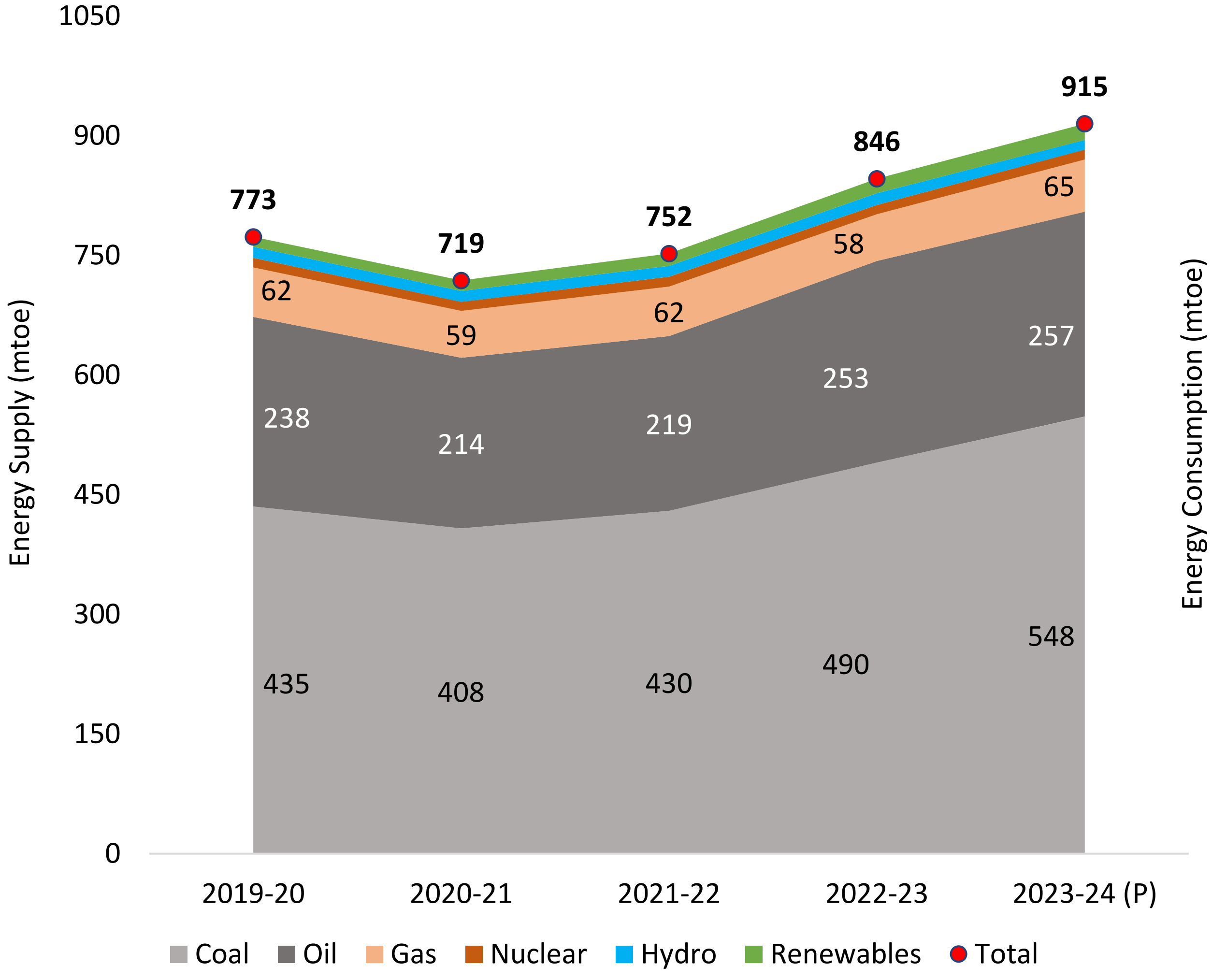
India’s Energy Overview

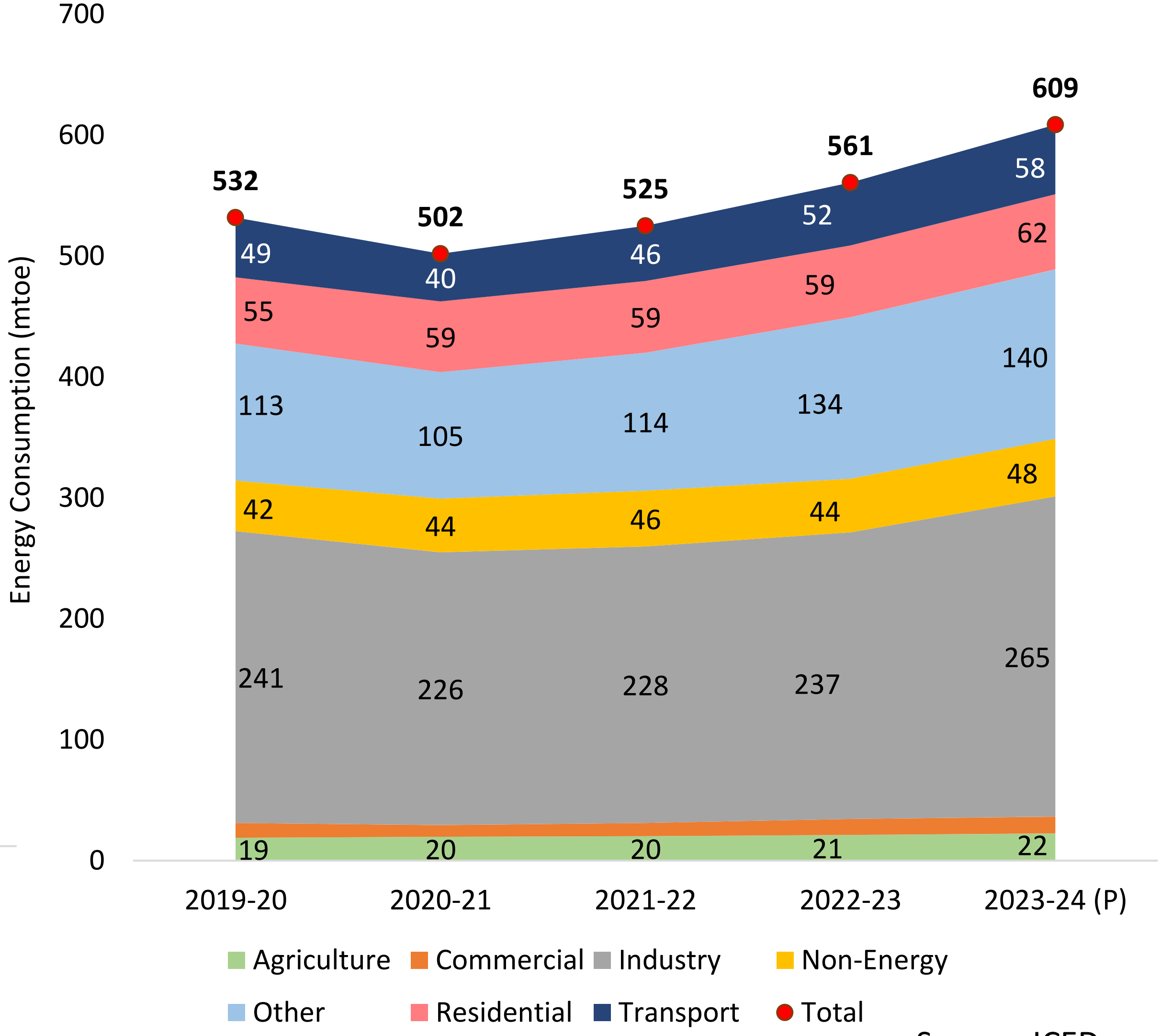
January 2026

VASUDHA FOUNDATION
Green ways for a good earth!

Contents

Primary* and Final Energy Mix in India

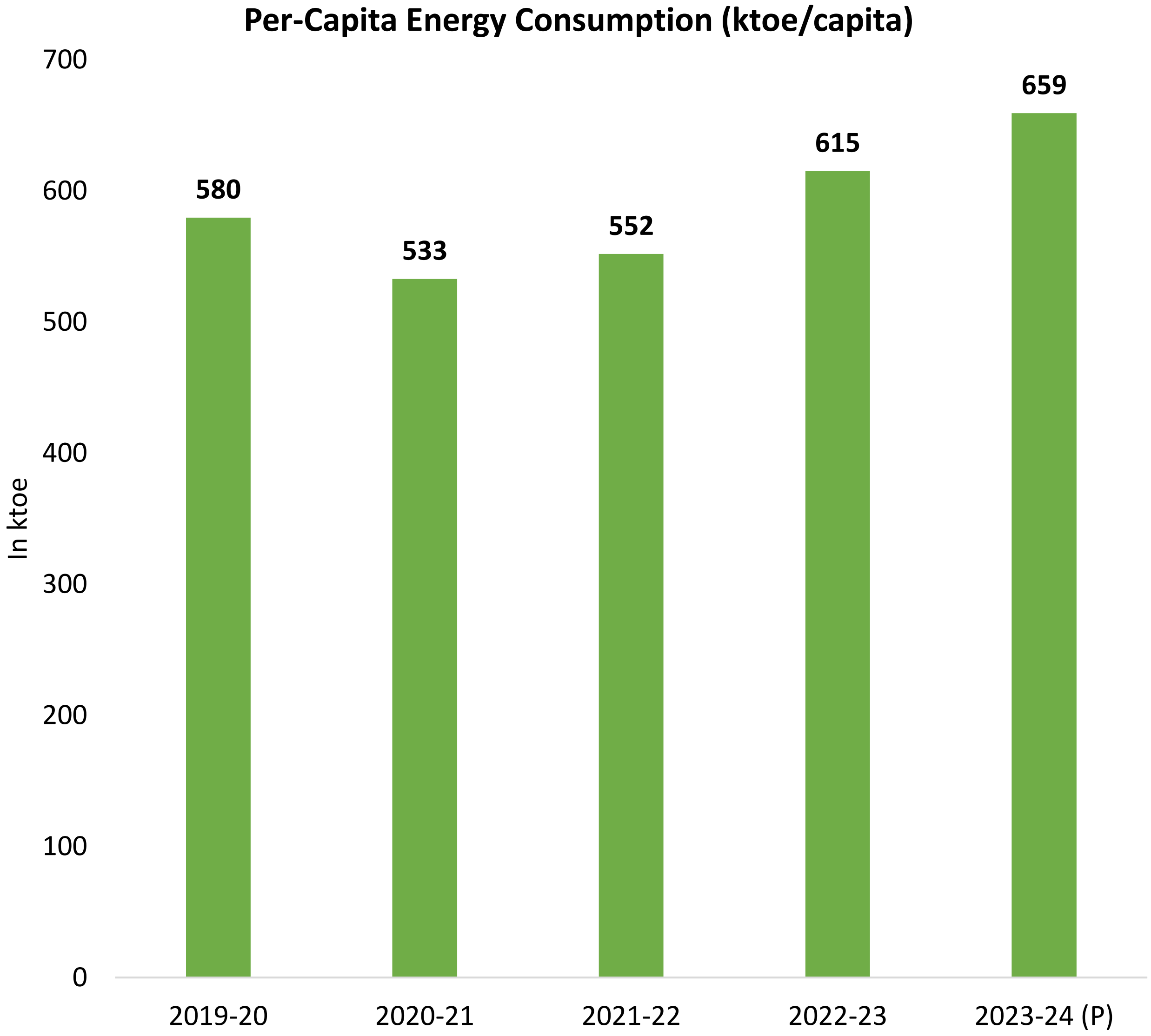


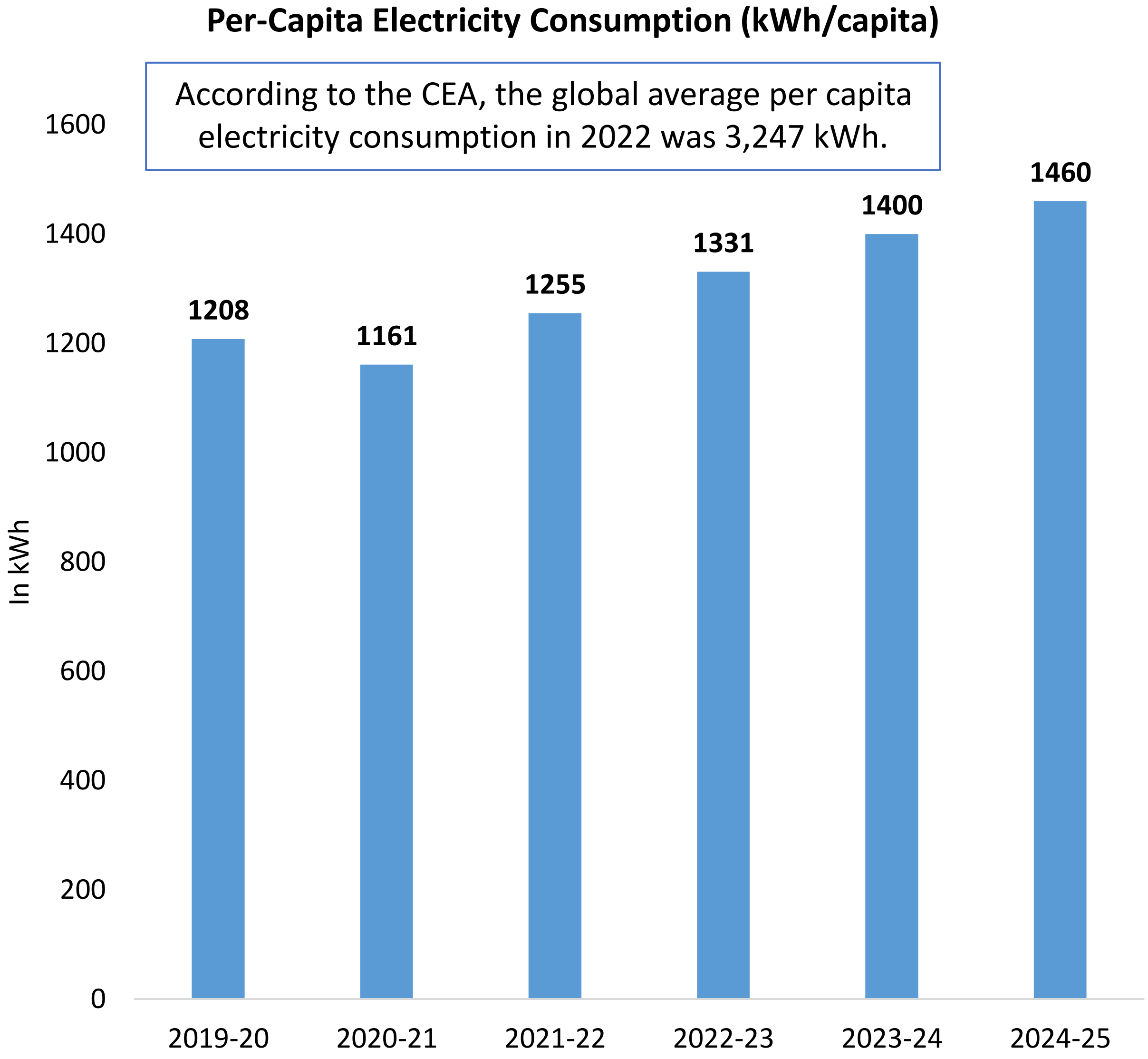


*Excluding biofuels, waste, and other non-commercial source of energy

Source: ICED

Per-Capita Energy and Electricity Consumption

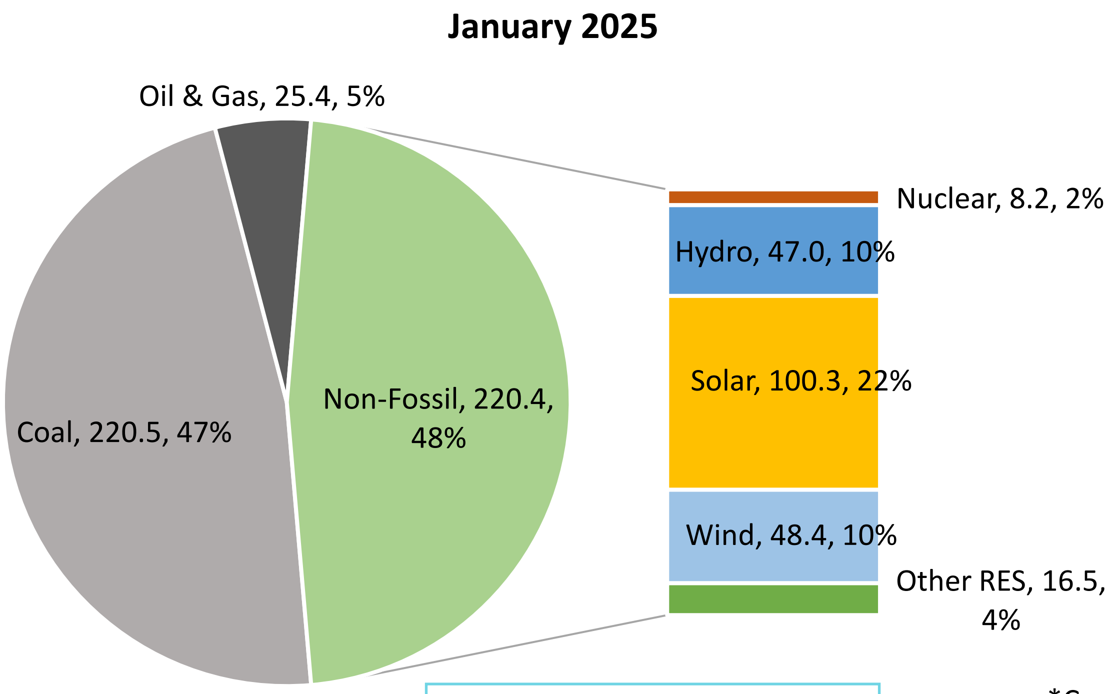




Note: Per Capita energy consumption is calculated on energy supply basis.

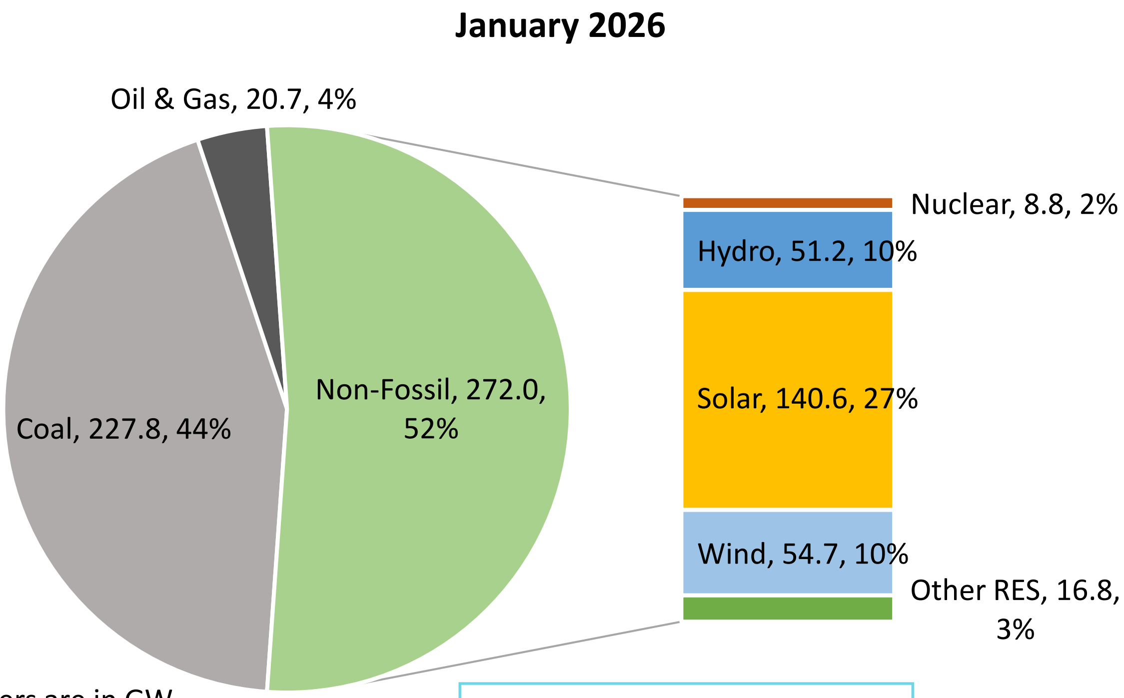
Source: ICED & CEA

India's Electricity Capacity Mix (Utility-scale)



Total Capacity: 466 GW

*Capacity Numbers are in GW

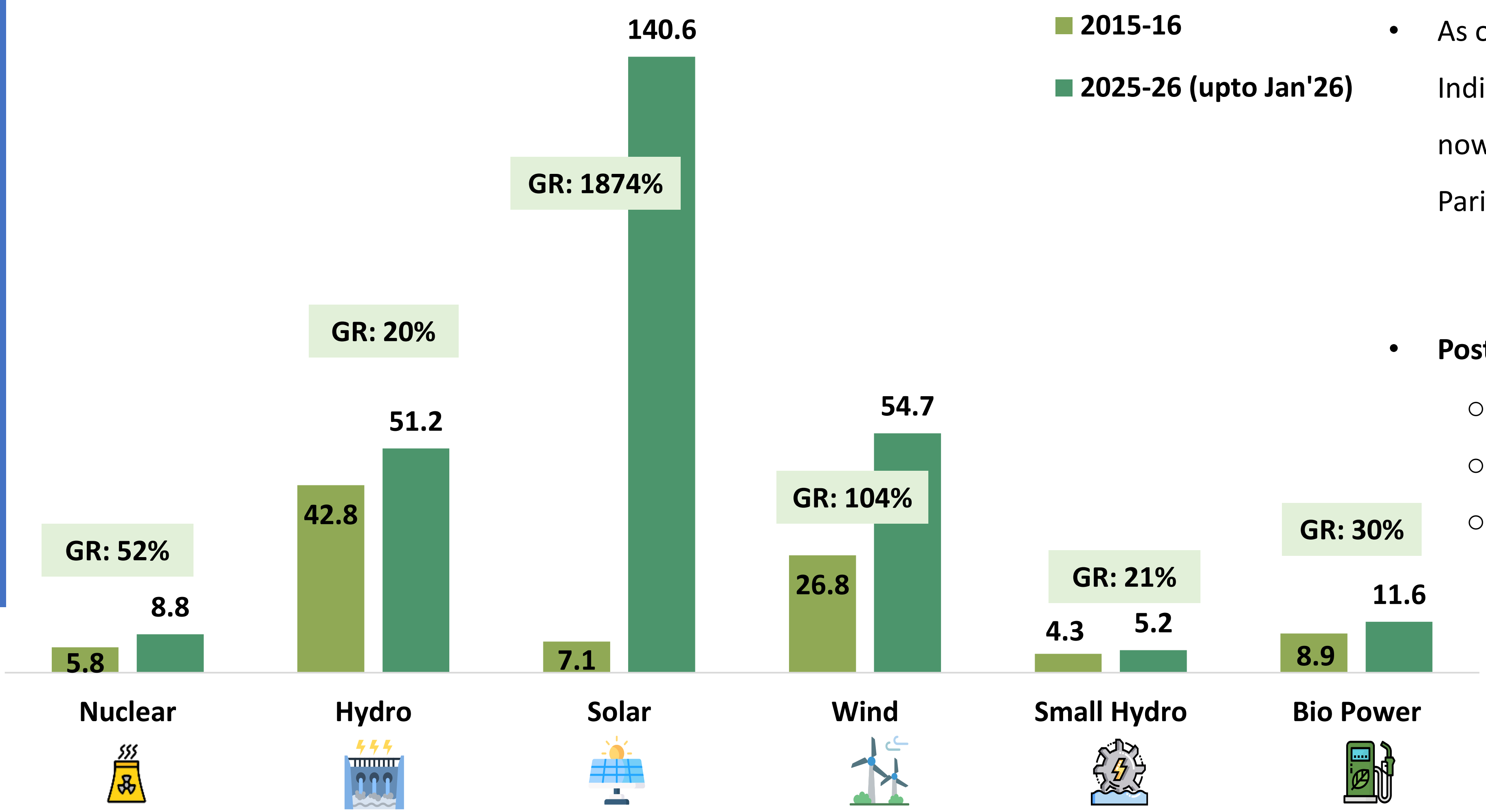


Total Capacity: 521 GW

- India's electricity generating capacity is 521 GW as on Jan'2026 [coal 228 GW (44%), solar 141 GW (27%), wind 55 GW (10%), and hydro 51 (10%)].
- India has achieved its NDC target of 52% non-fossil capacity, 5 years ahead of the originally set in 2030.
- As on Jan'2026, India's renewable energy capacity (including large hydro) stood at 263 GW out of 521 GW.

