MANAGEMENT DISCUSSION AND ANALYSIS REPORT

1.0 INDUSTRY STRUCTURE AND DEVELOPMENT

Coal and Coal India Limited

Coal remains the predominant indigenous energy source and fulfills 55% of primary commercial energy needs in India. The energy security of the country and its prosperity are integrally linked to efficient and effective use of its most abundant, affordable and dependent fuel, coal.

In terms of availability, coal is one is the most abundant fossil fuel in India. The geological reserves of coal in India are in excess of 315 Billion Tonnes. At the current rate of production, the reserves are adequate to meet the demand in the foreseeable future. Even considering only the proved reserves and incremental growth in the coal production (from the current level), the reserves will be adequate to meet coal demand for over a century.

In terms of need of coal, while Government of India has made unprecedented success in village and rural household electrification in the last four (4) years, there are still 32 million rural households which are yet to be electrified (14% of total rural household). Assuming 5 individuals per household, there are still more than 150 million Indians who are yet to get access to clean, cheap and sustainable electricity. The number will be still higher if quality of power, hours of supply, urban households, etc. are taken in to account. Coal is the key fuel for electricity generation in India. Coal based installed capacity forms 57% of the total installed capacity. In terms of electricity generation, the share of coal based capacity is still the highest (around 70%). Though the proportion of non-coal sources, particularly renewables, has increased over the last few years, coal remains the dominant fuel for electricity generation in India. Going forward, while it is accepted that the proportion of renewables in the overall generation mix will increase, coal based generation will continue to be the key driver of the nation's energy wheels and is expected to grow in absolute terms.

Today India is the third largest producer of coal in the world producing about 676 Mt. of coal (2017-18) which is in complete sync with our development needs. The coal sector in India is primarily driven by State owned companies including Coal India Limited and Singareni Collieries Company Limited. Participation of private sector companies in coal mining in India, till recent past, was limited to production for captive purposes. Under captive mining, significant resources have been allocated to government and private sector entities (in total, 89 coal blocks). However, the production from captive segment is yet to increase to significant levels. The Government, in a major reform in the sector, has approved participation of private sector companies in coal mining for sale of coal (commercial mining). The detailed scheme and allotment of coal blocks (vide auction) is under formulation. This is another step towards creation of a dynamic and competitive coal market in India.

Coal India Limited (CIL) is the single largest coal producing company in the world, with a total production of 567.36 million tonnes during the fiscal 2017-18. It accounted for 84% of total coal produced in India during the year. It is a Maharatna Company, listed on the Bombay Stock Exchange (BSE) and the National Stock Exchange (NSE).

CIL is with the holding company having seven wholly-owned coal producing subsidiaries and one mine planning and consultancy subsidiary. CIL's operations spread across 9 states in India. CIL also has a wholly owned foreign subsidiary company in Mozambique registered as 'Coal India Africana Limitada'.

2.0 SWOT ANALYSIS

Strengths	Weaknesses
• Large Scale of operations allow economies in scale of production.	• Large number of small sized mines.
• Large coal resource base.	• High cost of production in underground (legacy) mines.
• Geographical spread of operations in India allows proximity to a large and diversified customer base.	• Logistical constraints in evacuation High dependence on coal based power plants.
• Strong financial position.	• Challenges for obtaining environmental clearance.
• Skilled, highly experience and diversified workforce.	• Regulations related to Fuel Supply agreement.
• Well positioned to cater to high demand of coal in India.	• Low GCV content of coal.
• Consistent & strong track record of growth and financial performance.	• Regulation and constraints in land acquisition.
• Strong capabilities for exploration, mine planning, research and development.	
Threats	**Opportunities**
• High dependence on Indian Railways for evacuation of coal.	• Coal to remain the key primary energy source in India.
• Resistance to part with land, creating problems in acquisition of land and rehabilitation.	• Rural electrification and Power for All UDAY scheme.
• Decrease in global coal demand, reduced domestic demand for high grade of coal.	• Integration of transport sector with electric vehicles.
• Law and order problems/ Illegal Mining.	• Linkage rationalization optimizing production cost.
• Appreciation in land cost.	• Export opportunities to neighbouring countries.

Threats	Opportunities
● Increasing proportion of renewable in the energy mix.	● Strong economic growth in India and resultant demand for energy, particularly coal being the dominant energy source.
● Increased taxes, cess on coal consumption. (adversely making it unviable compared to alternate energy sources)	● Being a cheaper source of energy compared to alternate sources available in India, coal demand will continue to remain strong.
● Emerging energy storage solutions for renewables.	● Exploring new markets through Coal to liquid and Coal to syn gas technology.
● Growing environmental concerns against continuance of coal mining.	● Growth in coal washing infrastructure.
● Material substitution for end-use sector.	

3.0 SEGMENT-WISE PERFORMANCE

Offtake:

Particulars	April-Mar' 18	April-Mar' 17	April-Mar' 16
Offtake (Mill Te)	580.28	543.32	534.50
Growth (over previous year)	6.80%	1.7%	9.2%

Statement of break-up of offtake **(in Million Te)**

Particulars	April'17-March'18	%	April'16-March'17	%	Growth %
Off-take	580.28	100.0%	543.32	100.0%	6.8%
Less: Own Consumption	0.24	0.0%	0.27	0.1%	-12.0%
Less: Feed to washeries	13.96	2.4%	18.62	3.4%	-25.0%
Less: E-auction	95.68	16.5%	92.38	17.0%	3.6%
Despatch to outsiders under FSA	470.41	81.1%	432.05	79.5%	8.9%

Sector-wise dispatch of coal & coal products

Sector wise break-up of despatches of Coal & Coal products (in Million Te) during 2016-17, against target and last year's actual were as under:

(Figs. In million tonnes)

Year	2017-18			2016-17	Growth over Last Year	
Sector	AAP Target	Despatch	% Satn.	Actual	Abs.	%
Power (Util)#	452.236	454.224	100.4%	425.397	28.8	6.8%
Steel*	4.490	3.143	70.0%	3.345	-0.2	-6.0%
Cement	7.090	4.835	68.2%	3.672	1.2	31.6%
Fertilizer	2.695	1.883	69.9%	2.145	-0.3	-12.2%
Others	134.669	117.390	87.2%	107.934	9.5	8.8%
Despatch	**601.180**	**581.475**	**96.7%**	**542.494**	**39.0**	**7.2%**

\# Power house despatches in 2017-18 and 2016-17 includes despatches under special forward e-auction to power.

* Despatch of washed coking coal & raw coking coal for direct feed, blendable coal to steel plants & to external washeries.

Production from underground and opencast mines:

Subsidiary-wise production from Underground & Opencast Mines in 2017-18 compared to 2016-17 were as under:

(In Million Tonnes)

Company	Underground		Opencast		Total	
	2017-18	2016-17	2017-18	2016-17	2017-18	2016-17
ECL	8.603	8.127	34.965	32.390	43.568	40.517
BCCL	1.076	1.679	31.531	35.358	32.607	37.037
CCL	0.405	0.737	63.000	66.310	63.405	67.047
NCL	0.000	0.000	93.018	84.096	93.018	84.096
WCL	4.954	5.368	41.266	40.264	46.220	45.632

Company	Underground		Opencast		Total	
	2017-18	2016-17	2017-18	2016-17	2017-18	2016-17
SECL	14.461	14.548	130.247	125.455	144.708	140.003
MCL	1.040	1.015	142.018	138.193	143.058	139.208
NEC	0.003	0.003	0.778	0.597	0.781	0.600
CIL	30.542	31.477	536.823	522.663	567.365	554.140

Company-wise Coal Off-take :

Subsidiary wise Off-take of coal in 2017-18 compared to 2016-17 were as under

Fig in Mill.Tonnes

Company	2017-18	2016-17	Growth over last year
ECL	43.629	43.019	1.4%
BCCL	33.362	34.919	-4.5%
CCL	67.510	60.934	10.8%
NCL	96.772	83.491	15.9%
WCL	48.748	39.497	23.4%
SECL	151.103	137.670	9.8%
MCL	138.267	143.013	-3.3%
NEC	0.895	0.777	15.1%
CIL	**580.284**	**543.319**	**6.8%**

Overburden Removal

The Company wise overburden Removal are shown below:

(in Million cubic metres)

Company	2017-18	2016-17	% growth
ECL	118.895	124.637	-4.829
BCCL	110.466	131.215	-18.783
CCL	95.622	102.630	-7.329
NCL	316.795	324.136	-2.317
WCL	185.287	166.142	10.333
SECL	205.018	178.791	12.793
MCL	138.179	123.342	10.738
NEC	7.853	5.484	30.167
CIL	**1178.115**	**1156.377**	**1.845**

4.0 OUTLOOK :

CIL envisaged coal supply target of 610 Mt. in 2018-19 of which 80% of the said production would be consumed by power sector only. Comparatively, in 2017-18, the total coal supplied by CIL was 580.3 MT. The target for the current year is higher by 3.5% than the actual coal supply in the year 2017-18. CIL's growth plan for the future is in synergy with the ambitious plan of the Government for 24 X 7 power supply to all homes in the country. Though a roadmap to achieve more than 908 Mt of coal production by 2019-20 was prepared, due to a combination of factors like sluggish industry growth, change in energy mix, environmental challenges and land acquisition, the time frame for reaching the said goal has been shifted to 2025-26.

