

# India's Energy Overview

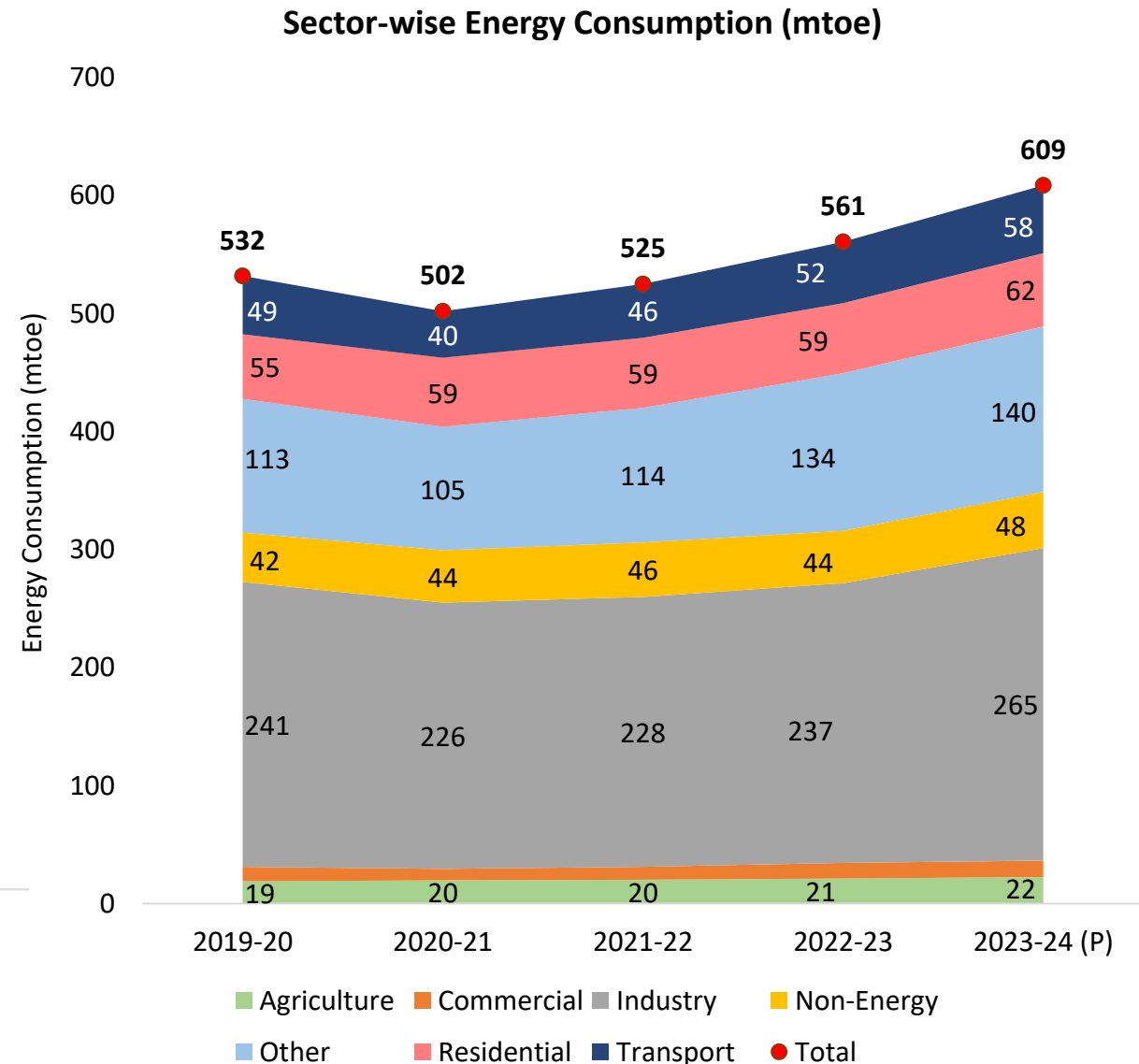
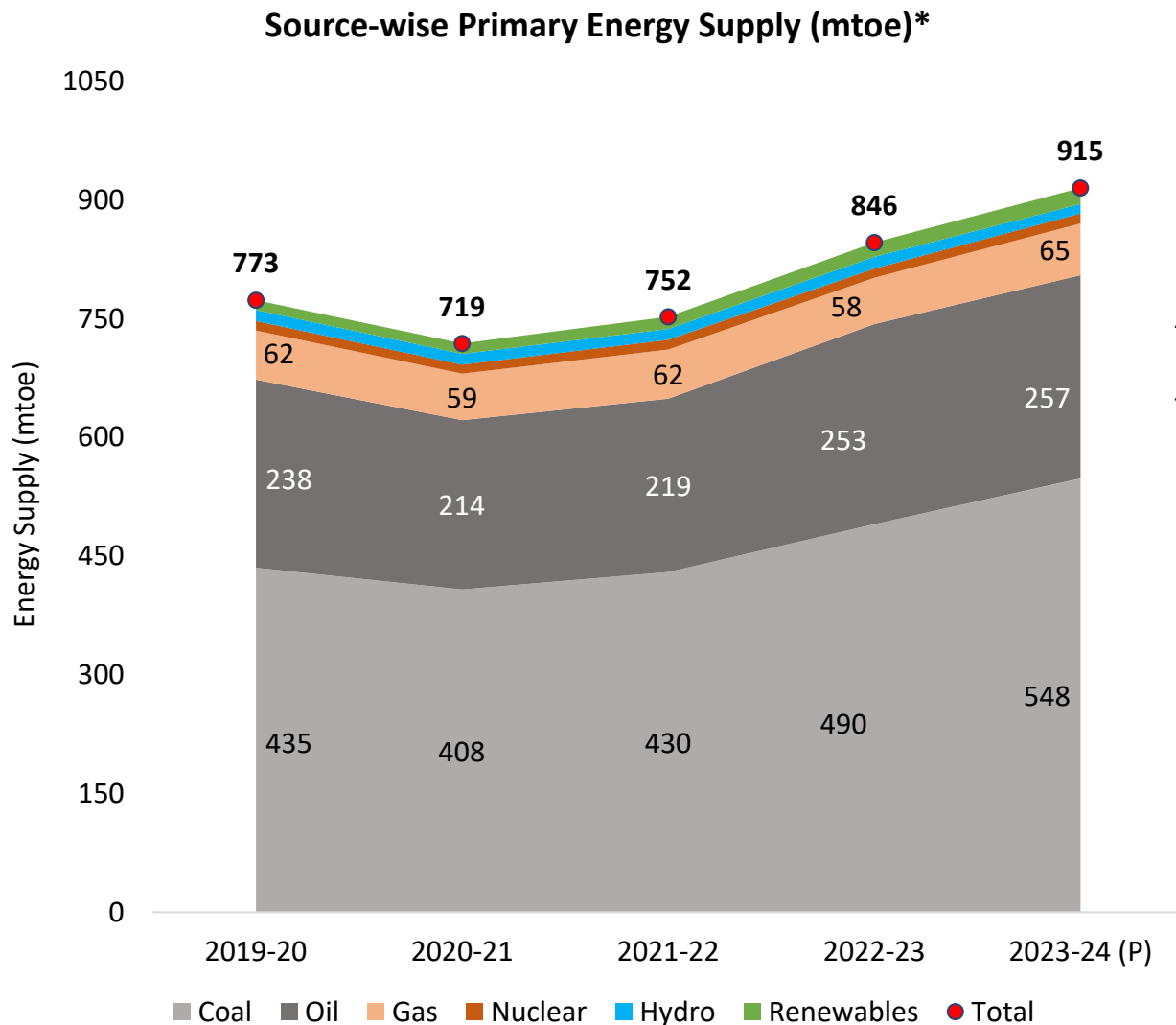
February 2026



# Contents

1. Primary and Final Energy Mix in India
2. Per-Capita Energy and Electricity Consumption
3. India's Electricity Capacity Mix (Utility-scale)
4. Non-Fossil Energy Capacity Growth Post-2015 Paris Agreement
5. India's Electricity Addition in last 5 years
6. State-wise Solar Installed Capacity
7. State-wise Wind Installed Capacity
8. Top 10 High RE States and Their Capacity Mix
9. Renewable Energy Potential
10. RE Installed capacity as a Percentage of the total resource potential in the state as on February 2026
11. India's Electricity Generation Mix
12. Thermal Generation Loss and Reasons for Forced Outages
13. Indian Electricity Exchange (IEX) Market Snapshot
14. National and State-level Electricity Demand
15. India's Monthly Electricity Requirement and Supply
16. Monthly Electricity Demand for the top 5 states
17. Electricity Consumer-category wise top 5 States
18. National and State-level Peak Electricity Demand
19. India's Monthly Peak Electricity Demand and Supply
20. All India, Regional, and Seasonal Electricity Demand Curve of Peak Demand Day
21. Monthly Peak Electricity Demand for the top 5 states
22. Monthly Coal Statistics
23. Oil Market Scenario
24. Daily Prices of Crude Oil
25. Gas Market Scenario
26. Daily Prices of Gas
27. Status of Electric Mobility in India
28. Recent Interventions to Promote Renewable Energy
29. Recent Key Highlights or Announcements

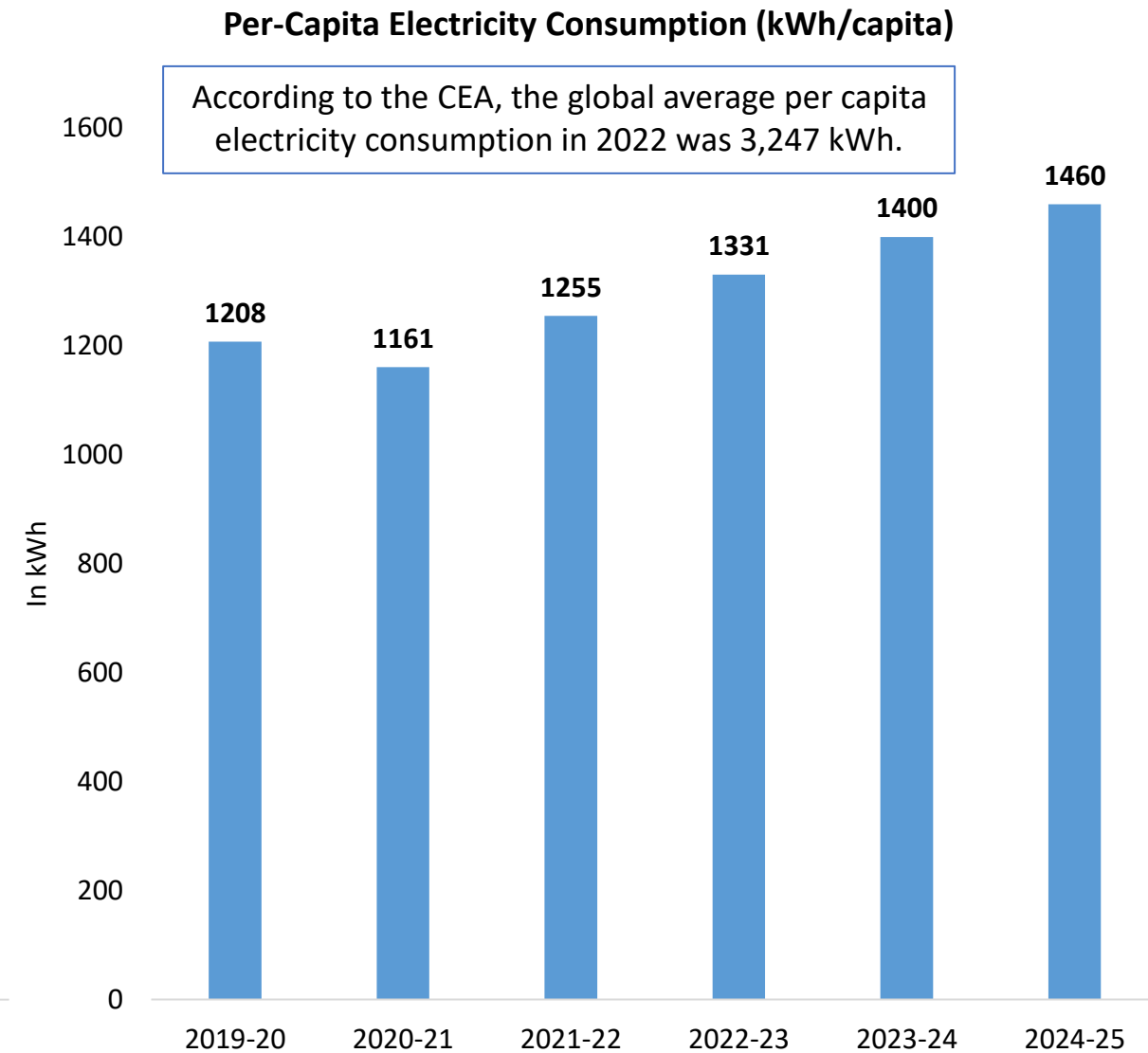
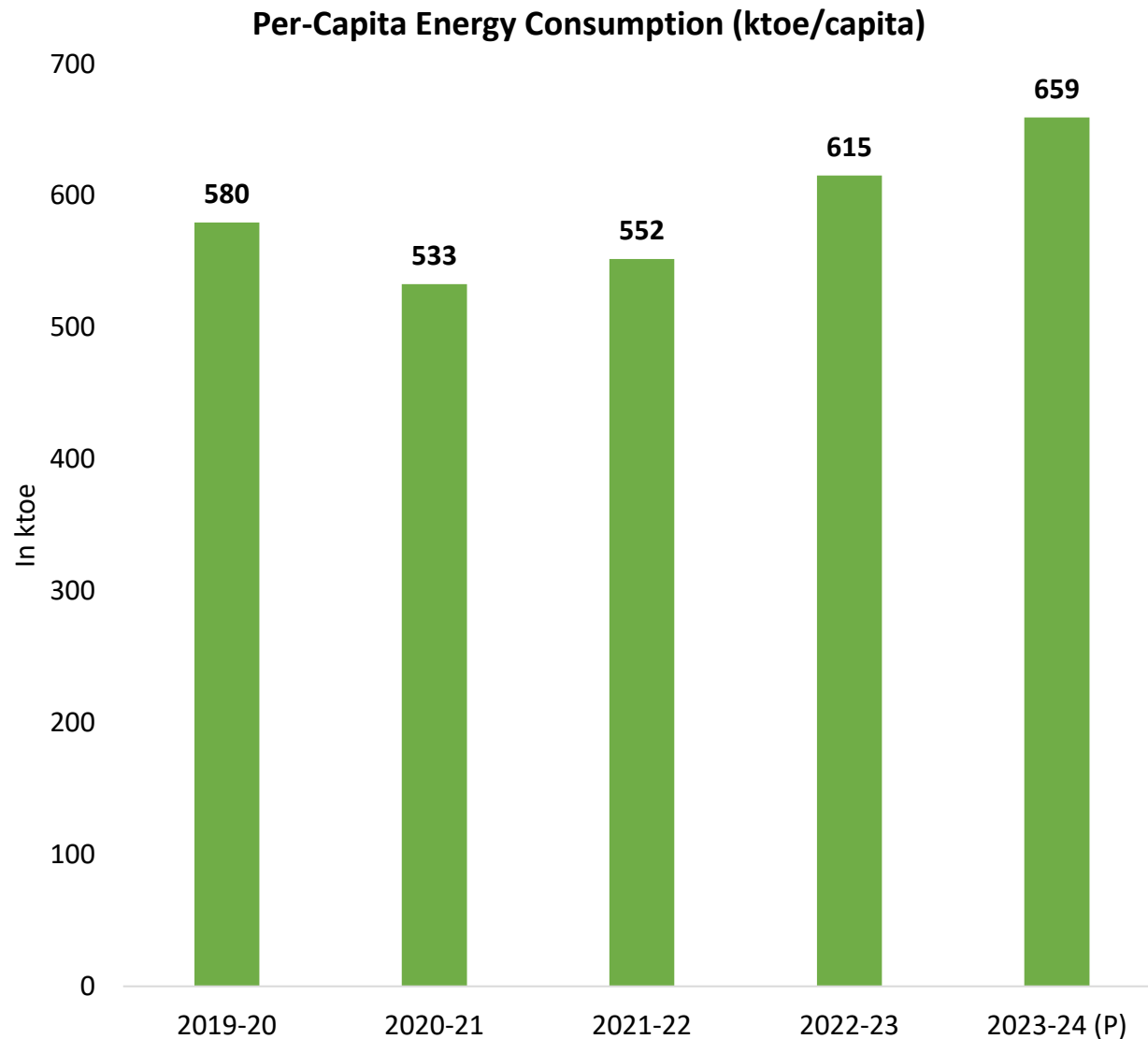
# Primary\* and Final Energy Mix in India



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

Source: ICED

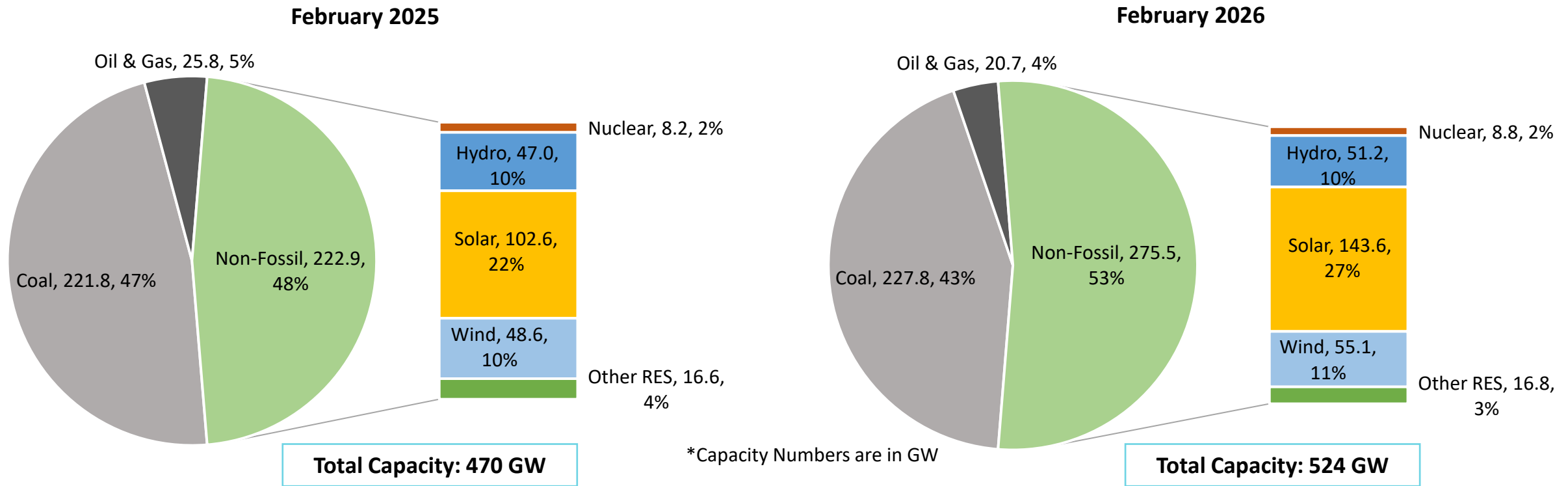
# Per-Capita Energy and Electricity Consumption



