

India's Energy Overview

JUNE 2022



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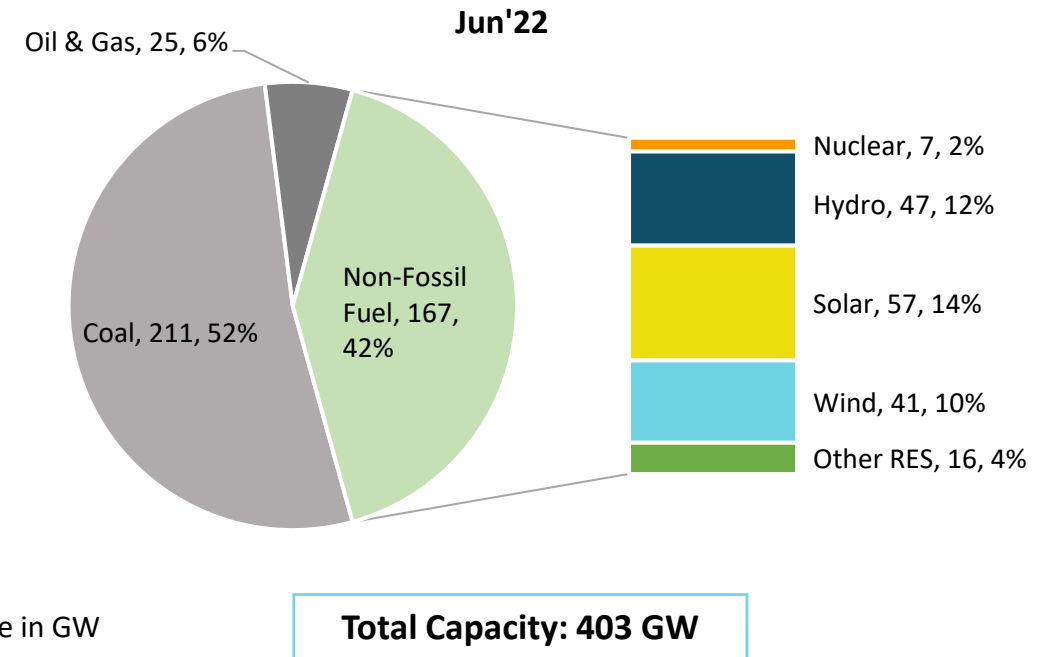
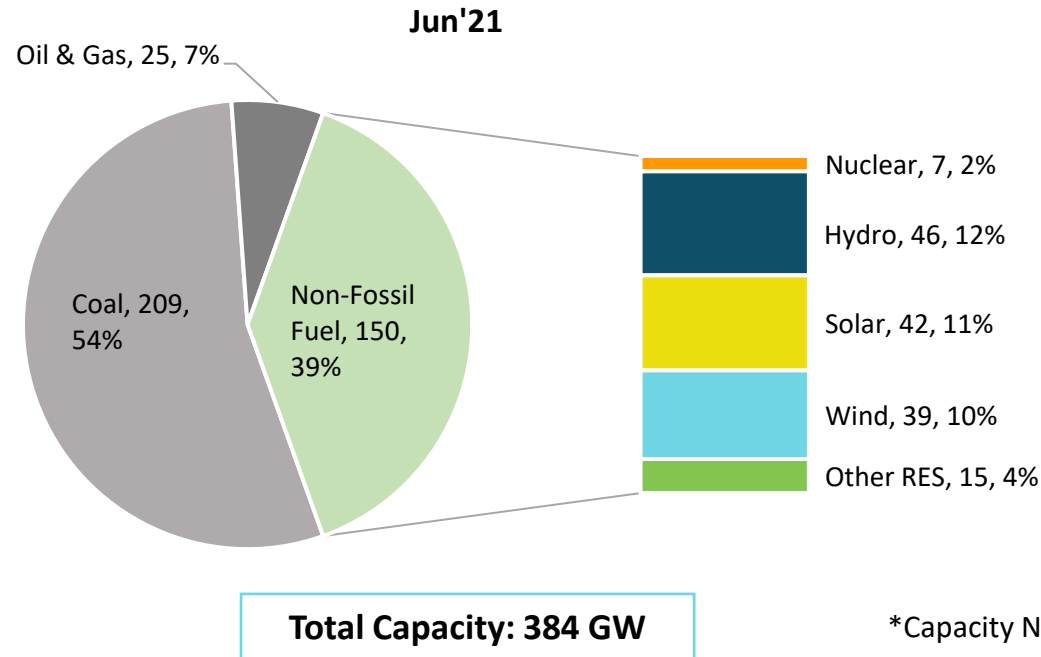
Monthly Petroleum Products Market Scenario