Sustainability of such growth by minimizing the environmental impact being a major issue, thrust is laid in qualitative improvement in coal production through selective mining, beneficiation & blending and diversifying into clean coal technologies.

The targeted growth in coal production would also call for developing matching logistics infrastructure. Apart from creating new infrastructure, optimum utilization of existing capacity through a dynamic process of source rationalization is another key area of activity. By means of launching linkage auction scheme, an in-built system of source rationalization has already been put in place for non-regulated sector. Further, it has been envisaged to encourage dispatch of coal to consumers within 20 Km. by belt closed conveyor and within 40 Km. by MGR. This may help provide additional rakes for long distance transport of coal.

CIL is also exploring opportunities to diversify coal to chemical business. This is to ensure greater value addition and thereby improving financial performance of the company and ensuring long term sustenance.

CIL has planned a capital investment of Rs 9500 Crs for maintaining its volume growth in 2018-19. In addition, the company has also envisaged for investing substantial amount in different schemes in 2018-19 such as development of railway infrastructure project, solar power, pit head power plants, surface coal gasification, Coal Bed Methane (CBM), revival of fertilizer plants etc.

In line with the envisaged growth in production, CIL has envisaged an investment of ₹ 31540 Crs for developing of railway infrastructure projects. The Tori-Shivpur line upto Balumath in Jharkhand was commissioned and operationalised on 9th Mar'18 and from Balurmath to Bukru engine trial run was done on 28th May'18. The Jharsuguda-Barapali line in Odisha upto Sardega has been commissioned and operationalised on 5th Apr'18. Further, CIL plans to significantly ramp up its investment programme in next five years also.

Marketing Outlook:

The Working Group on Coal and Lignite, during the process of formulation of XII Plan document in 2011, projected a widening gap between demand and indigenous availability to the tune of 273 Mt by 2021-22. Accordingly, CIL was mandated to produce 908 Mt coal production by the year 2019-20. It may be noted that the achievement of 908 Mt production was contingent on coordinated effort of CIL and MoC at one hand, and coal bearing states and other Ministries such as Railways & MoEF CC on the other hand, to access the resources and speed up logistics for coal evacuation. Subsequent to the change in environmental paradigm and coal demand, an urgent need was felt for revisiting the 908 Mt programme. In 2017, Ministry of coal through Coal India Limited appointed an independent agency to formulate Vision up to 2030 for the Indian coal sector and as part of it, assess the coal demand – supply scenario for the country and the coal demand on CIL (Coal Vision 2030). As per the study, in view of lower than expected growth in coal demand (under the 1 BT plan) and growth from alternate energy sources, CIL may have a target of lower supply in the near future. In the study, the demand estimates have been undertaken under three scenarios - Pessimistic, Base case and Optimistic. While the estimates for pessimistic and base case are on the basis of GDP growth of 7%, the optimistic case presumes GDP growth rate of 8% and additional demand from alternate uses of coal.Under the estimated base case scenario, the projected demand of coal for the current year is likely to be about 220 MT and in the optimistic scenario the projected demand is about 954 MT. Accordingly, the projected CIL share of coal production for the year is 652 MT in both the scenarios.

Similarly, during the year 2023-24 the estimated base case projected demand of coal is about 1005 MT and in the optimistic scenario the projected demand is about 1208 MT. Correspondingly, the projected CIL share of coal production for the year is estimated to be of the level of 720 & 923 MT in the base case & optimistic scenario respectively.

Further, as per the study, the estimated demand projections for the year 2029-30 shall be about 1318 MT & 1747 MT in the base case & optimistic scenario respectively. Correspondingly, the projected CIL share of coal production for the year is estimated to be of the level of 897 & 1326 MT in the base case & optimistic scenario respectively.

CIL has also taken an initiative to build matching logistics infrastructure to ensure evacuation of planned quantity of production. The following activities have already been initiated to augment rail evacuation capacity:

i) CIL has undertaken major Railway Infrastructure Projects, implemented either by Railways on **deposit basis** or **JV Companies** formed between the Indian Railway represented by IRCON, Subsidiary Company and concerned State Government.

ii) The two major Railway Infrastructure Projects on **deposit basis** are: -

   (a) Tori Shivpur New BG Line - This railway line caters to North Karanpura Area of CCL and it is planned to evacuate about 32 MTY of coal once the line comes through in the state of Jharkhand. It is expected to be completed in March'2019.

   (b) Jharsuguda–Barpali–Sardega Rail Link relates to the Basundhara coalfields of MCL and the envisaged capacity evacuation is 70 MTY of coal from MCL.It was completed on 5th April'2018.

iii) The three major railway infrastructure projects being undertaken by **JV mode** are as follows:

   (a) East Rail Corridor and East West Rail Corridor are planned for evacuation of coal of Mand- Raigarh and Korba – Gevra Coal- fields of SECL respectively by Rail JVs CERL & CEWRL in the state of Chhattisgarh. East Corridor Phase I(Single track) is expected to be completed in Sep'19 and Phase II (Single track) is March'22. East West Corridor is expected to be completed in March'22.

   In all, about 180 MTY of coal shall be evacuated through these two corridors.

   (b) The Shivpur-Kathautia rail connectivity is envisaged to be executed by Rail JV, JCRL (Jharkhand Coal Railway Limited) formed among CCL (Central Coalfields Limited), Govt of Jharkhand and Indian Railway represented by IRCON, in the state of Jharkhand. It is expected to be completed in Jan'2022.

   About 30 MTY coal from the mines of CCL is planned to be evacuated through this line.

   (c) MCRL (Mahanadi Coal Railway Limited) has been formed among MCL (Mahanadi Coalfields Limited), Govt. of Odisha and Indian Railway represented by IRCON, for creating rail infrastructure in the state of Odisha. The work has been taken up in two phases:

1st PHASE

Angul –Balram- Jarpada-Tentuloi link at Talcher Coal field of MCL (69.10 KM) which consists of Jharpada – Kalinga- Angul link (14.22 Km). It is expected to be completed in Sep'19.

2nd PHASE

Tentuloi- Budhapank – as phase - II (136 KM approx.)

About 60 MTY of coal from MCL is envisaged to be evacuated from these rail lines and decongest as well as systemize the coal evacuation of the region.

The Government has introduced a policy titled 'Scheme for Harnessing and Allocating Koyla (Coal) Transparently in India (SHAKTI)' on 22.05.2017 to provide long term coal linkage to various segments of power producers. Allocation of coal under SHAKTI to some segments of power producers has already been made and the process of allocation of linkages to other segments is under process. Besides, the platform for transparent allocation of long term linkage to non-regulated sectors and Spot and Forward e-Auction schemes for meeting the term and seasonal coal requirement for different consuming sectors, are continuing.

Customer satisfaction through quality assurance is another key area for improvement. Following initiatives are identified towards quality improvement and assurance:

i. Supply of (-) 100 mm sized coal to power sector consumers wef. 1st Jan'16.

ii. Third party sampling facility extended to all sectors and schemes. In order to promote transparency with commitment for supply of good quality coal, Third Party sampling through independent agencies was introduced for various categories of consumers. Initially, this facility was provided to Power Sector under FSA/ MOU for which CSIR-CIMFR has been jointly engaged by CIL and Power Utilities as the Third Party Agency.

Further, Third Party Sampling was extended to Power consumers taking coal under Special Forward e-Auction Scheme and non-regulated sector taking coal under Linkage Auction. Subsequently, in terms of decision by CIL Board in its 353rd meeting held on 18/19.12.17, facility of independent Third Party Sampling was extended for other remaining schemes viz. Spot/ Special Spot e-Auction scheme, Exclusive e-Auction Scheme for non-Power consumers as well as Non-Power sector FSAs (in addition to those executed under Linkage Auction route) & State nominated Agencies drawing coal through FSAs. For all these schemes, IIT-ISM and QCI were nominated as Independent Third Party sampling agencies.

As of now, Power Sector as well as Non-Power Sector consumers drawing coal under all the schemes are eligible to avail transparent third party sampling arrangement.

iii. All major laboratories across the subsidiaries of coal companies are now equipped with the Automatic "Bomb Calorimeter" for ascertaining calorific value

iv. NABL accreditation of field level laboratories (43 labs are NABL accredited out of 55 labs selected).

Operations Outlook:

As on date 114 Ongoing projects having 548.43 Mty ultimate capacity and sanctioned capital of ₹ 63480.43 Crs are under various stages of implementation. For achieving production target in 2018-19, 28 EC proposals for EC capacity of 211.614 MTPA with incremental capacity of 106.012 MTPA are under process at different stages.