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

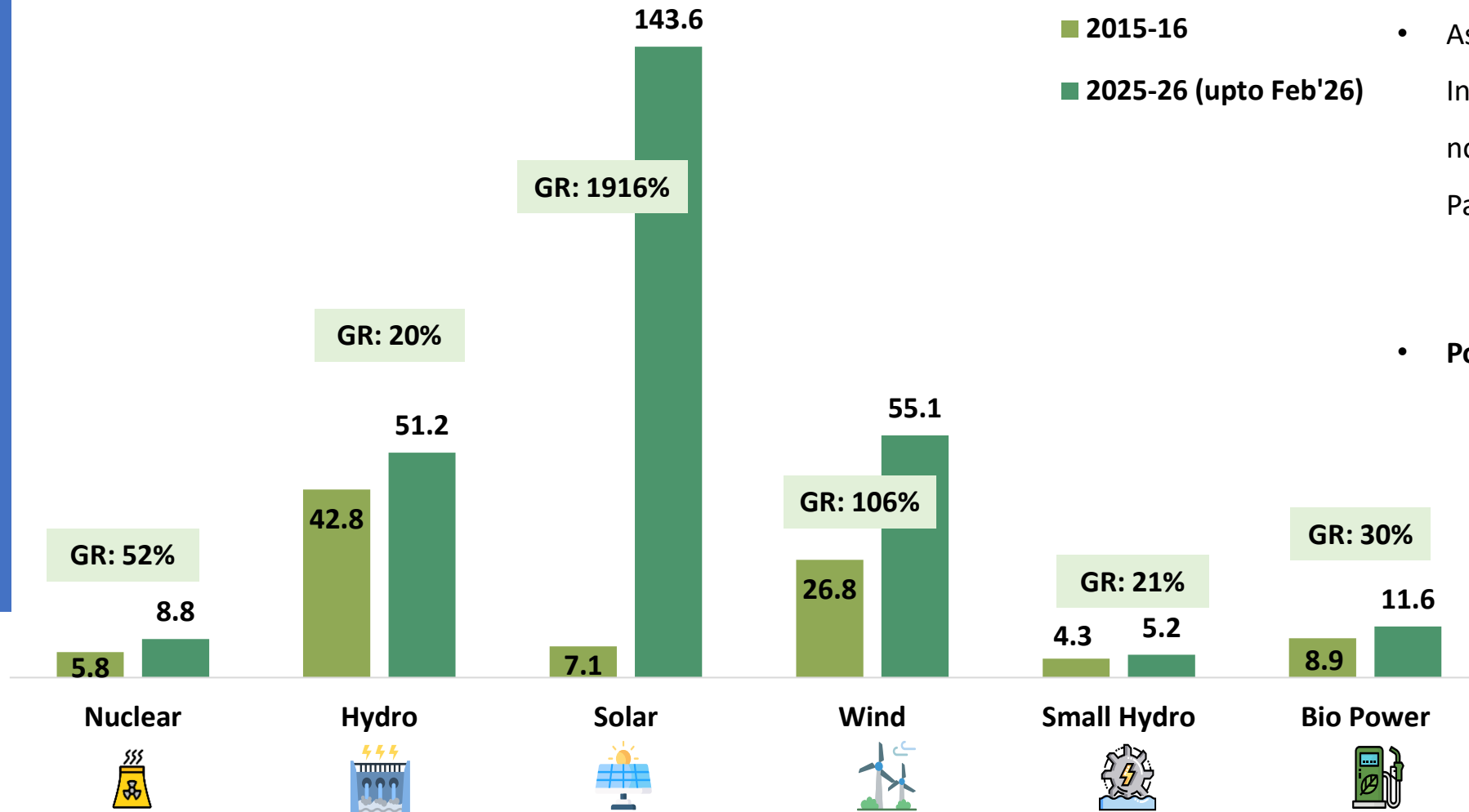
Source: ICED & CEA

# India's Electricity Capacity Mix (Utility-scale)



- India's electricity generating capacity is 524 GW as on Feb'2026 [coal 228 GW (43%), solar 144 GW (27%), wind 55 GW (11%), and hydro 51 (10%)].
- As on Feb'2026, India's renewable energy capacity (including large hydro) stood at 267 GW out of 524 GW.
- India has updated its NDC target to achieve 60% non-fossil capacity by 2035, after meeting the earlier 50% target for 2030 five years ahead of schedule.

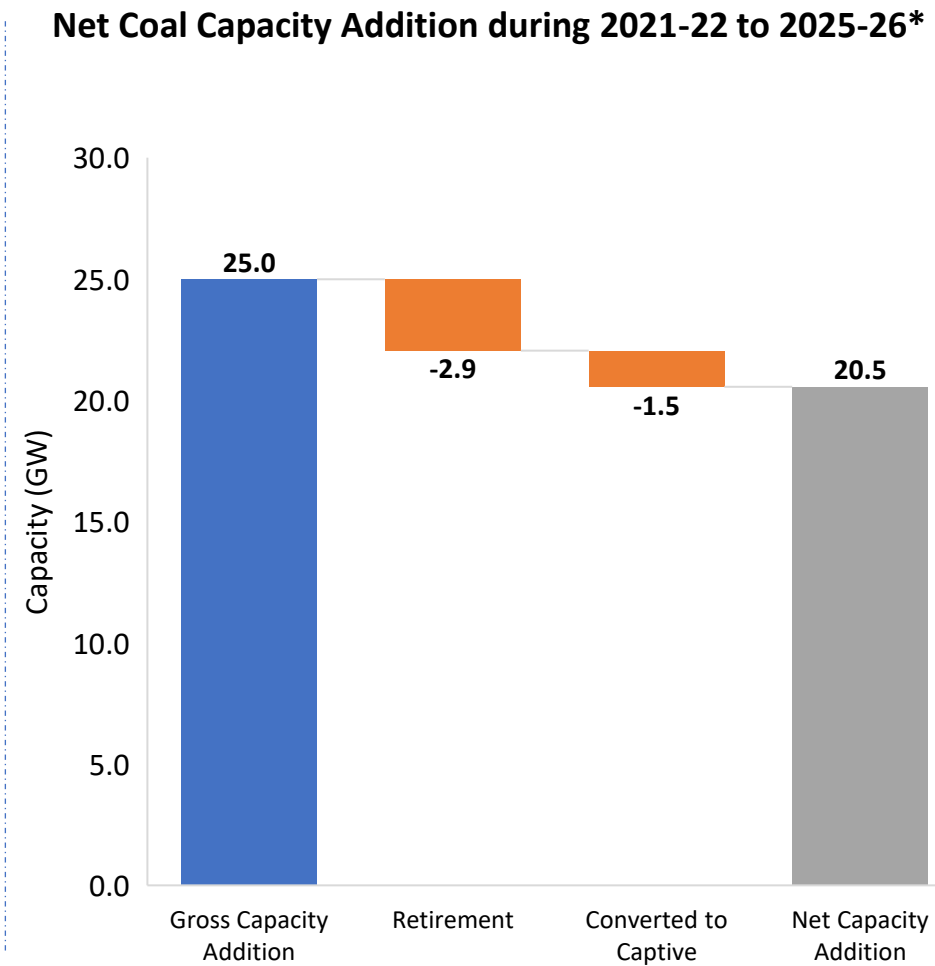
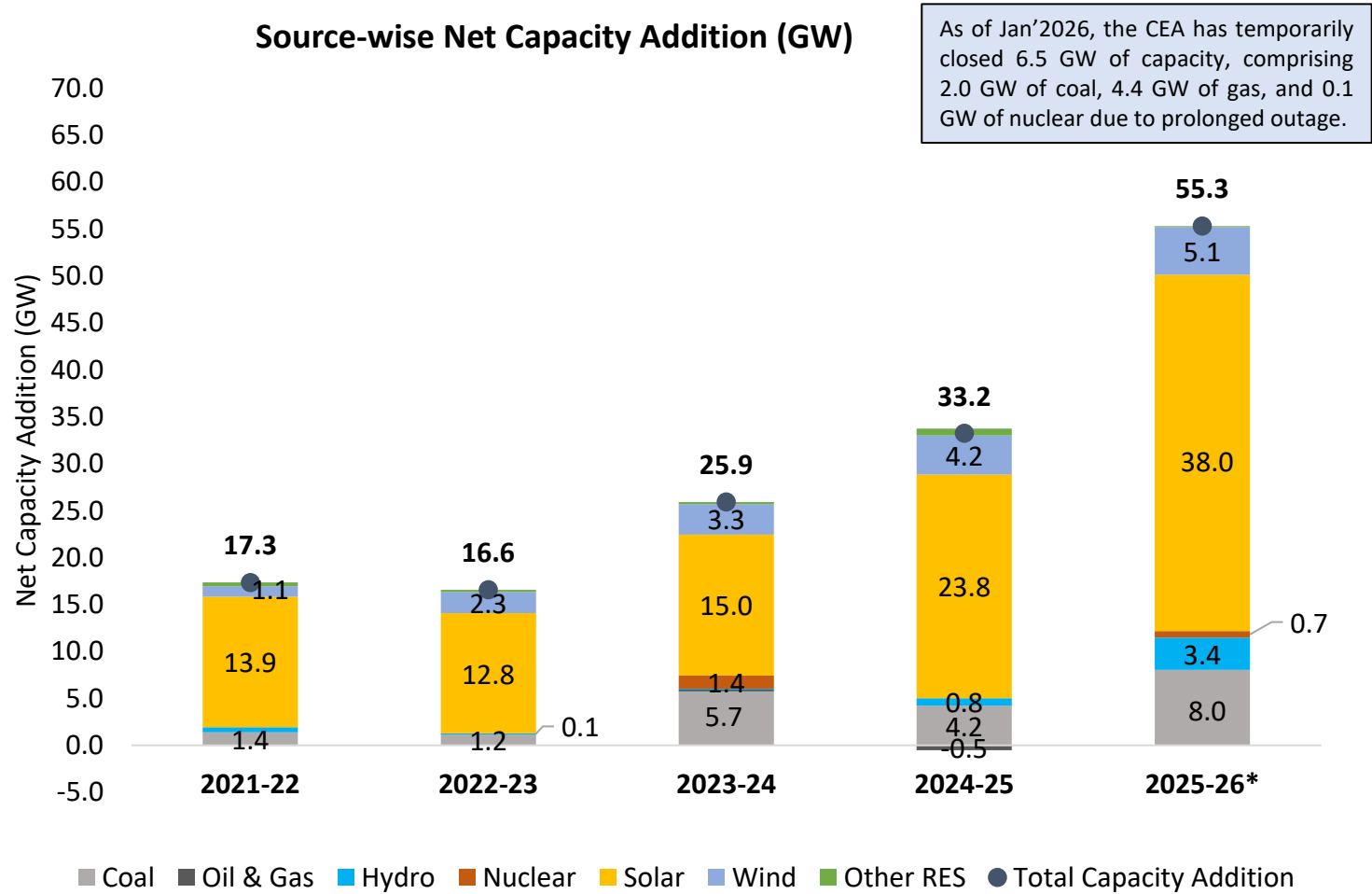
# Non-Fossil Energy Capacity (in GW) Growth Post-2015 Paris Agreement



- As of 28 February 2026, **53% (275 GW)** of India's total power capacity (**524 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 increased by **4% CAGR**.

# India's Electricity Capacity Addition in last 5 years



- A total of 126 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.

# State-wise Solar Capacity

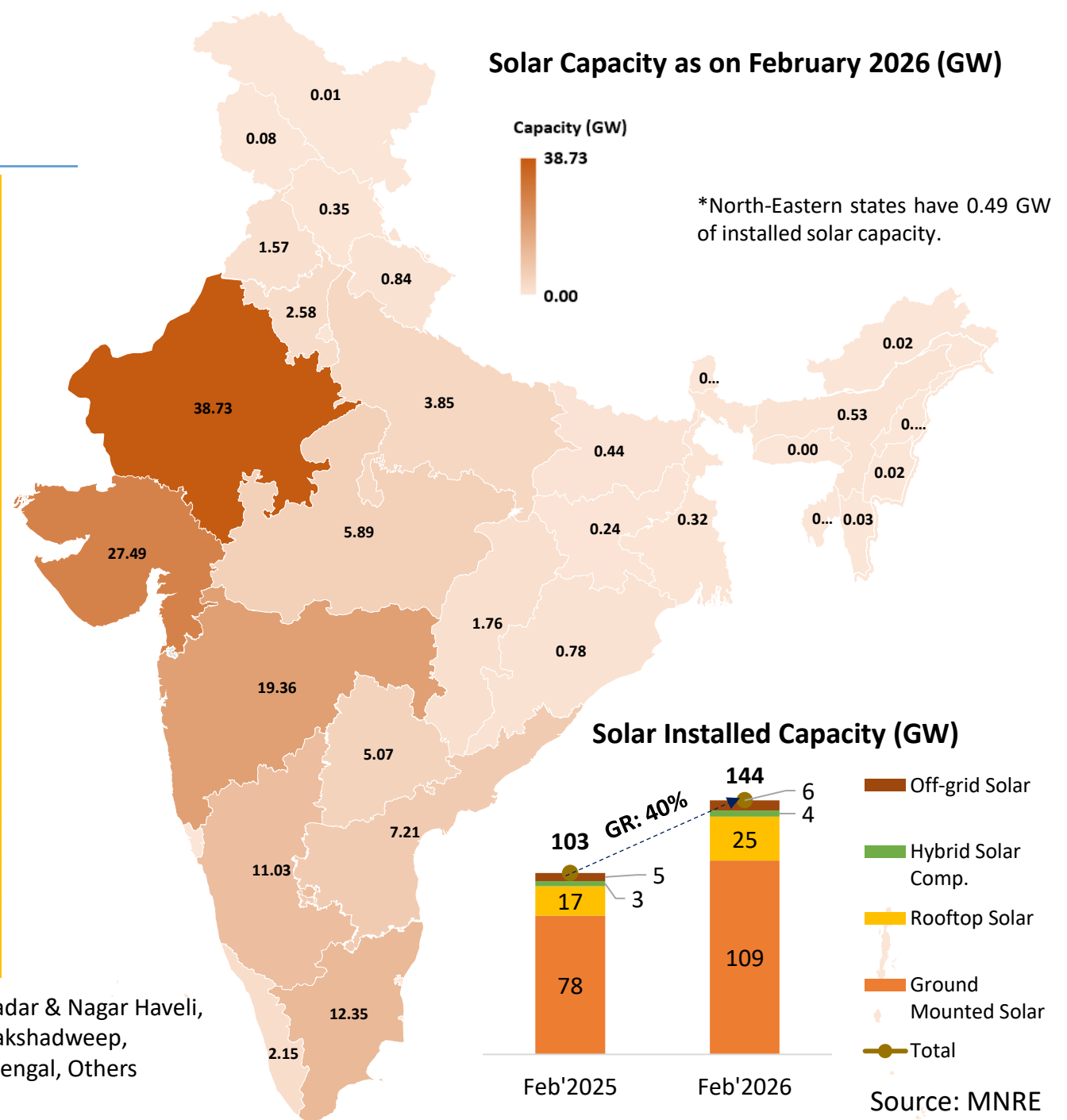
as on February 2026

State-wise Installed Capacity of Solar Power (GW)

| States           | Ground Mounted | Rooftop      | Solar Component in Hybrid | Off Grid    | Total Solar Power |
|------------------|----------------|--------------|---------------------------|-------------|-------------------|
| Rajasthan        | 33.86          | 2.07         | 1.98                      | 0.82        | 38.73             |
| Gujarat          | 19.47          | 6.67         | 1.17                      | 0.17        | 27.49             |
| Maharashtra      | 12.17          | 5.22         | 0.00                      | 1.97        | 19.36             |
| Tamil Nadu       | 10.94          | 1.34         | 0.00                      | 0.07        | 12.35             |
| Karnataka        | 9.79           | 0.84         | 0.36                      | 0.04        | 11.03             |
| Andhra Pradesh   | 6.35           | 0.77         | 0.00                      | 0.09        | 7.21              |
| Madhya Pradesh   | 4.94           | 0.85         | 0.00                      | 0.10        | 5.89              |
| Telangana        | 4.36           | 0.70         | 0.00                      | 0.01        | 5.07              |
| Uttar Pradesh    | 2.79           | 0.69         | 0.00                      | 0.36        | 3.85              |
| Haryana          | 0.27           | 1.16         | 0.00                      | 1.15        | 2.58              |
| Kerala           | 0.34           | 1.79         | 0.00                      | 0.02        | 2.15              |
| Chhattisgarh     | 1.20           | 0.17         | 0.00                      | 0.39        | 1.76              |
| Punjab           | 0.89           | 0.58         | 0.00                      | 0.10        | 1.57              |
| Uttarakhand      | 0.54           | 0.27         | 0.00                      | 0.02        | 0.84              |
| Others           | 1.60           | 1.74         | 0.00                      | 0.40        | 3.73              |
| <b>All India</b> | <b>109.50</b>  | <b>24.87</b> | <b>3.51</b>               | <b>5.73</b> | <b>143.60</b>     |