Key Highlights or Announcements of June'22



India's Electricity Capacity Mix

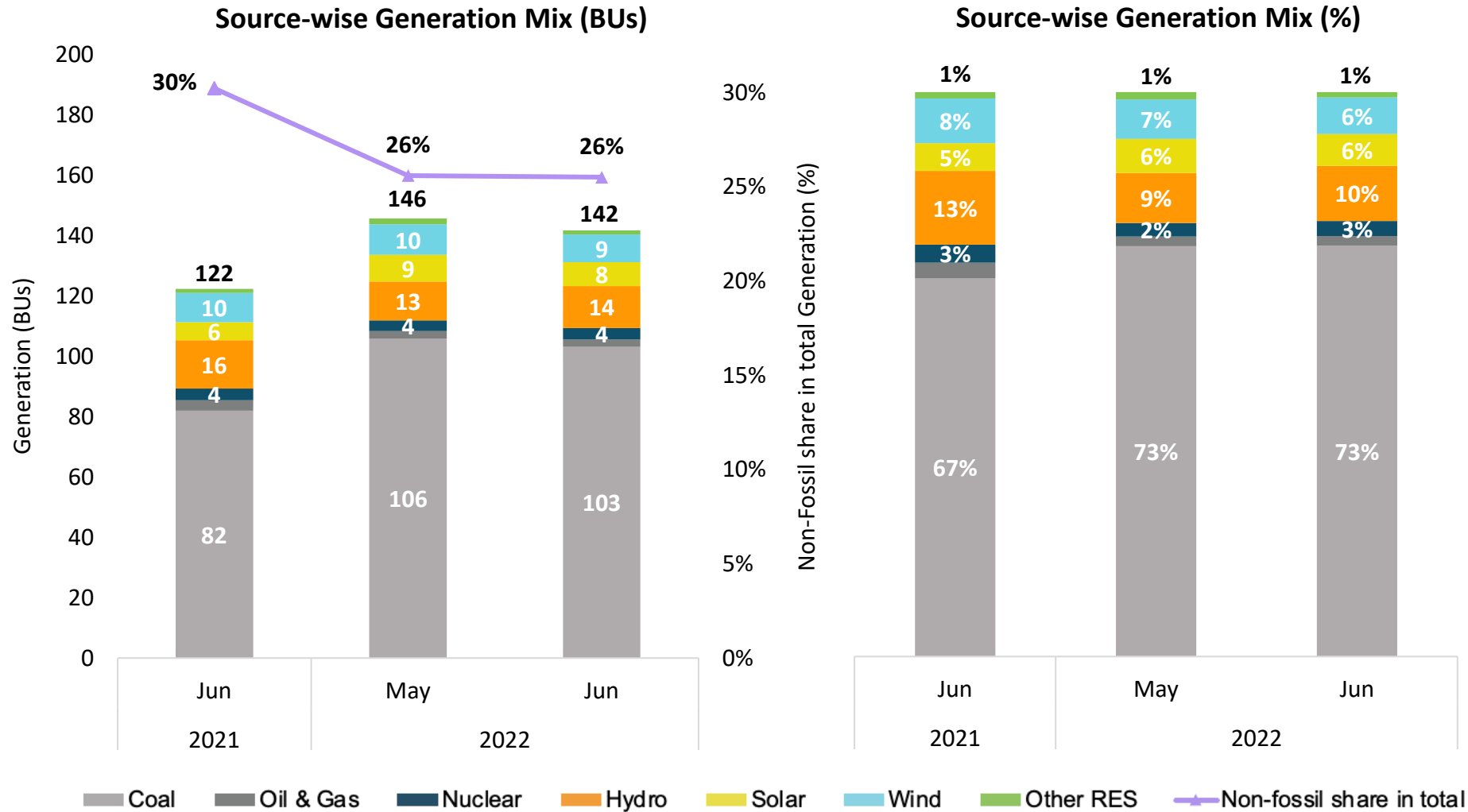


*Capacity Numbers are in GW

- India's electricity generating capacity is 403 GW as of Jun'22. Major contributors to the capacity are coal 211 GW (52%), solar 57 GW (14%), hydro 47 GW (12%), and wind 41 GW (10%).
- Non-fossil fuel share in total generation capacity has increased from 39% to 42% since Jun'21. Major capacity addition is in Solar technology.



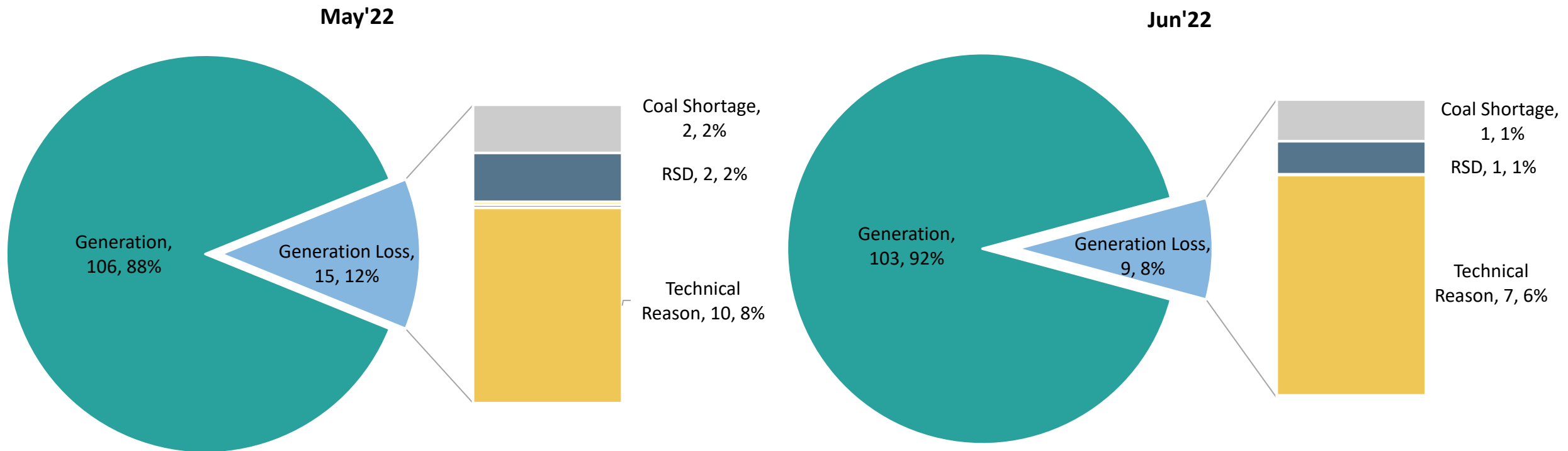
India's Electricity Generation Mix



- The increase in electricity demand in summer this year resulted in corresponding increase in thermal electricity generation to meet demand.
- Increase in generation from solar source can be attributed to increase in capacity from 42GW last year to 57GW currently.