In FY 18-19, Stage-I FC is required for 22 proposals involving 5818.69 Ha and Stage-II FC is required for 16 proposals involving 2374.10 Ha forest land to commensurate with coal production target.

In terms of land acquisition requirements, 2707.91 Ha land to be taken into possession by the subsidiaries of CIL for achieving target in 2018-19.

The expansion program will be managed in a structured manner with the help of IT enabled solutions. The implementation of ERP solution to enable transparency in operations, maintenance and support functions is under consideration. The project implementation of vital mines is being monitored using MS Project software.

The Company has already concluded a study through reputed consultant for mechanization and automation level across a substantial number of mines. This is aimed at identification of opportunities in mine planning, exploration, survey, operations and maintenance.

To support increase in production on a sustainable basis, synergic growth in exploration is absolutely necessary. Increased use of hydrostatic drilling with PCD bits and 2D Seismic Survey Technology to achieve high rate in exploration have been envisaged. CIL will continue to focus on increasing its reserve base in India.

CIL is in the process of augmenting the capacity of training institutes across subsidiaries, including IICM. Several other actions for building human resource capacity are being contemplated in collaboration with reputed institutions.

Outlook regarding Evolution of the Ecosystem:

CIL's projected coal production in the coming years will be materialized only by working closely with other stakeholders. These include the Indian Railways, State Governments, Regulators, Community and other market participants. CIL's initiatives towards this endeavor are as below:

1. MCL has formed a SPV, Mahanadi Basin Power Limited (MBPL), with 100% stake held by MCL for power generation capacity of 2X800 MW through pit-head Power Plant at Basundhara Coalfields.

2. 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 downward trend in prices of solar projects and availability of land in Madhya Pradesh Solar Park, the tenders were cancelled and SECI is in the process of re-tendering of above projects in state Solar Parks of Madhya Pradesh.

CIL and its subsidiary companies have installed more than 3 MW ground mounted and roof top Solar Projects. Further, CIL is also exploring various opportunities for development of Solar power projects to meet the requirement of 'Net Zero' energy company by 2020.

In addition to above, CIL has a mandate to commission a total of 3000 MW of solar photo-voltaic power project to meet the requirement of the 'Net Zero' energy company. CIL has already executed a MoU with SECI to construct a 1000 MW solar project for CIL. For the balance 2000 MW, CIL is exploring various opportunities like searching JV partner to execute solar projects in JV mode. Recently, CIL has held a meeting with NLC India Limited (A Govt. of India undertaking under the Ministry of Coal) to venture into solar power so as to meet the 'Net Zero' energy requirement of CIL. NLC on their part have shown interest to execute the solar power project for CIL.

Further CIL has initiated formation of a JV with IOCL for ensuring uninterrupted supply of bulk explosives for its mines on long term basis. CIL has consistently face disruption of supply of explosives from manufacturers resulting in loss of production and revenue. This initiative is likely to reduce the dependence of CIL on private explosive manufacturers who at times were cartelizing the market and benefit CIL by ensuring the supply security, assured quality product with timely supply, efficient distribution and meeting future growth in demands.

3. It is proposed to explore the possibility of planting shrubs/vetiver grass on the OB dumps wherever feasible and also installation of Solar Panels on stable OB dumps.

4. Authorities of BCCL and ECL are working closely with the Government of Jharkhand and West Bengal to enable quick implementation of the Master Action Plan of Jharia and Raniganj Coalfields. High Power Central Committee chaired by Secretary (Coal) reviews the development on implementation of master plan wherein State Officials also remains present.

5. In pursuance of initiatives towards development of Clean Coal Technology and alternate use of coal, it has been decided to explore the possibilities of setting-up of a coal based Methanol plant using coal from Raniganj Coalfield in the premises of DCC. In this direction an Expression of Interest was been floated on 28.02.2017 for prequalification of Coal Gasification Technology licensors with proven experience of gasifying coal having upto 28% ash content. Based on evaluation of responses carried out with the assistance of review consultant, M/s Gujarat State Fertilizers & Chemicals Ltd. (GSFCL), five (05) licensors were preliminarily short-listed as suppliers of coal gasification technology, subject to physical verification of the success of their technologies in operating plants.

M/s. Project & Development India Ltd. (PDIL) has prepared the Pre-Feasibility Report (PFR) for setting up of 2050 MTPD (0.66 MTY) capacity Coal to Methanol plant at DCC based on the Capex and Opex data along with other technical information provided by the shortlisted technology suppliers. Based on the outcome of the PFR, CIL Board has accorded 'in-principle' approval to undertake pre- project activities.

Research & Development

CMPDIL is the nodal agency for coordination and monitoring of S&T projects in the coal sector as well as the R&D projects of CIL. During 2017-18, expenditure incurred in 14 R&D projects and 14 S&T projects was ₹ 5924.36 lakhs and 1149.91 lakhs respectively. The details are given in **Annexure A.**

5.0 RISKS AND CONCERNS

CIL has a comprehensive Risk Management Framework in place. The Board of CIL had approved a Risk Management Framework for the Company, which consists of (a) a process to identify, prioritize and formulate mitigation plans for prioritized risks, and, (b) a framework of roles & responsibilities of various officers, Committees and the Board, in discharging the risk management process, periodicity of reporting (Risk Management Calendar) and related templates and enablers. As part of this Risk Management Framework, risk owners and mitigation plan owners have been identified for each risk and corresponding mitigation plans to ensure continuous risk monitoring and risk mitigation.

A sub-committee of the Board of Directors viz Risk Management Committee (RMC) has been constituted in compliance with Listing Regulations' 2015 of SEBI. The RMC, inter alia, is also responsible for the oversight of the risk identification, risk prioritization, mitigation plan formulation and risk monitoring activities in CIL. Recommendations of the RMC with respect to the risk management of CIL are placed to the Board of Directors for their consideration and further directions.

A Consultant Agency has also been engaged, who has been working under the guidance of the RMC to facilitate implementation of the governance process envisaged in the Risk Management Framework, including facilitation for formulation of risk mitigation plans for the prioritized risks of CIL. Risk Management is a continuous journey to align the objectives and vision of CIL through regular risk-managed business operations.

6.0 INTERNAL CONTROL SYSTEMS AND ITS ADEQUACY

Coal India Limited (CIL) is striving to strengthen internal control systems and processes for smooth and efficient conduct of business and complies with relevant laws and regulations. A comprehensive delegation of power exists for smooth decision making. Elaborate guidelines for preparation of accounts are followed for uniform compliance. Further, all the key functional areas are governed by respective operating manuals. In order to ensure that all checks and balances are in place and all internal control systems are in order, regular and exhaustive internal audits are conducted by experienced firms of accountants in close co-ordination with the Company's Internal Audit Department.

The Internal Financial Controls of the Company were reviewed by Internal Auditors appointed. According to them, the Company has, in all material respects, laid down internal financial controls (including operational controls) and that such controls are adequate and were operating effectively during the year ended 31st March, 2018.

7.0 DISCUSSION ON FINANCIAL PERFORMANCE WITH RESPECT TO OPERATIONAL PERFORMANCE

The Consolidated financial statements of CIL, hereinafter referred as "company", have been prepared in accordance with Indian Accounting Standards (Ind AS) notified under the Companies (Indian Accounting Standards) Rules, 2015. A detailed discussion on financial performance and analysis is furnished below.

A. Total Income:

Total Income of the Company comprises Revenue from operations and other Income. Major revenue of the company from the above two heads of total income includes income from sale of coal, other operating revenue such as loading and transportation charges recovered from customers, Evacuation Facility Charges, Subsidy for sand stowing & protective works, consultancy and other services related to mine planning

& designing, interest earned on investments such as term deposits with banks, dividend income from mutual funds etc. The total income for financial Year 2017-18 is ₹91926.89 crore as against ₹89322.94 crore in the previous year registering an increase of 2.92%. The breakups of major elements of income are discussed below:

(₹ in crore)

Particulars	FY 2017-18	FY 2016-17	Change %
Sale of Coal	127162.17	122286.96	3.99%
Less: Statutory Levies	44056.04	41240.33	6.83%
Less: Excise Duty	1376.67	5443.77	– 74.71%
Net Sales	81729.46	75602.86	8.10%
Other Operating Revenue (Net)	4162.44	2952.10	41.00%
Revenue from Operations	**85891.90**	**78554.96**	**9.34%**
Other Income	4658.32	5324.21	– 12.51%
Total Income	**90550.22**	**83879.17**	**7.95%**

Note: With effect from 01.07.2017 excise duty on coal was subsumed in GST

1) Revenue from Operations:

(i) Sale of Coal

Sales are presented as gross sales and net of various statutory levies comprising royalty, GST,GST Compensation Cess, Cess on Coal, Central Sales Tax, Stowing Excise Duty, Clean Energy Cess, Sales Tax, Additional Royalties relating to National Mineral Exploration Trust (NMET), District Mineral Foundation (DMF) and other levies etc. but excluding Excise Duty (following the clarification issued by SEBI the Excise Duty is to be included in revenue from operations and therefore to be shown as an item of expenditure). Excise duty therefore has been shown as a part of Gross/Net Sales. The Income from sale of coal is mainly dependent on the pricing and production of coal and distribution thereof. It may be noted that excise duty is subsumed in GST w.e.f 01.07.2017.

