India's Energy Overview

June 2026

VASUDHA FOUNDATION
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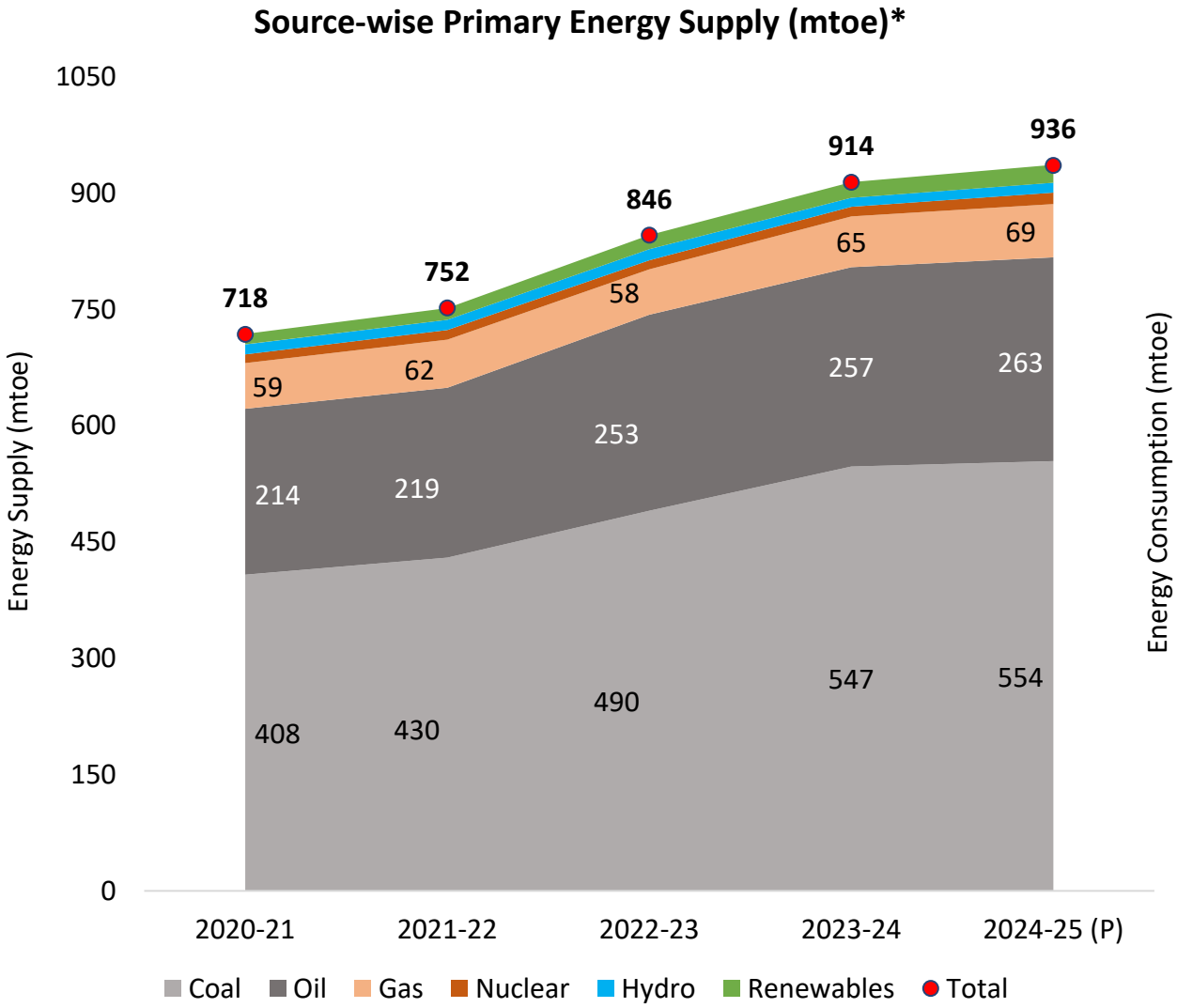
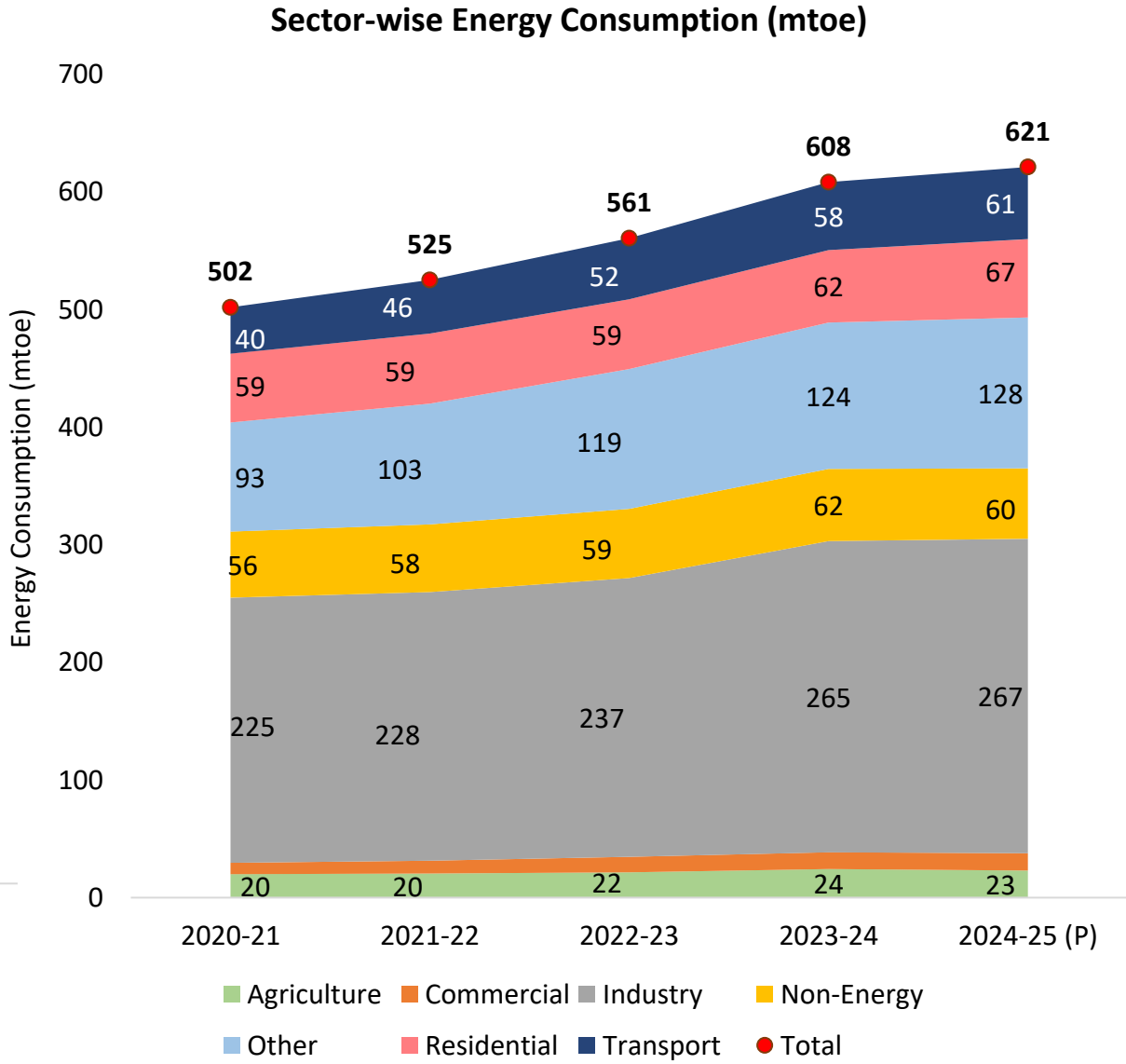
Contents

Primary* and Final Energy Mix in India

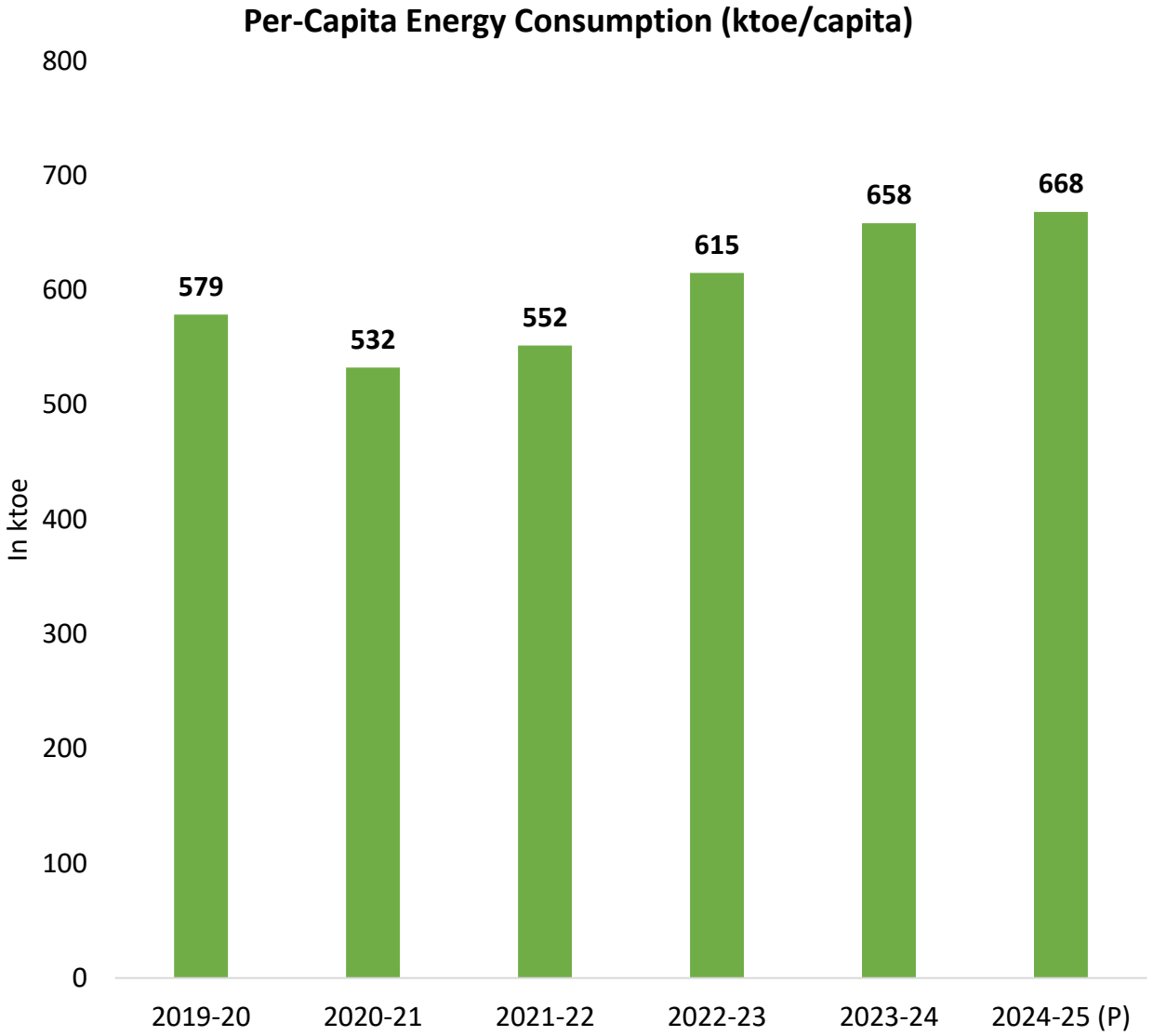


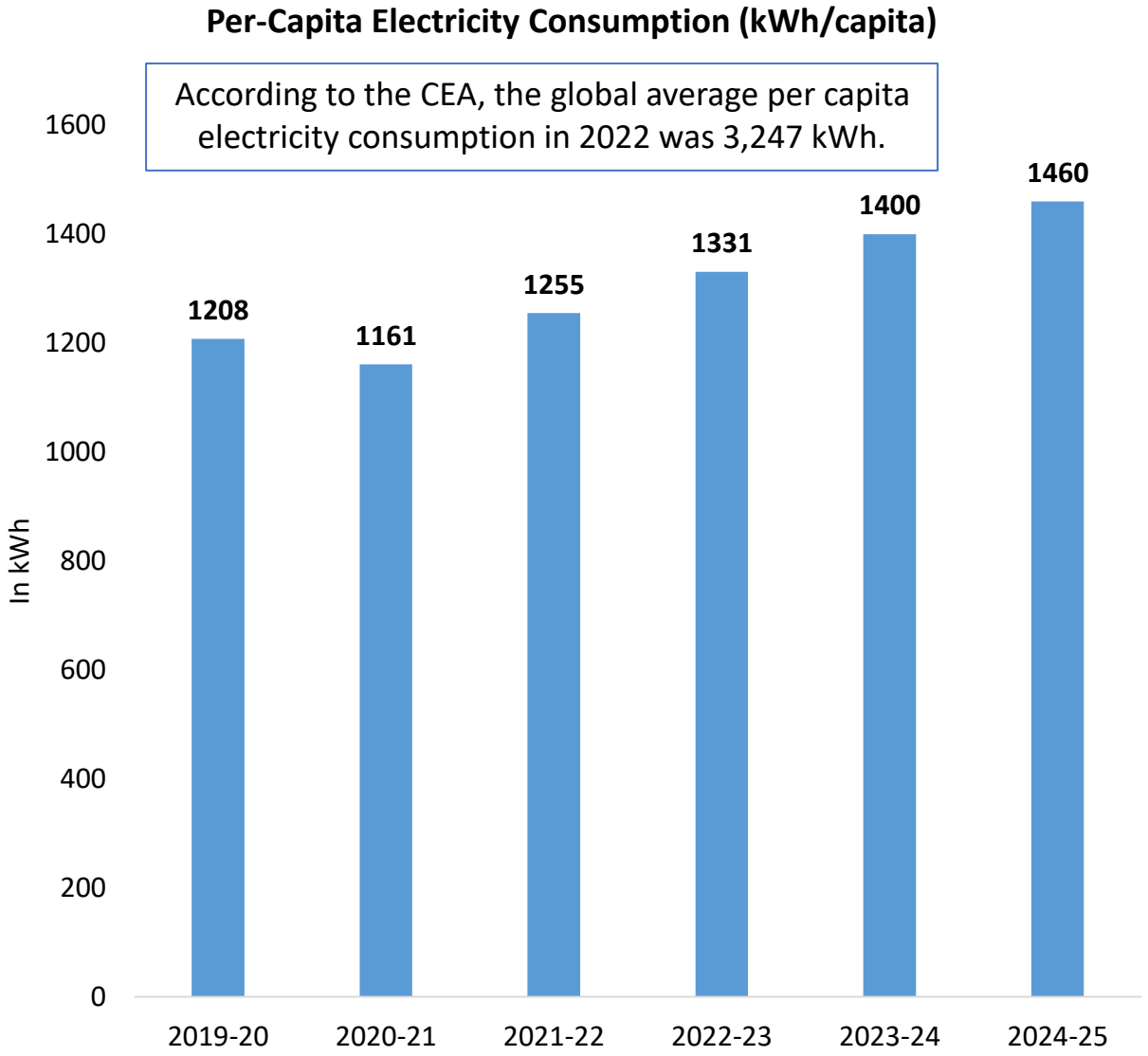


*Excluding biofuels, waste, and other non-commercial source of energy

Source: ICED

Per-Capita Energy and Electricity Consumption

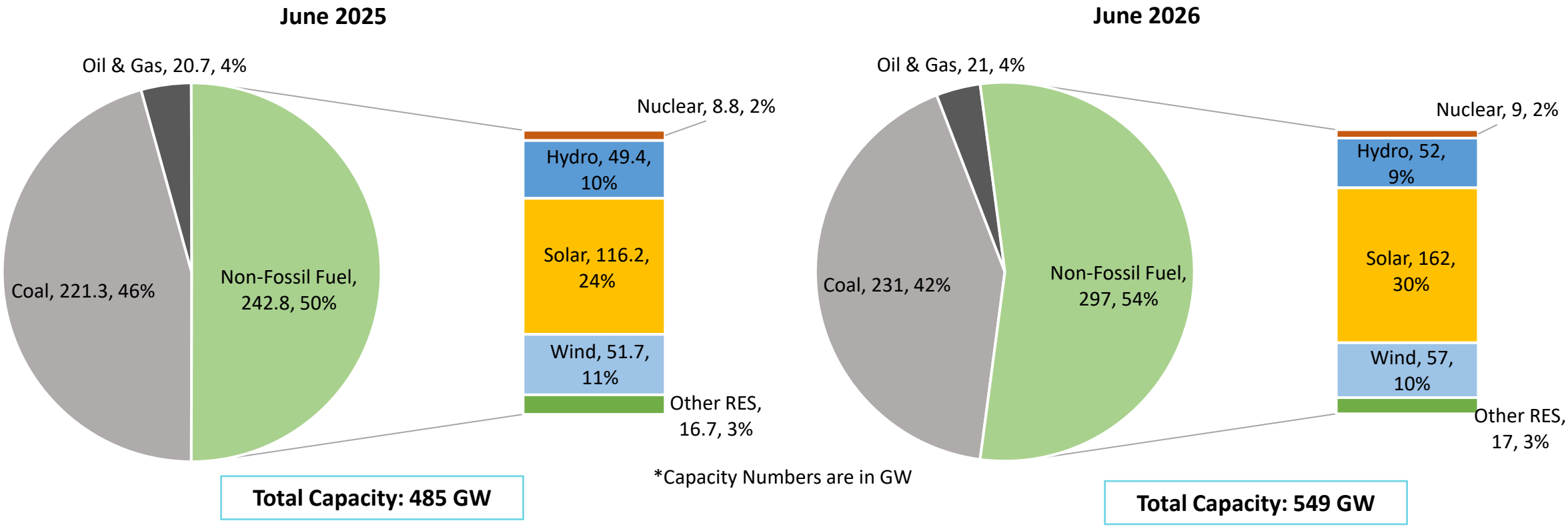




Note: Per Capita energy consumption is calculated on energy supply basis.

Source: ICED & CEA

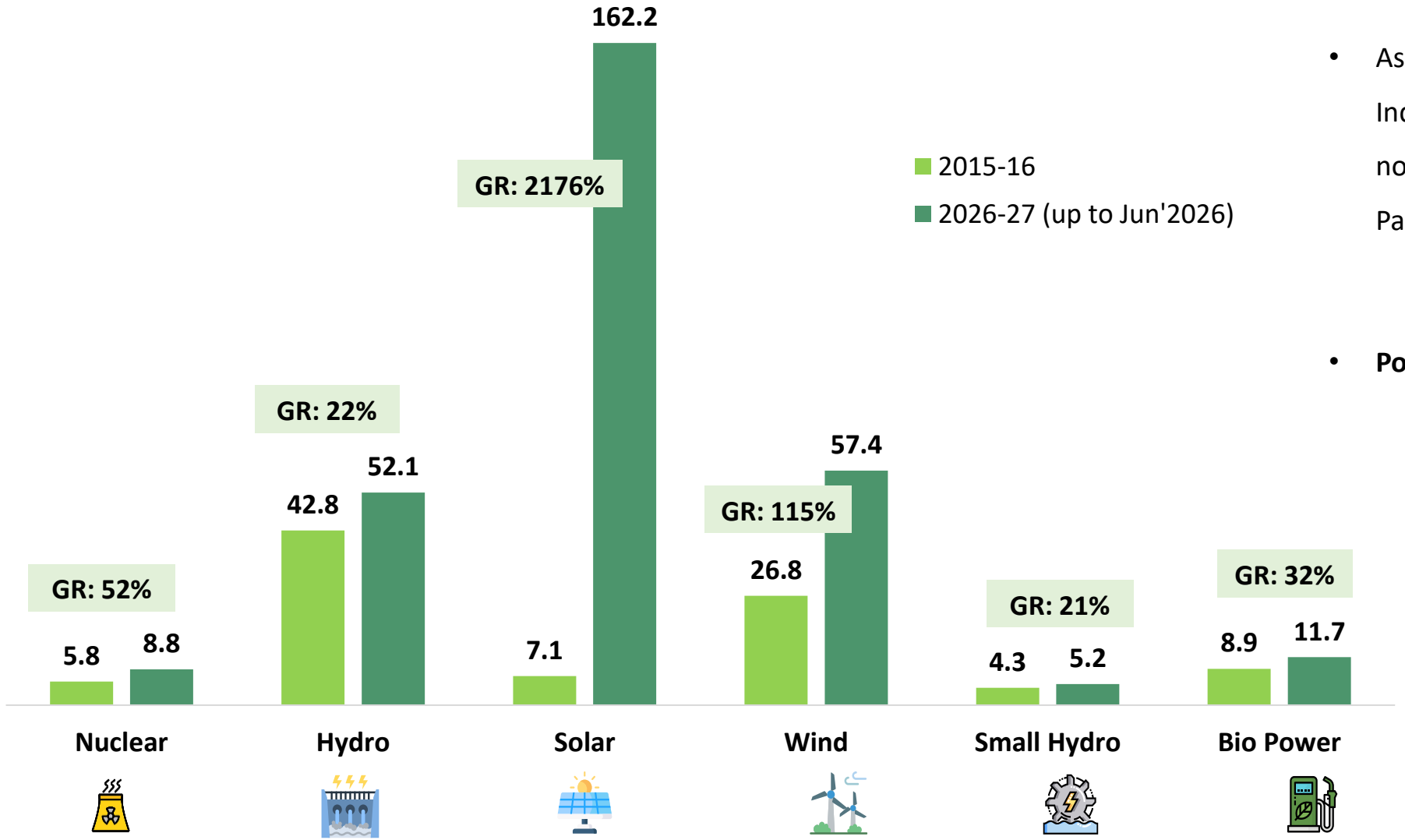
India’s Electricity Capacity Mix (Utility-scale)



- India’s electricity generating capacity is 549 GW as on June 2026 [coal 231 GW (42%), solar 162 GW (30%), wind 57 GW (10%), and large hydro 52 (9%)].
- As on June 2026, the share of non-fossil-based electricity capacity is 54% against the updated target of 60% non-fossil capacity by 2035.
- As on June 2026, India’s renewable energy capacity (including large hydro) stood at 289 GW out of 549 GW.

