

QUARTERLY **RE UPDATE**

Q4 2025 (Oct-Dec)



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S&P Global Commodity Insights Estimates

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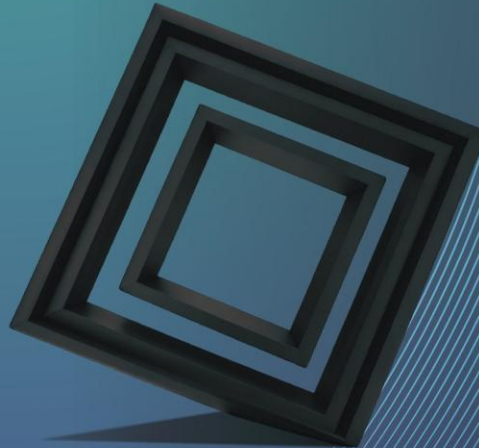


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Table of Contents

01>

*Executive
summary*

02>

*Installation
Trends*

03>

*Market
Shares*

04>

Tenders

05>

*Financial
Deals*

06>

*Solar
Manufacturing*

07>

Price Trends

08>

GDAM

Executive Summary

- During Q4 2025 (Oct–Dec), India added approximately 6.2 GW of utility-scale solar capacity, marking about a 23% decline from the previous quarter. In the wind sector, installations reached around 1.39 GW, an 7.3% drop compared to Q3 2025. Additionally, the rooftop segment saw about 2.1 GW installations, reflecting a 22% decrease over the previous quarter.
- India recorded strong renewable energy growth in CY2025, with utility-scale solar capacity additions reaching approximately 28.6 GW, reflecting a significant 54.6% increase compared to 2024. Rooftop solar installations also surged to 7.9 GW during the year, marking a 72% year-on-year rise, largely driven by the PM Surya Ghar: Muft Bijli Yojana initiative. Meanwhile, wind energy installations stood at around 6.3 GW in 2025, registering an 85% increase over 2024 (3.4 GW).
- According to JMK Research, in CY2026, about 42.5 GW of new solar capacity is expected to be added in India (32.5 GW from utility-scale, 8.5 GW from rooftop solar and another 1.5 GW from off-grid component). Whereas in the wind segment, it is projected that around 6.5 GW of new capacity is likely to be added in CY2026.
- Further, in Q4 2025, more than 14.2 GW of shipment data was reported by 16 players supplying both central and string inverters in India. Sungrow maintained its market leadership during the quarter, with shipments exceeding 5.25 GW, primarily driven by strong central inverter sales while also retaining a substantial share in the string inverter segment.
- In Q4 2025, about 14 GW of modules were shipped by leading 23 players in the Indian market in which top 5 players contributed around 52% share. Waaree is the leading supplier with 21% share.
- In Q4 2025 (October–December), 10 tenders totaling 4.2 GW were issued across solar, wind, hybrid, and RE+storage segments marking a 33% decline from Q3 2025 and a 55% drop from Q4 2024 (9.4 GW).
- In Q4 2025, around 4.6 GW was allocated, nearly double the capacity awarded in Q3 2025, though still about 40% lower year-on-year compared to Q4 2024.
- In Q4 2025, three renewable-plus-storage auctions were completed. The lowest tariff secured was INR 2.86/kWh under SECI's 2000 MW of solar capacity along with 1000 MW/ 4000 MWh of energy storage tender, issued in June 2025, while the highest tariff discovered was INR 6.74/ kWh under SJVN's 1500 MW RE with ESS tender issued in December 2024.
- In Q4 2025, the renewable energy sector attracted over US\$ 5.6 billion in investments, about 41.7% higher than Q3 2025 and 21.77% higher than Q4 2024
- In Q4 2025, Solex exports stood at 3.76 MW in total, with a stronger Mono-PERC base (2.22 MW) along with TOPCon shipments of 1.54 MW, reflecting a diversified export mix.
- In Q4 2025, Mono PERC 500 Wp modules were priced at INR 14.32/Wp, reflecting a 1.24% fall from Q3 2025 and a 7.6% decrease compared to Q4 2024.

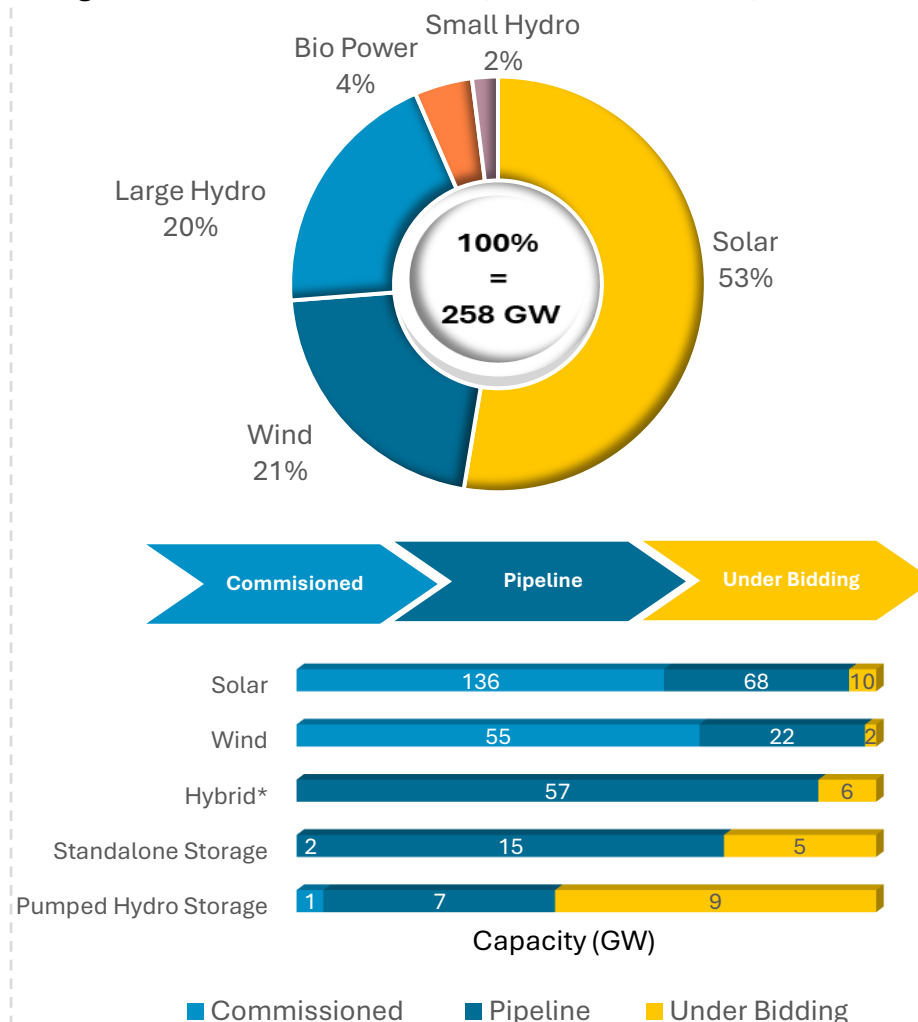


Chapter 2: **Installation Trends**

Cumulative Installation Trends

- India's renewable capacity installation reached 258 GW as of December 31, 2025. Solar continues to be the major contributor with a 53% share in the total renewable mix, followed by wind (21%) and large hydro with a 20% share.
- As of December 31, 2025, India had installed approximately 136 GW of solar, 55 GW of wind, and 51 GW of hydro capacity. The current pipeline of combined capacity of solar, wind, hybrid, and storage projects is around 169 GW, which is likely to be commissioned in the next 4-5 years. Another 32 GW of projects are under the bidding phase i.e., where tenders have been issued but auctions are not yet concluded.
- India recorded its highest-ever annual renewable energy additions in CY2025 (January-December), adding nearly 37.9 GW of solar and 6.3 GW of wind capacity. Compared to CY2024, solar capacity increased by 54.7%, while wind installations recorded a significant increase of 85.3%.

Figure 2.1: RE Installations trend, as of December 31 , 2025



Installation Trends and Projections

Figure 2.2: Annual Solar capacity addition trends in India (Jan- Dec)

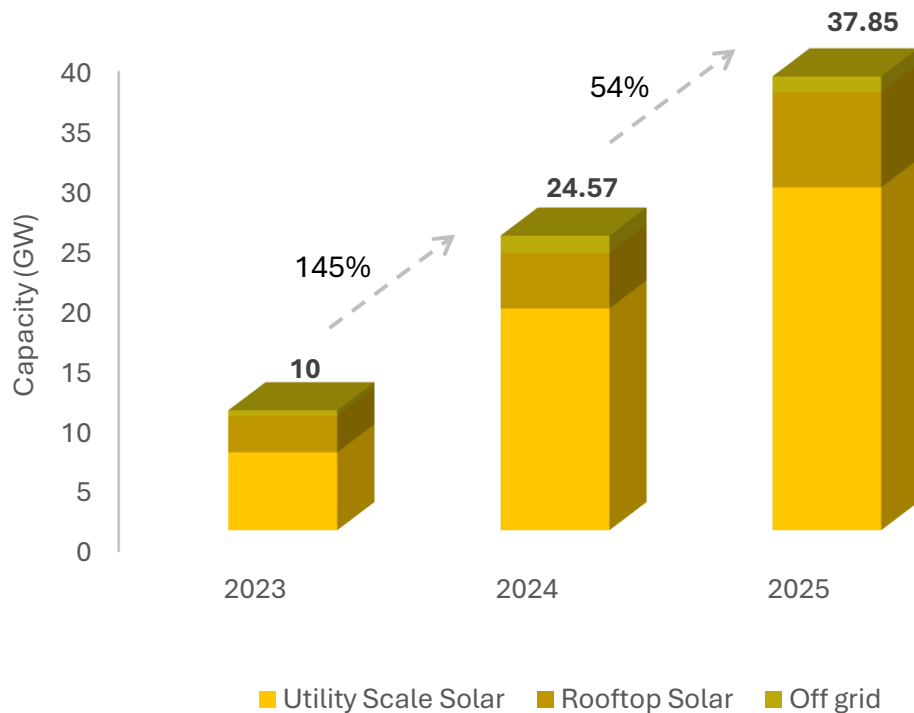
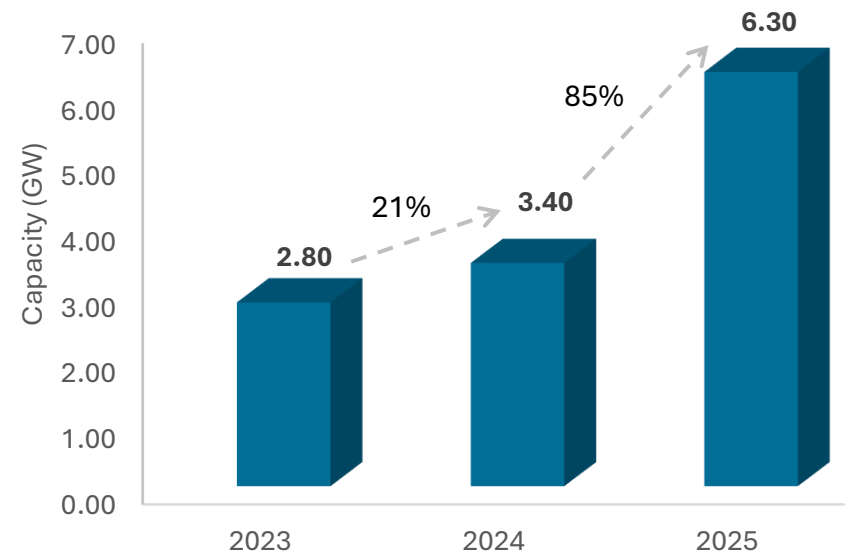


