

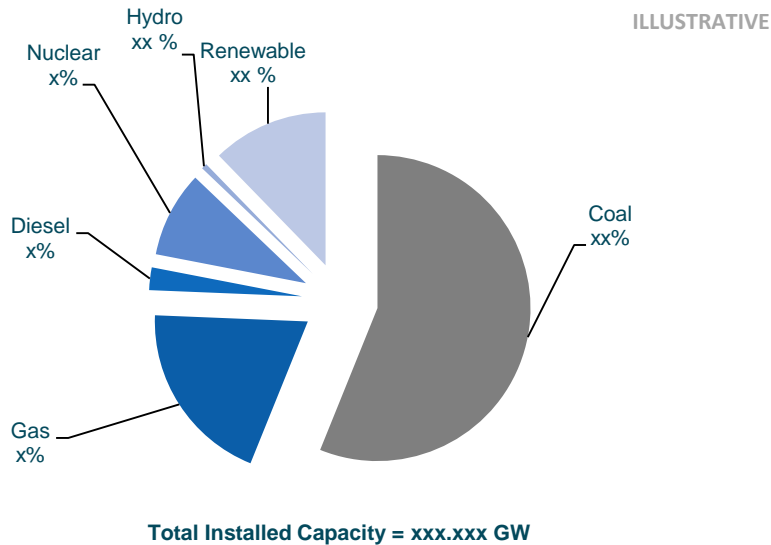
# Coal Demand Supply Outlook in India

Factoring coal sourcing , logistics , opportunities and strategies

December 2013

Coal has been the mainstay of Indian economy since the advent of industrial activity in India. From electricity generation to steel production and cement manufacturing to other industrial applications, coal is the key industrial engine driver. Core industries - crude oil, petroleum refining, coal, electricity, cement and finished steel – have a combined contribution of about quarter in the index of industrial production and are therefore, indicators of present and future outlook of industrial activity.

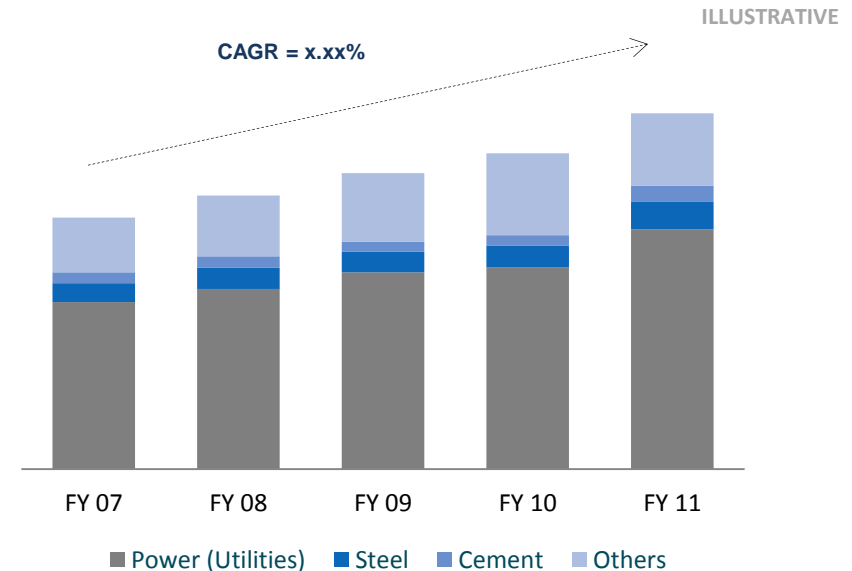
*Exhibit 1.2: Percentage Share of Coal Based Capacity in Total Installed Capacity of India (FY 12)*



Source: ENINCON Research

**With respect to electricity generation , coal is having the peak share with more than xx percent of electricity production depends upon coal.**