Source: CEA

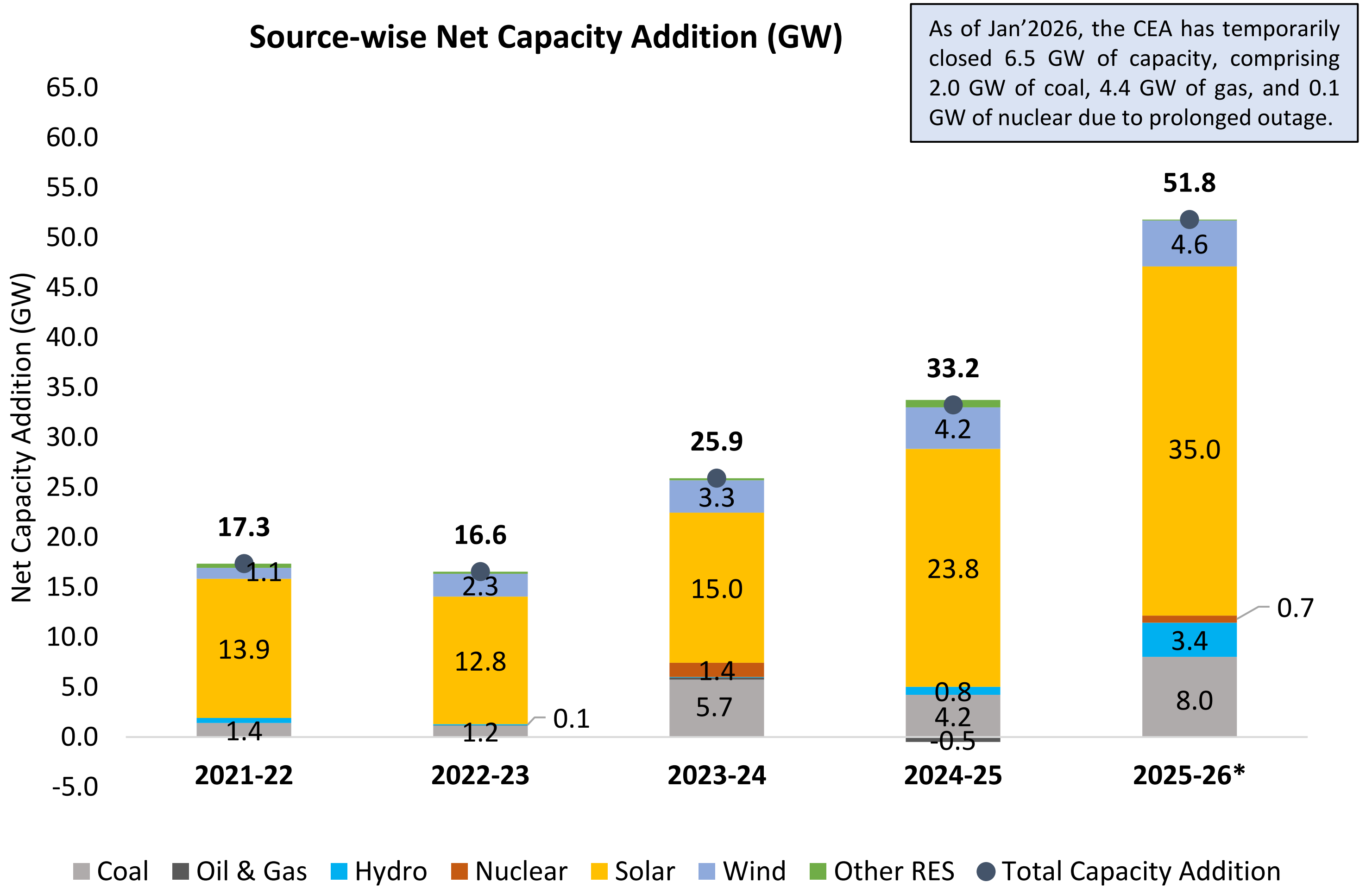
Non-Fossil Energy Capacity (in GW) Growth Post-2015 Paris Agreement

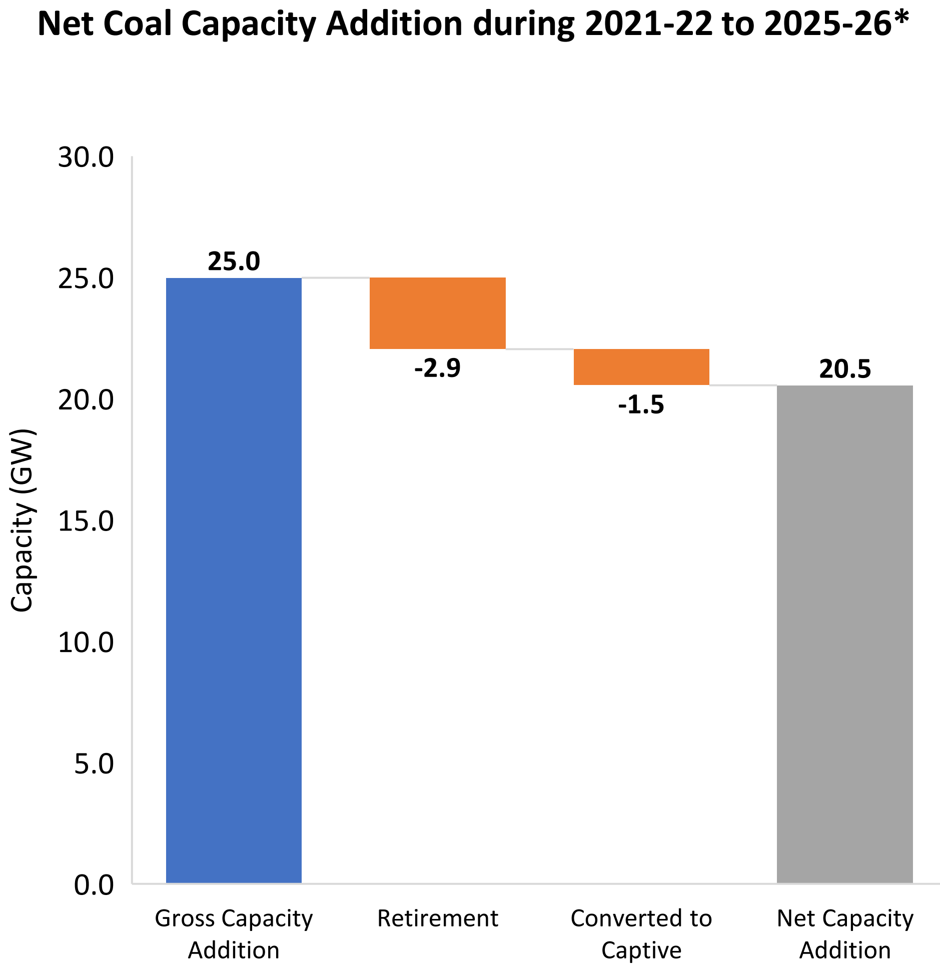


- As of 31 January 2026, **52% (272 GW)** of India's total power capacity (**521 GW**) is now non-fossil fuel-based, meeting the Paris Agreement pledge.
- **Post-2015 Paris Agreement Growth**:
  - solar capacity increased **20-folds**
  - wind power **doubled**
  - nuclear energy **doubled**.

Source: CEA & MNRE

India's Electricity Capacity Addition in last 5 years





- A total of 123 GW of generation capacity has been added in RE (Hydro, solar, wind, and other RES) over the past 5 years (2021-22 to 2025-26*), whereas the net coal capacity addition during the same period was 21 GW, mostly in the central sector.

NOTE: * The data for 2025-26 is up to January 2026.

Source: CEA & MNRE

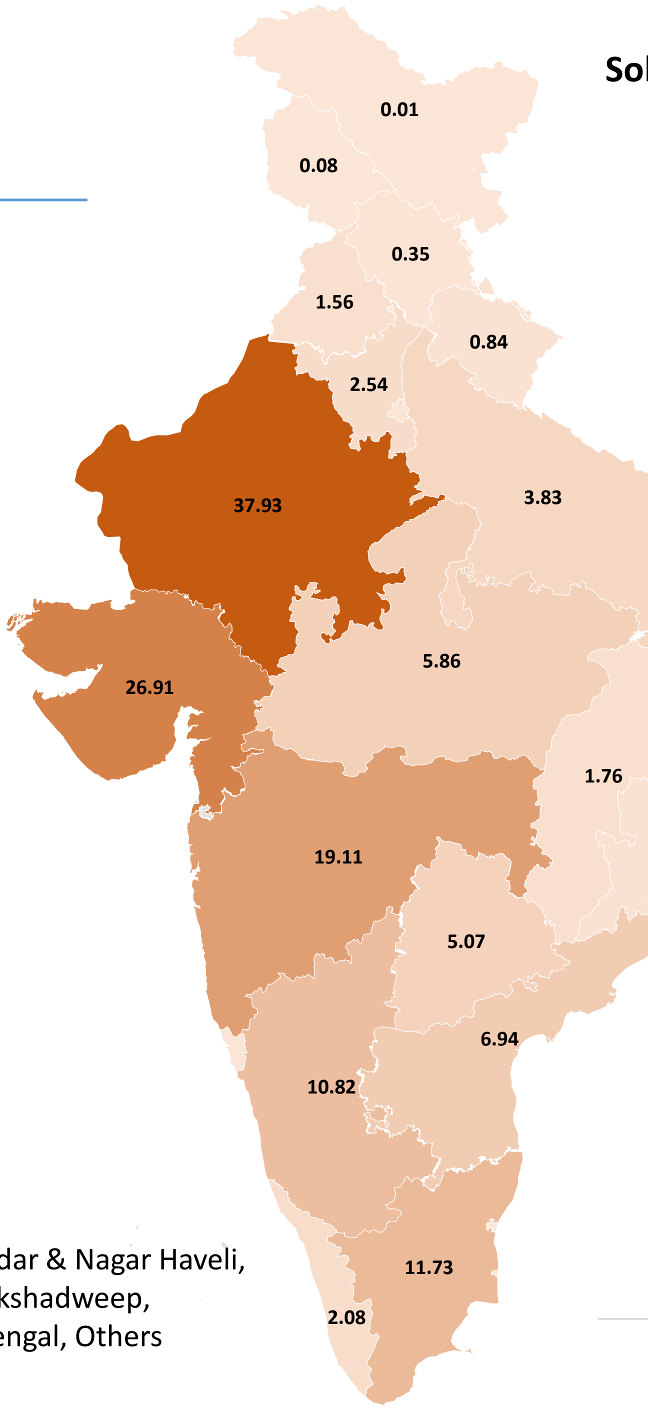
State-wise Solar Capacity

as on January 2026

State-wise installed capacity of Solar Power (GW)					
States	**Ground Mounted**	**Rooftop**	**Solar Component in Hybrid**	**Off Grid**	**Total Solar Power**
Rajasthan	**33.06**	2.06	**1.98**	0.82	**37.93**
Gujarat	19.00	**6.56**	1.17	0.17	26.91
Maharashtra	12.15	5.02	0.00	**1.93**	19.11
Tamil Nadu	10.32	1.34	0.00	0.07	11.73
Karnataka	9.76	0.81	0.21	0.04	10.82
Andhra Pradesh	6.09	0.76	0.00	0.09	6.94
Madhya Pradesh	4.93	0.82	0.00	0.10	5.86
Telangana	4.36	0.70	0.00	0.01	5.07
Uttar Pradesh	2.79	0.68	0.00	0.36	3.83
Haryana	0.27	1.12	0.00	1.15	2.54
Kerala	0.32	1.73	0.00	0.02	2.08
Chhattisgarh	1.20	0.17	0.00	0.39	1.76
Punjab	0.89	0.57	0.00	0.10	1.56
Uttarakhand	0.54	0.27	0.00	0.02	0.84
Others	1.57	1.68	0.00	0.39	3.65
All India	**107.26**	**24.30**	**3.36**	**5.68**	**140.60**

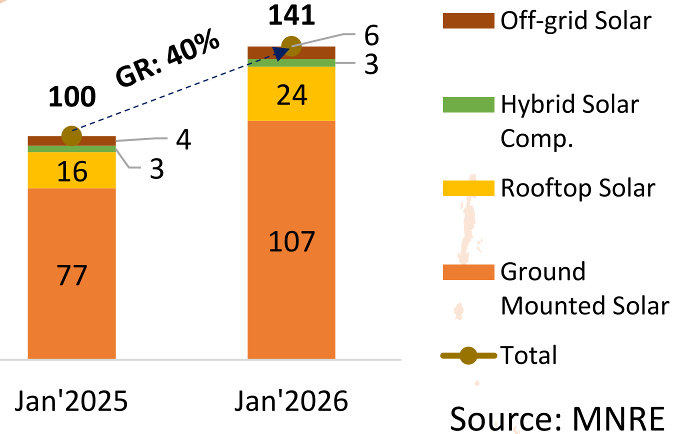
Others include- Andaman & Nicobar, Arunachal Pradesh, Assam, Bihar, Chandigarh, Dadar & Nagar Haveli, Daman & Diu, Delhi, Goa, Himachal Pradesh, Jammu & Kashmir, Jharkhand, Ladakh, Lakshadweep, Manipur, Meghalaya, Mizoram, Nagaland, Odisha, Puducherry, Sikkim, Tripura, West Bengal, Others

Solar Capacity as on January 2026 (GW)



*North-Eastern states have 0.49 GW of installed solar capacity.

Solar Installed Capacity (GW)



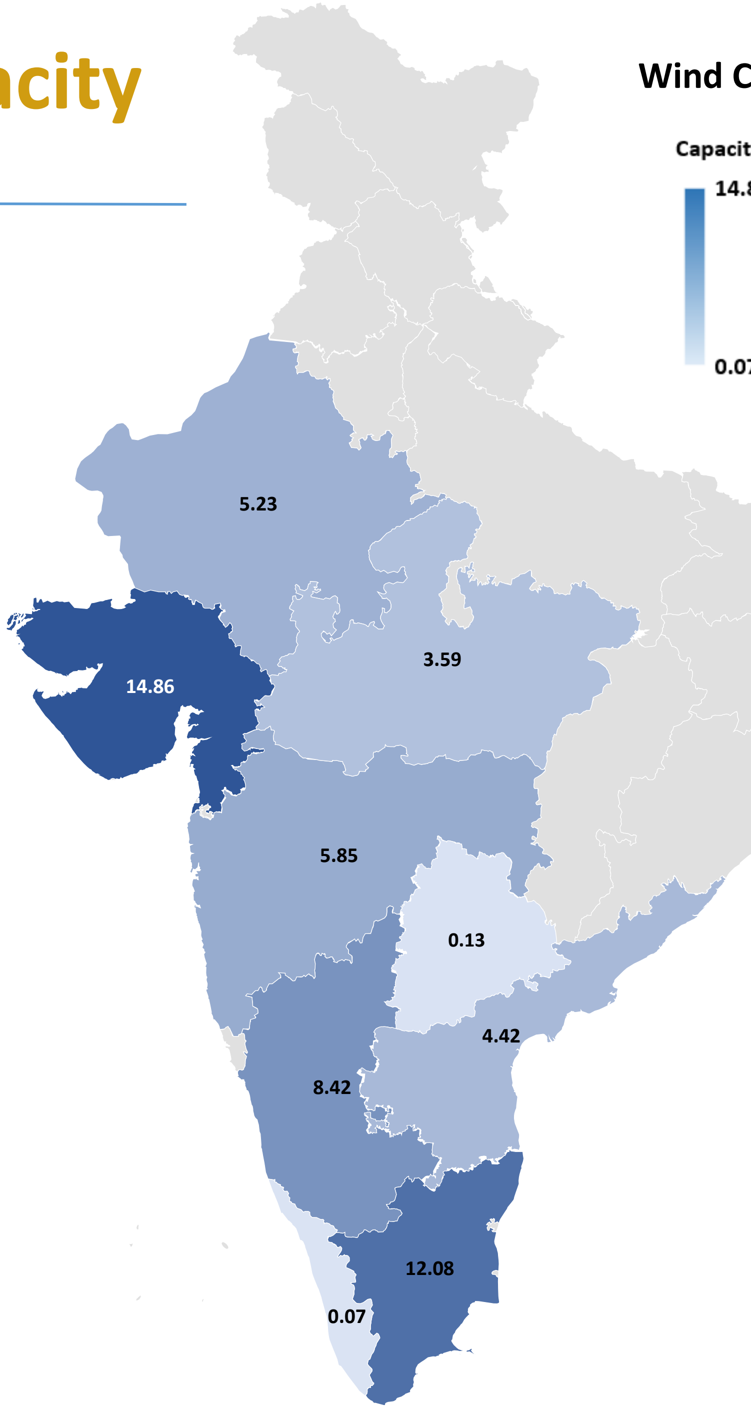
Source: MNRE

State-wise Wind Onshore Capacity

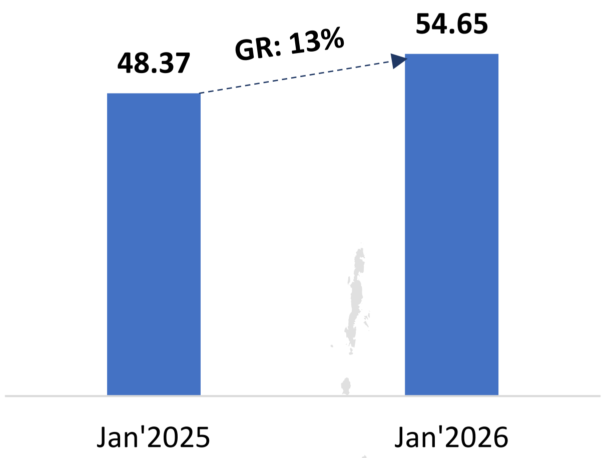
as on January 2026

State-wise installed capacity of Wind (Onshore) Power	
States	**Installed Capacity (GW)**
Gujarat	14.86
Tamil Nadu	12.08
Karnataka	8.42
Maharashtra	5.85
Rajasthan	5.23
Andhra Pradesh	4.42
Madhya Pradesh	3.59
Telangana	0.13
Kerala	0.07
India Total	**54.65**

Wind Capacity as on January 2026 (GW)



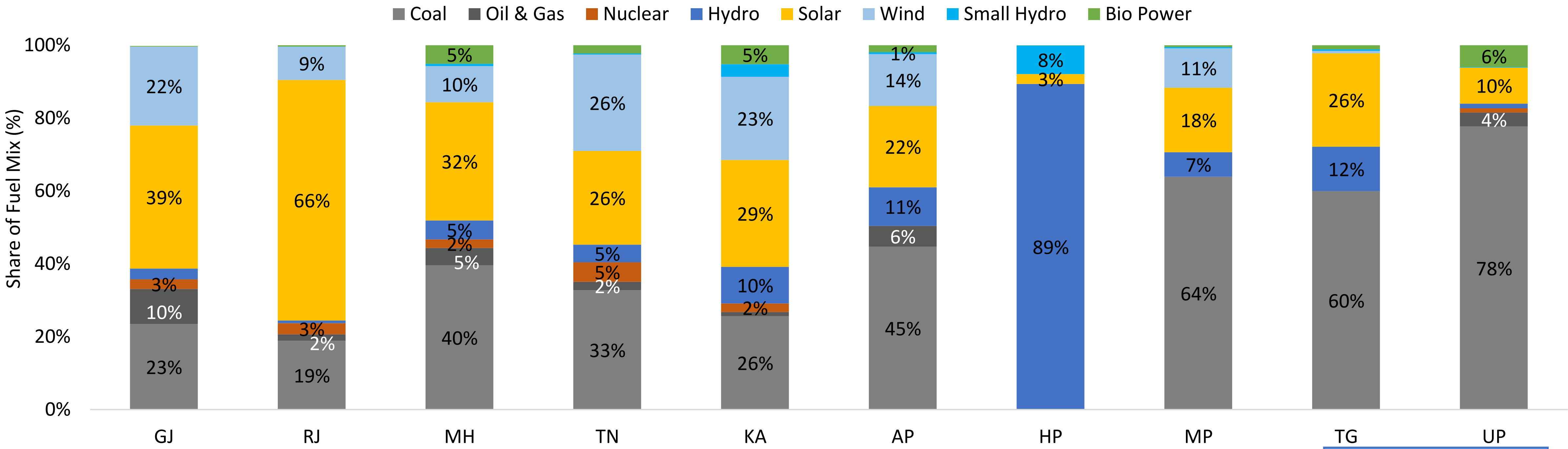
Wind Installed Capacity (GW)