Figure 2.3: Annual Wind capacity addition trends in India (Jan – Dec)



Installation Trends and Projections

Utility-Scale Solar

India added about 28.6 GW of new utility-scale solar capacity in CY2025, a sharp increase of around 54.6% compared to 2024. The growth was mainly driven by the commissioning of previously awarded projects, faster execution ahead of the ISTS waiver deadline, and strong activity in the open access segment, which contributed over 38% of total utility scale solar additions.

Rooftop Solar

Rooftop solar installations in India reached 7.9 GW in 2025, a 72% year-on-year increase, primarily supported by the PM Surya Ghar: Muft Bijli Yojana. By December 2025, the scheme had covered over 26 lakh households and disbursed nearly INR 14,771 crore in central financial assistance, significantly boosting adoption across the country.

Off-grid Solar

Off-grid solar additions remained at almost similar levels in 2024 and 2025, at around 1.48 GW and 1.35 GW respectively, after rising from 0.5 GW in 2023. A major portion of off-grid capacity was installed in Maharashtra (1.0 GW), mainly due to large-scale deployment of off-grid solar agricultural pumps under schemes like PM-KUSUM and state-specific solar pump programs, supported by high solar potential and attractive financial incentives.

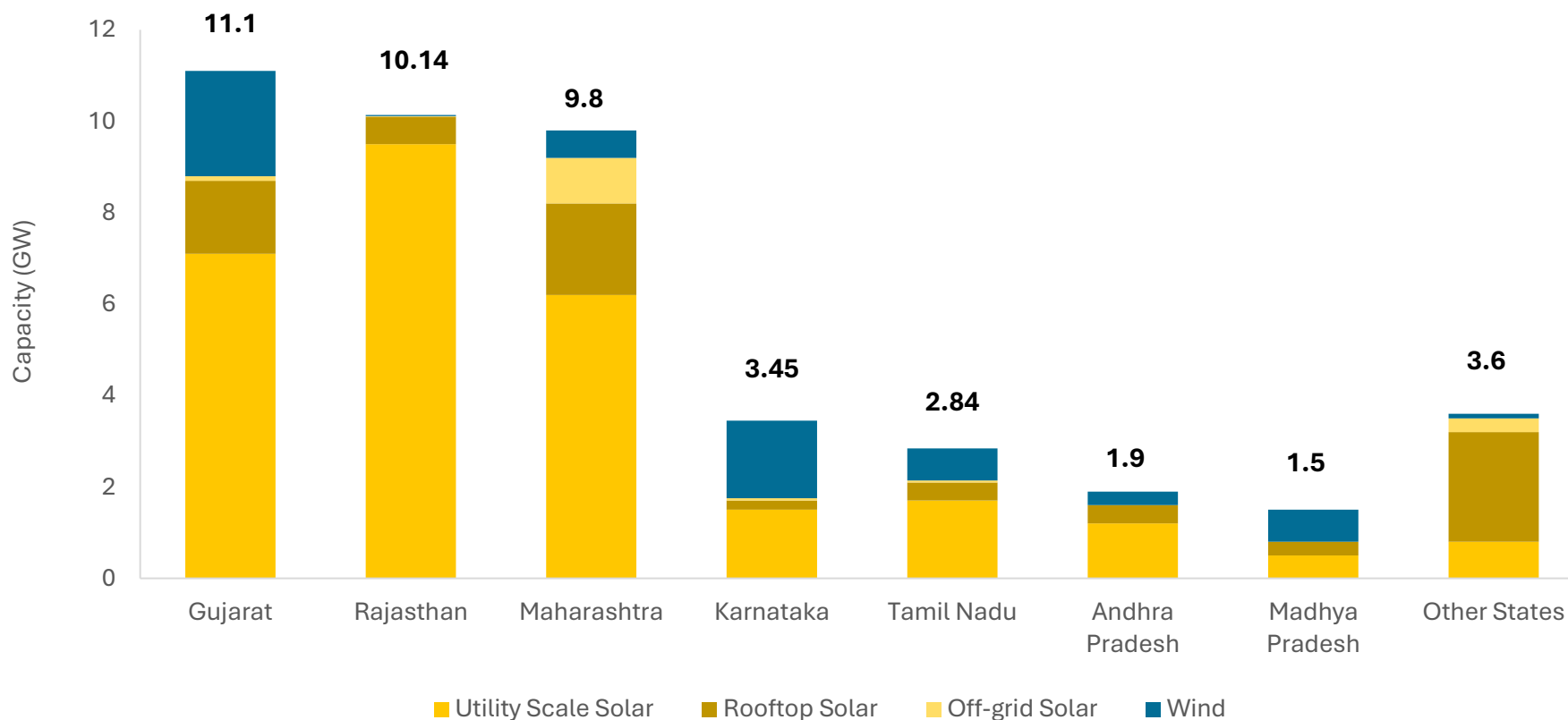
Wind

India added about 6.3 GW of wind capacity in 2025, marking an 85% year-on-year increase compared to 3.4 GW in 2024 and a 125% increase over 2023 (2.8 GW). The increase can be attributed to the dominance of open access capacity additions in Gujarat, Karnataka and Tamil Nadu, which accounted for more than 60-70% of wind installations this year.

State wise Installations

In 2025, renewable energy installations were largely concentrated in a few key states, with Gujarat, Rajasthan, Maharashtra, Karnataka, and Tamil Nadu collectively accounting for approximately 83.7% of total solar and wind capacity additions. Gujarat led the additions with around 11.1 GW, followed by Rajasthan at 10.14 GW and Maharashtra at 9.8 GW, primarily driven by strong solar project development. Meanwhile, Gujarat, Tamil Nadu, and Karnataka continued to remain major wind energy markets. Gujarat's growth will be further supported by its Integrated Renewable Energy Policy 2025, which encourages the development of large renewable parks, accelerates approval processes, and targets over 100 GW of renewable capacity by 2030.

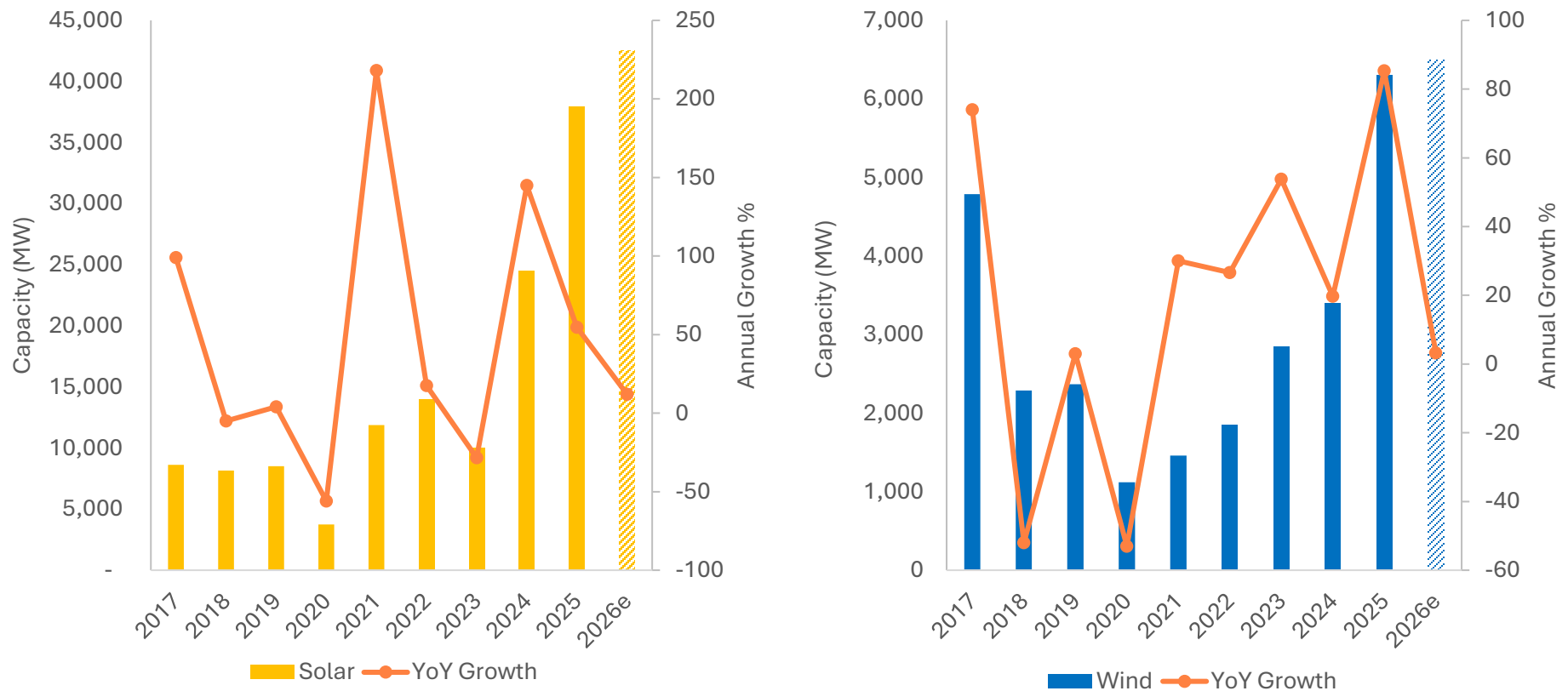
Figure 2.4: State-wise solar and wind capacity addition in India during Jan – Dec 2025



Yearly Projections

According to JMK Research, in CY2026, about 42.5 GW of new solar capacity is expected to be added in India (32.5 GW from utility-scale, 8.5 GW from rooftop solar and another 1.5 GW from off-grid component). Whereas in the wind segment, it is projected that around 6.5 GW of new capacity is likely to be added in CY2026.

