# Coal: Domestic Production to exceed 750 MT for FY22



February 17, 2022 | Industry Insights

# **Coal production during January 2022**

With ease of restrictions and re-opening of the economy, coal production has ramped up to reach 79.60 Million Tonnes (MT) in Jan-22, highest in the month of January in the last 3 years. The total coal production for Jan-22 has witnessed an increase of 8.3 per cent over the same period in 2021 and 6.1 per cent over the same period in 2020.

Table 1: Coal prod	uction for the month	of January for 2022	, 2021, and 2020
--------------------	----------------------	---------------------	------------------

Production (in MT)	Jan-22	Jan-21	Jan-20	Growth % (Jan-22 vs. Jan-21)	Growth % (Jan-21 vs. Jan-20)	Growth % (Jan-22 vs. Jan-20)
CIL	64.5	60.4	63.0	6.8%	-4.1%	2.3%
SCCL	6.0	6.0	5.7	1.2%	4.2%	5.4%
Captives	9.1	7.1	6.3	27.0%	14.1%	44.9%
Total	79.6	73.5	75.0	8.3%	-2.0%	6.1%

Source: Ministry of Coal, CareEdge Research, CIL- Coal India Limited, SCCL- Singareni Collieries Company Limited

While Coal India Limited (CIL) has maintained its position as the largest coal producer with around 80 per cent share in total coal produced during Jan for 2020, 2021 and 2022, it's share in total coal produced has decreased from around 84 per cent in Jan-20 to 81 per cent of total coal produced in Jan-22. In addition to this, Captive mines' share has significantly increased over last 3 years from around 8.4 per cent in Jan-20 to around 11.4% in Jan-22.

# Coal production during the ten months ended January 2022

India's coal production has shown cumulative growth of 10.3 per cent during the ten-month period from April 2021 to January 2022 as compared to the corresponding period of the previous year (FY21) and 8.4 per cent compared to the same period of FY20.

The ten-month period (from April 2020 to January 2021) of FY21, witnessed a degrowth in coal production by 1.7 per cent as compared to the same period for FY20 (Non Covid-19 year). This degrowth in coal production was on account of lower economic growth due to the Covid-19 pandemic led lockdowns in the country.

· · · · · · · · · · · · · · · · · · ·						
Production (in MT)	April 2021 to January 2022	April 2020 to January 2021	April 2021 to January 2022	Growth (FY22 vs. FY21)	Growth (FY21 vs. FY20)	Growth (FY22 vs. FY20)
CIL	478.1	453.2	451.2	5.5%	0.4%	6.0%
SCCL	52.5	38.6	52.5	36.1%	-26.4%	0.2%
Captives	71.3	54.1	51.7	31.7%	4.6%	37.8%
Total	602.0	545.9	555.4	10.3%	-1.7%	8.4%

# **Table 2: Coal production April - January**

Source: Ministry of Coal, CareEdge Research, \* indicates these growth numbers are for comparable periods in each of these financial years

# Coal despatch during the period

The overall coal despatch stood at 75.6 MT for the month ended Jan-22. The coal despatched to power sector that accounted for around 84 per cent of the total despatches in Jan-22 was 79 per cent of the total despatches in Jan-21 indicating increased in share of coal despatch to the power sector. The despatch to the power sector increased



by 22.7 per cent in Jan-22 over Jan-21 as collieries continue to prioritise fuel supply to coal-starved power plants to ensure uninterrupted electricity supply to meet the increased power demand of the country.

Sectors (in MT)	Jan-22	Jan-21	Jan-20	Growth % (Jan-22 vs. Jan-21)	Growth % (Jan-21 vs. Jan-20)	Growth % (Jan-22 vs. Jan-20)
Power	63.2	51.5	53.3	22.7%	-3.3%	18.7%
CPP	4.3	4.2	5.0	0.9%	-14.9%	-14.1%
Steel	0.7	0.7	0.9	2.8%	-21.1%	-18.9%
Cement	0.7	0.8	0.9	-10.4%	-11.5%	-20.7%
Sponge Iron	0.7	0.9	0.9	-29.8%	1.1%	-29.0%
Others	6.0	7.3	7.3	-18.6%	1.1%	-17.7%
Total	75.6	65.5	68.2	15.3%	-3.9%	10.8%

# Table 3: Coal Despatch in January of 2022, 2021 and 2020

Source: Ministry of Coal, CareEdge Research, CPP- Captive Power Plants

# **Sectoral Coal Supplies**

The share of coal despatched to power sector improved to around 83 per cent in FY22 from an earlier 79 per cent of the total coal despatched in FY21.

Table 4: Coal Despatch April to January (10 Months)

	April to January (in MT)			April to January Growth (%)		
Sectors	FY 22	FY 21	FY 20	FY22 vs. FY21	FY21 vs. FY20	FY22 vs. FY20
Power	553.4	436.4	463.0	26.8%	-5.7%	19.5%
CPP	31.6	38.2	43.2	-17.3%	-11.7%	-26.9%
Non-power	84.8	79.1	71.3	7.3%	10.9%	19.0%
Total	669.8	553.6	577.5	21.0%	-4.1%	16.0%

Source: Ministry of Coal, CareEdge Research, Note 1- CPP- Captive power plants. Note 2 – Non power includes – cement, steel, sponge iron, and others like fertilizers, textiles, chemicals, paper & pulp, and other basic metals. This is comparison of 9 months for all the three years.