Source: CEA

Non-Fossil Energy Capacity (in GW) Growth Post-2015 Paris Agreement



- As of 30 June 2026, **54% (297 GW)** of India's total power capacity (**549 GW**) is now non-fossil fuel-based, meeting the Paris Agreement pledge.

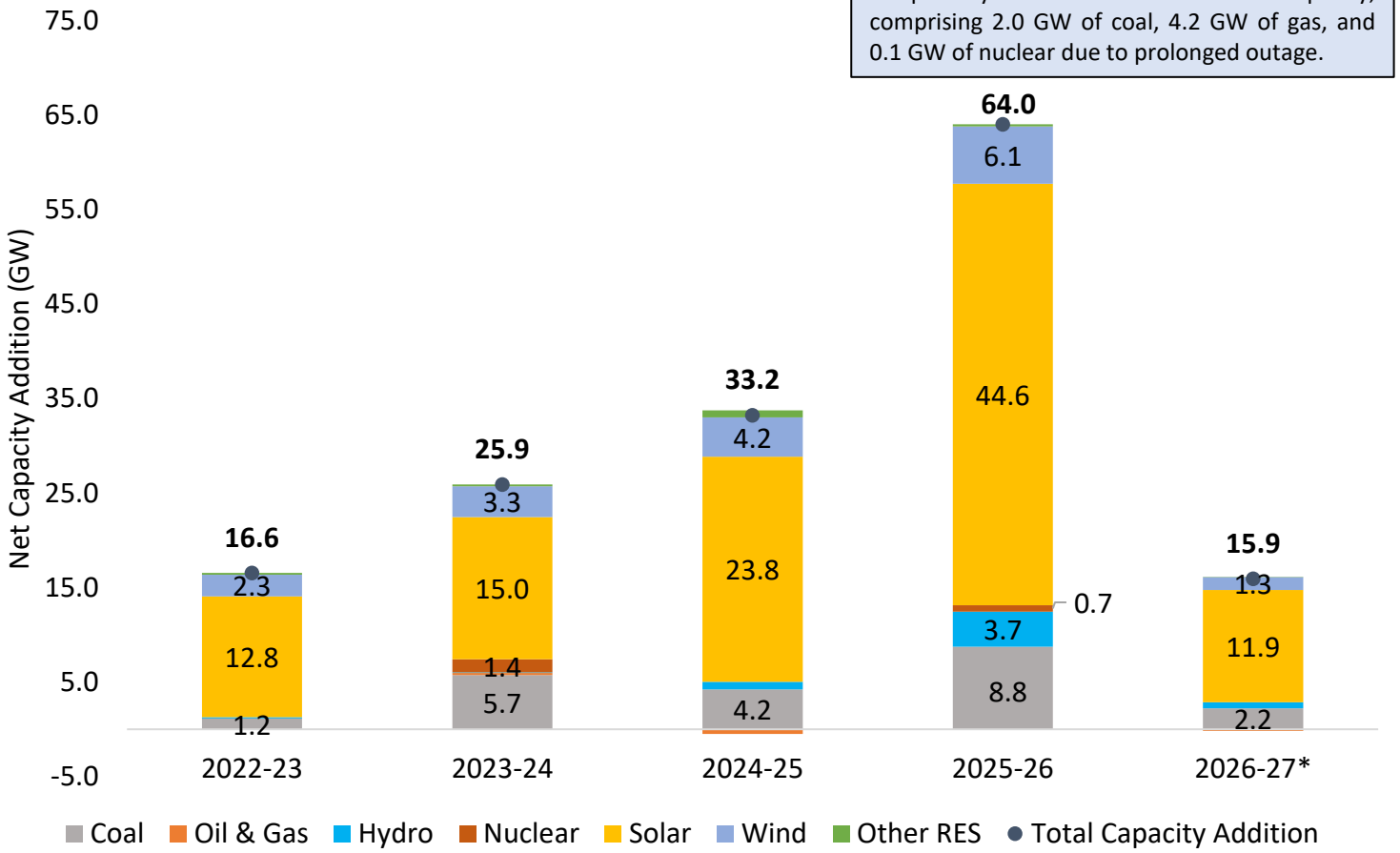
- **Post-2015 Paris Agreement Growth**:
  - solar capacity increased **23-folds**
  - wind power **doubled**
  - nuclear increased by **4% CAGR**.

Source: CEA & MNRE

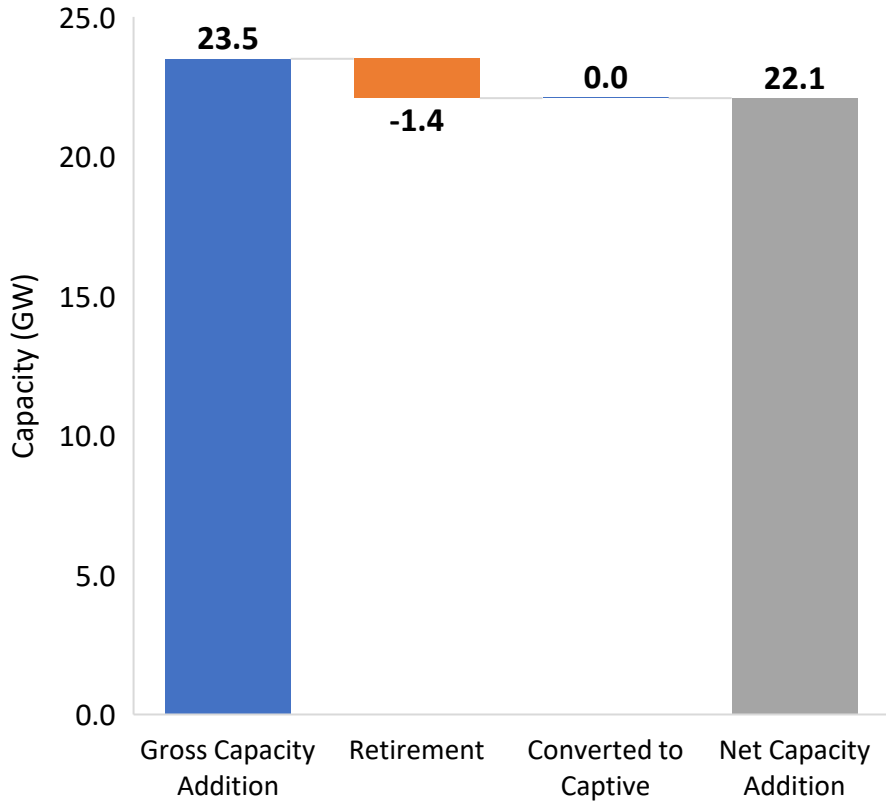
India’s Electricity Capacity Addition in last 5 years

Source-wise Net Capacity Addition (GW)

From Apr’2025 to Jun’2026, the CEA has temporarily closed 6.3 GW of capacity, comprising 2.0 GW of coal, 4.2 GW of gas, and 0.1 GW of nuclear due to prolonged outage.



Net Coal Capacity Addition during 2022-23 to 2026-27*



- A total of 132 GW of generation capacity has been added in RE (Hydro, solar, wind, and other RES) over the past 5 years (2022-23 to 2026-27*), whereas the net coal capacity addition during the same period was 22 GW, mostly in the central sector.

NOTE: *2026-27 is up to June 2026.

Source: CEA & MNRE

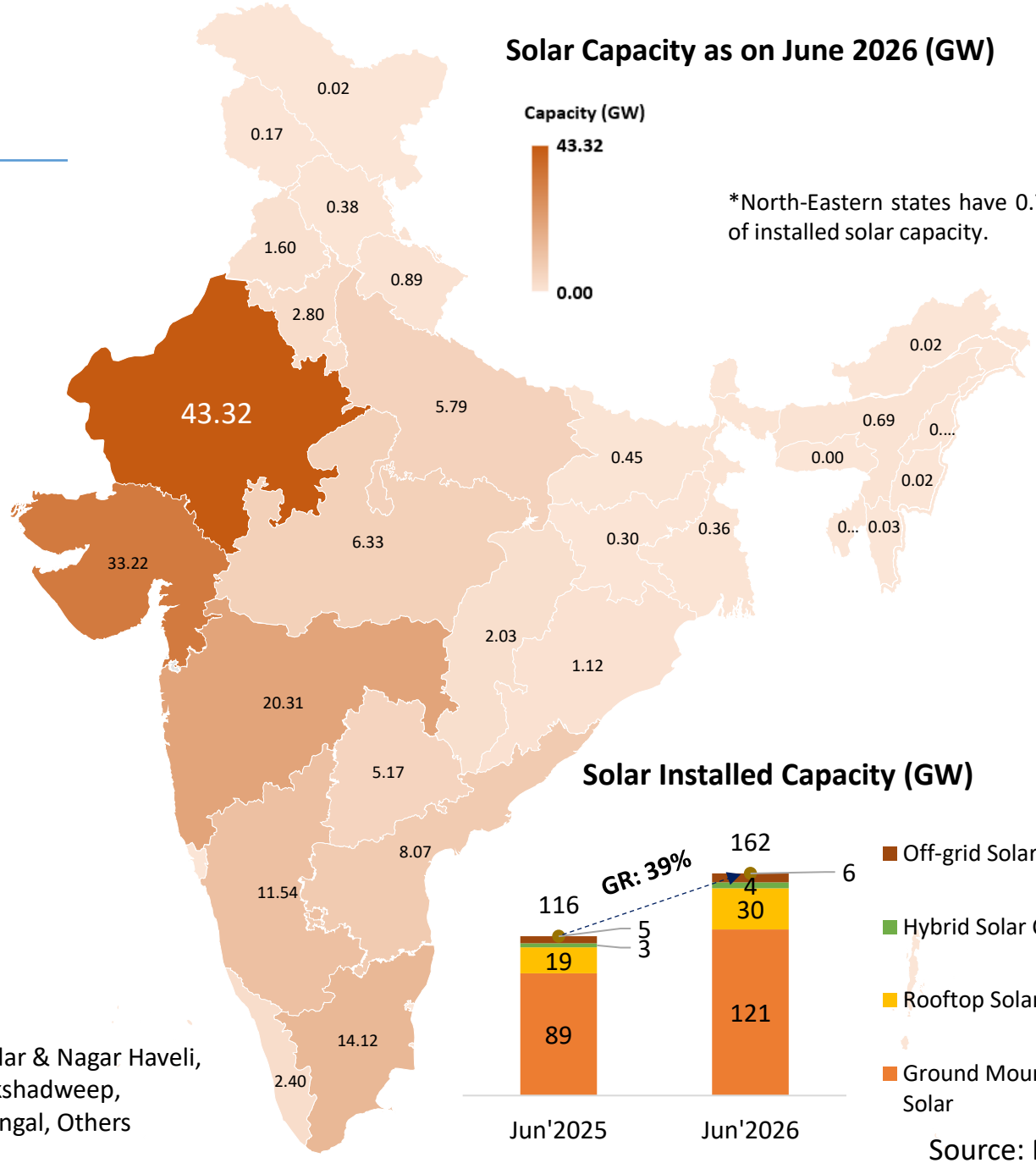
State-wise Solar Capacity

as on June 2026

State-wise Installed Capacity of Solar Power (GW)					
States	**Ground Mounted**	**Rooftop**	**Solar Component in Hybrid**	**Off Grid**	**Total Solar Power**
Rajasthan	**38.15**	2.32	**1.98**	0.87	**43.32**
Gujarat	24.09	**7.44**	1.49	0.20	33.22
Maharashtra	12.17	5.97	0.00	**2.17**	20.31
Tamil Nadu	12.41	1.64	0.00	0.08	14.12
Karnataka	10.05	0.93	0.36	0.20	11.54
Andhra Pradesh	6.56	0.89	0.53	0.09	8.07
Madhya Pradesh	5.13	1.03	0.00	0.17	6.33
Uttar Pradesh	3.06	2.35	0.00	0.38	5.79
Telangana	4.36	0.80	0.00	0.01	5.17
Haryana	0.27	1.32	0.00	1.21	2.80
Kerala	0.34	2.04	0.00	0.02	2.40
Chhattisgarh	1.40	0.24	0.00	0.39	2.03
Punjab	0.89	0.60	0.00	0.12	1.60
Odisha	0.72	0.32	0.00	0.08	1.12
Others	1.66	2.23	0.00	0.44	4.33
All India	**121.25**	**30.12**	**4.36**	**6.43**	**162.15**

Others include- Andaman & Nicobar, Arunachal Pradesh, Assam, Bihar, Chandigarh, Dadar & Nagar Haveli, Daman & Diu, Delhi, Goa, Himachal Pradesh, Jammu & Kashmir, Jharkhand, Ladakh, Lakshadweep, Manipur, Meghalaya, Mizoram, Nagaland, Odisha, Puducherry, Sikkim, Tripura, West Bengal, Others

Solar Capacity as on June 2026 (GW)



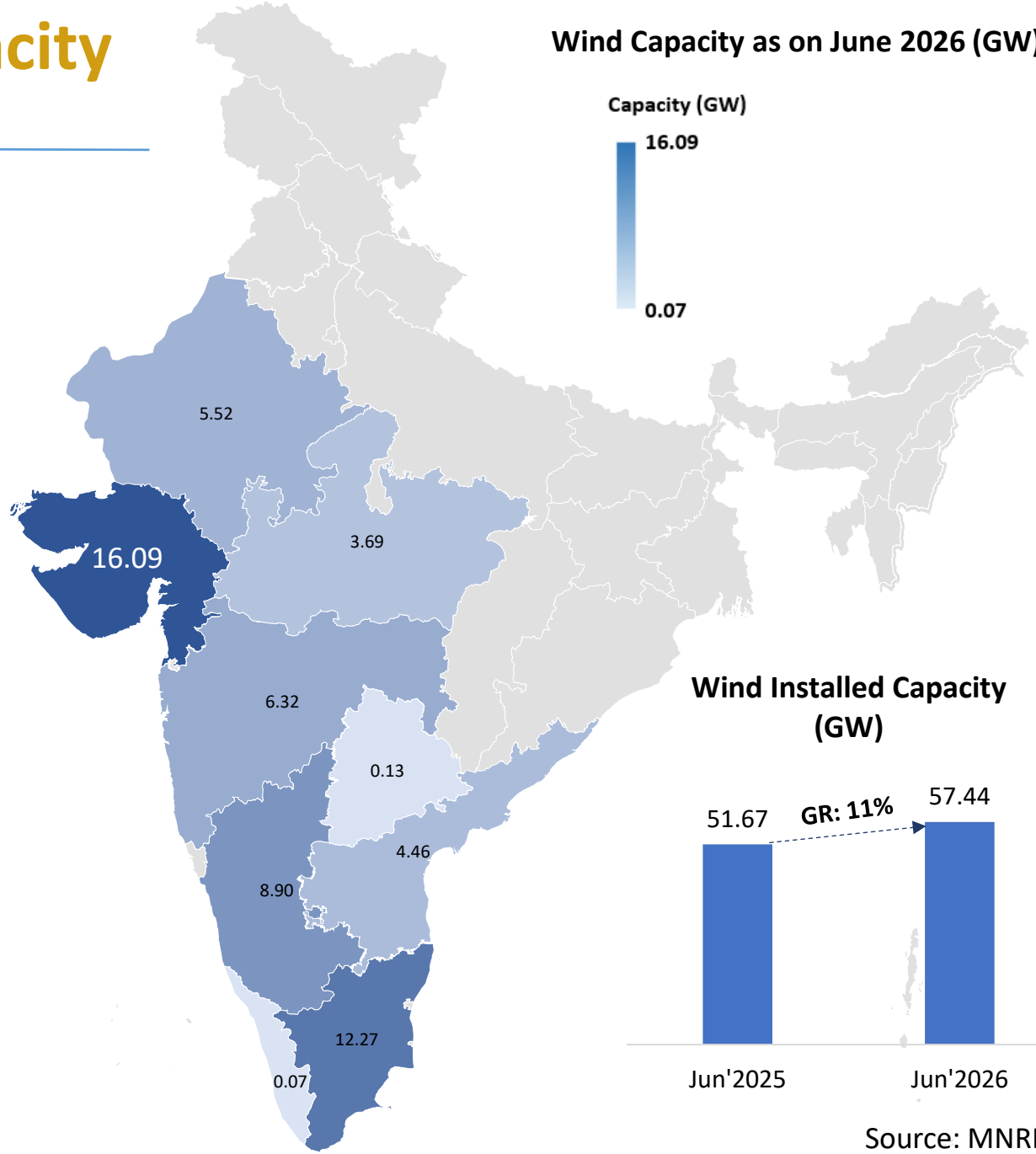
Solar Installed Capacity (GW)

Source: MNRE

State-wise Wind Onshore Capacity

as on June 2026

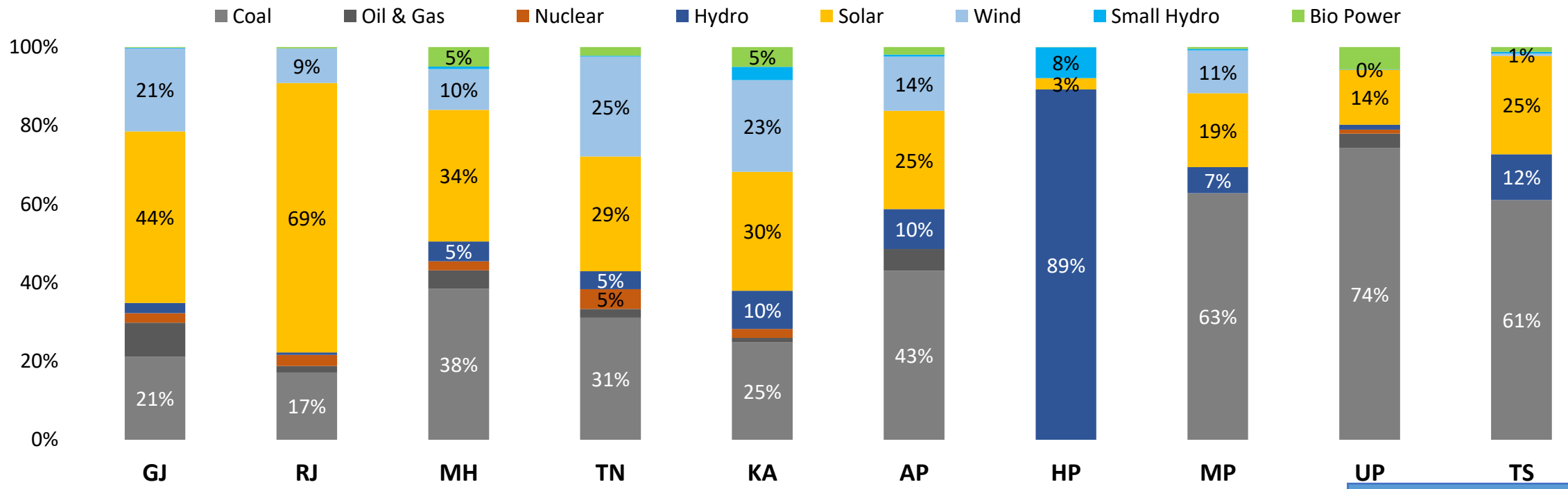
State-wise installed capacity of Wind (Onshore) Power	
States	**Installed Capacity (GW)**
Gujarat	16.09
Tamil Nadu	12.27
Karnataka	8.90
Maharashtra	6.32
Rajasthan	5.52
Andhra Pradesh	4.46
Madhya Pradesh	3.69
Telangana	0.13
Kerala	0.07
India Total	**57.44**