Figure 2.5: Year-wise solar and wind installation trends in India



Source: MNRE, JMK Research

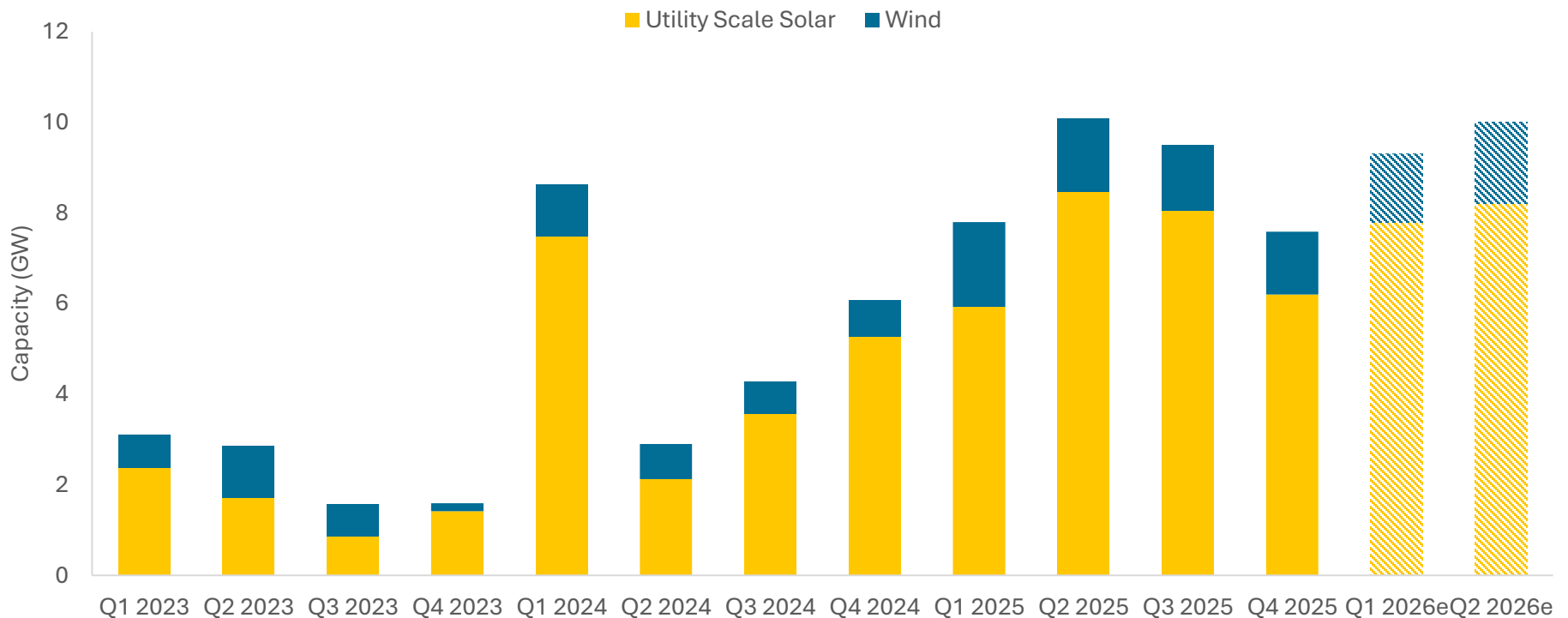
Note: Solar includes Utility Scale Solar, Rooftop Solar and Off grid solar capacity

Quarterly Trends

During Q4 2025 (Oct-Dec), India added approximately 6.2 GW of utility-scale solar capacity, marking about a ~23% decline from the previous quarter. In the wind sector, installations reached around 1.39 GW, an 7.3% drop compared to Q3 2025.

In the next two quarters, about 16 GW of solar and 3.3 GW of wind capacity is expected to be installed in the country.

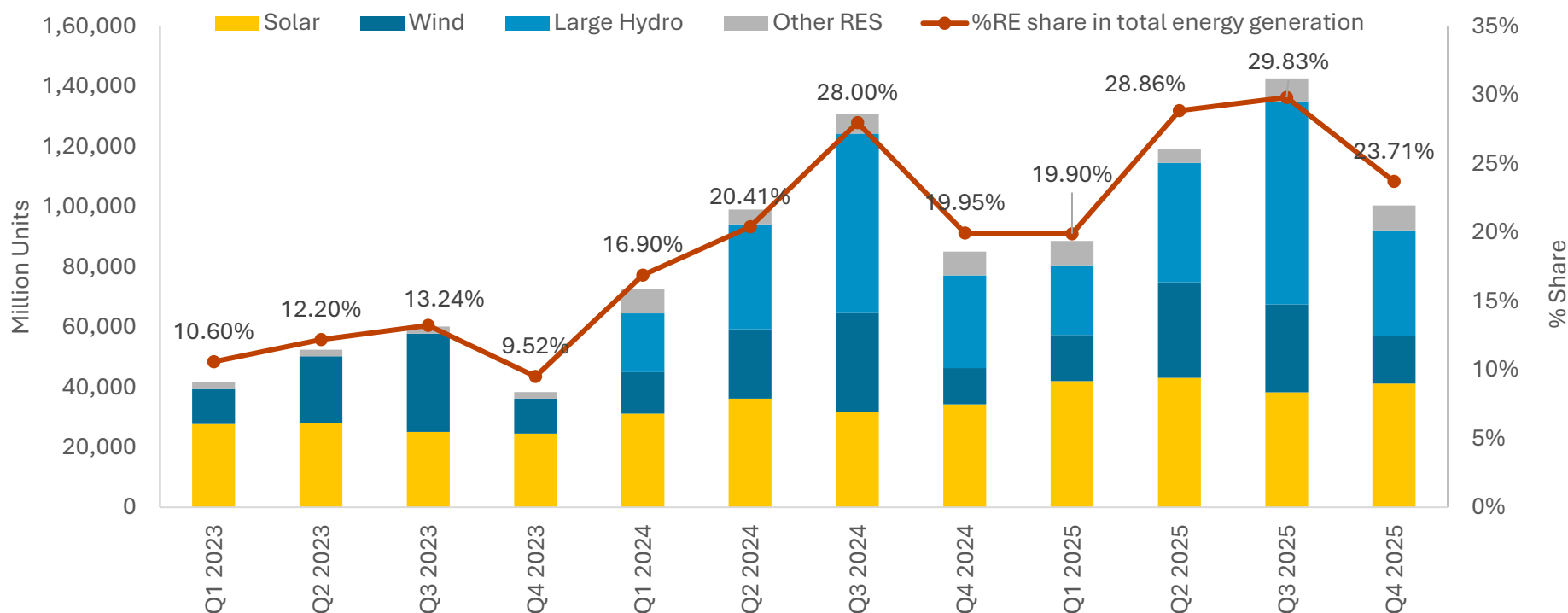
Figure 2.6: Quarter-wise solar and wind installations



Quarterly RE Generation

- In Q4 2025, renewable energy accounted for 23% of India's total power generation of 423.5 BUs. Total renewable output stood at 100.45 BUs during the quarter, reflecting a 30% decline compared to the previous quarter. Of the total renewable generation in Q4 2025, solar contributed 41%, followed by large hydro at 34.8% and wind at 15%, while other renewable sources, including biomass, bagasse, waste heat recovery, and small hydro, collectively represented 8.2%.
- In CY2025, renewable energy's share peaked at 28.86% in Q2 and 29.83% in Q3 respectively, driven by increased solar capacity additions and strong monsoon-led wind and hydro generation. The decline to 23.71% in Q4 reflects seasonal moderation and relatively higher thermal output, though the annual trend indicates sustained renewable capacity growth and improving grid integration.

