	389.36	277.53	0	277.53	666.89	55.62	87593	50.97
CCL	352.83	75.78	150.78	226.56	57.73	16.08	73.81	300.37	85.13	90100	130.02
NCL	169.46	0	169.09	169.09	0	0	0	169.09	99.78	132760	213
WCL	1399.31	122.54	322.45	444.99	6.48	301.98	308.46	753.45	53.84	0	0
SECL	839.6	232.02	203.61	435.63	20.07	115.8	135.87	571.5	68.07	46672	598.7
MCL	954.23	57.01	149.26	206.27	88.38	659.57	747.95	954.22	100	130165	551.1
CIL	5443.46	829.06	1346.76	2175.82	533.43	1137.18	1670.61	3846.43	70.66	890843	1543.79

Zero discharge of the effluent

Good environment management practices have made CIL and its subsidiary units a zero discharge. Effluent treatment facilities for mine effluent, workshop effluent and CHP effluent like oil & grease traps, sedimentation ponds and facilities for storage of treated water and its reuse have been provided for all the major projects.

As of now, CIL is operating 15 coal washeries with a capacity 36.80 MT - all of which have been designed for zero discharge. The total washed coal production from these existing washeries for the year 2016-17 has been pegged at 17.04 Million Tonnes. With the help of state of the art technology in the field of coal beneficiation that will create and aggregate throughput capacity of 123.68 MTY, CIL plans to up the performance in its 22 new washeries. The storm water drainage will be treated in settling ponds before being discharged into rivers, streams and other water bodies. The wet washeries generally utilise mine water as a rule. In case mine water is not available, the option of storage of rain water and its use is being practiced with rainwater harvesting. The use of surface water and ground water is being diligently avoided to the maximum possible extent.

Company	NO. OF ETPs	NO OF DETPs	NO OF W/SHOP ETPs
BCCL:	24	16	4
CCL	15	5	03
ECL	22	9	9
MCL	26	8	18

NCL	10	9	9
NEC	4	0	2
SECL	66	6	7
WCL	86	7	27
TOTAL	241	60	79

Biodiversity

CIL has created value and improve lives through sustainable and responsible mining. The biodiversity value is retained with no significant affected water bodies or related habitat. Action plans were taken to identify legally protected and high biodiversity value areas when conducting assessments identified by International Union for Conservation of Nature (IUCN) and the United Nations Environment Programme World Conservation Monitoring Centre.

If not managed properly, mining can impact the biodiversity in an adverse manner with broad ranging implications that affect habitat conversion as well as water and soil contamination. At CIL, we recognize the importance of the biodiversity which bears maximum impact due to our operations. We strive to mitigate the impact through our ethical practices. It is our firm belief that in order to sustain our business, we need to take up tasks for the restoration of our environment so that development takes place on both sides, in a responsible manner. Our good practices involve a gamut of activities which have been undertaken for managing our natural capital. These protected areas are out of bounds from mining activities. Areas of high biodiversity value outside protected areas are being maintained with regular gap plantation with indigenous species. We follow the EIA and EMP of the MOEFCC for keeping track of biodiversity assessments.

Steps to retain Biodiversity

- Meeting expectation on biodiversity assessment.
- Preventing any impact on biodiversity and conducted appropriate assessment for future
- Setting up biodiversity baseline to providing foundation
- No mine exploration in conserved or world heritage sites
- Land restoration and rehabilitation

Coal India has made afforestation over the area of around 37557.458 hectares through well-structured environmental management plans and sustainable activities. As part of 'Clean & Green' programme, massive plantation has been taken up by CIL wherever land is available.

Waste Management

Waste is something that can generate a number of problems in social and environmental terms, and needs to be managed in a way that creates sustainable growth for the surroundings. At CIL, we are acquainted with the fact that mining generates a lot of waste due to its operations which has a direct impact on the environment. This is because mining involves removing the top layer of the earth to dig out coal. Once the coal has been extracted, various kinds of wastes such as Solid Waste, Mine Water, removed top soil, process waste, Suspended Air particulate matter, instrumental waste, Oil spills, Tailings, Sludge etc which through proper channel should be neutralized or dumped for minimal impact of environment.

We recognize that careful management of mine waste is very important to ensure sustainability of the operations. We undertake safe disposal of waste even as we keep the effect on local communities in mind. Hazardous materials, used oil and explosives are managed appropriately and the same is reflected in our Environmental Audit Statement that are submitted to the Central Pollution Control Board and State Pollution Control Board in Form -V, etc. No coal spillage and oil spillage were reported during the reporting year. CIL has an agreement with third party for proper disposal of hazardous waste and the responsibility of its subsidiaries through the state government ensures no human or environmental impact.

Land Reclamation

Reclamation of mined out areas is important for Sustainable development. Emphasis was laid on proper reclamation (both technical and biological) and mine closure. Satellite Surveillance for land reclamation was given the requisite thrust by partnering with the National Remote Sensing Centre at Hyderabad. Satellite Surveillance has been introduced at all the open cast mined in order to monitor the land reclamation activities of the mining sites. This has been done in order to comply with the MoEF stipulations as well as for progressive mine closure monitoring.

Land Restoration / Reclamation Monitoring of 50 Opencast Coal Mines Projects of CIL producing more than 5 million cum (Coal+OB) based on Satellite Data for the Year 2016-17.

One of the most important and primary resources used in mining includes land. Therefore, our major sustainability measures are aligned towards taking mitigation measures for reclamation of mined out areas and the external OB dumps. Reclamation of mined out areas is conducted as per the Environmental Management Plan approved by MoEF where back filling of the OB material in the mine voids is part of the mining operation cycle, for all the new mines. Part of our initiative includes top soil preservation, storage and the use in plantation areas within the reclaimed locations in the open cast mines. Also, concurrent reclamation and rehabilitation of the mined out areas are taken on as a matter of priority for gainful use of land. This is done so that the geo mining conditions and the technical feasibility does not suffer. The overburden extracted during the coal extraction process is also filled into the open cast mines after technical reclamation. Thereafter, complete plantation is carried out in a process that is termed as biological reclamation.

Accordingly, we have engaged the Forest Research Institute (FRI), Dehradun and top soil has been recognised as an invaluable natural resource. This has been done especially for regeneration of the regional ecology with measures ranging from effective Bio-reclamation of disturbed land. For this, scientific studies have been conducted in order to select suitable species of plants for each coalfield with a sustainable sequence of reclamation from grass to shrubs, and trees. The Forest Research Institute has been engaged by us to gain a partner whose rich expertise in the field of eco-restoration can help in the reclaimed areas.

Monitoring of Land Reclamation of OC mines through Remote Sensing

CIL introduced state-of-the-art Satellite Surveillance to monitor land reclamation and restoration for all opencast projects. The land reclamation and rehabilitation operations are being monitored by Satellite Surveillance. 50 major OCPs excavating more than 5 Mm³ (Coal+OB) per annum are being monitored every year while remaining OCPs excavating less than 5 Mm³



(Coal+OB) per annum are being monitored every 3rd year. This gives a clear picture of reclamation, which otherwise is difficult to accurately estimate. The study during 2016-17 shows that all the major OCPs (excavating > 5 Mm³ (Coal+OB) per annum) have reclaimed area of 77.59% and active mining area is only 22.41% of the total excavated area. In addition, CIL is conducting vegetation cover mapping through satellite surveillance in every 3 years.

Case Study: Ecological Restoration

As a part of eco-restoration measures, the suitable selection of plants for each of the coal fields is done in a way that will give rise to a sustainable sequence of reclamation from grass to shrubs and finally into trees. This helps in creating a basis for effective Bio-Reclamation of disturbed land with the help of scientific followed for the selection.

The Forest Research Institute (FRI) has been engaged by us for providing their services for eco-restoration in the reclaimed areas where top soil has been recognised as an invaluable natural resource.

CIL has always fostered and cultivated a culture to achieve greener footprint and nurtured afforestation in various mines. Some of the Eco-park in Reclaimed land, Eco Parks have been developed in many of the mined out areas of CIL

- Gunjan Park of ECL
- Ananya Vatika of SECL
- Nigahi of NCL
- Saoner of WCL
- Kayakalp Vatika, Rajarappa Eco Park in CCL etc. to spread the message of environment conservation in and around the mining area.

Coal Production (Million Tonne)

Company	2016-17	
	Target	Actual
ECL	46.940	40.517
BCCL	37.000	37.037
CCL	67.000	67.047
NCL	82.000	84.096
WCL	48.000	45.632
SECL	149.670	140.003
MCL	167.000	139.208
NEC	1.000	0.600
CIL	598.610	554.140

OBR (Million m³)

Company	2016-17	
	Target	Actual
ECL	141.000	124.637
BCCL	145.000	131.215
CCL	105.000	102.630
NCL	335.000	324.136
WCL	200.000	166.142
SECL	220.000	178.791
MCL	150.000	123.342
NEC	13.000	5.484
CIL	1309.000	1156.377

Noise Reduction

Noise pollution in open cast mines has an adverse impact on humans and wild habitat. There is a need to reduce or abate the noise due to mining practices and transportation of mined product through better mining techniques and a proper channel for flow of mined product from mines to various locations. Our operations involve the use of HEMMs for mining, blasting and drilling which can contribute greatly to noise pollution. This is an occupation hazard that we are aware of – one that impacts the workers busy within the coal mines. For our operations to be environmentally friendly, we at CIL have taken several measures to control noise pollution.

Apart from proper maintenance of equipment to minimise vibrations, we have also indulged in developing a green belt which is wrapped around the mine as well as residential areas. This green cover helps in combating noise. Additionally, we have also taken on controlled blasting and blasting

only during the day time. The use of technically sound machinery such as Surface Miners, Continuous Miners and High Wall Miners are used for extracting coal without the blasting process. In addition, we are always committed towards providing occupation health and safety facilities to workers working in the mine. Accordingly, ear muffs and ear plugs have become a part of the regular gear to be used by workers in noisy areas.

Noise has decreased by introduction of new technologies at CIL like

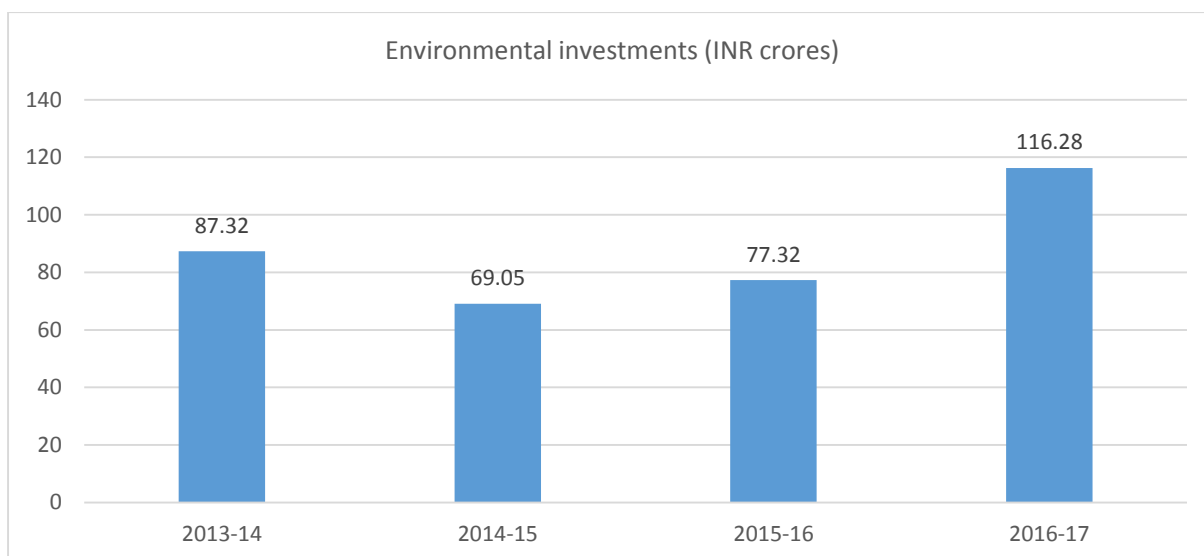
- Proper maintenance of equipment to minimize vibration
- Green belt provided around the mine as well as residential area
- Long-wall method
- Short-wall method
- Blasting gallery technology
- High-wall mining
- Continuous miner technology resulting in increased percentage of extraction in underground(UG) mining
- Controlled Blasting & blasting in only day time
- Surface miners, Continuous Miner & High Wall mining which extract coal without blasting
- Ear Muff or Ear Plugs provided to Workers at highly noisy areas

Mine Rehabilitation and Reclamation

- Projects on sustainable mine closure activities and mining wasteland to be utilized as a source of livelihood for local community were proposed to be carried out with the help of US agencies. In this regard, a proposal was received from M/s Norwest Corporation on 15th Dec 2015
- After many deliberations on the proposal, it was proposed by CMPDI to route the proposal through indo-US CWG platform prior to submission at the R&D Nodal Agency i.e. CMPDI for funding under CIL. Subsequently, a meeting was held at CMPDI with officials from M/s Norwest Corporation on 20th July 2016 and a decision was taken to formulate the proposal in two phases i.e. Phase-I: Study & Capacity Building, and Phase-II: Implementation in one of the selected OC mines in CCL(CCL has given the consent for study and implementation of the proposal in Amrapali OCP vide letter dated 29th August 2016). M/s Norwest Corporation prepared the revised draft proposal and sent to CMPDI(Implementation Agency) on 6th September 2016 for necessary scrutiny. The proposal was vetted by CMPDI
- In the meanwhile, CMPDI has incorporated the duly filled Annexures of the proposal and forward the same to M/s Norwest Corporation vide email dated 28th November 2016 for incorporating their input in the Annexures before submission of the proposal.