The gross sales of the company which exceeded the landmark figure of One Lac crore in year 2015-16 stood at ₹127162.17 Crores in 2017-18 against the previous year gross sales of ₹122286.96 crore. The Net sales (net of all levies including Excise Duty) for the year was ₹81729.46 crore against the previous year figure of ₹75602.86 crore, thereby registering a growth of 8.10%.

During the year the offtake increased to 580.28 million tonne from 543.32 million tonne in previous year, registering a growth over 6.80%. The increase in volume accounted for the growth in sales revenue.

During the year the pit head Run of Mine prices of all grades of non-coking coal has been revised w.e.f 00.00 Hour of 9th January, 2018. In view of re-gradation of large number of mines w.e.f. April, 2017, which was carried out as an annual exercise, the average sales price realisations showed downward trend in the first three Quarters as compared to the previous year. However, post such price rationalization and higher realization from E-auction sales in the Fourth Quarter, the average sales price realisations started improving. E-auction sales accounts for about 18% of total volume of offtake. The total average sales realization was ₹1408 per tonne in current year as against ₹1397 per tonne in previous year.

The combined effect of increase in volume, improvement in average sales realization etc. resulted in increase in net sales (net of all levies including Excise Duty) of ₹6126.60 crore.

Government of India has introduced Goods and Services tax (GST) w.e.f 1st July 2017. The rate of GST on coal is 5%. Further GST has subsumed earlier indirect levies viz. Central Excise Duty, Central Sales Tax, VAT etc. Stowing Excise Duty has also been done away with. The taxes subsumed in GST, which were earlier levied on coal was around 11-12%. Even though Clean Energy Cess of ₹400 per tonne was also repealed w.e.f 01.07.17, a new levy viz. GST Compensation Cess of ₹400 per tonne was introduced by The Goods and Services tax (Compensation to States) Act, 2017 w.e.f. 01.07.17.

(ii) Other Operating Revenue:

Loading and additional transportation charges

Major element of other operating revenue is on account of transportation charges recovered from the customers. The company charges transportation costs for transportation of coal to dispatch points. During the year such surface transportation charges were revised by the subsidiary companies for all the existing lead distances including 0-3 kilometers, which hitherto were not charged. The revised charges were based on weighted average transportation cost of the respective lead distance of the subsidiary company plus 10%. Similarly sizing charges and rapid loading silo charges, etc. were also revised up during the year. The loading and transportation charges recovered (net of all levies including Excise Duty) during the year was ₹2980.60 crores against ₹2490.91 crores in the previous year.

Evacuation Facility Charges

W.e.f. 20th Dec 2017, the company introduced a charge of ₹50 per tonne as 'Evacuation Facility Charges' on all despatches except dispatch through rapid loading arrangement. During the year, a sum of ₹743.57 crore (net of levies) was realized by the company on account of such levy.

Subsidy for sand stowing & protective works

Other operating revenue includes Subsidy for sand stowing & protective works amounting to ₹80.79 crores (PY ₹126.84 crores) received from Govt. of India. Stowing Excise Duty leviable on coal sales was repealed with introduction of GST from 01.07.2017. The Subsidy for sand stowing & protective works accounted for during the year relates to the period prior to 01.07.2017.

Revenue from services

Revenue from services includes consultancy and other services provided by CMPDIL, a subsidiary of CIL to parties outside the CIL's group. Revenue from services which also forms part of other operating revenue has improved significantly from ₹190.60 crores (net of levies) in 2016-17 to ₹328.02 crores (net of levies) in 2017-18.

2) Other Income

Other income primarily includes Interest income from Deposits with Banks, Dividend from Mutual Funds, rental income, profit on sale of assets, other miscellaneous incomes etc. Write back of provisions and liabilities made in earlier years which are no longer required are also considered in other income.

During the year other income declined by 12.51% from ₹5324.21 crore in FY 2016-17 to ₹4658.32 crore in FY 2017-18 mainly owing to lower earnings from interest on bank deposits. The interest earning on bank deposits declined by ₹725.20 crore, from ₹2767.30 Crore in FY 2016-17 to ₹2042.10 Crore in FY 2017-18. The above decline was mainly owing to reduction in average investment in bank deposits and due to decline in average yield from investment in bank deposits/mutual funds.

B. Expenses

Break up of Major Heads: - (₹ in crore)

Particulars	FY 2017-18	FY 2016-17 (Restated)	change	change %
Cost of Materials Consumed	6829.57	6968.52	(138.95)	(1.99)
Change in Inventories of finished goods/work in progress and stock in trade	1679.46	(1238.38)	2917.84	235.62
Excise Duty	1406.13	5587.52	(4181.39)	(74.83)
Employee Benefits Expense	42633.60	33522.88	9110.72	27.18
Power Expenses	2516.42	2546.45	(30.03)	(1.18)
Corporate Social Responsibility Expenses	483.78	489.67	(5.89)	(1.20)
Repairs	1439.47	1285.92	153.55	11.94
Contractual Expenses	12766.97	12303.03	463.94	3.77
Finance Costs	431.79	409.18	22.61	5.53
Depreciation/Amortisation/Impairment	3066.38	2906.75	159.63	5.49
Provisions	372.47	2304.98	(1932.51)	(83.84)
Write Off	0.72	26.97	(26.25)	(97.33)
Stripping Activity Adjustment	3358.25	2672.21	686.04	25.67
Other Expenses	4215.44	5090.91	(875.47)	(17.20)
Total Expenses	**81200.45**	**74876.61**	**6323.84**	**8.45**

[#] *Figures in brackets indicate reduction in expenditure.*

1) Cost of Materials Consumed

Cost of materials consumed relate to materials and items of stores used in coal mining and processing operations, primarily petrol oil and lubricant (including diesel), explosives, and timber. Other consumables used in coal mining operations include tyres, spares for heavy earthmoving machineries, other plant and machinery relating to coal handling plants and beneficiation facilities, vehicles, and other miscellaneous stores and spares.

Cost of material consumed decreased by ₹138.95 crore, from ₹6968.52 crore in FY 2016-17 to ₹6829.57 crore in FY 2017-18 i.e. by 1.99%, mainly due to savings in consumption of stores and spares and also because of savings in procurement of explosives cost inter-alia by implementation of Reverse auction mechanism in such procurements.

2) Employee Benefits Expense

Employee benefit expenses constitute the largest component in the total cost, and are about 52% of the total cost.

Employee benefits expenses (for executive and non-executive employees) include salary, wages and allowances, provisions relating to Employee benefit, contributions to provident fund and gratuity, leave encashment, attendance bonus, productivity and performance linked bonus and other incentives, and other employee benefits.

Effect of Non-Executive pay-revision

During the year wages for non-executive employees were revised. Such wage revision for non-executive employees takes place every five years and was earlier revised in FY 2011-12. The present wage revision (National Coal Wage Agreement X – NCWA X), which was due for revision w.e.f. 01.07.2016, was finalized on 10th Oct 2017 and the payment of revised wages started from October 2017. For the period 01.07.2016 to 30.09.2017, pending such finalization of wage revision, provisions were made in the financial statements. In FY 2016-17 a provision of ₹2101.39 crore was made for the nine months' period 01.07.16 to 31.03.2017. Further during FY 2017-18, an amount of ₹2849.62 crore was also provided pending final settlement, which included an amount of ₹893.01 crore towards shortfall of provision for FY 2016-17.

Effect of change in gratuity ceiling

Employees of Coal India Limited are entitled to gratuity as a defined superannuation benefit plan. Such superannuation benefit is valued on actuarial basis at each reporting date. Further, The Payment of Gratuity Act, 1972 stipulates the ceiling of gratuity payable. Such ceiling was increased from ₹10 lakhs to ₹20 Lakhs during the year vide notification No. S-42012/02/2016-SS-II dated 29.03.2018. Increase in such gratuity ceiling limit to ₹20 Lakhs had financial impact of ₹7384.37 crores which was fully provided during the year.

Effect of change in executive pay revision

Department of Public Enterprises had constituted 3rd Pay Revision Committee to review the structure of pay scales and allowances/benefits of various categories of Central Public Sector Enterprise. The recommendation of the Committee has been submitted and guidelines are issued by DPE in this respect. The Salary for the executive employees is due for revision every ten years. Such salary revision is presently due from 01.01.2017. Pending implementation of revision of salary for executive employees, a provision of ₹899.14 crore has been made in the financial statements for the FY 2017-18.

The above along with other increases like annual normal increment in salary & DA, increase in Provision for Performance related pay/exgratia etc. accounted for the total increase of ₹9110.72 crore in employee benefits expense from ₹33522.88 crore in FY 2016-17 to ₹42633.60 crore in FY 2017-18, i.e. 27.18 %.