Figure 2.7: Source-wise Renewable Energy Generation (MUs) in India, quarterly trend





Chapter 3:

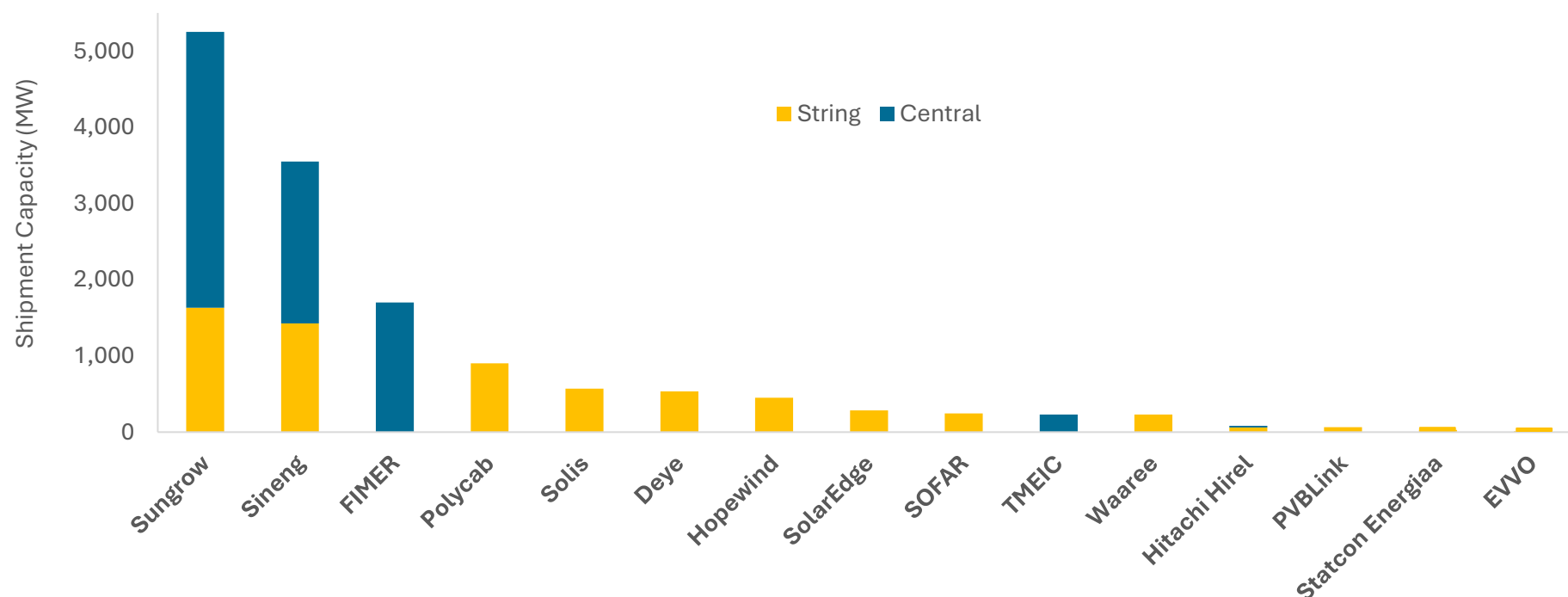
Market Shares

Inverter Shipment

In Q4 2025, over 14.2 GW of shipment data was recorded from 15 players supplying both central and string inverters in India. Sungrow continued to lead the market in Q4 2025 with shipments exceeding 5.25GW, driven primarily by central inverters while maintaining a significant string inverter share.

The top three suppliers Sungrow, Sineng and FIMER collectively accounted for around 73.9% of total inverter shipments. In the central inverter segment, Sungrow, Sineng, and FIMER contributed nearly 96.7% of all shipments, underscoring their market dominance. For string inverters, Sungrow, Sineng and Polycab together held around 61.4% share of total shipments.

Figure 3.1 Leading inverter suppliers in solar segment in India in Q4 2025





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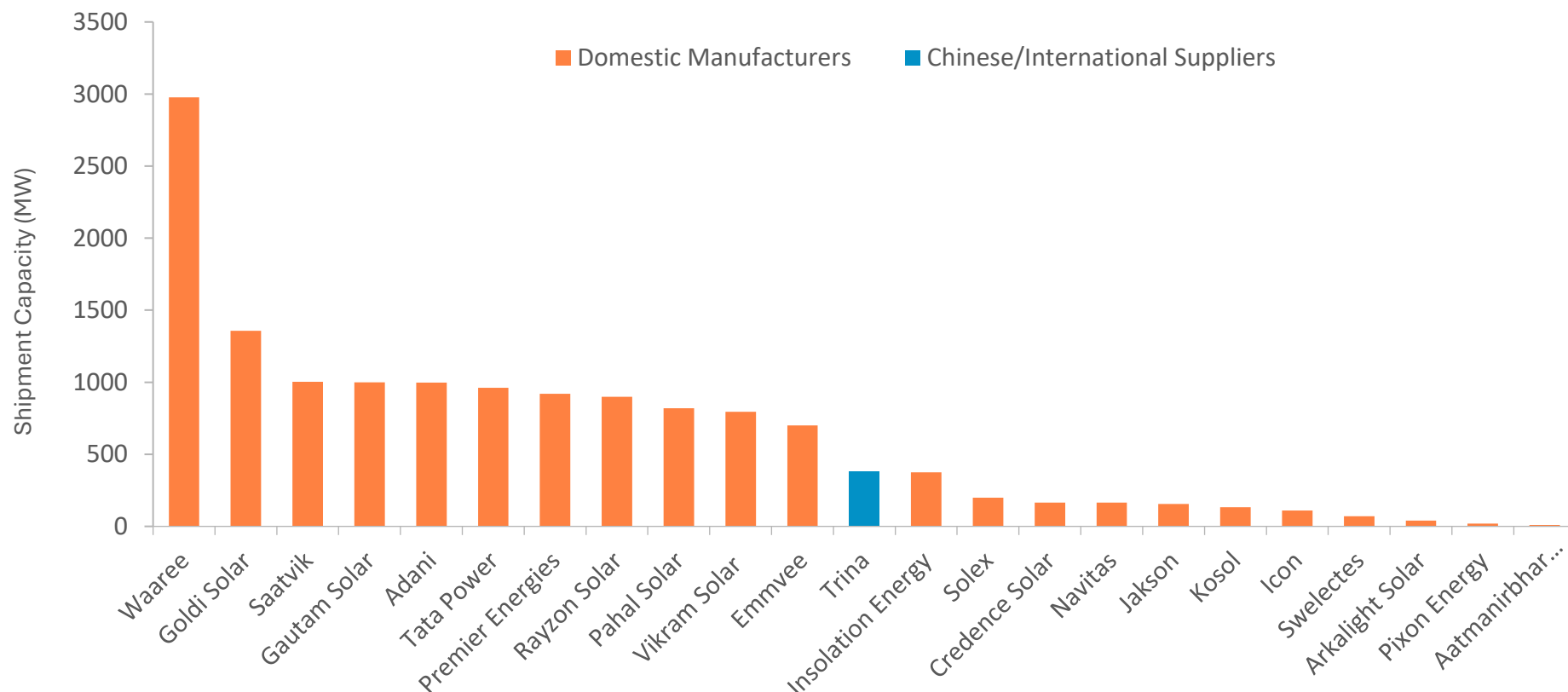
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Module Shipment

- In Q4 2025, about 14 GW of modules were shipped by leading 23 players in the Indian market in which top 5 players contributed around 52% share. Waaree is the leading supplier with 21% share.

Figure 3.2 Leading module suppliers in the solar segment in India in Q4 2025



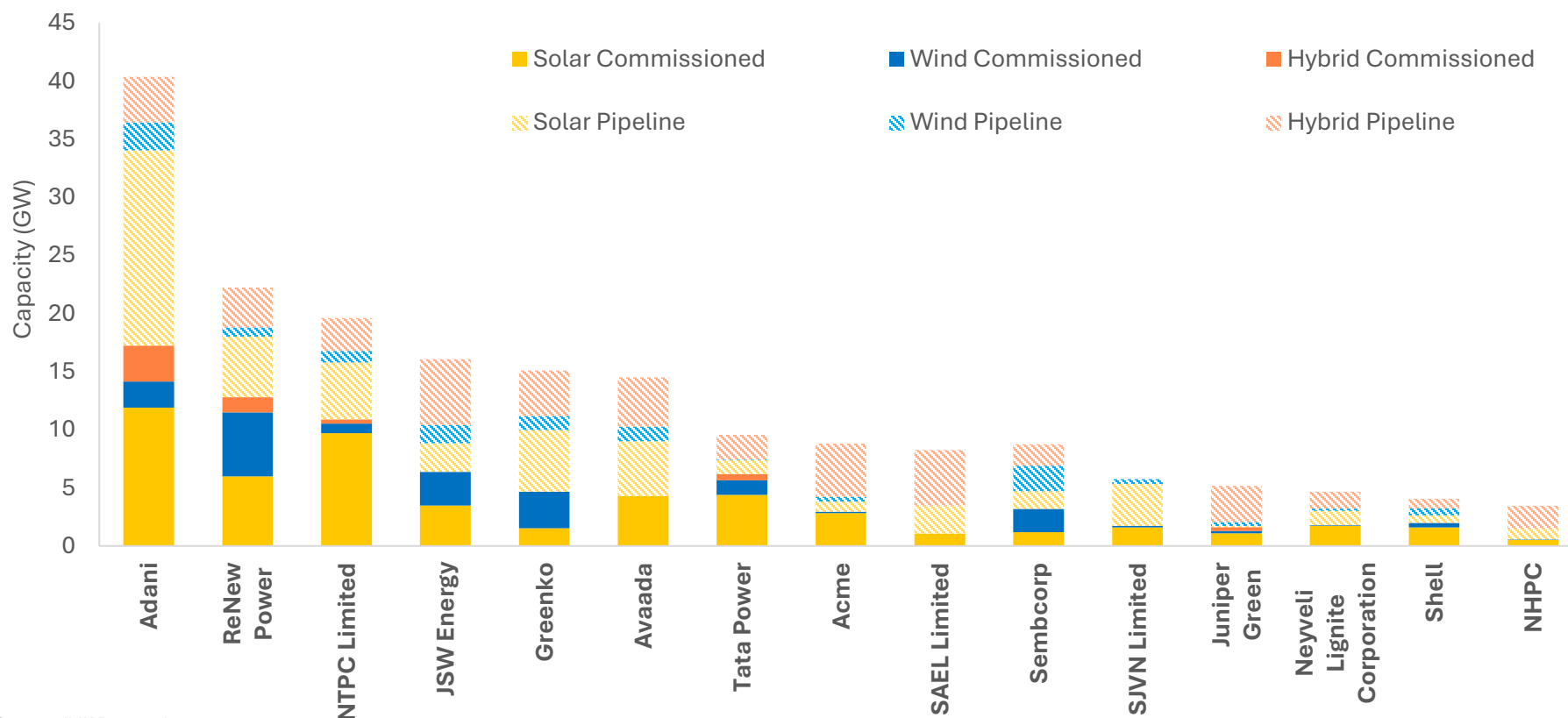
Source: JMK Research.