Mine Closure Plan (MCP)

Mine closure plan is an integral part of the project report prepared by CMPDIL for Coalmines. This progressive mine closure plan also forms a part of the EIA/EMP prepared and submitted to MOEF for Environmental Clearance. The progressive reclamation of mined out areas by inbuilt in the project cost and is implemented accordingly. After exhaustion of reserves, statutory obligations in respect of closure are also followed. CIL is practicing mine closure very effectively. CIL is committed for restoration of abandoned / mined out areas in a socially acceptable & environment friendly manner. As on March 2017, out of 454 identified mines, 453 MCP were already prepared, 445 MCP were approved by concern Subsidiary board, 422 numbers of Escrow account were open and an amount of 5487.13 Cr were deposited in this account.



Social Performance

CIL believes that the performance of an organization must be measured in terms of the value it creates for the society. Organizations that embed sustainability into their strategies can create substantial stakeholder value through innovative development models that simultaneously generate sustainable livelihood opportunities as well as create a positive environmental footprint. CIL is totally committed to foster health, safety and well-being of employees by building a unique culture of their empowerment and enrichment and also to collaborate with communities towards social interventions in the identified thrust areas. CIL believes its employees as its most valuable resource and this is evident in the organizational strategy towards developing capabilities and realization of best potential of its people. It is needless to say that committed human resources go a long way in providing competitive advantage and CIL attributes its success to the investment in human capital that are behind every activity, every technology and every innovation.

Management Approach

An organization's output is only the sum total of its employee's endeavors. CIL has actively fulfilled the social responsibility, and made new efforts and obtained new achievements in aspects of value creation, safe production, environmental protection, science and technology innovation, staff care, community building, and so on. The company values employees as its most valuable resource and this is evident in the organizational strategy towards developing capabilities and realization of best potential of its people. It is needless to say that committed human resources go a long way in providing competitive advantage and CIL attributes its success to the investment in human capital that are behind every activity, every technology and every innovation.

CIL's Human Resource agenda is primarily focused on strengthening four key areas: building a robust and diverse talent pipeline, enhancing individual and organisational capabilities for future readiness, driving greater employee engagement and strengthening employee relations further through progressive people practices. The Human Resources department supports the business operations and helps enhance performance parameters for each employee. It has been investing in progressive employee relations practices to ensure that it invests in capability directly at the grass root level. Efforts for skill mapping, skill assessment, performance assessment, gap analysis that enables training plan identification which is customised to each workman basis priority areas are being undertaken on a regular basis.

CIL in order to ensure that it can fulfil all the tasks required to achieve its objectives within the framework of its policies, processes and procedures, has been actively implementing various Management Systems. CIL HQ has got certification for ISO 9001 and ISO 50001 (Quality Management System and Energy Management System) from Bureau of Indian Standards and implementation / integration of Environment Management System (ISO 14001) is under progress. As on 31st March 2017 two subsidiaries, namely, NCL and MCL are certified for their companywide Integrated Management System (ISO 9001, ISO14001 and OHSAS 18001) and another subsidiary ECL is likely to be certified shortly. Subsidiaries CCL, BCCL and WCL are in the process for implementation of Integrated Management System (ISO 9001, ISO 14001 and OHSAS 18001) across the company. CMPDIL headquarters and its seven RIs are certified for ISO 9001:2015.

Workforce

CIL measures growth not just in terms of the value it delivers to its customers, but also in terms of the growth of its employees. The company believes that the welfare of its employees is integral to its vision to become a vibrant organisation. CIL recognizes that its people are the key to its continued expansion and growth. Therefore, the Company puts a great deal of emphasis on talent acquisition, development, retention and motivation.

The total manpower of the Company including its subsidiaries as on **31.03.2017** is 310016 against 3,22,404 as on 31.03.2016. We follow the DPE guidelines for the recruitment of Director and Senior Management for positions of GM and above. Of the existing Directors, eight of our Directors are above the age of 50 years whilst three of them are above the age of 60 years.

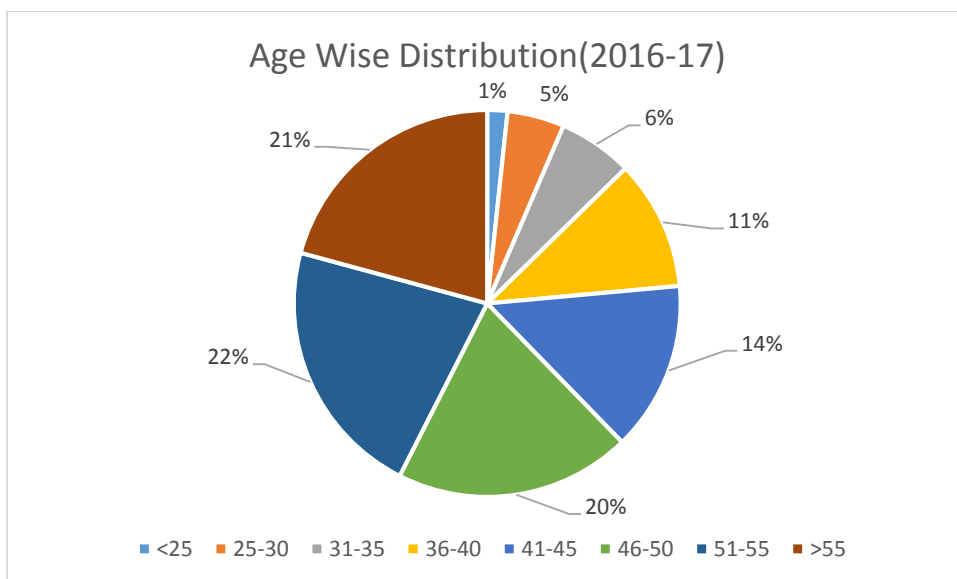
Subsidiary-wise position of manpower is as below:-

Company	As on	Total
ECL	31.03.2017	64029
	31.03.2016	66238
BCCL	31.03.2017	51147
	31.03.2016	53670
CCL	31.03.2017	42156
	31.03.2016	43681
WCL	31.03.2017	47632
	31.03.2016	49062
SECL	31.03.2017	61209
	31.03.2016	64505
MCL	31.03.2017	22036
	31.03.2016	22397
NCL	31.03.2017	15357
	31.03.2016	16078
NEC	31.03.2017	1706
	31.03.2016	1877
CMPDIL	31.03.2017	3498
	31.03.2016	3622
DCC	31.03.2017	378
	31.03.2016	417
CIL(HQ)	31.03.2017	868
	31.03.2016	857
Total (CIL as a whole)	31.03.2017	310016
	31.03.2016	322404

Company	2014-15			2015-16			2016-17		
	Actual			Actual			Actual		
	As on 31.3.15			As on 31.3.16			As on 31.3.17		
	Executive	Non-executive	TOTAL	Executive	Non-executive	TOTAL	Executive	Non-executive	TOTAL
ECL	2472	66209	68681	2375	63863	66238	2276	61753	64029
BCCL	2454	53597	56051	2324	51346	53670	2242	48905	51147
CCL	2706	42305	45011	2590	41091	43681	2436	39720	42156
WCL	2631	47440	50071	2599	46463	49062	2541	45091	47632
SECL	3471	64803	68274	3358	61564	64922	3275	58312	61587
MCL	1884	20375	22259	1861	20536	22397	1828	20208	22036
NCL	1795	14431	16226	1786	14292	16078	1708	13649	15357
NEC	113	1914	2027	107	1770	1877	96	1610	1706
CMPDI	934	2695	3629	913	2709	3622	917	2581	3498
CIL(HQ)	378	490	868	391	466	857	411	457	868
TOTAL	18838	314259	333097	18304	304100	322404	17730	292286	310016

Contractual Manpower as on 01.04.2017

Sl. No.	Company	No. of Contractual Manpower as on 01.04.2017
1	ECL	13038
2	BCCL	6901
3	CCL	8019
4	WCL	13827
5	SECL	37964
6	MCL	21465
7	NCL	24976
8	CMPDIL	1779
9	NEC	643
10	CIL(HQ)	234
TOTAL		128846



Talent Management

Effective talent management doesn't happen by accident. Forward-focused businesses organisations actively seek to improve employee performance levels. CIL believes that employees are the main force for organisation's development and the growth of the employees and the company are complementary to each other. The company advocates the establishment of a learning organisation which encourages employees to establish the concept of lifelong learning and strives to build a platform for comprehensive growth of its employees through capacity training, potential development and skills upgrade.

Company	2016-17						
	Female			Male			Total Manpower
	Exe.	Non-exe.	Total	Exe.	Non-exe.	Total	
ECL	101	4135	4236	2175	57618	59793	64029
BCCL	119	3981	4100	2123	44924	47047	51147
CCL	157	3862	4019	2279	35858	38137	42156
WCL	176	2462	2638	2365	42629	44994	47632
SECL	146	3012	3158	3097	54954	58051	61209
MCL	85	1699	1784	1743	18509	20252	22036
NCL	65	496	561	1643	13153	14796	15357
NEC	8	139	147	88	1471	1559	1706
CMPDI	67	158	225	850	2423	3273	3498
DCC	6	27	33	26	319	345	378
CIL(HQ)	64	79	143	347	378	725	868
TOTAL	994	20050	21044	16736	272236	288972	310016

Male-Female Manpower as a whole

Year	Female Employees	Male Employees	Total Manpower power
1.04.2015	25633	307464	333097
1.04.2016	22135	300269	322404
1.04.2017	21044	288972	310016

Appointment of Non-executive Manpower

Company	Particulars	14-15	15-16	16-17
CIL(HQ) AS A WHOLE	Employment In lieu of death(9.3.2)	2585	2545	2408
	Employment In lieu of perm. Disabilities(9.4.0)	45	114	117
	Appointment against Special Female VRS	568	2568	462
	Appointment of land losers	1296	2595	2151
	Appointment of depended of Executive	4	1	2
TOTAL		4498	7823	5140

Employee turnover	ECL	BCCL	CCL	WCL	SECL	MCL	NCL	NEC	CMPDI	DCC	CIL(HQ)	TOTAL
Retirement	268	436	268	312	414	64	104	9	20	7	9	1911
Resignation	11	3	3	18	19	12	4	0	3	0	0	73
Death	97	54	84	38	54	11	14	8	0	1	0	361
Medically unfit	0	2	0	0	2	0	0	0	0	0	0	4
Special VRS (Female)	0	6	53	0	0	0	0	0	0	0	0	59
VRS (DPE)	1	0	0	0	0	0	0	1	0	0	0	2
Dismissal/Termination/Separation/Removal	6	19	10	16	32	5	5	0	1	2	0	96
Inter Company Transfer (on transit)	39	6	35	111	51	99	27	2	5	0	0	375
Non executive to Executive	0	0	0	0	0	0	0	0	0	0	0	0
Others (Posting order changed & cancelled)	0	0	0	0	0	0	1	0	0	0	0	1
Apptt. To D(T)	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL DECREASE	422	526	453	495	572	191	155	20	29	10	9	2882
Net Position												
	ECL	BCCL	CCL	WCL	SECL	MCL	NCL	NEC	CMPDIL	DCC	CIL(HQ)	TOTAL
	-239	-395	-266	-115	-418	91	10	-19	-21	-10	15	-1367

During FY 2016-17, 38 Medical Specialists and Medical officers joined the Company. CIL also inducted fresh talent into the organization at the entry level with 438 Management Trainees selected through campus recruitment joining the company. They have been imparted induction training and posted to different subsidiaries based on manpower requirement.