Source: MNRE

Top 10 High RE* States and Their Capacity Mix

as on June 2026



Numbers are in GW

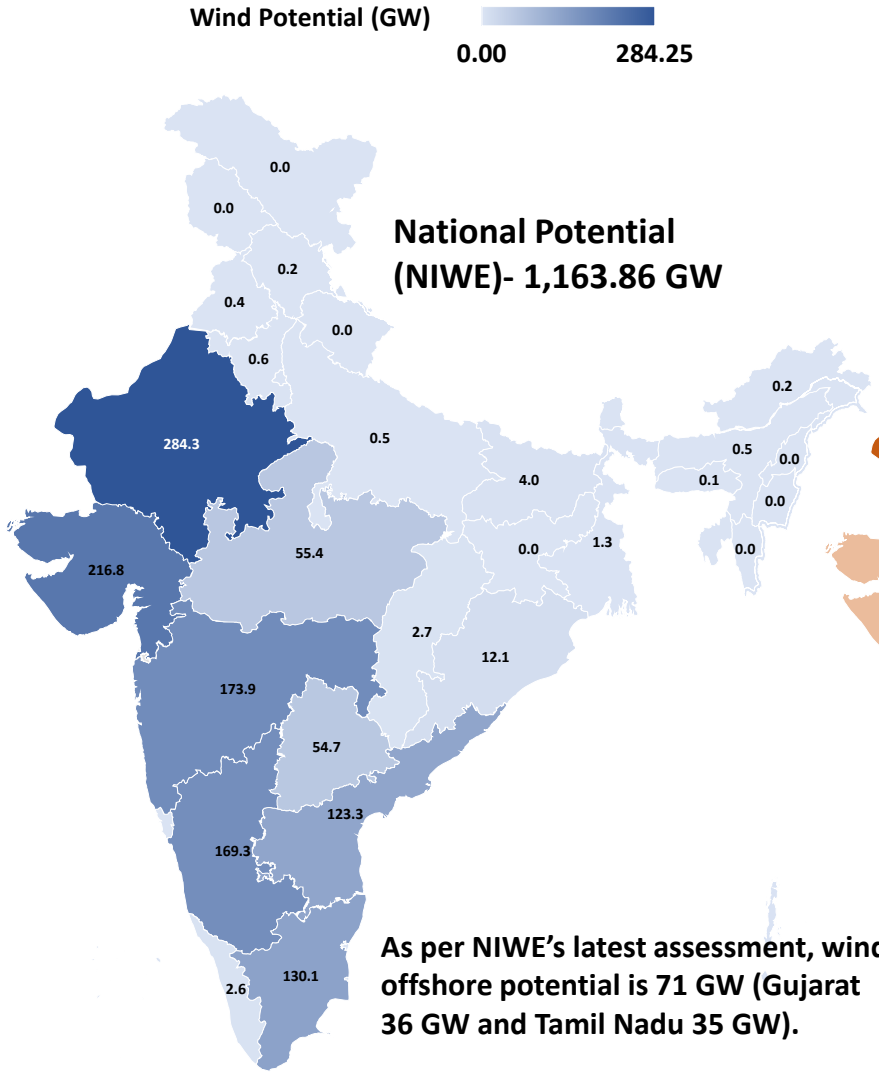
Parameters	GJ	RJ	MH	TN	KA	AP	HP	MP	UP	TS
Total Installed Capacity	76.05	63.12	60.60	48.31	38.08	32.27	12.97	33.71	41.30	20.61
Total RE Capacity	51.54	49.49	33.06	29.78	27.32	16.60	12.97	12.54	8.67	8.03
RE Share	68%	78%	55%	62%	72%	51%	100%	37%	21%	39%

NOTE: *Renewable Energy includes Large Hydro

Source: MNRE & NPP

Renewable Energy (RE) Potential

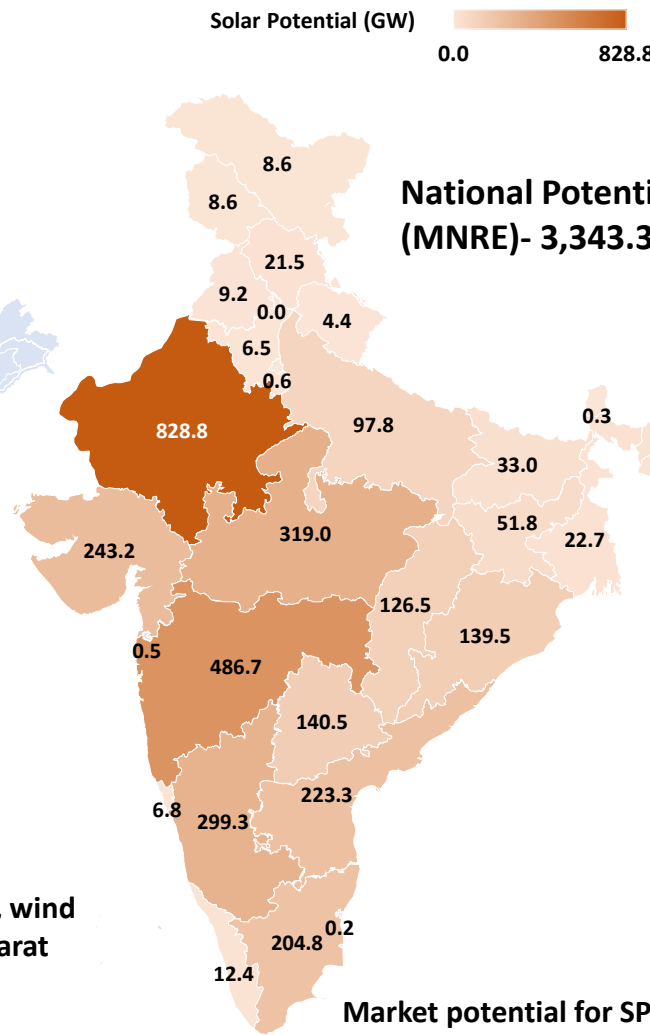
Wind Onshore (at 150m agl) and Offshore Potential



National Potential (NIWE)- 1,163.86 GW

As per NIWE's latest assessment, wind offshore potential is 71 GW (Gujarat 36 GW and Tamil Nadu 35 GW).

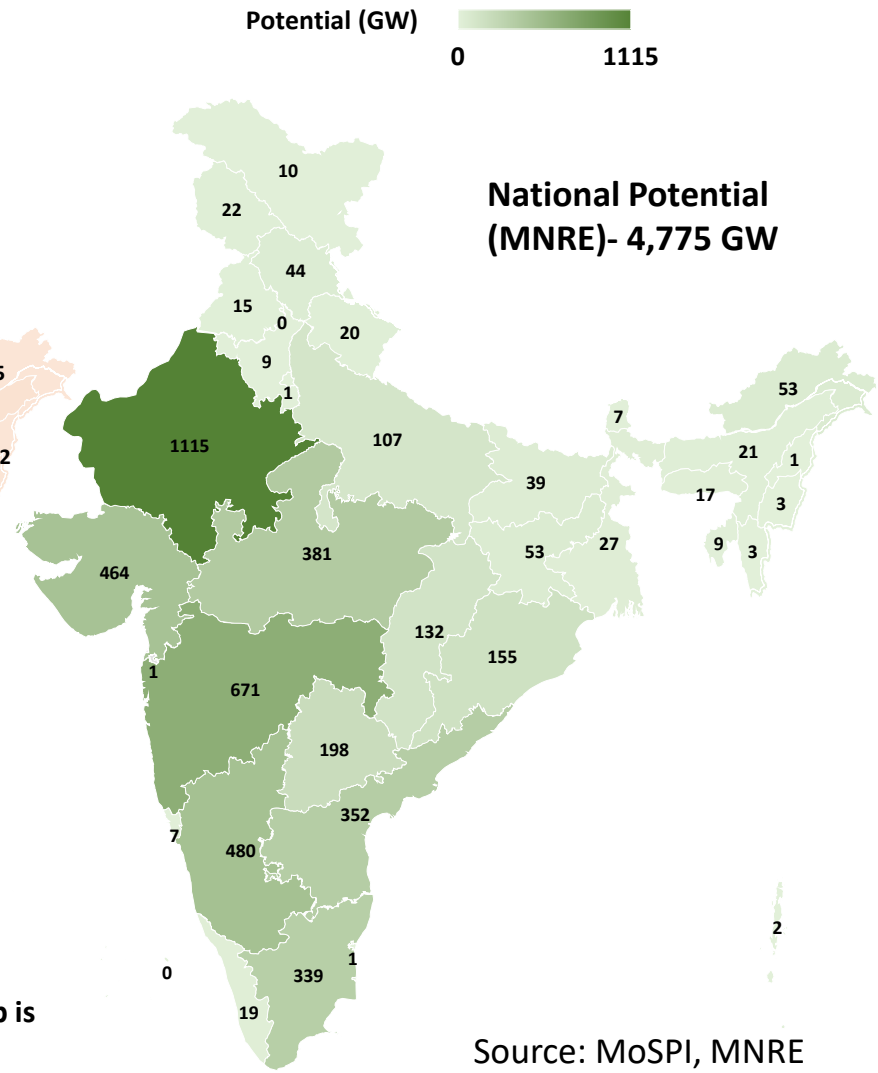
Solar Ground Mounted Potential (at 6.69% wasteland)



National Potential (MNRE)- 3,343.37 GW

Market potential for SPV rooftop is 124 GW.

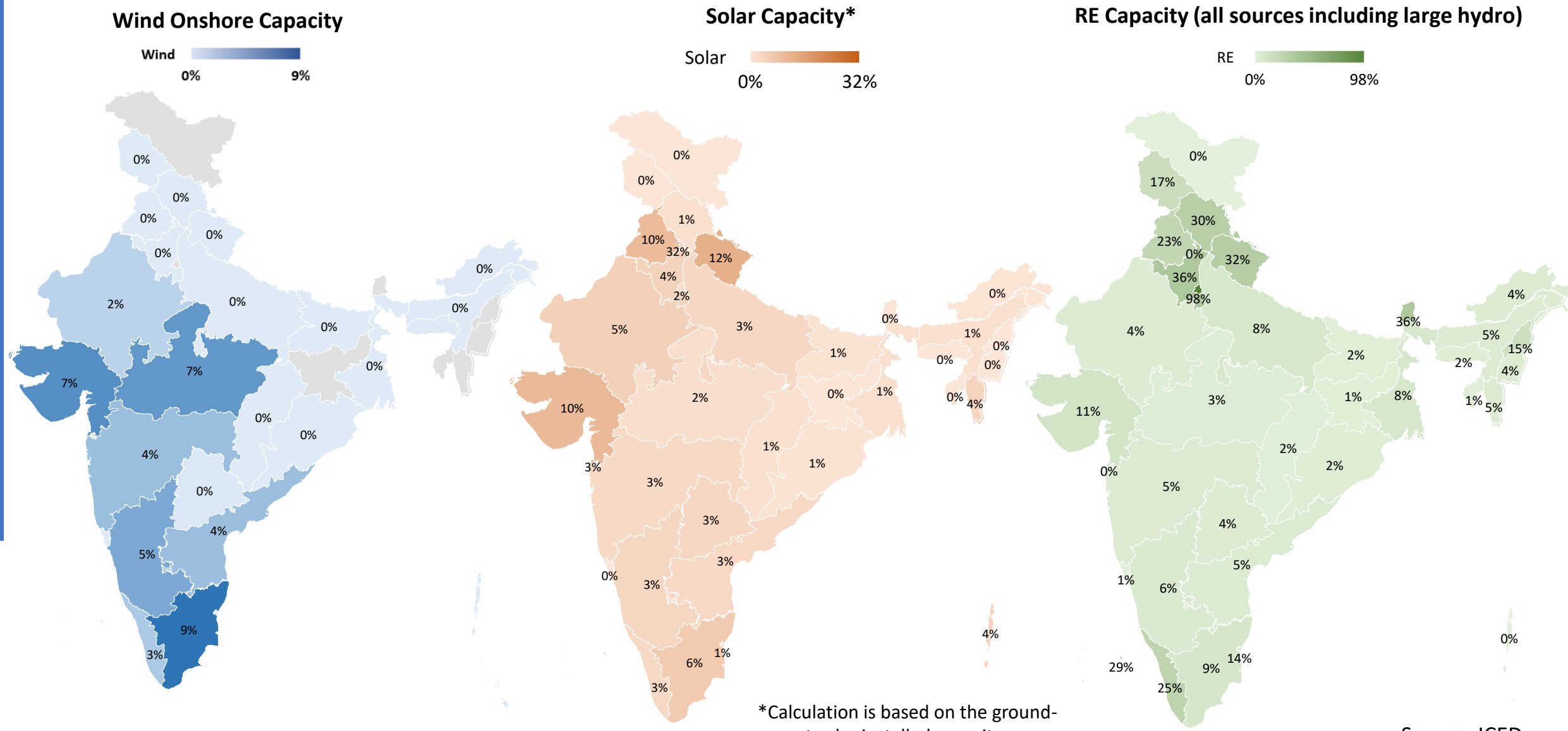
Renewable Energy Potential (all sources incl. large Hydro)



National Potential (MNRE)- 4,775 GW

Source: MoSPI, MNRE

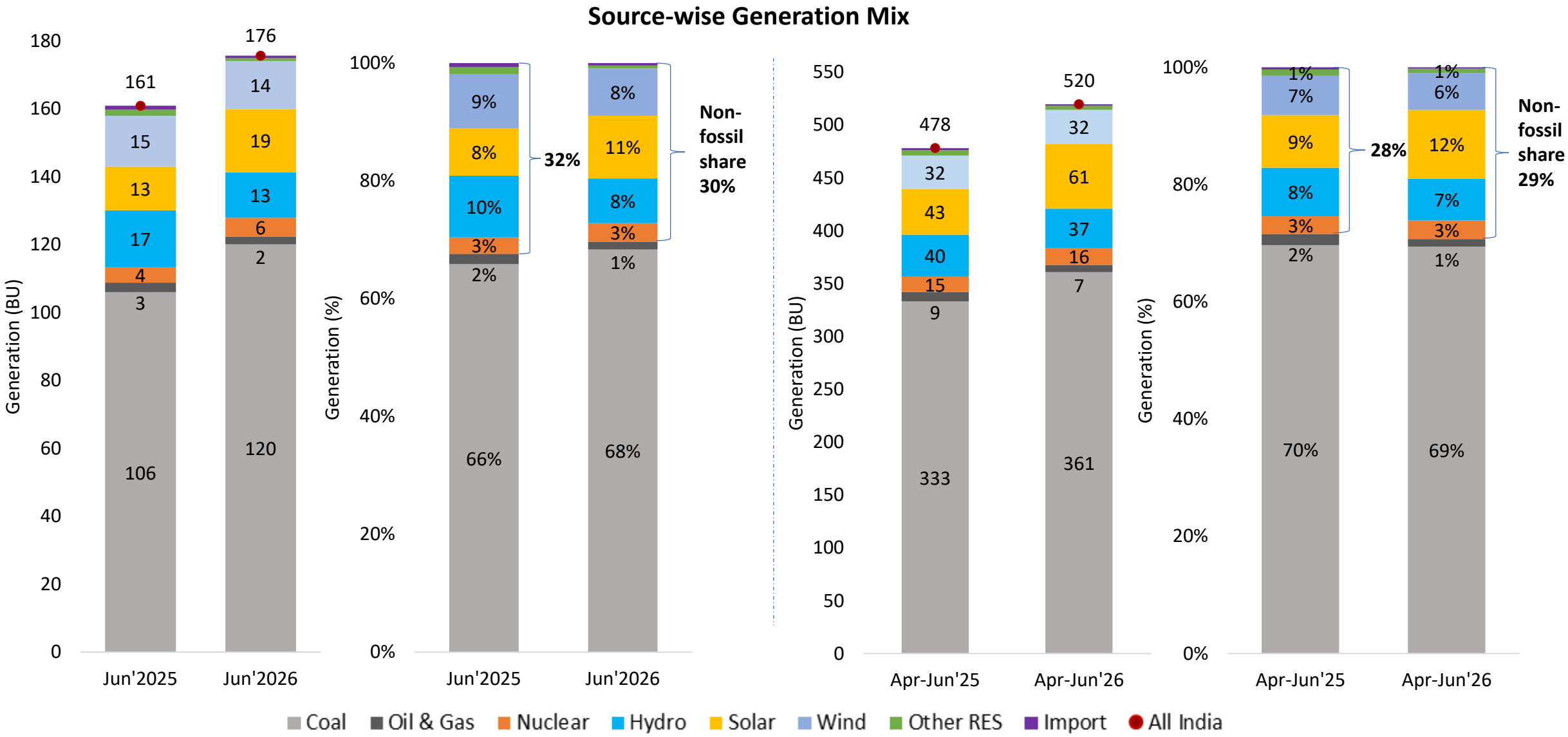
RE Installed Capacity as a Percentage of the Total Resource Potential in the State (as on June 2026)



*Calculation is based on the ground-mount solar installed capacity.