Note: Players like Jinko, Longi, RenewSys, Novasys, ReNew and First Solar have not shared their quarterly data, hence not included. Data is based on self-declaration by companies.

Project Developers

As of December 31, 2025, the top five players in terms of cumulative installations and pipeline capacity across utility-scale solar, wind, and hybrid segments are Adani (40.4 GW), ReNew (22.2 GW), NTPC (19.6 GW), JSW Energy (16.1 GW) and Greenko (15.1 GW). Among the leading players, Adani, ReNew, NTPC, Tata Power, and Juniper Green have collectively installed around 5.61 GW of hybrid capacity as of December 2025.

Figure 3.3 Top 15 project developers across utility-scale solar, wind and hybrid segment as of December 31, 2025



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Chapter 4: **Tenders**

In Q4 2025 (October–December), 10 tenders totaling 4.2 GW were issued across solar, wind, hybrid, and RE+storage segments marking a 33% decline from Q3 2025 and a 55% drop from Q4 2024 (9.4 GW). With a 52% share, the RE+storage segment dominated tender issuance activity, highlighting the growing emphasis on dispatchable renewable power, which was consistently reflected in tendered capacities throughout the year.

The slowdown in tender issuance can be attributed to multiple factors. Large capacities issued in earlier quarters led to temporary pipeline saturation, prompting a more cautious approach throughout the year. As a significant share of previously issued tenders has not translated into actual offtake, the government has slowed fresh issuances. Consequently, the Ministry of New and Renewable Energy has directed REIAs to review unsigned LoAs and prioritise clearing the existing pipeline before floating new bids, resulting in reduced tender issuance until backlog and viability concerns are resolved.

Additionally, the growing focus on RE+storage projects, requiring longer planning cycles due to land, transmission, and policy-related constraints, contributed to the slower pace of tender rollouts.

Figure 4.1 Quarter-wise renewable energy tender issuance trajectory, by tender type

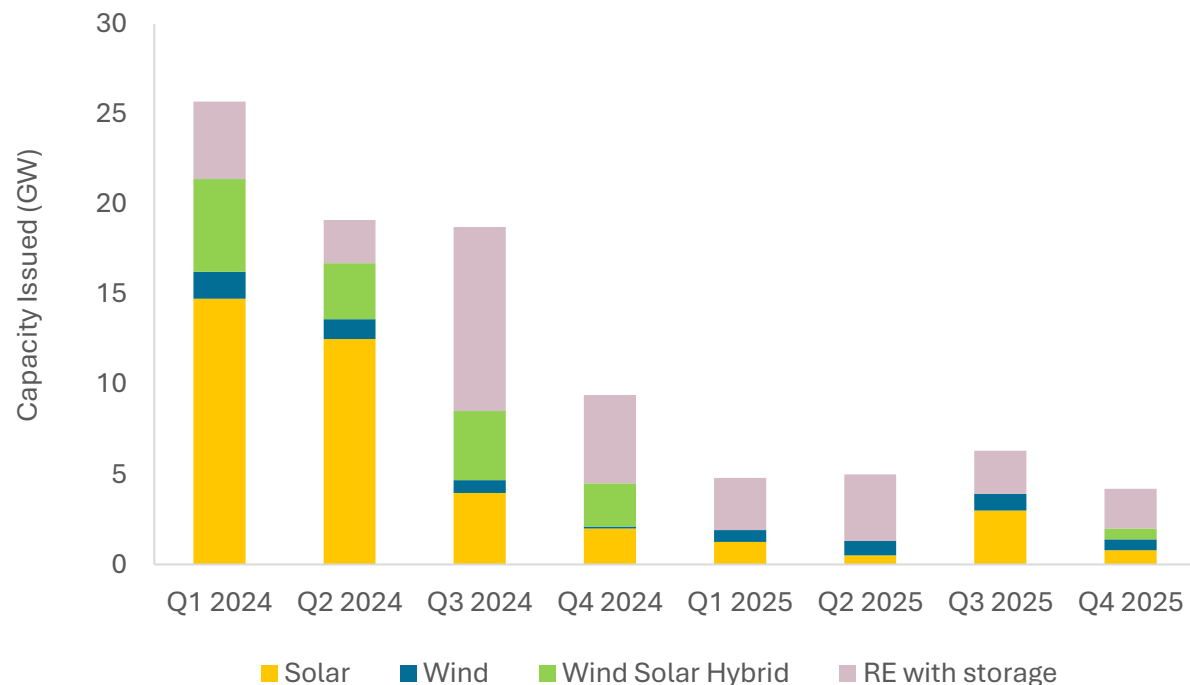
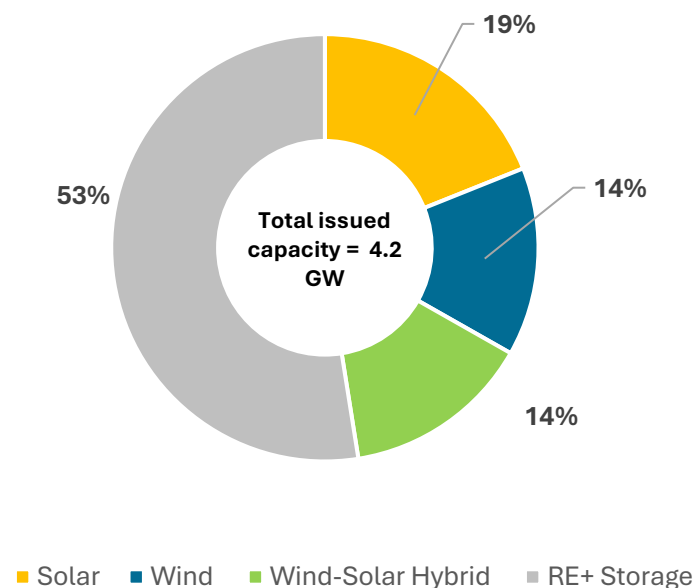


Figure 4.2: Segment-Wise Split, in Q4 2025



Tenders Issued

In Q4 2025, central agencies dominated tender activity, issuing 2.60 GW, accounting for about 62% of the total tenders floated. The entire 2.6 GW capacity was issued by SECI, comprising 2,000 MW under the RE+Storage segment and 600 MW of wind capacity.

State agencies issued a capacity of 0.803 MW, representing 19% of the total tendered capacity. Notable tenders included PSPCL's 0.5 GW solar tender in Punjab and GRIDCO's 0.225 GW floating solar tender in Odisha.

In Q4 2025, two private players, Tata Power and CESC (Calcutta Electric Supply Corporation) issued the remaining capacity of 0.8 GW, accounting for 19% of the total capacity. Tata Power invited bids for 200 MW RE+ Storage project in Delhi.

