

Coal Update: June 2020

June 15, 2020 | Industry Research

Coal output marginally up in May over April, but continues to fall y-o-y

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India's coal production picked up marginally by 3% in May 2020 over the previous month as India slowly opened up for the businesses but it was still down sharply from year-ago levels. On a y-o-y basis, coal output fell by 15% in May 2020.

The nationwide-wide lockdown which came into effect on 25 March brought economic activities to a sudden standstill as many factories and offices were shut and operations suspended. This slashed electricity demand, thus affecting the demand for coal and causing inventories to swell to record levels. The combined inventories of coal with power plants and at pit-heads and non-pit-heads of commercial coal mining companies in India have risen to three-months of average coal production seen in last fiscal year.

The lockdown measures were gradually eased in May in several states and large cities, including Delhi, Bengaluru and Hyderabad that decided to reopen some businesses and limited public transport. However demand for coal did not see any significant pick up. Several manufacturing companies were unable to restart operations mainly due to shortage of labour and liquidity constraints. Power plants were not very keen to lift coal due to muted demand and high inventories and dispatch of coal fell by a sharp 26.5% y-o-y in May. Thermal power generation has seen a near 20% month-on-month decline in April 2020. Thermal plant load factor (PLF) declined to 42.4% in April 2020 from 60.3% in February 2020 (Pre-Covid) on account of lower demand.

As India push forward with plans to further ease lockdown measures in June, economic activity and electricity demand from the commercial and industrial sector would see some recovery. Although month-on-month improvement will be seen in coal demand but the short term demand prospects for coal looks subdued as power plants have sufficient coal stocks. Also, to avoid the risk of coal catching fire and pilferage due to high inventories at pit-heads, coal miners are likely to cut their production till the record stockpiles are brought down to mandated levels. The upcoming monsoon season also weighs on coal sectors as hydropower generation will see further growth. However, any diversion of coal to non-power sector, such as cement, steel etc that imports coal (which can be substituted with domestic coal) may provide some support to domestic coal companies and also help in curbing imports.

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The country imported 243 million tonnes of coal in FY20, up by 3.3% over FY19. Coal India Ltd. (CIL) has been mandated by the government to replace at least 100 million tonnes of substitutable imports with domestically-produced coal in the ongoing fiscal. CIL's fuel allocation under the exclusive e-auction scheme (to make coal available to non-power consumers, including captive power plants) for the non-power sector rose over three-folds from 1.2 mt in April 2019 to 3.91 mt in April 2020 as the company looks to tap non-power sector due to slump in demand from the power sector. In FY20, CIL's coal allocation under the scheme had dropped to 8 mt from 11.4 mt in the previous year.

Besides this, opening up of coal mining for the private sector is likely to boost the domestic production in medium term although it will take some time for the country to reduce over dependence on CIL for its coal requirements.

Table1. Volume: Domestic Coal Production, Import of Coal, Steel, Cement and Electricity

| | Production | | | % change | | |
|-------------------------------|------------|------------|--------------|-------------|-------------|-------------|
| | FY18 | FY19 | FY20 | FY18 | FY19 | FY20 |
| Domestic coal output (mt) | 689 | 728.7 | 729.1 | 2.6% | 7.9% | 0.1% |
| Imports (mt) | 213 | 235.3 | 243 | 8.9% | 13% | 3.3% |
| Total (mt) | 902 | 964 | 972.1 | 4.1% | 9.1% | 0.8% |
| Steel output (mt) | 106 | 110.9 | 109.2 | 5.6% | 7.6% | -1.5% |
| Cement output (mt) | 298 | 337 | 334 | 6.3% | 13.3% | -0.8% |
| Thermal power generation (bu) | 1,037 | 1,072 | 1,044 | 4.3% | 3.4% | -2.6% |

MT- Million Tonnes BU- Billion kWh Source: Ministry of Coal, CEA, Office of the economic advisor

India's production of coal grew by a marginal 0.1% to 729.1 million tonnes (Provisional) in FY20 as compared to 7.9% growth in FY19, mainly due to prolong excessive rainfall hampering mining operations. Coal production could have possibly registered a decline if not for increased coal output in the final three months of FY20.