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

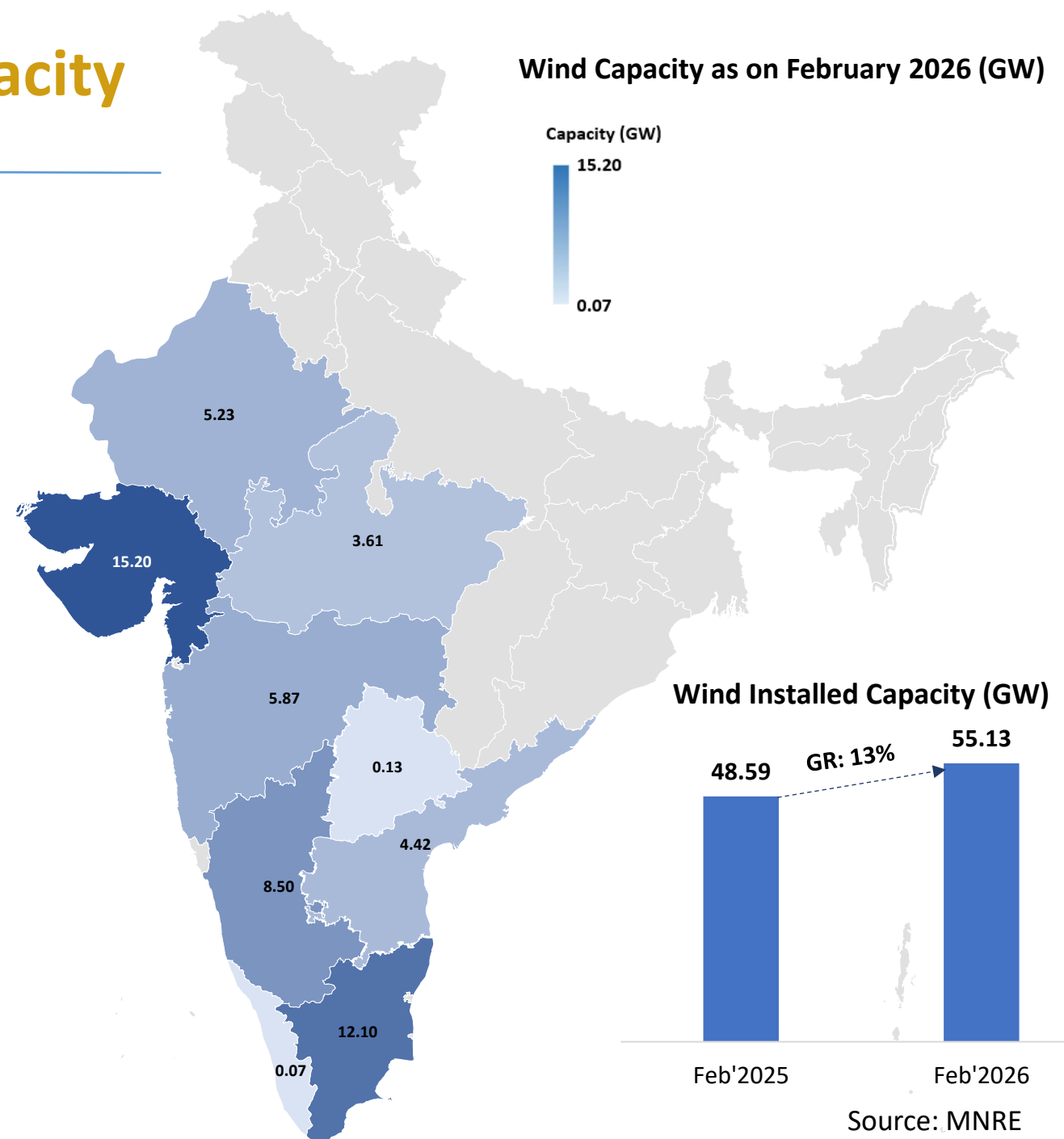
Solar Capacity as on February 2026 (GW)



# State-wise Wind Onshore Capacity

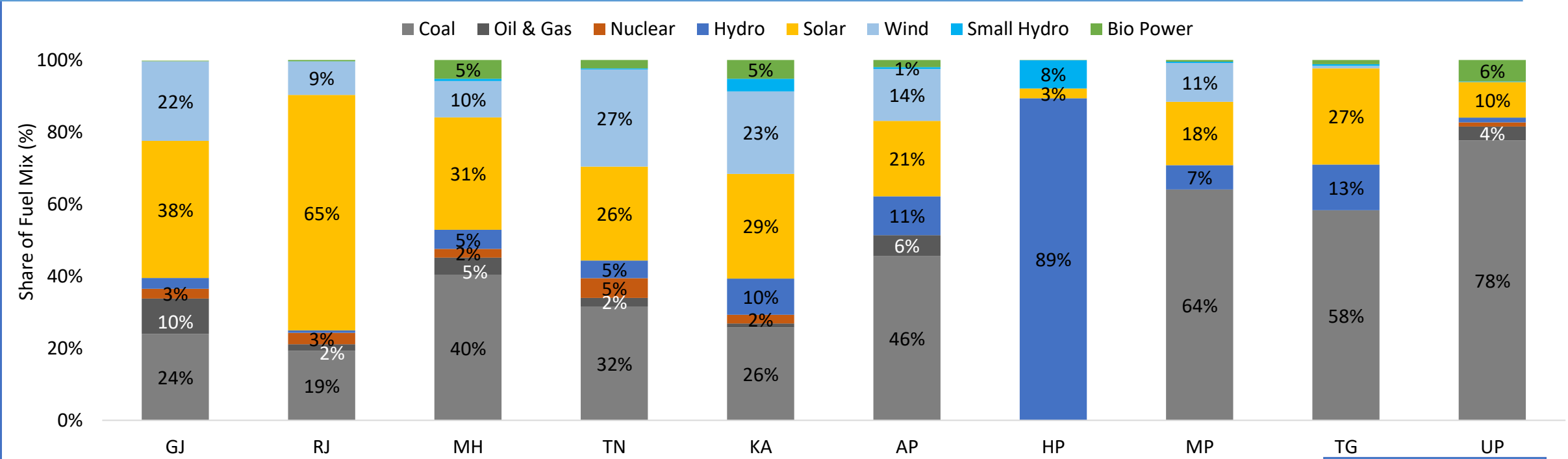
as on February 2026

| State-wise installed capacity of Wind (Onshore) Power |                         |
|---|-------------------------|
| States  | Installed Capacity (GW) |
| Gujarat   | 15.20                   |
| Tamil Nadu  | 12.10                   |
| Karnataka   | 8.50                    |
| Maharashtra   | 5.87                    |
| Rajasthan   | 5.23                    |
| Andhra Pradesh  | 4.42                    |
| Madhya Pradesh  | 3.61                    |
| Telangana   | 0.13                    |
| Kerala  | 0.07                    |
| <b>India Total</b>                                    | <b>55.13</b>            |



# Top 10 High RE\* States and Their Capacity Mix

as on February 2026




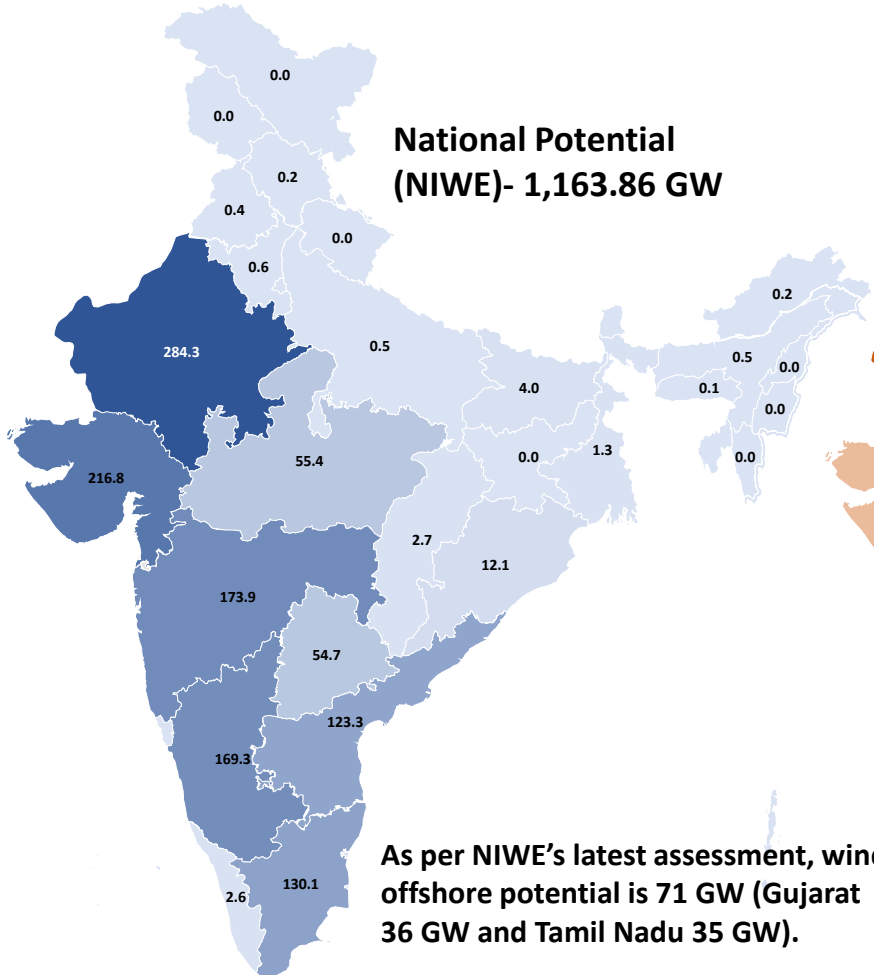
Numbers are in GW

| Parameters                      | GJ    | RJ    | MH    | TN    | KA    | AP    | HP    | MP    | TG    | UP    |
|---------------------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| <b>Total Installed Capacity</b> | 69.43 | 58.23 | 59.20 | 46.29 | 37.18 | 31.34 | 12.79 | 33.19 | 19.75 | 38.66 |
| <b>Total RE Capacity</b>        | 44.92 | 44.60 | 31.67 | 27.83 | 26.42 | 15.67 | 12.79 | 12.02 | 7.91  | 6.71  |
| <b>RE Share</b>                 | 65%   | 77%   | 53%   | 60%   | 71%   | 50%   | 100%  | 36%   | 40%   | 17%   |

# Renewable Energy (RE) Potential


Wind Onshore (at 150m agl) and Offshore Potential

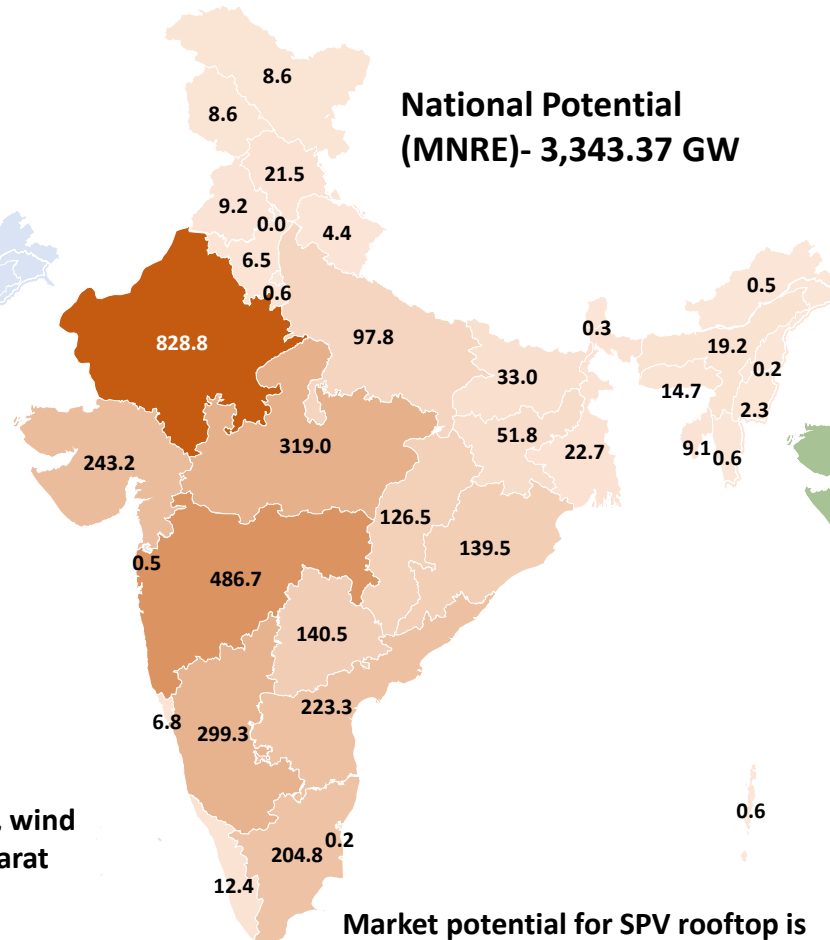
Wind Potential (GW)  0.00 284.25



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)

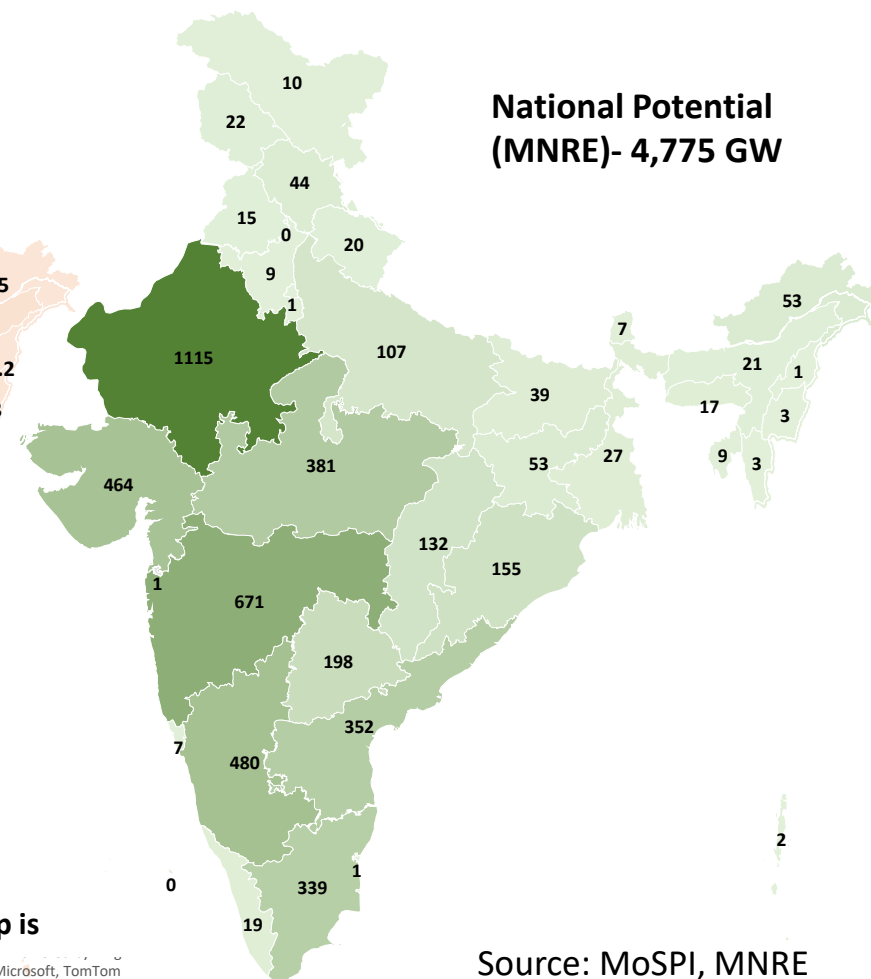
Solar Potential (GW)  0.0 828.8



Market potential for SPV rooftop is 124 GW.

Renewable Energy Potential (all sources incl. large Hydro)