In the current financial year, campus recruitment of Management Trainees in various disciplines is under progress with 239 candidates being selected till March 2017 against 297 vacancies. The selected candidates shall be offered appointment to join the company in July-August 2017 on successful completion of their degree courses.

175 non-executive level employees were promoted to Executive cadre through departmental selection/promotion process.

Employee Associations

The foundation of long-term value creation rests on our philosophy of participative management between Management and the Employee Associations. Trust is the cornerstone on which industrial harmony has been built. CIL fully recognizes the rights of employees to freely associate and join trade unions, and we have embedded this principle in our Management Standards. About 94.32 per cent of our employees are covered by collective bargaining arrangement i.e., National Coal Wage Agreement(s) by the Joint Bi-partite Committee for the Coal Industry (JBCCI). A large number of issues including the wage structure, fringe benefits, service conditions, welfare, social security, safety and other allied matters are covered under the agreement. During 2016-17, a one day Nation-wide General Strike was called by Four Central Trade Unions on 2nd September, 2016 due to which company lost 83368 Man-days and 443834 tonnes of production. There were total 5 instances of Bandh called by regional parties in the area of operation of subsidiary companies viz. MCL, CCL & CMPDIL, where normal working was affected.

Company-wise details of strikes, man-days lost and production lost and other incidents are furnished in the following table:-

Company	No. of Strikes/Bandhs		No. of other incidents		Man-days Lost		Production Lost (in tonne)	
	2015-16	2016-17	2015-16	2016-17	2015-16	2016-17	2015-16	2016-17
ECL	1+0	1+0	45	44	15108	8722	37303	44591
BCCL	1+0	1+0	11	10	16562	25363	49516	68123
CCL	1+0	1+4*	75	98	21528	16983	00	00
WCL	1+0	1+0	00	1	19974	16004	68690	24550
SECL	1+0	1+0	03	0	39300	13855	53172	0
NCL	1+0	1+0	00	9	5617	00	58000	0
MCL	1+0	1+1**	00	6	11330	11611	34904	306570
NEC	1+0	1+0	00	0	762	00	1100	00

CMPDI	1+0	1+4*	00	0	1387	1280	00	00
CIL	1+0	1+0	00	0	00	00	00	00
Total	1+0	1+0	134	168	131568	83368	302685	443834

Bandh- *On 20.06.2016/31.08.2016/30.09.2016/25.11.2016- Jharkhand/ Local Bundh called by TPC/PLFI/MCC/Local Parties affecting CCL &CMPDIL, Ranchi

**On 16.08.2016/, -Odisha Bundh called by Indian National Congress

Strike- One day Nation-wide General Strike was called by four Central Trade Unions(AITUC,INTUC,HMS,CITU) on 2nd September, 2016.

Learning & Development

CIL continues to focus on its people, striving to establish a diverse and inclusive environment where each person has a sense of purpose and is empowered to achieve his/her full potential. In 2016-17, the Company focused on overcoming difficulties and increasing quality and efficiency, and constantly stimulated the employees' vitality and potential of innovation and entrepreneurship based on their positions. In order to identify high-potential individuals mechanism for talent tracking is in place that is constantly used by the HRD Division of CIL. Our approach to imparting training is participative in nature and we actively seek feedback from employees and their managers to ascertain the training needs and setup training calendar accordingly. Training Needs Identification exercise along with PMS is conducted before start of every new performance cycle. All the executives of CIL are reviewed through CIL's online system Human Resource Information System (HRIS).

CIL recognizes the fact that continual training and skill development is very critical for the growth of the employees as well as the organization. Keeping this in view, regular training programs for officers and workmen are conducted through internal and external professionals and experts in various areas of operations and CIL selectively sends officers to attend training programs at reputed Institutions to improve their skills and knowledge.

Training and Development

CIL and its subsidiaries follow a structured approach for training and development of employees. Multiple forums for learning like classroom training, on-the-job training, inclusion in taskforces and projects, mentoring and deploying of organization wide portals to enable sharing of best practices are in place.

HRD Department of CIL has been playing an active role in ensuring a smooth and fruitful on-boarding process for the Management Trainees in the Company. The importance of seamless transition of young management trainees into their roles while creating awareness amongst them towards the organizational practices cannot be overstated. HRD department proactively conducts several activities such as induction trainings and workshops and interaction sessions with higher level management including Company\ Directors and CMD. Such orientation goes a long way in ensuring that youngsters thoroughly understand the organization culture and feel themselves to be part of CIL family. HRD department also facilitates in conducting technical trainings for different disciplines as per the requirement.

CIL has a multi-pronged approach to learning, with focused interventions in core and functional areas, customized business specific as well as organization-wide strategic interventions and leadership development programmes designed to enhance skills of employees and strengthen their career

profiles. A systematic approach to integrate the HRD efforts in each of the 27 training centers located in different subsidiaries of CIL, an Annual HRD plan is prepared out every year. Trainings are broadly classified under four heads.

Average hours of training per year per employee, by gender, and by employee category.

Category/Level/Grade of Employees	No of Hours		Per Employee	Per Category
	Male	Female		Total
Associates	2460	678		3138
Middle Management	4086	330		4416
Senior Management	9735	132		9867
Top management	1920	186		2106

- A Tripartite MoU has been entered into among National Skill Development Fund(NSDF), National Skill Development Corporation(NSDC) and CIL on 3rd May,2015 to provide training and undertake Recognition of Prior Learning to around 2.7 Lakh persons over a period of 2 years as per National Skills Qualification Framework in CIL's operational areas and neighboring regions.
- For the Year 2016-17, Under RPL(Recognition of Prior Learning) about 40,000 CIL workers are to be trained. For the year 2016-17, 38575 employees are trained.
- For the year 2016-17, 199 persons have been trained under fresh skilling and around 40 people have been offered Job as well.
- Regular training programs are held through IICM(Indian Institute of Coal Management), External Institutions , other foreign training to hone leadership skills and occupy senior position which benefits organization as a whole.
- Yes, company provides training to support employees after retirement by conducting a training program in IICM for their career enhancement.
- There is Induction training program for one week in IICM for the new recruited employees on organization policies and procedures. After 3 months they also attend Functional skill development and Managerial Skill Development program for enhancing their functional and Managerial Skill.

Technical Training

Technical training to employees at the Zero level focuses on continuous skill up-gradation on the basis of skill-gap assessment and planned technology induction so as to enhance their technical knowledge on the various means and methods being used in each subsidiary. CIL has in vogue a new trend of imparting training to its employees for the statutory posts at around 102 Vocational Training Centers. This has enabled many employees to become competent and to qualify for statutory posts. Thus, CIL has been ensuring its senior management are well trained and competent enough to address the future challenges of the business.

Management Training

The company has a well-developed Young Managers' Development Program, which is a cross-departmental training programme designed for the Management Trainees and ensures a regular talent flow within the company. In addition to the introductory concept on Coal Industry, they are trained on basic Management Techniques (MAP) as well as in their respective Technical fields (TAP) through regular courses organized by IICM by reputed faculties. Special attention is also given in tuning them in their respective specialized working areas by on-the-job training throughout the year. 168 Management Trainees /AMs of Excavation and E&M disciplines posted in different Coal Mines underwent 5 weeks intensive training for AMs/MTs at Indian School of Mines, Dhanbad the premier Mining Institute of our country during the year 2016-17. This was primarily in order to provide them proper exposure to Mining Operations as well as Mining Equipment (both surface and underground) and to make them wee conversant with the Safe Mining activities.

Additionally, various need based management training programs have been designed and developed for our executives at all levels. These trainings are imparted to the executives at the time of joining the new position. The Management Training Centre of each subsidiary of CIL and also the apex training center - Indian Institute of Coal Management, Ranchi conduct these MDPs as per training calendar.

Transformation Training

As CIL focuses on creating a distinctive leadership culture, embedding the Company priorities of safety, by removing non-value activities and enabling more focus on adding value; culture, by empowering teams to see, create and capture value; and productivity, by focusing on continuous improvement and better decision-making is essentially adhered to. This is a part of the management policy at CIL and holds good for the workmen too, for whom skill acquisition for moving them from conventional to semi-mechanized mines with intermediate technology is also facilitated in a well-structured manner. National Skill Development Fund(NSDF), National Skill Development Corporation(NSDC) and CIL have entered into a Tripartite MoU on 3rd May 2015 for providing training and undertake Recognition of Prior Learning to around 2.7 Lakh persons over a period of 2 years as per National Skills Qualification Framework in CIL's operational areas and neighboring regions. In the year 2016-17, 38,833 employees have been trained under Recognition of Prior Learning (RPL) program.

General Development Training

CIL organizes leadership development programs for executives across different management levels. The basic leadership development program is intended to train the lower level management executives on basic leadership competencies. Middle level management undergoes advanced leadership development programs to equip them in assuming higher roles. Two weeks training program on General Management for 189 middle level Executives of Coal India Limited was conducted at Administrative College of India (ASCI), Hyderabad. Additionally, Training program on Executive Development for 126 E4/ E5 executives was conducted at Indian Institute of Management, Lucknow. Transformational leadership program is intended for senior executives, especially for the E8 & E9 grades, as these executives are in a transition point and they would have to be prepared for top management roles.

These program are conducted in-house or in prestigious institutions in India or abroad. One Batch consisting of 15 Executives from Mining, E&M were trained at AGH University, Poland.

In CIL and its subsidiaries, 140490 employees have been trained during 2016-17. Out of which 18757 were executives and 121733 non-executives. These trainings include in- house training (training at subsidiary training centers, VTCs and also at IICM), training in other reputed institutes outside the company and training abroad.

In house training (Training at Subsidiary Training Centres and at IICM)

CIL's Subsidiary HQs, 27 Training Centres and 102 Vocational Training Centres across India and IICM impart In-house trainings to employees. Assessing the training needs of employees in each category within the subsidiary is followed by organising these trainings by respective HRD Divisions with special attention being given to skill enhancement of the employees, keeping in mind the need of Industry. Details of in-house Training imparted during 2016-17 are listed below:-

	Training	Short Training	Workshop/Seminar	Total
Executive	5060	6877	1800	13737
Non-executive	98567	21837	379	120783
Total	103627	28714	2179	134520

Training Outside Company (Within the Country)

Besides in-house training at our Training Institutes, VT centers and IICM, employees were trained within the country at reputed training institutes, in their respective field of operations and also for supplementing our in-house training efforts. Employees from eight subsidiary companies and from CIL (HQ) have been trained in those reputed institutes. The break-up is given below:-

	Training	Short Training	Workshop/Seminar	Total
Executive	1684	2532	683	4899
Non-executive	690	113	147	950
Total	2374	2645	830	5849

iii) Training Abroad

Coal India has sent 121 employees in different countries from all the subsidiary companies and CIL (HQ) during the year 2016-17.

	Training	W/Shop/Seminar/Conference	Total
Executive	120	1	121
Non-executive	0	0	0
Total	120	1	121

iv) Initiatives

- CIL has been recruiting fresh and dynamic young bloods in different disciplines for the last few years consistently. A special attention has been given in grooming these young and energetic persons in their respective fields throughout the year. In addition to the introductory concept on Coal Industry, they have been trained on basic Management Techniques (MAP) and also in their

respective Technical fields (TAP) through regular courses organized by IICM with the reputed faculties. Special attention has also been given in tuning them in their respective specialized working areas by on-the-job training throughout the year.