Source: MNRE

Top 10 High RE* States and Their Capacity Mix

as on January 2026



Numbers are in GW

Parameters	GJ	RJ	MH	TN	KA	AP	HP	MP	TG	UP
Total Installed Capacity	68.51	57.42	58.92	45.65	36.89	31.07	12.78	33.13	19.75	38.64
Total RE Capacity	44.00	43.80	31.38	27.19	26.14	15.40	12.78	11.96	7.91	6.69
RE Share	64%	76%	53%	60%	71%	50%	100%	36%	40%	17%

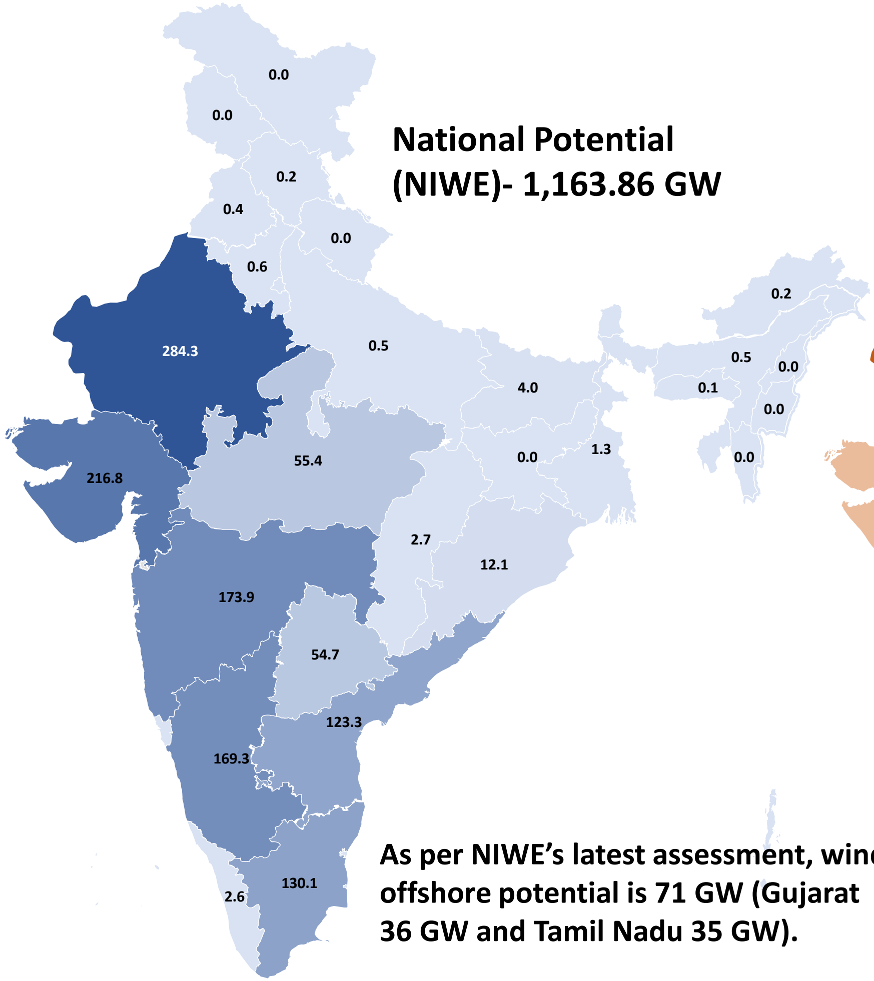
NOTE: *Renewable Energy including Large Hydro

Source: MNRE & NPP

Renewable Energy (RE) Potential

Wind Onshore (at 150m agl) and Offshore Potential

Wind Potential (GW) 0.00 – 284.25

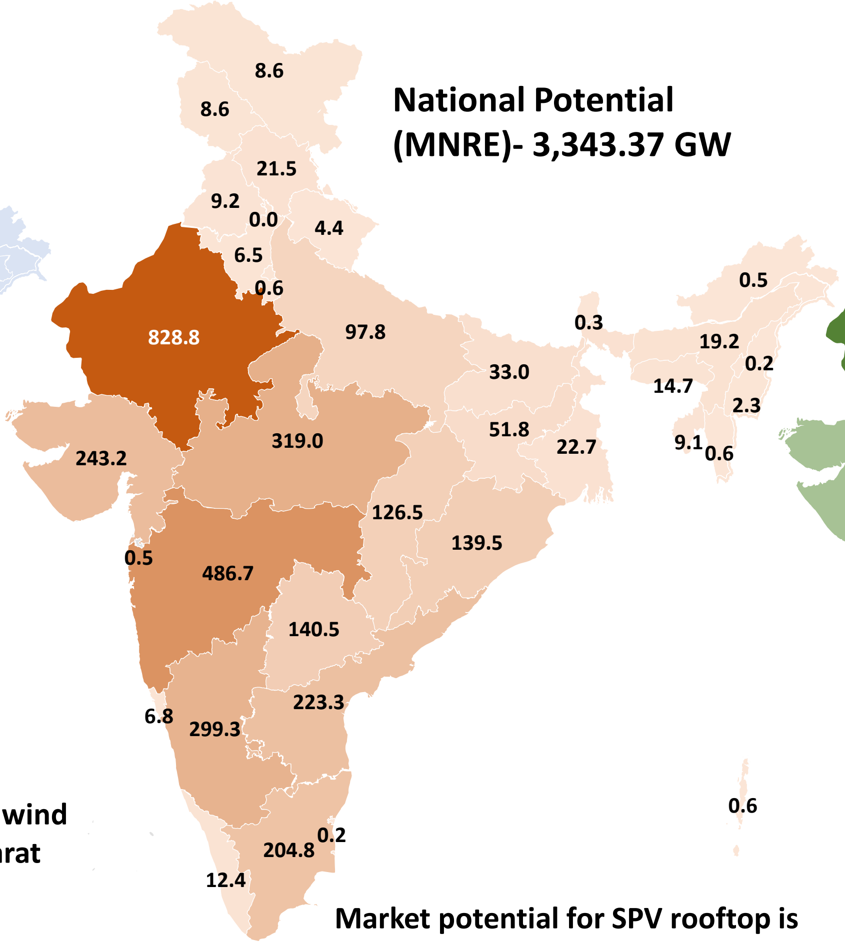


National Potential (NIWE)- 1,163.86 GW

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)

Solar Potential (GW) 0.0 – 828.8

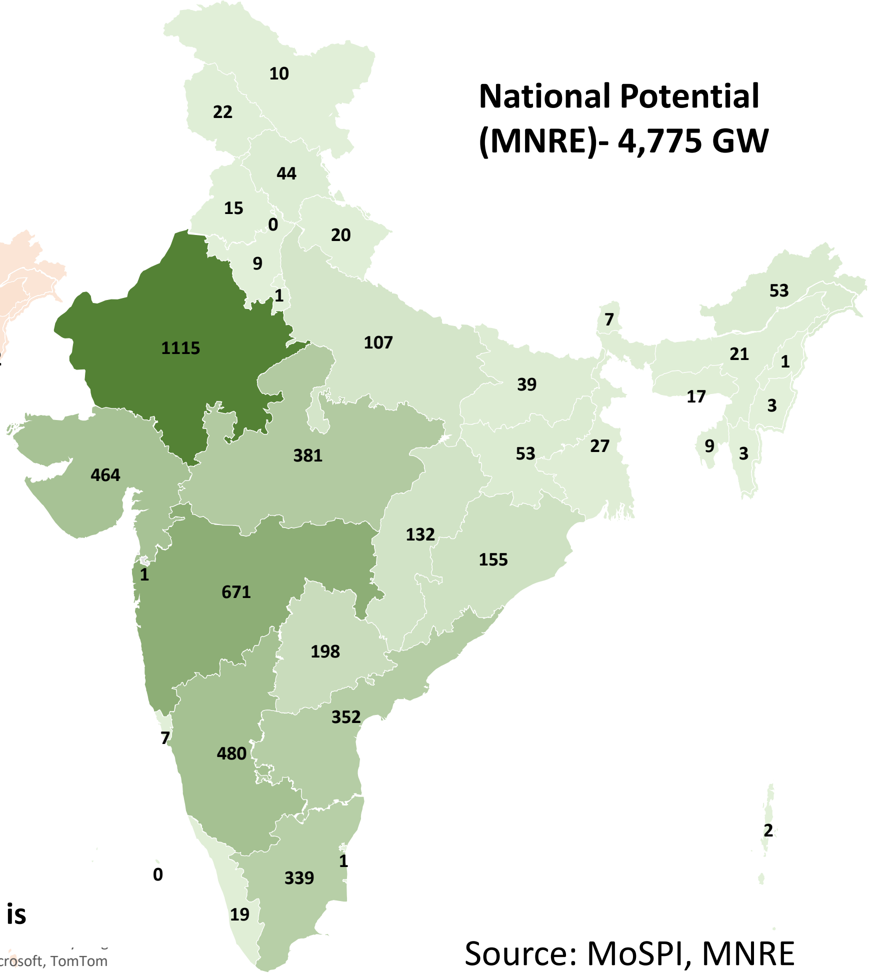


National Potential (MNRE)- 3,343.37 GW

Market potential for SPV rooftop is 124 GW.

Renewable Energy Potential (all sources incl. large Hydro)

Potential (GW) 0 – 1115

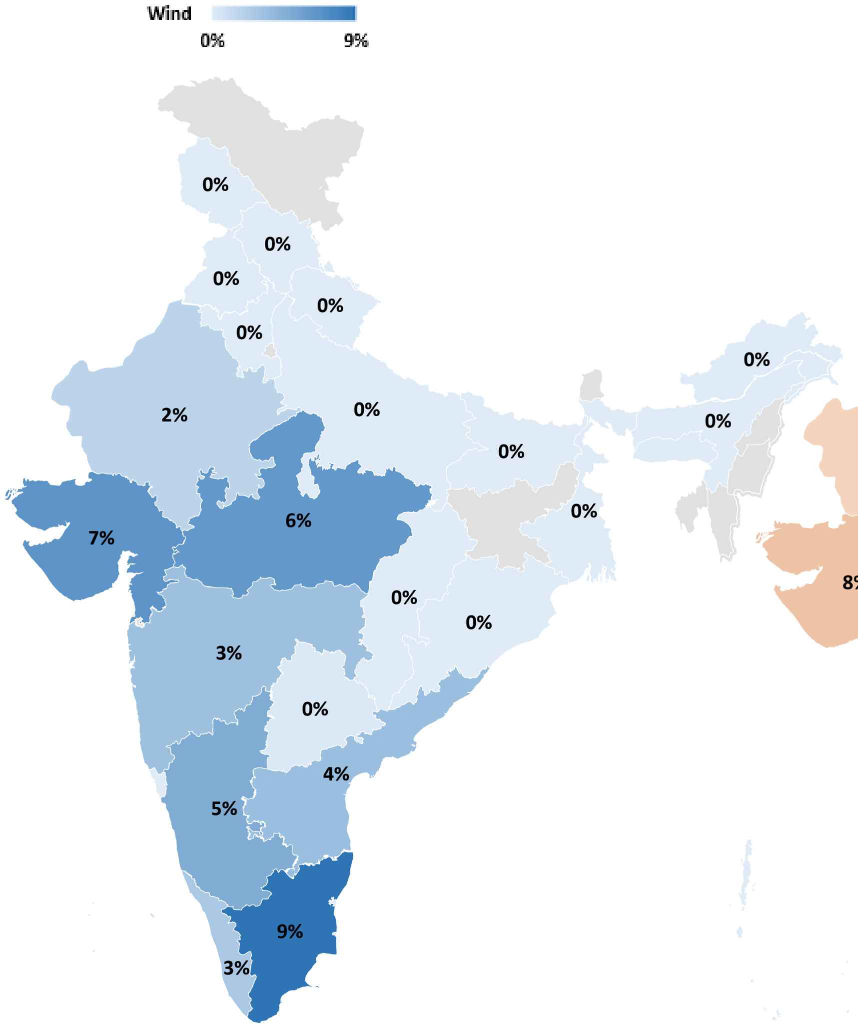


National Potential (MNRE)- 4,775 GW

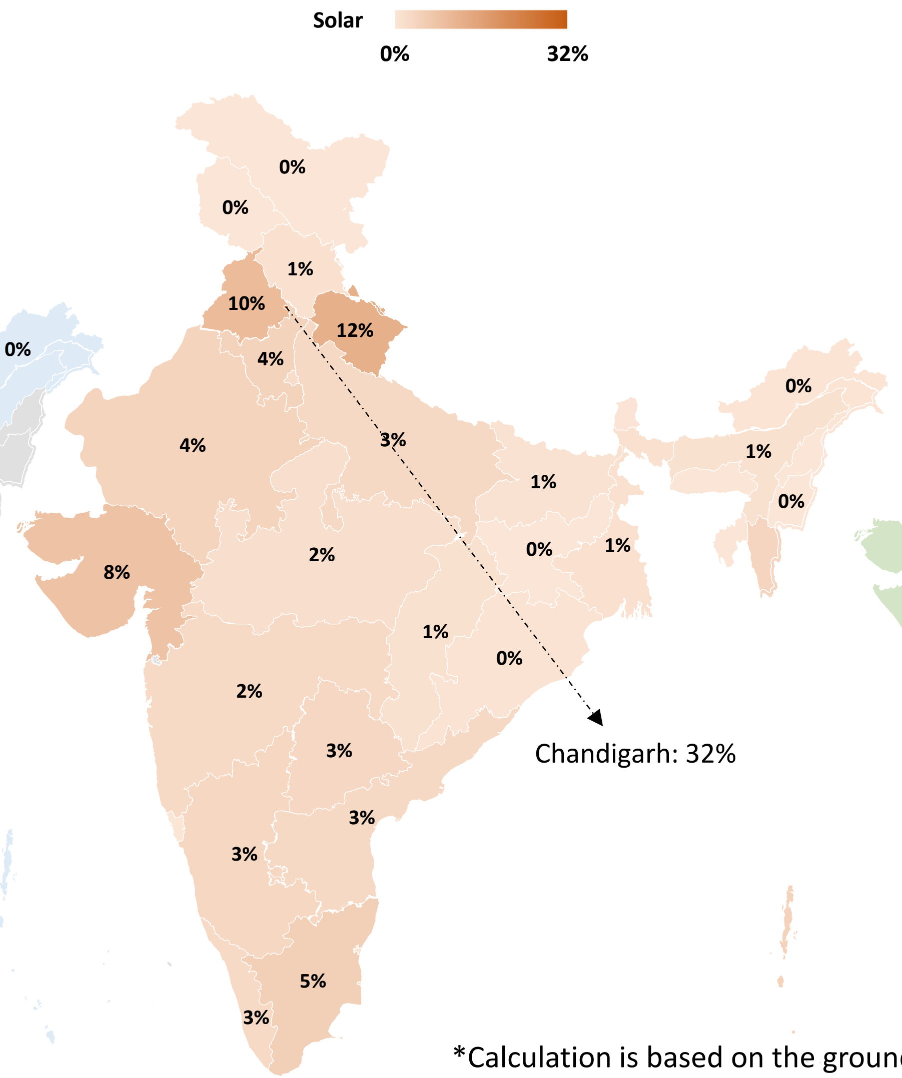
Source: MoSPI, MNRE

RE Installed capacity as a Percentage of the total resource potential in the state as on January 2026

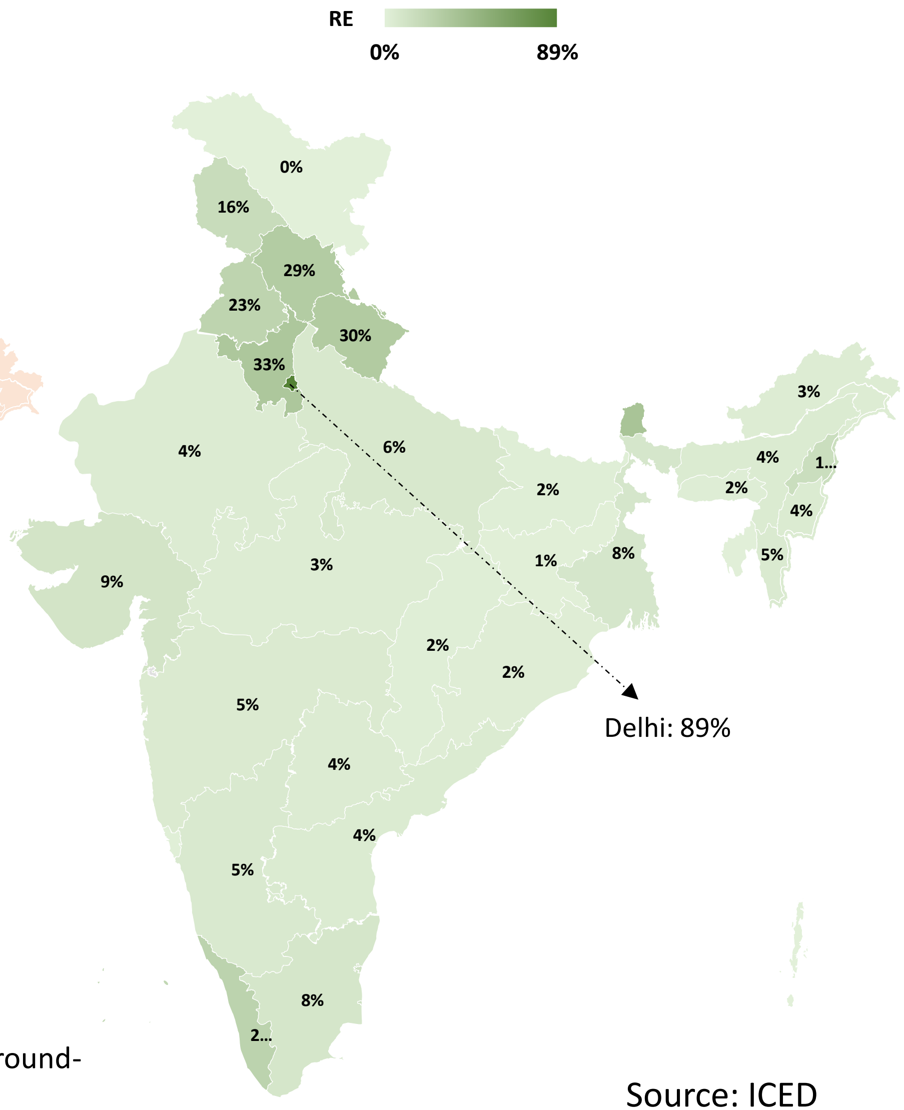
Wind Capacity



Solar Capacity*



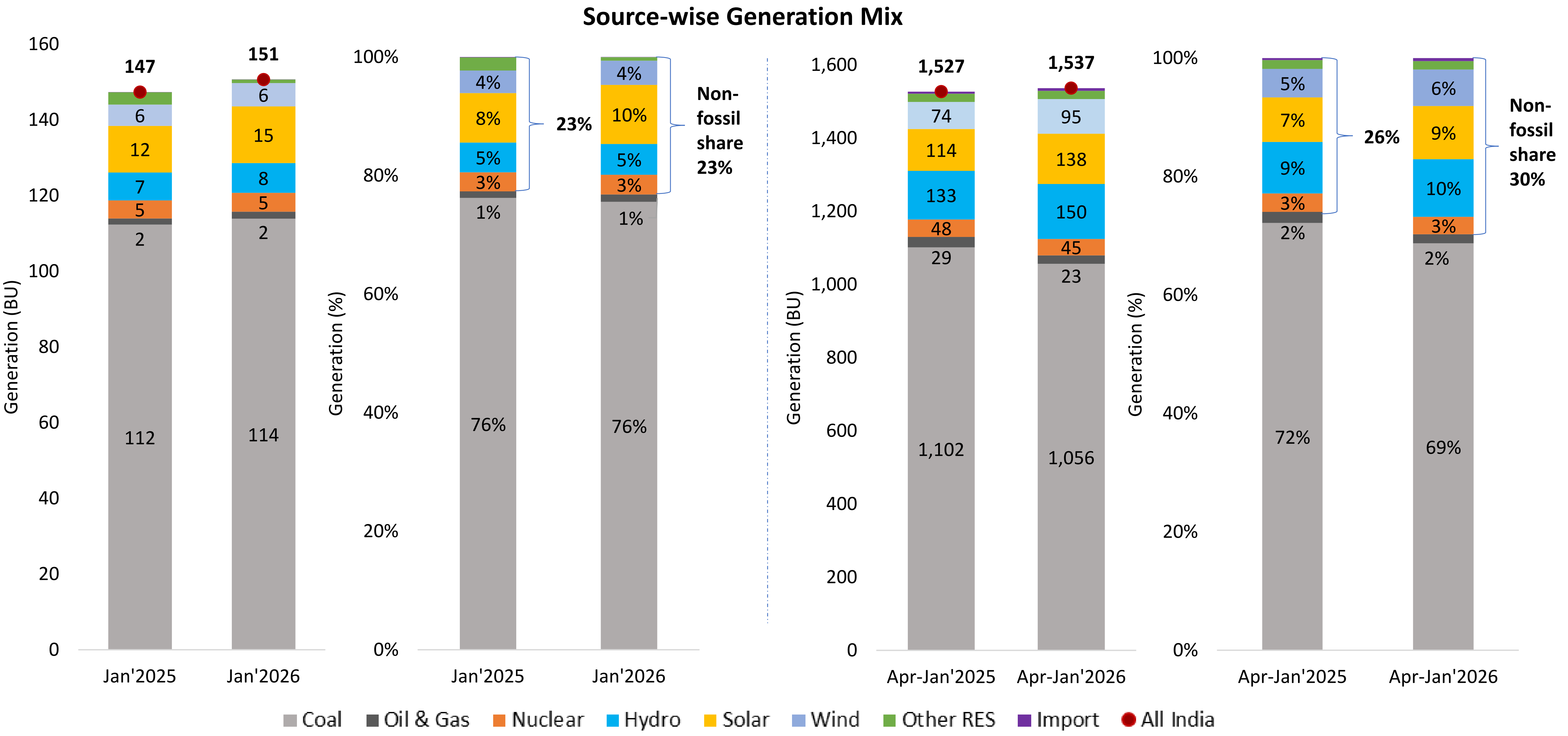
RE Capacity (all sources including large hydro)