Potential (GW)  0 1115

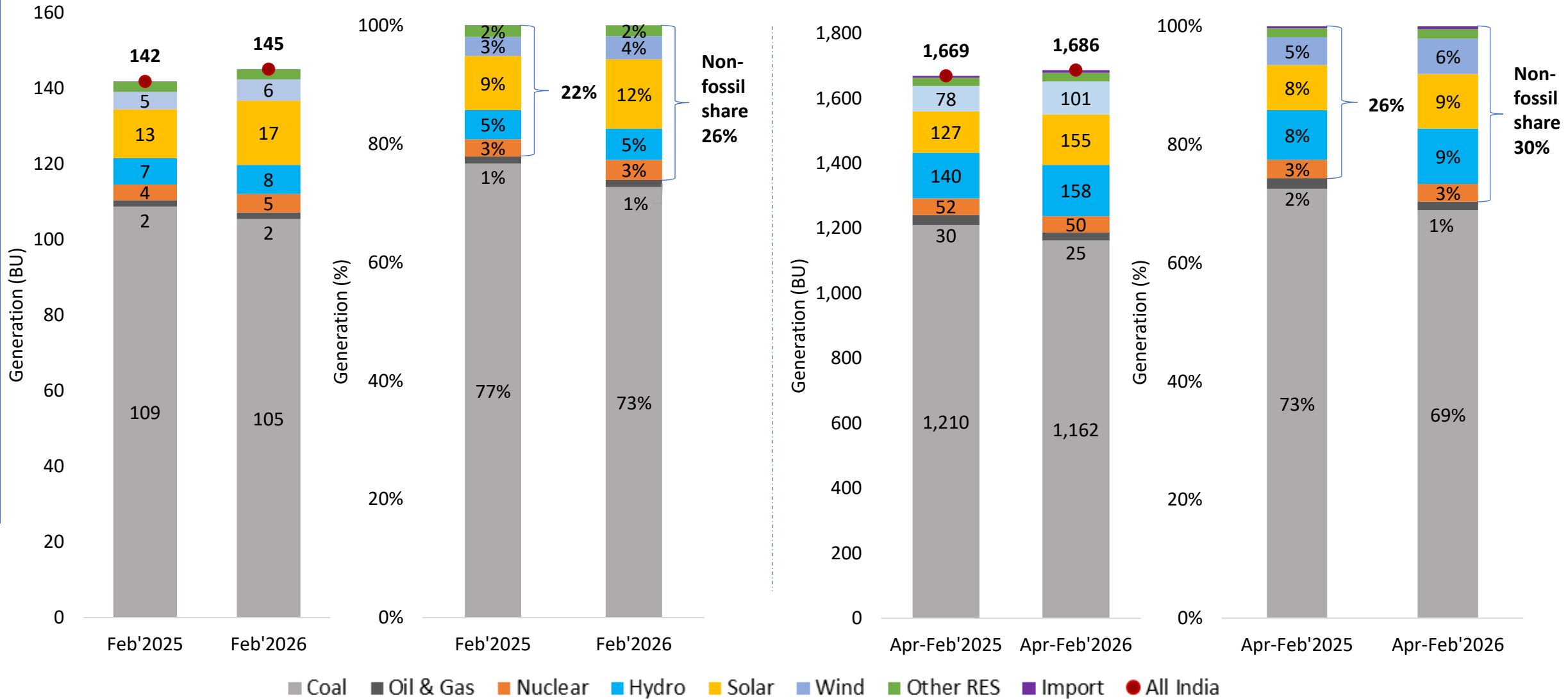


Source: MoSPI, MNRE

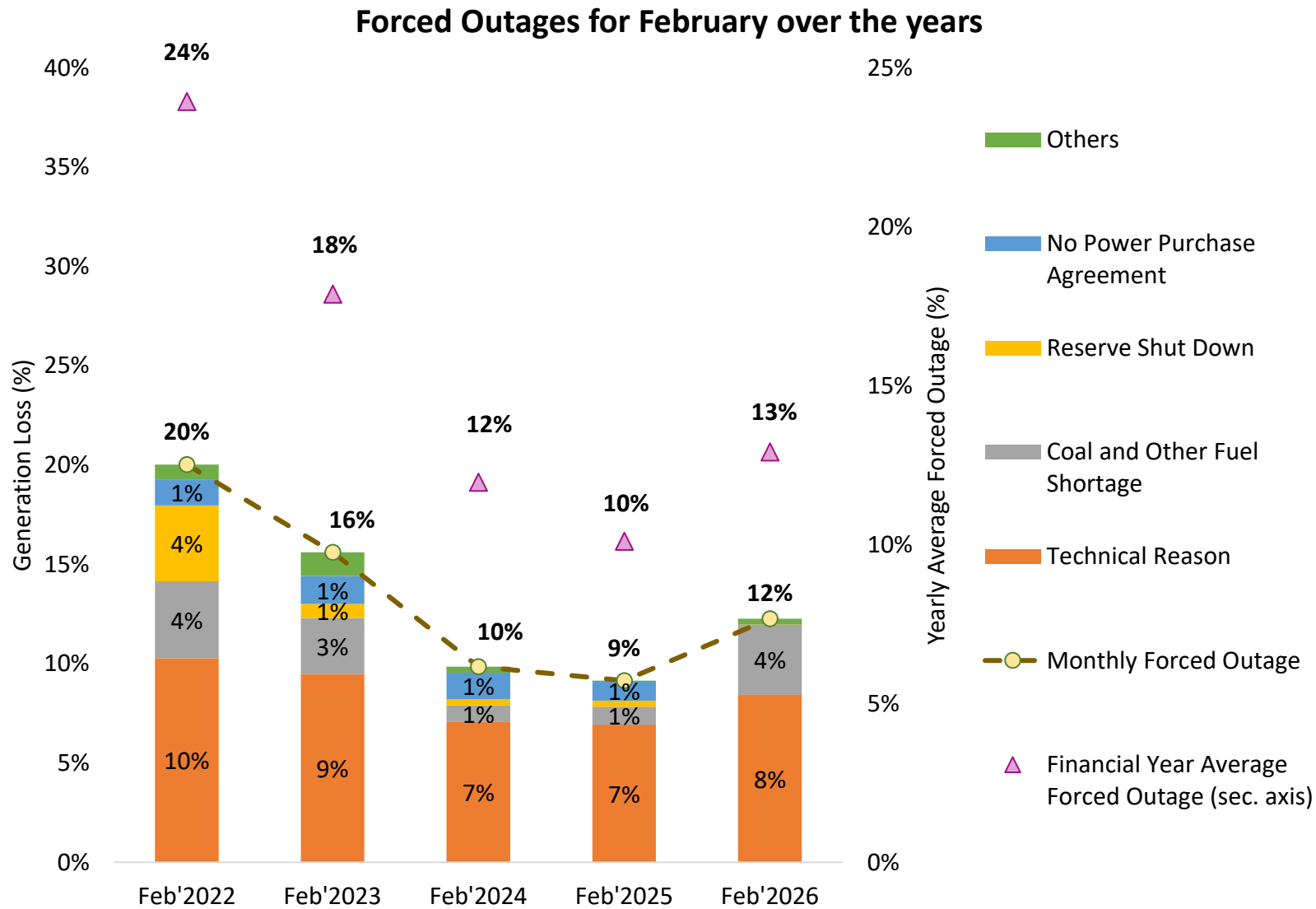


# India's Electricity Generation Mix

## Source-wise Generation Mix



# Thermal Generation Loss and Reasons for Forced Outages



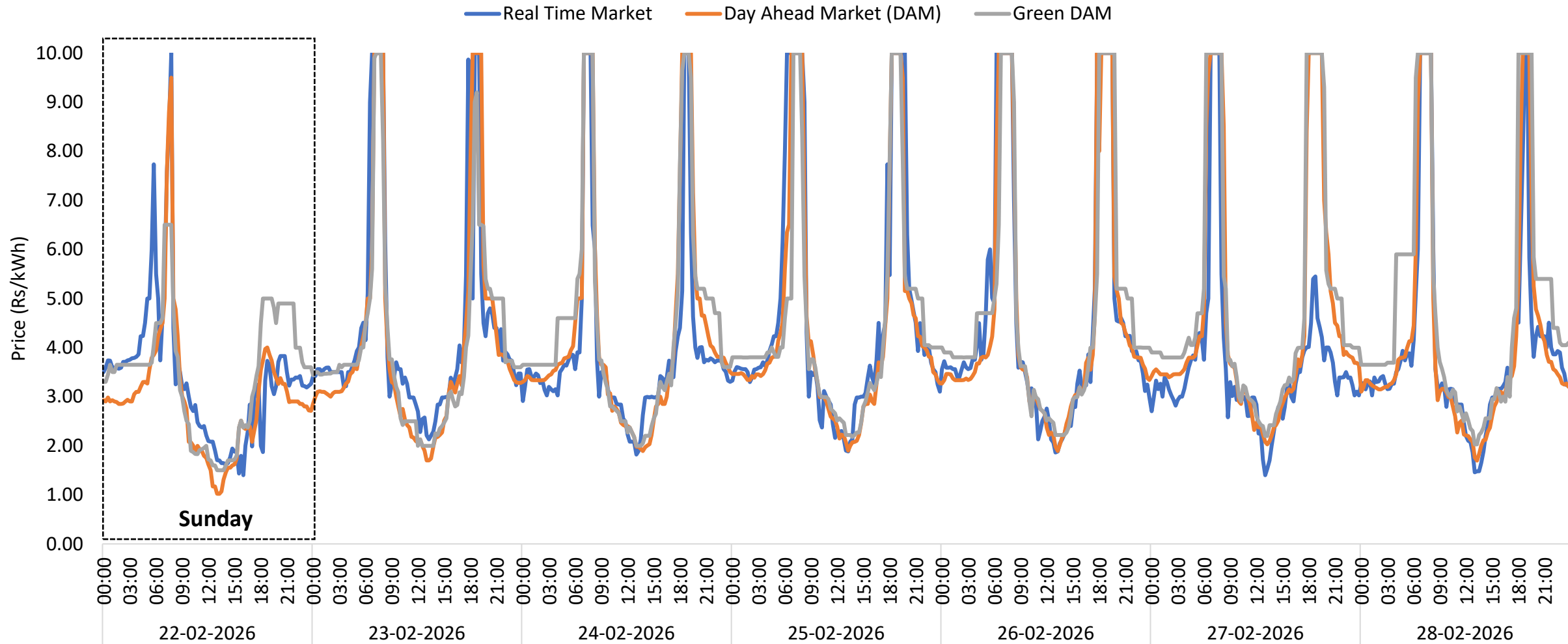
| Year/ Month |                           | Average Forced Outage Share |
|-------------|---------------------------|-----------------------------|
| Yearly      | FY 2023-24                | 12%                         |
|             | FY 2024-25                | 10%                         |
|             | FY 2025-26 (up to Feb'26) | 13%                         |
| Monthly     | Feb'2024                  | 10%                         |
|             | Feb'2025                  | 9%                          |
|             | Feb'2026                  | 12%                         |

Thermal includes only Coal and Lignite Plants.

Source: ICED

# Indian Electricity Exchange (IEX) Market Snapshot

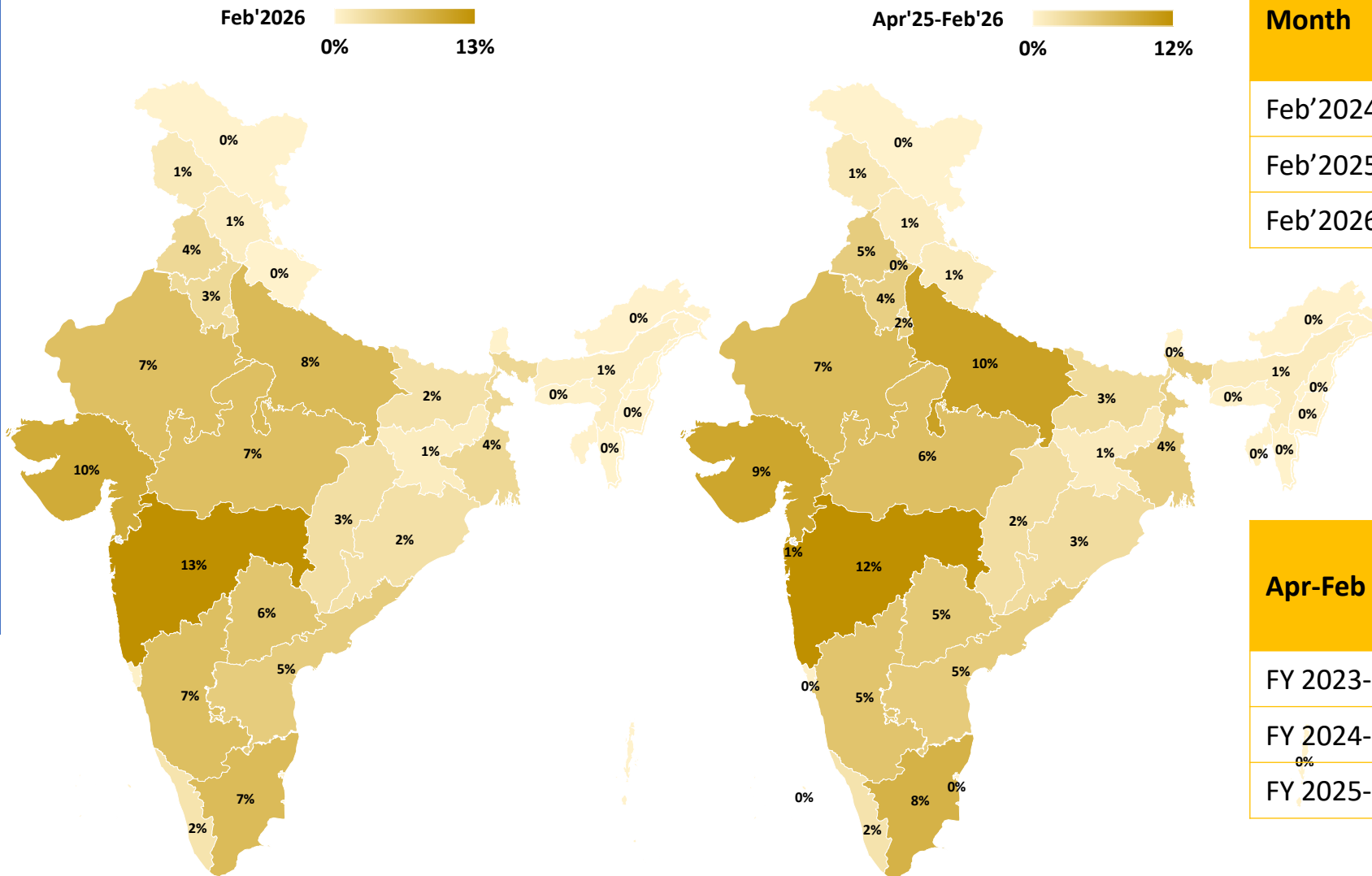
## Market Clearing Prices of last 7 days of February 2026



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

# National and State level Electricity Demand

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



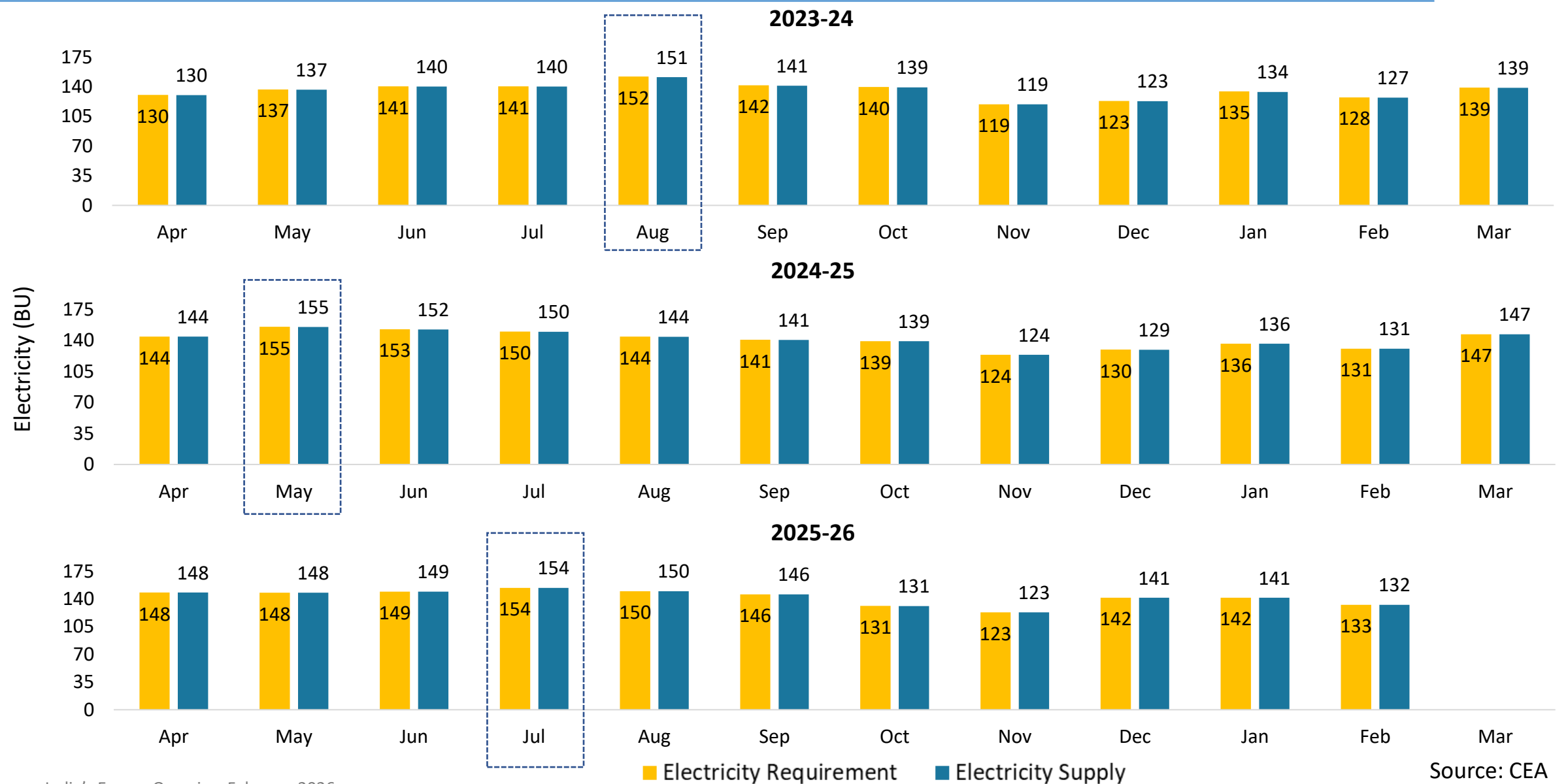
| Month    | Electricity Demand (BU) | Electricity Supply (BU) | Gap (BU) (+/-) |
|----------|-------------------------|-------------------------|----------------|
| Feb'2024 | 128                     | 127                     | 0.3            |
| Feb'2025 | 131                     | 131                     | 0.0            |
| Feb'2026 | 132                     | 132                     | 0.0            |

| Apr-Feb    | Electricity Demand (BU) | Electricity Supply (BU) | Gap (BU) (+/-) |
|------------|-------------------------|-------------------------|----------------|
| FY 2023-24 | 1,487                   | 1,483                   | 4.0            |
| FY 2024-25 | 1,547                   | 1,545                   | 1.6            |
| FY 2025-26 | 1,559                   | 1,559                   | 0.5            |