Figure 4.3 Renewable energy tender issuance in Q4 2025

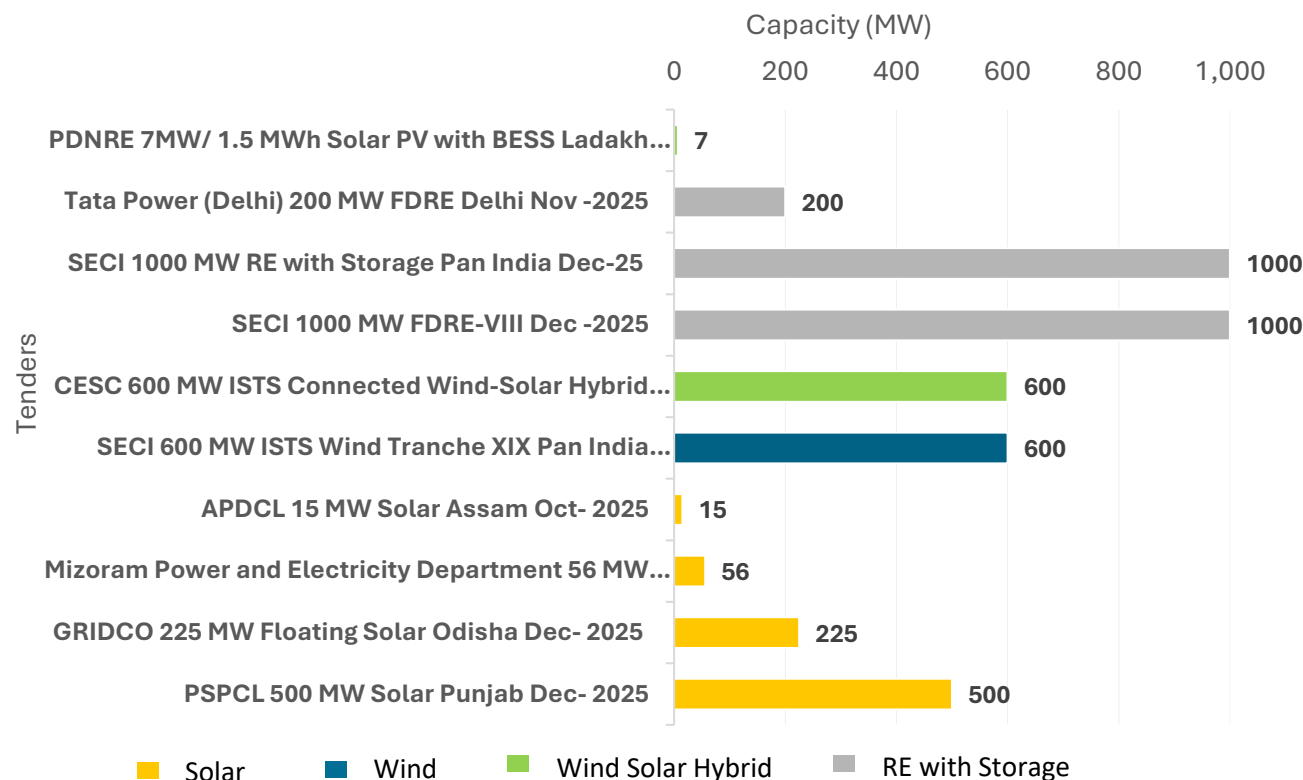
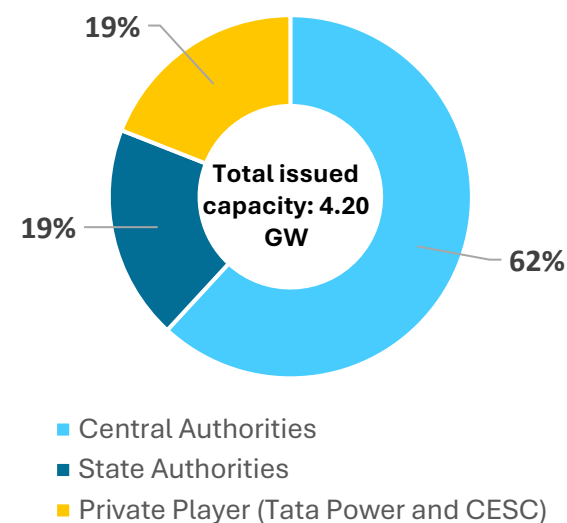
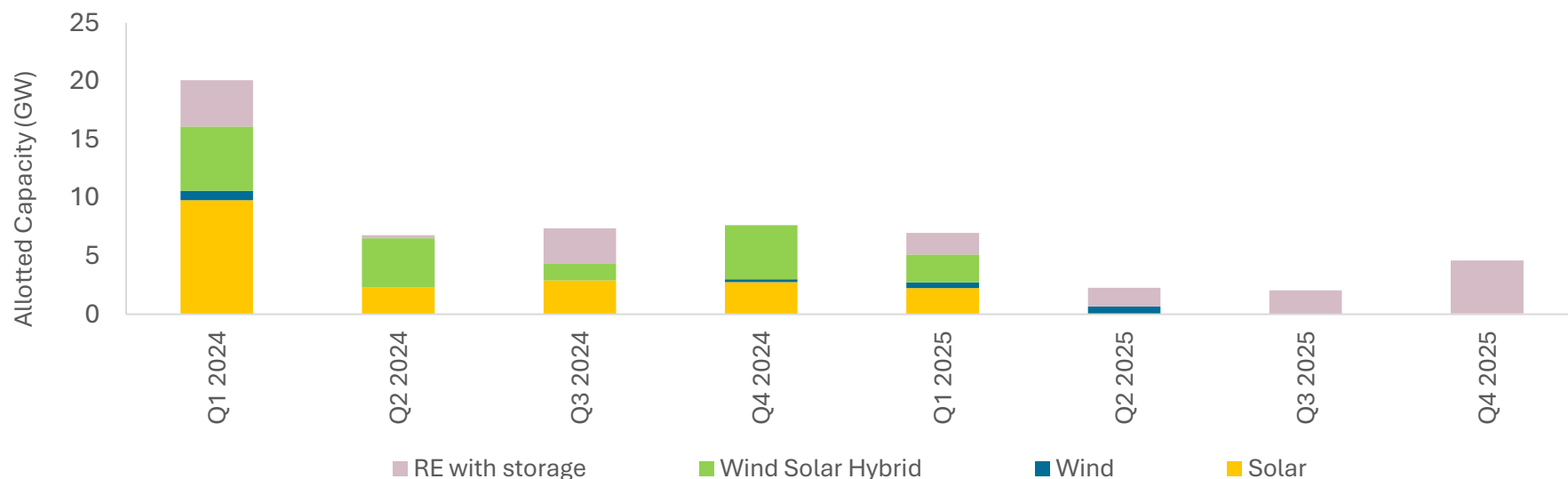


Figure 4.4 RE tender issuance by central, state and private player tendering authorities, Q4 2025



In Q4 2025, around 4.6 GW was allocated, nearly double the capacity awarded in Q3 2025, though still about 40% lower year-on-year compared to Q4 2024. Since Q1 2025, allotments have increasingly shifted toward the RE + Storage segment, reflecting a clear preference for reliable, round-the-clock power over intermittent standalone wind and solar. Declining battery costs have reduced project capex, improved the viability of firm and dispatchable renewables projects, and lowered procurement risk for DISCOMs, thereby driving higher RE + storage awards. The rise in RE + storage allocations is also driven by central mandates to co-locate storage with renewable projects and improved long-term revenue visibility for investors.

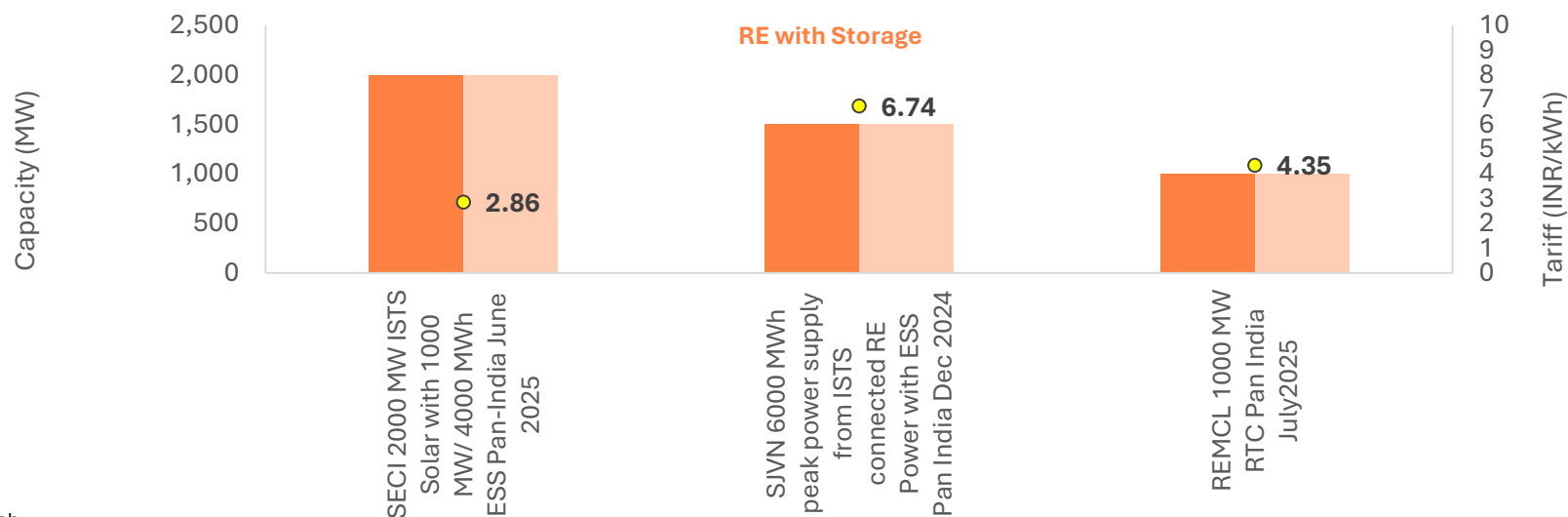
Figure 4.5 Renewable energy tender allotment trajectory, by tender type, quarter wise



- In Q4 2025, only one standalone solar project (100 MW) was awarded to DBL-AMPL at INR 2.09/kWh, for projects in Ramnagar and Dhanwada villages. Wind and wind-solar hybrid tenders saw no allotments this quarter, continuing the trend of the previous two quarters.
- In Q4 2025 about 4.5 GW was auctioned under RE+ Storage segment, which is more than double of capacity allotted in Q3 2025, which was 2,050 MW.
- In CY 2025, overall renewable energy tender allotments were considerably lower than in 2024, with most of the activity focused on RE-with-storage projects. The year saw a clear shift toward RE-with-storage projects, while standalone solar, wind, and hybrid segments saw limited participation beyond the first quarter.

In Q4 2025, 4500 MW of RE+ Storage capacity was allotted to 19 developers under three tenders floated by SECI, SJVN and REMCL (Railway Energy Management Company), with the capacities 2000 MW, 1500 MW and 1000 MW respectively.

Figure 4.6 Renewable energy tender allotment in Q4 2025



Source: JMK Research

Note:

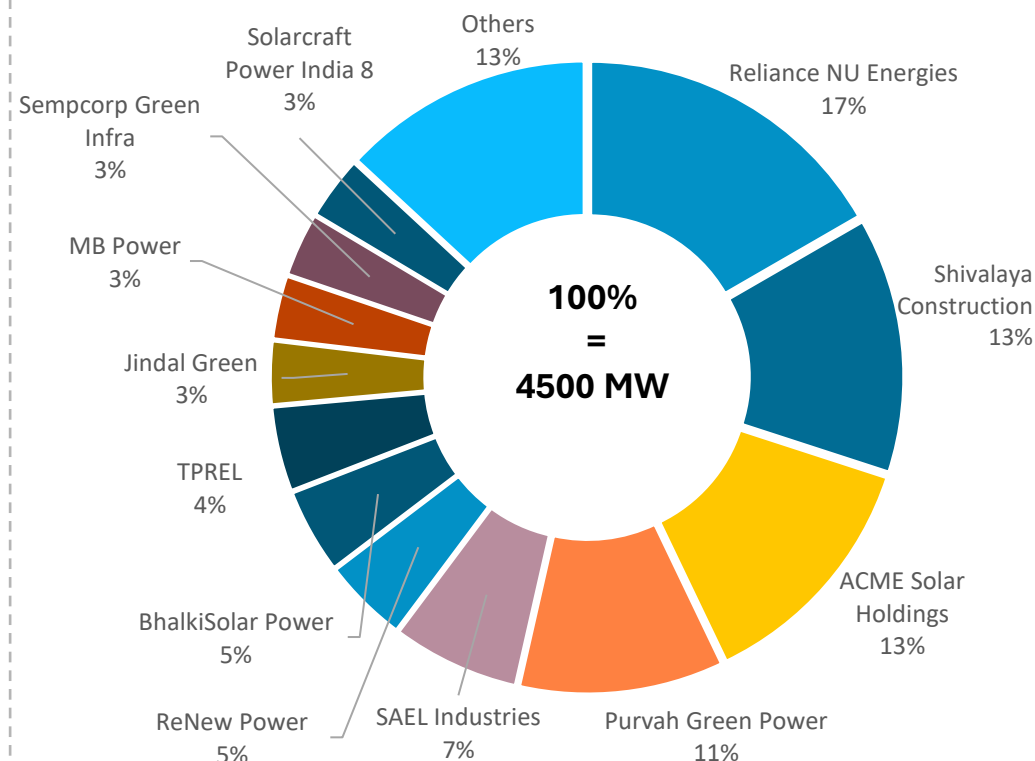
- Darker bars represent issued tender capacity, while lighter bars indicate awarded capacity.
- The SECI tender includes solar + storage tariffs only while other 2 include solar and wind + storage

The lowest tariff secured was INR 2.86/kWh under SECI's 2000 MW of solar capacity along with 1000 MW/ 4000 MWh of energy storage tender, issued in June 2025, while the highest tariff discovered was INR 6.74/ kWh under SJVN's 1500 MW RE with ESS tender issued in December 2024.