3) Power Expenses

Power expenses represent cost of electricity consumed in operations. Power expenses was ₹2516.42 crore in FY 2017-18 as against ₹2546.45 crore during FY 2016-17. The decrease in amount of power expenses in current year FY 2017-18 is by ₹30.03 crore.

4) Corporate Social Responsibility Expenses (CSR expenses)

The Company has framed CSR Policy on the basis of provisions of The Companies Act, 2013 and guidelines issued by Department of Public Enterprises. Such policy is followed by both CIL and its subsidiary companies individually. The areas of CSR expenses, as per the said policy, include education, Water supply including drinking water, medical facilities, health awareness programme/medical camps, social empowerment, promotion of sports & culture, relief to victims of natural calamities/disasters, Infrastructure development, environment etc.

During the year total expenditure on CSR was ₹483.78 crore as against ₹489.67 crore during FY 2016-17.

5) Contractual Expenses

Contractual expenses primarily consist of transportation charges for coal, sand and materials carried out through third party contractors, contractor expenses relating to wagon loading operations, hiring charges for plant and machinery and Heavy Earth Moving Machinery representing cost of coal extraction and overburden removal activities and other miscellaneous works carried out through third party contractors such as for haul road maintenance at mines and temporary lighting etc.

Contractual Expenses increased by ₹463.94 crore, from ₹12303.03 crore in FY 2016-17 to ₹12766.97 crore in FY 2017-18, i.e. 3.77%. Transportation charges of coal & Hire charges of plant and equipment has increased in the current year. The contractual expense pertains to both coal production as well as removal of overburden. While during the year, the coal production increased by 2.39% (from 554.14 Mill Te in FY 2016-17 to 567.37 Mill Te in FY 2017-18) the overburden removal volume increased by 1.85% (from 1156.38 Mill CuM in FY 2016-17 to 1178.12 Mill CuM in FY 2017-18). The increase in contractual expenses during the year was largely on account of increase, in the volume of production of coal and over burden. Further, higher diesel rates during the year in comparison to previous year also resulted in increase in contractual expenses. It may be mentioned that the contractors as per the agreement are compensated for diesel price increases.

6) Repairs

Repairs consist of cost of repair and maintenance of plant and machinery relating to departmental operations, rehabilitation of heavy earthmoving machinery, office equipment, vehicles and other miscellaneous assets.

Repair Expenses increased by ₹153.55 crore, from ₹1285.92 crore in FY 2016-17 to ₹1439.47 crore in FY 2017-18, i.e. 11.94%. Repairs to Buildings & Plant & machinery has increased by ₹105.98 crore & ₹51.80 crore respectively.

7) Finance Costs

Finance costs increased by ₹22.61 crore, from ₹409.18 crore in FY 2016-17 to ₹431.79 crore in FY 2017-18, i.e. 5.53%, mainly due to unwinding of discount on Site restoration costs etc.

8) Stripping Activity Adjustment

In accordance with the Accounting policy of the company, in open cast mines with rated capacity of one million tonne per annum and above, the cost of Stripping activity is charged on technically evaluated average ratio (overburden : coal) at each mine with due adjustment for stripping activity asset and ratio variance account after the mines are brought to revenue. The net of balances of stripping activity asset and ratio variance at the Balance Sheet date is shown as Stripping Activity Adjustment under the head Non-Current Provisions/ Other Non-Current Assets as the case may be.

The Stripping Activity adjustment (cost) varies from subsidiary to subsidiary depending on geo-mining condition of raising the overburden. During the year owing to higher incremental growth in overburden removal compared to incremental growth in production of coal, in some of the subsidiary companies there was reduction in stripping activity adjustment. However, in some of the mines in certain other subsidiary the Stripping ratio of Overburden: Coal was re-estimated and the resultant ratio based on balance life of the mine was determined to be higher than existing ratio. In view of the above, the overall Stripping activity adjustment (net) increased by ₹686.04 crore, from ₹2672.21 crore in FY 2016-17 to ₹3358.25 crore in FY 2017-18, i.e. 25.67%.

9) Depreciation/Amortisation/ Impairment

Depreciation on fixed assets is provided on straight-line method based on their technically estimated useful life. Impairment loss is recognized wherever the carrying amount of an asset is in excess of its recoverable amount and the same is recognized as an expense in the Statement of Profit and Loss and carrying amount of the asset is reduced to its recoverable amount.

Depreciation/Amortization/Impairment increased by ₹159.63 crore, from ₹2906.75 crore in FY 2016-17 to ₹3066.38 crore in FY 2017-18, i.e. 5.49%, owing to higher Capital expenditure during the year.

10) Provisions/write-off

Provisions/write-off include any provisions for doubtful debts and advances, provision for coal quality variance, provisions for unmoved/ obsolete stores and spares inventory, provisions relating to impairment of assets, and any other miscellaneous provisions.

Provisions made are presented net of any write back of provisions no longer required. Write-offs include write-offs for doubtful debts, doubtful advances and other write-offs.

Further the year end provision (net) for coal quality variance on sales (awaiting sampling results) decreased by ₹798.82 crore, which mainly contributed in decrease of provision/write-off by ₹1958.76 crore, from ₹2331.95 crore in FY 2016-17 to ₹373.19 crore in FY 2017-18, i.e. 84%.

11) Other Expenses

Other expenses includes various operational, selling and administrative expenses, under-loading expenses paid to Indian Railways, mine rehabilitation expenses, security expenses, and rent, rates and taxes, traveling expenses, employee training expenses, cost of printing and stationery, communication, advertisement and publicity related expenses, freight charges for stores and materials, demurrage paid to Indian Railways and land/crop compensation and hire charges for office administration equipment and other miscellaneous expenses .

Other Expenses decreased by ₹875.47 crore, from ₹5090.91 crore in FY 2016-17 to ₹4215.44 crore in FY 2017-18, i.e. 17.20%.

C. Taxation

Income tax expense comprises current tax expense and deferred tax expense or income computed in accordance with the relevant provisions of the Income Tax Act and Accounting Standards, as amended. Provision for current taxes is recognized based on the estimated tax liability computed after considering deduction/benefits of all allowances and exemptions in accordance with the Income Tax Act.

Net Deferred tax assets/ liabilities are recognized for the future tax consequences attributable to timing differences that result between the profits offered for income taxes and the profits shown in financial statements. Deferred tax assets and liabilities are measured using tax rates and tax regulations enacted or substantively enacted up to the balance sheet date. The effect on deferred tax assets and liabilities due to a change in tax rates is recognized in the financial statement of the relevant financial year of change of rate. Deferred tax assets in respect of carry forward losses are recognized only to the extent that there is virtual certainty that sufficient future taxable income will be available against which such deferred tax asset can be realized. Other deferred tax assets are recognized only if there is a reasonable certainty that sufficient future taxable income will be available against which such deferred tax assets can be realized. Deferred tax assets are reviewed as at each balance sheet date and written down or written-up to reflect the amount that is reasonably /virtually certain (as the case may be) to be realized.

The total income tax expenses during current FY 2017-18 is ₹3706.66 crore as against ₹5164.79 crore in previous year resulting in effective tax rate of about 34.56% in FY 2017-18 as against effective tax rate of about 35.75% in FY 2016-17.

D. Reconciliation of profit before tax:

Profit Before Tax (PBT) for FY 2016-17:	₹14446.33 crore
Increase in PBT due to:	
*Increase in net sales (Refer Para A(1)(i) above):	₹6126.60 crore
*Levy of Evacuation facility charges (Refer Para A(1)(ii) above):	₹743.57 crore
*Increase in loading & transportation charges (Refer Para A(1)(ii) above):	₹489.69 crore
*Saving in provisions/writeoff (Refer Para B(10) above):	₹1958.76 crore
	₹9318.62 crore

Decrease in PBT due to:

*Increase in employee benefits expense (Refer Para B(2) above) :	(-) ₹9110.72 crore
*Increase in all other expenses (net):	(-) ₹1009.95 crore
	(-) ₹10120.67 crore
Increase in changes in inventories of finished goods/ work-in-progress and stock in trade :	**(-) ₹2917.84 crore**
Net decrease in PBT (10120.67+2917.84-9318.62) :	(-) ₹3719.89 crore
Profit Before Tax (PBT) for FY 2017-18 :	₹10726.44 crore

BREAK UP OF PROFITS ***(₹ in Crore)***

Particulars	**2017-18**	**2016-17**
Profit Before Tax (PBT)	10726.44	14446.33
Income Tax	3706.66	5164.79
Profit for the period from continuing operations	7019.78	9281.54
Profit/(Loss) from discontinuing operations	-	(0.01)
Share in JV's/Associate's profit (loss)	0.44	(1.76)
Profit for the period	7020.22	9279.77
Other Comprehensive Income	632.51	82.00
Total Comprehensive Income	7652.73	9361.77
Profit attributable to :		
Owners of the company	7020.34	9280.02
Non- controlling Interest	(0.12)	(0.25)
Total	**7020.22**	**9279.77**
Total comprehensive income attributable to		
Owners of the company	7652.85	9362.02
Non- controlling Interest	(0.12)	(0.25)
Total	**7652.73**	**9361.77**

The Profit before Tax (PBT) decreased by ₹3719.89 crore, i.e. 25.75%, from ₹14446.33 crore in FY 2016-17 to ₹10726.44 in FY 2017-18.