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

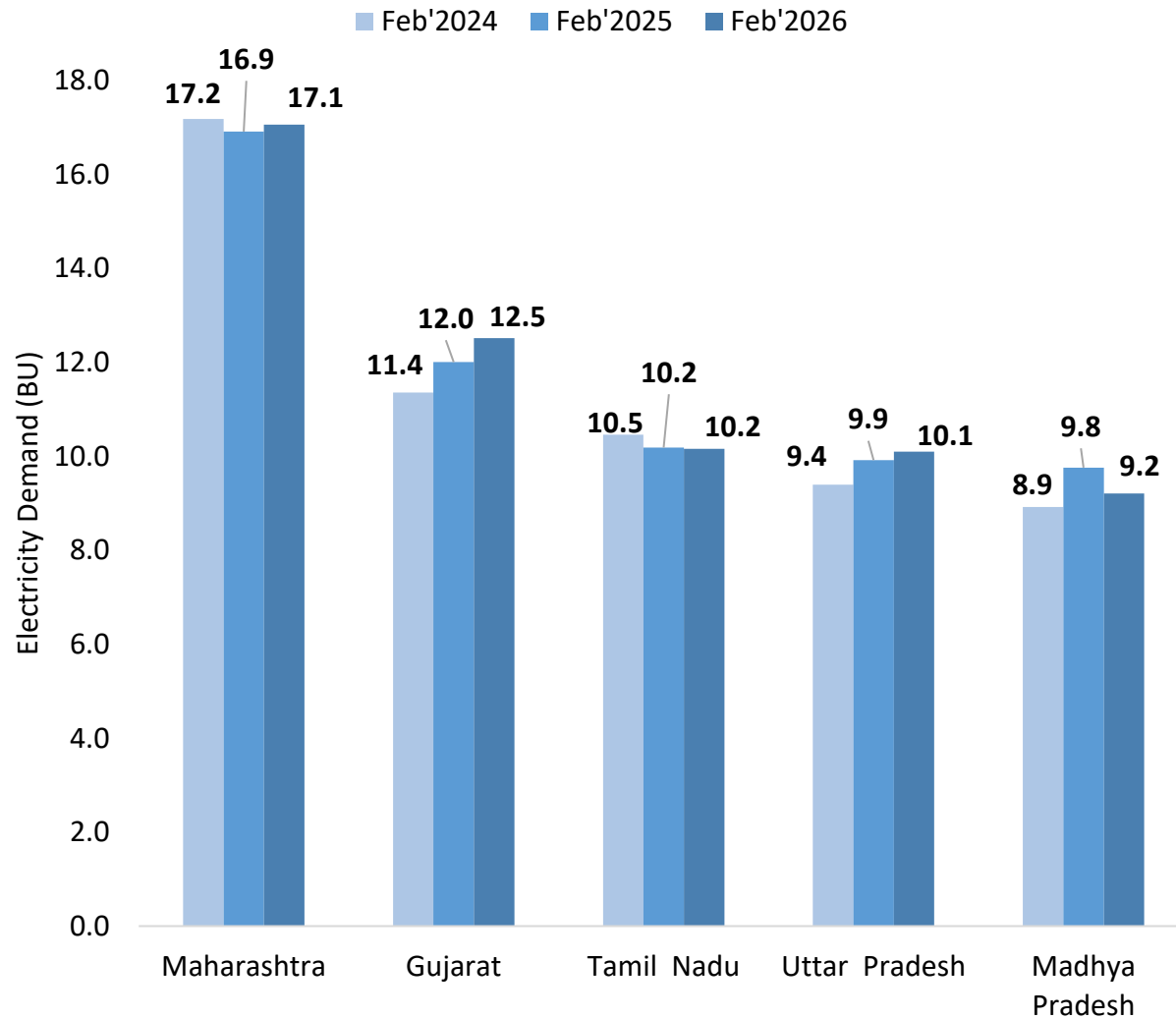
Source: CEA

# India's Monthly Electricity Requirement and Supply

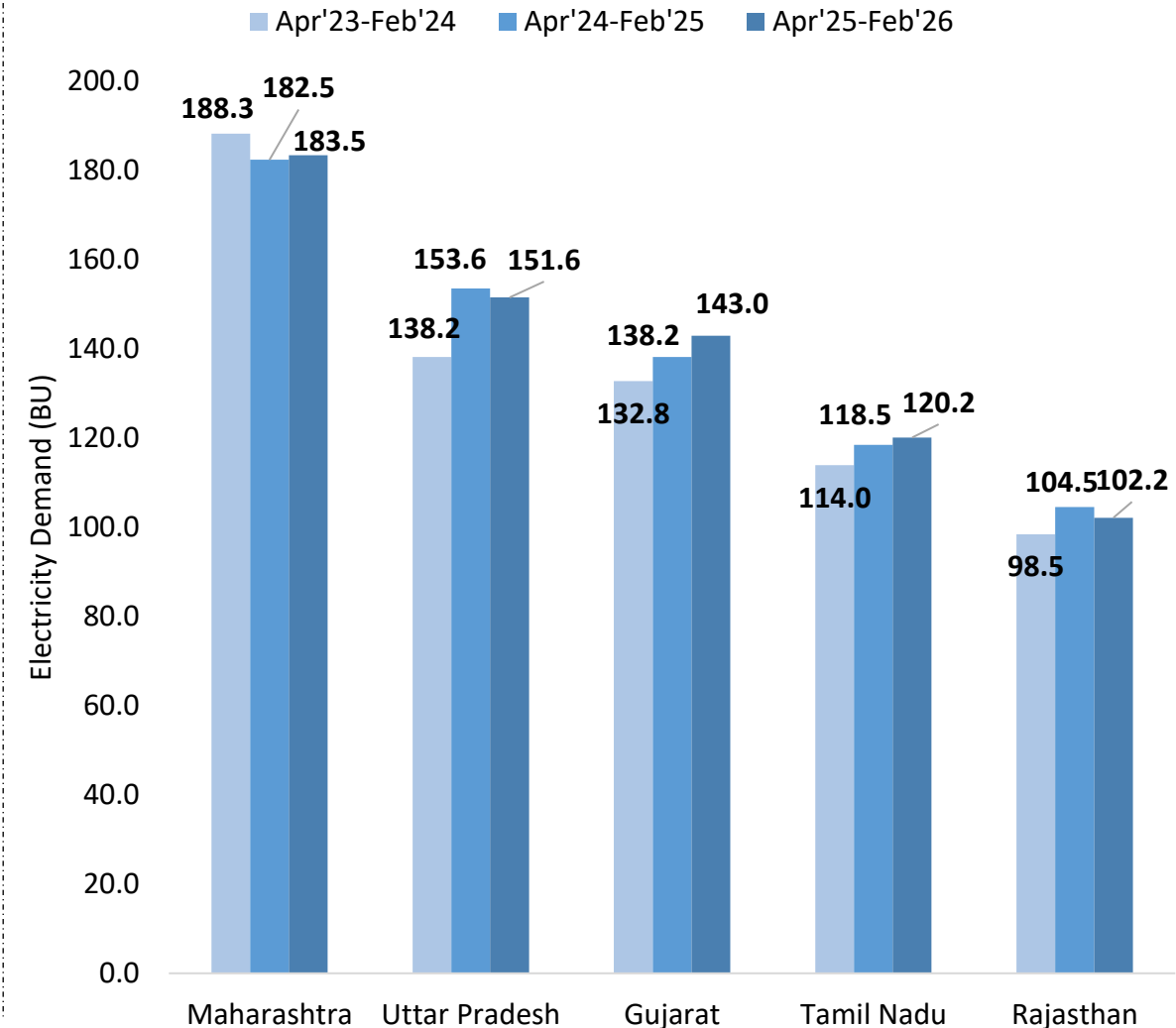


# Monthly Electricity Demand of the top 5 states

States with Highest Electricity Demand in February (BU)



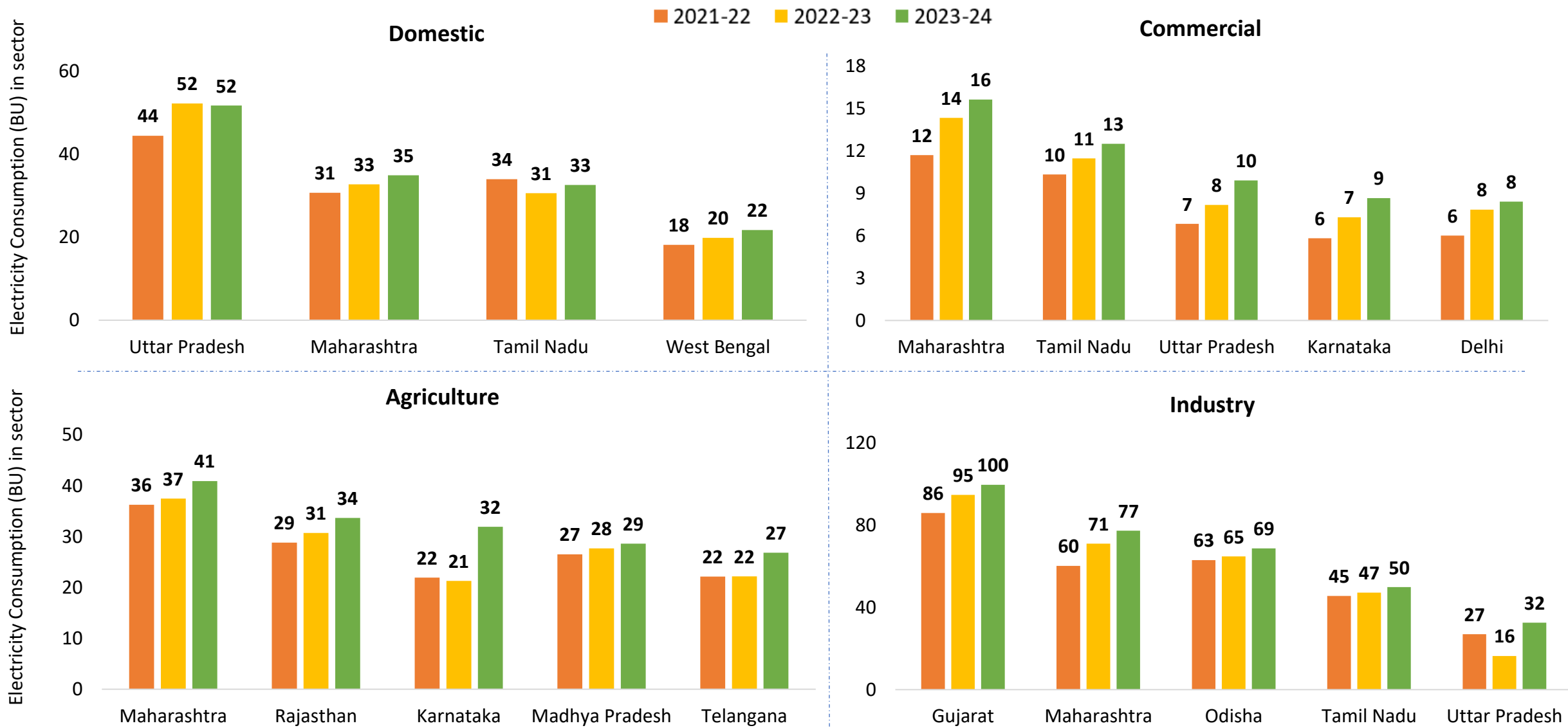
States with Highest Electricity Demand (BU)



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

Source: CEA

# Electricity Consumer-category wise top 5 States

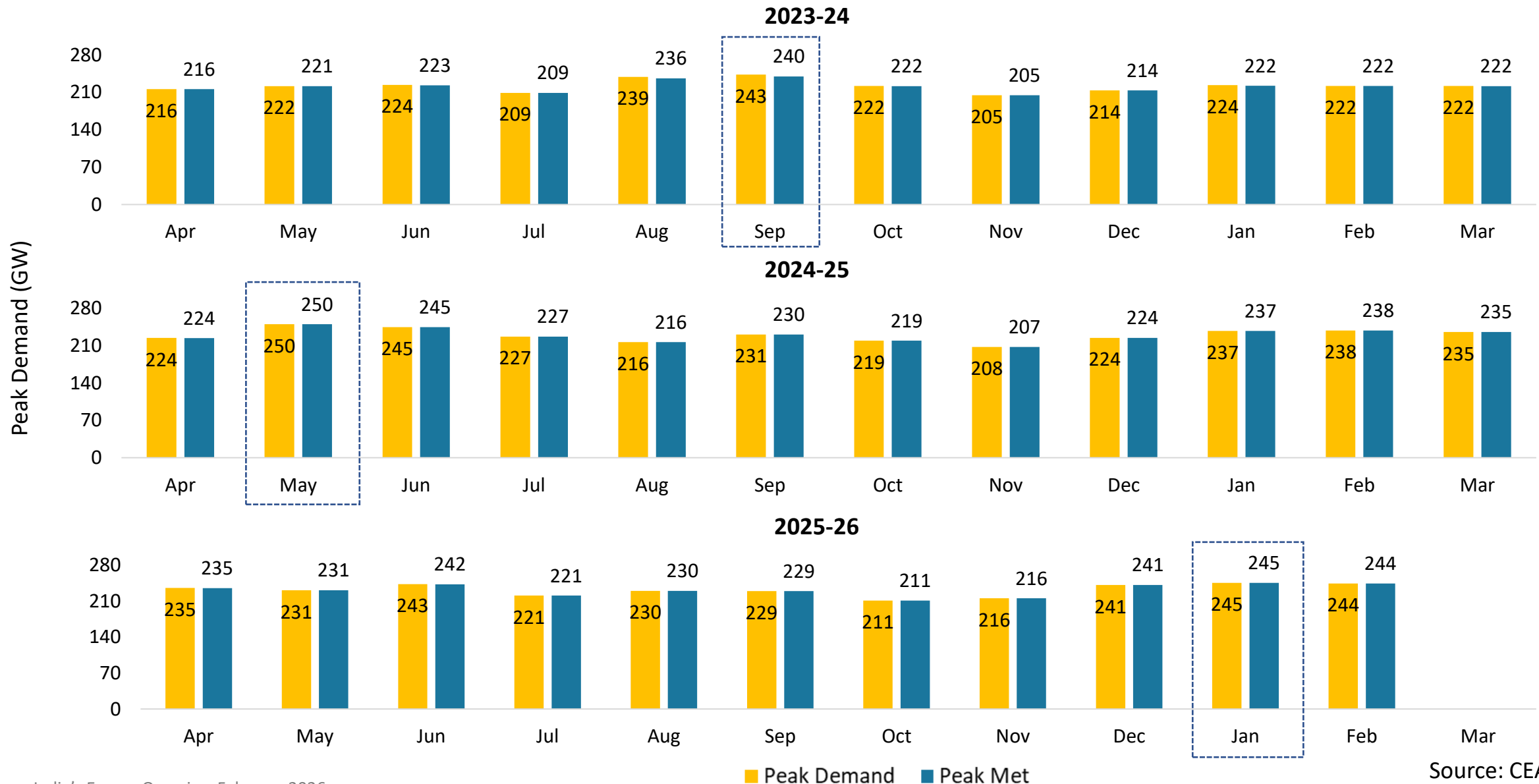


NOTE: Top 5 States under consumer-categories are selected on the basis of 2023-24

Source: CEA

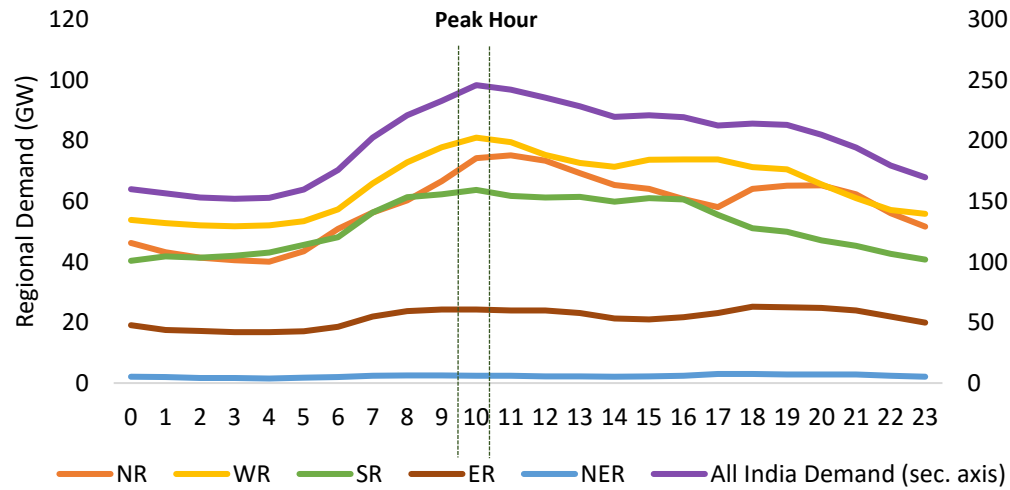


# India's Monthly Peak Electricity Demand and Supply

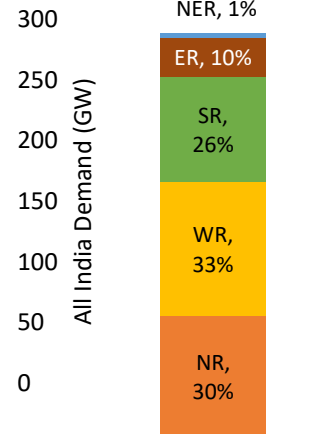


# All India and Regional Electricity Demand Curve of Peak Demand Day

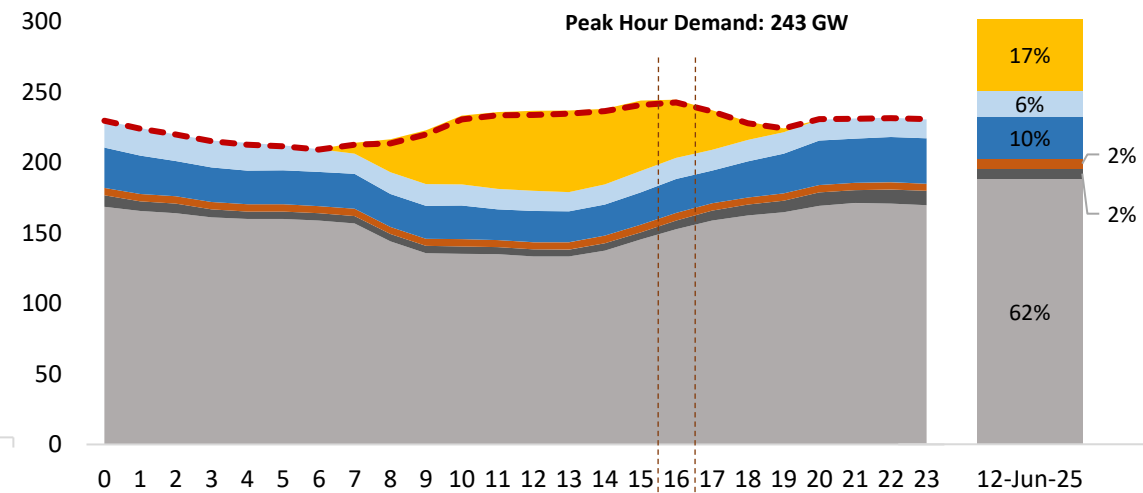
Regional Hourly Demand Curve of Peak Demand Day in 2025-26 (up to Jan'26)  
(9th Jan'2026)



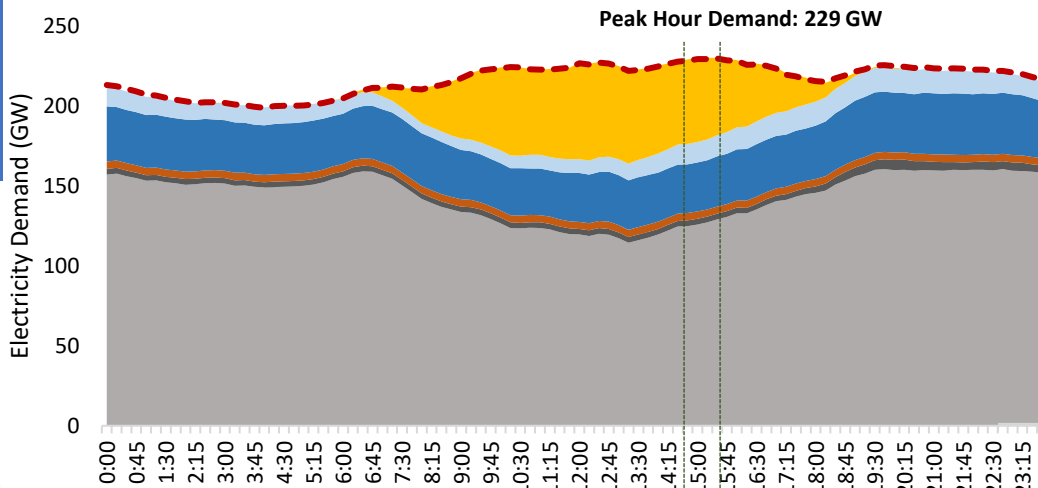
Share of Regions in All India Peak Demand



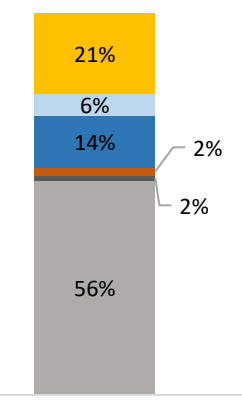
India's Electricity Demand Curve of Peak Demand Day in Summer Season (Mar-Jun'25) (12th June 2025)