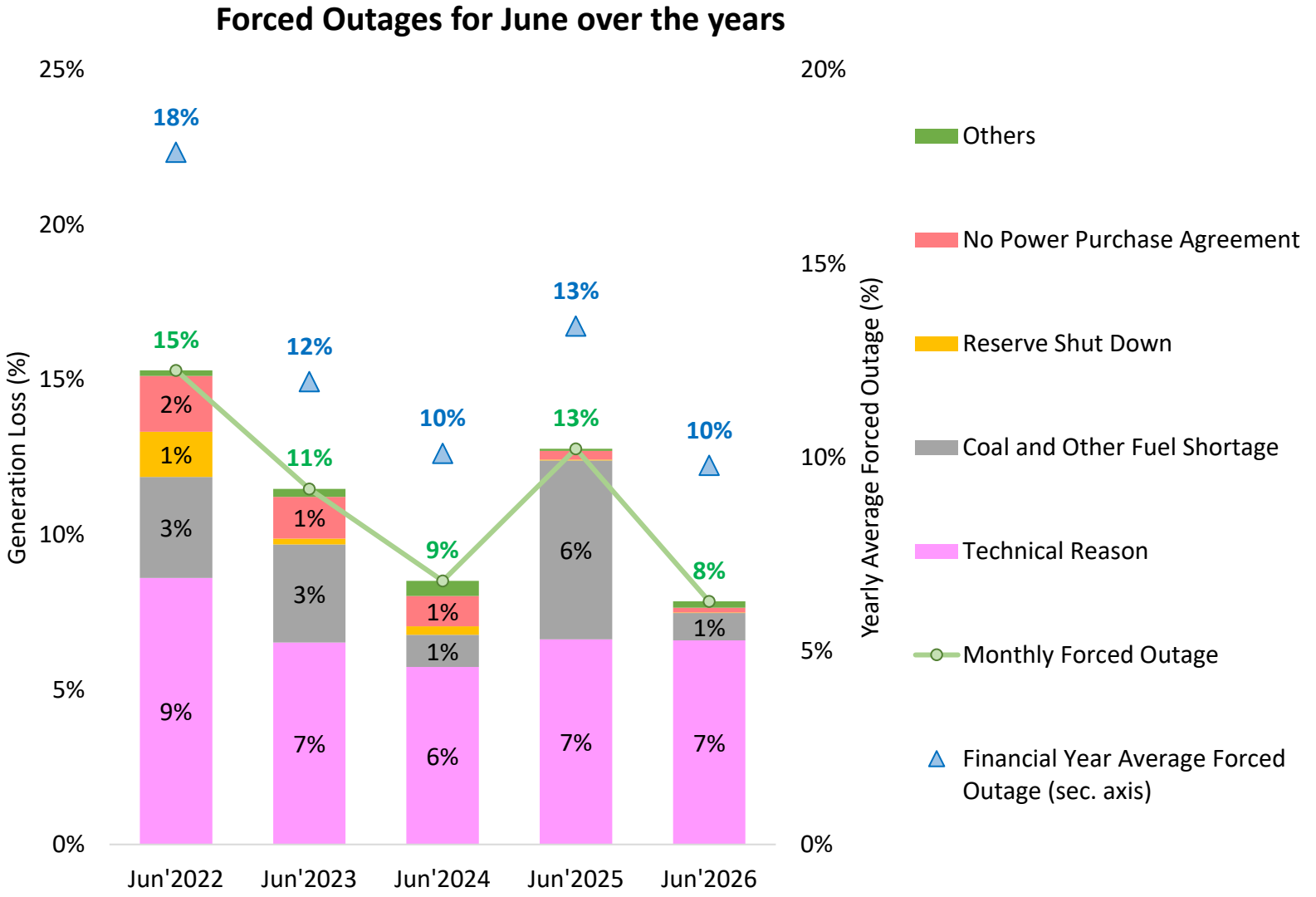
Source: ICED

India’s Electricity Generation Mix



Source: CEA

Thermal Generation Loss and Reasons for Forced Outages

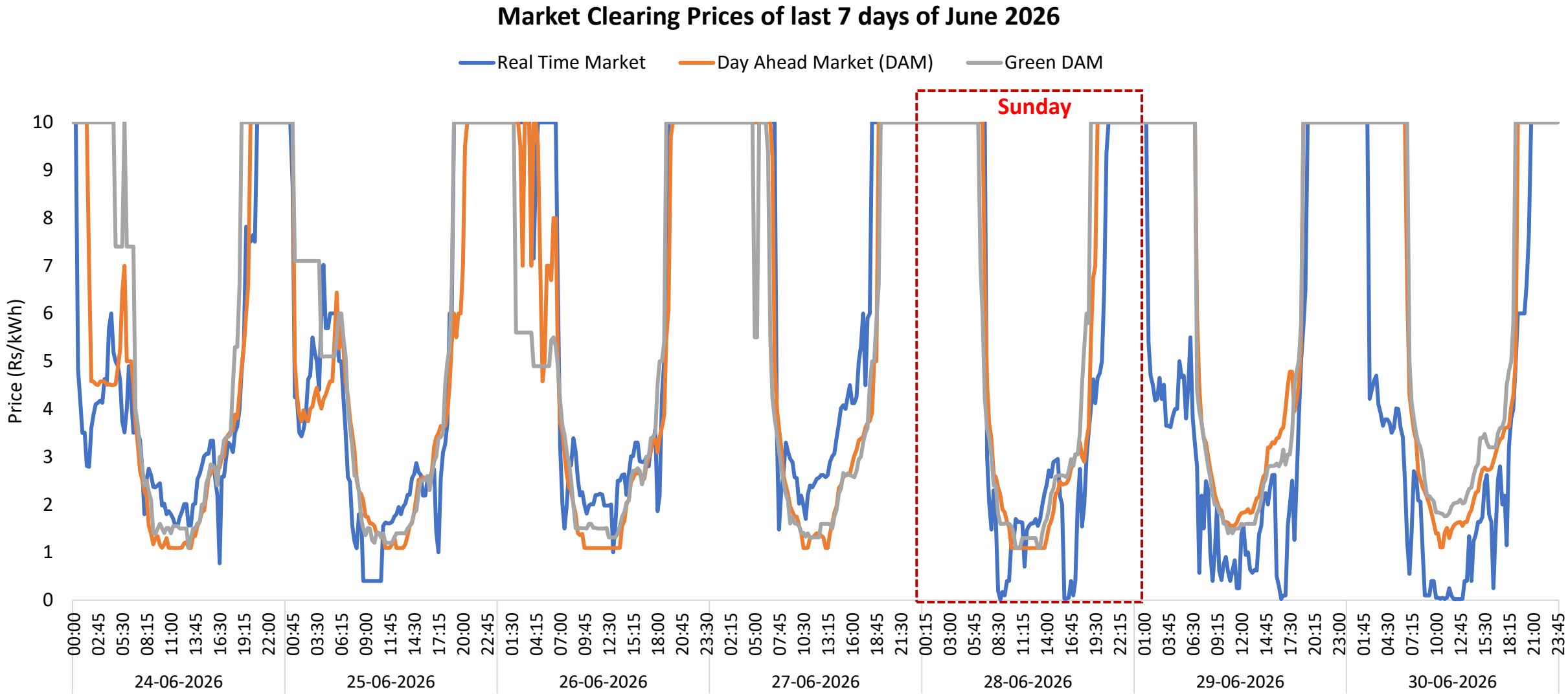


Year/ Month		Average Forced Outage Share
Yearly	FY 2024-25	10%
	FY 2025-26	13%
	FY 2026-27 (up to Jun'2026)	10%
Monthly	Jun'2024	9%
	Jun'2025	13%
	Jun'2026	8%

NOTE: Thermal includes only Coal and Lignite Plants.
Others includes Other Commercial Reasons, Raw Water Unavailability and Technical Grid.

Source: ICED

Indian Electricity Exchange (IEX) Market Snapshot

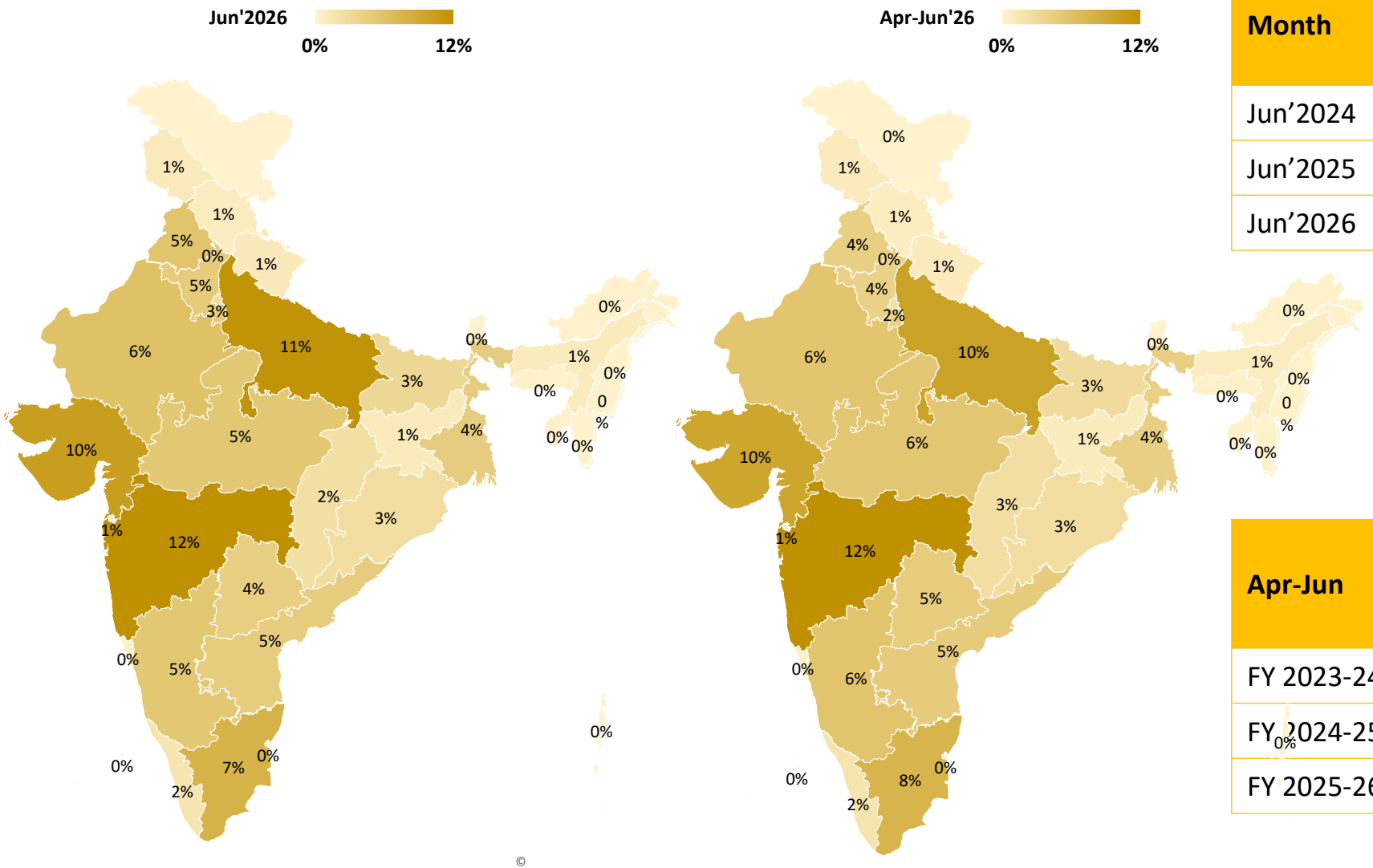


In April 2023, CERC revised the price ceiling from ₹12/kWh to ₹10/kWh in the power exchange market.

Source: IEX

National and State level Electricity Demand

State-level Electricity Demand as a percent of National Demand (%)



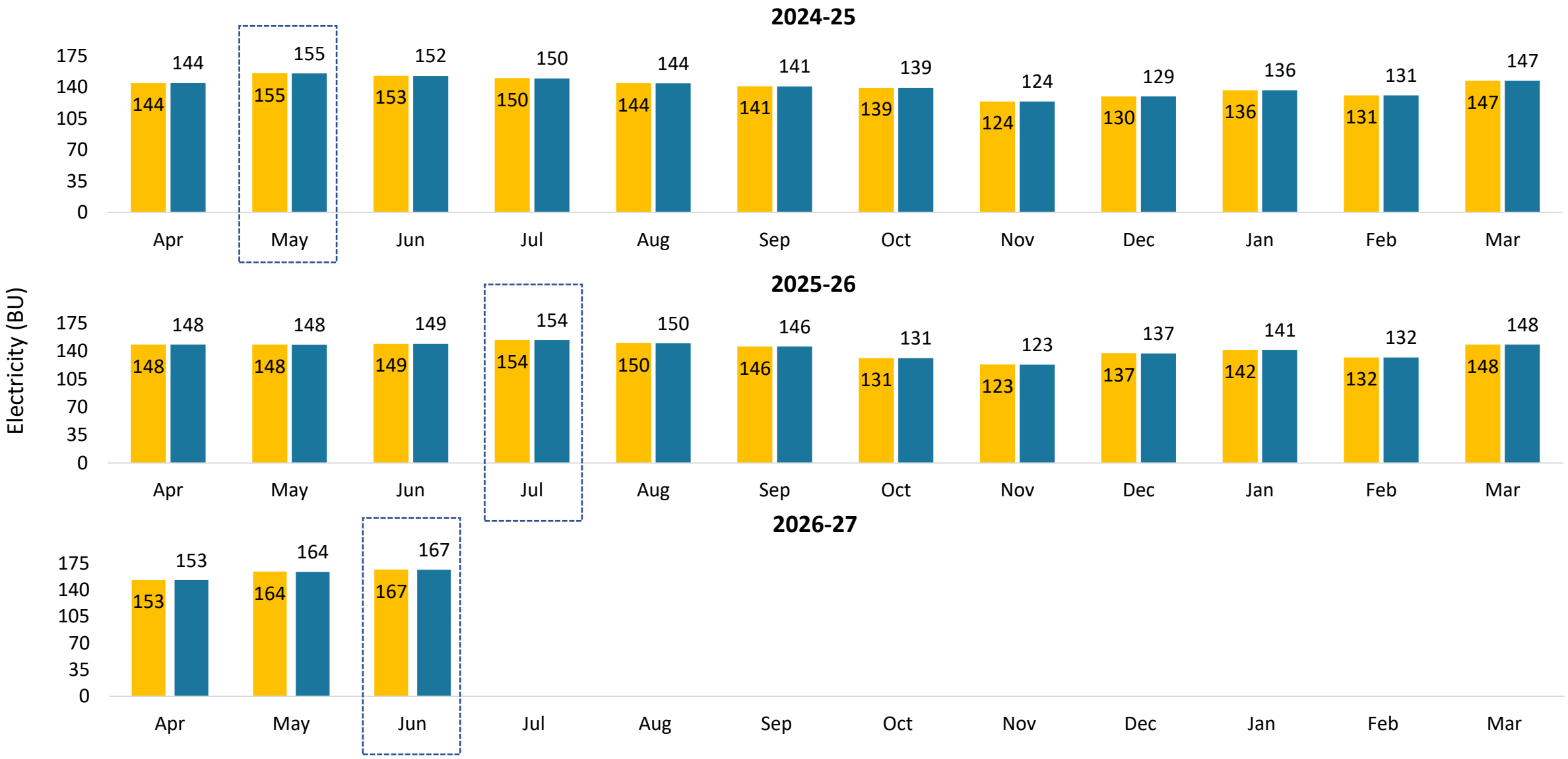
Month	Electricity Demand (BU)	Electricity Supply (BU)	Gap (BU) (+/-)
Jun'2024	153	152	0.3
Jun'2025	148	148	0.1
Jun'2026	167	167	0.1

Apr-Jun	Electricity Demand (BU)	Electricity Supply (BU)	Gap (BU) (+/-)
FY 2023-24	452	452	0.6
FY 2024-25	296	296	0.1
FY 2025-26	486	484	0.5

NOTE: The demand represented above includes intra state T&D losses.

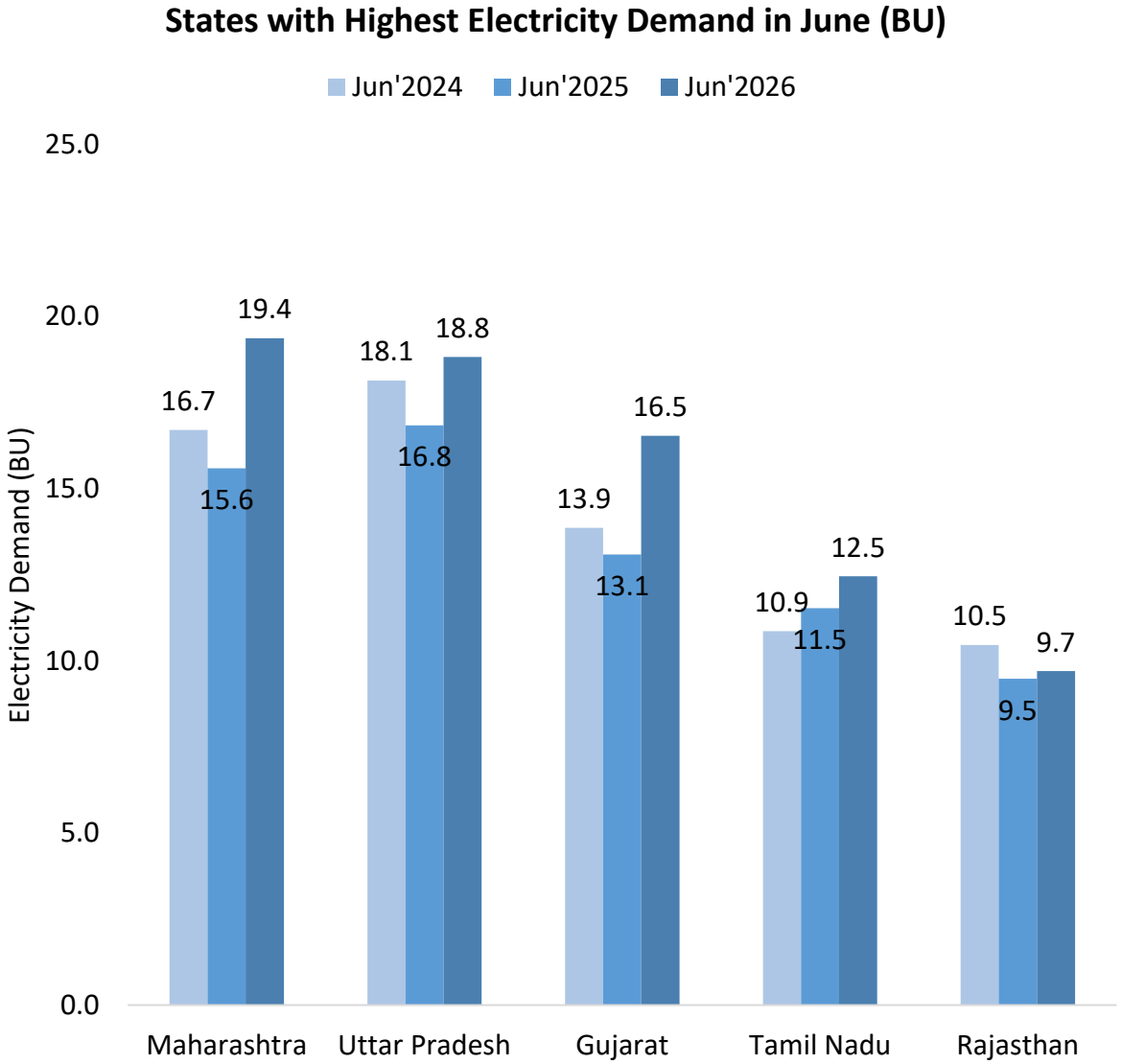
Source: CEA

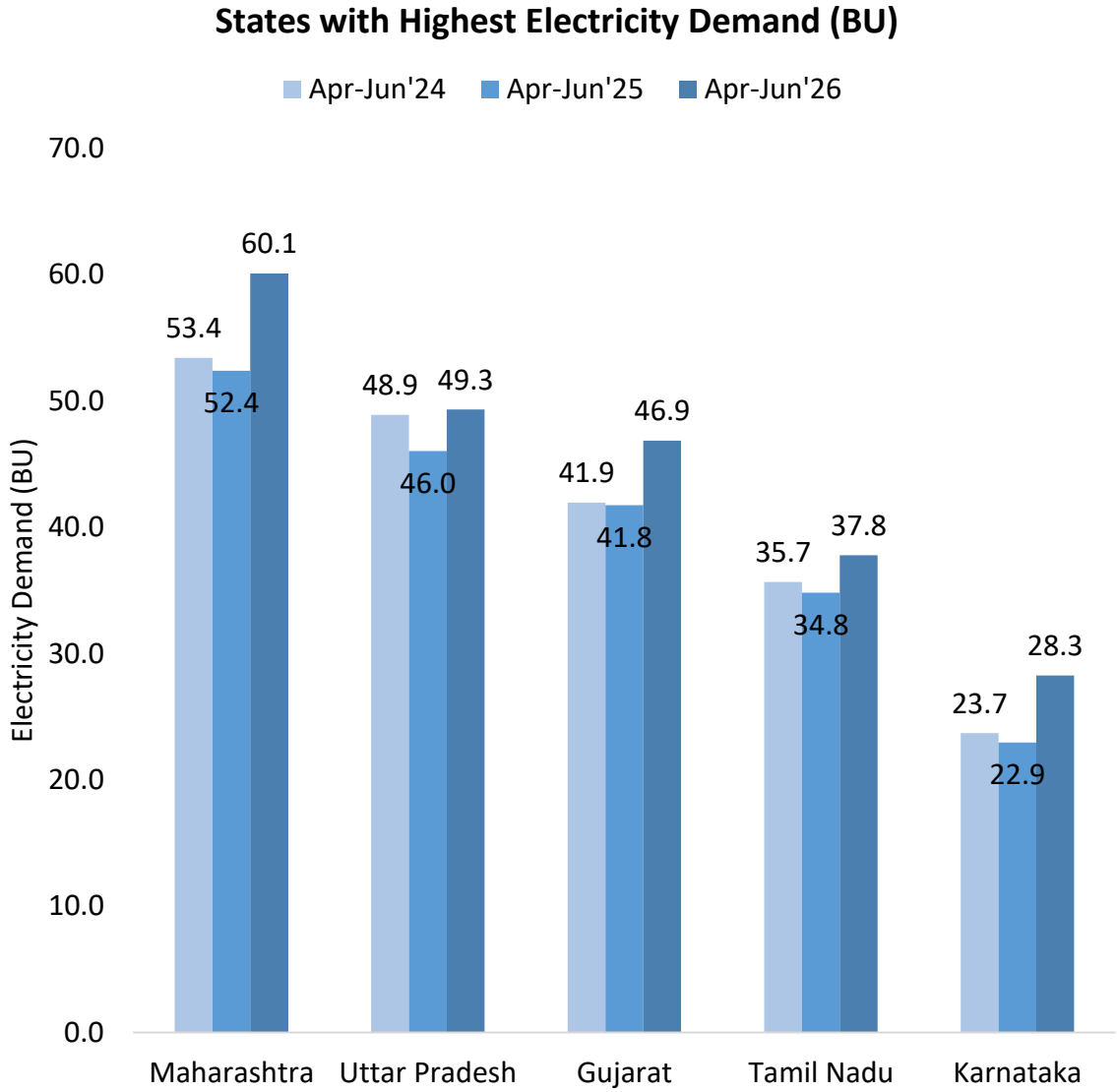
India’s Monthly Electricity Requirement and Supply