- As MTs of Excavation and E&M disciplines are posted in different Coal Mines, in order to provide them proper exposure to Mining Operations as well as Mining Equipment (both surface and underground) and to make them conversant with the Mining activities, 5 weeks intensive training for 168 AMs/MTs was organized at Indian School of Mines, Dhanbad, the premier Mining Institute of our country during the year 2016-17.
- Training program on General Management for Middle Level Executives of Coal India Limited for two weeks is done by making a tie up with Administrative College of India (ASCI), Hyderabad to develop Executives to take up higher responsibilities and occupy senior positions. 189 Participants have attended the course for the financial year, 2016-17.
- Training program on Executive Development for E4/ E5 executives of Coal India Limited is done by making a tie up with Indian Institute of Management, Lucknow. 126 Participants have attended the course for the financial year 2016-17.
- One Batch consisting of 15 members comprising Mining, E&M are trained in AGH University, Poland.
- A Tripartite MoU has been entered into among National Skill Development Fund (NSDF), National Skill Development Corporation (NSDC) and CIL on 3rd May, 2015 to provide training and undertake Recognition of Prior Learning to around 2.7 Lakh persons over a period of 2 years as per National Skills Qualification Framework in CIL's operational areas and neighboring regions.
- For the Year 2016-17, Under RPL (Recognition of Prior Learning) 38,833 employees are trained.
- 620 no. of employees of CIL belong to Persons with Disability(PWD) category and 26190 no. of employees belong to the minority communities.
- The representation of SC/ST employees in total manpower of CIL and its Subsidiary Companies as on 01.01.2015, 01.01.2016 and 01.04.2017 is given below:-

As on	Total Manpower	Scheduled Caste		Scheduled Tribe	
		Nos.	Percentage	Nos.	Percentage
1.1.2015	336675	73527	21.84	41212	12.24
1.1.2016	326032	70502	21.62	39669	12.17
1.4.2017	310016	70513	22.74	39721	12.81

Employee Diversity

CIL believes that diversity at the workplace positively impacts work performance and work environment through superior consumer-centricity, innovative ideas and better employee engagement. The intent is to ensure that there is no discrimination in compensation, training and employee benefits, based on caste, religion, disability, gender, sexual orientation, race, color, ancestry, marital status or affiliation with a political, religious or union organization or majority/minority group. Given the socio-cultural diversity of our country, CIL's recruitment and selection processes are geared towards enabling representation from across regions, ethnicities, religions and different social strata.

The ratio of the basic salary and remuneration of women to men is 1:1. For payment of salary and wages, we follow the NCWA for Non Executives and specified pay scales for Executive cadre employees with no discrimination on the basis of gender.

There is no difference between basic salaries for male and female at any position within the organization. The principle of **'Equal Remuneration for men and women workers for Work of Equal Value'** is being followed at CIL. The Company provides equal opportunity to both men and women employees in all the matters, such as, salaries/payments, career growth, social security measures etc.

Empowering Women

Women empowerment is a reality at CIL and we ensure that all those are taken care of. At our organization, all female employees are entitled to maternity benefits as per the statute i. e. Maternity Benefit Act. Further, female employees (executives and non-executives) are entitled to Child Care Leave that can last up to 2 years. The female employees after availing the said leave, return to their work place and continue to remain in the company's employment. There is no provision of parental leave for male employees.

CIL and WIPS contributing to women empowerment

CIL values its female employees in the organization and the women workforce has always been an integral part of business. Special programs are conducted through forums, namely, Women in Public Sector (WIPS) to encourage women to join CIL. WIPS plays a catalytic role in improving the status of women in and around public sector undertakings. Female employees are entitled to the provisions like Maternity Benefit Act and Equal Remuneration Act.

Proactive efforts are made at CIL to encourage, catalyze and provide women from the community toward undertaking steady income generation activities. The purpose is to help women, often a marginalized section of the society, to secure sustainable livelihood opportunities. Various establishments of the company are actively providing trainings to female employees to get nurtured in the professional sphere. In order to achieve this, many Nurse training institutes have been set up where training is imparted to the trainee nurses so that they may find an opportunity in or around the industry. Likewise, Mahila Mandals, Mahila Samiti and other such forums are working in different units and establishments of the coalfield areas to look after the welfare of female employees and female spouses or dependents. Awareness is inculcated through symposiums, seminars, training programs and cultural activities which are organized on a regular basis.

The Company has zero tolerance towards sexual harassment at the workplace and has adopted a policy on prevention, prohibition and redressal of sexual harassment at workplace in line with the provisions of the Sexual Harassment of Women at Workplace (Prevention, Prohibition and Redressal) Act, 2013 and the Rules there under. In line with the requirements of the Act, a Women's Cell has been constituted to look into the complaints of women employees with respect to discrimination and sexual harassment. Guidelines of the National Commission for Women are usually adhered to while addressing to these grievances.

A forum for Women in Public Sector Cell (WIPS) has been set up in Kolkata and five subsidiary companies including ECL, BCCL, CCL, SECL and CMPDI. Each WIPS cell is headed by a coordinator who plans and executes the activities of the forum with the help of a duly appointed executive committee.

Employee Benefit

An organization's output is only the sum total of its employee's endeavours. Employee well-being is a continuous process at CIL, enabling employees to feel good, live healthy and work safely. The Company has continued to invest in progressive employee relations characterised by the core principles of trusteeship, fairness and equity, industrial democracy and partnership with enlightened trade unions, which has stood the test of time.

All employees of CIL are covered under the Coal Mines Provident Fund scheme which is a contributory fund with equal shares both by employee and the company operated and maintained by the Coal Mines Provident Fund (CMPF) Authorities.

The liability on the Balance Sheet date on account of gratuity and leave encashment is provided for on an actuarial valuation basis by applying the projected unit credit method. Further we have created a Trust with respect to the establishment of Funded Group Gratuity Scheme (cash accumulation) through Life Insurance Corporation of India. Contribution is made to the said fund based on the actuarial valuation.

Benefits on account of LTA/LTC, Life Cover Scheme, Group Personal Accident Insurance Scheme, Settlement Allowance, Retired Executive Medical Benefit Scheme, Compensation to Dependents of the deceased in mine accidents are also provided to CIL's employees.

Employee Benefits Expense(In Crores)		
	For the year ended 31.03.17	*For the year ended 31.03.16(Restated)
Salary, Wages, Allowance, Bonus etc	21,933.75	21,760.68
Provision for National Coal Wages Agreement (NCWA)-X*	2,101.39	-
Executive Pay Revision*	95.10	-
Ex-Gratia	1,666.22	1,641.49
Performance Related Pay	198.97	273.59
Contribution to P.F.& Other Funds	2,666.44	2,635.76
Gratuity	1,029.68	912.12
Leave Encashment	1,349.67	754.07
Voluntary Retirement Scheme	0.91	3.05
Workman Compensation	10.15	4.49
Medical Expenses for existing employees	427.45	384.71
Medical Expenses for retired employees	96.43	70.36
Grants to Schools & Institutions	139.69	135.31
Sports & Recreation	27.27	25.05
Canteen & Creche	4.17	4.07
Power- Township	909.59	867.03
Hire Charges of Bus, Ambulance etc.	63.01	53.04
Other Employee Benefits	794.4	601.96
Total	33,514.29	30,126.78

*-The restated employee benefits expenses of 2015-16 is on account of reclassification of actuarial valuation of gratuity, leave encashment etc. as per Ind AS, a part of such gratuity/leave encashment etc, is now classified under other comprehensive income.

Further, there were prior period adjustment effect given as per Ind AS.

Employee Welfare

It is important for us to keep our employees constantly motivated and provide them with an opportune working environment. We have dedicated residential and commercial areas, sports

facilities, clubs, schools and medical facilities for employees in remote areas. We also organize events during festivals and special occasions for employees and their families. Innovation being a significant aspect of CIL's culture, employees are continuously encouraging us to be a part of it.

Nurturing quality talent and caring for the well-being of employees are an integral part of CIL's work culture. This approach focuses on creating a conducive work environment that helps deliver winning performance. Employee welfare is an important part of our People's coexistence plan at CIL. Coal India Welfare Board is the decision making forum when it comes to welfare policies to create a better standard of living for all the employees of the company. This extends to various members and associations as well as their concerns. The members include Central Trade Union representatives and CIL Management. Both parties meet regularly to hold discussions on the welfare measures and also, to review the implementation of different welfare schemes.

Housing:

The most important role of any organization today, is to ensure that there is a continuous improvement in its social, environmental and economic performance along with its operational success. To put a roof over one's head is one of the primary areas of livelihood. The availability of houses has increased to 3,97,379 from 1,18,366 (including sub-standard houses) at the time of Nationalization.

Water Supply:

Water is another indispensable and scarce resource, more so in India, which sustains 17% of the world's population with merely 4% of the world's fresh-water reserves. Falling water levels can severely impact industrialization. CIL is proud to share that efforts have been made to water harvesting at our mines and CIL is aspiring to become a water positive company. Water is a resource that can drive the human race and we respect this fact by creating better access to water. As against 2.27 Lakhs people having access to potable water at the time of Nationalization in 1973, we presently ensure that a populace of 3,97,379 Lakhs has been covered under the water supply scheme.

Medical Facilities:

Our employees are our most valuable resources. CIL constantly strives to better the social living status of our employees and their families with easily accessible world-class medical treatments and frequent medical check-ups. Our employees and their family members can avail this medical care, thus resulting in a healthy workforce, high employee engagement, and improved productivity. The company has also developed medical facilities at all its operational areas. There are about 80 hospitals, 376 dispensaries and 541 ambulances engaged in providing medical services to the employees and their family members. There are 1150 medical officers and specialists who provide round the clock medical services to them. Besides this, there are five Ayurvedic Dispensaries that are being run in the Subsidiaries of Coal India Limited to provide an indigenous system of treatment to workers.

Educational Facilities:

CIL shows its concern and gratitude to the local community by focusing its efforts on holistic growth, primarily through education and other various skill-building measures. The company has undertaken numerous high-impact social activities to shape the lives of countless children by empowering them with quality education. The subsidiary companies of CIL have been providing financial assistance deficit grant and infrastructure facilities to certain renowned schools. Presently 43 DAV Public Schools, 14 Kendriya Vidyalaya, and one Delhi Public School, 2 Saraswati Vidya Mandir, 1 Ram Krishna Vivekanand Vidyapith and 1 Vivekanand Kendriya Vidyalaya ensure that quality education is imparted to the wards of the company employees as well as others residing in the Mines areas. Privately Managed

schools in ECL, BCCL and CCL are provided grant - in - aid to encourage education in the operational areas of subsidiaries.

Grant sanctioned for Schools including privately managed school:-

Company	Amount (Figs. in Lakh Rupees)
ECL	963.88
BCCL	186.93
CCL	2375.68
WCL	1155.24
SECL	5371.90
MCL	2759.79
NCL	3004.00
CMPDIL	1.00
Total	15818.42

Coal India Scholarship Scheme:

The objective of the Coal India Scholarship scheme for Project Affected People is to strengthen the future of the project affected communities by helping the scholarship spread of quality professional education among the meritorious and talented young generation who often get deprived of such opportunities due to non-availability of means to pursue such education. Imbursement of full Tuition fees, Hostel fees/Mess Charges (Accommodation charges) and Incidental fee of Rs. 10,000 /- (i.e., Electricity charges, Water Rent, Caution Money and similar charges) as a part of accommodation Charge/Mess charge. A total of 100 scholarships (94 Scholarships for Engineering discipline - i.e. Mining, Electrical, Mechanical, Civil, Computer/I.T., Environment & Electronics & Telecommunications and 06 scholarships for Medical Discipline) shall be awarded on merit-cum-means basis every year. In total 7170 scholarships were awarded and tuition fees & hostel charges were reimbursed to 1142 students.

Scholarship and Reimbursement of tuition fees and Hostel Charge and Grants sanctions to schools

Company	No. of Scholarship Awardees	No. of students (whose tuition fees and Hostel Charge reimbursed).
ECL	909	89
BCCL	46	116
CCL	777	56
WCL	2113	99
SECL	1862	308
MCL	1081	188
NCL	278	272
CMPDIL	104	14
Total	7,170	1142

Statutory Welfare Measures: Certain characteristics of mining industry in general and coal mining in particular make welfare more significant in this industry. For the size of investments and mining operations, the proportion of manpower to be looked after and welfare facilities to be provided is substantial. In accordance with the provision of the Mines Act 1952 and Rules and Regulations framed under the same, subsidiaries of Coal India Limited are maintaining various statutory welfare facilities for the coal miners such as Canteen, Rest Shelters, Pit Head Baths and more.

Co-operative Stores and Credit Societies: In order to supply essential commodities and Consumer goods at a cheaper rate in the Collieries, 16 Central Co-operatives and 99 Primary Cooperative Stores are functioning in the Coalfield areas of CIL. In addition, 158 Co-operative Credit Societies are also functioning in the Coal Companies.

Banking Facilities:

The salary of all employees in CIL is being paid directly through different banks and their branches. Thus, employees and the workforce were encouraged to open the bank accounts to receive their monthly wages. The Management is trying to provide infrastructure facilities to the various Nationalised Banks so that they may open their Branches and Extension Counters in the Coalfields for the benefit of the workers. Various nationalised banks have started their operations and are running their operations smoothly, efficiently and profitably. At present more than 427 branches and 48 Extension Counter of nationalized banks are operational under the command area.

Sports:

Coal India Limited has adopted a comprehensive Sports Policy for the overall development of sports activities in the CIL and its subsidiaries in 2013. In accordance with the sports promotion objectives of the Government of India. As per the sports policy, Coal India Sports Promotion Association (CISPA) has been registered under the West Bengal Societies Registration Act, 1961. CISPA has undertaken several sports activities at the National Level and International Level.