The Profit attributable to owners of the company decreased by ₹2259.68 crore, i.e. 24.35%, from ₹9280.02 crore in FY 2016-17 to ₹7020.34 crore in FY 2017-18.

E. Cash Flows (in nutshell)

(₹ in Crore)

PARTICULARS	**For the year ended 31st March**	
	2018	**2017**
Opening Cash & Cash equivalents	4193.91	4876.40
Net cash from operating activities	21255.85	16460.84
Net cash from investing activities	(7676.28)	454.64
Net cash used in financing activities	(13580.82)	(17597.97)
Change in Cash & Cash equivalents	(1.25)	(682.49)
Closing Cash & Cash equivalents	4192.67	4193.91

Net cash from operating activities for the year ended March 31, 2018 increased by ₹4795.01 crore i.e. 29.13%, ₹21255.85 crore for current year as against ₹16460.84 crore for the previous year. Increase in cash flow from operating activities was mainly due to, higher realisations of trade receivables and increase in other current/Non-current provision and financial/non-financial liabilities.

Net cash from investing activities for the year ended March 31, 2018 decreased by ₹8130.92 crore, net cash outflow of ₹7676.28 crore for current year as against net cash inflow of ₹454.64 crore for the previous year. Decrease in cash flow from investing activity was mainly on account of investment in bank deposit, less interest received from investment and more capital expenditure compared to previous year, more investment in joint ventures.

Net cash used in financing activities for the year ended March 31, 2018 decreased by ₹4017.15 crore i.e. 22.83%, ₹13580.82 crore for current year as against ₹17597.97 crore for the previous year. The decrease in outflow from financing activity was mainly attributable to increase in borrowings in some of the subsidiaries, decrease in the dividend payment etc.

F. Balance Sheet - Analysis

[Figures in ₹ Crore]

	As at 31.03.2018	As at 31.03.2017	Remarks/Analysis
ASSETS			
Non-Current Assets			
(a) Property, Plant & Equipments	24,063.30	22,035.99	Increased (net) due to addition of new plant and machinery
(b) Capital Work in Progress	10,286.42	8,585.22	Increased (net) due to addition of Capital Work in Progress
(c) Exploration and Evaluation Assets	3,484.58	1717.73	Increased (net) due to incurrence of expenditure in development mines and payment of upfront fees of ₹1375 crore by ECL, BCCL and WCL for allocation of 11 coal blocks.
(d) Intangible Assets	29.53	57.65	Decreased (net) due to impairment of Intangible assets.
(e) Financial Assets			
(i) Investments	1,303.06	969.39	Increased due to Investment of in JVs during the current financial year.
(ii) Loans	1,020.08	23.29	Increased due to Loan of ₹1000 Crores to NLCIL by MCL, a subsidiary company of CIL.
(iii) Other Financial Assets	10,590.03	9534.29	Further investment as per norms in escrow fund relating to site restoration/ mine closure of money lying in bank deposits.
(f) Deferred Tax Assets (net)	5,355.05	2732.76	Mainly due to incremental, provision made for salary and wage settlement for non-executive and executive & gratuity ceiling increase.
(g) Other non-current assets	2,545.40	2238.99	Increase in advances for railway line construction (CCL)
Total Non-Current Assets (A)	**58,677.45**	**47,895.31**	
Current Assets			
(a) Inventories	6,443.85	8,945.27	Decrease due to Liquidation of inventory
(b) Financial Assets			
(i) Investments	205.57	513.47	Utilization of mutual fund investment
(ii) Trade Receivables	8,689.16	12476.27	Decreased due to Settlement of dues/ provisions made during the year
(iii) Cash & Cash equivalents	4,192.67	4,193.91	
(iv) Other Bank Balances	27,282.40	26955.28	Increase in Bank Deposit
(v) Loans	3.69	12.48	Recovery of Loans during the year
(vi) Other Financial Assets	3,565.64	2,829.83	
(c) Current Tax Assets (Net)	8,177.73	7,467.97	
(d) Other Current Assets	10,253.57	6,525.43	Increase in Input tax credit available which is yet to be utilized.
Total Current Assets (B)	**68,814.28**	**69,919.91**	
Total Assets (A+B)	**1,27,491.73**	**1,17,815.22**	
Equity			
(a) Equity Share Capital	6,207.41	6,207.41	
(b) Other Equity	13,639.16	18,310.68	Decrease (Net) mainly due to utilization of reserves on account of dividend payment
Equity attributable to equityholders of the company	**19,846.57**	**24,518.09**	
Non-Controlling Interests	362.45	345.92	Increase in share of non-controlling interest.
Total Equity (A)	**20,209.02**	**24,864.01**	
Liabilities			
Non-Current Liabilities			
(a) Financial Liabilities			
(i) Borrowings	1,054.40	294.80	Increase due to borrowings by subsidiary of SECL.
(ii) Other Financial Liabilities	1,163.55	1,042.76	Increase in security deposit

	As at 31.03.2018	As at 31.03.2017	Remarks/Analysis
(b) Provisions	49,903.10	43778.11	Mainly due to increase in liability for Mine closure and stripping activity adjustment.
(c) Other Non-Current Liabilities	4,366.58	3,819.71	Increase due to contribution to Shifting and rehabilitation fund.
Total Non-Current Liabilities (B)	**56,487.63**	**48,935.38**	
Current Liabilities			
(a) Financial Liabilities			
(i) Borrowings	476.54	2,712.97	Decreased due to repayment of short term borrowings during the year.
(ii) Trade payables	4,516.93	3,884.31	Increased due to payable on account of Stores & spares, Power & fuel and other expenses
(iii) Other Financial Liabilities	5415.54	4747.97	Earnest Money Deposit and Security Deposits for various work contracts etc.
(b) Other Current Liabilities	25,572.48	21,524.07	Mainly due to increase in advance from customers in subsidiaries.
(c) Provisions	14,813.59	11,146.51	Increase mainly due to increase in Gratuity Provision, Executive pay provision & NCWA-X Provision.
Total Current Liabilities (C)	**50,795.08**	**44,015.83**	
Total Equity and Liabilities (A+B+C)	**1,27,491.73**	**117815.22**	

G. Dividend

During the year ended 31.03.2018, the company has paid interim dividend of ₹16.50 (₹19.90) per equity share of face value of ₹10/- each for the year 2017-18 amounting to ₹10,242.24 crore (₹12,352.76 crore).The Board of Directors of the company decided to recommend such interim dividend already paid as final dividend and no additional dividend has been recommended for the year 2017-18.

H. The various ratios related to the financials of Coal India: -

	April to March' 18	April to March' 17
As% Net Sales		
Profit Before Tax	12.91%	17.82%
As% Total Expenditure		
Employee Benefits Expense	52.50%	44.77%
Cost of Materials consumed	8.41%	9.31%
Power Expenses	3.10%	3.40%
Contractual Expenditure	15.72%	16.43%
CSR Expense	0.60%	0.65%
Interest & Depreciation	4.31%	4.43%
All other Expenditure	15.36%	21.01%
Liquidity Ratios		
Current Ratio	1.35	1.59
Quick Ratio	1.23	1.39
Trade receivables as no. of Days sales	24.94	37.24
Stock of Coal as no. of Days of production (Qty)	35.74	45.07
Structural Ratios		
Long Term Debt : Equity	0.17	0.05
Long Term Debt : Net Worth	0.05	0.01
Net Worth : Equity Capital	3.19	3.95
Earnings Per Share (in ₹)	11.31	14.80

8.0 MATERIAL DEVELOPMENT IN HUMAN RESOURCES/INDUSTRIAL RELATIONS FRONT, INCLUDING NUMBER OF PEOPLE EMPLOYED.

I. Manpower

The manpower strength of the company as on 31.03.2018 against the previous year was as under:

Year	Executive	Non-Executive	Total
31.03.2017	17730	292286	310016
31.03.2018	17558	281199	298757

The manpower strength has come down by 11259 during 2017-18.

II. Talent Development Initiatives

Overall, professional development of the employees is at the core of HR policies of the company. The company provides an equal opportunity to all employees to grow and develop in their area of specialization by imparting training both in general and on special fields and the company has established Indian Institute of Coal Management (IICM), Ranchi as an apex Training Institute, a Management Development Institute at every subsidiary, 102 Vocational Training Centres in all projects and 27 other training centres for imparting management and skill development trainings. Further, Coal India is also providing training to the employees through reputed educational Institutions/ professional Institutes across the country to tap best management and technical expertise.