Coal Generation Loss Reasons for Forced Outages



Generation and Generation Loss in BU

Sources: Vasudha Analysis

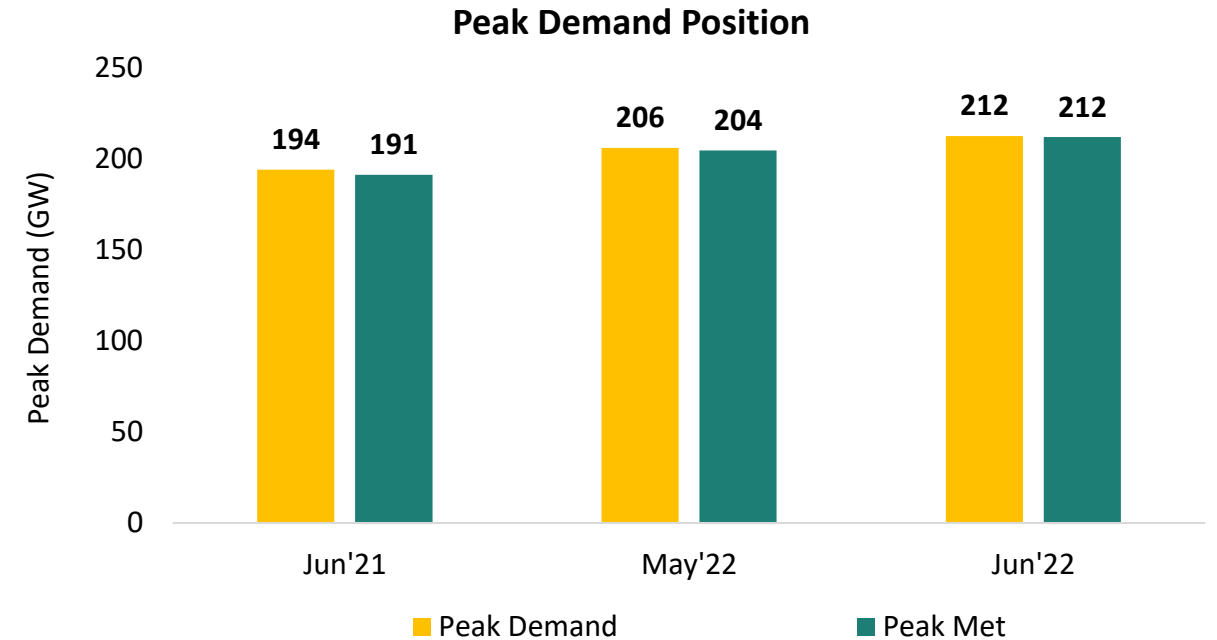
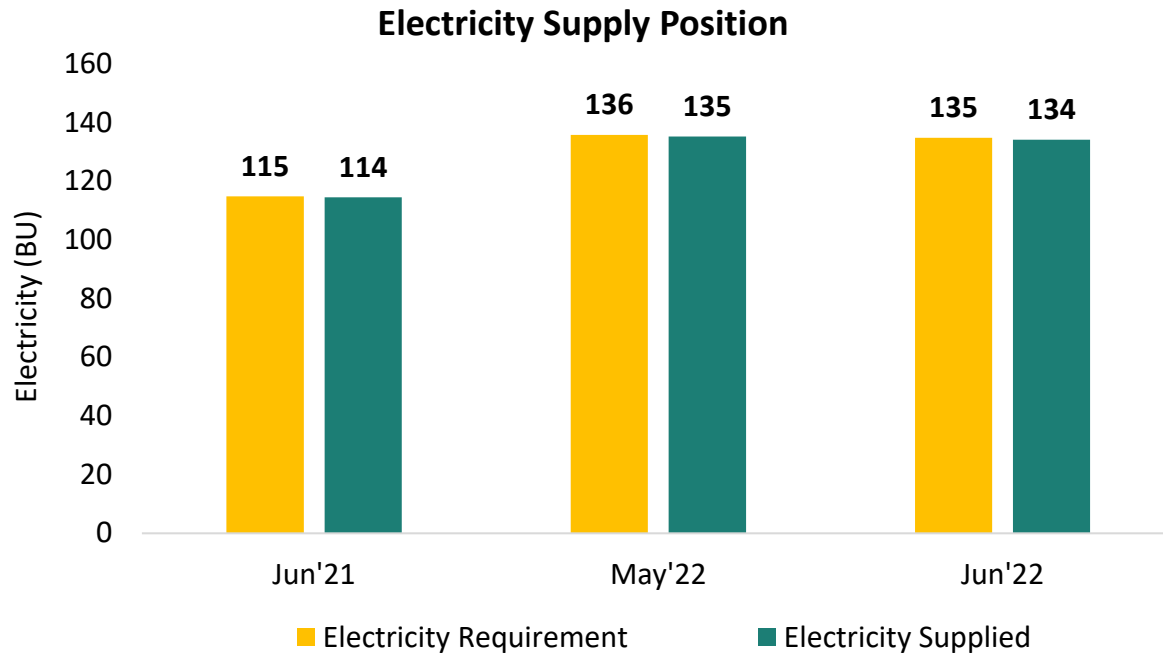
Note: Generation loss data for June is up to 28th June 2022, and loss data dose not include generation loss due to planned outages