Special Cash Award:-

During 2016-17, 26 meritorious Sons and Daughters of employees of CIL(Hqrs.),Kolkata received special Cash awards along with Eight students who have secured 90% or above marks in the Class-XII Board level examination and Eighteen students who have secured 90% or above marks in the Class-X Board level examination were given cash award @Rs.7,000/- and @Rs.5,000/- respectively from Desk Offices of subsidiary companies. An amount of Rs.1,46,000/- was disbursed as Special Cash Award.

Health & Safety

CIL places great value on the health and safety of our workforce, protection of our assets, value to stakeholders and the environment. Through our robust management systems, the company has been able to translate these values into systems and processes that drive performance excellence and deliver results. We have developed a comprehensive safety management system in order to ensure a safe workplace for every employee. As a matter of fact, it is our philosophy that nothing is more important than the safety and health of the employee. This philosophy of ours is demonstrated through the safety and health principles which we have adopted and have embedded in our day-to-day activities to foster health, safety and well-being of employees and build culture of empowerment and enrichment.

CIL's Safety policy includes provision of adequate funds for safety, deployment of adequate numbers of trained manpower ensuring safety in mining operations; establishment of an Internal Safety Organization (ISO) in all the subsidiaries of CIL to monitor the implementation of CIL's Safety Policy; continuous and sustained improvement in technological inputs for mining operations; support of scientific planning and R&D activities made available through the use of in-house expertise of CMPDIL and in collaboration with the other institutes; and finally, ensuring workers' participation in every forum for monitoring safety status in the mines.

In India, the operations in coalmines are regulated by the Mines Act, 1952, Mine Rules –1955, Coal Mine Regulation-1957 and several other statutes framed thereunder. Directorate-General of Mines

Safety (DGMS) under the Union Ministry of Labour & Employment (MOL&E) is entrusted to administer these statutes. The following are the statutes that are applicable in coal mines for occupational health and safety (OHS).

SN	Statute
1	The Mines Act -1952
2	The Mines Rules -1955
3	The Coal Mine Regulation -1957
4	The Mines Rescue Rules -1985
5	The Electricity Act- 2003
6	Central Electricity Authority (measures related to safety & supply) Regulations - 2010
7	The Mines Vocational Training Rules -1966
8	The Mines Crèche Rules -1966
9	Indian Explosive Act, 1884
10	The Explosive Rules - 2008
11	Indian Boiler Act, 1923
12	Mines Maternity Benefit Act & Rules -1963
13	The Workmen Compensation Act - 2009
14	The Factories Act - 1948 Chapter -III & IV

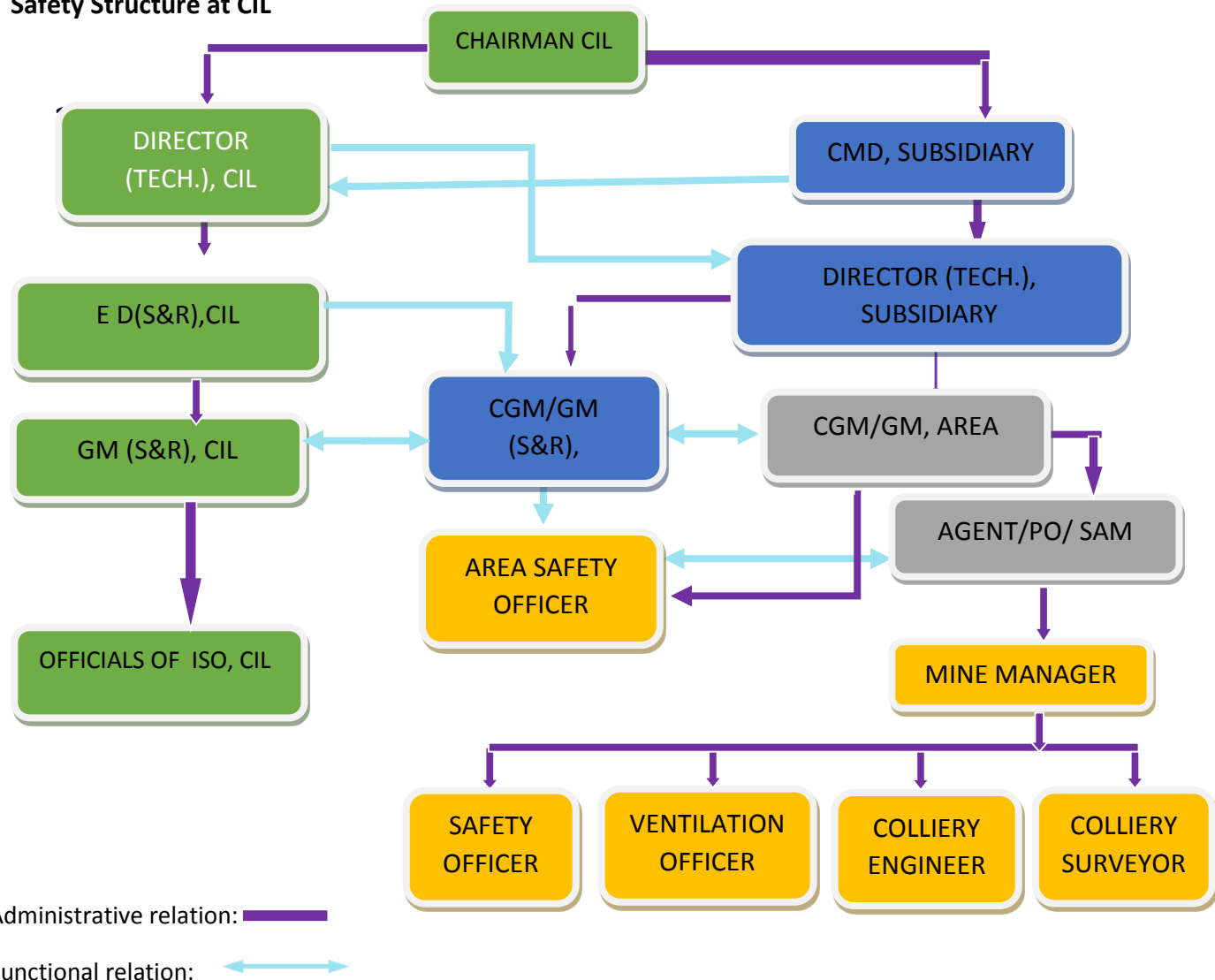
CIL essentially follows the Occupational Health and Safety (OHS) compliances as per DGMS standards which is mandatory for all its coal mines.

Safety Governance:

It is to be noted safety is one of the main missions of CIL. CIL has given utmost importance to safety of their employees. As a part of it, more than five safety audits by the external experts were conducted during the year. The company prepares annual safety plan and long term safety plan at the beginning of every calendar year to effect improved safety in operation as per geo-mining needs, to prepare the units for onset of monsoon, to fulfil implementation of decision by committee on safety in mines safety conferences, and safety audit and to take the measures for overcoming accident proneness keeping priority in sensitive areas like roof management, haulage, explosive, machinery including HEMM etc.

Multi-level monitoring of the implementation of the safety plans through internal safety organisations at the company headquarters and area safety officers at area level and down the line is carried out meticulously to achieve high standards of Mines Safety.

Safety Structure at CIL



Safety Management Plan at CIL

All the mines of CIL have their separate Risk Assessment based Safety Management Plan. These plans are prepared by multi-dimensional teams of the individual mines based on the local conditions prevailing there.

Various initiatives taken to enhance safety in 2016-17

To improve the standard of safety, CIL and its subsidiaries have vigorously pursued several new initiatives in the year 2016 to work concurrently with the on-going safety related measures apart from the compliance of statutory requirements for safety, which are given below.

1. Internal Safety Organization (ISO): Continuous monitoring and review of safety status of each and every mines is being done by the multi-disciplinary teams of the Internal Safety Organization (ISO).
2. Training for preparation of Risk Assessment based SMP: Executives who have undergone specialist training on risk assessment through SIMTARS, Australia are engaged in imparting training and upgrading the knowledge of mine level executives as well as members of safety committees of individual mines to identify the hazards and evaluate the associated risks in the mines so as to prepare Risk assessment based Safety Management Plans (SMPs).
3. Preparation and Implementation of Risk Assessment based Safety Management Plan (SMP): The Risk assessment based Safety Management Plans (SMPs) have been prepared for all the mines of CIL and control measures suggested thereof are being implemented as a continuous ongoing process.
4. Standard Operating Procedure (SOP): Risk assessment based site specific Standard Operating Procedures (SOP) are formulated and being implemented for various mining and allied operations.
5. Safety Audits: Safety Audit of all producing / operative mines have been conducted by multi-disciplinary inter-company teams.
6. Dump stability study: Assessment of OB dumps have been conducted using expertise of CMPDIL and multi-disciplinary ISO teams in most of the opencast mines.
7. Guidelines on corrective measures: After root-cause analysis of the fatal accidents which occurred at different point of time in 2016, several directives / guidelines on corrective measures to be taken for prevention of recurrence of similar type of accidents in future have been issued by the Safety & Rescue Division of CIL.
8. Adoption of State-of-the art technology at suitable geo-mining locales:
 - Adoption of Mass Production Technology in more number of UG mines to reduce the number of workmen at hazardous areas.
 - Deployment of more number of Surface Miners to eliminate blasting operation in OCPs.
 - Deployment of relatively higher capacity HEMM in more number of OCPs.
 - Mechanization of UG drilling.
 - Phasing out manual loading in UG mines.
9. Adoption of State-of-the art mechanism for Strata Management:
 - Scientifically determined Rock Mass Rating (RMR) based Support System.
 - Strata Control Cell for monitoring efficacy of strata support system.
 - Roof bolting by using mechanized Drilling for Roof Bolting.
 - Use of Resin capsules in place of Cement capsules.
 - Use of modern Strata Monitoring Instruments.
 - Imparting quality training to support crews & front-line mine officials.
10. Mechanism for monitoring of mine environment:
 - Detection of mine gases by using Methanometer, CO-detector, Multi-gas detector etc.
 - Continuous monitoring of mine environment by installing Environmental Tele Monitoring System (ETMS) & Local Methane Detectors (LMD) etc.
 - Regular Mine Air Sampling and Analysis by Gas Chromatograph.
 - Personal Dust Sampler (PDS).
 - Use of Continuous Ambient Air Quality Monitoring System (CAAQMS) in large OCPs to assess the ambient dust concentration and take suitable mitigating measures.

11. Underground Mine Ventilation:

- Supply of sufficient quantity of air to all work places by installing suitable Main Mechanical Ventilator (Surface), Auxiliary Fans, Booster fans (UG), ventilation stoppings, air Crossings etc.
- Conducting Pressure - Quantity Survey on regular basis.
- Using Modern instruments for air measurement.

12. Water Danger Management:

- Conducting Check Survey to eliminate errors in mine survey.
- Preparation and maintenance of seam-wise Water Danger Plan.
- Preparation and implementation of Monsoon Preparation Plan.
- Adequate Pumping Facilities & adequate capacity of sumps.
- Liaison with the State Meteorological Dept. & Dam Authority, if any.
- Construction of embankments with proper design against water bodies.
- Advance borehole for locating water body in underground.
- Inter-mine joint survey between adjoining mines to prove inter-mine barriers to prevent transference of danger.

13. Steps for prevention accidents in OCPs:

- Formulation and implementation of Mine-specific Traffic Rules.
- Code of Practices for HEMM operators, Maintenance staff & others.
- Training of Contractor's Workers involved in contractual jobs.
- Training on Simulators to dumper operators.
- Lighting arrangement using high mast towers for increasing level of illumination.
- Eco-friendly Surface Miners for blast free mining and avoidance of associated risks.
- Dumpers fitted with Proximity Warning Devices, Rear view mirrors and camera, Audio-Visual Alarm (AVA), Automatic Fire Detection & Suppression system etc.
- Ergonomically designed seats & AC Cabins for operators' comfort.
- Wet Drilling & water Sprinklers for dust suppression.
- Use of Shock Tubes & Electronic Detonators for control of ground vibration & fly rocks.
- GPS based Operator Independent Truck Dispatch System (OITDS) in large OCPs for tracking movement of HEMMs inside OC mine.

14. Mine Safety Inspection:

- Round-the-clock Supervision of all mining operations by adequate number of competent & statutory Supervisors and mine Officials.
- Periodic mine Inspections by Head Quarter and Area level senior officials.
- Surprise back shift mine Inspections by mine and area level officials.
- Regular Inspection by Workmen Inspectors appointed in each mine.
- Periodic mine Inspections and interactions by the safety committees of mines and areas
- Regular mine Inspection by officials of Internal Safety Organization.