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

Source: ICED

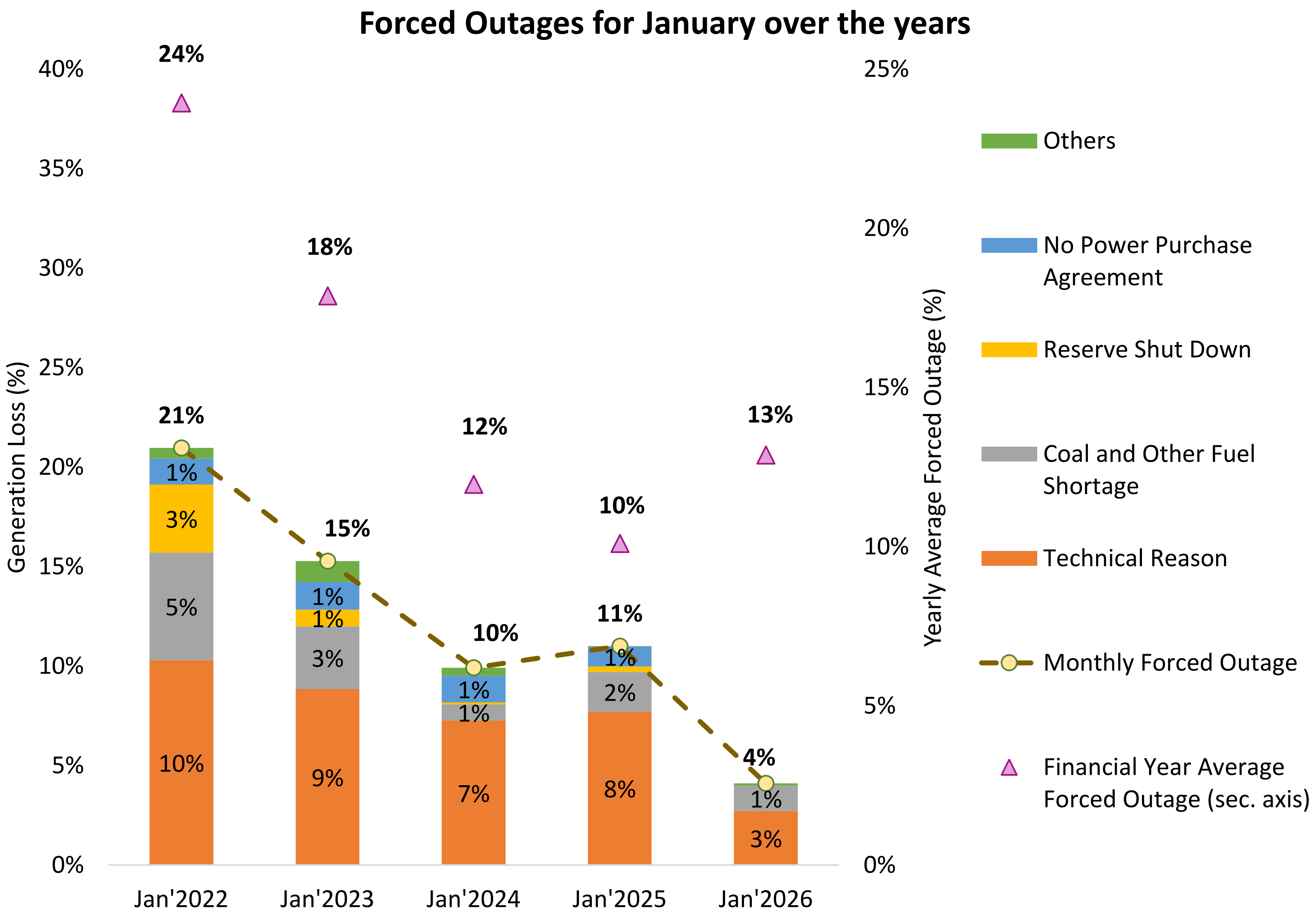
India's Electricity Generation Mix



Note: The electricity generation data for Jan'26 is Provisional.

Source: CEA

Thermal Generation Loss and Reasons for Forced Outages

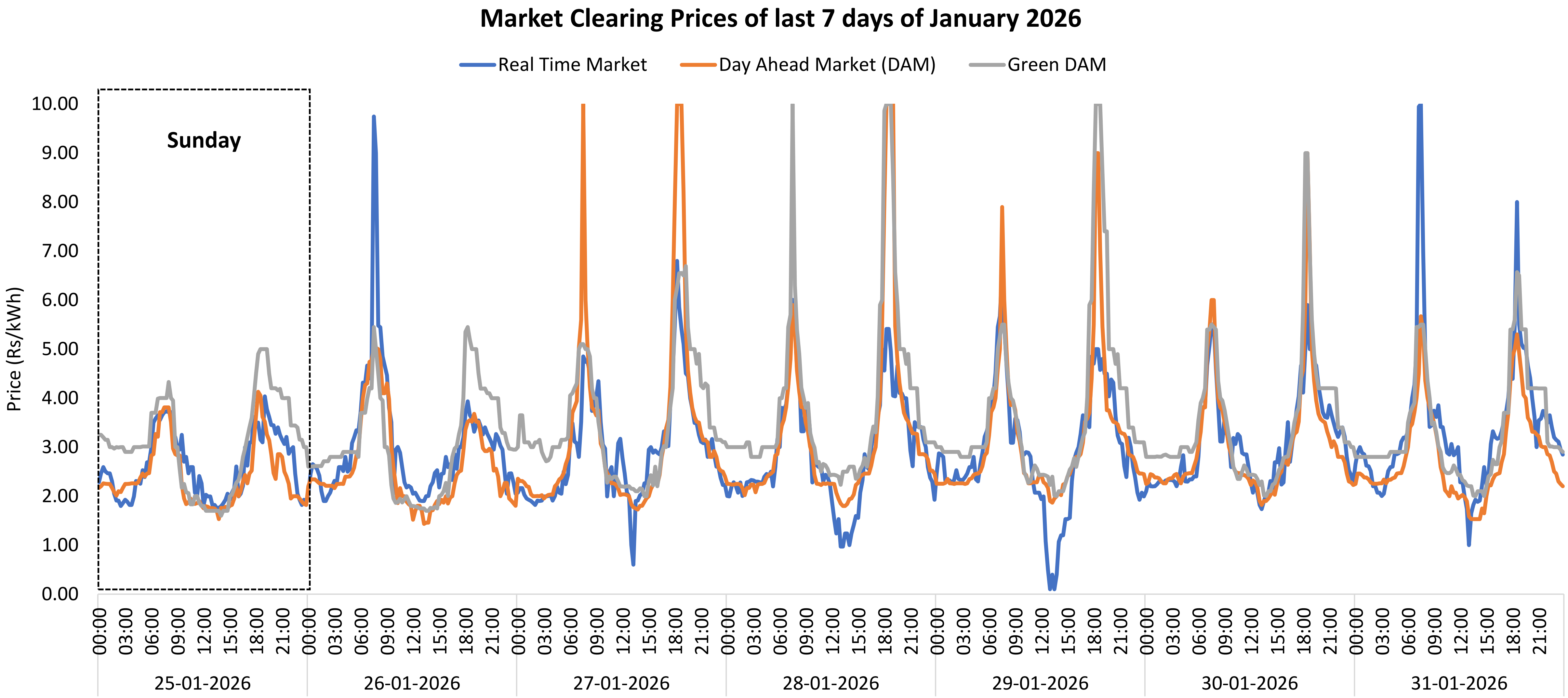


Year/ Month		Average Forced Outage Share
Yearly	FY 2023-24	12%
	FY 2024-25	10%
	FY 2025-26 (up to Jan’26)	13%
Monthly	Jan’2024	10%
	Jan’2025	11%
	Jan’2026	4%

Thermal includes only Coal and Lignite Plants.

Source: ICED

Indian Electricity Exchange (IEX) Market Snapshot

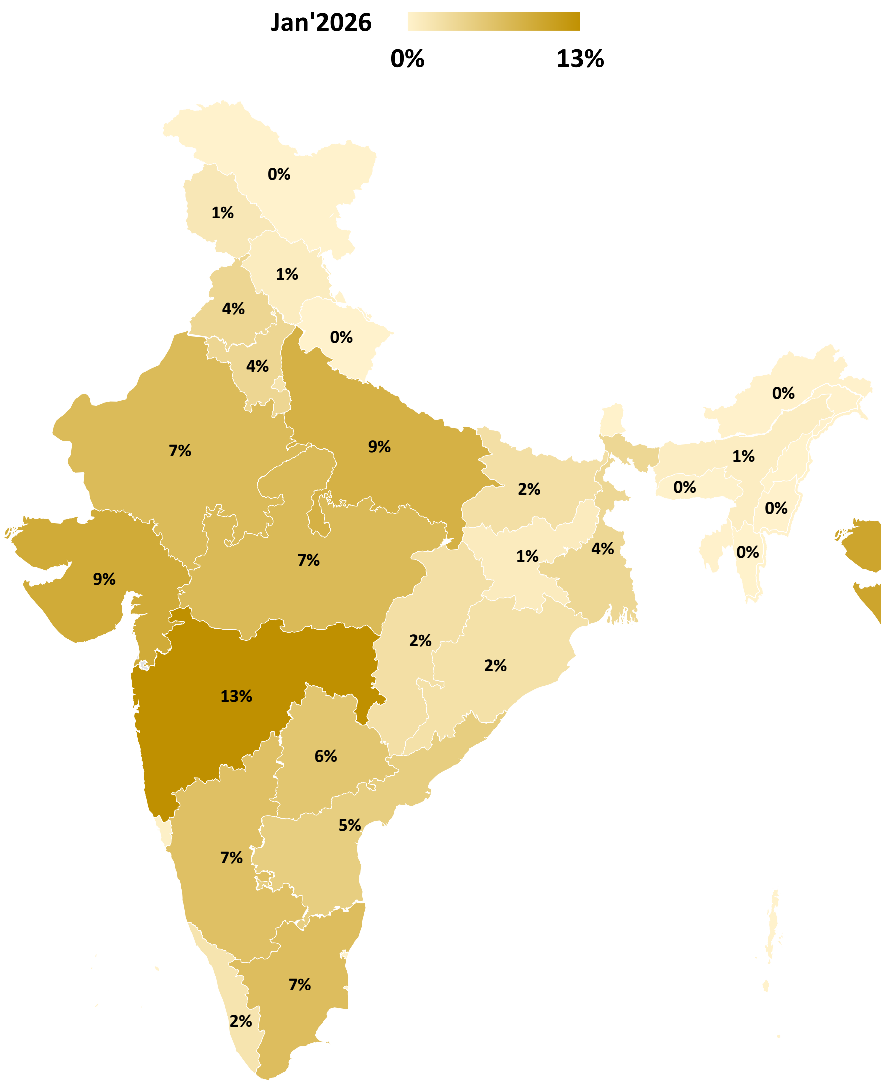


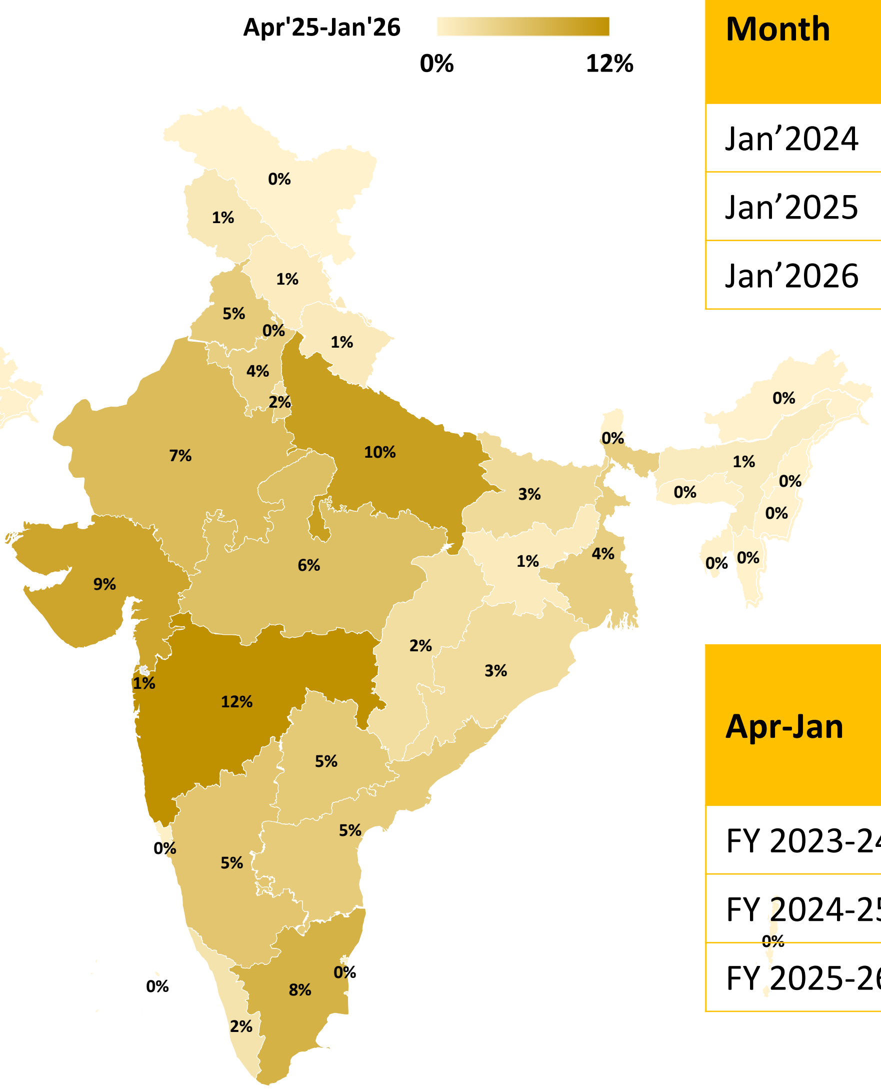
In April 2023, CERC revised the price ceiling from ₹12/kWh to ₹10/kWh in the power exchange market.

Source: IEX

National and State level Electricity Demand

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





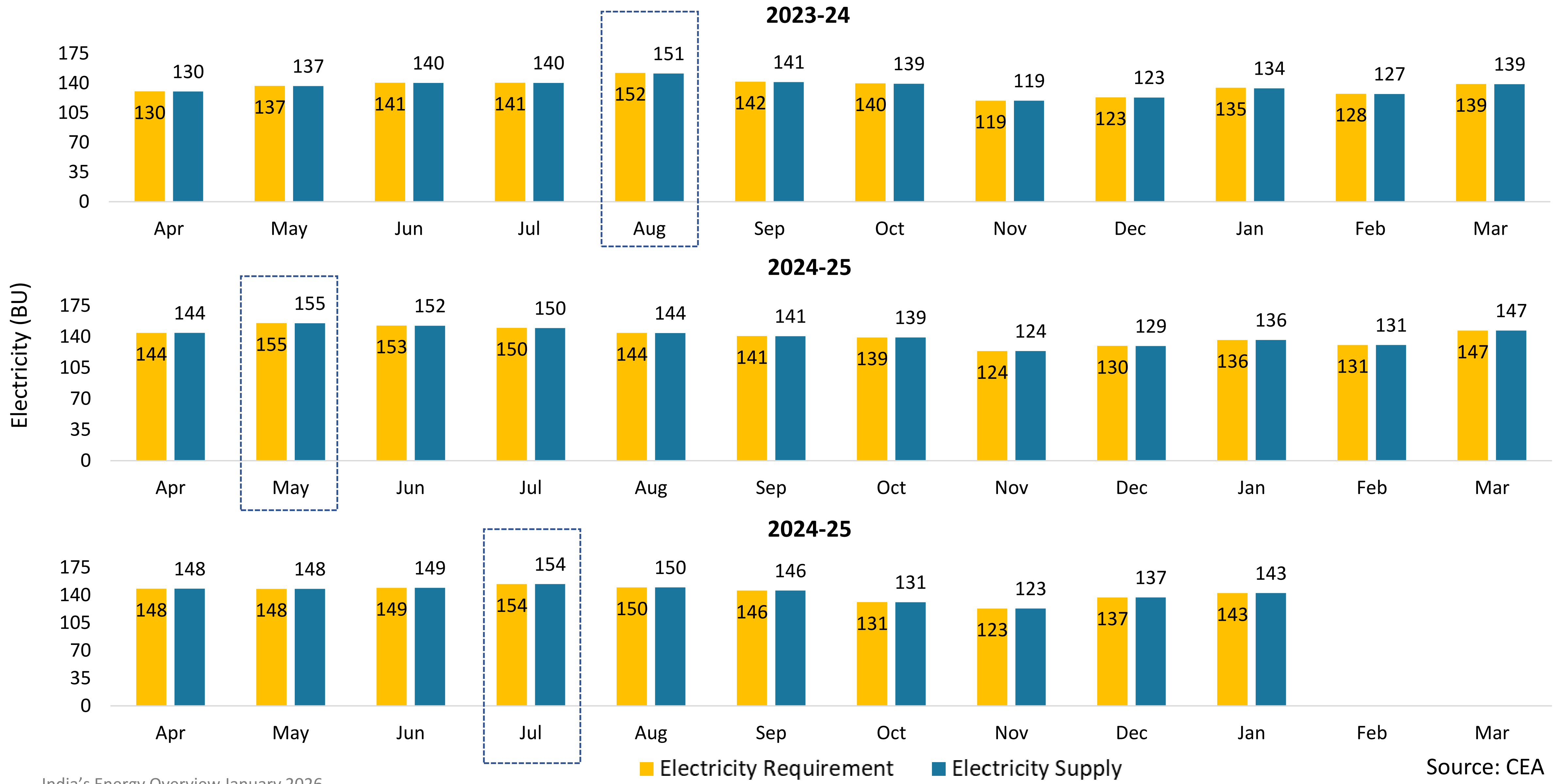
Month	Electricity Demand (BU)	Electricity Supply (BU)	Gap (BU) (+/-)
Jan’2024	135	134	0.6
Jan’2025	136	136	0.0
Jan’2026	143	143	0.0

Apr-Jan	Electricity Demand (BU)	Electricity Supply (BU)	Gap (BU) (+/-)
FY 2023-24	1,359	1,356	3.8
FY 2024-25	1,416	1,415	1.5
FY 2025-26	1,428	1,428	0.4