BU: Billion Units

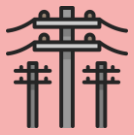
RSD: Reserve shut down



India's Electricity Demand & Supply Position

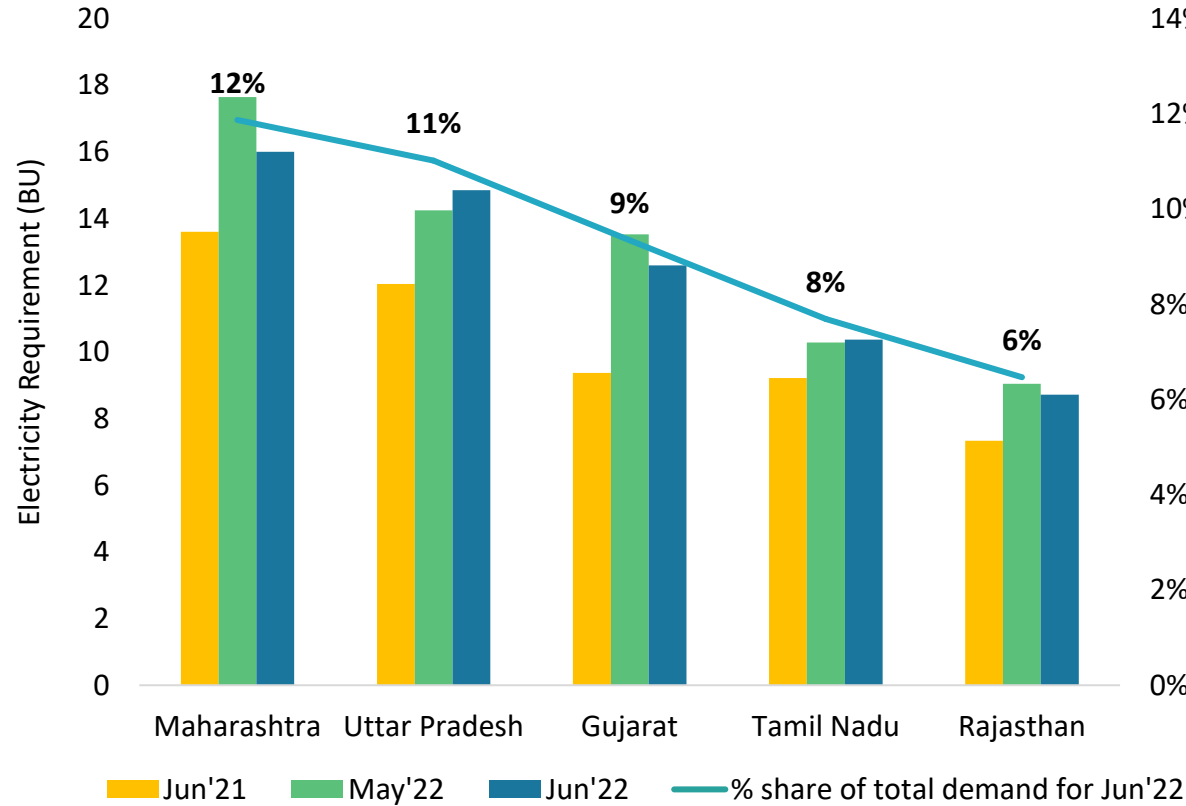


- National electricity demand in Jun'22 has increased by 17% as compared to demand in Jun'21. This increase in demand can be attributed to economic recovery and space cooling requirement specially in residential and commercial sector.
- Peak Demand deficit in Jun'22 has decreased from 1.4% (Jun'21) to 0.3%.
- All India's peak electricity demand recorded at an all-time high of 212 GW on 10th June 2022.
- National peak electricity demand in Jun'22 has increased by 10% as compared to peak demand in Jun'21.

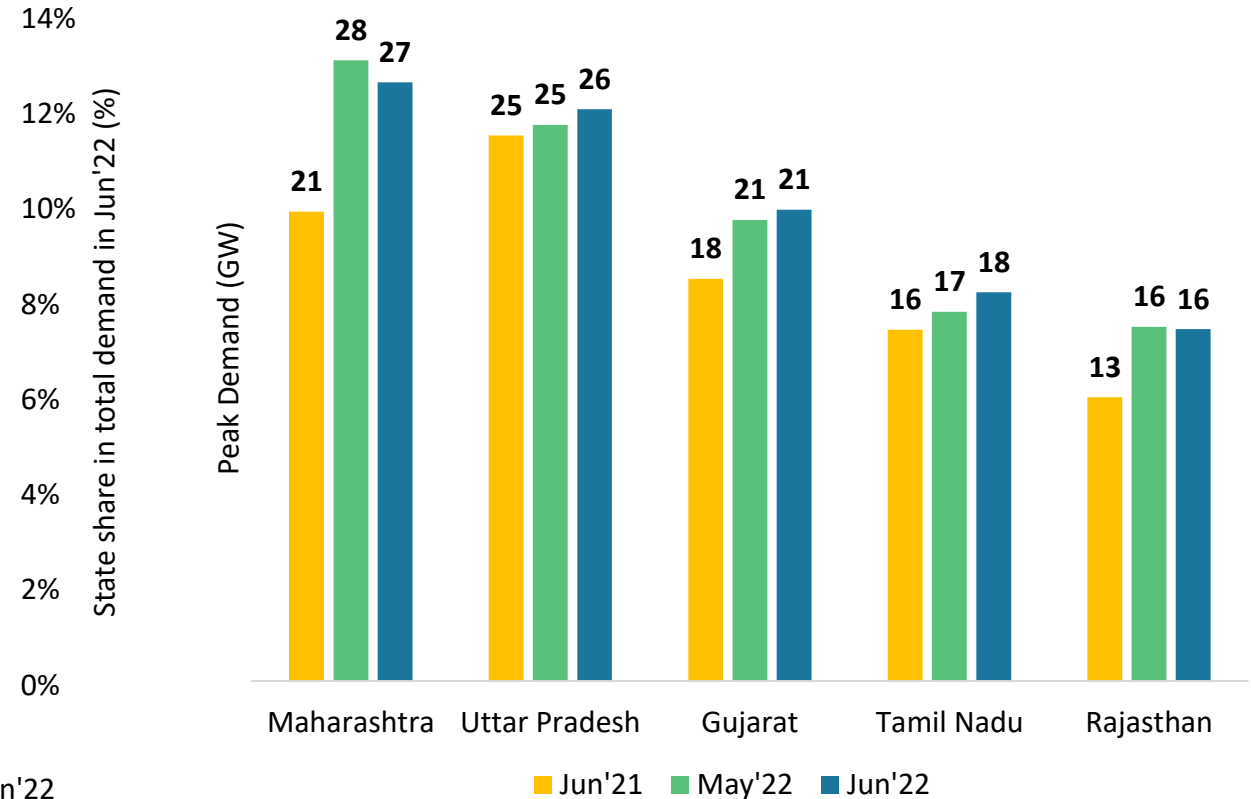


Monthly Electricity Demand of the top 5 states (1/2)

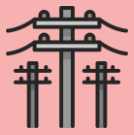
States with Highest Monthly Electricity Requirement



Monthly Peak Demand of top 5 states



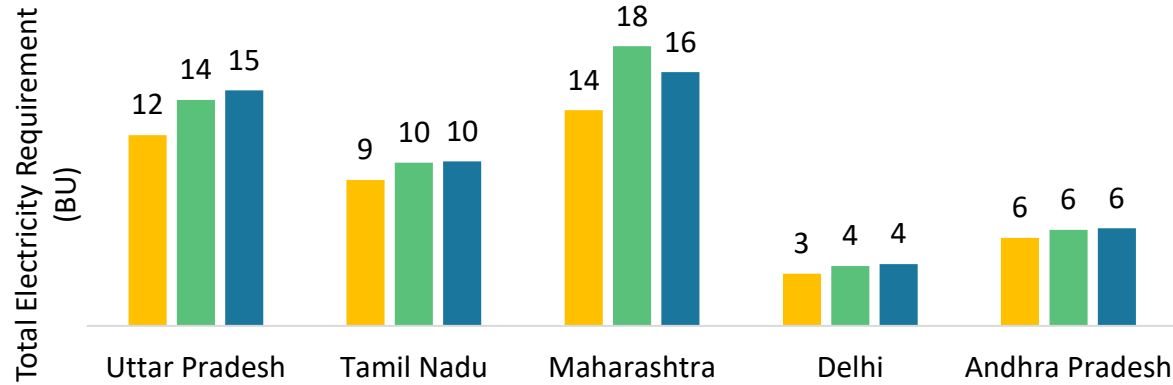
The top 5 states collectively account for a 46% share of India's total electricity requirement (135 BU).