15. Safety Training:

- Risk Management and preparation of "Safety Management Plan".
- Initial and Refresher training & On-the-Job Training as per statute.
- Training on Simulators for dumper operators.
- Skill up-gradation of all frontline officials.
- Sensitization training of all employees including members of Safety Committees and contractual workers.

16. Emergency Response System:

- Risk based Emergency Action Plans have been prepared for every mine.
- Mock Rehearsals are conducted regularly to examine the efficacy of the Emergency Action Plan.
- Emergency Escape Routes are clearly demarcated belowground.
- Check list is prepared for dealing with an emergency in mine.
- Flow Chart has been prepared for sending information regarding crisis / disaster in mines from site of accident to the Ministry of Coal, New Delhi.

Workers participation in Health and Safety Management

The company has formal management – worker health and safety committees and up to 25% of the workforce of CIL are representing these committees. The employees of CIL don't have such high risk for any specified diseases. All the employees of CIL are part of trade unions and there is formal arrangement with trade unions for health and safety management of employees.

Local	
• Personal protective equipment;	YES
• Joint management-employee health and safety committees;	YES
• Participation of worker representatives in health and safety inspections, audits and accident investigations;	YES
• Training and education;	YES
• Complaints mechanism;	YES
• Right to refuse unsafe work; and	YES
• Periodic inspections.	YES
Global	YES
• Compliance with the ILO;	YES
• Arrangements or structures for resolving problems; and	YES
• Commitments regarding target performance standards or level of practice to apply.	YES

Details of the types of injuries that occurred during the Calendar Year 2016.

Region/Subsidiaries	Fatal Accidents	Fatalities	Serious Accidents	Serious Injuries
ECL	9	26	42	44
BCCL	6	6	5	5
CCL	4	4	7	8
NCL	4	4	13	13
WCL	5	5	14	14
SECL	8	9	25	27
MCL	2	2	7	7
NEC	0	0	0	0
CIL	38	56	113	118

Note: Figures are subjected to reconciliation with DGMS.

Company	Fatalities		Injury Rate (IR) i.e. Fatality Rate per M te. of coal produced in 2016	
	Male	Female	Male	Female
ECL	26	0	0.61	0
BCCL	6	0	0.17	0
CCL	4	0	0.07	0
NCL	4	0	0.05	0
WCL	5	0	0.12	0
SECL	9	0	0.07	0
MCL	2	0	0.01	0
NEC	0	0	0.00	0
CIL	56	0	0.10	0

Note: 1. Accident Statistics are maintained calendar year-wise in conformity of DGMS practices and Figures are subjected to reconciliation with DGMS.

Causes of these fatalities were due to:

- Trucks & Dumper,
- Fall of roof,
- Fall of Person,
- Non Transport M/c,
- Miscellaneous,
- Electricity,
- Side Fall,
- Haulage,
- Explosive
- OB dump slide.

Safety Statistics

Accidents statistics is the relative indicator for safety status in mines. Over the years, the safety performance of CIL in terms of accident has improved significantly. CIL has achieved

This improvement in mine safety in CIL is attributed to the following contributing factors:

- Collective commitment and synergetic collaboration of the Management, Employees, the regulator (DGMS) and Trade Unions.
- Use of state-of-the-art technology in the field of Mining Methods, Mining Machineries and Safety Monitoring Mechanism.
- Continuous improvement in knowledge, skill and responsiveness of workforce through imparting quality safety training and relentless safety awareness drives.
- Constant vigil, round-the-clock supervision and assistances from various quarters.

Gist of CIL achievements in Safety for the year 2016-17

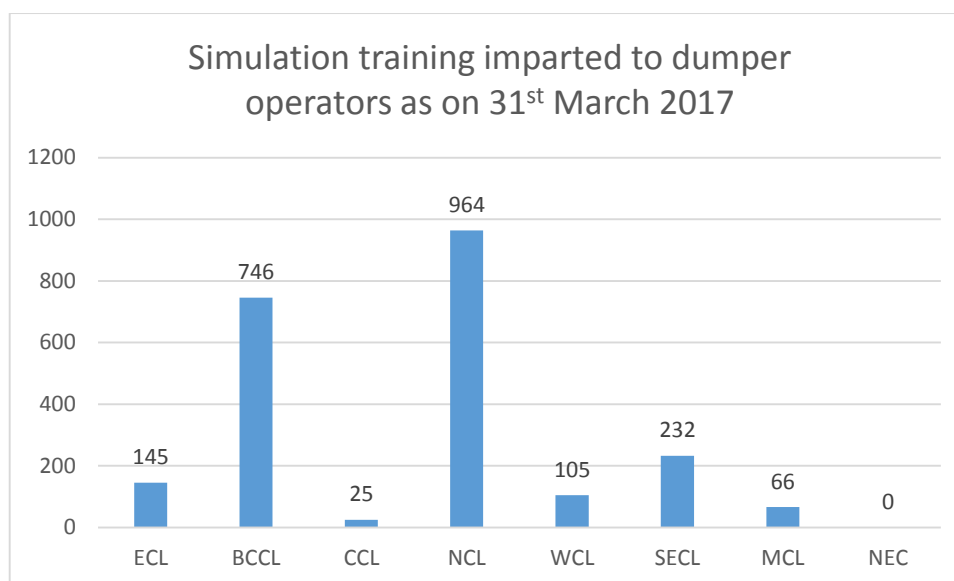
Sl. No.	Items / Parameters	Quantity
1	Safety Audit of Mine	366 mines
2	Reduction of Manual loading in UG mines	20 UG mines
3	Adoption of Resin type capsules	26 UG mines
4	LED cap lamp	28140 Number
5	Commissioning of Man Riding System	8 UG mines
6	Training to front mine officials / PSC members on risk assessment based SMP by SIMTRAS accredited executives of CIL	3450 Number
7	Training on Simulator to Dumper operators	412 Number

Safety Training:

Safety of the employees has always been paramount at CIL. There has always been an effort to continually improve and instill a culture of safety within every employee. At CIL, the focus is always on establishing safe working practices through comprehensive risk assessment and constructive dialogue. The company encourages safety training and re-training of workmen including contractor's workers and supervisors through safety awareness programs, regular safety drives and safety weeks, frequent publication of posters at public and gathering places, etc. All employees are given training as per Mine Vocational Training Rules- 1966 (MVTR-1966). Advanced special Training is being given by the SIMTARS accredited Trainers for preparation of a risk assessment based Safety Management Plan (SMP).

Company-wise status of Simulation training imparted to dumper operators as on 31st March'2017 is as under:-

Company	Simulation training imparted to dumper operators as on 31 st March 2017
ECL	145
BCCL	746
CCL	25
NCL	964
WCL	105
SECL	232
MCL	66
NEC	0
CIL (Total)	2283



To improve safety standard, CIL and its subsidiaries have vigorously pursued several measures in the year 2016 along with on-going safety related initiatives apart from compliance of statutory requirements for safety.

Continuous review of safety status of mines is being done by the multi-disciplinary Internal Safety Organization (ISO). Executives who have been trained by SIMTARS, Australia are engaged for imparting training and upgrading the knowledge of mine level executives as well as members of safety committee of mine to identify the hazards and evaluate the associated risks in the mines and prepare Risk assessment based Safety Management Plans (SMPs).

The Risk assessment based Safety Management Plans (SMPs) have been prepared for all mines of CIL and control measures suggested thereof in SMPs are being implemented. It is a continuous ongoing process. Risk assessment based site specific Standard Operating Procedures (SOP) are formulated and being implemented for various mining and allied operations. Safety Audit of all producing / operative mines have been conducted by multi-disciplinary inter-company teams. Assessment of OB dumps have been conducted by using expertise of CMPDIL and multi-disciplinary ISO teams in most of opencast mines. After analysis of fatal accidents which occurred at different point of time in 2016, several directives / guidelines on corrective measures to be taken for prevention of recurrence of similar type of accidents in future have been issued by the Safety & Rescue Division of CIL.

Rescue services for emergency response system

CIL is maintaining a well-established rescue team comprising of six Mine Rescue Stations, 14 Rescue Rooms-with-Refresher Training facilities (RRRT) and 17 Rescue Rooms.

All Rescue Stations and Rescue Rooms are fully equipped with an adequate number of rescue apparatus as per the Mine Rescue Rules (MRR) - 1985. This rescue team is staffed by adequate numbers of Rescue Trained Personnel (RTPs) as per the MRR-1985. All RTPs are being periodically retrained to conduct rescue operations in hot, humid and irrespirable atmospheres in modern training galleries as well as within the mines.

Permanent Brigade Members and RTPs are on call 24x7 for rescue and recovery operations.

The details of Mine Rescue Station and Rescue Rooms established at strategic locations spreading across different subsidiaries are as under:-

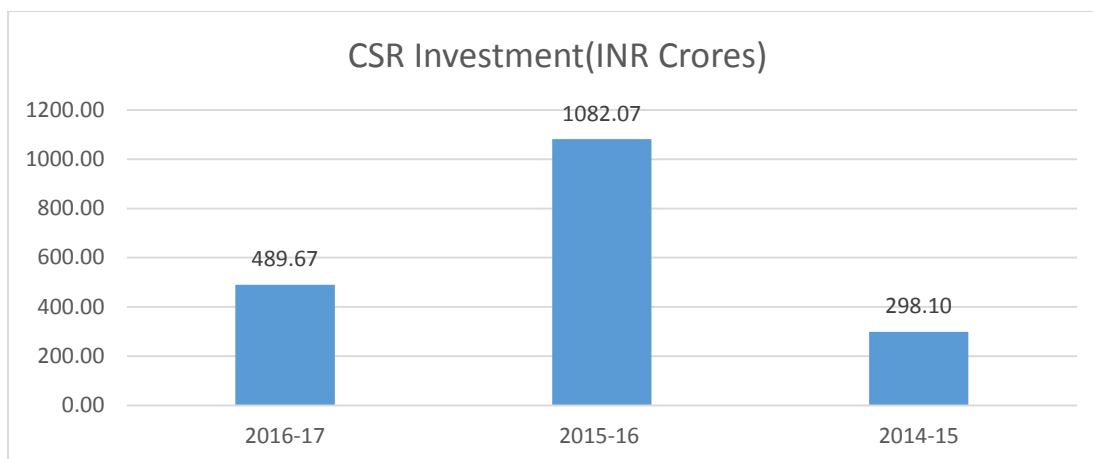
Company	Rescue establishment presently operating		
	Mine Rescue Station (MRS)	Rescue room with Refreshers Training (RRRT)	Rescue Room (RR)
ECL	Sitarampur	Kenda	Jhanjra ,Kalidaspur Mugma
BCCL	Dhansar	Sudamdih	Moonidih, Murulidih Madhuband
CCL	Ramgarh	Kathara & Churi	Dhori, Kedla & Urimari
SECL	Manindragarh	Sohagpur, Kusmunda, Bisrampur, Baikunthpur, Johilla	Chirimiri, Raigarh, Bhatgaon, Jamuna&Kotma, korba
WCL	Nagpur	Parasia, Pathakhera,Tadali	Damua , New Majri & Sasti
MCL	Brajraj Nagar	Talcher	-
NEC	-	Tipong	-
Total	6	14	17

Corporate Social Responsibility at CIL

CIL's CSR Committee and its subsidiaries protect and safeguard societal value embracing disadvantaged sections of the society. Our policy on Community Development programs for healthcare, child education, women empowerment, training programmes and community responsibility of the socially excluded section of the society initiate economic empowerment and bridges the gap of inequality. The rural development programs bring socio-economic development of the marginalised section. This is done in a wholesome manner, by reaffirming to the corporate motto of Growing with Surroundings - an ideal which is in consonance with the national agenda of Inclusive Growth. To ensure that our activities have a positive impact on the lives of people living in close proximity of our operations and the society broadly, we engage with the surrounding and local community.

The Mines of CIL and its subsidiaries are located in different parts of the country spread in 8 States, and relatively in isolated areas with little contact to the outside society. Mining of coal has profound impact on the people living in and around the areas where the mines are established. The obvious impact of introduction of any production activity in such areas change the traditional lifestyle of the original inhabitants and also changes the socio-economic profile of the area. Hence, as per company's CSR policy, the primary beneficiaries of CSR are land oustees, PAP and those staying within the radius of 25 Kms of the Project.