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

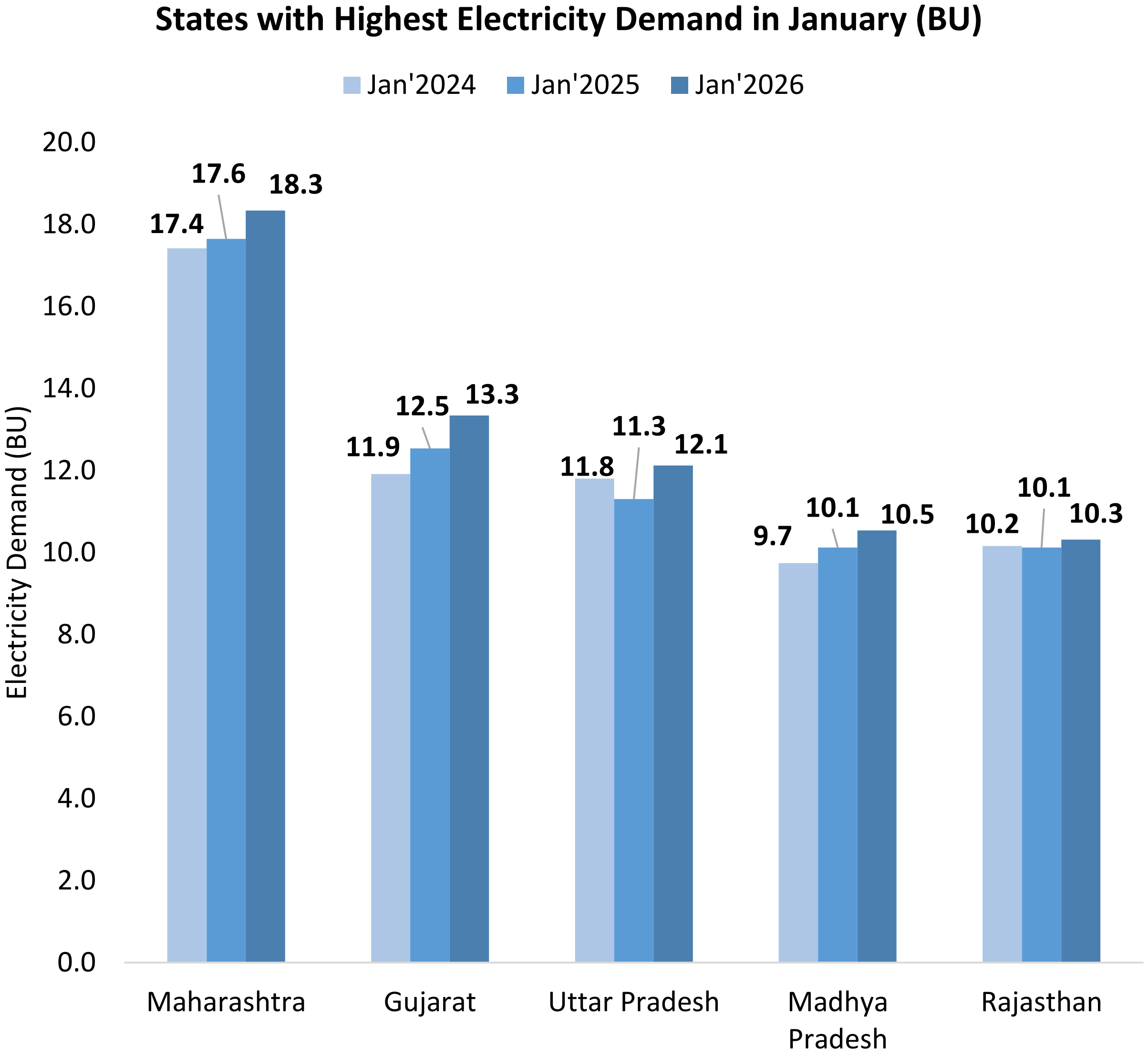
Source: CEA

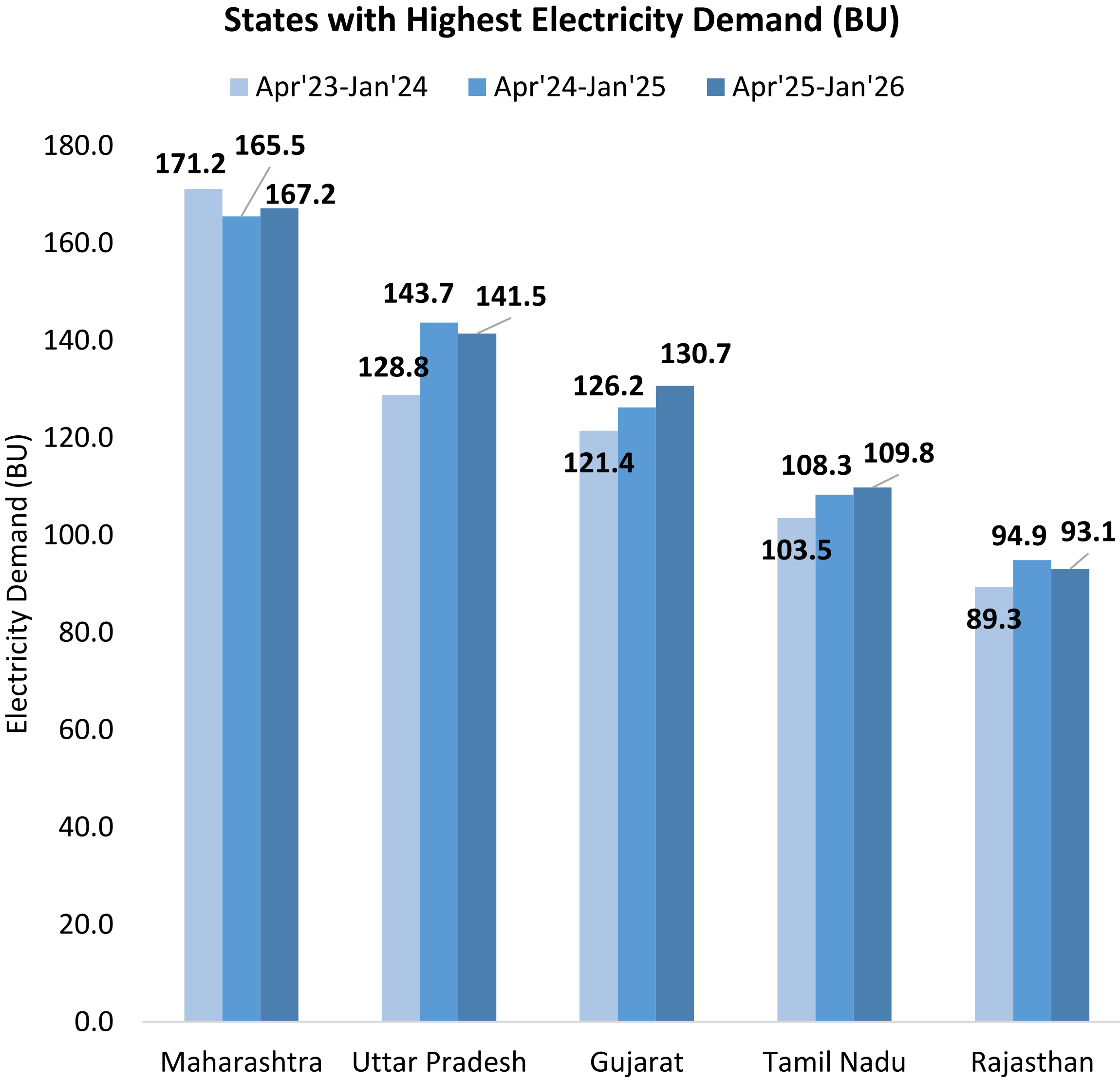
India's Monthly Electricity Requirement and Supply



Source: CEA

Monthly Electricity Demand of the top 5 states

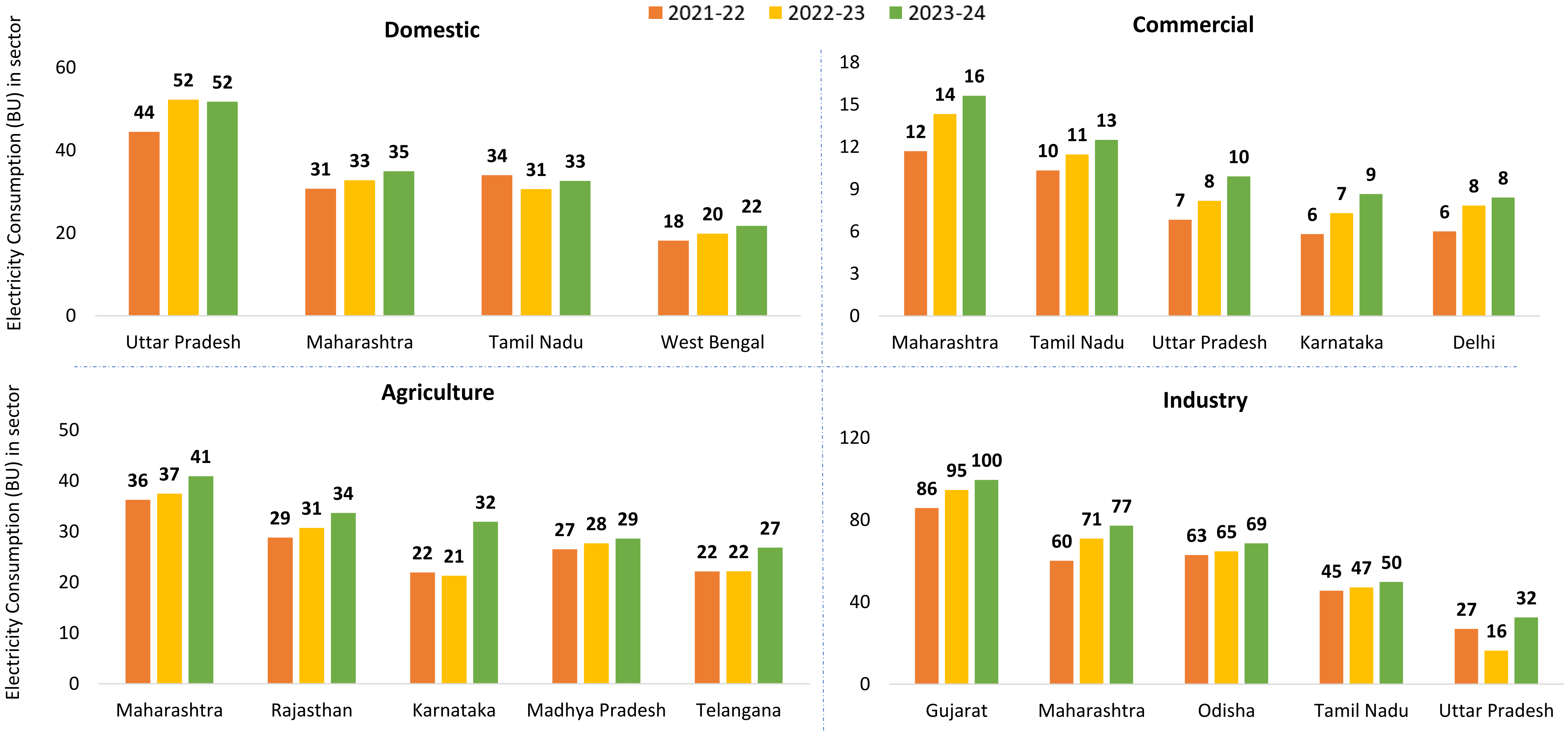




Note: The electricity demand data for Jan’26 is Provisional.

Source: CEA

Electricity Consumer-category wise top 5 States

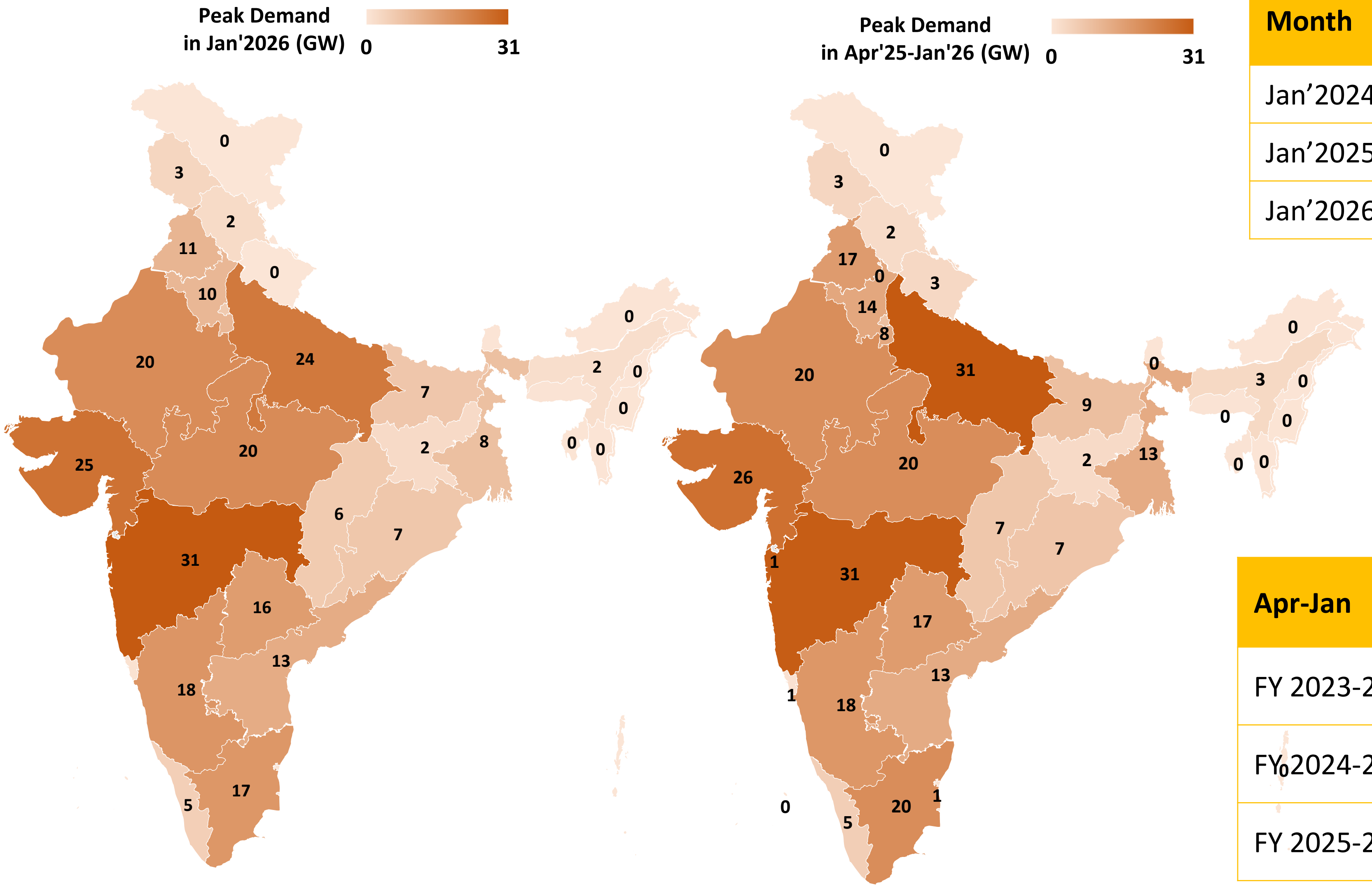


NOTE: Top 5 States under consumer-categories are selected on the basis of 2023-24

Source: CEA

National and State level Peak Electricity Demand

State-level Peak Electricity Demand (GW)



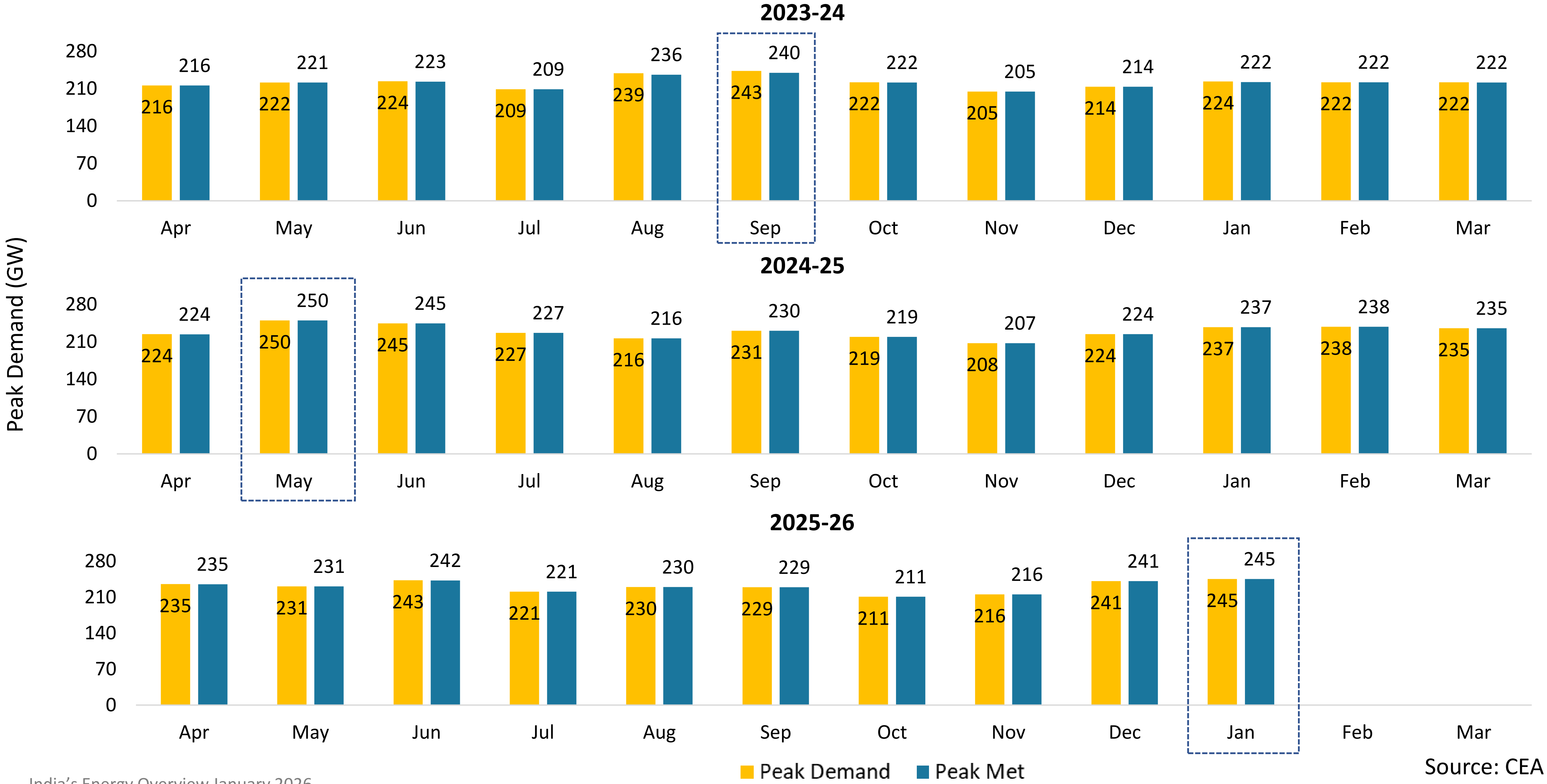
Month	Peak Demand (GW)	Peak Supply (GW)	Gap(GW) (+/-)
Jan’2024	224	222	1.2
Jan’2025	237	237	0.0
Jan’2026	245	245	0.0

Apr-Jan	Peak Demand (GW)	Peak Supply (GW)	Gap (GW) (+/-)
FY 2023-24	243	240	3.3
FY 2024-25	250	250	0.0
FY 2025-26	245	245	0.0

Note: The peak electricity demand data for Jan’26 is Provisional.

Source: CEA

India's Monthly Peak Electricity Demand and Supply

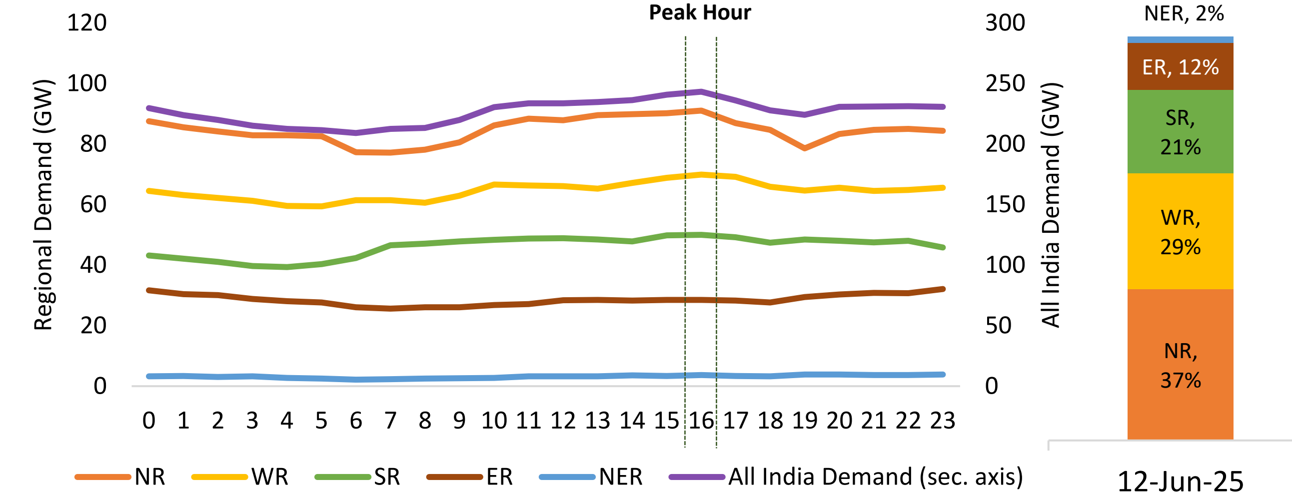


Source: CEA

All India and Regional Electricity Demand Curve of Peak Demand Day

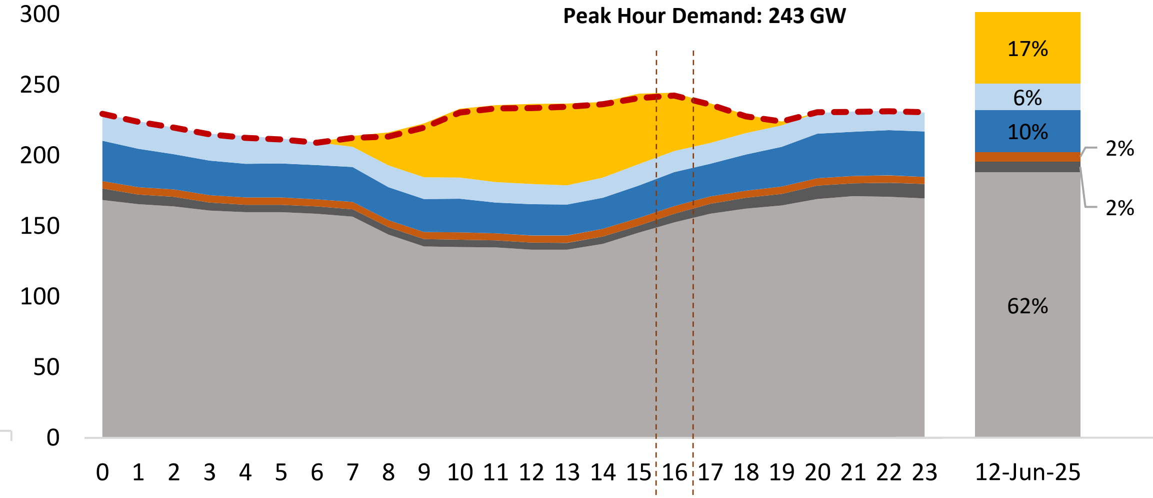
Regional Hourly Demand Curve of Peak Demand Day in 2025-26 (up to Dec'25) (12th Jun'2025)

Share of Regions in All India Peak Demand



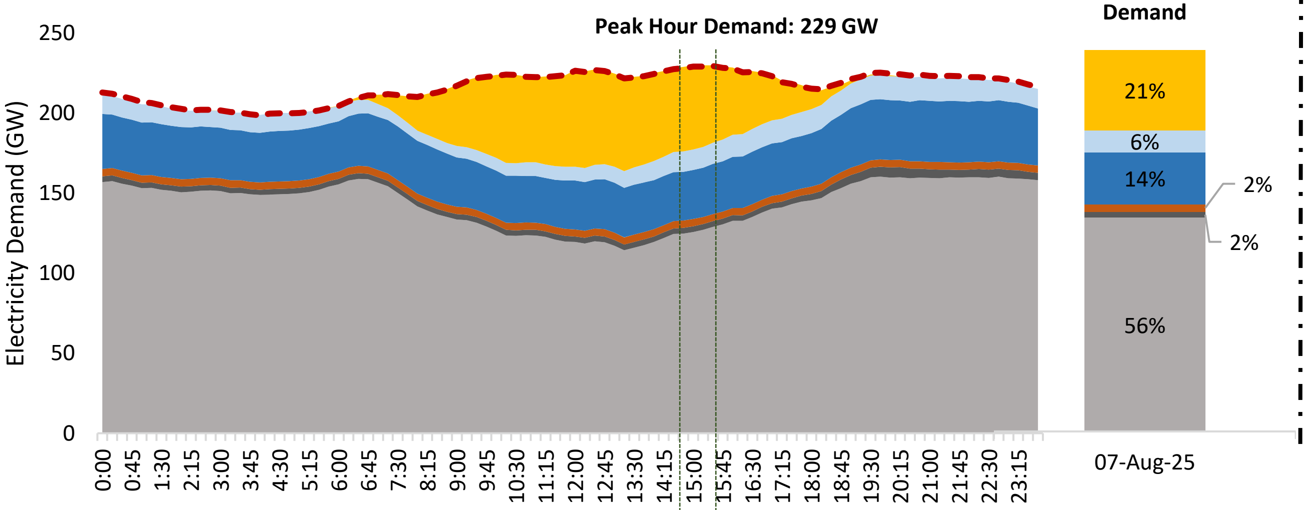
India's Electricity Demand Curve of Peak Demand Day in Summer Season (Mar-Jun'25) (12th June 2025)