The Covid-19 induced lockdown which came into effect from 25 March brought many business activities across the country to a near standstill. Mining was classified as an essential industry and allowed to remain operational through the lockdown period. However production was impacted due to shortage of labour force as many left for their hometown in the wake of the Pandemic. Besides, halt in business activities sharply reduced the demand for power. Almost 70% of power generation in India is coal-based.

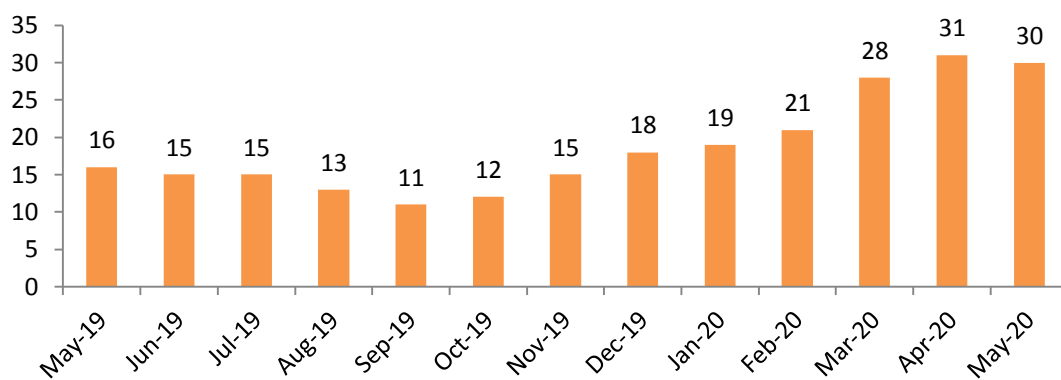
Power sector consumes about 70% of total coal produced in India. Electricity generation (excluding renewables) fell 25.4% y-o-y to 81.5 billion units in April with thermal PLFs facing larger impact than renewables given the higher variable costs and must-run status to renewables, nuclear and hydro power generation. Coal-based power generation fell by a sharper 31.7% y-o-y in April 2020. Thermal plant load factor (PLF) declined to 42.4% in April 2020 on account of lower demand.

Table 2: Coal production and off take, power and steel output in April and May 2020

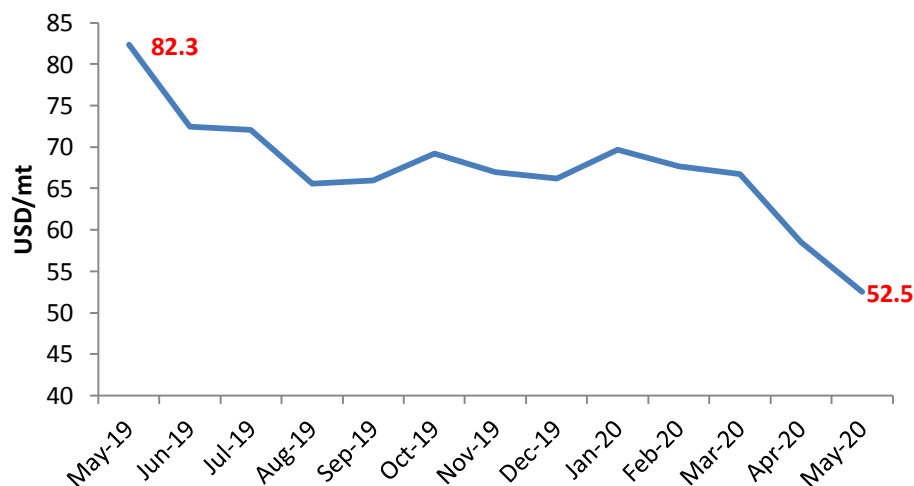
| Period | | y-o-y change |
|---------------------------|--------------|--------------|
| Domestic coal output | Apr-May 2020 | -14.8% |
| Coal off take/ dispatches | Apr-May 2020 | -27% |
| Thermal power generation | April 2020 | -28.5% |
| Crude Steel | April 2020 | -65.2% |

Source: CEA, Ministry of Coal

Inventories of coal at thermal power plants have sharply risen in the last three months and power utilities are now refraining from purchasing more coal. As on 1 June, inventory of coal with power plants stood at 49.5 million tonnes, sufficient for 29 days. This is more than the Central Electricity Authority (CEA) mandated 22 days stock. Moreover, coal stocks at CIL's pit-head alone stood at about 75 million tonnes as on 1 April, as per the company.