Apart from improving the quality of lives of people, the CSR initiative is also committed towards collectively and partnering with these people in inclusive growth which is also the goal of the company. This has been taken care of by providing opportunities within mutually beneficial relationships.



The Composition of the CSR Committee includes a two tier CSR Committee as per the DPE's Guideline. This has been further elaborated as follows:

CSR policy Implementation Mechanism

Policy on CSR:

Policy on Corporate Social Responsibility of CIL has been framed after incorporating the features of the Companies Act 2013 and as per notification issued by Ministry of Corporate Affairs, Govt. of India on 27.02.2014 as well as DPEs guidelines and broadly covers the following:-

- Welfare measures for the community at large, so as to ensure the poorer section of the Society derived the maximum benefits.
- Contribution to the society at large by way of social and cultural development, imparting education, training and social awareness especially with regard to the economically backward class for their development and generation of income to avoid any liability of employment.
- Protection and safeguard of environment and maintaining ecological balance.

According to CSR Policy of CIL, the budget on CSR is allocated at 2% of the average net profit of the Company during the three immediate preceding financial year or Rs.2/- per te of coal produced in the previous year, whichever is higher.

Modalities and Mechanism of Implementation of CSR:

The poor and needy Section of the Society living in and around the mining areas in different states of India are the major beneficiaries covered under the CSR activities of CIL. The CSR Programme also cover the existing components of Special Corporate Plan (SCP) and Tribal Sub Plan (TSP) for development of the SC and ST population besides development components for the entire population.

CIL is a holding company that executes CSR activities throughout the country as well as in the areas which are beyond the jurisdiction of subsidiary companies. As far as subsidiary companies are concerned, the CSR policy is operational within a 25 Kilometer radius of the projects and mines as well as other areas including the Headquarters for which 80% of the budget is allocated. The balance 20% is spent within the State or States in which the subsidiary companies operate. CIL has entered into an MOU with the Tata Institute of Social Sciences (TISS), a National CSR hub for implementation of CSR activities.

Drinking Water

CIL has successfully installed 130 nos. of deep bore wells in Sidhi District, Madhya Pradesh for ensuring regular water supply. We have given financial assistance for community arsenic mitigation project in Varanasi, Ghazipur and Ballia districts of Uttar Pradesh. For the betterment of community, we have succeeded in installing 100 hand pumps in backward districts of district Ghazipur and 44 hand pumps in Sundarban Area. In constant endeavor to support community, we have setup up community drinking water project for the people of Bishnupur. Also for residents of Shravasti constituency in Uttar Pradesh, 275 number of India Mark hand pumps were installed.

Education

We have always promoted education for betterment and upliftment of community, we have made felt our presence by giving BPL Scholarship in West Bengal and construction of home for underprivileged/ orphaned boys in Jharkhand. Over years of our commitment to educate community to bring equality, self-dependency and for economic growth of the nation is very successful with the help of various NGOs and Education foundations. We have financially contributed for infrastructure development and purchasing of desks and benches.

Environmental Sustainability and Conservation of Natural Resources

Our mission to mitigate the threat to existing ecosystem and sustainability of income generating activities has increased our role in environment and social wellbeing. We have embraced responsibility to protect environmental vulnerability. Some of them are

- Adoption and annual maintenance of butterfly habitat
- Installation of Solid Waste Management Plants at prominent temples
- Financial support for Himalaya Cleaning Campaign as part of the Swachh Bharat Abhiyan
- Establishment of sixteen Central Ambient Air Quality Monitoring Systems (CAAQMS) in ten cities

Healthcare

We have shown our accountability and commitment towards the community by improving the quality of life of our stakeholders by bringing them under umbrella of happy and healthy life. The purpose of good health and proper amenity is ensured by us by reaching proactively and providing the basic medical attention.

- Financial assistance for purchase of emergency ambulance service fully equipped with medical facility in South 24 Parganas, West Bengal
- Conducting eye screening and cataract operation camps to reduce avoidable blindness in rural and backward areas of the country
- Financial assistance for procurement of CT scan machine and cath lab equipment to provide affordable healthcare
- Fund transfer to WCL for financial assistance to Dr. Aabaji Thatte Sewa aur Anusandhan Sanstha for National Cancer Institute, Nagpur
- Financial support towards purchase of equipment for digital pathological laboratory
- Financial assistance for Bone marrow transplant of 2 underprivileged children and distribution of medicines
- Construction of satellite eye hospital at Alwar, Rajasthan
- Construction of blood bank with component separation facility at IMA, Kanpur premises
- Conducting Medical Camps

Promotion of Sports

Sports culture to support for training and preparation of sportspersons for Olympics and Paralympics in different games is truly adopted by CIL and we have given financial assistance for CSR activities of CCL - Sports complex at Khelgaon (Hotwar), Ranchi. We have constantly brought into focus not only health but also active participation in sports and to attend sporting events.

Rural Development Projects

We have reached society by holistic development of rural areas encompassing various facets of people's lives. Without annulling the culture and bringing modernity by motivating locals to participate of both genders to ensure progress and development, we have brought a closer link of the detached community.

Sanitation

The Swach Bharat Abhiyan, an awareness and movement for clean and healthy India, a GOI initiative is made into effect through NGO and programs to construct community or individual toilets. Taking this initiative, we have constructed public toilets for the benefit of tribal students and general public. We have build 400 number of toilets in Sundarban Area for public use. Also a celebration of Swachhta Pakhwada. The awareness through advertisements to attain a fully open defecation free india by 2019 by the government is a good step for healthy environment.

Skill Development: Reaching the Society and empowering them

Reaching the society and equipping them with basic skill development so they may join the mainstream society is the motto of CIL, i.e. with profit making and benefit the society to operate effectively. We have imparted training to 400 persons in plastic engineering trades at CIPET, Murthal. The roots of giving back to the society is part of CIL.

Welfare of the differently-abled

We have always encouraged people with disabilities to join mainstream by facilitating development of physical abilities to the highest potential through regular therapy services to children and adults with cerebral palsy and other neuro-motor disabilities. Those who cannot afford to buy equipment for differently abled children has been supported in past, in the year of this reporting and in future.

Women Empowerment and Child Education

Role of education for women and children is felt and ingrained in CILs social commitment by empowerment of destitute, marginalized and domestic violence victims and brining the children with better health and care. We have done construction of hostel for accommodating girls belonging to BPL and backward communities for their skill development as mid-level ophthalmic assistants under Project Nai Roshni.

Others

We have our values intact in giving back to the society and always ensure empowerment, upliftment and participation of the underprivileged. Some of the other commitments are:

- Conducting a year long traffic awareness programme in nine traffic zones of Kolkata for public utility service

- Electrification of dining hall and kitchen with energy efficient LED lighting system providing food free of charge to underprivileged people
- Financial support for setting up auditorium on the third floor of the museum constructed by Gaudiya Mission
- Installation of escalators at Suburban railway stations in Mumbai

Resettlement & Rehabilitation

Coal India's R&R Policy was first formulated in 1994 and has been in operation with modifications from time to time. The R&R Policy, in vogue since 2000, was further modified in 2004, 2008 and 2012. The revised R&R Policy of CIL-2012 provides multiple options to the land losers.

Some of the operational features of the R & R policy (2012) are as follows:-

- > Land compensation to land oustees is paid as per the provisions of the relevant Act or State Government Notification.
- > Employment is provided to land oustees against every two acre of land. All the land losers who are not eligible for employment are entitled to receive monetary compensation in lieu of employment at the rate of Rs.5 lakh for each acre of land on pro-rata basis.
- > A one-time lump-sum payment of Rs.3 lakhs is paid in lieu of alternate house site. Monetary compensation is also provided for construction of work shed etc.
- > Each affected family gets a subsistence allowance at the rate of 25 days Minimum Agriculture Wage per month for one year.
- > Coal companies assist project affected people to establish non-farm self-employment. Contractors are encouraged to give jobs to the eligible on a preferential basis.
- > As far as possible coal companies shift tribal community as a unit and provide facilities to meet the specific needs of the tribal community - thus allowing them to maintain their unique identity.
- > Affected tribal families are given one time financial assistance of 500 days for loss of customary right.
- > Affected tribal families settled out of the district are given 25% higher rehabilitation and resettlement site, a school, road with street light, pucca drain, pond, tube well for drinking water supply, community centre, place of worship, dispensary, grazing land for cattle and play ground.
- > The community facilities are available to all the residents of the resettlement colonies, including PAPs and the host population.
- > The approach for operation of community facilities is flexible and all efforts are made to involve the State and local self- Government/Panchayat. The planning of community facilities and their construction is undertaken in consultation with the affected community.

In line with its social objectives, CIL has always paid greater attention to developing robust rehabilitation strategies focusing on the effective rehabilitation and resettlement (R&R) of PAPs and also community development works in and around the projects.

GRI Index

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EN12	Description of significant impacts of activities, products, and services on biodiversity in protected areas and areas of high biodiversity value outside protected areas.	62,63,64,65,66	
EN13	Habitats protected or restored.	62,63,64,65,66	
EN14	Number of IUCN Red List species and national conservation list species with habitats in areas affected by operations, by level of extinction risk.	62,63,64,65,66	
EN19	Reduction of GHG emissions	Currently no data available	Section E-P-6 #2, #4 NVG P-6
EN20	Ozone-depleting substances (ODS)	NA	
EN21	NOx, SOx, and other significant air emissions by type and weight.	56,57,58	
Effluents and Waste			
EN22	Total water discharge by quality and destination.	60,61,62	NVG P-6
EN23	Total weight of waste by type and disposal method.	61,62,63	
EN24	Total number and volume of significant spills.	62,63	
EN25	Weight of transported, imported, exported, or treated waste deemed hazardous under the terms of the Basel Convention Annex I, II, III, and VIII, and	NA	Section E: P-2 #5

	percentage of transported waste shipped internationally.		
EN26	Identity, size, protected status, and biodiversity value of water bodies and related habitats significantly affected by the reporting organization's discharges of water and runoff	62	
Products and services			
EN27	Initiatives to mitigate environmental impacts of products and services, and extent of impact mitigation.	56-66	Section E-P-2 #2; P-6 #2; P-8 #3
EN28	Percentage of products sold and their packaging materials that are reclaimed by category.	NA	Section E: P-2 #5
Transport			
EN30	Significant environmental impacts of transporting products and other goods and materials used for the organization's operations, and transporting members of the workforce.	58	
Overall			
EN31	Total environmental protection expenditures and investments by type.	67	
Supplier Environmental Assessment			
EN32	Percentage of new suppliers that were screened using environmental criteria	Currently data not available	
EN33	Significant actual and potential negative environmental impacts in the supply chain and actions taken	Currently data not available	
Environmental Grievance Mechanisms			
EN34	Number of grievances about environmental impacts filed, addressed and resolved through formal grievance mechanisms	27	
Employment			
LA1	Total number and rates of new employee hires and employee turnover by age group, gender, and region	68,69,70,71,72, 73	

LA2	Benefits provided to full-time employees that are not provided to temporary or part-time employees, by major operations.	78,79,80,81	
LA3	Return to work and retention rates after parental leave, by gender.	78	
<i>Labour/Management Relations</i>			
LA4	Minimum notice period(s) regarding significant operational changes, including whether it is specified in collective agreements.	72	
<i>Occupational Health and Safety</i>			
LA5	Percentage of total workforce represented in formal joint management-worker health and safety committees that help monitor and advice on occupational health and safety programs.	84	Section E: P-3 #5, #6
LA6	Rates of injury, occupational diseases, lost days, and absenteeism, and number of work-related fatalities by region and gender.	87,88	
LA7	Workers with high incidence or high risk of diseases related to their occupation	88	
LA8	Health and safety topics covered in formal agreements with trade unions.	87,90,91	
<i>Training and Education</i>			
LA9	Average hours of training per year per employee by gender and by employee category.	74,75	Section E: P-3 #8 NVG P-3
LA10	Programs for skills management and lifelong learning that support the continued employability of employees and assist them in managing career endings.	76,77	Section E: P-3 #9 NVG P-3
LA11	Percentage of employees receiving regular performance and career development reviews by gender and employment category	76,77	
<i>Diversity and Equal Opportunity</i>			
LA12	Composition of governance bodies and breakdown of employees per employee category according to gender, age group, minority group membership, and other indicators of diversity.	68,69,70,71,77	Section E: P-3 #3, #4