Unlike the power sector, the share of coal despatch to captive power plants reduced from 7 per cent in FY21 to 5 per cent of the total coal despatched in FY22 and the share of coal despatch to others also reduced from 14 per cent in FY21 to 13 per cent in FY22. This decrease in supply to captive power plants was on account of comparatively increased supply of coal to the Non-power sector (NPS) through e-auction sales that were capped at notified price for the first half of FY 2021.

# Power Sector benefits from increased coal allocation

Power plants are benefitting as their PLFs (Plant load factor is the capacity utilisation of the power plants) have improved in the first half of 2021(calendar year) due to increased supplies by domestic coal producers to keep up with the increased demand and unusually high international coal prices proving to be a hindrance for importing coal required.



Figure 1: Plant Load Factor (Thermal Plants)



Source: Central Electricity Authority (CEA), CMIE, CareEdge Research, Data is provisional

# **Coal Despatch to Power Sector**

The increase in domestic coal despatch to power sector was on account of reduced imported coal volumes, apart from the increase in overall demand for power generation with the resumption in economic activity. As per data from Ministry of Coal, imported coal volumes (for thermal power plants) decreased by around 39 per cent from 35.10 MT in nine-month period from April-20 to Dec-20 to 21.40 MT in the same period for 2021. CIL has stepped-up their supply to power sector to make up for the shortfall caused by reduction in import volumes.

# **Power Generation**

Source (Generation in Million Units)	April-21 to Jan-22	April-20 to Jan-21	April-19 to Jan-20	Growth % (FY22 vs. FY21)*	Growth % (FY21 vs. FY20)*	Growth % (FY22 vs. FY20)*
Coal	8,50,825	7,65,336	8,02,828	11.2%	-4.7%	6.0%
Lignite	30,665	24,730	26,942	24.0%	-8.2%	13.8%
Hydro	1,33,894	1,34,614	1,38,156	-0.5%	-2.6%	-3.1%
Nuclear	38,735	37,053	39,045	4.5%	-5.1%	-0.8%
Gas, Naptha, Diesel	31,759	43,975	40,611	-27.8%	8.3%	-21.8%
RES	1,41,280	1,23,428	1,07,568	14.5%	14.7%	31.3%
Total	12,27,157	11,29,137	11,55,151	8.7%	-2.3%	6.2%

# **Table 5: Source-wise Power Generation**

Source: CEA, CareEdge Research, Data is provisional, \* indicates these growth numbers are for comparable periods in each of these financial years, RES includes Wind, Solar, Biomass & Others

Coal based power generation has registered a growth of 11.2 per cent in FY22 over FY21, indicating improved coal supply for power generation. In addition to this, the share of coal-based generation in total power generated increased from 68 per cent in FY21 to around 69 per cent of the total power generated in FY22. In FY22, the share of lignite and nuclear based power generation remained to 2 per cent and 3 per cent of the total power generated respectively and share of hydro and gas, naptha & diesel reduced by 1 per cent compared to FY21.

Over the past three periods, the share of RES (Wind, Solar, Biomass & Others) based power generation has increased from 9 per cent in FY20 to 12 per cent of the total power generated in FY22 indicating transition towards green resources for power generation.

## **Coal Stocks at Non-pithead power plants**

Date	No. of Plants	Capacity (MW)	Daily Requirement (TT)	Total Stock (TT)	Total Stock (in Days)
30-Apr-21	118	1,31,546	1,470	17,760	12
31-May-21	119	1,32,866	1,373	23,602	17
30-Jun-21	118	1,32,656	1,475	24,093	16
31-Jul-21	118	1,32,656	1,360	19,199	14
31-Aug-21	119	1,33,256	1,452	9,472	7
30-Sep-21	119	1,29,866	1,369	5,611	4
31-Oct-21	119	1,29,866	1,357	7,647	6
30-Nov-21	119	1,31,096	1,387	13,445	10
31-Dec-21	162	1,63,442	2,218	17,439	8
31-Jan-22	162	1,63,442	2,220	18,133	8
14-Feb-21	154	1,63,419	2,209	17,684	8

## Table 6: Coal Stock at Non-pithead plants

Source: Central Electricity Authority (CEA), CareEdge Research, TT- Thousand Tonnes, Data are provisional

As of February 14, 2022, as per CEA data, while the pithead power plants have around 83% of their normative stock available, while non-pithead plants (non-pit head plants are power plants where the coal mines are more than 1,500 kms away) have only around 31% of their normative stock available. Although the stocks have improved they still remain lower than normative stock levels indicating shortage in stock inventory at most power plants.