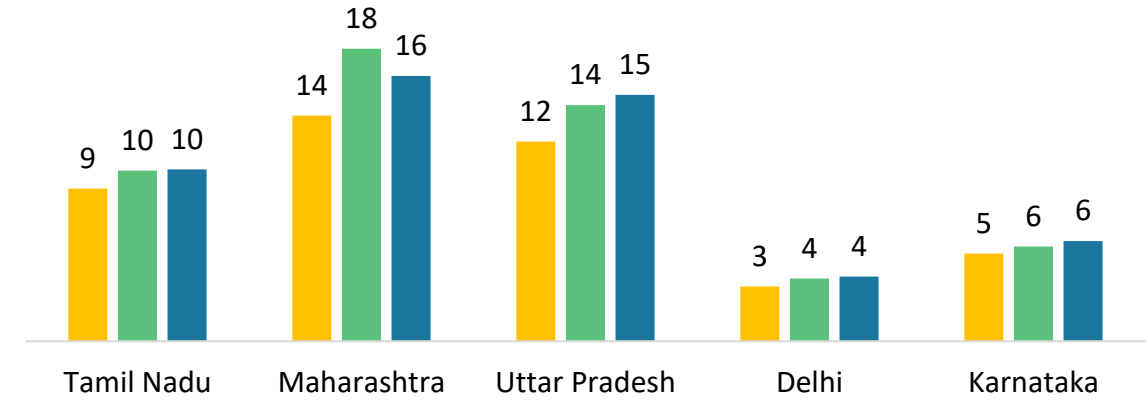
Monthly Electricity Demand of the top 5 states (2/2)

States have been selected on the basis highest electricity consumption in the sector