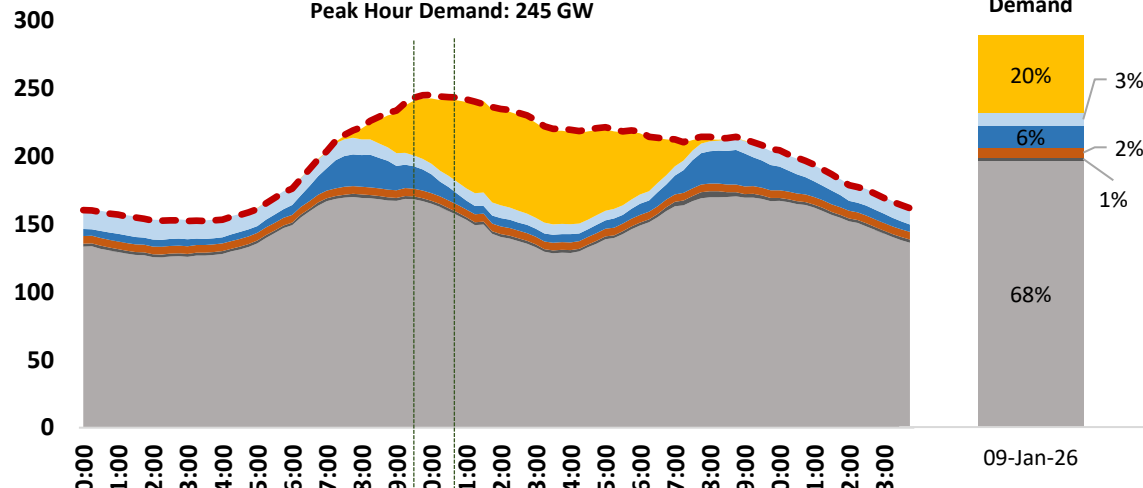
India's Electricity Demand Curve of Peak Demand Day in Monsoon Season (Jul-Oct'25) (7th Aug 2025)



Share of Supply Sources in Peak Demand

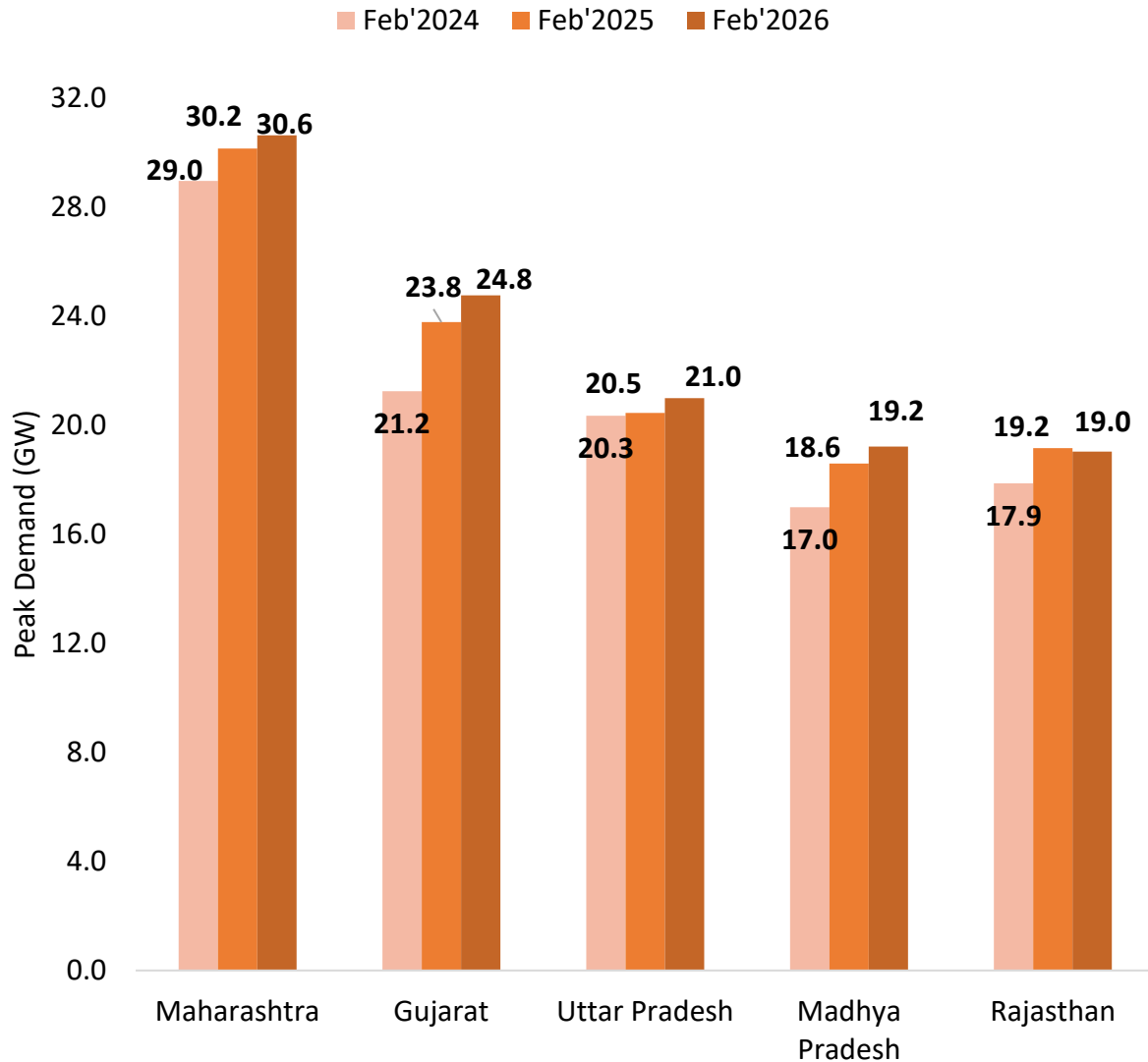


India's Electricity Demand Curve of Peak Demand Day in Winter Season (Nov'25-Feb'26) (9th Jan 2026)

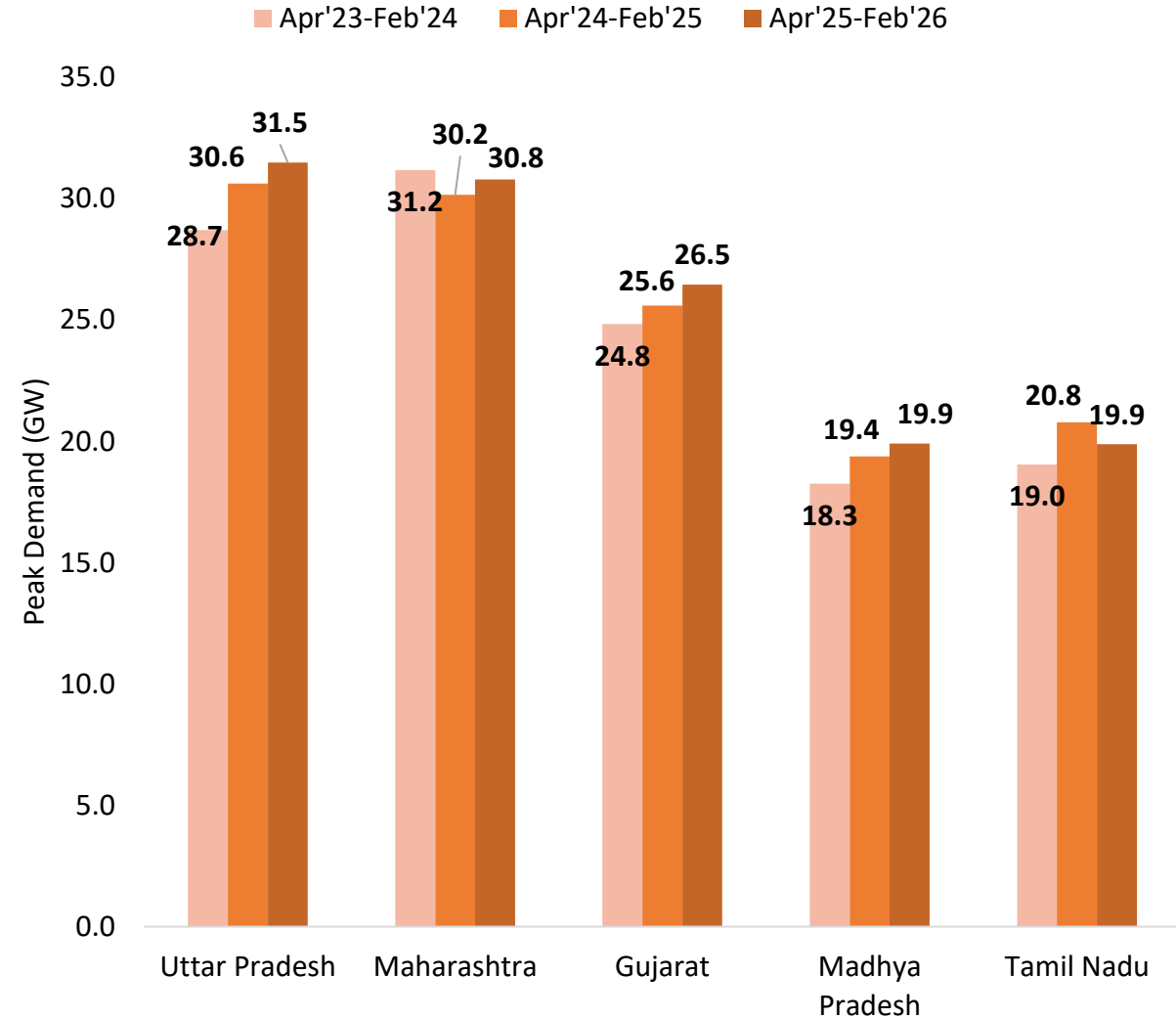


# Monthly Peak Electricity Demand of the top 5 states

States with Highest Peak Electricity Demand in February (GW)



States with Highest Peak Electricity Demand (GW)

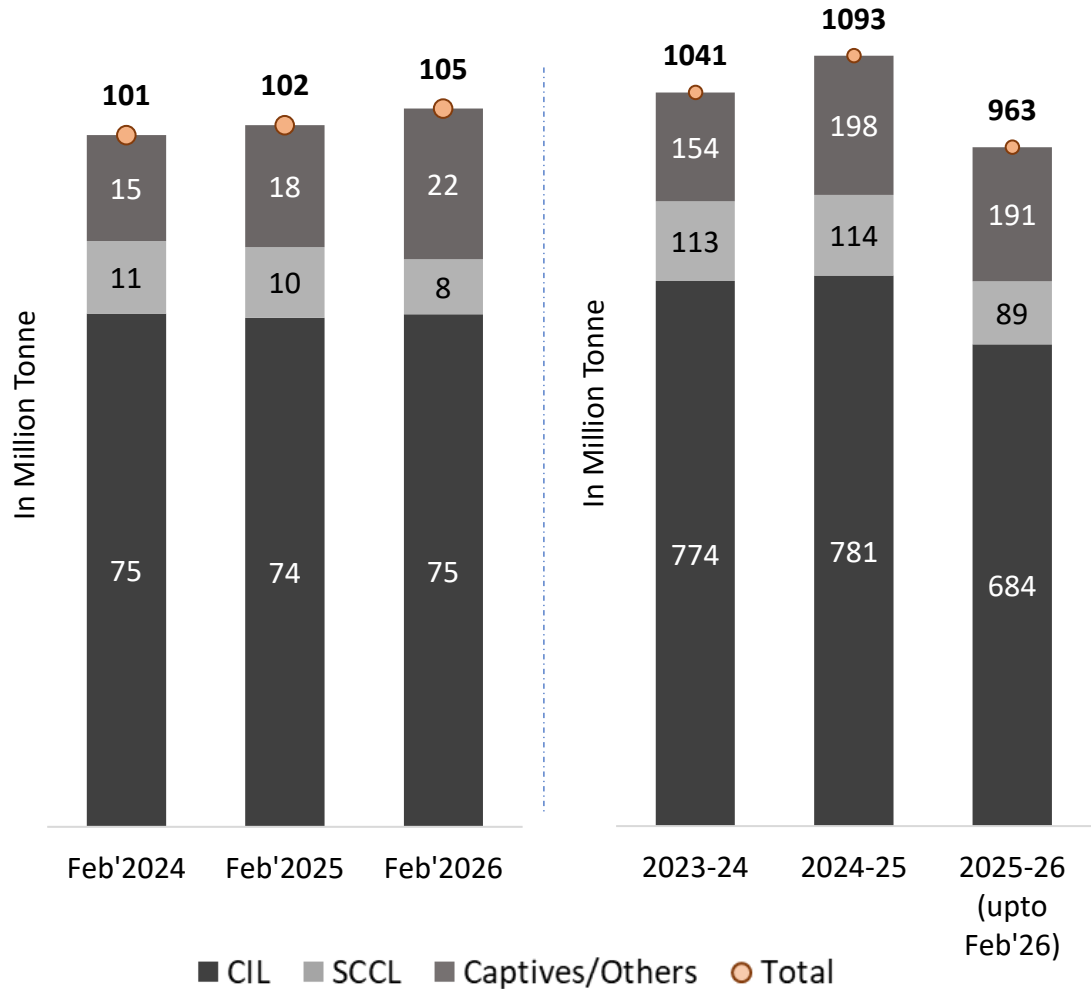


Note: The peak electricity demand data for Feb'26 is Provisional.