<i>Equal Remuneration for Women and Men</i>			
LA13	Ratio of basic salary of men to women by employee category, by significant locations of operation	79	
<i>Supplier Assessment for Labor Practices</i>			
LA14	New suppliers that were screened using labor practices criteria	48	
LA15	Negative impacts for labor practices in the supply chain	22	
<i>Labour Practices Grievance Mechanisms</i>			
LA16	Number of grievances about labour practices filed, addressed and resolved through formal grievance mechanisms	25	Section E: P-5, #1
<i>Investment</i>			
HR1	Percentage and total number of significant investment agreements and contracts that include human rights clauses or that have undergone human rights screening.	22	NVG P-2
HR2	Total hours of employee training on policies and procedures concerning aspects of human rights that are relevant to operations, including the percentage of employees trained.	24,25	
<i>Non-Discrimination</i>			
HR3	Total number of incidents of discrimination and corrective actions taken.	77,78	NVG P-5
<i>Freedom of Association and Collective Bargaining</i>			
HR4	Operations and significant suppliers identified in which the right to exercise freedom of association and collective bargaining may be at significant risk, and actions taken to support these rights.	22,48	
<i>Child Labour</i>			
HR5	Operations and significant suppliers identified as having significant risk for incidents of child labour, and measures taken to contribute to the elimination of child labour.	22	NVG P-2
<i>Forced and Compulsory labour</i>			

HR6	Operations and significant suppliers identified as having significant risk for incidents of forced or compulsory labour, and measures to contribute to the elimination of all forms of forced or compulsory labour.	22	Section E: P-3 #7 NVG P-2
<i>Security Practices</i>			
HR7	Percentage of security personnel trained in the organization's policies or procedures concerning aspects of human rights that are relevant to operations.	23	
<i>Indigenous Rights</i>			
HR8	Total number of incidents of violations involving rights of indigenous people and actions taken.	22	NVG P-5
<i>Assessment</i>			
HR9	Percentage and total number of operations that have been subject to human rights reviews and/or impact assessments.	22	
<i>Supplier Human Rights Assessment</i>			
HR10	Percentage of new suppliers that were screened using human rights criteria	22	
HR11	Significant actual and potential negative impacts for human rights in the supply chain and actions taken	NA	
<i>Human Rights Grievance Mechanisms</i>			
HR12	Number of grievances related to human rights filed, addressed, and resolved through formal grievance mechanisms.	27	Section E: P-3 #7, #8 NVG P-3, P-5
<i>Local Communities</i>			
SO1	Percentage of operations with implemented local community engagement, impact assessments, and development programs.	90,91,92	Section E: P-8 #4 #5 NVG P-8
SO2	Operations with significant potential or actual negative impacts on local communities.	52	Section E: P-8 #4 #5 NVG P-8
<i>Anti-Corruption</i>			

SO3	Percentage and total number of business units analysed for risks related to corruption and the significant risks identified	23, 25	
SO4	Communication and training on anti-corruption policies and procedures	24, 25, 26	
SO5	Confirmed incidents of corruption and actions taken	25	Section E: P-1 #2
Public Policy			
SO6	Political contributions	40	
Anti-competitive Behaviour			
SO7	Total number of legal actions for anti-competitive behaviour, anti-trust, and monopoly practices and their outcomes.	23,25	
Compliance			
SO8	Fines for non-compliance with laws	Annual Report	
Supplier Assessment for Impacts on Society			
SO9	New suppliers screened for impacts on society	48,49	
SO10	Negative impacts on society in the supply chain	Annual Report	
Grievance Mechanisms for Impacts on Society			
SO11	Number of grievances about impacts on society filed, addressed and resolved through formal grievance mechanisms	22,23	
Customer Health and Safety			
PR2	Total number of incidents of non-compliance with regulations and voluntary codes concerning health and safety impacts of products and services during their life cycle, by type of outcomes.	None	Section E: P-2 #1 NVG P-9
Product and Service Labelling			

<i>PR3</i>	Type of product and service information required by procedures, and percentage of significant products and services subject to such information requirements.	18,44,45	Section E: P-9 #2 NVG P-9
<i>PR4</i>	Total number of incidents of non-compliance with regulations and voluntary codes concerning product and service information and labelling, by type of outcomes.	None	Section E: P-9 #1, #3; P-2 #1 NVG P-9
<i>PR5</i>	Results of surveys measuring customer satisfaction.	46,47	Section E: P-9 #1, #4 NVG P-9

INDEPENDENT ASSURANCE STATEMENT



Introduction and objectives of work

Bureau Veritas India Pvt. Ltd. (Bureau Veritas) has been engaged by Coal India Limited (CIL) to conduct an independent assurance of its Sustainability Report 2016-17. This Assurance Statement applies to the related information included within the scope of work described below.

This information and its presentation in the Sustainability Report 2016-17 (hereafter referred to as Report) are the sole responsibility of the management of CIL. Bureau Veritas was not involved in the drafting of the Report. Our sole responsibility was to provide independent assurance on the accuracy and reliability of information included, and on the underlying systems and processes established to collect, analyses and review.

Scope of Assurance

CIL requested Bureau Veritas to verify the accuracy and reliability of the following:

- Data and information included in the **Sustainability Report 2016-17 of Corporate Functions and its fully owned 8 subsidiary companies located in provincial states across India covering Mining, Production of Coal & by-products, and Beneficiation Units.**
- The assurance process was conducted to meet the requirements of a **Type 1 assurance engagement** as defined by AA1000 2008 Assurance Standard (AA1000 AS). The assurance process was designed to provide a reasonable level of assurance concerning the nature and extent of CIL's adherence to the AA1000 AS accountability principles and a **Moderate level of assurance** of the reliability of specified performance information within the report.
- During the process of verification and assurance following aspects were covered.
 - a. Interaction with the Top Management of CIL to realize their sustainability vision.
 - b. Assessment of methods used for data collection and reporting for the selected sustainability performance indicators.
 - c. Testing of system, including internal controls; select interview with staff responsible for data collection, collation and reporting
 - d. Testing on a sample basis and evidence of supporting data
 - e. Assessment of consistency between data for the selected sustainability performance indicators and related written comments in the report.

Methodology

As part of its independent assurance, Bureau Veritas Assurance team planned and carried out the assurance engagement based on site visit and document review at Jhanjara Colliery of Eastern Coal Field Project, Head Quarter at Kolkata (Sustainable Development Group and Environment Management Group Office) at Rajarhat, Kolkata during the first week of August 2017 and undertook broadly the following activities:

1. Conducted interviews with core team of the SD group responsible of preparing the Sustainability report and the Senior Management of CIL including but not limited to Chief General Manager-Environment.
2. Onsite and offsite review of documentary evidence such as Performance Monitoring Reports and Factual information (for the period 1st April 2016 to 31st March 2017) contained in the Report, Achievement against Internal and External Memorandum of Understanding (MOU) targets, Enterprise Risk Management (ERM) framework, Environmental Compliance of the Stations, CSR-R&R expenditure records from SAP system shared by CIL to Bureau Veritas Assurance team.
3. Evaluation of information against Global Reporting Initiative (GRI G4, Core) and as per National Voluntary Guidelines (NVG) Business Responsibility Reporting Framework disclosure frameworks and principles of Accuracy, Accessibility, Balance, Clarity, Comparability, Reliability and Timeliness;

4. Audit of performance Indicator data (samples of which traced back to source)
5. Review of CIL's internal mechanisms for implementing Sustainable Development, other policies, data and information systems for collection, aggregation, analysis and review at Corporate SD Group Level, Subsidiary company training establishments across India
6. Review of process for identification, management of material issues, risks to the Company and its stakeholders; and justification for subsequent inclusion within the report;

Our work was conducted against Bureau Veritas' standard procedures and guidelines for external Assurance of Sustainability Reports, based on current best practice in independent assurance. The work was planned and carried out to provide moderate level of assurance and we believe it provides a reasonable basis for our conclusions.

Our findings and recommendations

On the basis of our methodology and the activities described above, it is our opinion that:

- The information and data included in the scope of our assurance are accurate, reliable and free from material mistake or misstatement. The information is presented in a clear, understandable and accessible manner and the Report provides a fair and balanced representation of activities during the FY 2016-17.
- CIL has established appropriate systems for the collection, aggregation and analysis of relevant information as per GRI G4 Economic, Social, Human Resource, Labour and Environmental & mapped with NVG principles
- The Report properly reflects the organisation's alignment to and implementation of the AA1000 Assurance Standard (2008) principles of Inclusivity, Materiality and Responsiveness in its operations.
- Strengthen the internal assurance system for establishing specific standard disclosure indicators/data related to material aspects of the information submitted by the subsidiaries (Provincial subsidiaries) and offices.
- There is an established mechanism of vigilance, which can be further extended effectively to concerns of stakeholder with defined management approach based on materiality analysis as per area of operations and as per business partners. Stakeholder including contractors' and supply chains' social, environmental monitoring may be brought under the purview of sustainability. Disclosure on Management Approach for indicators material to the organization like external assurance for report, delegation of authorities for different aspects (social, economic, environmental) may be stated effectively to enable better understanding of organization's performance over time line by stakeholders.

Adherence to AA1000 AS Principles

Inclusivity –CIL continues to deploy robust processes for engaging with key stakeholders including undertaking centralised stakeholder engagement with key audiences such as Socially Responsible Investors. The willingness of CIL to engage with stakeholders in order to develop its approach to relevant issues has been particularly evident during this reporting period through activities of the engagement forums listed in the Sustainability Report 2016-17. The climate change impact on the coal usage to generate primary power in India shall be required to be evaluated in the subsequent reports.

Materiality – The internal materiality determination process results has been strengthened by input from relevant department, framework continues to provide a comprehensive, balanced understanding and prioritisation of CIL's key material corporate responsibility issues. However, the continued investment and expansion of its coal production activities there is a need to enhance the scope for the company to incorporate the impact of its subsidiaries activities on its overall materiality matrix as per GRI G4 reporting framework.

Responsiveness – The report provides a comprehensive response to the issues and stakeholder concerns relating to its activities. Through the assurance process it is evident that

CIL is responding to concerns raised by specific stakeholder groups and seeking proactive discussions to ascertain their views and progress towards addressing any concern. During the interaction it was apparent that stakeholder views are listened to and that site level management work with local communities to achieve appropriate solutions. The R&R and CSR strategies can have a strategic linkage in the project affected areas.

Evaluation against Global Reporting Initiative (GRI) G4 Sustainability Reporting Guidelines

Bureau Veritas undertook an evaluation of CIL's Sustainability Report 2016-17 against the G4 Sustainability Reporting Framework in accordance with 'Core'. This included cross checking the GRI index table against all the reference documents to provide an opinion on the self-declared GRI G4 'Core'. Based on our work, it is our opinion that CIL's Sustainability Report 2016-17 has been prepared in accordance with the GRI G4. Reporting Framework including appropriate consideration of the Reporting Principles and necessary indicators to meet the requirements of GRI Application-Core

Limitations and Exclusions

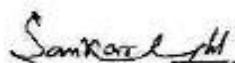
Excluded from the scope of our work is any assurance of information relating to:

- Activities outside the defined assurance period of FY 2016-17 and positional statements (expressions of opinion, belief, aim or future intention by CIL and statements of future commitment);
- The data and information under assurance related to all GRI 4 standard disclosure and performance indicators of CIL only. Subsidiaries and Joint Ventures are excluded from the Assurance activity. Assurance activity does cover sample physical site visit verification at mining and development projects. Energy Indirect GHG emission (wherever applicable) is excluded.

Statement of independence, impartiality and competence

Bureau Veritas is an independent professional services company that specialises in QHSE, Social Accountability & Sustainability Assurance with almost 180 years history in providing independent assurance services, and an annual turnover in 2016 of Euros 5.90 billion. Bureau Veritas has implemented a Code of Ethics across the business to maintain high ethical standards among staff in their day to day business activities. We are particularly vigilant in the prevention of conflicts of interest. No member of the assurance team has a business relationship with CIL, its Directors or Managers beyond that required of this assignment. We have conducted this verification independently, and there has been no conflict of interest. The assurance team has extensive experience in conducting verification and assurance over environmental, social, ethical and health & safety assessments and has over 30 years combined experience in this field and an excellent understanding of Bureau Veritas standard methodology for the Assurance of Sustainability Reports.

FOR BUREAU VERITAS INDIA PVT. LTD.



Sankar Ghosh
Manager – Certification, East Region



AA1000
Licensed Assurance Provider
000-137



Rupam Baruah
General Manager- Eastern Region

Kolkata, India
08th August, 2017





Coal India Limited

**Coal Bhawan,
Premises No. 4, MAR,
Plot No: AF III, Action Area 1A,
New Town, Rajharhat,
Kolkata, West Bengal
PIN- 700156**