*Exhibit 1.3: Sector-wise Coal Consumption in India (MTs)*

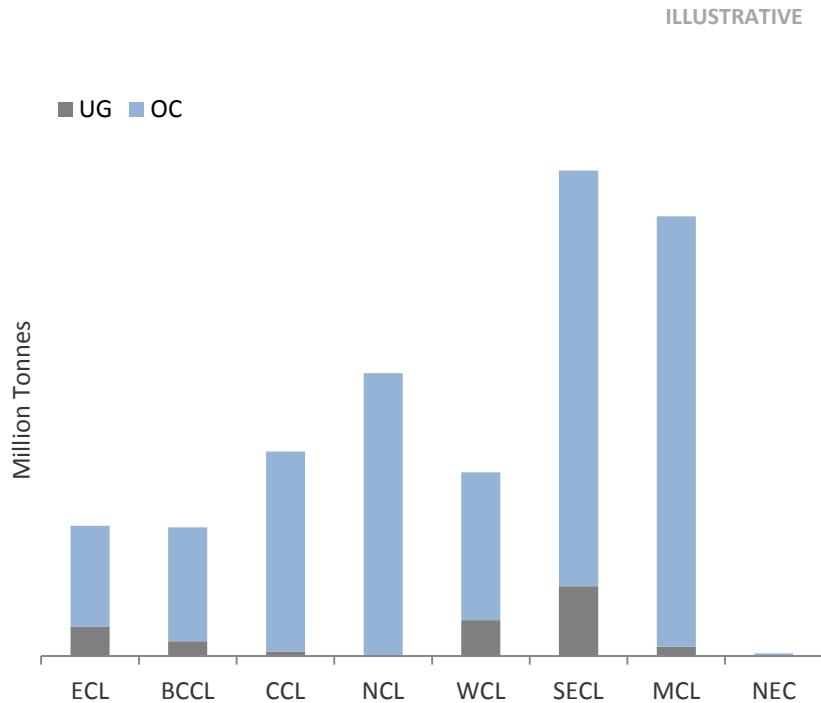


Source: ENINCON Research

**Power sector consumes xx percent of the coal in comparison to other sectors on account of huge thermal power capacity in India.**

Most of the mines in India belong to the Opencast category as they are generally more economical to operate, even though they are considered to be less environment friendly. During last FY, about xx percent coal production of CIL was through opencast mines.

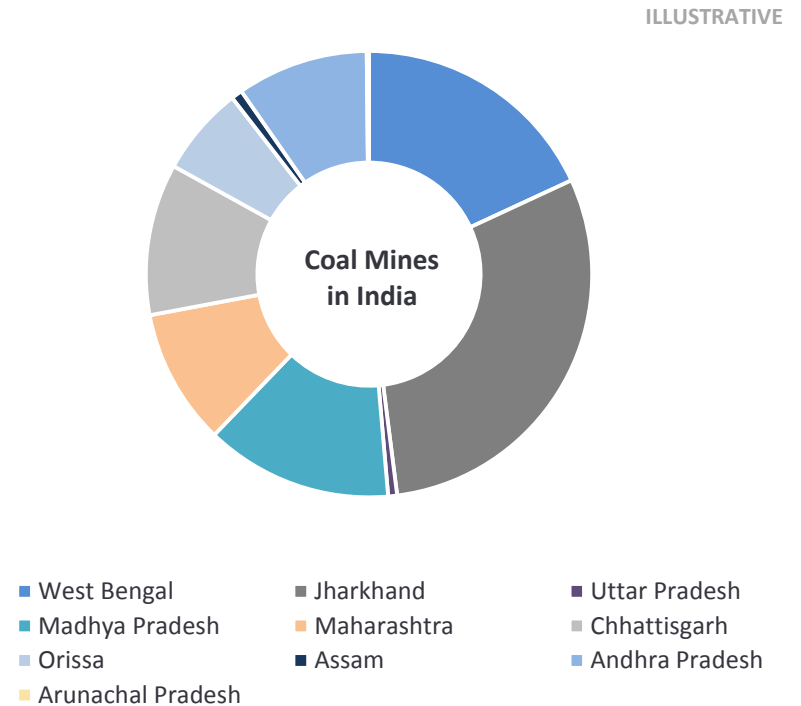
*Exhibit 4.2: CIL's Subsidiary-Wise Distribution of Opencast and Underground Mines*



Source: ENINCON Research

The coal mines of the country are mainly concentrated in the eastern and western region with the maximum number of coal mines situated at Jharkhand, followed by West Bengal. It determines the location of consuming industries, as proximity to coal sources is a major location determinant.