Chart 1: Inventory of coal with power plants (days inventory)

Source: CEA

Chart 2: Trend in International coal prices

Source: World Bank

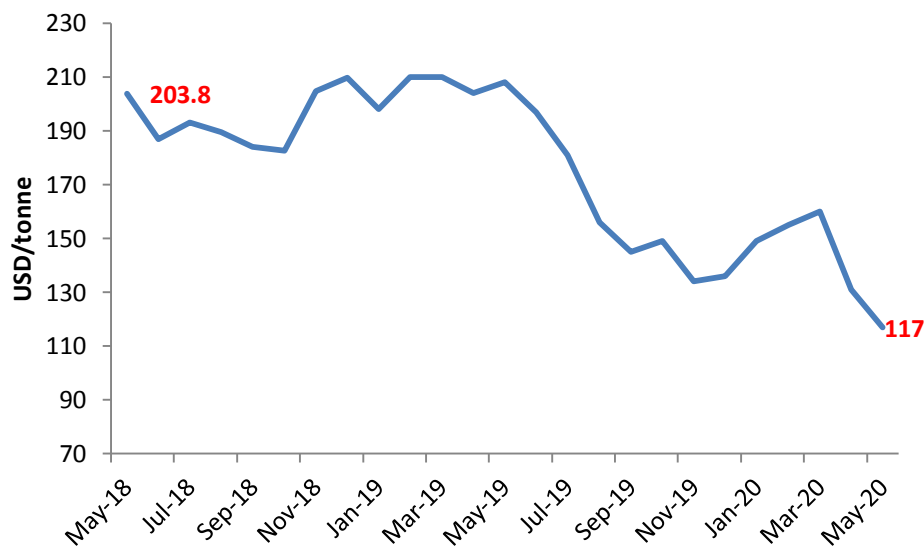
Table 3: E-auction of coal

| (in million tonnes) | FY18 | % change | FY19 | % change | FY20 | % change |
|-------------------------|------|----------|------|----------|------|----------|
| Spot E-auction | 55.2 | 2.8% | 34.3 | -37.7% | 29.8 | -13.1% |
| E-auction for power | 28.9 | -38.7% | 27.1 | -6.2% | 27.1 | 0% |
| E-auction for non-power | 11.1 | 76.2% | 11.4 | 2.7% | 8 | -29.8% |

Source: Ministry of coal

E-auction coal prices continued to fall for the second consecutive year ended FY20 in line with fall in international coal prices, sufficient coal stocks and slump in demand.

Chart 3: Trend in coking coal price



Source: Industry Research

Coking coal prices have fallen 25% since February 2020. Lower demand from the steel sector impacted prices of coking coal.

Coal De-regulation:

The Indian government last month approved auction of coal mines to private sector (domestic and foreign) for commercial mining, without any end-use restriction while announcing the stimulus package for the Covid-19 hit Indian economy.

Some of the measures announced are as follows:

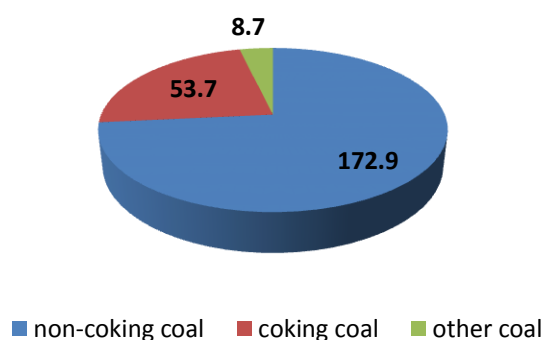
- The government plans to auction around 50 mines immediately and more in the medium term.
- The auctions for allocation of coal blocks will be based on the principal of revenue sharing instead of the regime of fixed royalty/tonne.