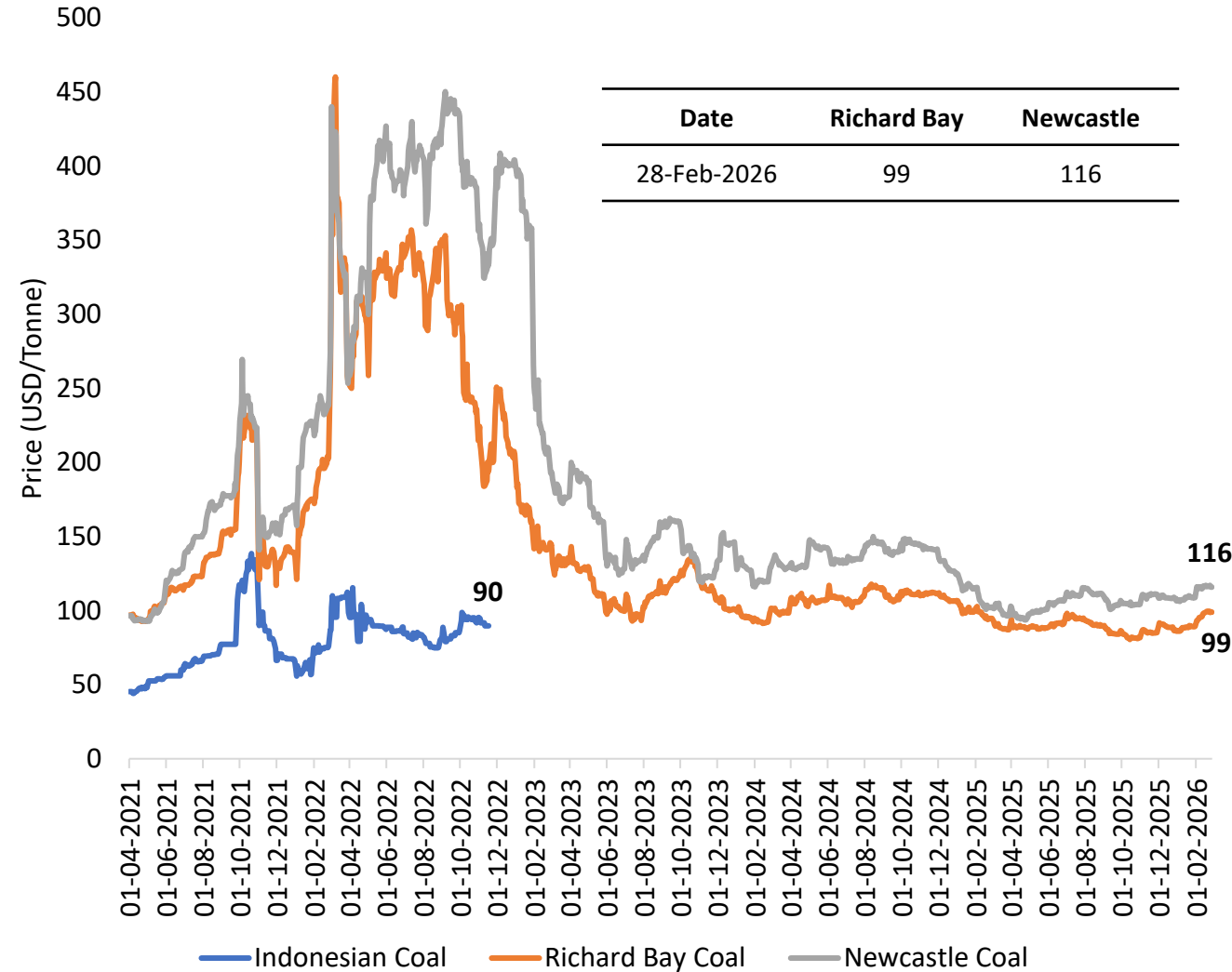
Source: CEA

# Monthly Coal Statistics

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

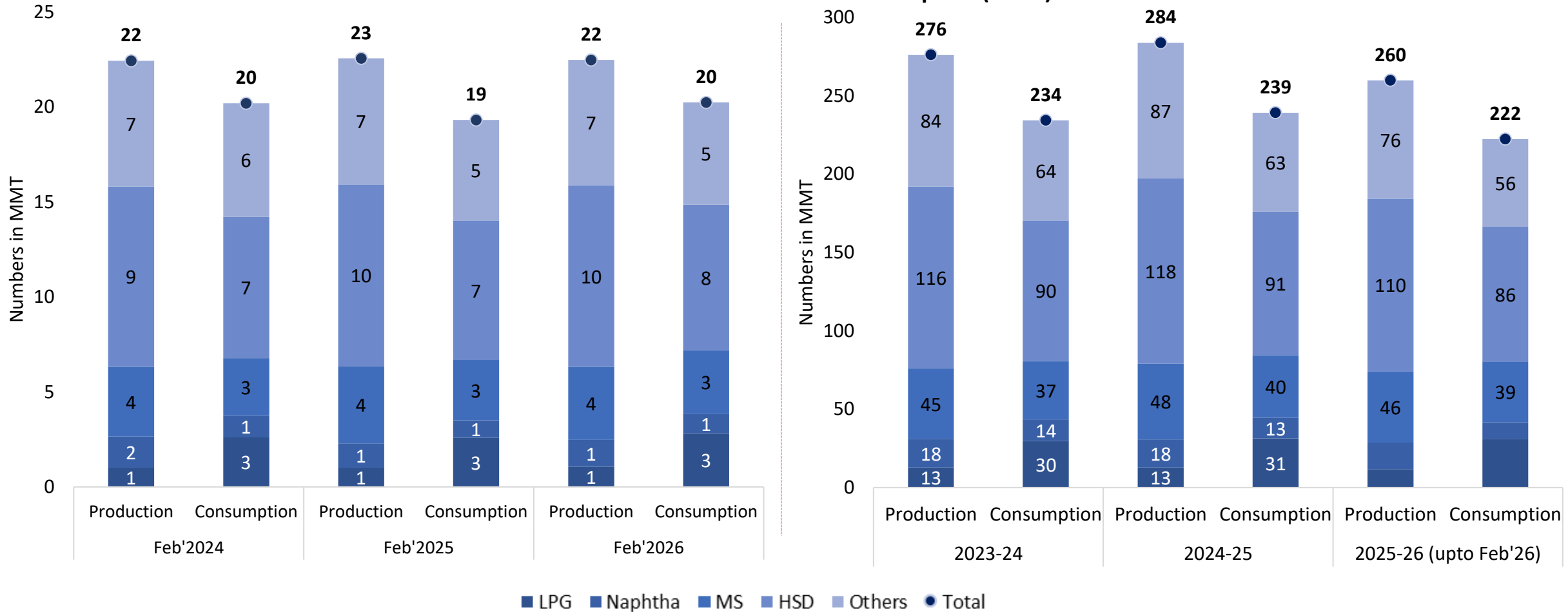


International Coal Prices



# Oil Market Scenario (1/3)

## Petroleum Product-wise Production & Consumption (MMT)



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

# Oil Market Scenario (2/3)

| Import/Export of Crude Oil and Petroleum Products ('000 Tonnes) |                   |              |              |              |               |               |                           |
|---|-------------------|--------------|--------------|--------------|---------------|---------------|---------------------------|
| Petroleum Products  | Import/ Export    | Monthly      |              |              | Yearly        |               |                           |
|   |                   | Feb'24       | Feb'25       | Feb'26       | 2023-24       | 2024-25       | 2025-26<br>(up to Feb'26) |
| Crude Oil   | Import            | 18244        | 19466        | 19431        | 234262        | 243225        | 225683                    |
|   | Export            | 0            | 0            | 0            | 0             | 0             | 0                         |
|   | <b>Net Import</b> | <b>18244</b> | <b>19466</b> | <b>19431</b> | <b>234262</b> | <b>243225</b> | <b>225683</b>             |
| LPG   | Import            | 1750         | 1568         | 1721         | 18514         | 20667         | 20503                     |
|   | Export            | 45           | 49           | 50           | 525           | 551           | 522                       |
|   | <b>Net Import</b> | <b>1705</b>  | <b>1520</b>  | <b>1671</b>  | <b>17989</b>  | <b>20116</b>  | <b>19982</b>              |
| Diesel  | Import            | 11           | 7            | 3            | 42            | 42            | 32                        |
|   | Export            | 2396         | 2329         | 1705         | 28204         | 28027         | 25266                     |
|   | <b>Net Import</b> | <b>-2385</b> | <b>-2322</b> | <b>-1701</b> | <b>-28162</b> | <b>-27985</b> | <b>-25234</b>             |
| Petrol  | Import            | 0            | 0            | 0            | 717           | 235           | 0                         |
|   | Export            | 1256         | 1687         | 1387         | 13472         | 15830         | 15474                     |
|   | <b>Net Import</b> | <b>-1256</b> | <b>-1687</b> | <b>-1387</b> | <b>-12755</b> | <b>-15596</b> | <b>-15474</b>             |
| Others  | Import            | 2766         | 2378         | 2088         | 29419         | 29960         | 24758                     |
|   | Export            | 1620         | 1563         | 1217         | 20391         | 20667         | 15677                     |
|   | <b>Net Import</b> | <b>1146</b>  | <b>815</b>   | <b>872</b>   | <b>9029</b>   | <b>9293</b>   | <b>9082</b>               |

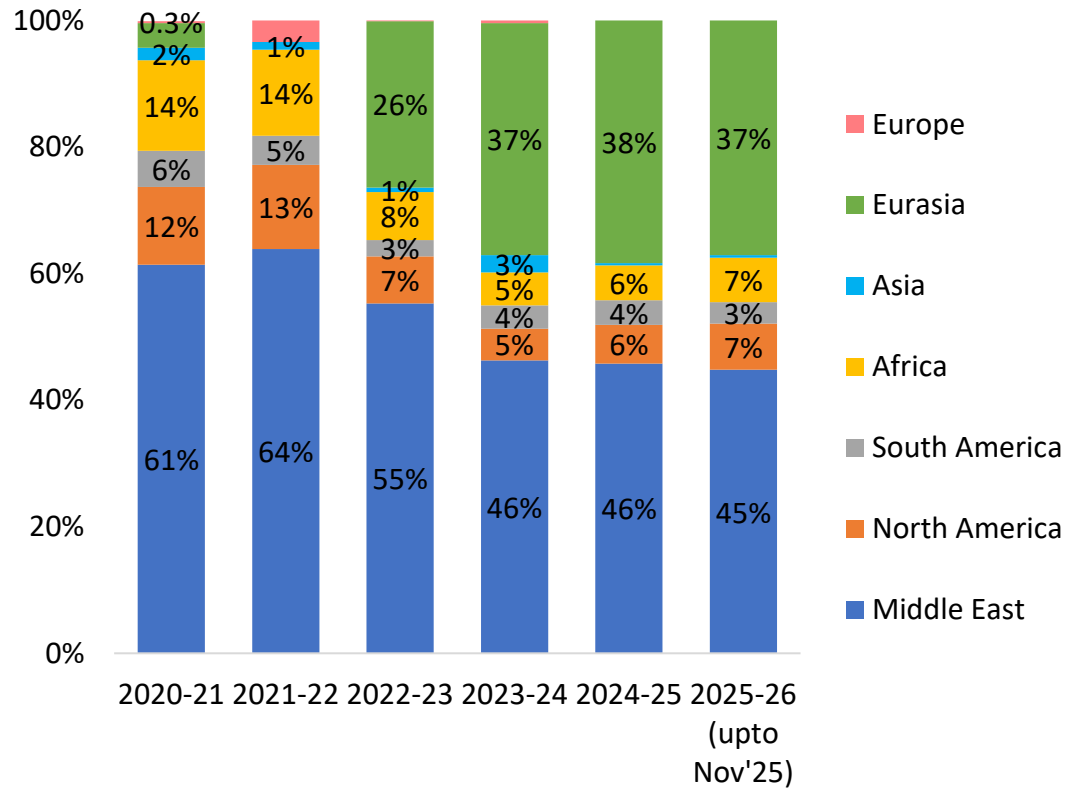
\*Others include ATF, Naphtha, SKO, LDO, Lubes, FO, LSHS, Bitumen, pet coke, and others.

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

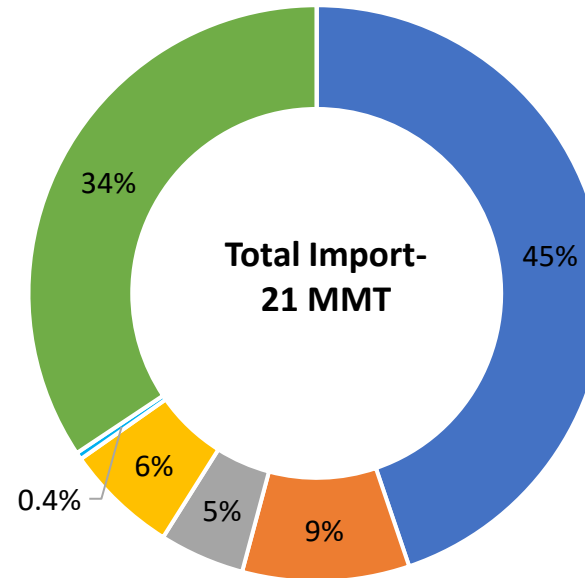
Source: PPAC

# Oil Market Scenario (3/3)

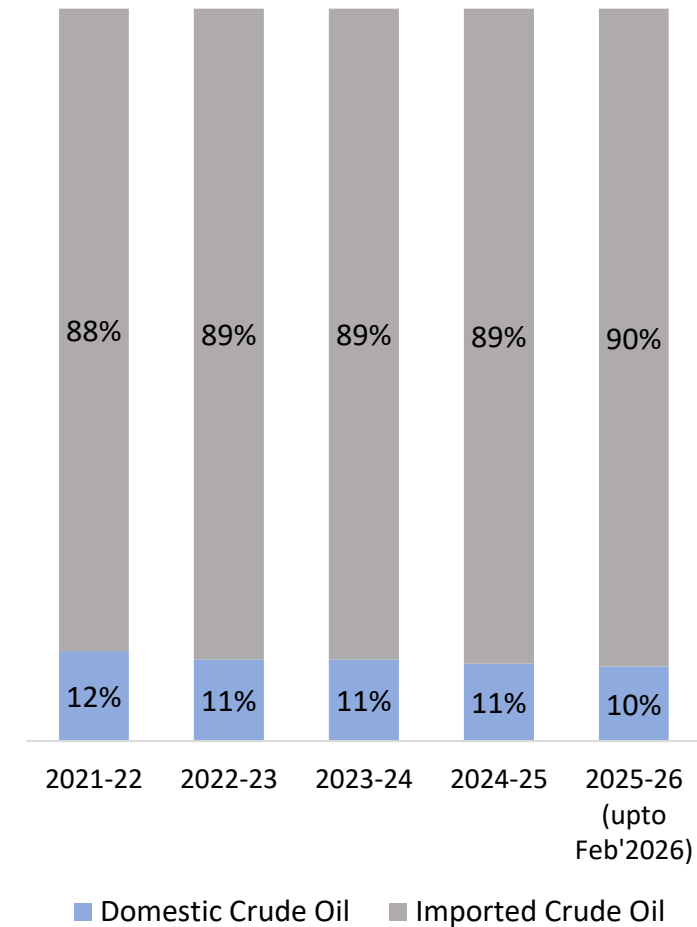
Region-wise Share in Import of Crude Oil (%)



Regional share of Imported Crude oil in November 2025



Domestic and Imported Crude Oil share in India (%)



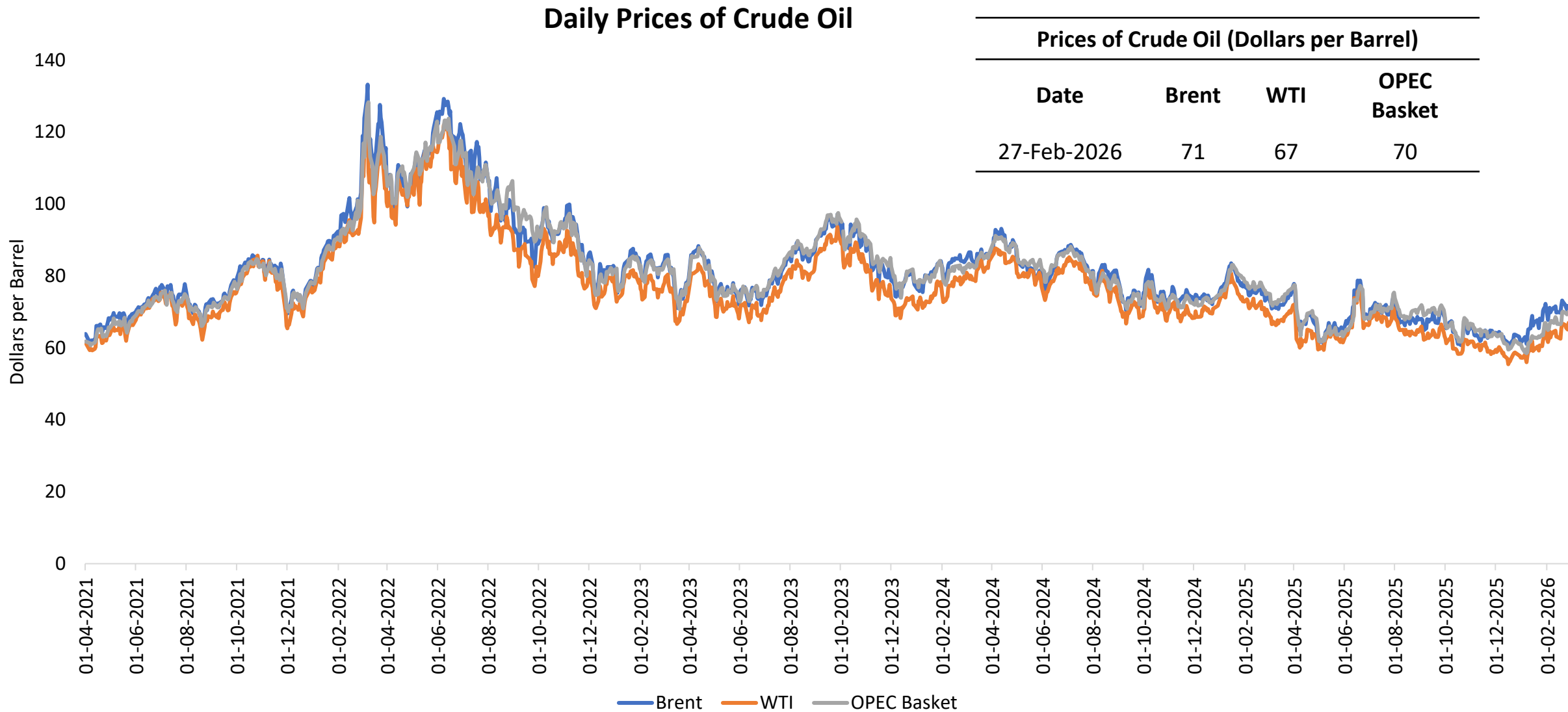
Total Import of Crude Oil (MMT)

| Total Import     | 2023-24    | 2024-25    | 2025-26 (up to Feb'26) |
|------------------|------------|------------|------------------------|
| <b>Crude Oil</b> | <b>234</b> | <b>243</b> | <b>226</b>             |