Tariff differences stem from tender design and delivery obligations: SECI discovered the lowest tariff (INR 2.86/kWh) for a relatively simpler solar + storage structure; REMCL tariffs are moderate due to its RTC model allowing optimisation across solar, wind, and storage; while SJVN recorded the highest tariff (INR 6.74/kWh) owing to stringent assured peak power requirements, including mandatory daily BESS discharge and guaranteed evening supply.

- In Q4 2025, 4500 MW of RE+ Storage capacity was allotted to 19 developers.
- The capacity was allocated under three tenders floated by SECI, SJVN and REMCL (Railway Energy Management Company).
- Among the winners, Reliance Industries secured the highest capacity at 750 MW, followed by Shivalaya Construction (600 MW), ACME Solar Holdings (580 MW), Purvah Green Power (480 MW) and SAEL Industries (300 MW).
- Together, these top five developers secured 2,710 MW capacity, accounting for 60% of the total allotted capacity.
- The quarter saw some new entrants to the market like Bhalki Solar Power and MB Power.

Figure 4.7: Projects won by developers in RE+Storage segment in Q4 2025



Source: JMK Research

Note: Others include Ayana Renewables, Navayuga Green Energy, Banyan Insolation, Stockwell Solar Services, Oswal Cables, LC Infra and GH2 Solar.

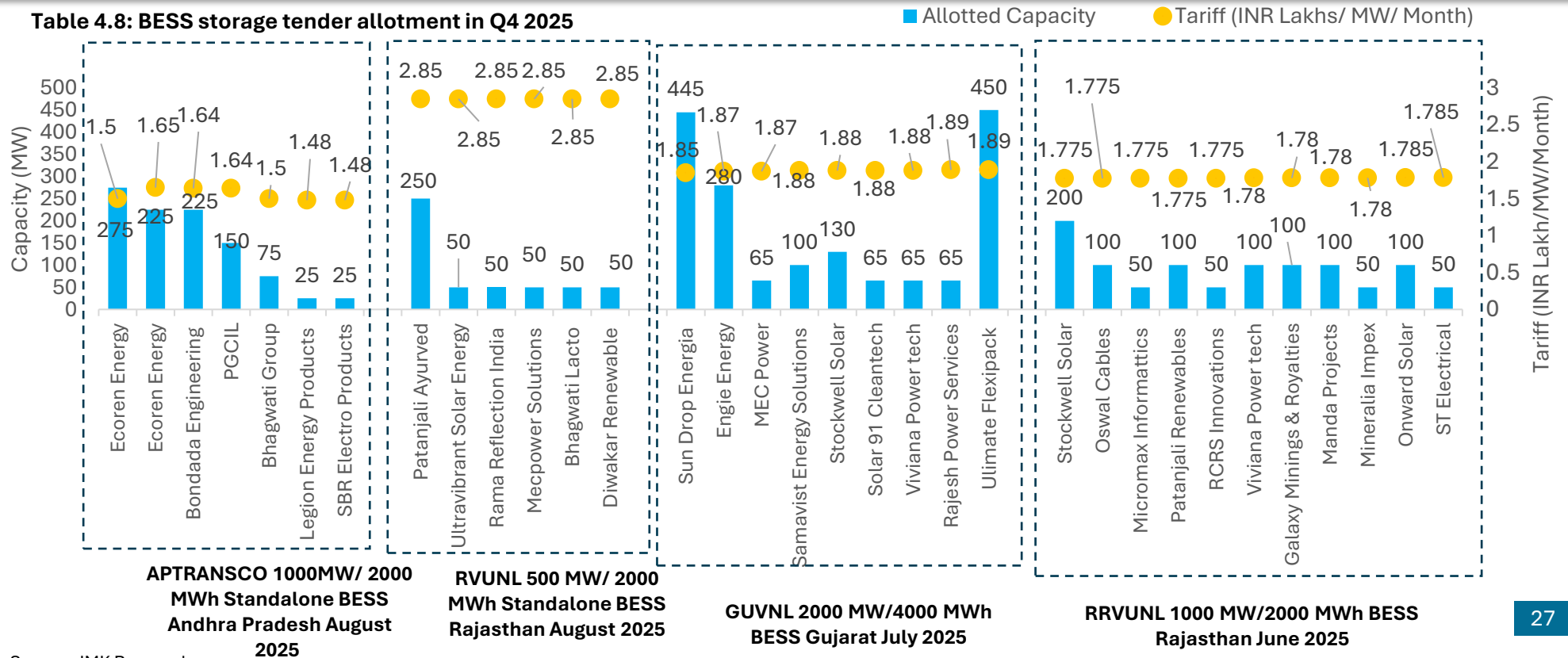
In Q4 2025, 1,725 MW of standalone BESS tenders were floated, a steep 76% decline from 6,295 MW in Q3, likely reflecting delays in PPA/PSA finalization after project awards. Overall, tender issuance remained volatile during the year, reaching a high of 6,125 MW in Q1, dropping to the lowest level of 1,500 MW in Q2, rebounding sharply in Q3, and declining again in Q4.

In Q4 2025, around 4,165 MW of standalone BESS capacity was allotted, marking a sharp 362% rise from 900 MW in Q3 2025. Despite this strong quarterly jump, overall allocations during the year remained relatively modest, with the highest awards recorded in Q4 2024 and the lowest allocation of 850 MW seen in Q1 2025.

The lowest tariff discovered for standalone energy storage projects rose to INR 2.85 lakh/MW/month from INR 2.54 lakh/MW/month in the previous quarter, marking a 12% increase. This is due to higher battery procurement and financing costs, along with stricter performance and availability requirements.

This quarter saw many new entrants to the BESS market like Patanjali Ayurved, Bhagwati Lacto, Diwaker Renewable Infra, ST Electrical, Rama Reflection, Galaxy Minings, Mineralia Impex. All the awardees will receive Viability gap funding, Ecoren Energy won the highest capacity of 275 MW (at tariff INR 1.5 lakh/MW/month) and 225 MW (at INR 1.65 lakh/MW/Month) under the APTRANSCO tender floated in August 2025.

Table 4.8: BESS storage tender allotment in Q4 2025



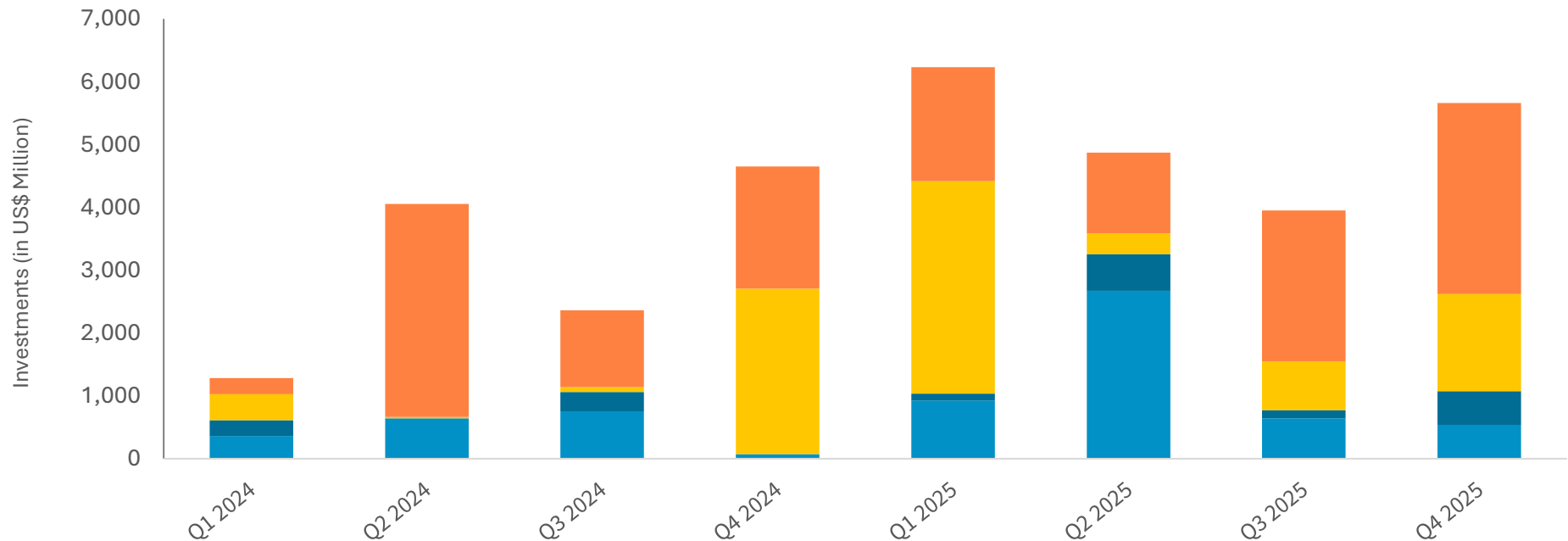


Chapter 5: **Financial Deals**

Investments in RE Sector

In Q4 2025, the renewable energy sector attracted over US\$ 5.6 billion in investments, about 41.7% higher than Q3 2025 and 21.77% higher than Q4 2024. Acquisitions accounted for 27.3% of the total investments concluded this quarter, followed by equity (9.5%) and bonds (9.43%). On a year-on-year basis, total investments in 2025 grew by about 67.7% compared to 2024. This increase was primarily driven by the closure of large, platform-level M&A transactions, along with a sharp rise in equity infusions into renewable energy platforms, as investors focused on fewer but higher-value deals, significantly lifting overall investment volumes.