Source: CEA

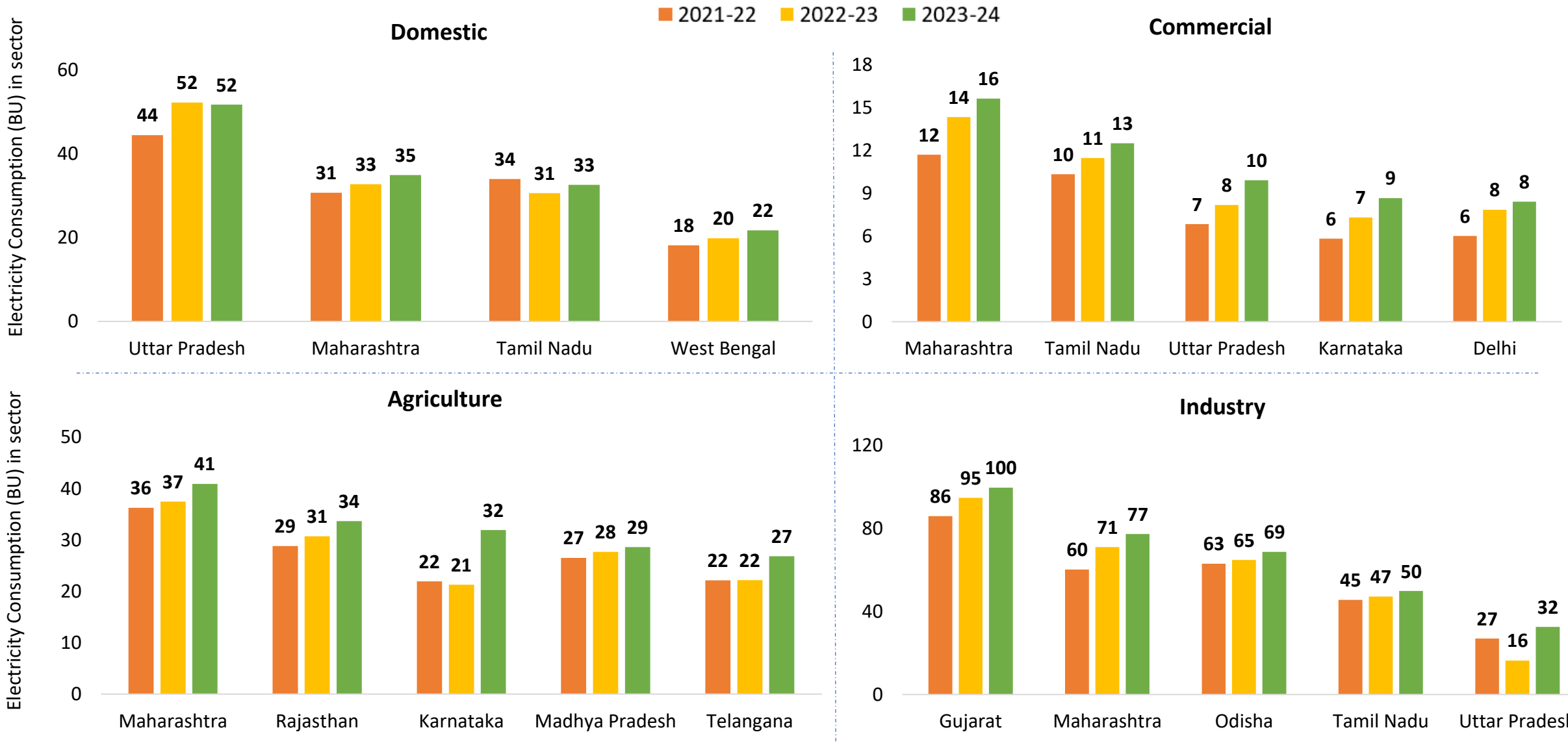
Monthly Electricity Demand of the Top 5 States





Source: CEA & Grid India

Electricity Consumer-category wise Top 5 States

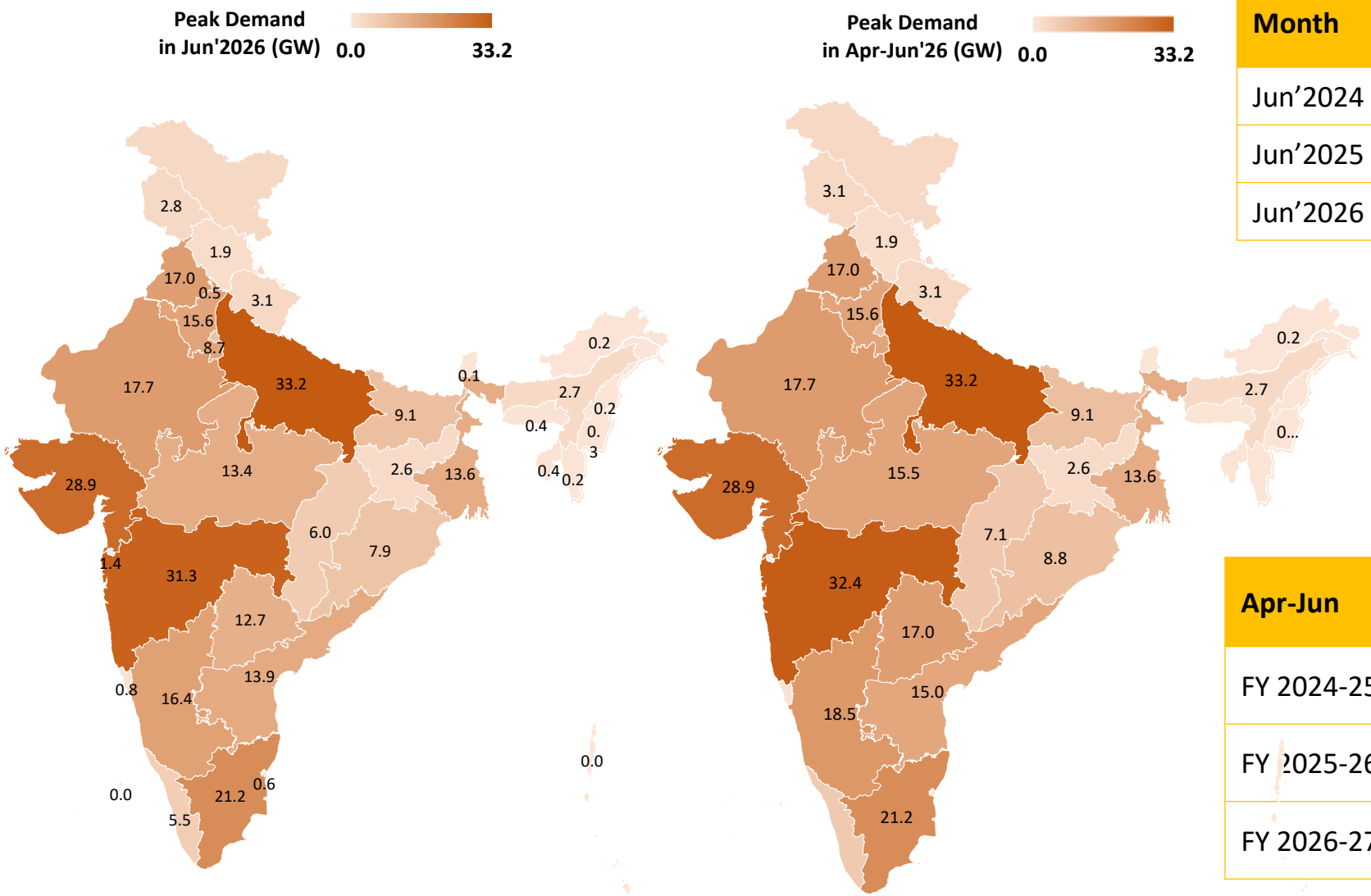


NOTE: Top 5 States under consumer-categories are selected on the basis of 2023-24

Source: CEA

National and State level Peak Electricity Demand

State-level Peak Electricity Demand (GW)

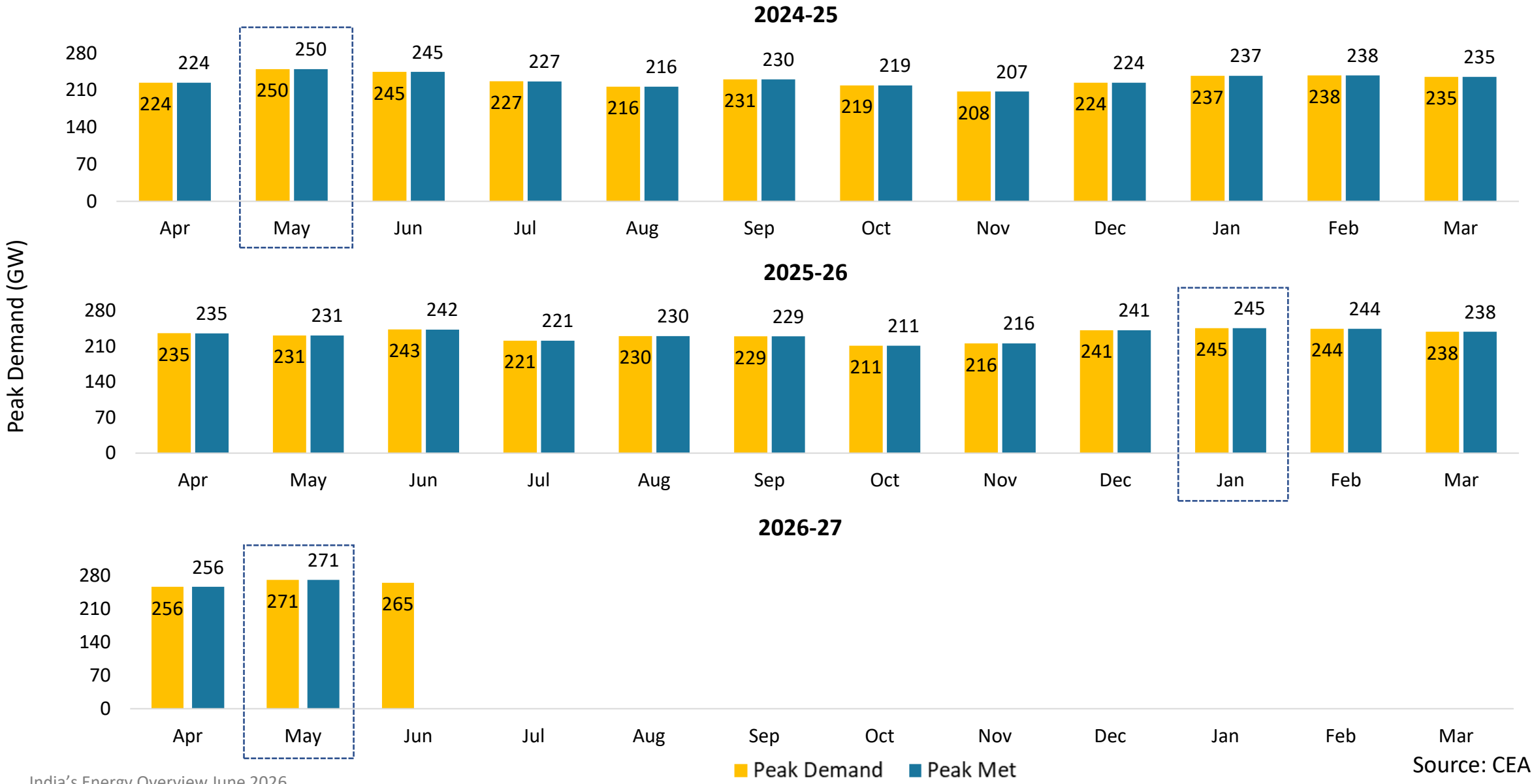


Month	Peak Demand (GW)	Peak Supply (GW)	Gap(GW) (+/-)
Jun'2024	245	245	0.0
Jun'2025	243	243	0.3
Jun'2026	265	-	-

Apr-Jun	Peak Demand (GW)	Peak Supply (GW)	Gap (GW) (+/-)
FY 2024-25	250	250	0.0
FY 2025-26	243	243	0.3
FY 2026-27	271	271	0.0

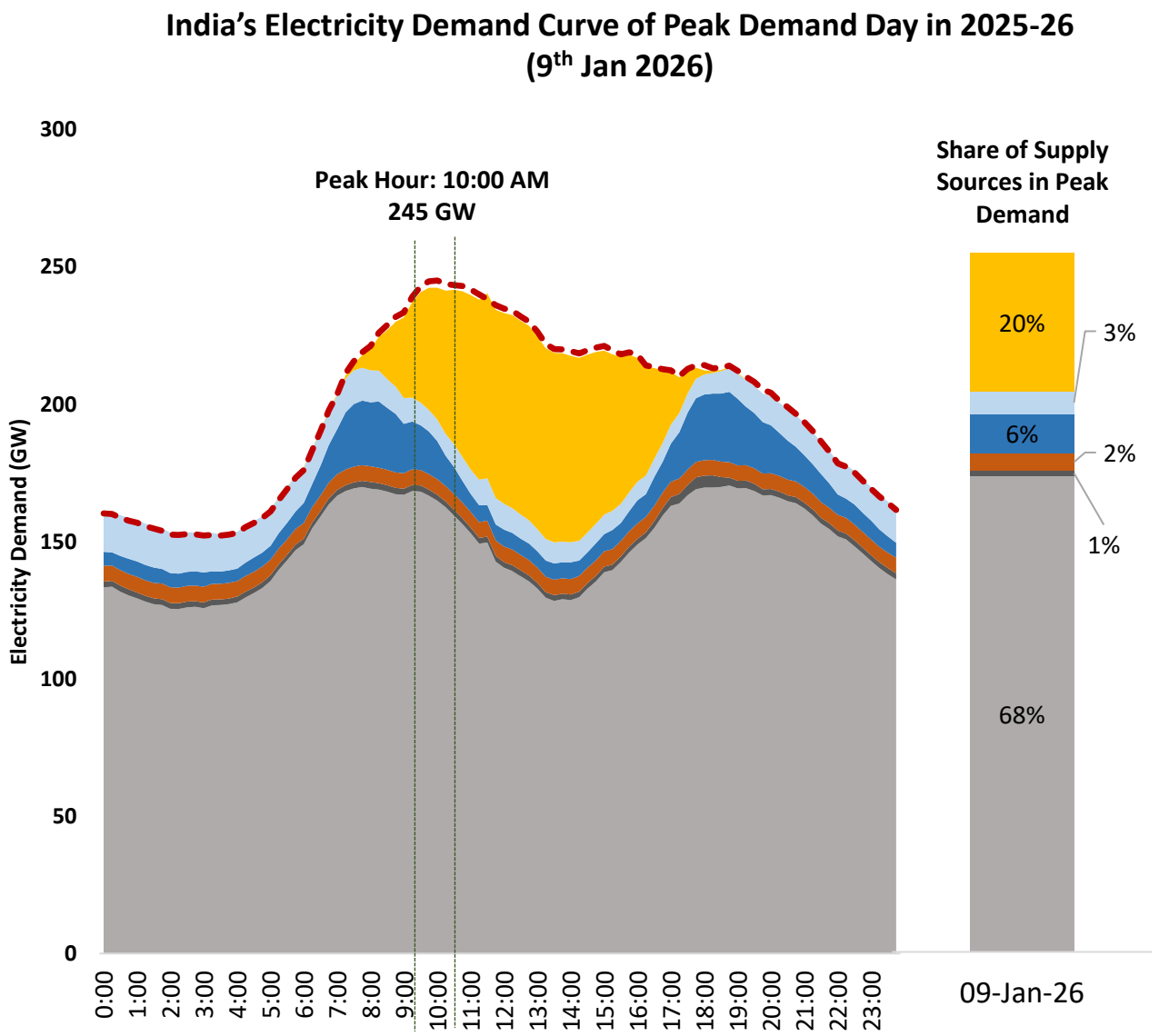
Source: CEA

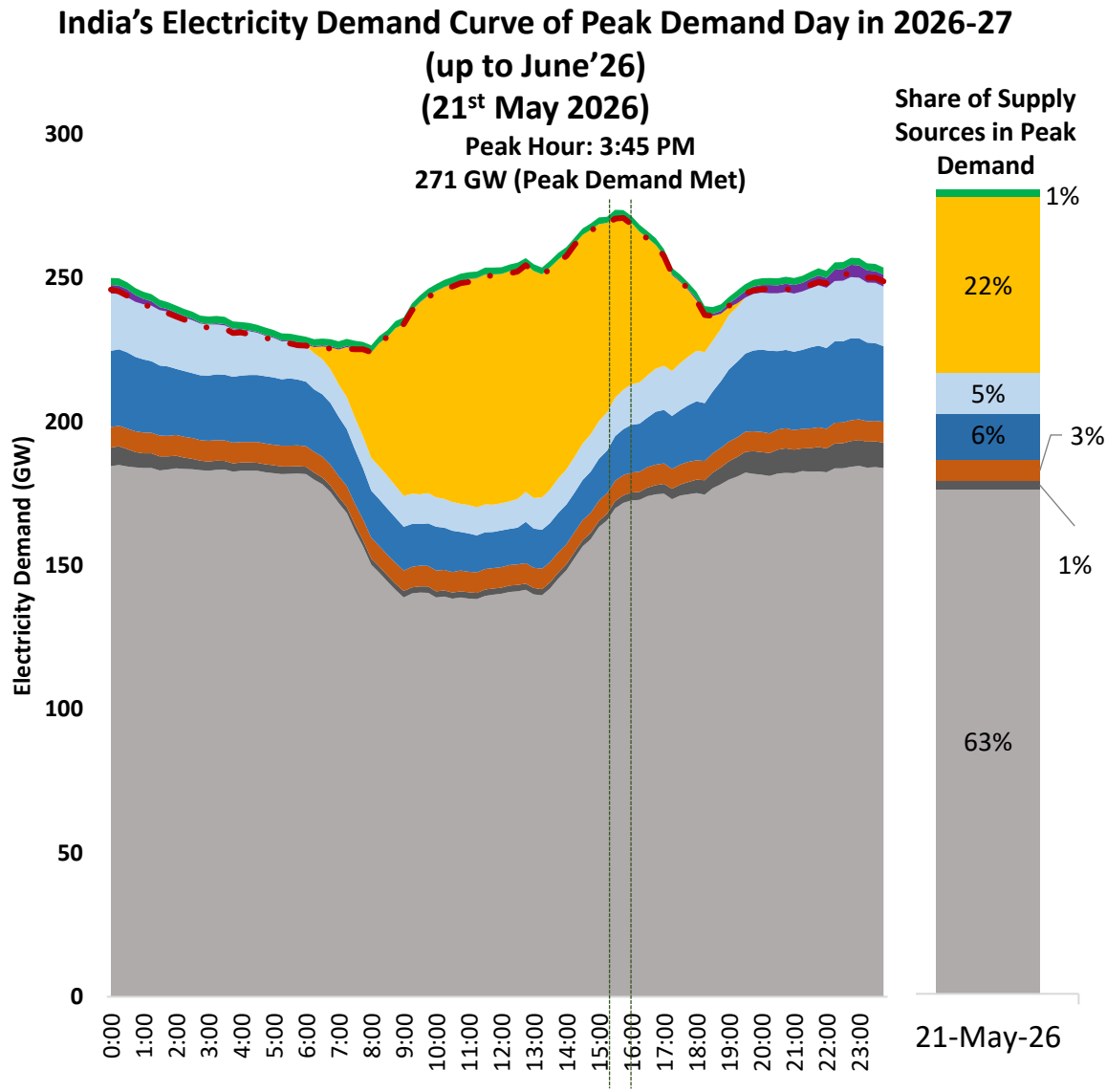
India’s Monthly Peak Electricity Demand and Supply