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

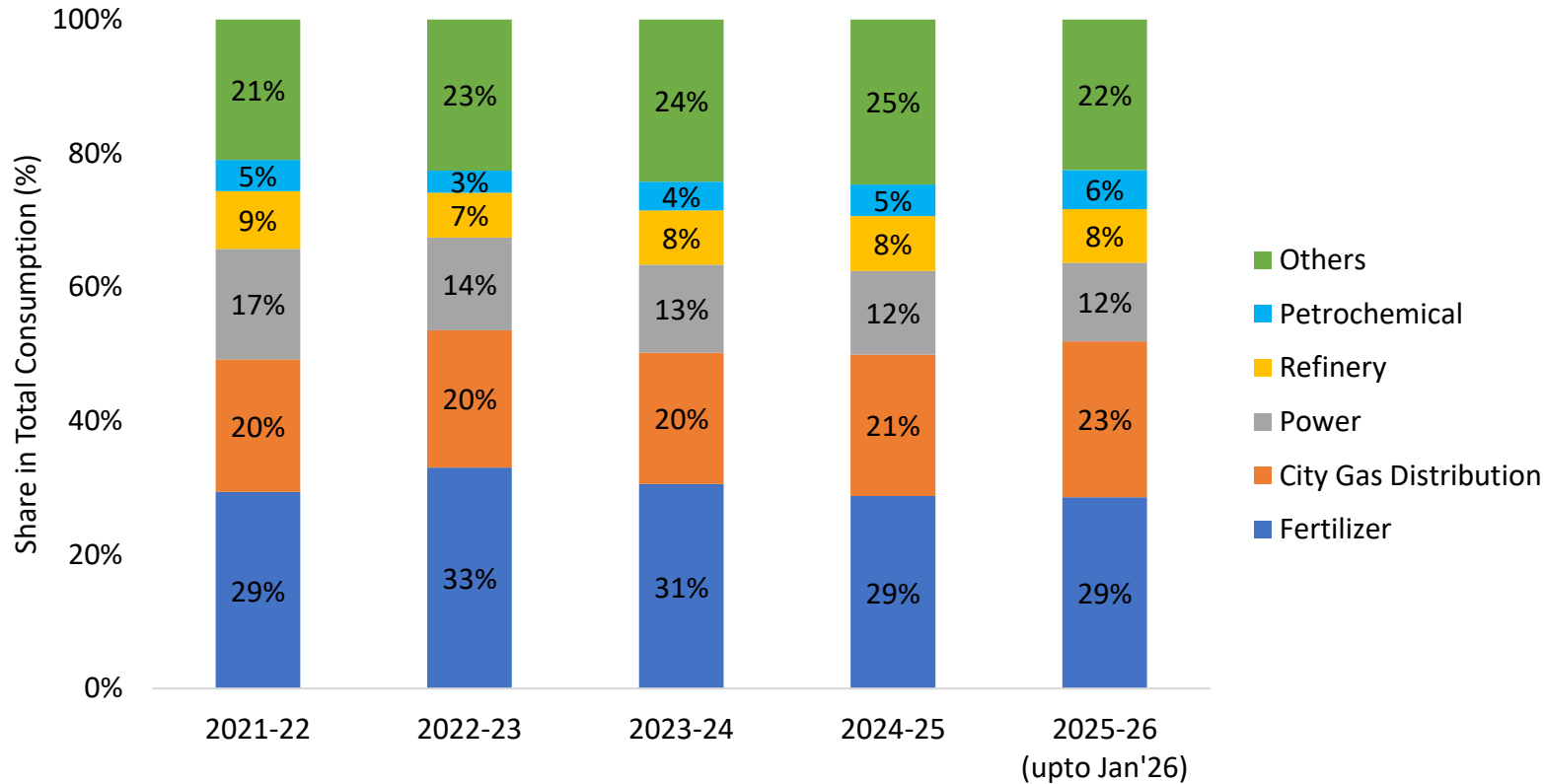
Source: MoPNG and PPAC

# Daily Prices of Crude Oil

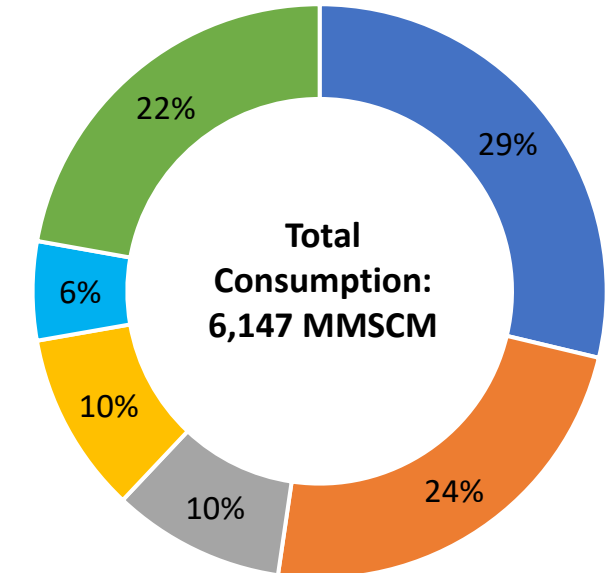


# Gas Market Scenario (1/2)

Sector-wise Share in Natural Gas Consumption



Sector-wise share in Natural Gas Consumption in January 2026

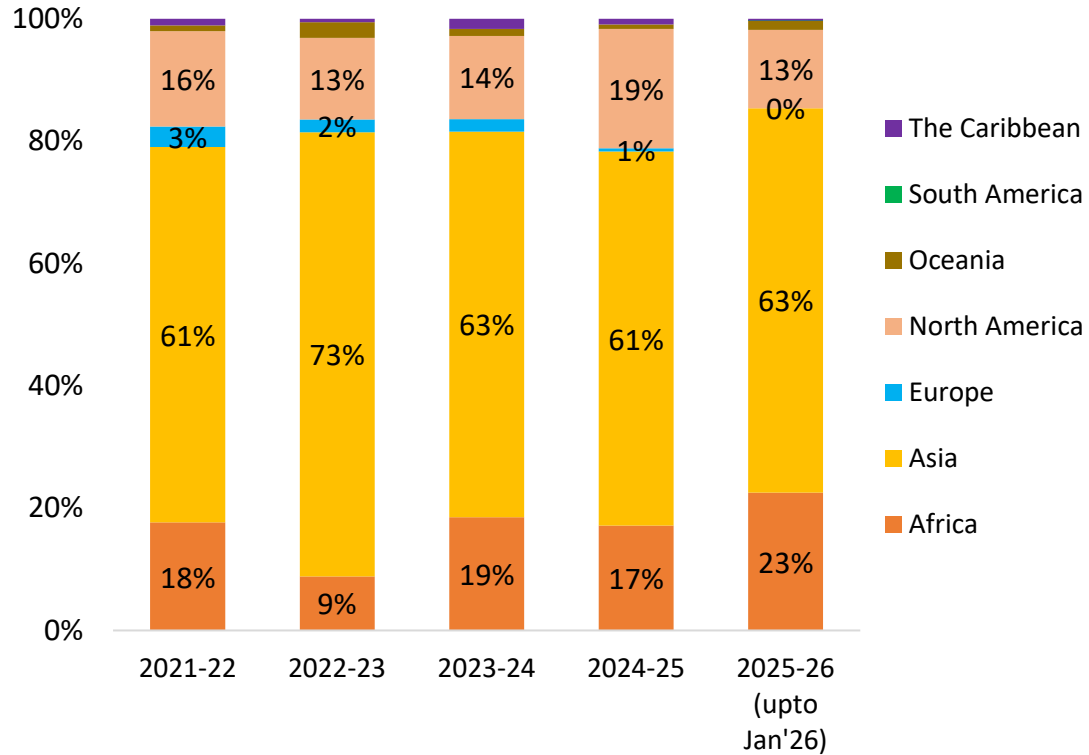


| Total Consumption of Natural Gas (NG) (MMSCM) |               |               |               |               |                        |
|---|---------------|---------------|---------------|---------------|------------------------|
| Total Consumption                             | 2021-22       | 2022-23       | 2023-24       | 2024-25       | 2025-26 (up to Jan'26) |
| <b>Natural Gas</b>                            | <b>61,491</b> | <b>58,702</b> | <b>68,809</b> | <b>71,196</b> | <b>58,802</b>          |

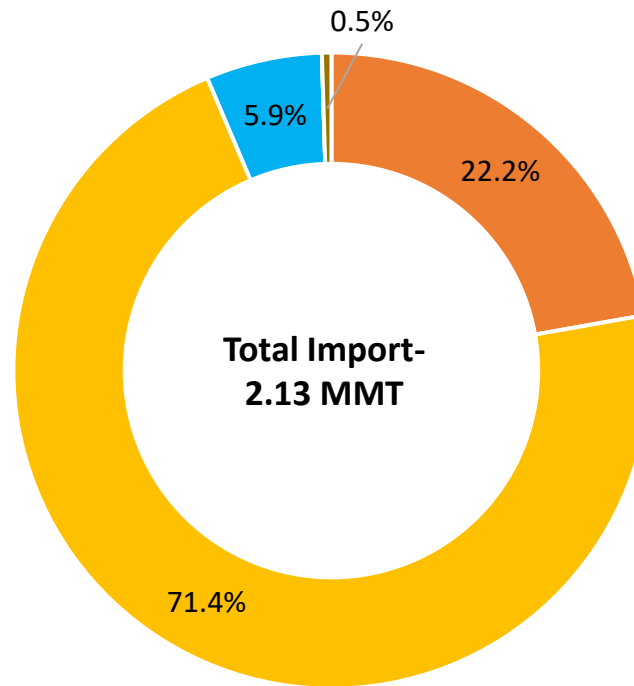
Others include- Internal Consumption of Pipeline System, Industrial, Sponge iron/steel, LPG shrinkage, Manufacturing, Agriculture (tea plantation), Others

# Gas Market Scenario (2/2)

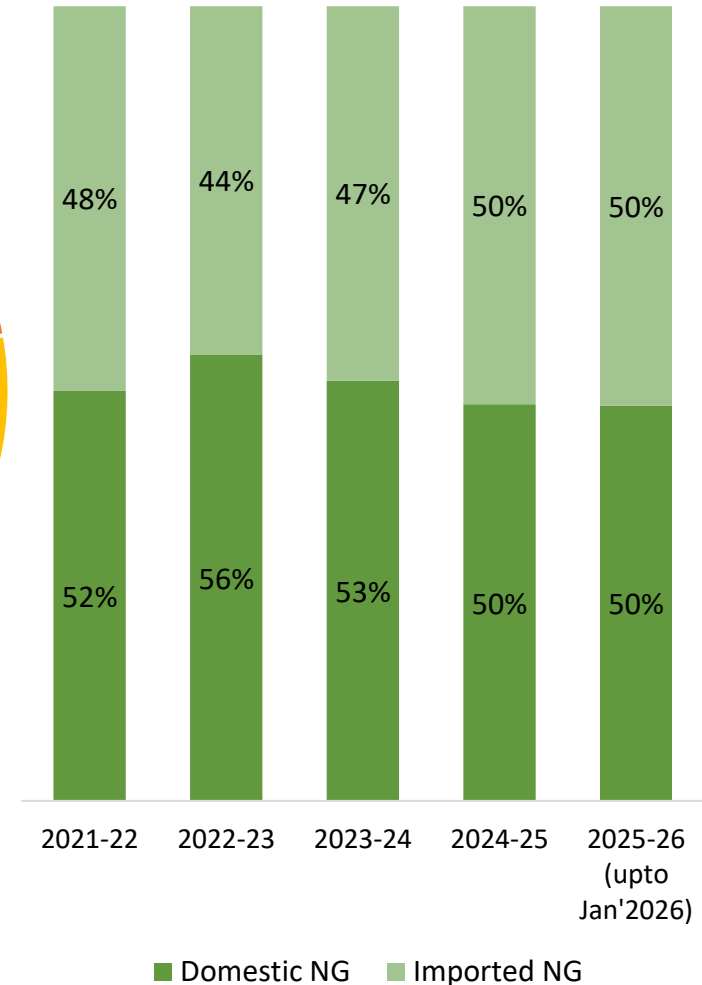
Region-wise Share in Import of LNG (%)



Country Share of Imported LNG in January 2026



Domestic and Imported Natural Gas share in India (%)

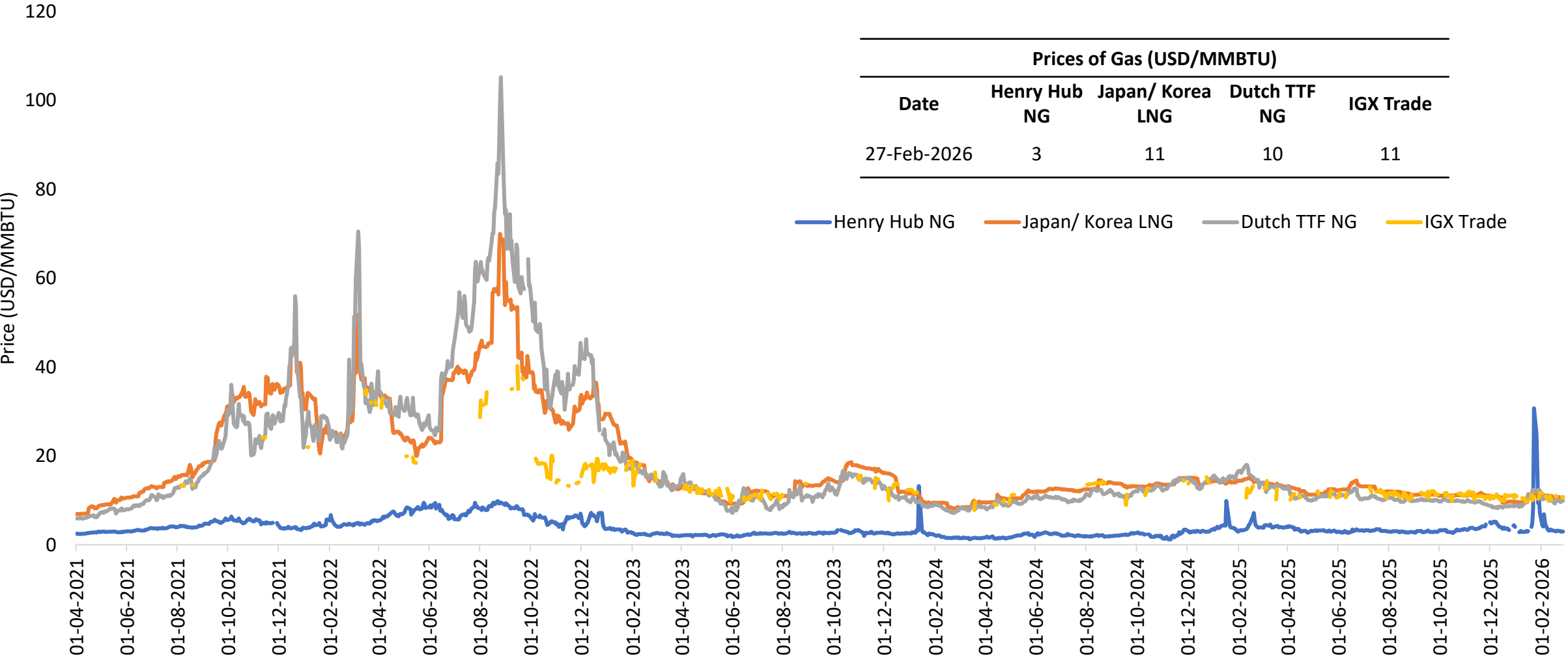


Total Import of Liquefied Natural Gas (LNG) (MMT)

| Total Import | 2023-24      | 2024-25      | 2025-26 (up to Jan'23) |
|--------------|--------------|--------------|------------------------|
| <b>LNG</b>   | <b>24.00</b> | <b>26.96</b> | <b>22.31</b>           |

# Daily Prices of Gas

Gas Daily Market Price



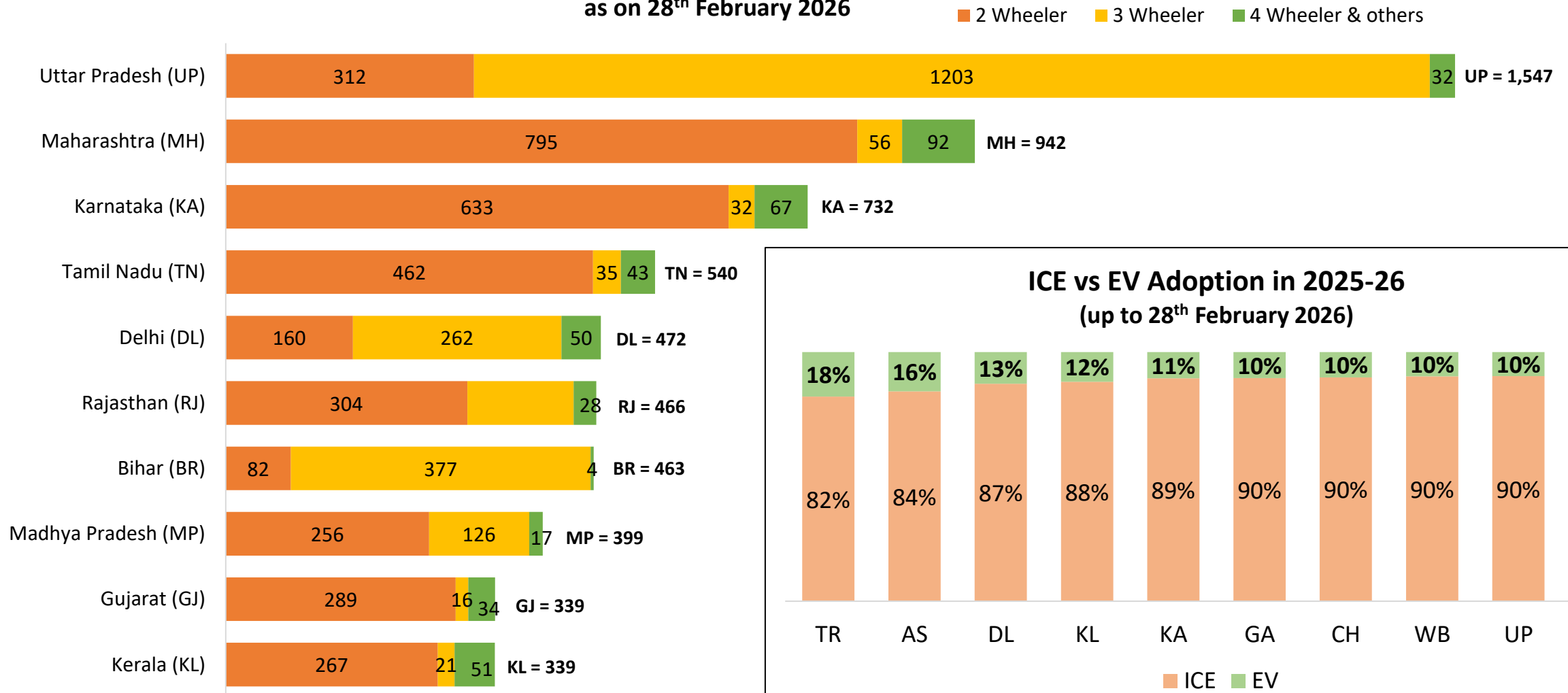
| Prices of Gas (USD/MMBTU) |              |                  |              |           |
|---------------------------|--------------|------------------|--------------|-----------|
| Date                      | Henry Hub NG | Japan/ Korea LNG | Dutch TTF NG | IGX Trade |
| 27-Feb-2026               | 3            | 11               | 10           | 11        |

Henry Hub NG    Japan/ Korea LNG    Dutch TTF NG    IGX Trade



# Status of Electric Mobility in India

**States with Highest Electric Vehicles Registered (in Thousands)  
as on 28<sup>th</sup> February 2026**



# 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](#) 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 30<sup>th</sup> 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 projects](#) where PPAs/NTPs are signed on or before 31<sup>st</sup> March 2025 only, it is decided to provide the extension of timelines till 31<sup>st</sup> March 2027.

## 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 30<sup>th</sup> June 2025 and for [off-shore projects](#) on or before 31<sup>st</sup> 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<sub>2</sub>)

[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 Gol.

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

- India and the United Kingdom have launched the [India–UK Offshore Wind Taskforce](#) under the India–UK Vision 2035 and the 4th Energy Dialogue to provide strategic leadership and coordination for India’s offshore wind ecosystem. The initiative focuses on three key pillars:
  - Ecosystem planning and market design (including improved seabed leasing frameworks and reliable revenue mechanisms);
  - Infrastructure and supply chains (such as port modernisation, local manufacturing, and specialised vessels); and
  - Financing and risk mitigation through blended finance approaches and mobilisation of long-term institutional capital.
- The [Ministry of Ports, Shipping & Waterways has approved a ₹797.17 crore project to develop a dedicated jetty at Paradip Port for handling green hydrogen, ammonia, and other liquid cargo](#) on a build-operate-transfer basis. With a capacity of 4 MTPA, the project will strengthen the port’s role as a hub for green energy cargo. The infrastructure will include a dedicated jetty, storage systems, pipelines, handling equipment and associated facilities.
- The Government of India has notified [the Electricity \(Amendment\) Rules, 2026 to streamline Captive Generating Plants \(CGPs\)](#), enhance ease of doing business, and support clean energy adoption. The amendments clarify ownership norms, simplify group captive structures, and introduce a uniform verification mechanism, encouraging industries to access reliable and cost-effective power.

# Recent Key Highlights or Announcements

- The Ministry of New and Renewable Energy is implementing the PM Surya Ghar Muft Bijli Yojana to install rooftop solar systems in one crore households by 2026-27. Since its launch in February 2024, [over 26.20 lakh installations \(9.57 GW\) have been completed as on 19 March 2026](#), with ₹17,967.53 crore disbursed as Central Financial Assistance (CFA), supporting clean energy adoption and job creation.
- Shri Manohar Lal, Union Minister for Power, inaugurated the Indian Carbon Market Portal ([www.indiancarbonmarket.gov.in](http://www.indiancarbonmarket.gov.in)) at the Prakriti 2026 conference in New Delhi. The portal will serve as a central platform for implementing and administering a transparent and credible Indian carbon market.
- At the Bharat Electricity Summit 2026 inaugural session, the Ministry of Power and CEA released key strategic reports, including the [National Generation Resource Adequacy Plan \(2026-27 to 2035-36\)](#) and the [Transmission Plan for Integration of over 900 GW Non-Fossil Fuel Capacity by 2035-36](#). The plans project India's installed capacity to reach ~1121 GW by 2035-36 (with ~786 GW from non-fossil sources, including ~664 GW solar and wind) and outline major transmission expansion—1.37 lakh ckm lines and 8.27 lakh MVA capacity with ₹7.93 lakh crore investment—to ensure reliable power supply and seamless renewable integration.



VASUDHA  
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Green ways for a good earth!

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