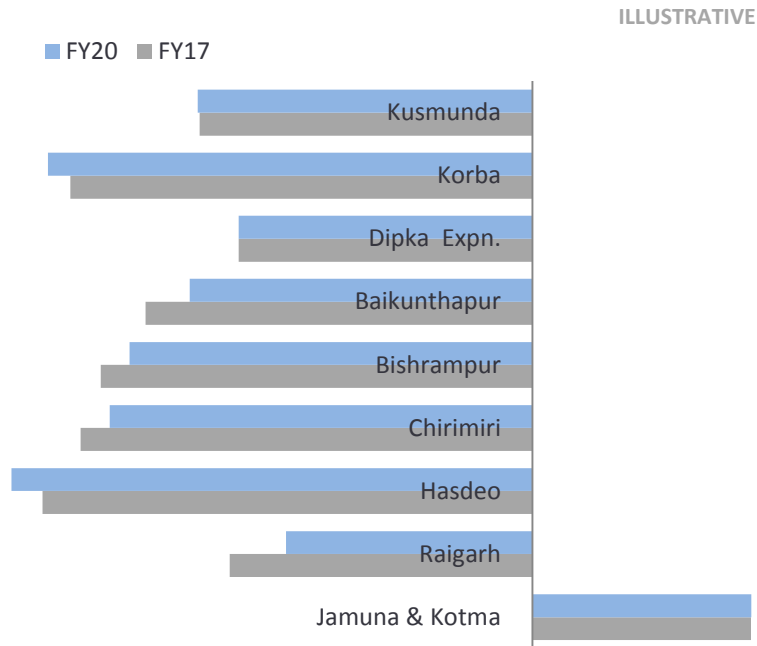
*Exhibit 4.3: Percentage Share of Coal Based Capacity in Total Installed Capacity of India (FY 12)*



Source: ENINCON Research & Analysis

During the XIIth FYP, the production from the xxxx and xxxx mines is expected to be the maximum followed by Raigarh and Kusmunda mines. Currently, the maximum production is from the Dipika Expn. group. which is about xx MT SECL is estimated to produce about xx MT of coal in FY17 and about xx MT amount in FY20 .

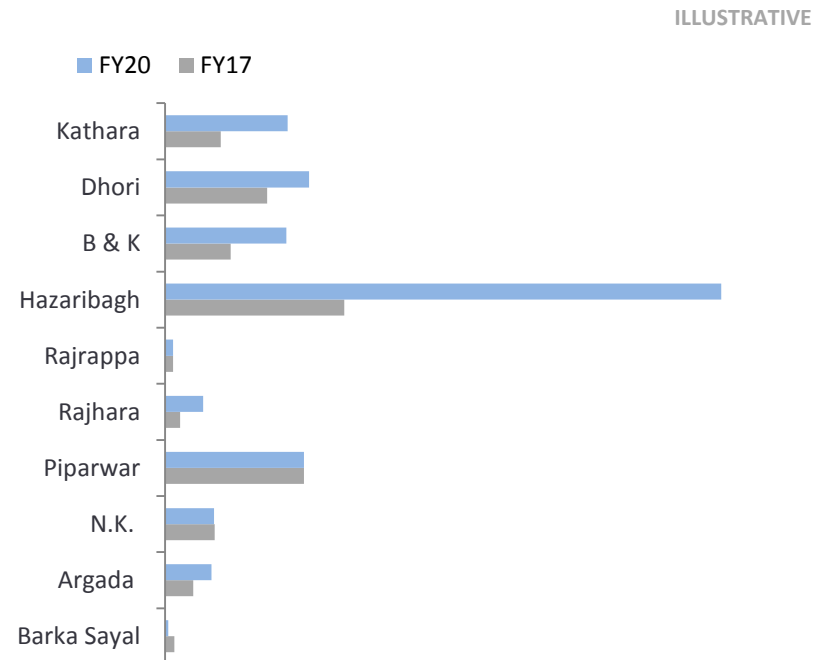
*Exhibit 4.7: Estimated Production from Major Mine Groups of SECL in FY17 and FY20*



Source: ENINCON Research & Analysis

Among the major mines of CCL, the production from the xxxx is expected to be the maximum after XIIth FYP, followed by xxxx and xxxx mines. Piparwar group is presently having the maximum production which is about xx MT. By 2017 CCL is expected to produce about xx MT of coal in and about xx MT by FY20.