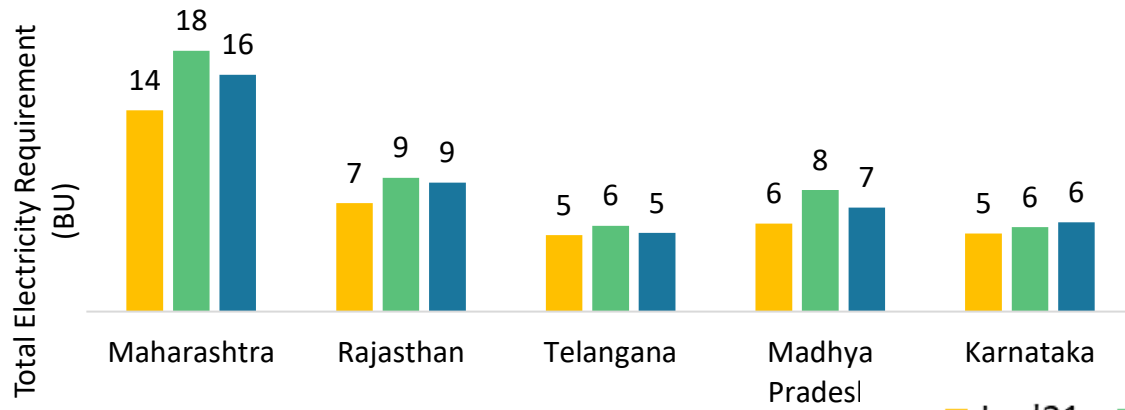
In Domestic Sector



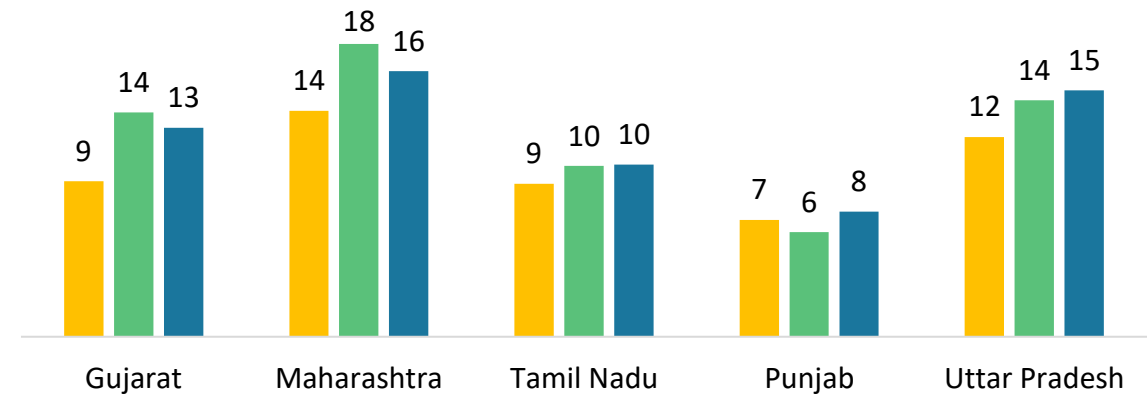
In Commercial Sector



In Agricultural Sector



In Industrial Sector



■ Jun'21 ■ May'22 ■ Jun'22

Sources: CEA and POSOCO

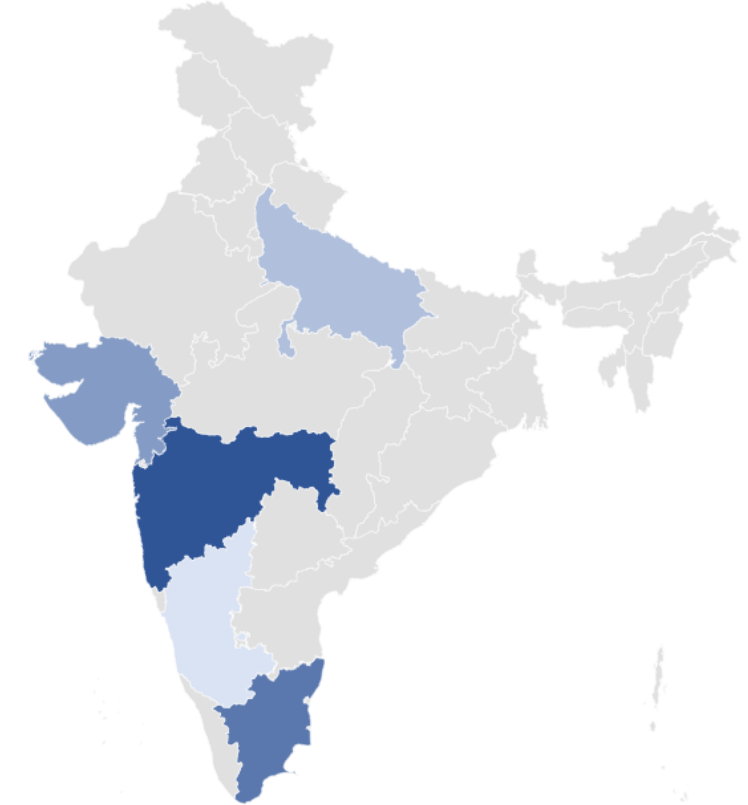
Notes: 1. Top 5 states under sectors are selected based on true-up sectoral electricity sales in FY20 mentioned in the state tariff orders. However, the numbers presented in the graphs are total monthly electricity sale as sector specific monthly electricity consumption numbers are not available for current financial year.

2. Jun'22 numbers are provisional.



State Power Sector Indicators

Parameters		Maharashtra	Tamil Nadu	Gujarat	Uttar Pradesh	Karnataka
Electricity Capacity (GW)*	Fossil Fuel (FY22)	29	15	24	21	10
	Non-Fossil Fuel (FY22)	15	20	18	8	20
Electricity Generation (BU)*	Fossil Fuel (FY22)	123	61	57	132	31
	Non-Fossil Fuel (FY22)	30	45	31	11	50
AT&C Loss (%) (FY22)**		15	12	10	28	13
Electricity Supplied (BU)* (FY22)		173	110	124	128	72
Major Electricity Consuming Sector § (FY22)		Industry	Industry	Industry	Domestic	Agriculture
Share of major electricity consuming sector in total (%) § (FY22)		35	33	57	47	37
Per capita Power Availability (kWh)# (FY21)		1341	1401	1852	618	1126



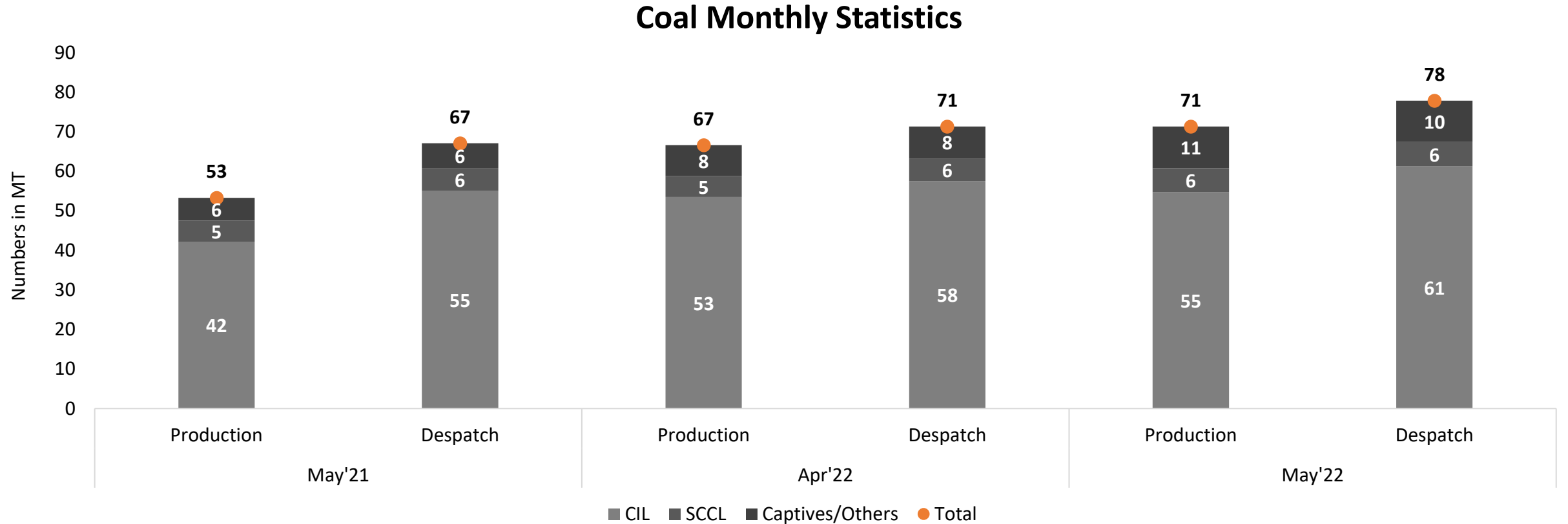
The top 5 states are selected on the basis of GSDP for FY20.

Sources: * CEA
 ** UDAY Dashboard
 § State Tariff Order
 #Handbook of Statistics on Indian States, RBI

NOTE: *The installed capacity and generation of state is based on plant location, not on the state contracts