Source: CEA

All India and Source-wise Electricity Demand Curve of Peak Demand Day

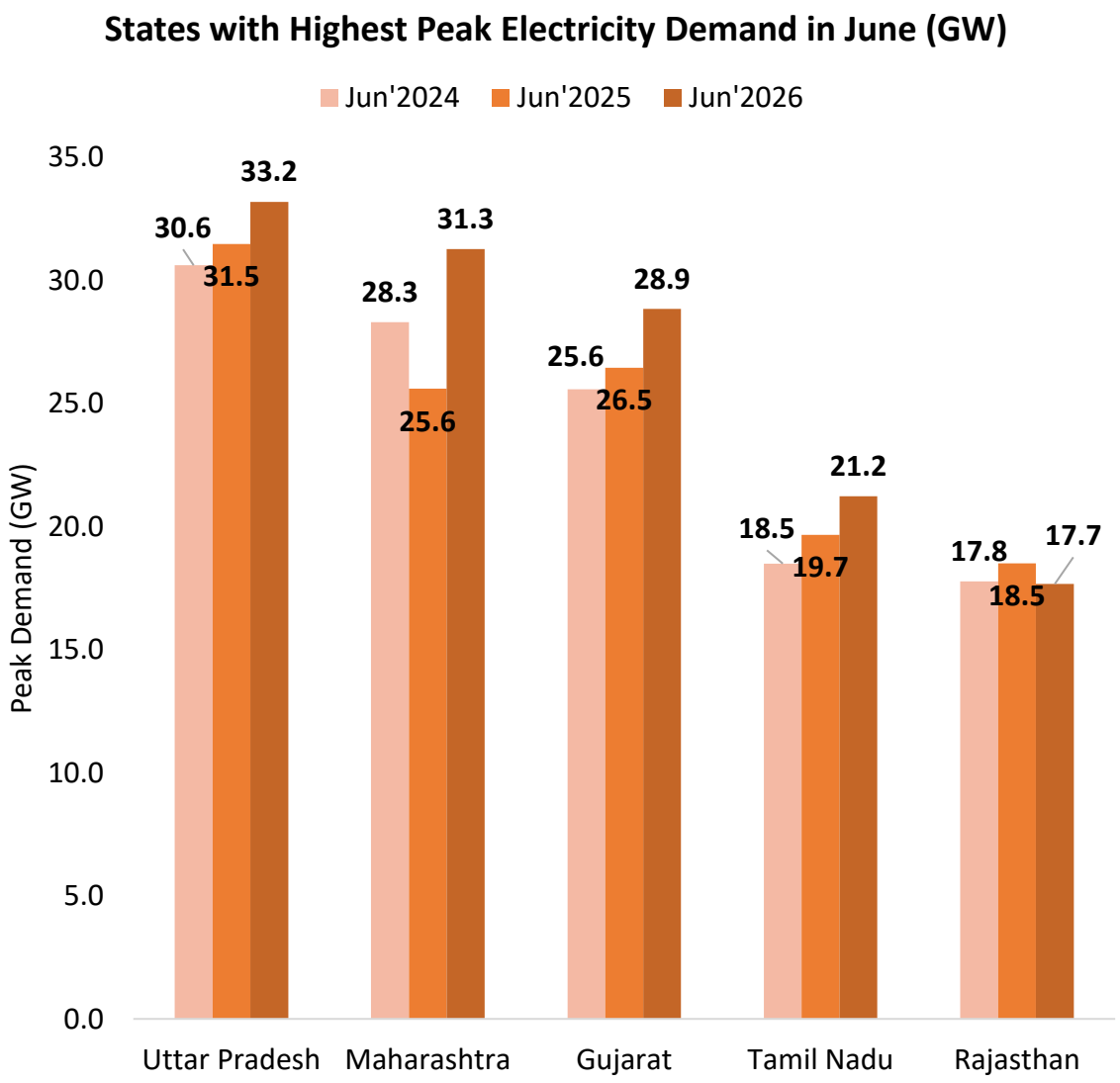


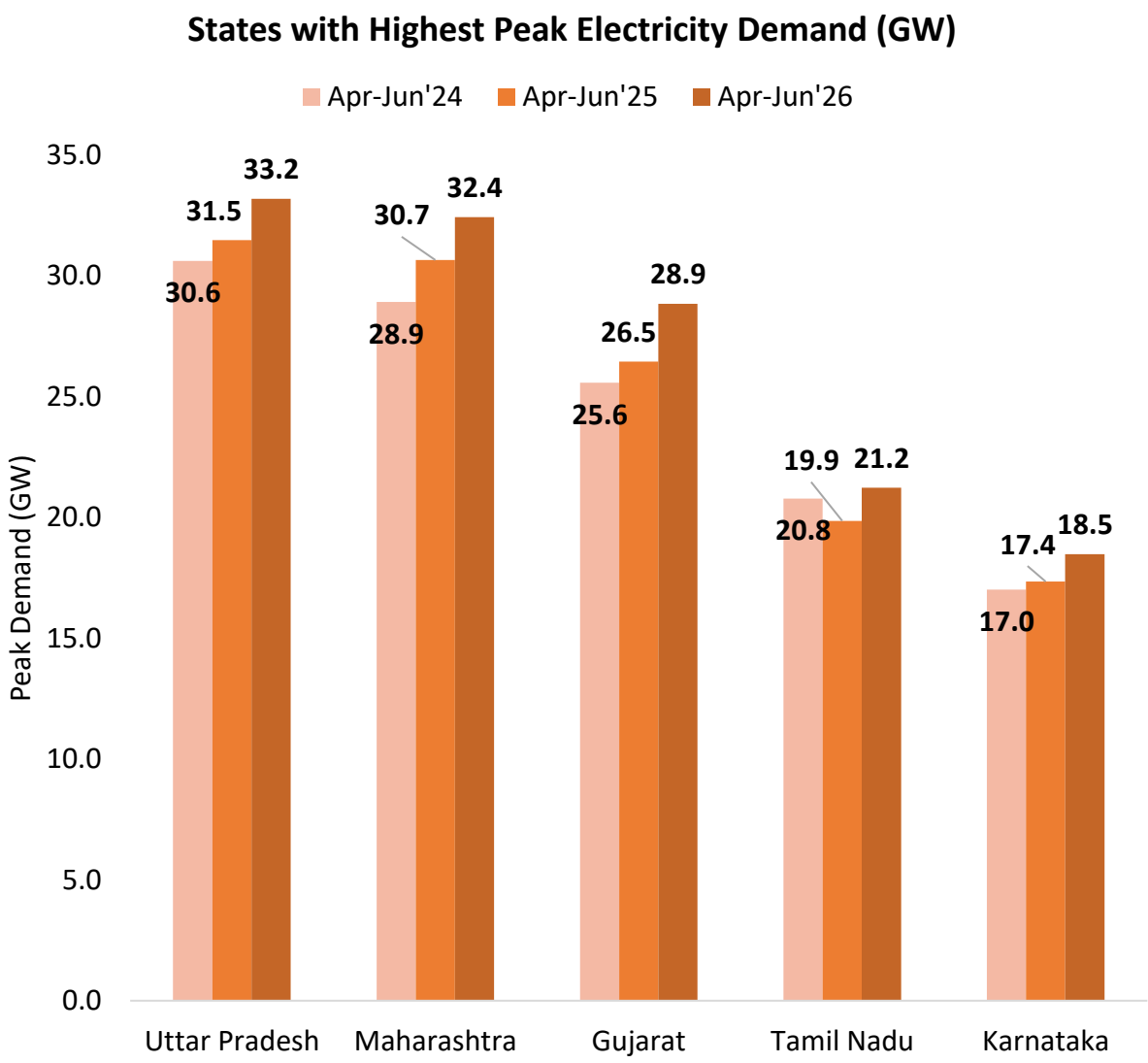


Coal | Gas | Nuclear | Hydro | Wind | Solar | Storage (PSP & BESS) | Other RES | Demand Met

Source: Grid-India

Monthly Peak Electricity Demand of the Top 5 States

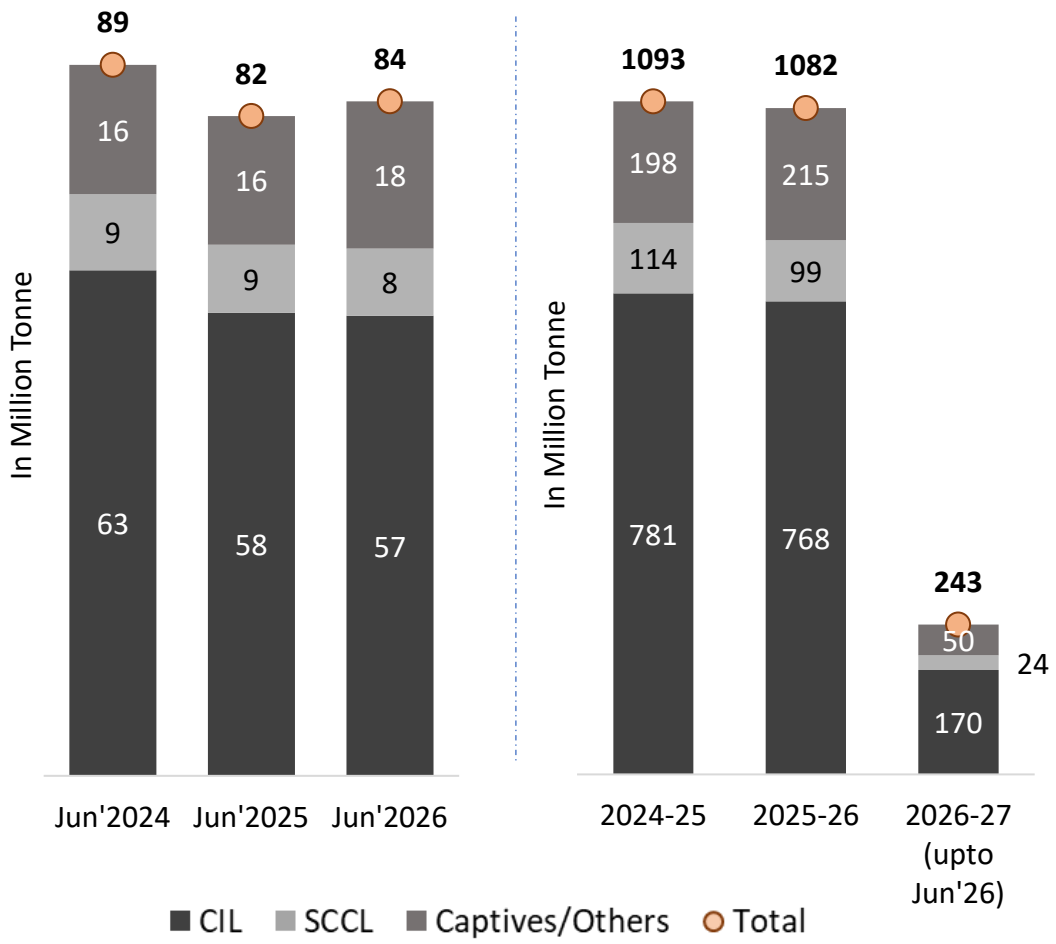




Source: CEA & Grid-India

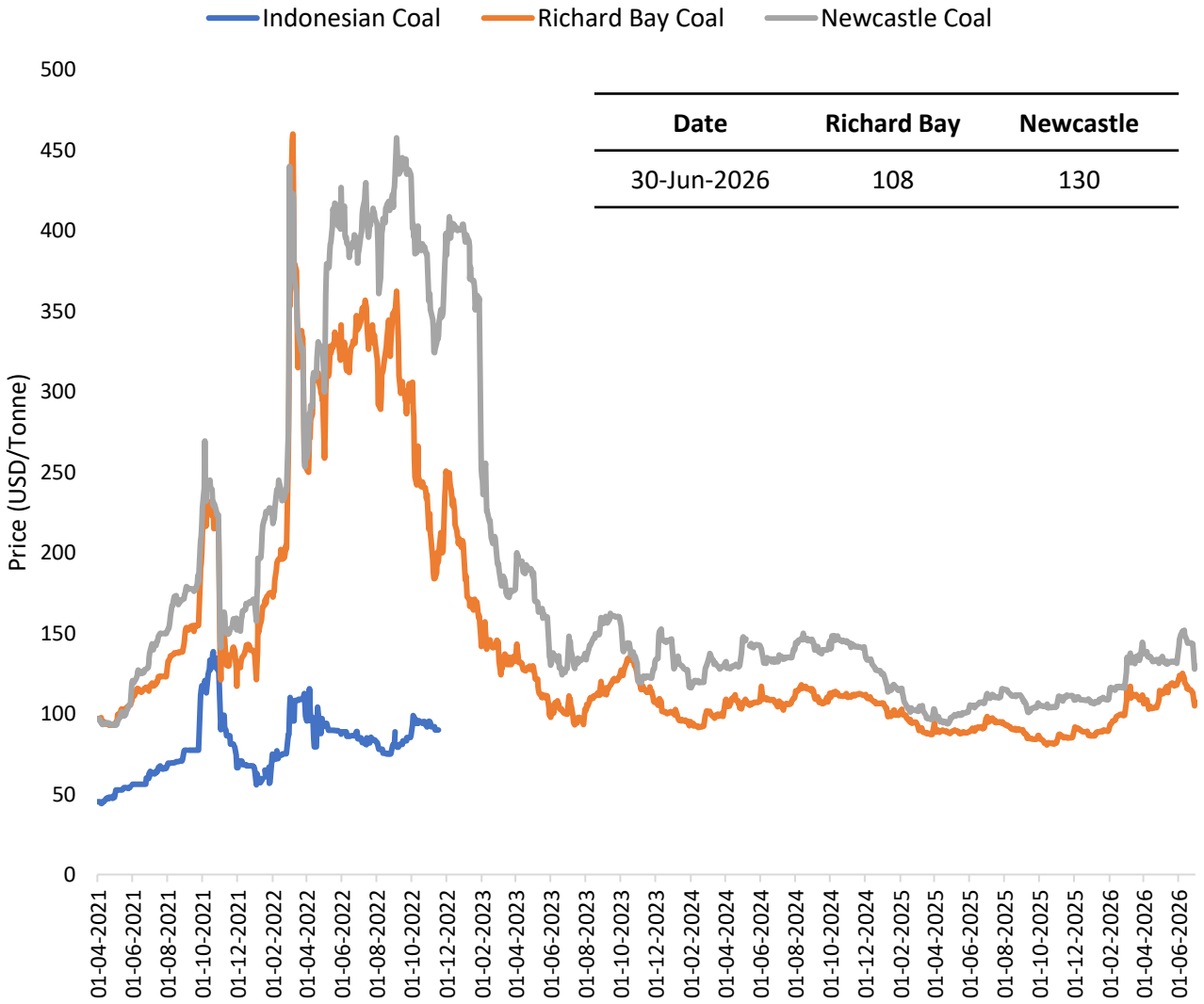
Monthly Coal Statistics

Monthly/ Annual Coal (incl. Lignite) Production (in Million Tonnes)



Source: Ministry of Coal

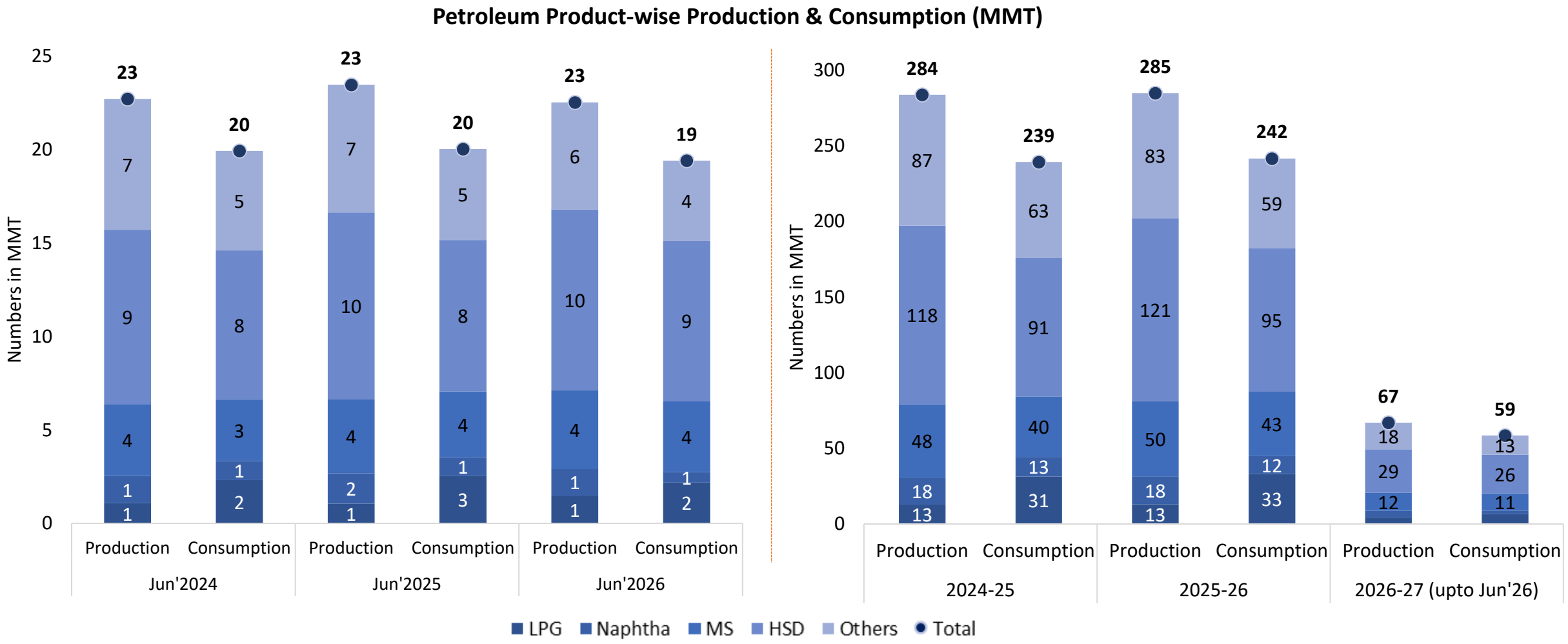
International Coal Prices



Date	Richard Bay	Newcastle
30-Jun-2026	108	130

Source: Investing.com

Oil Market Scenario (1/3)



Others include ATF, SKO, LDO, Lubes, FO, LSHS, Bitumen, pet coke, 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, MMT- Million Metric Tonne

NOTE: The data is available latest up to June 2026.

Source: PPAC

Oil Market Scenario (2/3)

Import/Export of Crude Oil and Petroleum Products ('000 Tonnes)							
Petroleum Products	Import/ Export	Monthly			Yearly		
		Jun'24	Jun'25	Jun'26	2024-25	2025-26	2026-27 (Apr-Jun'26)
Crude Oil	Import	18813	20314	19592	243225	245769	60481
	Export	0	0	0	0	0	0
	Net Import	**18813**	**20314**	**19592**	**243225**	**245769**	**60481**
LPG	Import	1323	1888	1027	20667	21268	2851
	Export	46	47	44	551	566	109
	Net Import	**1278**	**1841**	**982**	**20116**	**20702**	**2742**
Diesel	Import	2	2	3	42	38	8
	Export	1944	2245	1339	28027	27318	4450
	Net Import	**-1942**	**-2243**	**-1336**	**-27985**	**-27280**	**-4442**
Petrol	Import	0	0	0	235	0	0
	Export	1239	1270	974	15830	16666	2770
	Net Import	**-1239**	**-1270**	**-974**	**-15596**	**-16666**	**-2770**
Others	Import	2294	2173	1625	29960	24887	4316
	Export	1748	1791	1476	20667	16877	3763
	Net Import	**546**	**382**	**149**	**9293**	**8010**	**553**

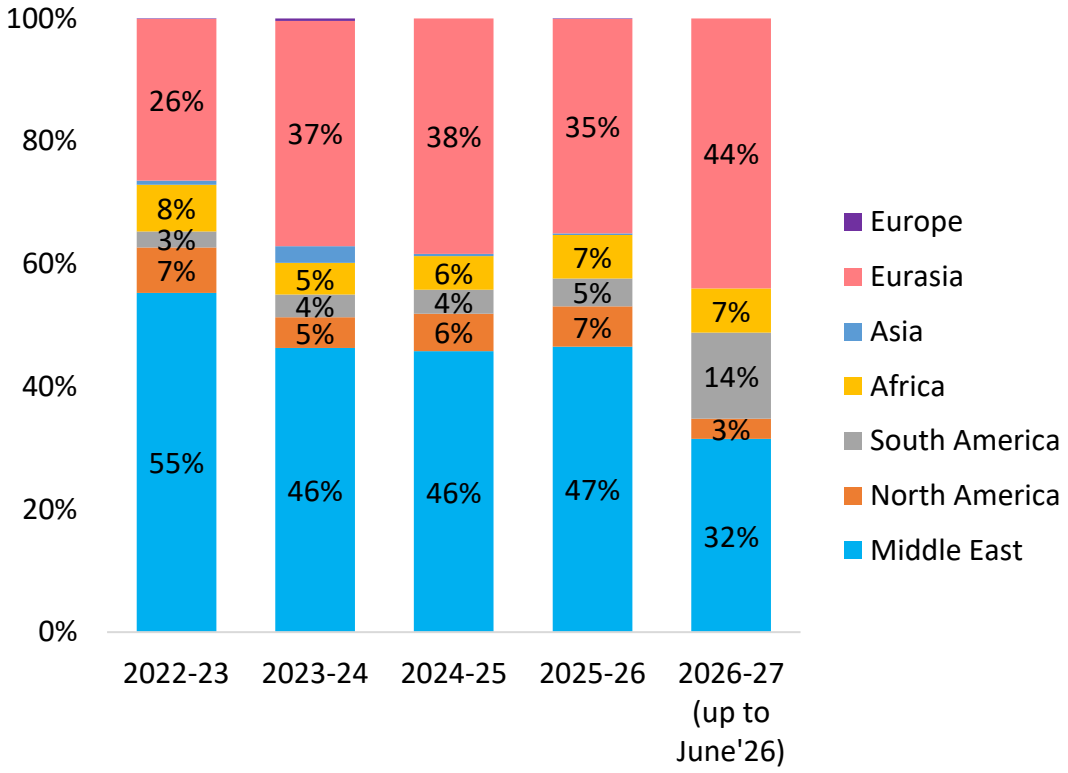
*Others include ATF, Naphtha, SKO, LDO, Lubes, FO, LSHS, Bitumen, pet coke, and others.

NOTE: The data is available latest up to June 2026.