In the year 2017-18, 107943 employees have been imparted training out of which 18373 were executives and 89570 were non-executive on various professional fields and skills. We have organized various In-house training programs for executives & non-executives covering about 102727 employees across the organization. Besides this, 5216 employees (4594 executives & 622 non-executives) were trained outside the organization within India.

During 2017-18, Organization appointed 1143 Executives from different sources and put into on-the-job training for a period of one year after the initial induction programme at IICM.

For grooming the middle management, the special training programs are organized through tie ups with Institutes like Administrative College of India (ASCI) Hyderabad, IIM Lucknow, ISM Dhanbad, etc to develop executives to take up higher responsibilities and occupy senior positions.

Further, CIL is also committed to support the Skill India Mission of Govt. of India. Till date, training and assessment have been done for 35,253 own employees of CIL to bring them in line with NSDC Qualifications. Further, 4700 contract workers engaged in CIL operations have been trained and certified by NSDC. Fresh skilling, under National Skills Qualification Framework (NSQF) aligned training programmes, was imparted to 1394 youth and women from operational areas of CIL, out of which, 706 persons have been placed in different organizations so far.

III. Talent Acquisition

CIL recruited 1143 fresh Executive cadre employees during the year 2017-18 from multiple sources such as all India level open sourcing, Campus sourcing. They are being groomed as GenNext leaders through off-the-job as well as on-the-job training interventions under the guidance of experienced senior experts in the company. This process facilitates easy transfer of tacit knowledge base of the organization from the elder generation to the GenNext leaders, besides easy adaptation into the organizational culture.

IV. HR Policy Benchmarking

CIL has undertaken HR policy benchmarking exercise to revamp the HR management processes to meet the contemporary needs. Under this exercise, around 11 Policies and 21 Rules have been revised through internal teams and support from Consultant. Some of the policies and rules like Mentoring Policy, Talent Management Policy, TA/DA rules, House Building Advance Rules, Furniture and Household Purchase Scheme, Leave Rules, Conveyance Advance Rules, Medical Attendance Rules, etc. are already approved by CIL Board.

V. Industrial Relations

In Mining industry, employees play a pivotal role in all spheres and for Coal India Ltd. (CIL) employees are of utmost importance. The company not only caters the concerns of associated stakeholders but also provides equal attention to those affected directly or indirectly by its operations in the value chain. The stakeholders of CIL includes company's 2.98 lakhs employees, their families, contractor workers, villagers around coalfields etc. CIL is committed to all the stakeholders and is in constant endeavour to amalgamate varying needs of stakeholders with its people-centric principles, policies and programmes.

The following pro-active and strategic Industrial Relations (IR) approaches & practices ensure harmonious & sustainable industrial relations in the company: -

a. Workers Participation in Management:

The decisions involving workers are taken through bilateral forums of Trade Unions and Management representatives. Bilateral forum such as Housing Committee, Welfare Committee, Canteen Committee etc. are functional at all projects. Similarly, in order to resolve the issues pertaining to service conditions, welfare, safety etc., bipartite meetings are held at regular intervals in Unit, Area, Subsidiary & CIL (HQ) levels. Every subsidiary has its Apex Bipartite Committee named Joint Consultative Committee (JCC), headed by Chairman-cum-Managing Director of the Subsidiary. JCC at subsidiary level is represented by Trade Unions along with Management. The JCC looks into various strategic issues related to improving the Production, Productivity & Performance of the Subsidiary.

b. Contract Labour Cell & Contract Labour Information Portal (CLIP):

Around 69,372 (as on 31.03.2018) Contract Labour provide support in various activities of the company. A Contract Labour Management Cell has been set up in CIL and its subsidiaries for better management of Contractors workers. Similarly, for facilitating the Contractors in management of their workers, CIL has launched a portal, Contract Labour Information Portal (CLIP). CLIP maintains complete database of all contracts and Contractor's workers. It enables verification of wage payment of Contractor's workers, keeps account of deductions like PF, monitors the health of contract workers and facilitates other compliance under the Contract Labour (Regulation & Abolition) Act 1970.

c. Reservations:

CIL complies with the provisions under Presidential Directives on reservations in appointments and promotions of candidates/employees belonging to Scheduled Caste, Scheduled Tribe, OBC, Physically challenged etc.

d. Diversity Management:

CIL maintains unity in diversity by recruiting people from different States through All India based open selection and campus selection from across the country. Similarly, it provides reservation for SC, ST, OBC communities. Manpower of CIL constitutes 19.13% of SC, 13.7% of ST and 22.91% of OBC as on 1.1.2018. Female employees of CIL constitutes 6.7% of its total manpower.

e. Non-Discrimination:

We treat our employees equally on grounds of religion, caste, region, creed, gender, languages etc. Discrimination is kept at bay in CIL. While all employees are given equal opportunity in service matters, apart from Maternity Leave, we extend special provisions like Child Care Leave to encourage women employees.

f. Prevention of Sexual Harassment at workplace:

Sexual harassment of any form is misconduct under the Conduct Discipline and Appeal Rules applicable to executives as well as in the Standing Orders applicable to the non-executives. Internal Complaints Committee (ICC) is functioning at unit, area and headquarter level under the Sexual Harassment of women at work place (Prevention, Prohibition and Redressal) Act, 2013.

g. Freedom of Associations:

Egalitarian values are ingrained in the management of human resource in the company. Employees are free to be a part of any registered Trade Union and Non-Govt. Organizations. Trade Unions affiliated to the Central Trade Unions are operating in Unit, Area, Subsidiary & CIL (HQ) level. Representation of employees through Trade Unions is allowed in the bipartite bodies under the norms of the Industrial Relations System.

h. Employee Welfare:

CIL adheres to a "total care approach" towards its employee. The employee welfare programmes addresses not only the need of employees but also their families. Employees are provided with decent housing, electricity, water supply etc. The residential areas are well connected with roads and other community facilities like recreation centers, stadium, gymnasium, library, colony roads, shopping complex, play grounds/ parks, street lighting, drainage system, cooperative society etc. The employees and their family members, including dependent parents, are entitled for free medical treatment anywhere in the country subject to certain conditions. The company has also developed medical facilities at all its operational areas. It has a strong network of 80 fully equipped Hospitals with 4938 beds, 376 Dispensaries, 541 Ambulance and 1150 Doctors including Specialists in CIL and its Subsidiaries to provide Medical Services to the employees. Further, for treatments not available in Company's hospitals, facilities are available for referral to other reputed Hospitals across the country.

Educational facilities have been created for providing quality education to the children of employees. There are 62 public schools financed by the company to provide quality education and grant-in-aid is given to 284 privately managed schools. CIL also gives assistance to other 81 schools in and around the coal field areas. The company provides scholarships to meritorious students and supports higher education of children of non-executive employees studying in Government Engineering Colleges & Medical Colleges by extending facility for reimbursement of their tuition fees and hostel charges.

In order to supply essential commodities and consumer goods at a cheaper rate, Central Co-operatives and Primary Co-operative stores along with Cooperative Credit Societies are functioning in the Coalfield areas of the company.

CIL also provides various amenities at workplaces for improving the overall work culture of the organization. Towards this, CIL has 422 Canteens, 6 Crèches, 15 Pit Head Baths, 446 Rest Shelters, drinking water facilities at all workplaces.

i. Post-Retirement Medical Support:

CIL has added Post-Retirement Medical Benefit for providing health support to the employees and their spouses. Subject to conditions, the scheme provides reimbursement of medical expenses for indoor and outdoor treatment for a maximum amount up to Rs 5 lakhs and Rs 25 lakhs, for ordinary cases, to Non-Executives and Executives respectively. Enhanced support in case of critical diseases such as Heart and vascular diseases, Cancer, Renal diseases, Paralysis, AIDS, Addison's disease & Adrenal Histoplasmosis is also provided.

j. Social Security : All employees are covered under the social security schemes of CIL as below:

1. **Gratuity :** Upto ₹ 20 Lakhs as per Payment of Gratuity Act w.e.f 29.03.2018
2. **Life Cover Scheme :** ₹125000/- in addition to Gratuity
3. **Ex-Gratia :** In addition to Employee Compensation Act, ₹ 90000/- in case of fatal mine accident, ₹ 5 Lakhs is paid to the next of kin of the deceased employee.

4. **Coal Mines Provident Fund (CMPF):** All employees are covered under the Coal Mines Provident Fund scheme with equal shares both by employees and the company.

5. **Coal Mines Pension Scheme :** On minimum 30 years on service, the employees are eligible and are covered under the pension scheme in which, on superannuation, they receive 25% of their last drawn notional salary (basic pay and dearness allowances) as monthly pension. However, where an employee has not completed thirty years but has completed ten years' pensionable service, on attaining the age of superannuation, the pension shall be determined on the length of service and accordingly 25 percentage of average emoluments will be given as pension.

In the event of death of the employee, the spouse and their children are eligible to receive pension.

6. **Employment** to the eligible dependent of the deceased employee or an employee who has been declared medically unfit is also provided as per the policy.