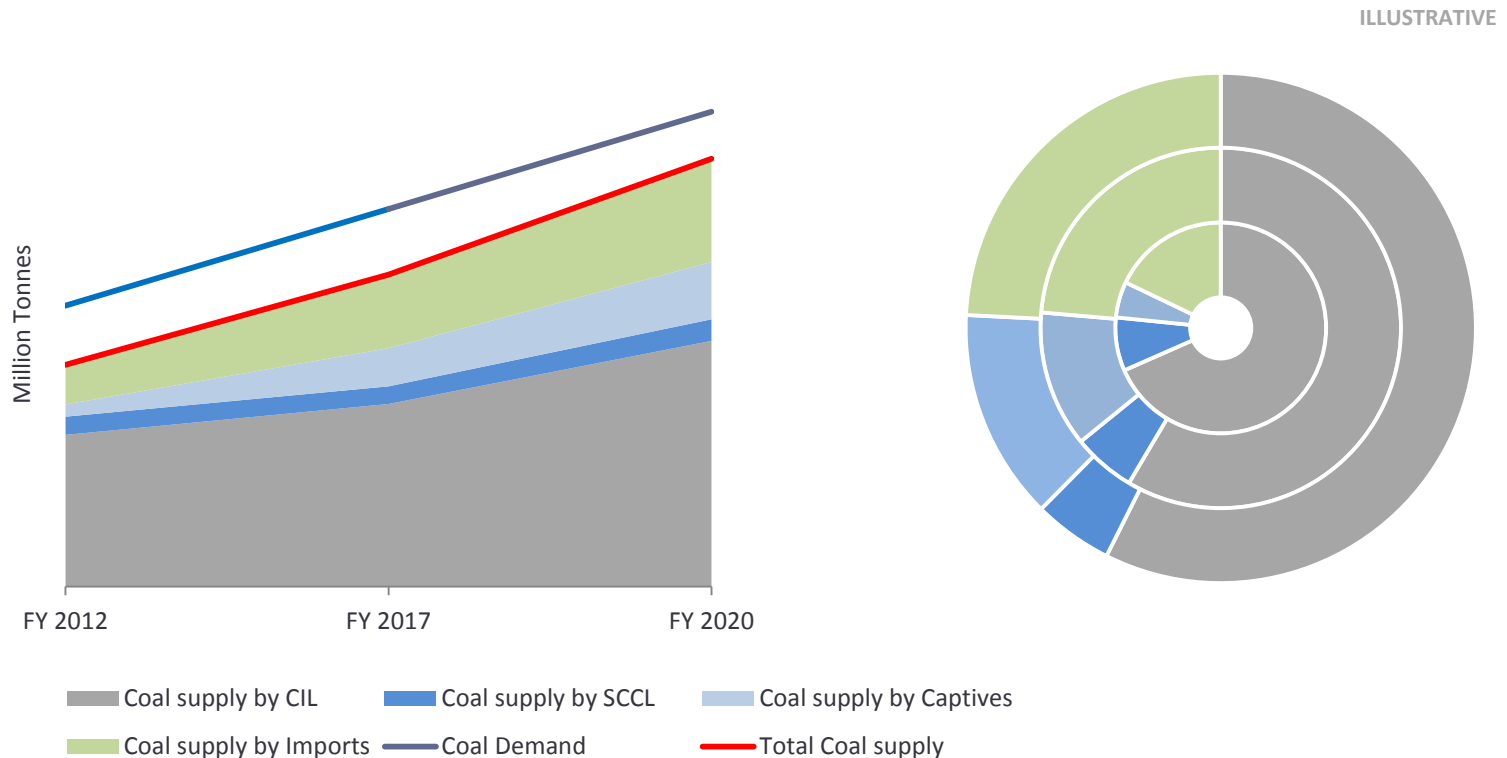
*Exhibit 4.8: Estimated Production from Major Mine Groups of CCL in FY17 and FY20*



Source: ENINCON Research & Analysis

Presently CIL produces about xx percent of the total coal consumed in India. Gradually it will move from its current market share to xx percent in FY 2017 and xx % by FY 2020. Similarly SCCL will also move from its current market share of xx percent in FY2017 and to xx percent by FY 2020 . To meet up the demand supply gap the share of imports will move from xx% in FY2017 to xx% by 2020.

Exhibit 9.1: Coal Supply Estimates FY 2017 & FY 2020



Source: ENINCON CO Model