Monthly Coal Statistics

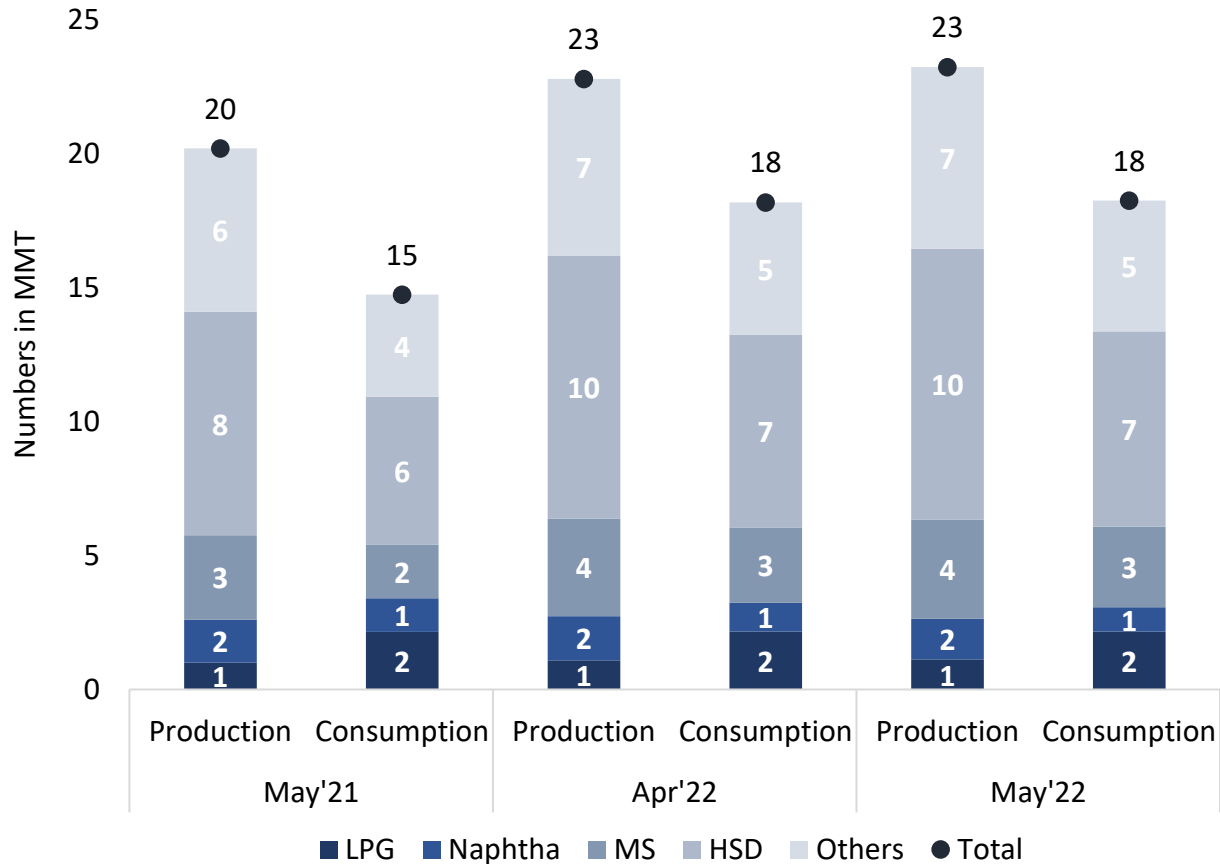


India's coal production has increased during May'22 (71 MMT) by 34% as compared to May'21 (53 MMT). Similarly, the coal despatch has increased by 16% in May this year.



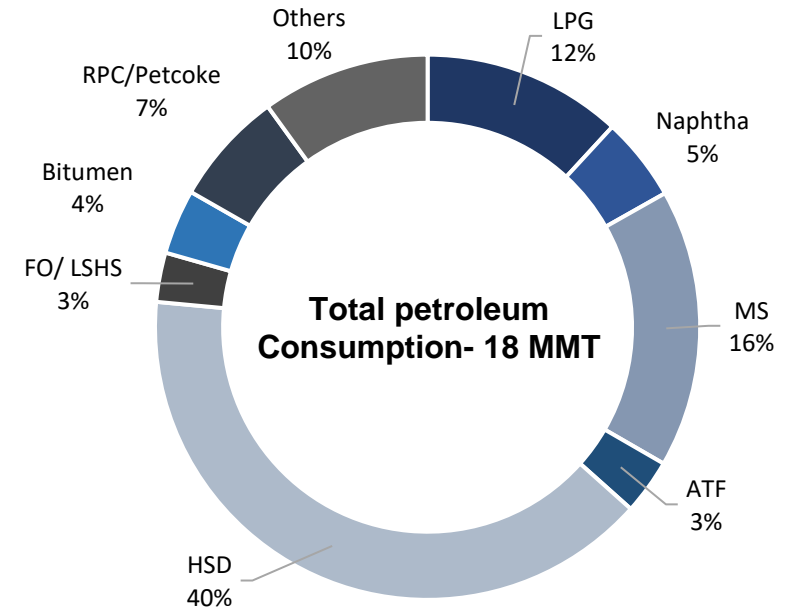
Monthly Petroleum Products Market Scenario (1/2)

Petroleum Product-wise Production & Consumption



Others include ATF, SKO, LDO, Lubes, FO, LSHS, Bitumen, pet coke, and other.

Consumption share of Petroleum Products in May'22



Others include SKO, LDO, Lubes, and Others

Abbreviations

ATF-Aviation Turbine Fuel

FO- Furnace Oil

HSD- High-Speed Diesel

LDO- Light Diesel Oil

MS- Motor Spirit (Petrol)