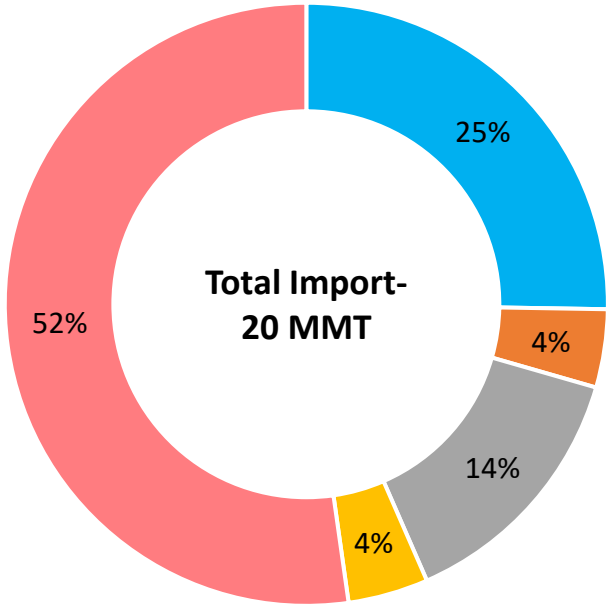
Source: PPAC

Oil Market Scenario (3/3)

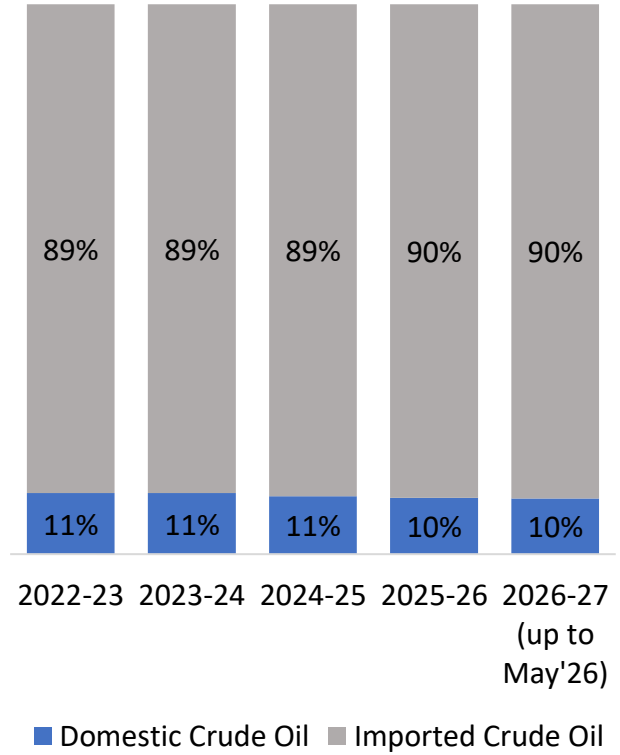
Region-wise Share in Import of Crude Oil (%)



Regional share of Imported Crude oil in June 2026



Domestic and Imported Crude Oil share in India (%)

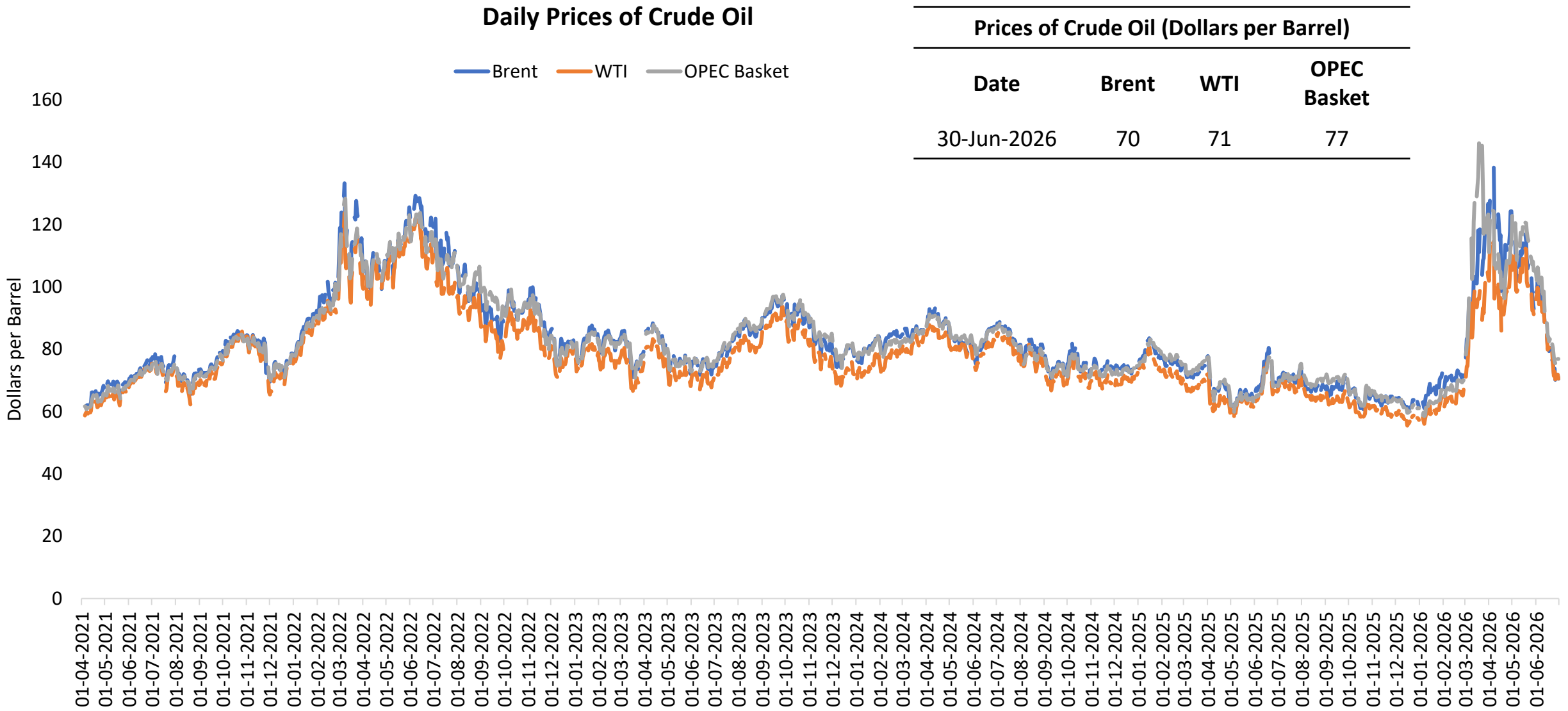


Total Import of Crude Oil (MMT)			
Total Import	2024-25	2025-26	2026-27 (up to Jun'26)
Crude Oil	**243**	**246**	**60**

NOTE: The data is based on the latest available information.

Source: MoPNG and PPAC

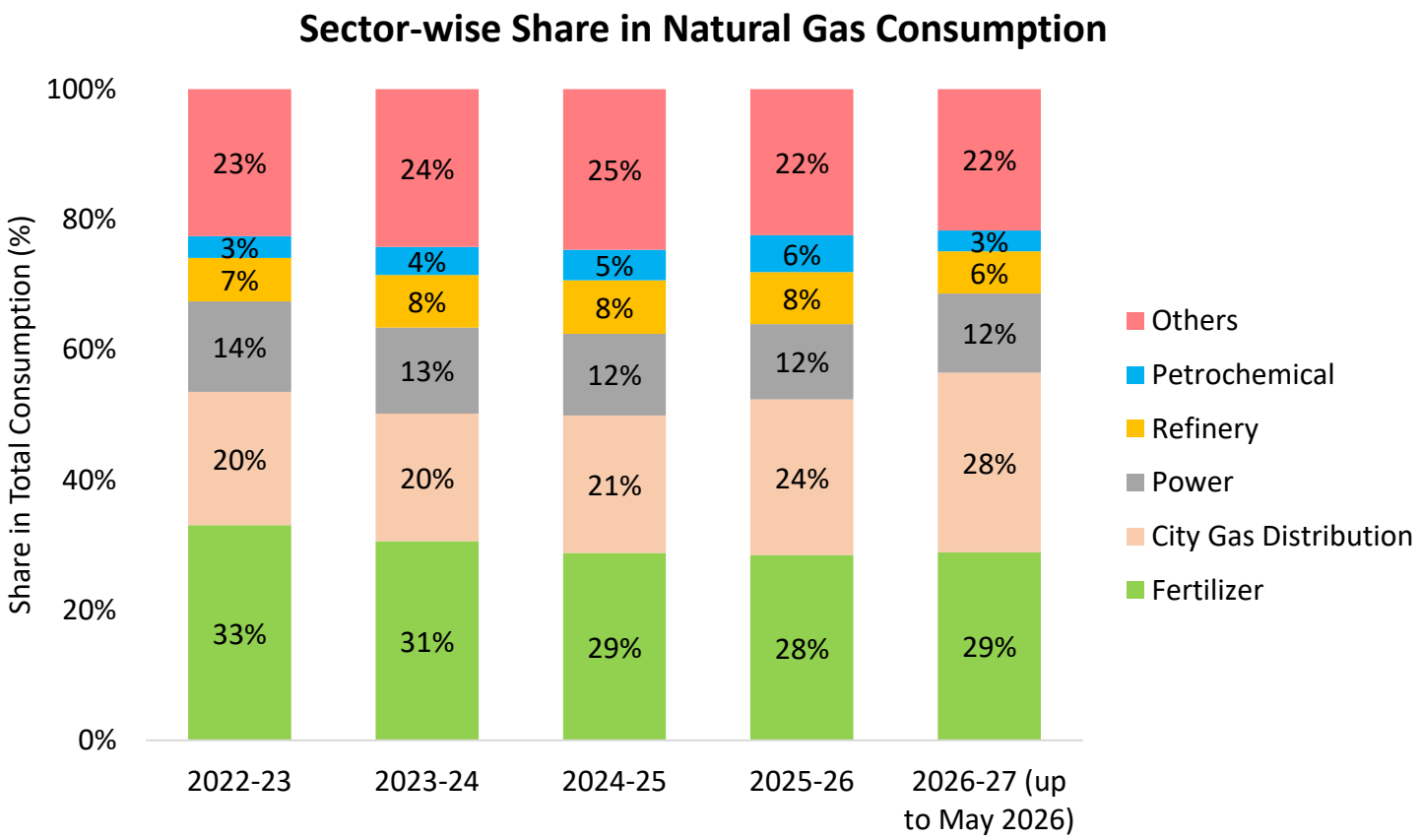
Daily Prices of Crude Oil

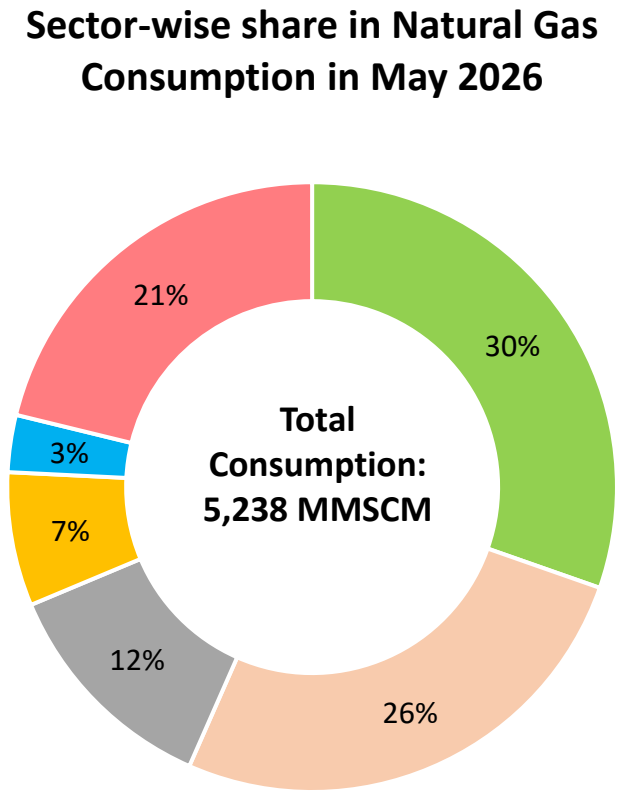


Prices of Crude Oil (Dollars per Barrel)			
Date	**Brent**	**WTI**	**OPEC Basket**
30-Jun-2026	70	71	77

Source: EIA & OPEC

Gas Market Scenario (1/2)





Total Consumption of Natural Gas (NG) (MMSCM)					
Total Consumption	2022-23	2023-24	2024-25	2025-26	2026-27 (up to May 2026)
Natural Gas	**58,702**	**68,809**	**71,196**	**69,048**	**10,349**

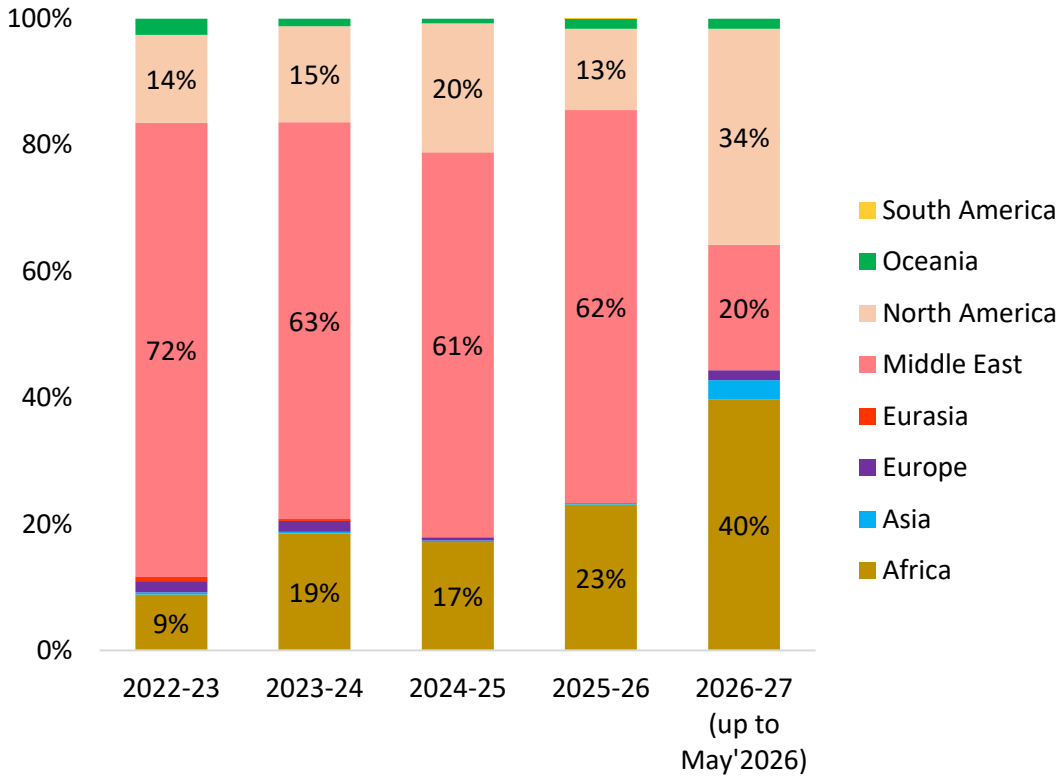
Others include- Internal Consumption of Pipeline System, Industrial, Sponge iron/steel, LPG shrinkage, Manufacturing, Agriculture (tea plantation), Others

NOTE: The data is available latest up to May 2026

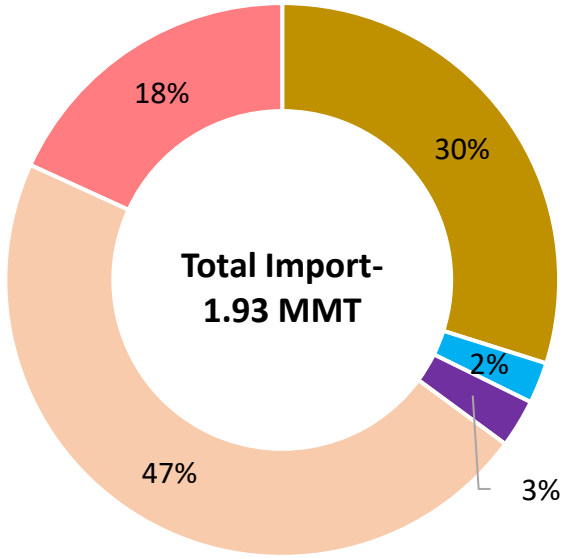
Source: PPAC

Gas Market Scenario (2/2)

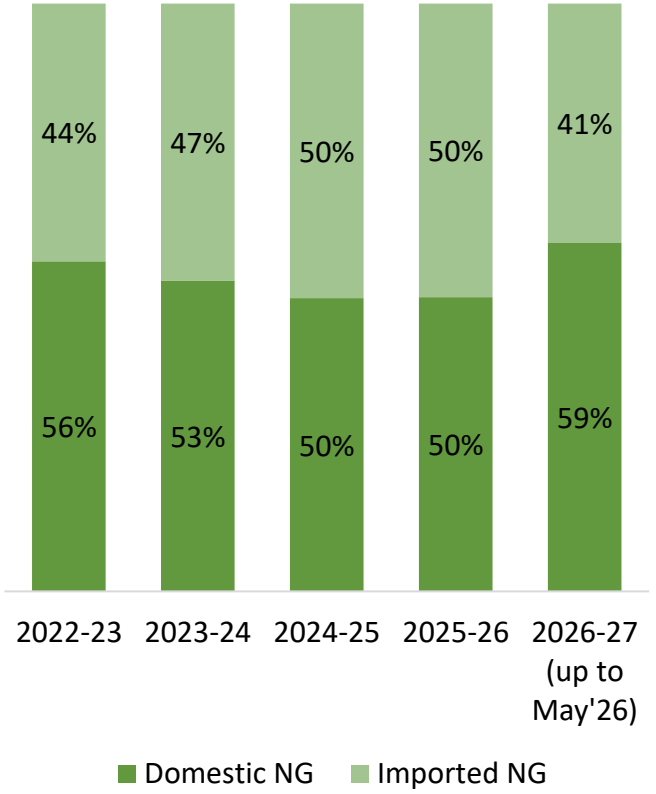
Region-wise Share in Import of LNG (%)



Regional Share of Imported LNG in May 2026



Domestic and Imported Natural Gas share in India (%)

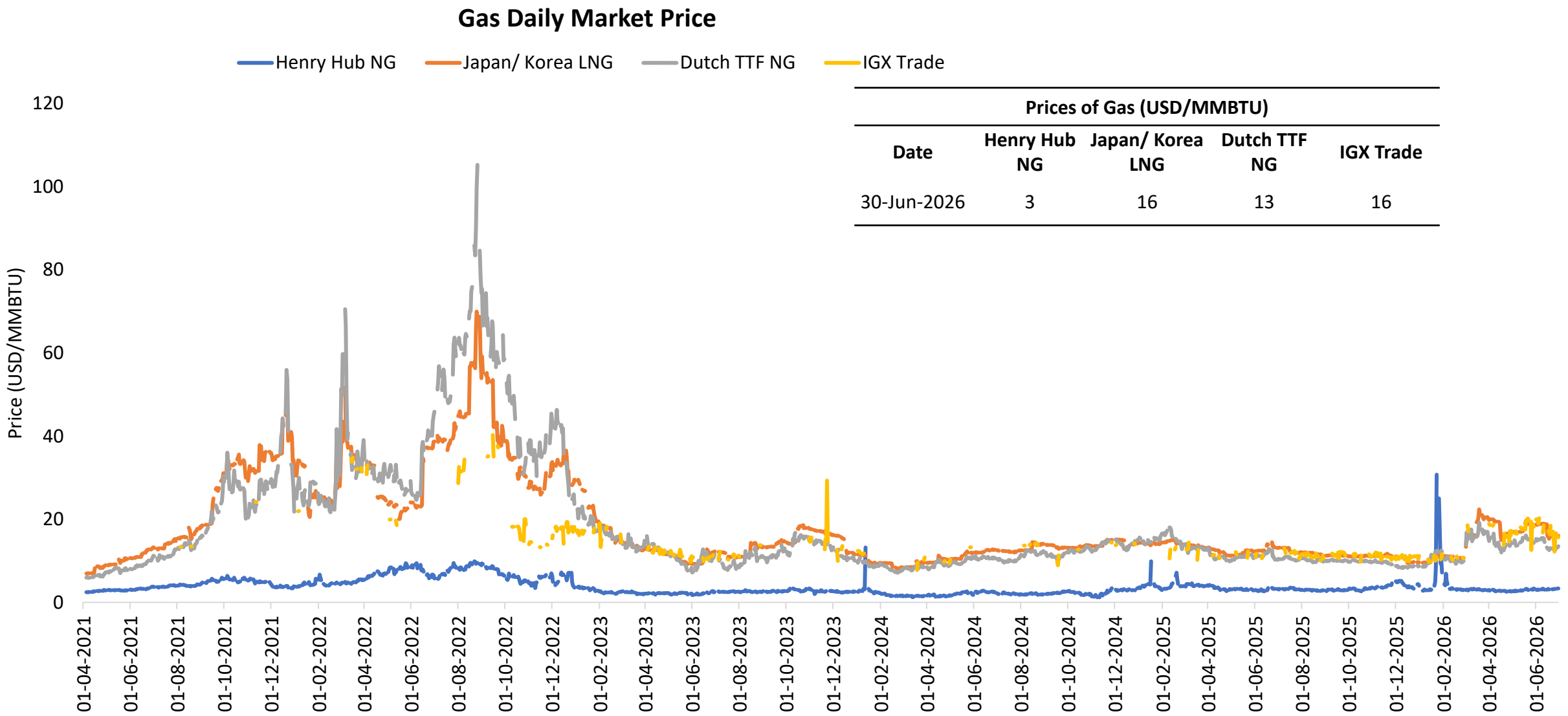


Total Import of Liquified Natural Gas (LNG) (MMT)			
Total Import	2024-25	2025-26	2026-27 (up to May 2026)
LNG	**26.96**	**25.82**	**3.79**

NOTE: The data is based on the latest available information.