7. **Monthly monetary compensation in lieu of employment :** Initial Basic of Category-I to the female dependent of Non-Executive & Initial Basic of E-1 to the female dependent of Executive.

k. Grievance management :

CIL has a robust online grievance management system to deal with the grievances of its stakeholders. Under the policy, all grievances are being addressed within the scheduled timeline and the stakeholders are informed accordingly. In the year 2017-18, Coal India has received a total of 7317 grievances in online portal, out of which, 6613 grievances have been disposed.

l. Transparency:

Transparency is one of the core values in CIL. The company provides various trainings to inculcate the values of the company among employees. CIL fully complies with the provisions of RTI Act 2005. In the year 2017-18, CIL (HQ) received a total of 2012 applications seeking various information under RTI Act 2015, out of which 1389 applications were suitably relied whereas 459 applications were transferred to subsidiaries for providing information. All the circulars/ office orders/ manuals/policies/promotion orders are regularly uploaded on the CIL's website in public domain for wide publicity and transparency. CIL encourages its employees to disclose their assets by providing an online return filling system.

The above approach resulted in maintaining excellent industrial relations in the company leading to reduction in number of strikes, production loss & man shift loss.

9.0 ENVIRONMENT PROTECTION AND CONSERVATION

Environmental protection measures are taken concurrently with mining operations for maintaining acceptable levels of major physical attributes of environment namely air & water quality, hydrogeology, noise level & land resources.

Suitable water spraying systems for arresting fugitive dust in roads, washeries, CHPs, Feeder Breakers, Crushers, coal transfer points and coal stock areas have been installed. Massive tree plantation in and around mining area, controlled blasting, use of modern techniques reduce air and noise pollution.

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. Domestic waste water treatment facilities have also been provided to deal with the domestic effluent. Domestic sewage treatment plants have also been established for treatments of domestic effluents. 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, de-silting of existing ponds/tanks etc.

The level of pollutants is being monitored on routine basis as per the statutory guidelines to ascertain the efficacy of the pollution control measures being taken in the projects.

Technical and biological reclamation of the mined out areas and the external overburden dumps are being taken by planting native species of plants for restoring the ecology. ECO- restoration site developed in Damoda, Tetulmari of BCCL, with technical guidance of FRI and 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, Sauner of WCL etc.).

The subsidiaries of CIL have planted around 96.00 million of trees covering an area over 38378.98 ha till March 2018 which includes 1.99 million over 821.52 Ha. in 2017-18. CIL introduced state-of-the-art Satellite Surveillance to monitor land reclamation and restoration for all opencast projects.

CIL has engaged Indian Council of Forestry Research & Education (ICFRE), Dehradun for **Environmental Audit of 20 OC Mines of CIL** intending third party inspection, verification of the existing levels of pollution. Draft report for the 20 mines has been submitted by ICFRE.

CIL has also engaged ICFRE in December 2017 for developing approach and methodology for index rating of environmental conditions and performance evaluation as per the EC conditions in 35 Mines of CIL .

CIL has signed an 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.

Technological conservation

Adoption of modern technologies like Surface Miners, Continuous Miners, Highwall Miners at different subsidiaries of CIL, which generates lesser air borne pollution for carrying out mining activities compared to conventional methods as drilling, blasting & use of explosives are introduced.

Renewable Energy Development

CIL has signed a MoU with Energy Efficiency Services Limited (EESL) to promote energy efficiency provisions in CIL and its subsidiary companies**.** Till 31st March 2018, more than 83,000 LED bulbs were replaced in all subsidiary companies of CIL

To promote, Green Initiatives taken by GoI, CIL has submitted Green Energy Commitment letter to MNRE for developing **1000 MW Solar Power Projects** during 2014-19. For implementation of these projects, CIL has signed an MoU with Solar Energy Corporation of India (SECI).

In the 1st phase, CIL is going to set up 2x100 MW Solar Power Plants in the state of Madhya Pradesh. Due to downwards trend in prices of solar projects and availability of land in Madhya Pradesh solar park, the tenders were cancelled and again retender was done which is under process.

Furthermore, CIL is identifying unutilized mined out areas in its Subsidiary Companies for setting up Solar Projects. For achieving the green energy targets, CIL is also exploring opportunities for formation of JV with other PSUs.

CIL's initiatives has resulted in installation of 3.26 MW capacity in CIL HQ and other Subsidiary Companies

10. CORPORATE SOCIAL RESPONSIBILITY:

The budget allocated for CSR activities for F.Y. 2017-18 was ₹ 110.83 crores, much more than the amount calculated as per the provisions of the Companies Act 2013 i.e. ₹7.89 crores. CIL was able to utilize ₹ 24.31 crores for CSR during the financial year, more than the statutory obligation as per Companies Act 2013.

CSR activities were undertaken under various thematic areas, healthcare, water supply, rural development and women empowerment being the prominent ones among them. The activities were entrusted to various implementing agencies, some of them being very prominent and well – known names like Tata Medical Centre, Christian Medical College, Rajiv Gandhi Cancer Institute & Research Centre, The Energy and Resources Institute (TERI), Central Institute of Plastic Engineering & Technology (CIPET), Kendriya Sainik Board, NRS Medical College & Hospital, Lions Club International Foundation India, Liver Foundation West Bengal and ICAR – Central Institute of Fisheries Technology, to name a few. Funds were also transferred to subsidiaries of CIL (CCL, WCL and SECL) to help them in fulfilling their committed CSR liabilities.

Monitoring, an important aspect of community based projects, was greatly emphasized upon by CIL. Members / Representatives of Below Board Level CSR Committee of CIL have visited all the major CSR projects and funds (second installment onwards) have been released only after the field visit reports being satisfactory. Stalled projects due to non-submission of Utilization Certificates (UCs) by implementing agencies have been revived after obtaining the Utilization Certificates.

The widespread public outreach of CSR activities is very important in order to establish and enhance CIL's image as a socially responsible company as well as to attract sincere partners as implementing agencies with innovate ideas for the upliftment of the underprivileged. To achieve this, a coffee table book on CSR activities highlighting the major CSR initiatives of CIL and its subsidiaries during the past few years was published and circulated among the subsidiaries, ministries of central government and other CPSEs. The book has received encouraging response.

Theme wise Expenditure by CIL (HQ) during year 2017-18

Thematic Area Wise Expenditure			
Sl. No.	**Thematic Area**	**Expenditure in F.Y. 2017-18 (₹ Lakhs)**	**As a % of Total CSR Expenditure in F.Y. 2017-18**
1	Healthcare	1075.68	44.24%
2	Drinking Water	153.05	6.29%
3	Education	81.35	3.35%
4	Skill Development	60.00	2.47%
5	Women Empowerment	102.21	4.20%
6	Welfare of armed forces' veterans and war widows	50.00	2.06%
7	Sanitation	75.84	3.12%
8	Welfare of Divyang	2.18	0.09%
9	Rural Development Projects	773.58	31.82%
10	Administrative expenses	6.96	0.29%
11	Others	50.62	2.08%
	Total (subject to audit)	**2431.47**	**100.00%**

Major Projects for which CSR fund was utilized in FY 17-18 by CIL (HQ)

- Installation of 200 nos. of hand pumps in Bhadohi district, Uttar Pradesh through Uttar Pradesh State Agro Industrial Corporation Limited (UPSICL).
- Cure and better management of disease in Thalassemia patients by way of financial assistance of ₹ 10 lakhs per patient to Christian Medical College, Vellore, Tata Medical Centre, Kolkata and Rajiv Gandhi Cancer Institute and Research Centre, New Delhi.
- Construction of soak pits, drains, platforms etc. for spot sources including training & IEC activities in 40 villages of Purulia district through Water & Sanitation Support Organization (WSSO), PHED, West Bengal.
- Different development works in Purulia, West Bengal through The Energy and Resources Institute (TERI) :-
  - Promoting renewable solutions for the energy needs of the households – Installation of Integrated Domestic Energy Systems and Solar Street Lights.
  - Agriculture, greening and capacity building initiatives.
  - Sanitation – Construction of Individual Household toilets in 5,660 households.
  - Education through Knowledge cum Resources Centers in 40 schools.
- Contribution of Rs. 50 lakhs to Armed Forces Flag Day Fund.
- Completion of training in plastic engineering and technology to 400 persons at Central Institute of Plastic Engineering and Technology, Murthal.
- Setting up blood bank with component separator facility at Belur, Howrah, West Bengal through Belur Shramjibi Swasthya Prakalpa Samity.
- Financial support towards setting up of Indian Institute of Liver and Digestive Sciences (IILDS), West Bengal by way of procurement of medical equipment through Liver Foundation, West Bengal.
- Menstrual Hygiene Management (MHM) for adolescent girls in Upper Primary and Secondary schools of Purulia district through Nirman Foundation.
- Construction of a hostel for accommodating girls belonging to BPL and backward communities for their skill development as mid level opthalmic assistants under project Nai Roshni through NANRITAM.