- The bidders would be required to bid for a percentage share of revenue payable to the government.
- The floor price shall be 4%.
- There will be no eligibility criteria, except for the capacity to pay up-front.
- Companies that start early production from the blocks will be offered 50% rebate on revenue share payable to the government.
- 500 blocks of minerals will be auctioned "through open transparent mechanism" as a part of the production regime
- The distinction between captive and non-captive mines will be removed to allow the transfer of mining leases and sale of surplus unused minerals.
- Rationalisation of stamp duty payable at the time of award of mining leases
- Joint auction of bauxite and coal mineral blocks to enhance aluminium industry's competitiveness
- Introduction of a seamless exploration-cum-mining-cum-production regime.
- Investment of Rs 50,000 crore on augmentation of evacuation infrastructure.
- Relief of Rs 5,000 crore for Coal India customers—by offering concession in commercial terms in two ways: reduced reserve price in auction for non-power customers; and easier credit terms.
- Coal gasification/liquefaction to be incentivised through rebate in revenue share.
- Coal bed methane extraction rights to be auctioned from Coal India's coal mine

Impact:

- India has the world's fourth largest coal reserves, however, the country meets about one fourth of coal requirements through imports, with import of around 243 million tonnes in FY20, about half of which can be substituted with domestically produced coal. This is mainly due to shortfall in domestic coal production and logistical constraints in evacuation infrastructure.

Chart 2: Share of import of coking and non-coking coal in FY19 (in million tonnes)



Source: DGCIS

The move to allow private sector participation in commercial coal mining which till now has remained the domain of the public sector will help in curbing imports and improve domestic production of coal in the medium to long-term. Aluminium, steel, cement and power companies have been buying coal at a premium in auctions. Aluminium industry stands to benefit from the joint auction of bauxite and coal blocks and it will help in bringing down electricity cost of aluminium smelters. Cement and steel companies that rely on imports to meet their coal requirements also stands to benefit.

However, this comes at a time when the economy is grappling with slowdown in demand due to the Coronavirus-induced nation-wide lockdown. Subdued economic activity and liquidity constraints may result in lower interest among the private players to invest in commercial mining rights.

Besides, stricter environmental norms are being adopted world over and with that many companies are increasingly moving towards greener and cleaner fuels. This may therefore fail to entice participation from foreign companies.

In India, even though the power sector continues to be dominated by conventional sources of energy (coal, diesel, gas, nuclear and large hydro), which accounts for nearly 3 quarters of the country's installed power generation capacity, domestic power companies have shown more interest towards renewable projects (wind, solar, bio and small hydro) in recent years. The capacity addition of renewable energy sources has grown at a CAGR of 22% in the last 5 year. The share of renewable energy in installed capacity has increased from 11.8% (31.7 GW in March 2015) to 23% (86.8 GW as on March 2020). On the other hand, the share of thermal sources viz. coal in installed capacity has been on the decline, from 61% to 55% during this period. The share of coal-based thermal power plants (largest source) in total installed capacity fell from 62% in March 2015 to 54% in March 2020.

Renewable energy is also significantly cheaper than electricity from new coal power plants which is also the reason why companies are finding it more lucrative to invest in new renewable power projects instead of thermal power capacity. Nonetheless, there would be some interest from private sector as many end user industries have been starved of coal compelling them to rely on imports.

Coal India's has targeted to increase its annual coal production to 1 billion tonnes by FY24.

Outlook:

- CARE Ratings expects decline in PLFs of thermal power plants to below 53% during FY21 on account of subdued demand from industrial and commercial segments and gradual ramp-up in economic activity post COVID-19 lockdown.
- Non coking coal imports are expected to come down in FY21 given increased availability in the domestic market. Premiums in recent e-auctions conducted by CIL have become virtually nil which along with relaxed payment terms is benefiting the coal off-takers.
- Coal demand from thermal power plants is expected to remain subdued in the short-term given the high inventory levels and lower PLFs.
- Coking coal imports are also expected to come down amid expectation of fall in crude steel production in FY21. Global steel production is expected to contract by nearly 6% during CY21 which is likely to keep the coking coal prices in check.