Source: MoCI and PPAC

Daily Prices of Gas



Prices of Gas (USD/MMBTU)

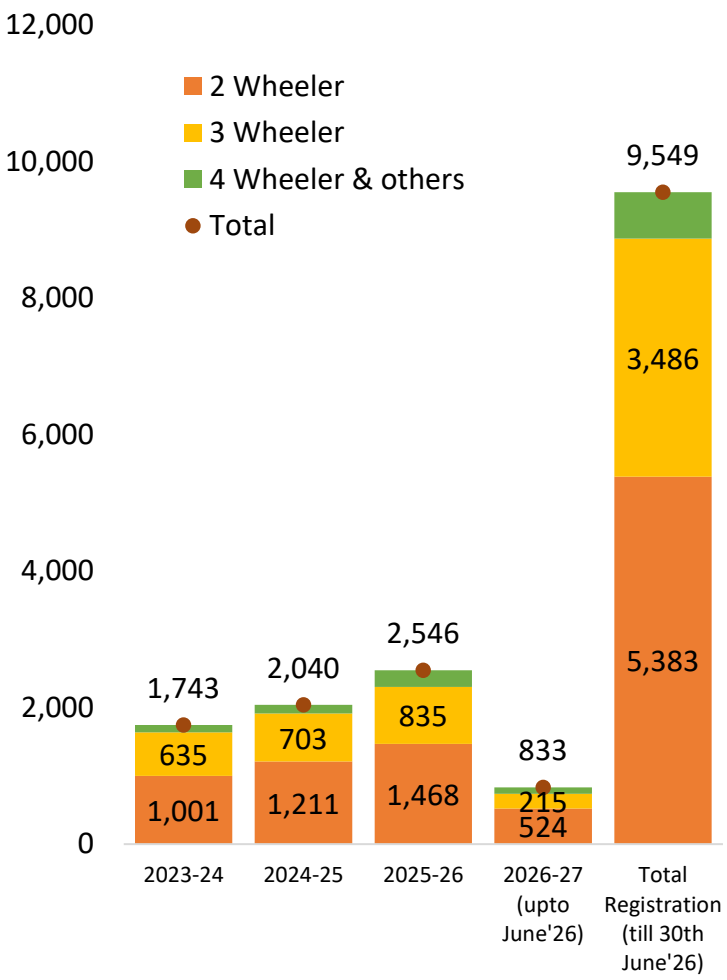
Date	Henry Hub NG	Japan/ Korea LNG	Dutch TTF NG	IGX Trade
30-Jun-2026	3	16	13	16

MMBTU- Million Metric British Thermal Unit

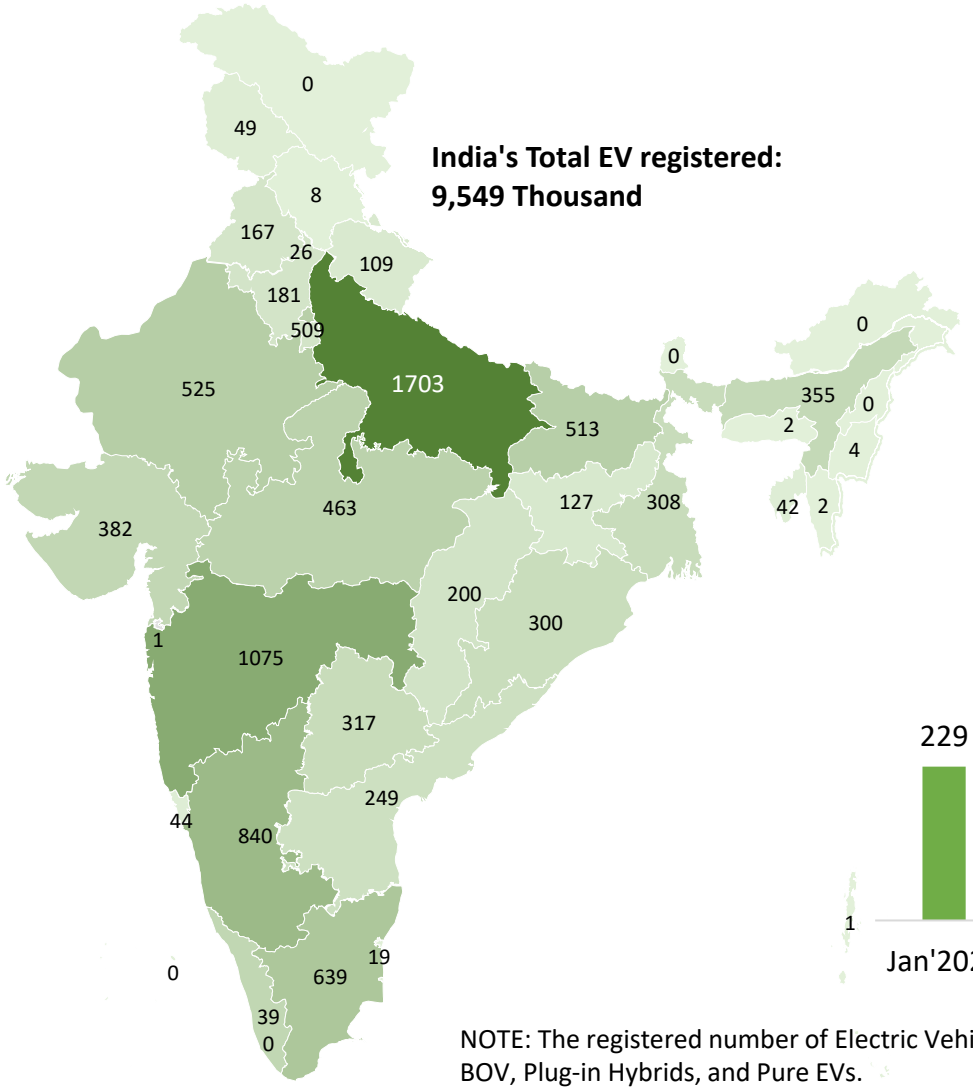
Source: EIA, Investing.com, IGX

Status of Electric Mobility in India (1/2)

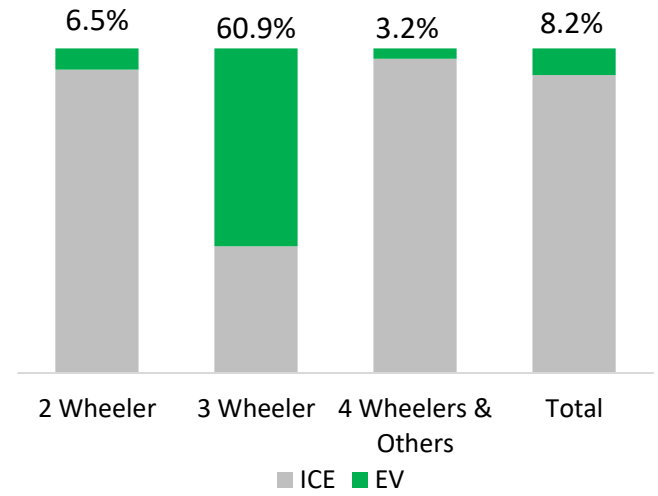
National EV registration (Number in Thousands)



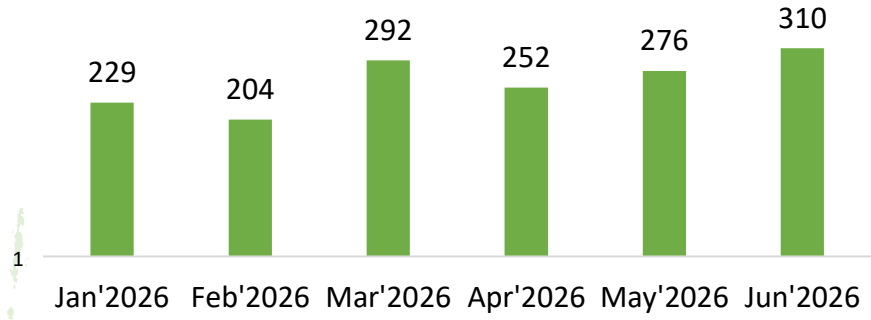
Cumulative State-wise EV registration as on 30th June 2026 (in Thousands)



EV and ICE sale composition in 2025-26



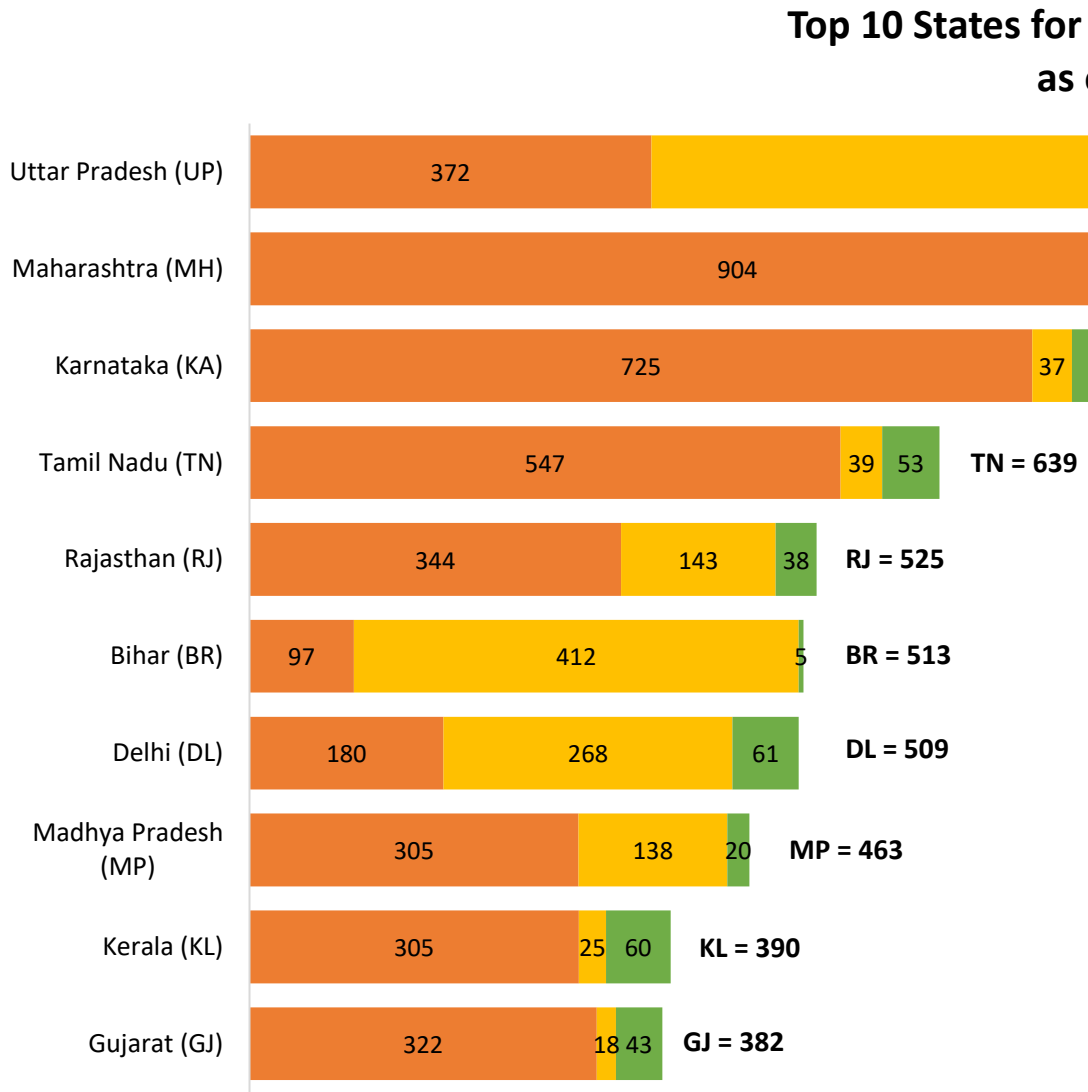
Provisional Monthly EV registered (in Thousands)

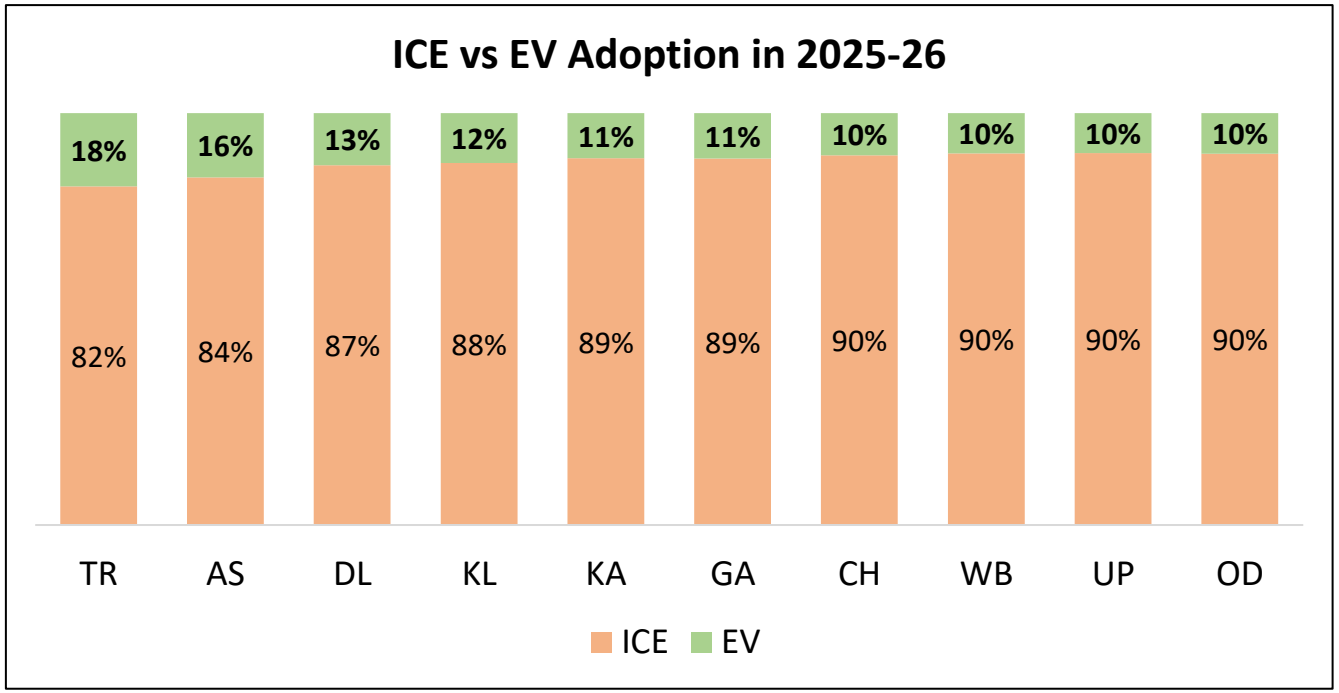


NOTE: The registered number of Electric Vehicles includes Electric BOV, Plug-in Hybrids, and Pure EVs.

Source: VAHAN Dashboard

Status of Electric Mobility in India (2/2)





NOTE: AS- Assam, CH- Chandigarh, GA- Goa, OD- Odisha, TR- Tripura, WB- West Bengal

Source: VAHAN Dashboard

Recent Interventions to Promote Renewable Energy

Solar

The Ministry of Heavy Industries invited global bids to establish 10 GWh of giga-scale ACC battery manufacturing capacity for grid-scale stationary storage under the PLI ACC Scheme.

PM-Surya Ghar: Muft Bijli Yojana released with a total outlay of Rs. 75,021 crore for installing rooftop solar (RTS) for one crore households. The scheme provides a CFA of Rs 30,000 for a 1 kW RTS system, Rs 60,000 for a 2kW RTS system, and Rs 78,000 for a 3kW RTS system.

The inter-state transmission charges are waived for 25 years for the projects being commissioned before 30th June 2025.

The updated RPO compliance supports solar integration of up to 33.57% of the electricity purchased by DISCOMs/states till the year 2029-30.

The Solar Parks and Ultra Mega Solar Power Projects scheme has been extended by three years until March 2029, providing developers with more time to complete large-scale project

In Union Budget 2026-27, ₹30,539.36 crore for solar energy.

Wind

Reverse auctions have been scrapped for wind projects. A traditional two-part (technical and financial) bid system has been put in place.

To support off-shore wind, SECI will invite bids for up to 4GW to set up offshore wind plants off the coast of Tamil Nadu and Gujarat.

The ISTS charges are waived for 25 years for the onshore projects being commissioned before 30th June 2025 and for off-shore projects on or before 31st December 2032.

The updated RPO compliance supports WIND integration of up to 6.94% of the electricity purchased by DISCOMs/states till the year 2029-30.

The National Repowering & Life Extension Policy for Wind Power Projects- 2023, for wind power projects is released for the optimum utilization of wind energy resources by maximizing energy (kWh) yield per sq. km of the wind project areas.

The GoI has decided to invite bids for 50 GW of RE annually, which includes up to 10 GW of wind capacity.

Energy Storage

Ministry of Power has released the guidelines for the development of PSP with the target of 26.7 GW of PSP and 47.2 GW of BESS to integrate with RE capacity till 2032.

PLI scheme unveiled for setting up 50 GWh ACC battery storage with an outlay of ₹18,100 crores.

Under the Waste Management Rules 2022, the disposal of waste batteries in landfills and incineration is prohibited and the recycling of waste batteries is made mandatory.

CERC, under RRAS regulation, has allowed the use of energy storage in secondary and tertiary ancillary support.

CERC has issued a draft second amendment to the Tariff Regulations,2024, proposing a dedicated tariff framework for integrated energy storage systems (ESS) paired with coal, lignite, or gas-based plants and ISTS.

The Energy Storage Obligation of DISCOMs is pegged at 4.0% up to 2029-30.

In India, approximately 10.62 GW of solar capacity coupled with 12.52 GWh of BESS has been tendered as of April 2025.

Green Hydrogen (H_2)

National Green Hydrogen Mission (NGHM) aims to meet the target of 5 million metric tonnes of green hydrogen production by 2030. The initial outlay for the Mission will be INR 19,744 crores. NGHM portal to track the recent initiatives and developments.

India's first Green Hydrogen Hub to be build in Andhra Pradesh by NTPC at an estimated cost of ₹1.85 Lakh Crore with a capacity of producing 1500 TPD Green Hydrogen and 7500 TPD Green Hydrogen derivative

MNRE has sanctioned pilot projects on Hydrogen Fuelled Buses and Trucks consisting total of 37 vehicles and 9 hydrogen refueling stations.

MNRE has sanctioned 3 pilot projects in steel sector for use of green Hydrogen in steel production to be commissioned in next 3 years with total financial outlay of ₹347 Crore from GoI.

Indian Railways to run 35 Hydrogen trains under "Hydrogen for Heritage" at an estimated cost of ₹ 80 crores per train and ground infrastructure of ₹ 70 crores per route on various heritage/hill routes.

Recent Key Highlights or Announcements

- On 17th June 2026, the Union Minister Shri Pralhad Joshi launched the Green Hydrogen Certification Portal of India (GHCI), to ensure transparent certification and regulatory compliance under the Green Hydrogen Certification Scheme of India.

- On 4th June 2026, the Union Minister Shri Pralhad Joshi announced the Utility-Linked Aggregation (ULA) model to accelerate rooftop solar adoption, with 30 lakh installations planned through DISCOMs, particularly for underserved households. He also mentioned plans to integrate Battery Energy Storage Systems (BESS) into the scheme as storage costs decline and expand adoption through the Model Solar Village initiative, while noting that the scheme has crossed 40 lakh beneficiary households and is targeting 75 lakh households by the end of 2026.

- The Department of Atomic Energy (DAE), India inaugurated the world's first hydrogen production facility based on Copper-Chlorine (Cu-Cl) thermochemical cycle using nuclear process heat from the Fast Breeder Test Reactor (FBTR), marking a major breakthrough in carbon-free hydrogen production and expanding the role of nuclear energy beyond electricity generation. The scheme has crossed 40 lakh beneficiary households and is targeting 75 lakh households by the end of 2026.

- On 15th July 2026, the Ministry of Heavy Industries invited global bids to establish 10 GWh of giga-scale Advanced Chemistry Cell (ACC) battery manufacturing capacity for grid-scale stationary storage under the PLI ACC Scheme, advancing domestic battery manufacturing and supporting India's growing renewable energy storage needs.

- Monthly EV sales crossed the 310,140 mark for the first time in June 2026, reflecting the continued acceleration of electric mobility adoption.
- Public EV charging load surpassed 1 GW for the first time, a significant milestone considering it took nearly seven+ years to reach this level.

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