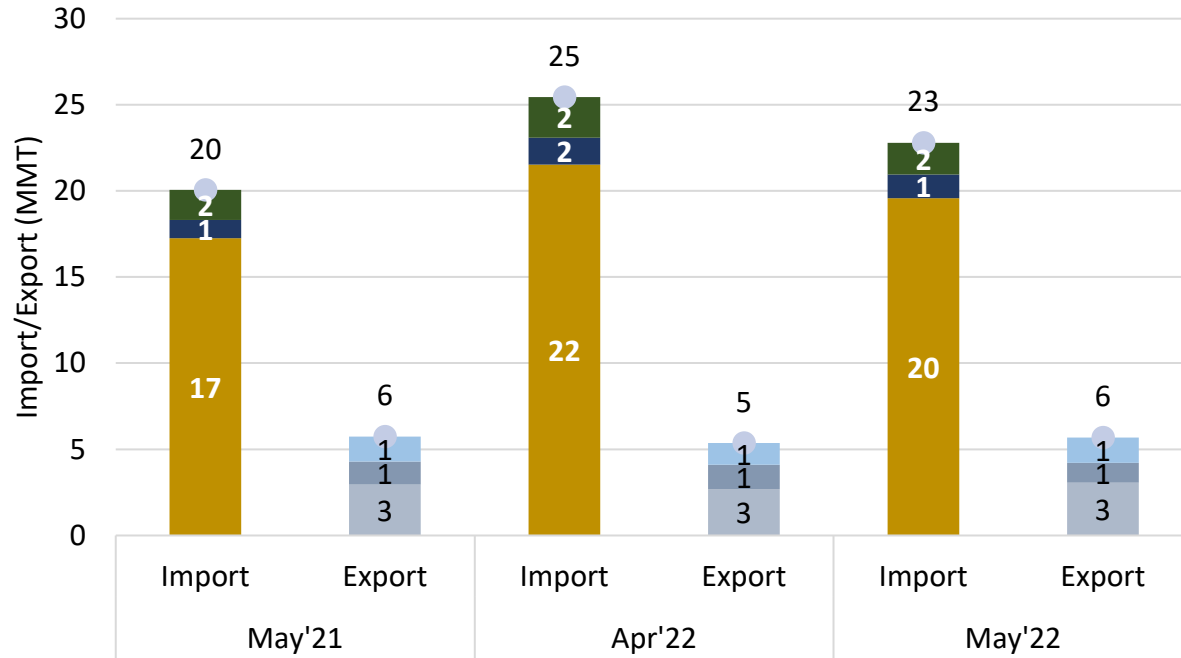
SKO- Superior Kerosene Oil

LSHS- Low Sulphur Heavy Stock LPG- Liquefied Petroleum Gas



Monthly Petroleum Products Market Scenario (2/2)

Petroleum Product-wise Import and Export

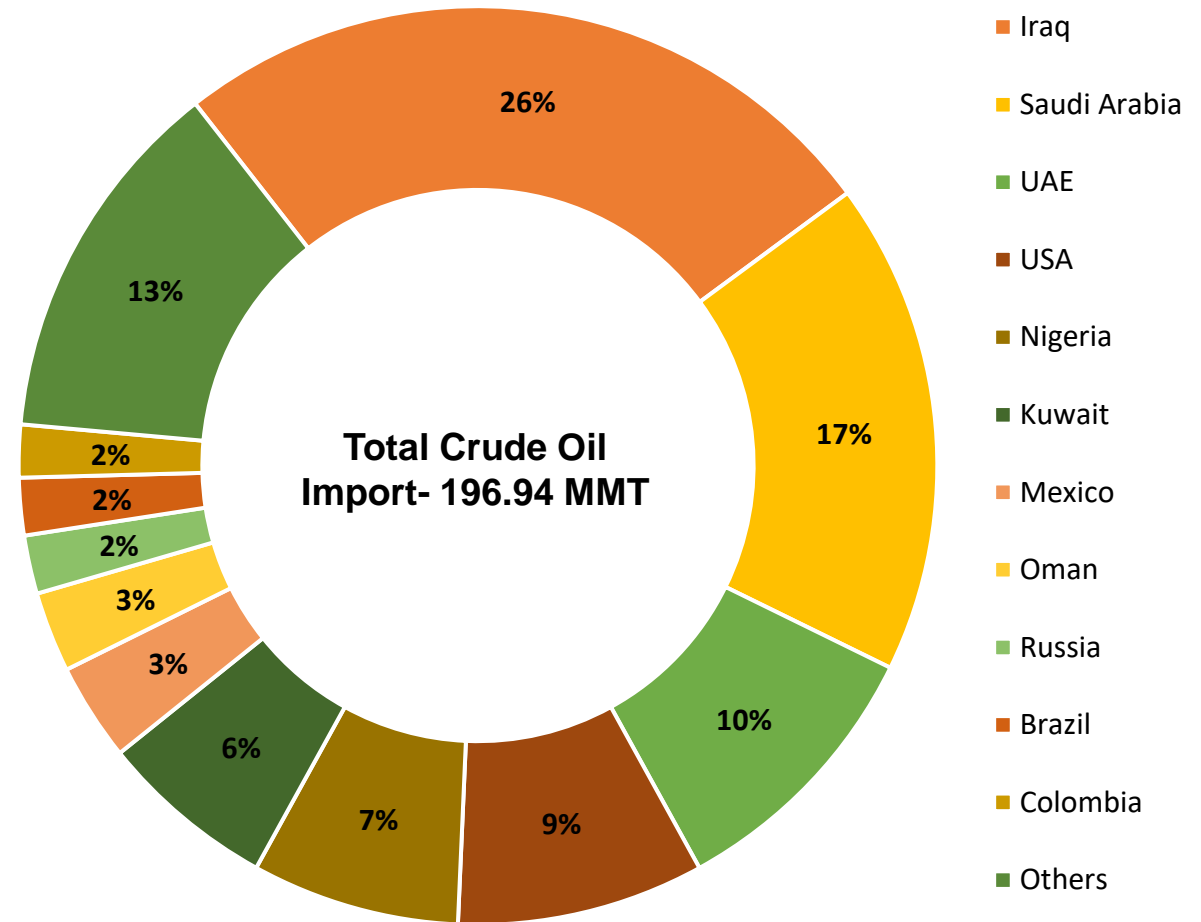


■ Crude oil ■ LPG ■ Others Import ■ HSD ■ MS ■ Other export ● Total

*Other Imports include Naphtha, MS, ATF, SKO, HSD, LDO, Lubes, FO, Bitumen, pet coke, and Others.

*Other Exports include LPG, Naphtha, ATF, SKO, Lubes, FO, Bitumen, pet coke, and Others.

Country-wise Share in Import of Crude Oil in FY22



Total Crude Oil Import- 196.94 MMT



Key Highlights or Announcements of June'22

- India's peak power demand broke the record for three consecutive days starting on 8th June 2022 (210.7 GW), to 9th June 2022 (211.4 GW), and ended on 10th June 2022 (212.4 GW). The rising peak demand reflects the post covid economic growth in the country. The ongoing heat wave and high temperature in northwest India are also reasons for the increasing peak demand. [Daily Reports, POSOCO](#)
- The Haryana Government approved the Draft State Electric Vehicle (EV) Policy 2022 on 27th June 2022. The policy aims to:
 - make Haryana a global electric mobility development and EV manufacturing hub.
 - convert 100% of the state bus fleet to electric buses by 2029.
 - phase out all fossil fuel-based commercial fleets and logistics vehicles in Gurugram and Faridabad by 2024, and in all cities by 2030.
 - convert all Government vehicles, including vehicles under Government Corporations and Boards, Government Ambulances, etc. to electric vehicles by 2024. [Government of Haryana, June 2022.](#)



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