## **Non-power Sector**

Key Non-power sectors such as cement, steel, sponge irons (direct reduced iron) have been impacted by lower coal supplies and high international coal prices.

# Table 7: Non-Coking Coal supply to Cement Sector

	Up to December				
	FY 22	FY 21	Growth (%) Y-o-Y		
Cement Production	256	203.0	26.1		
Domestic Coal Supply	5.2	4.6	14.4		
Coal Import	11	7.3	49.8		

Source: Central Electricity Authority (CEA), CareEdge Research

# Table 8: Non-Coking Coal supply to DRI (Sponge Iron) Sectors

	Up to December				
Items (MT)	FY 22	FY 21	Growth (%) Y-o-Y		
DRI Production	29.2	24.5	18.9		
Domestic Coal Supply	5.7	6.7	-15.1		
Coal Import	1.3	1.1	12.6		

Source: Central Electricity Authority (CEA), CareEdge Research

# Table 9: Coking Coal supply to Steel Sector

	Up to December				
Items (MT)	FY 22	FY 21	Growth (%) Y-o-Y		
Hot Metal Production	56	49.4	17.2		
Domestic Coal Supply	5.6	6.4	-13.4		
Coal Import	28.8	23.1	24.3		

Source: Central Electricity Authority (CEA), CareEdge Research



# Table 10: Coal Supply to Other Sectors

Source of Suppy (MT)	Up to December				
Source of Suppy (MT)	FY 22	FY 21	Growth (%) Y-o-Y		
Domestic Supply	59.5	51.6	15.4		
Import	47.1	53.7	-11.7		
Total	74.2	104.9	-29.3		

Source: Central Electricity Authority (CEA), CareEdge Research

## **Coal Prices**

Australian thermal coal prices, a global benchmark, dipped to USD 50.1 per MT in August 2020. Eventually, the prices started rising again from April 2021 onwards and in October 2021, seaborne thermal coal prices in Asia peaked to a new record high of USD 224.5 per MT due to coal shortages in top importer countries like China and India. In November 2021, the global benchmark took a dip by 29.8% to USD 157.5 per MT from an all-time high of 224.5 per MT in October 2021, and eventually rose back to USD 197 per MT in Jan 2022. The rise in coal prices is discouraging coal imports in the country. This has increased burden on coal producers to meet domestic coal demand.



Figure 2: Prices of Coal in Australia (\$/tonne)

Source: World Bank, CareEdge Research

# **Outlook:**

Domestic coal production is expected to grow by around 5 per cent and exceed 750 MT for FY22 compared to 716 MT for FY21. Impacted by the increased demand and high international coal prices, India continues to witness an imbalance in demand- supply of coal. With the ramp up in economic activity, the demand is expected to be met by improved coal production supported by domestic coal producers. Over the near term, CareEdge Research expects coal prices to continue to remain high, thereby impacting import volumes.

The demand for coal-based power generation will continue to increase over the near term. In Jan-22, coal used for power generation has increased by 9.2 per cent over Jan-20. Also, power generation from RES (Wind, Solar, Biomass & Others) has increased significantly indicating India's transition to green sources for power generation to meet its climate change targets. In medium term, the reliance on RES for power generation is expected to increase, whereas, dependence on coal is anticipated to remain stagnant.

#### Contact

Disha Ahuja	Analyst	disha.ahuja@careedge.in	+91 - 22 - 6837 4400
Mitali Kaka	Lead Analyst	mitali.kaka@careedge.in	+91 - 22 - 6837 4400
Kanmaani S	Associate Director	kanmaani.s@careedge.in	+91 - 22 - 6837 4423
Tushar Shah	Director	tushar.shah@careedge.in	+91 - 22 - 6687 4470
Mradul Mishra	Media Relations	mradul.mishra@careedge.in	+91 - 22 - 6837 3596

#### CARE Advisory Research & Training Ltd

(Wholly-owned subsidiary of CARE Ratings Ltd.)

A-Wing, 1102-1103, Kanakia Wall Street, Chakala, Andheri-Kurla Road, Andheri East, Mumbai- 400093 Phone: +91-22-68374400



#### About:

CareEdge (CARE Group) is a knowledge-based analytical group that aims to provide superior insights based on technology, data analytics capability and detailed research methods. CareEdge Ratings is one of the leading credit rating agencies in India. It has an impressive track record of rating companies for almost three decades and has played a pivotal role in developing the corporate debt market in India. CareEdge provides near real time research on all domestic and global economic developments. The wholly owned subsidiaries include CareEdge Advisory & Research arm focused on providing advisory and consultancy services and CareEdge Risk solutions a platform that provides risk management solutions.

#### **Disclaimer:**

This report is prepared by CARE Advisory Research and Training Limited (CareEdge Research). CareEdge Research has taken utmost care to ensure accuracy and objectivity while developing this report based on information available in public domain. However, neither the accuracy nor completeness of information contained in this report is guaranteed. CareEdge Research is not responsible for any errors or omissions in analysis / inferences / views or for results obtained from the use of information contained in this report and especially states that CareEdge Research has no financial liability whatsoever to the user of this report