Share of Supply Source in Peak Demand



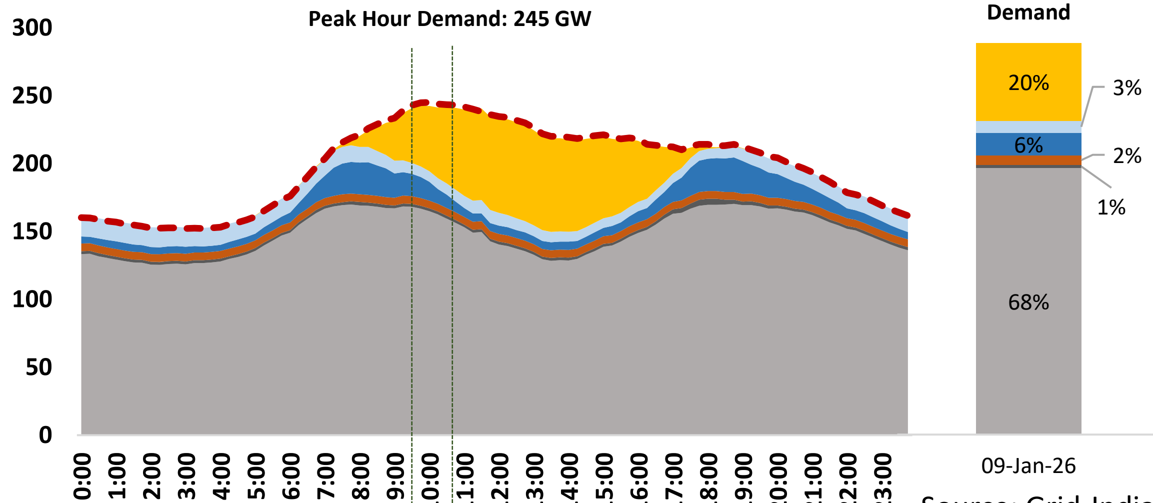
India's Electricity Demand Curve of Peak Demand Day in Monsoon Season (Jul-Oct'25) (7th Aug 2025)

Share of Supply Sources in Peak Demand



India's Electricity Demand Curve of Peak Demand Day in Winter Season (Nov'25-Jan'26) (9th Jan 2026)

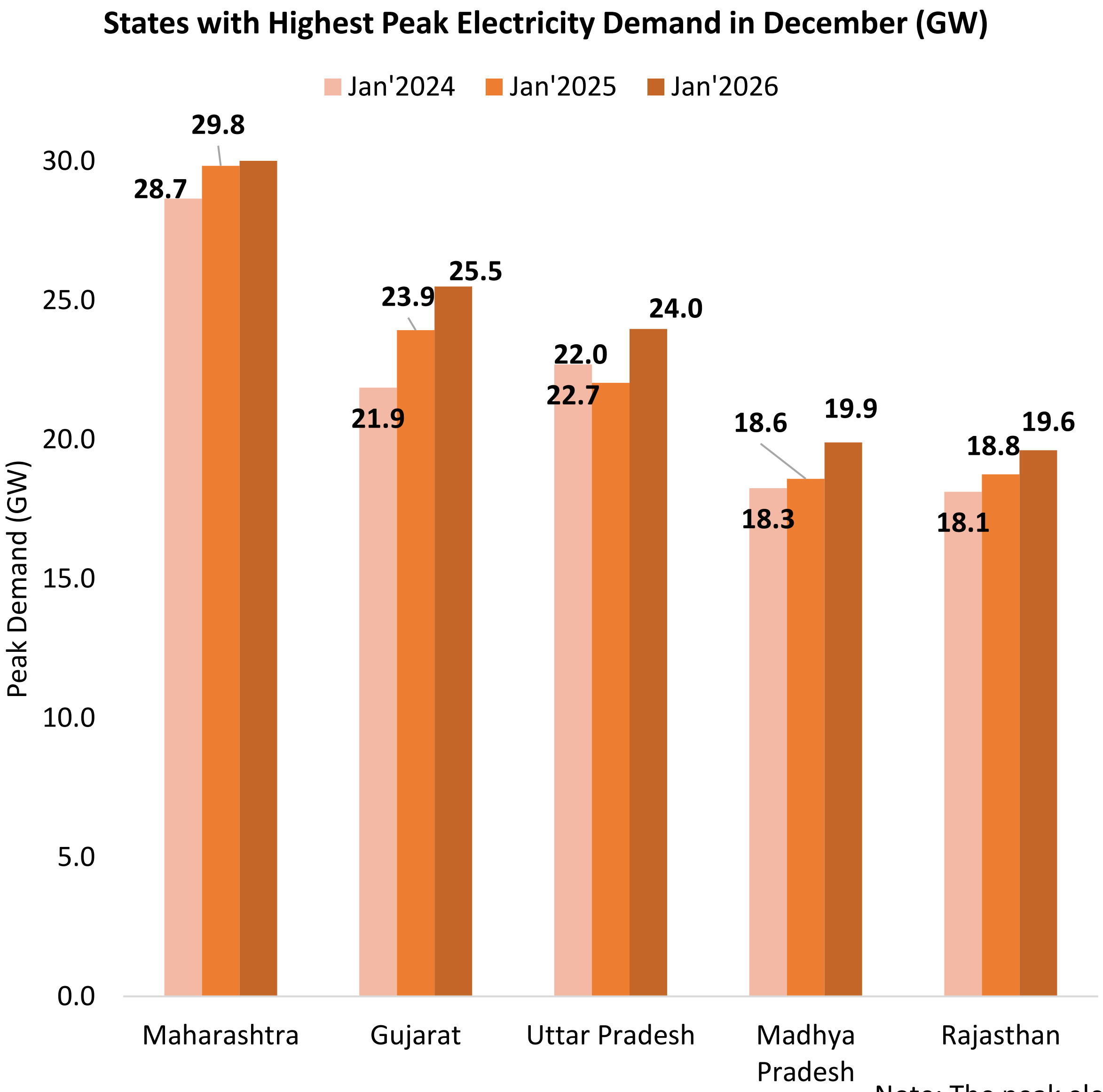
Share of Supply Sources in Peak Demand

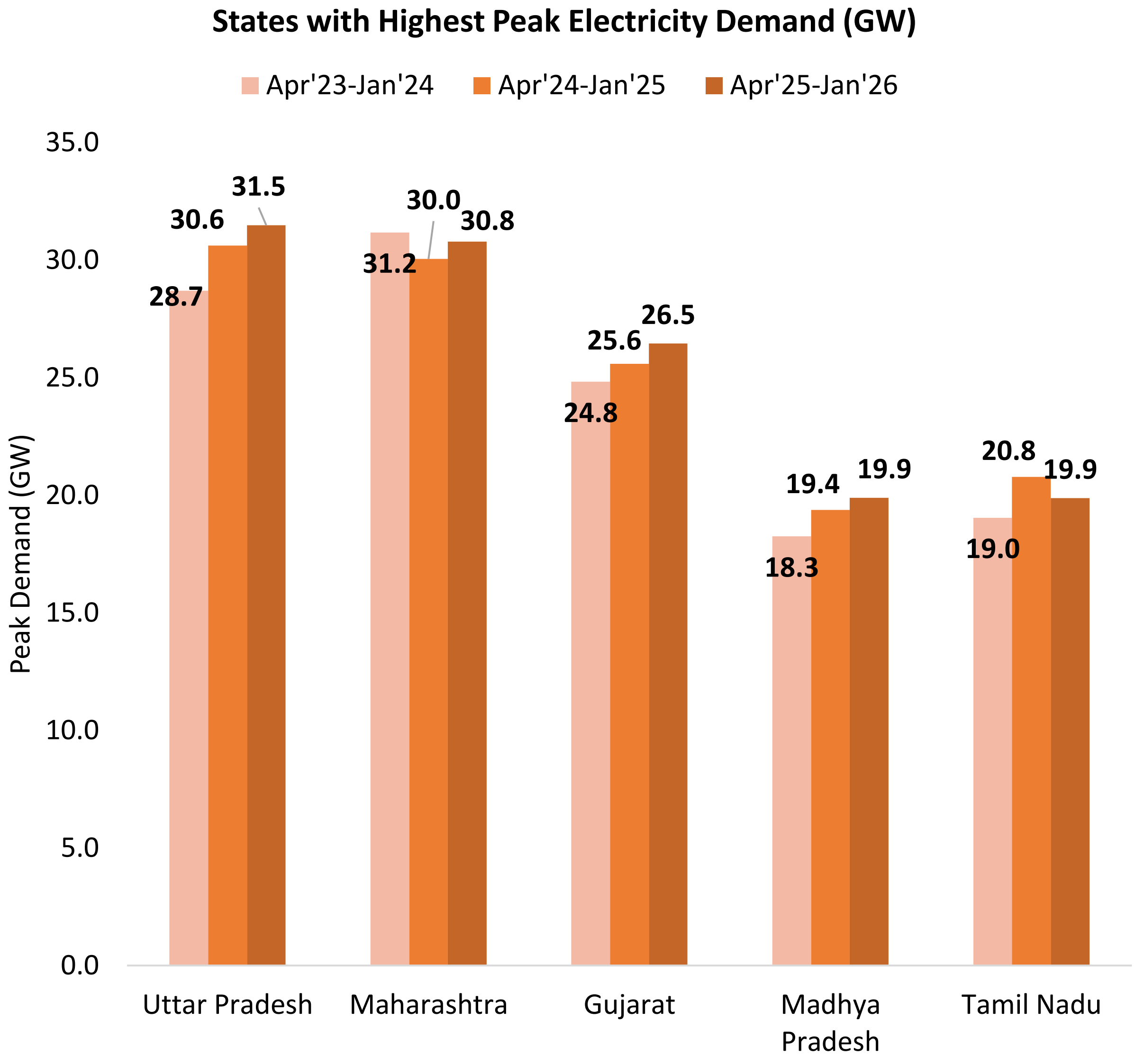


Coal Gas Nuclear Hydro Wind Solar Gross Demand

Source: Grid-India

Monthly Peak Electricity Demand of the top 5 states

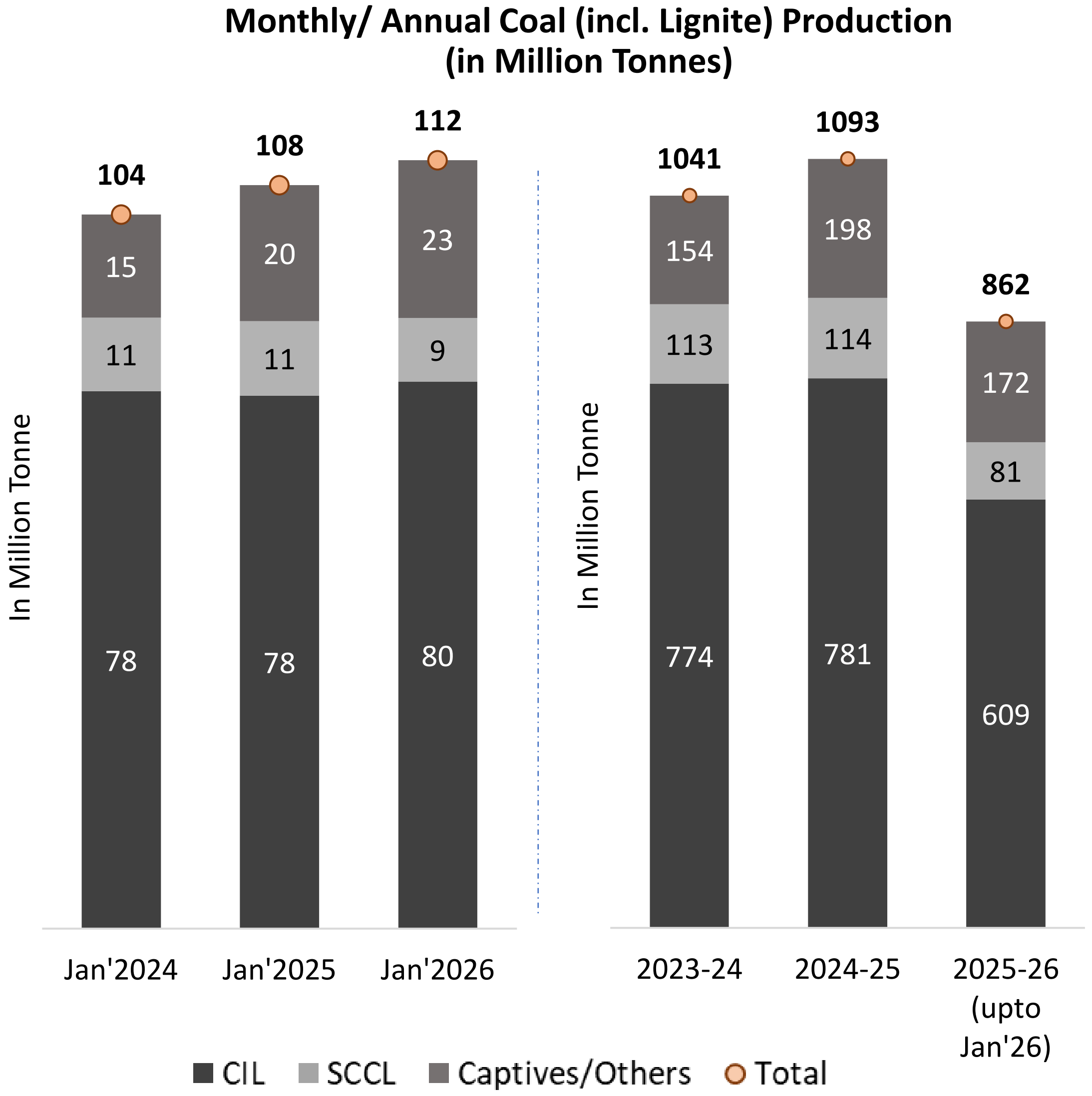




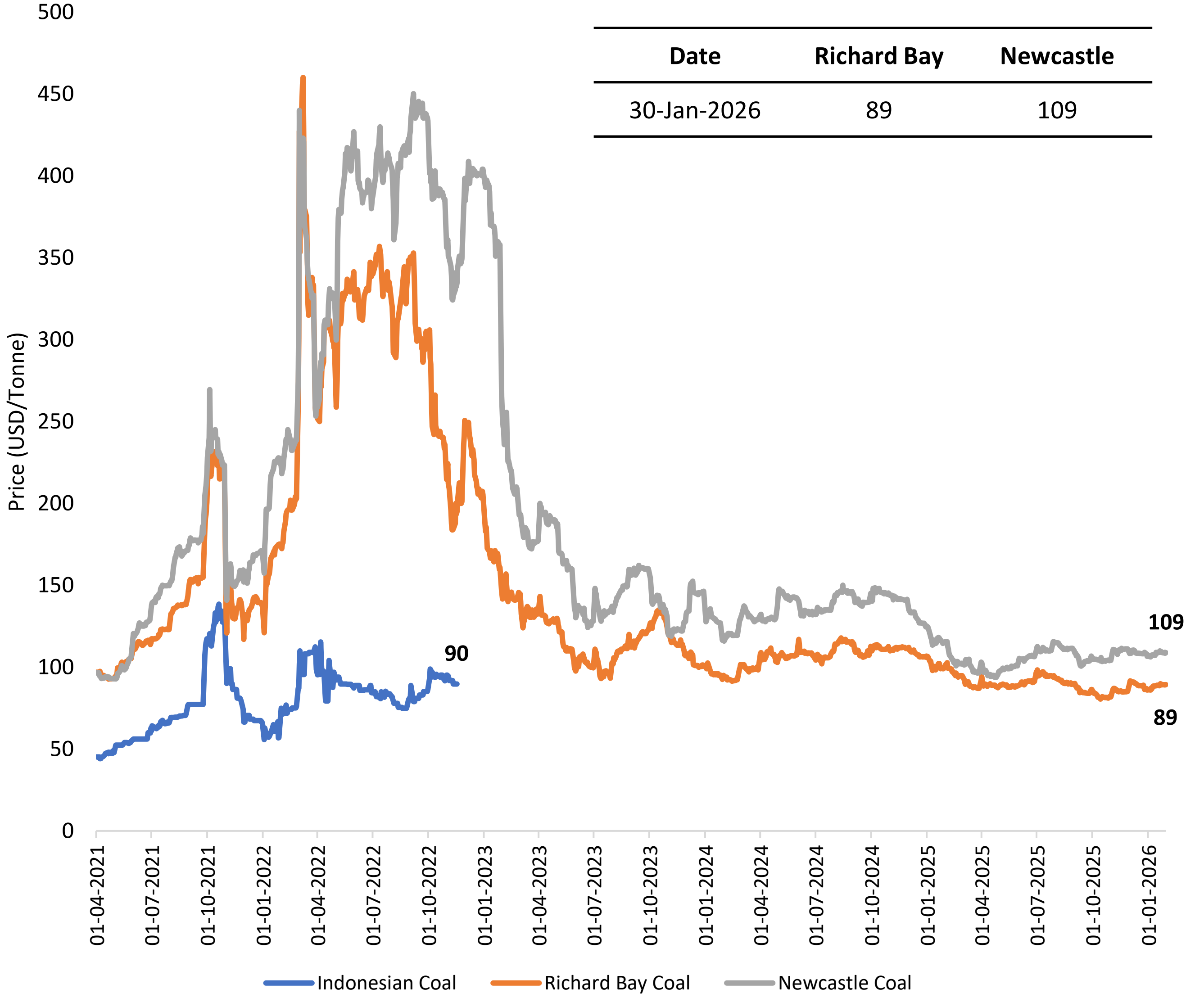
Note: The peak electricity demand data for Dec'25 is Provisional.

Source: CEA

Monthly Coal Statistics



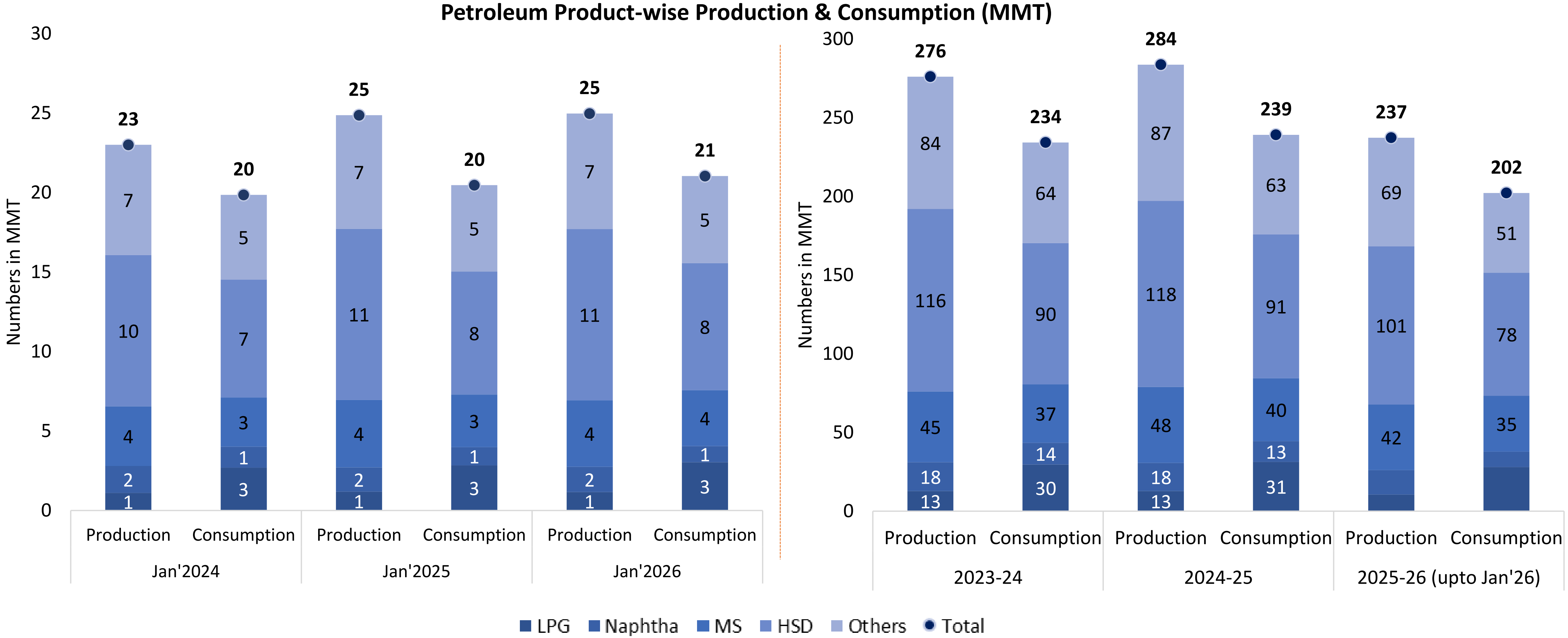
Source: Ministry of Coal



Date	Richard Bay	Newcastle
30-Jan-2026	89	109

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 January 2026.

Source: PPAC

Oil Market Scenario (2/3)

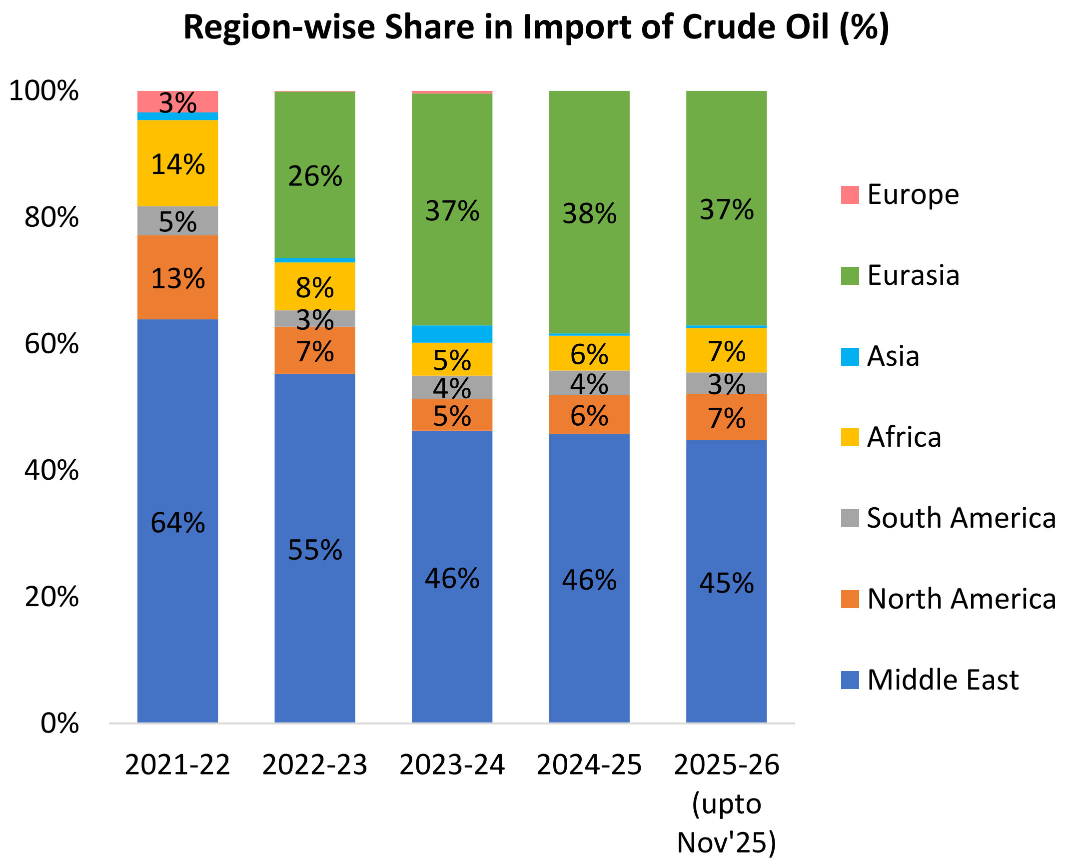
Import/Export of Crude Oil and Petroleum Products ('000 Tonnes)							
Petroleum Products	Import/ Export	Monthly			Yearly		
		Jan'24	Jan'25	Jan'26	2023-24	2024-25	2025-26 (upto Jan'26)
Crude Oil	Import	21515	21225	21094	234262	243225	206252
	Export	0	0	0	0	0	0
	Net Import	**21515**	**21225**	**21094**	**234262**	**243225**	**206252**
LPG	Import	1645	1811	2192	18514	20667	18796
	Export	45	49	48	525	551	471
	Net Import	**1600**	**1762**	**2144**	**17989**	**20116**	**18325**
Diesel	Import	3	3	3	42	42	30
	Export	2024	2789	2381	28204	28027	23562
	Net Import	**-2021**	**-2786**	**-2378**	**-28162**	**-27985**	**-23532**
Petrol	Import	0	0	0	717	235	0
	Export	975	1362	1406	13472	15830	14088
	Net Import	**-975**	**-1362**	**-1406**	**-12755**	**-15596**	**-14088**
Others	Import	2181	2627	2269	29419	29960	22794
	Export	1799	1271	1075	20391	20667	14460
	Net Import	**382**	**1356**	**1194**	**9029**	**9293**	**8334**

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

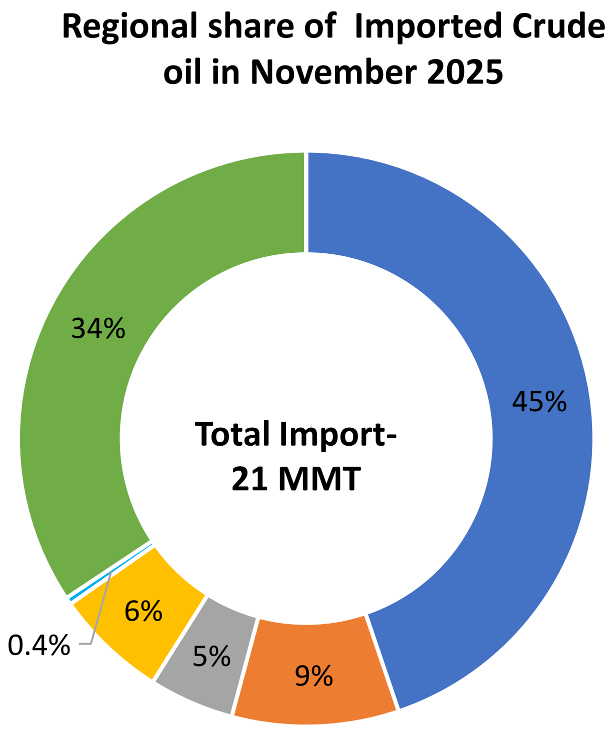
NOTE: The data is available latest up to January 2026.

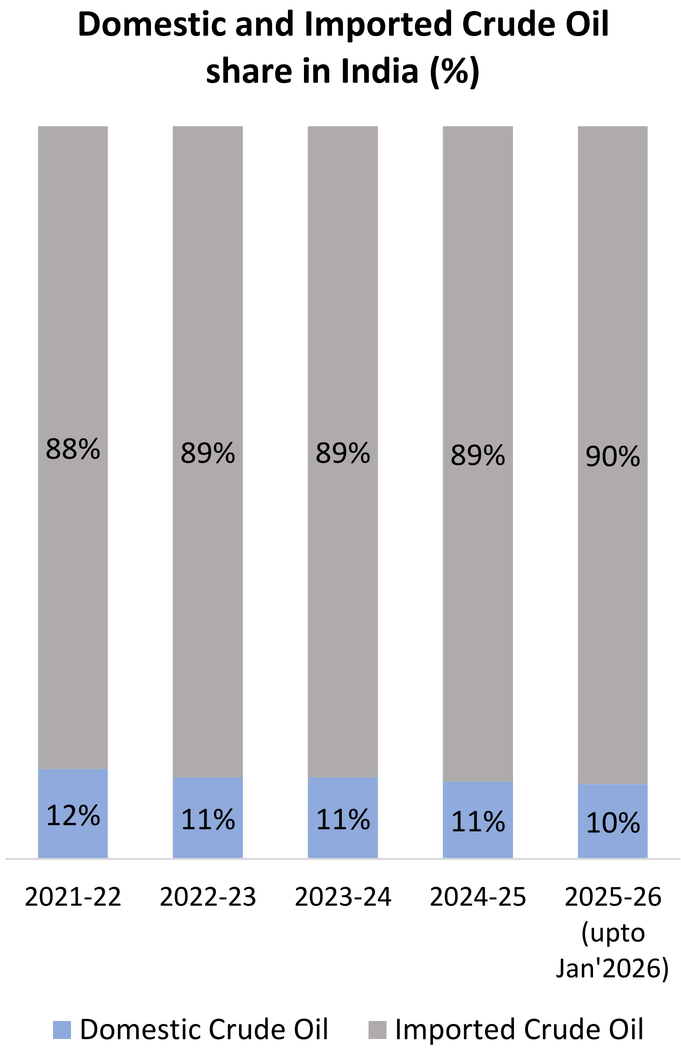
Source: PPAC

Oil Market Scenario (3/3)



Total Import of Crude Oil (MMT)			
Total Import	2023-24	2024-25	2025-26 (up to Jan'26)
Crude Oil	**234**	**243**	**206**



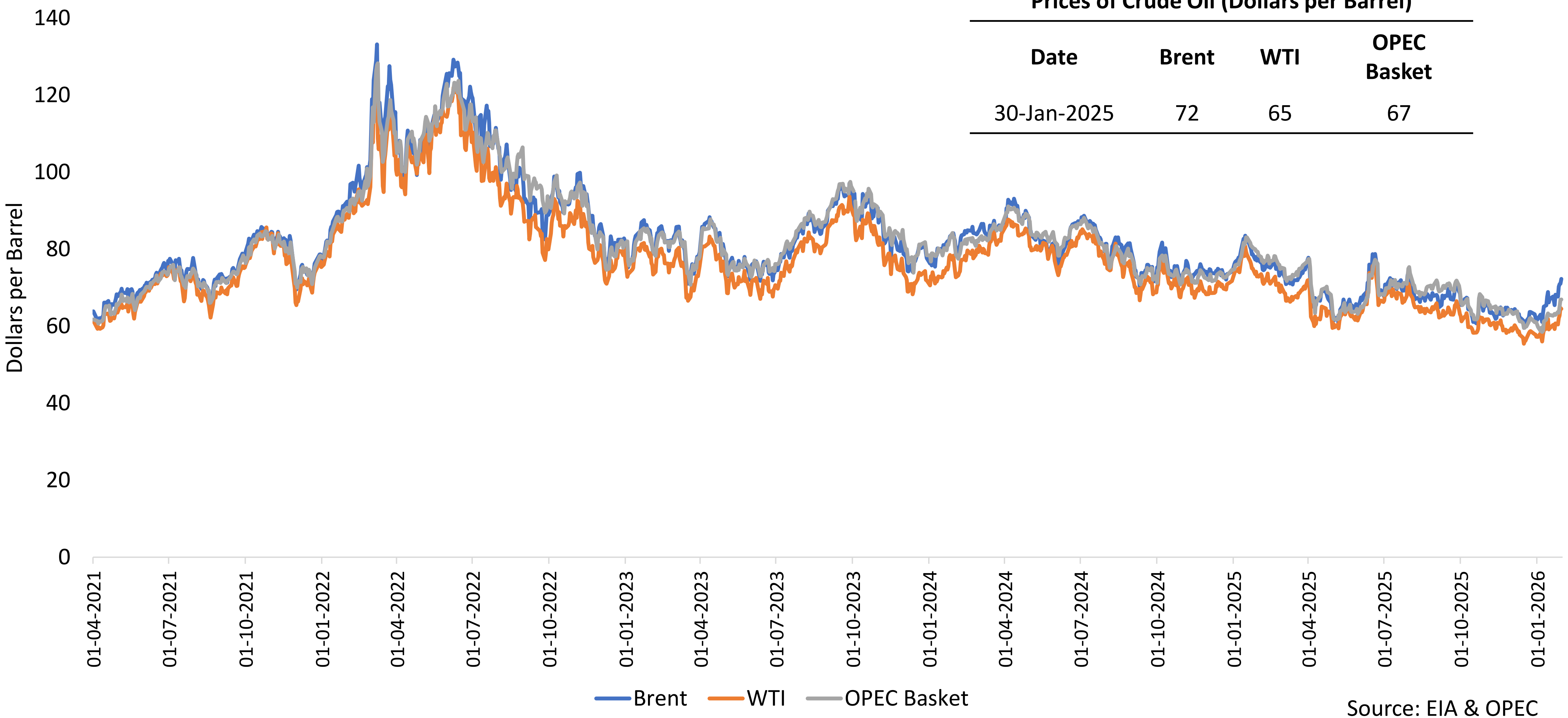


NOTE: The data is based on the latest available information.

Source: MoPNG and PPAC

Daily Prices of Crude Oil

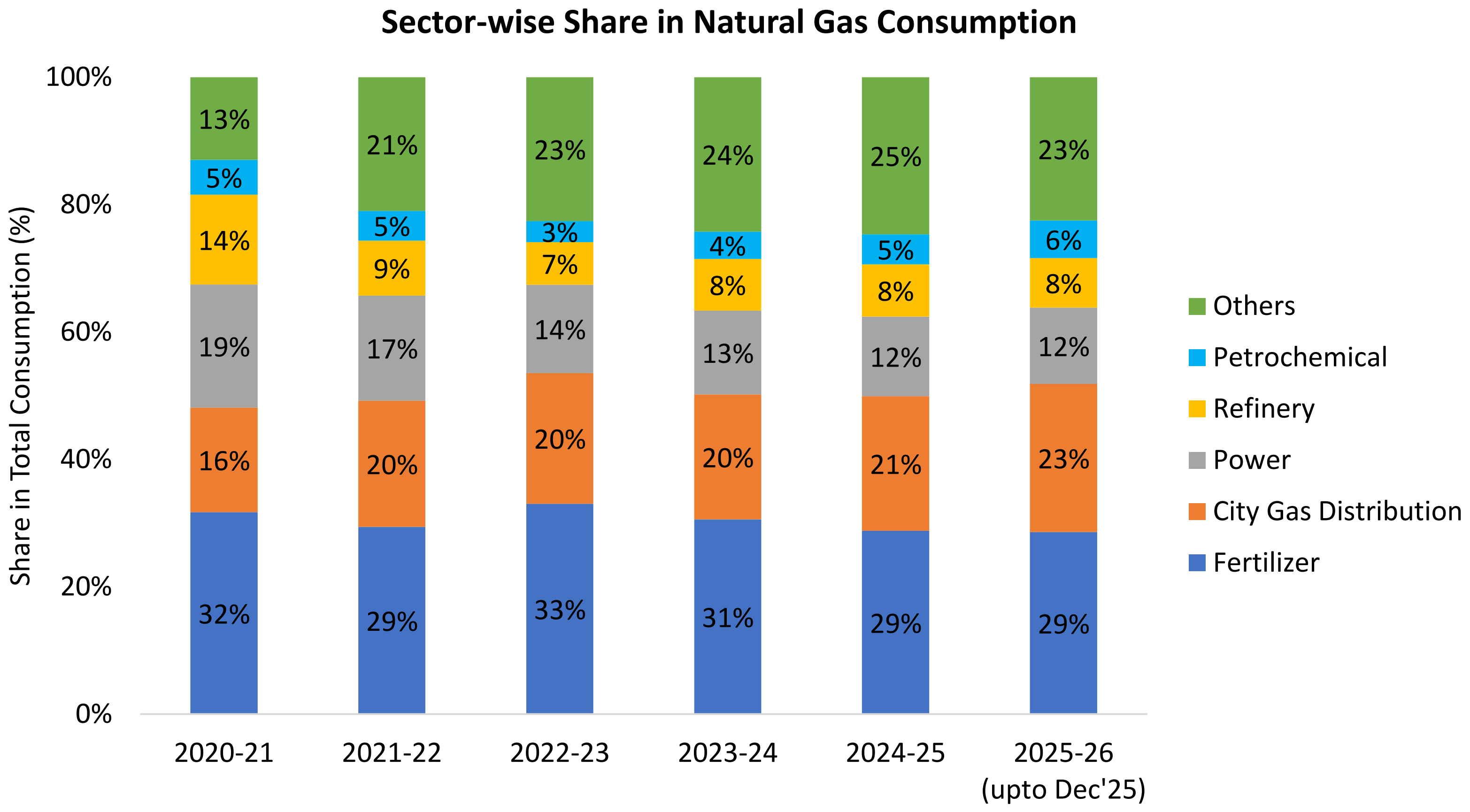
Daily Prices of Crude Oil

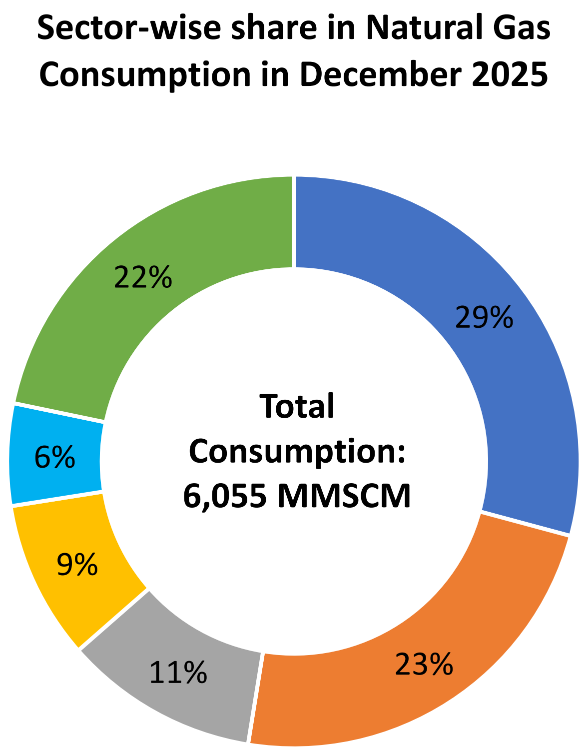


Prices of Crude Oil (Dollars per Barrel)			
Date	Brent	WTI	OPEC Basket
30-Jan-2025	72	65	67

Source: EIA & OPEC

Gas Market Scenario (1/2)





Total Consumption of Natural Gas (NG) (MMSCM)

Total Consumption	2021-22	2022-23	2023-24	2024-25	2025-26 (up to Dec'25)
Natural Gas	**61,491**	**58,702**	**68,809**	**71,196**	**52,654**

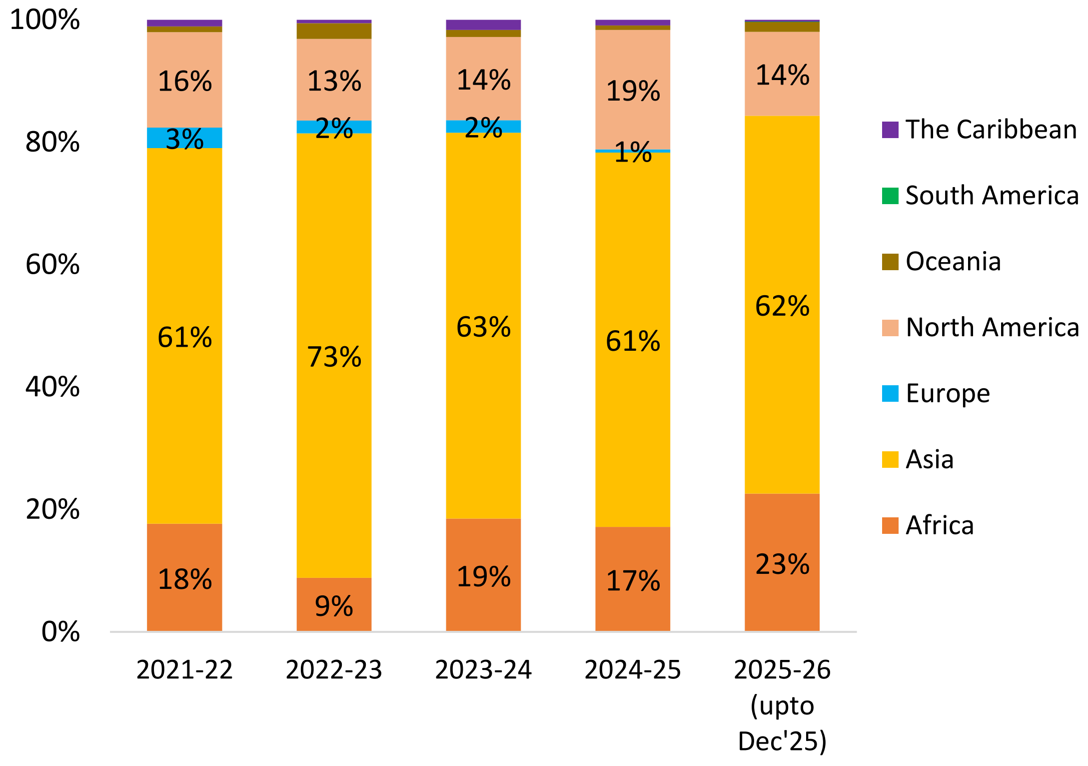
Others include- Internal Consumption of Pipeline System, Industrial, Sponge iron/steel, LPG shrinkage, Manufacturing, Agriculture (tea plantation), Others

NOTE: The data is available latest up to December 2025

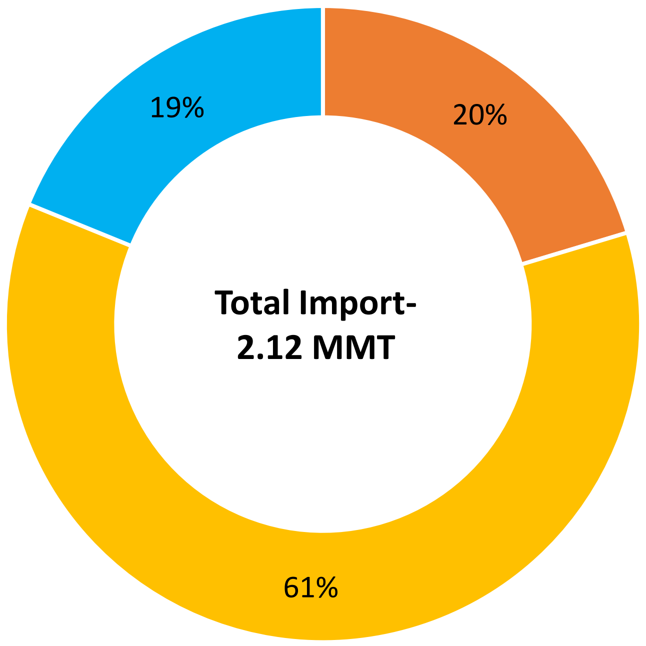
Source: PPAC

Gas Market Scenario (2/2)

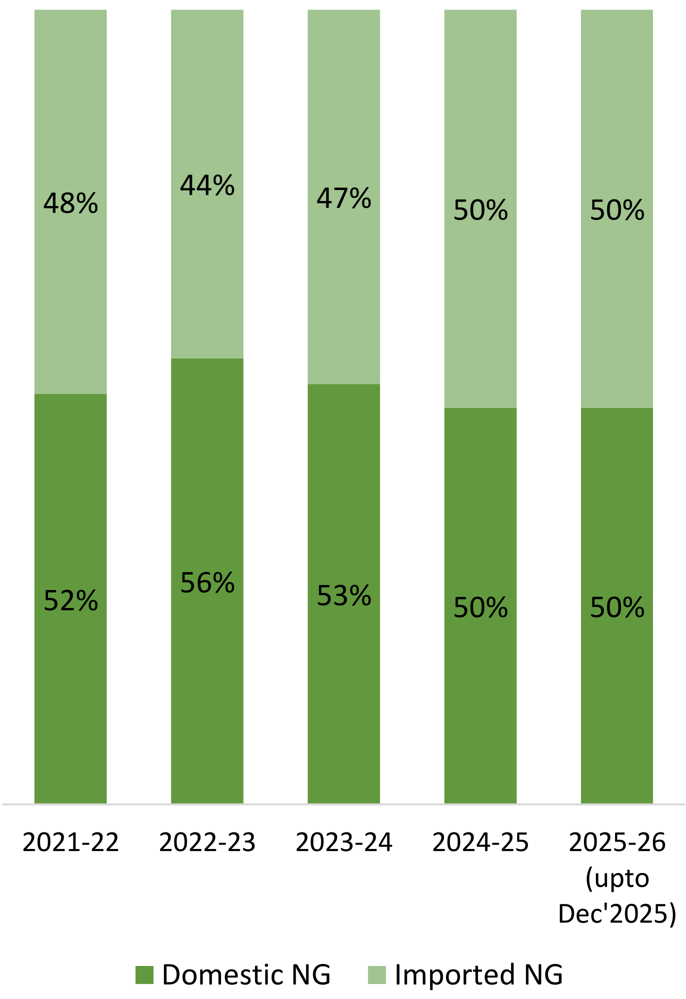
Region-wise Share in Import of LNG (%)



Country Share of Imported LNG in December 2025



Domestic and Imported Natural Gas share in India (%)



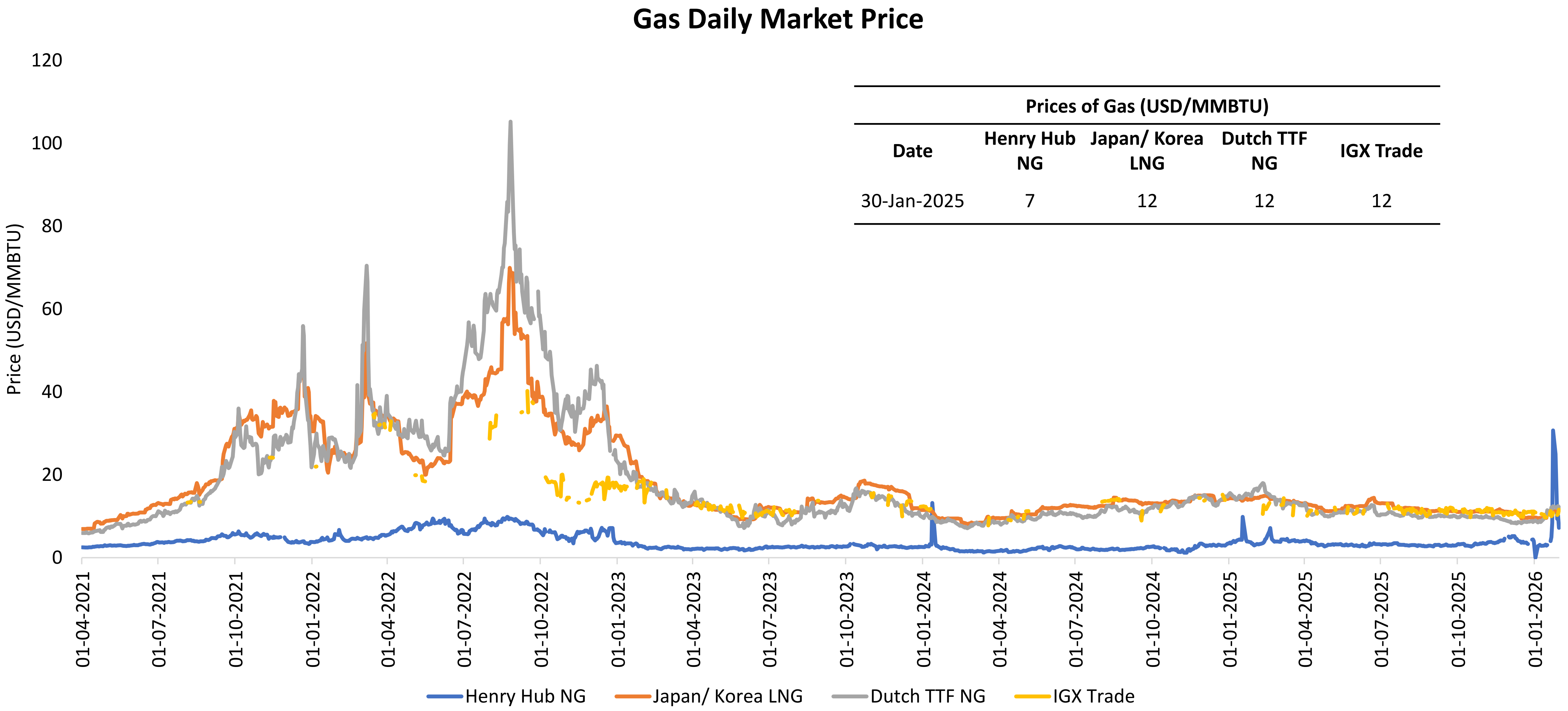
Total Import of Liquified Natural Gas (LNG) (MMT)

Total Import	2023-24	2024-25	2025-26 (up to Dec'25)
LNG	**24.00**	**26.96**	**19.72**

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

Source: MoCI and PPAC

Daily Prices of Gas

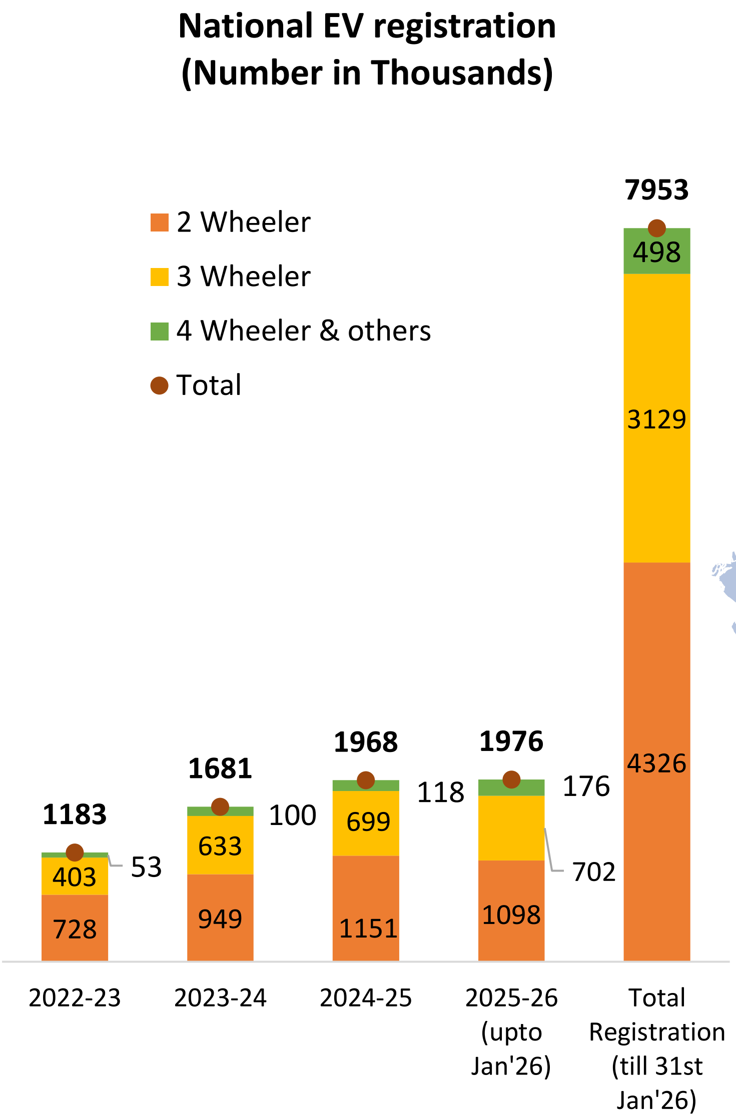


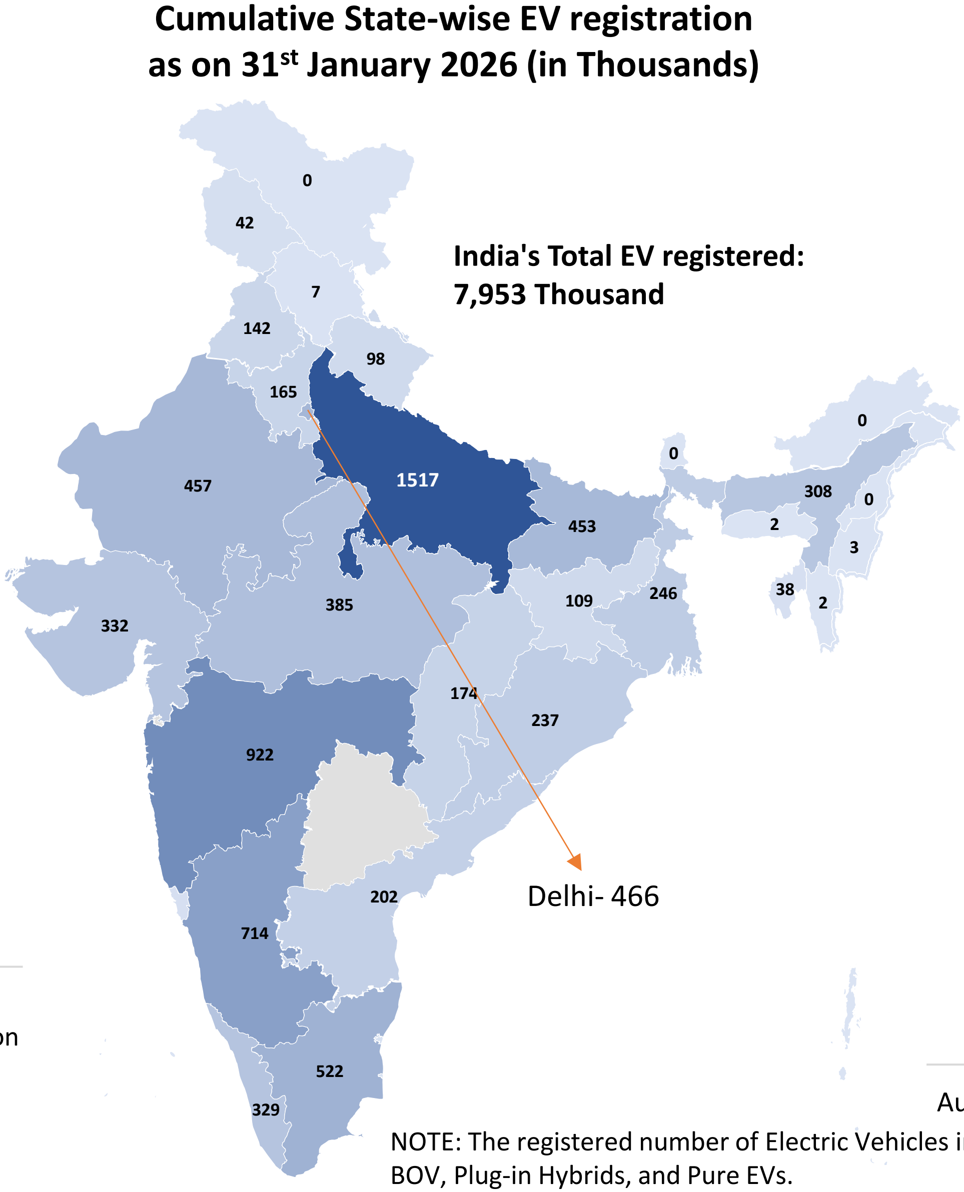
Prices of Gas (USD/MMBTU)				
Date	Henry Hub NG	Japan/ Korea LNG	Dutch TTF NG	IGX Trade
30-Jan-2025	7	12	12	12

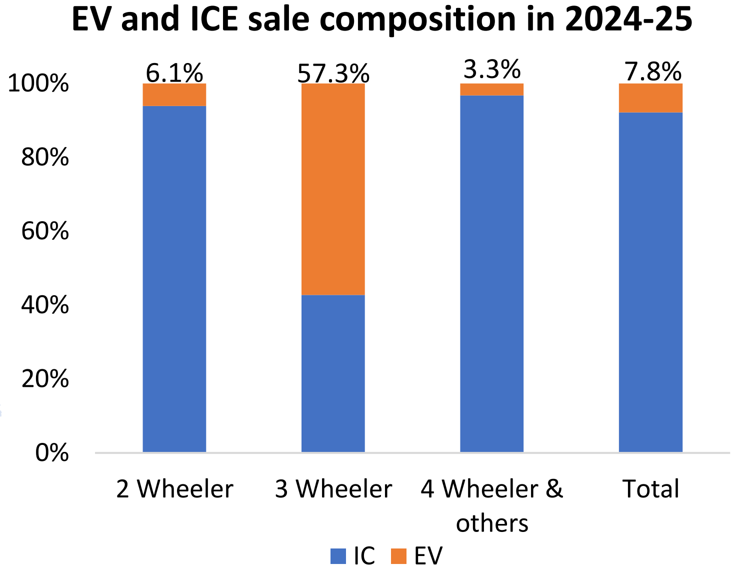
MMBTU- Million Metric British Thermal Unit

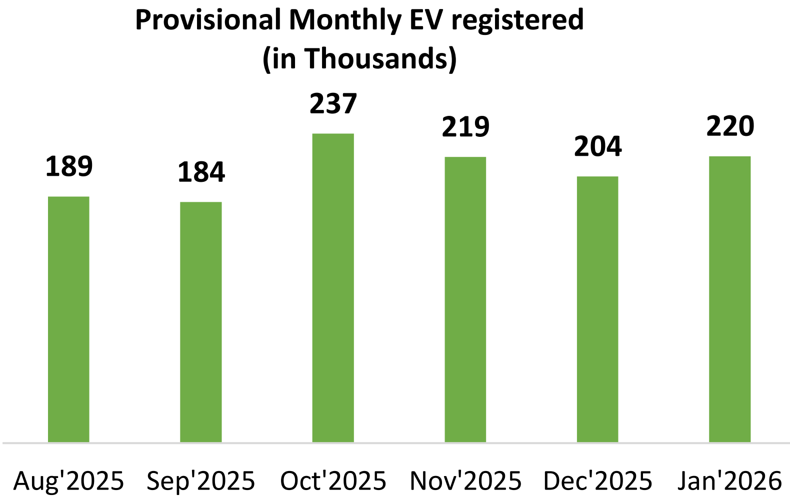
Source: EIA, Investing.com, IGX

Status of Electric Mobility in India





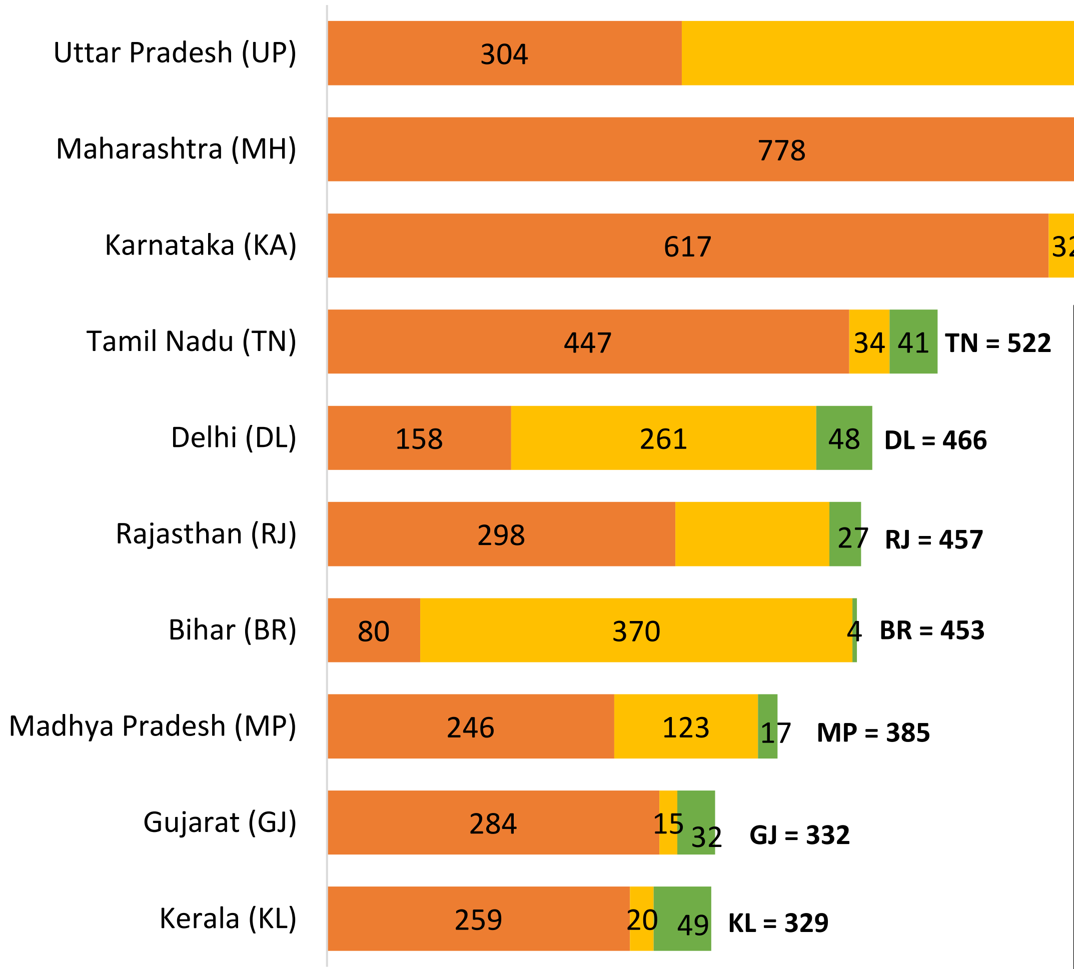


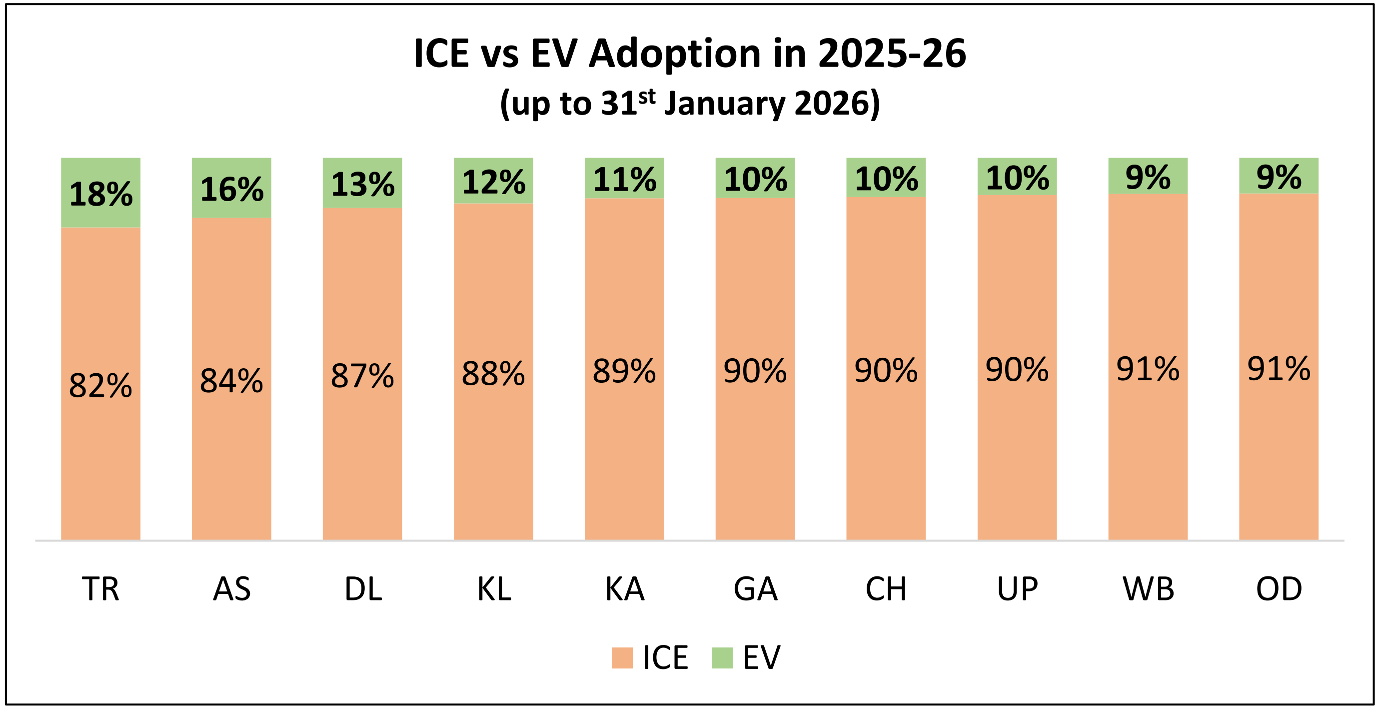


NOTE: The registered number of Electric Vehicles includes Electric BOV, Plug-in Hybrids, and Pure EVs.

Source: VAHAN Dashboard

Status of Electric Mobility in India





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

Source: VAHAN Dashboard

Recent Interventions to promote Renewable Energy

Solar

Under the PLI scheme, the GOI has announced INR 19,500 crores to incentivize the manufacturing of domestic solar PV modules.

PM-Surya Ghar: Muft Bijli Yojana relaesed 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.

PM KUSUM scheme has been extended till Mar'26 to install pump sets up to 15 HP in selected areas.

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

- The Ministry of Power unveiled the [Draft National Electricity Policy (NEP) 2026] on 20 January 2026, outlining a comprehensive roadmap to transform the power sector in line with the Viksit Bharat @2047 vision. The key highlights include:
    - Financial turnaround and commercial viability of the power sector
    - Reliable, quality power supply to meet peak and energy demand
    - Competitive electricity prices aligned with Viksit Bharat @ 2047 vision
    - Increase in the share of non-fossil capacity to meet NDC commitments
    - Promote competition in electricity supply
    - Increase in per capita consumption to 2,000 kWh by 2030 and over 4,000 kWh by 2047, with a focus on energy efficiency
    - Strengthening of grid resilience for large-scale renewable integration, flexible operations, climate adaptation and cybersecurity needs.
    - Stronger, resilient grid for large-scale RE integration, flexibility, climate adaptation & cybersecurity
    - Enhanced consumer-centric services and demand-side management
    - Faster dispute resolution to reduce sectoral and consumer financial burden
    - Mandatory Resource Adequacy planning at state and national levels.

Recent Key Highlights or Announcements

- In the Union Budget 2026–27, the Government of India outlined the following key allocations and reforms for the Power & Energy sector:
  - ₹32,914 crore allocated to Ministry of New and Renewable Energy, with major focus on solar expansion
  - ₹1,000 crore for Viability Gap Funding (VGF) for BESS and Pumped Storage Projects
  - ₹20,000 crore Carbon Capture, Utilisation and Storage (CCUS) programme (5 years) to support deep decarbonisation of hard-to-abate sectors
  - ₹18,000 crore allocation for Revamped Distribution Sector Scheme (RDSS). The enhanced funding supports ongoing power sector reforms, including reduction of AT&C losses, smart metering deployment, and measures to improve the financial stability of distribution companies (DISCOMs), strengthening operational efficiency and network modernization.
  - Incentives for states to implement Distribution Reforms, with additional borrowing limits (0.5% of GSDP) linked to performance in reducing AT&C losses.
  - Proposal to restructure Power Finance Corporation (PFC) and REC Limited to improve credit flow for modernizing transmission and distribution infrastructure has been set.
  - Basic Customs duty relief to boost domestic manufacturing across clean energy value chains

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