Figure 5.1: Quarter-wise investment flow in Indian RE sector (US\$ million)



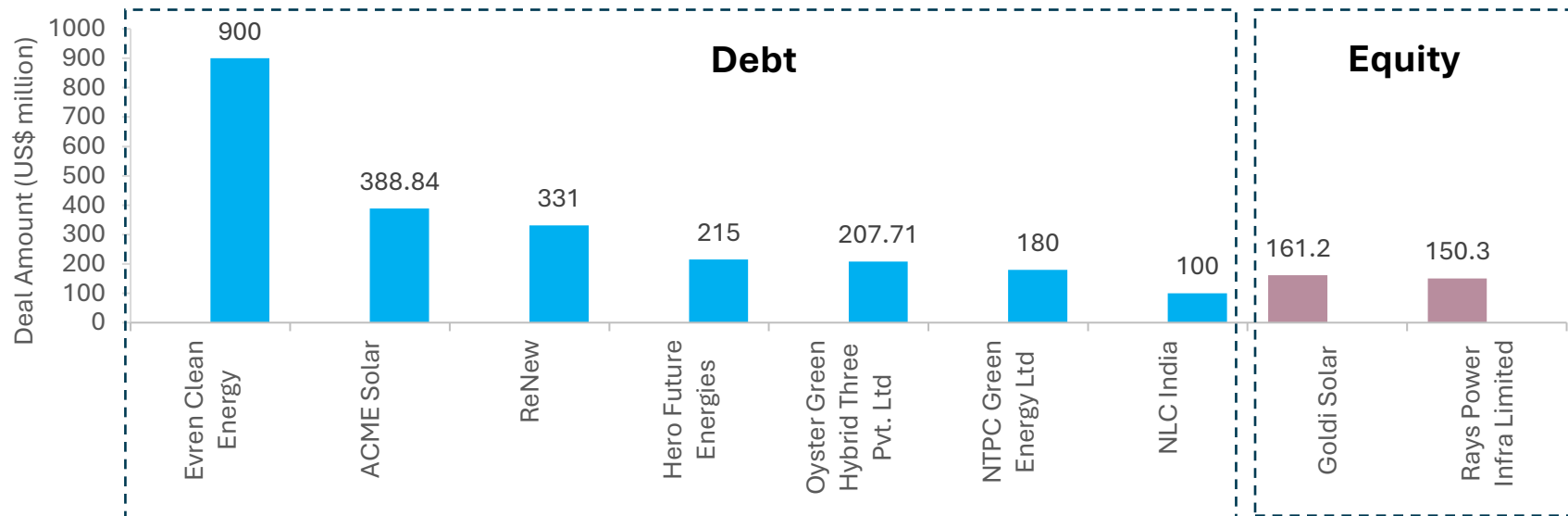
Source: JMK Research

Note: Others include debt, mezzanine funding, IPO etc

Equity Bonds M&A Other

- Evren Clean Energy obtained a record US\$900 million loan from REC to develop a 1,040 MW solar–wind hybrid project (400 MW solar and 640 MW wind) in Kurnool, Andhra Pradesh, marking REC’s largest-ever financing for a private-sector renewable energy project.
- ACME Solar raised INR US\$ 299 million from Power Finance Corporation (PFC) for its 300 MW FDRE project, while NaBFID has sanctioned US\$ 88 million for 150 MW solar plus storage project.

Figure 5.2: Equity Investments and debt raised by RE players in Q4 2025



Source: JMK Research

Note: The chart includes only equity and debt deals exceeding US\$100 million.

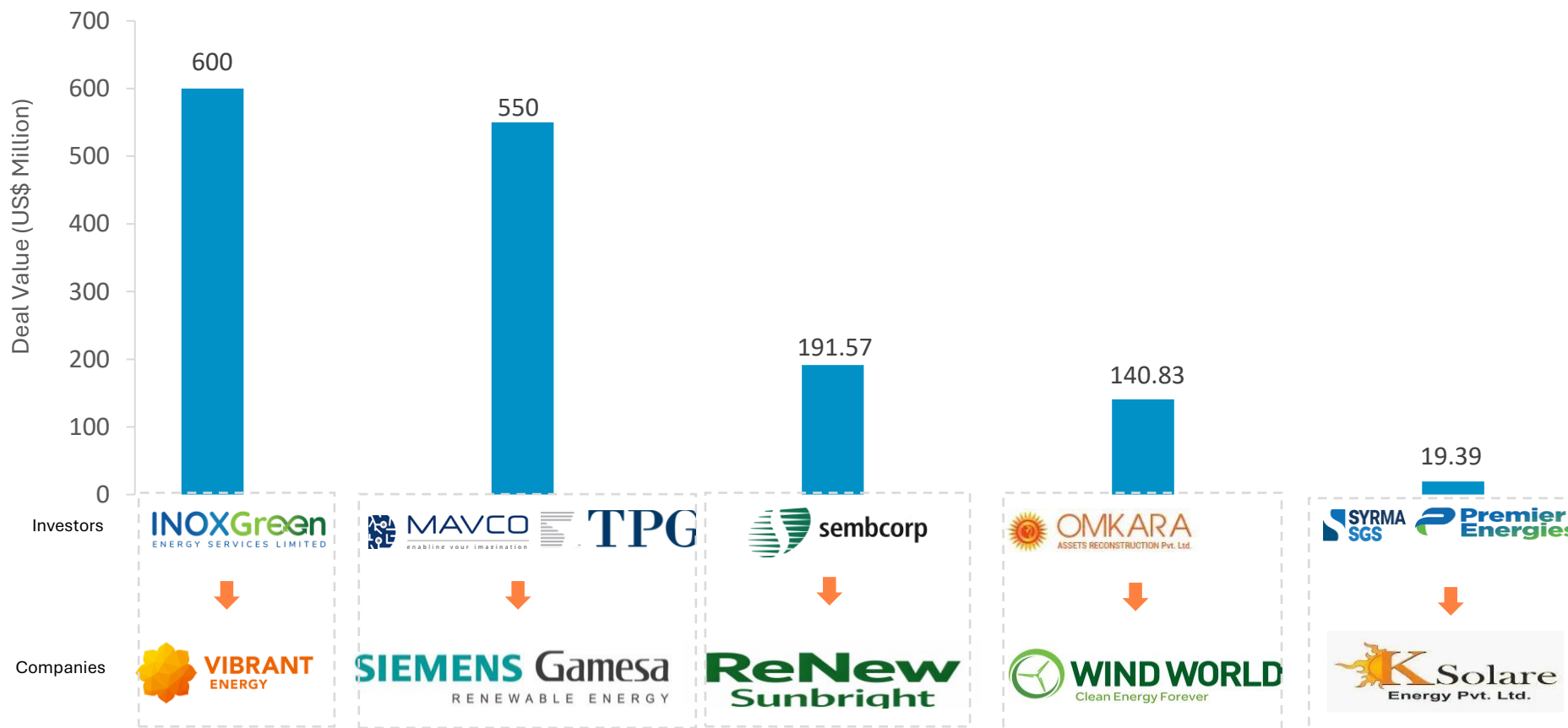
Equity:

- Goldi Solar secured over US\$161.2 million in a funding round led by Havells India to expand its manufacturing capacity, pursue backward integration into solar cell production, and strengthen both its domestic and export module businesses.
- Rays Power Infra secured US\$ 150.3 million from A.P. Moller Capital to scale its renewable energy platforms, expand solar and wind projects, and strengthen its readiness for a planned IPO.

Acquisition:

- Inox Clean Energy acquired Macquarie-owned renewable energy platform Vibrant Energy, adding a 1,337 MW portfolio (including around 800 MW operational assets) to accelerate its renewable capacity expansion.
- TPG and a Mavco-led consortium have acquired Siemens Gamesa's wind business in India and Sri Lanka, renaming it Vayona Energy. The consortium now holds 90% equity, while Siemens Energy retains the remaining 10%.
- Sembcorp acquired a 100% stake in ReNew Sun Bright (Subsidiary of ReNew) , adding a 300 MW operational solar asset and raising its total renewable capacity in India to around 6.9 GW.

Figure 5.3: Major Acquisitions of RE players in Q4 2025



Green Transmission Acquisition:

- Rapid growth in Solar and Wind capacity in key states has increased the need for transmission infrastructure, leading to evacuation challenges and some project delays. As a result, developers and infrastructure funds are acquiring transmission assets outright to secure stable, long-term returns, gain operational control, and ensure reliable power evacuation. This reflects a growing trend toward integrated renewable and transmission portfolios, supported by green energy corridors, faster tenders, and rising investments in grid assets.

Key deals under Green Transmission segment in Q4 2025 :

- IndiGrid signed agreements to acquire Gadag Transmission Limited for US\$ 41.42 million , a 187 circuit km operational ISTS asset designed to evacuate about 2.5 GW of solar power, strengthening its renewable-linked transmission portfolio.
- GR Infraprojects acquired Rajgarh Neemuch Power Transmission for about US\$ 2.07 million, making it a wholly owned subsidiary to execute the transmission system evacuating power from 2.5 GW of renewable energy zones in Rajgarh and Neemuch, Madhya Pradesh.

Company Name	Investor	Deal value
<u>Gadag Transmission Limited (GTL)</u>	IndiGrid	US\$ 41.42 million
<u>Rajgarh Neemuch Power Transmission Ltd (RNPTL)</u>	GR Infraprojects	US\$ 2.07 million



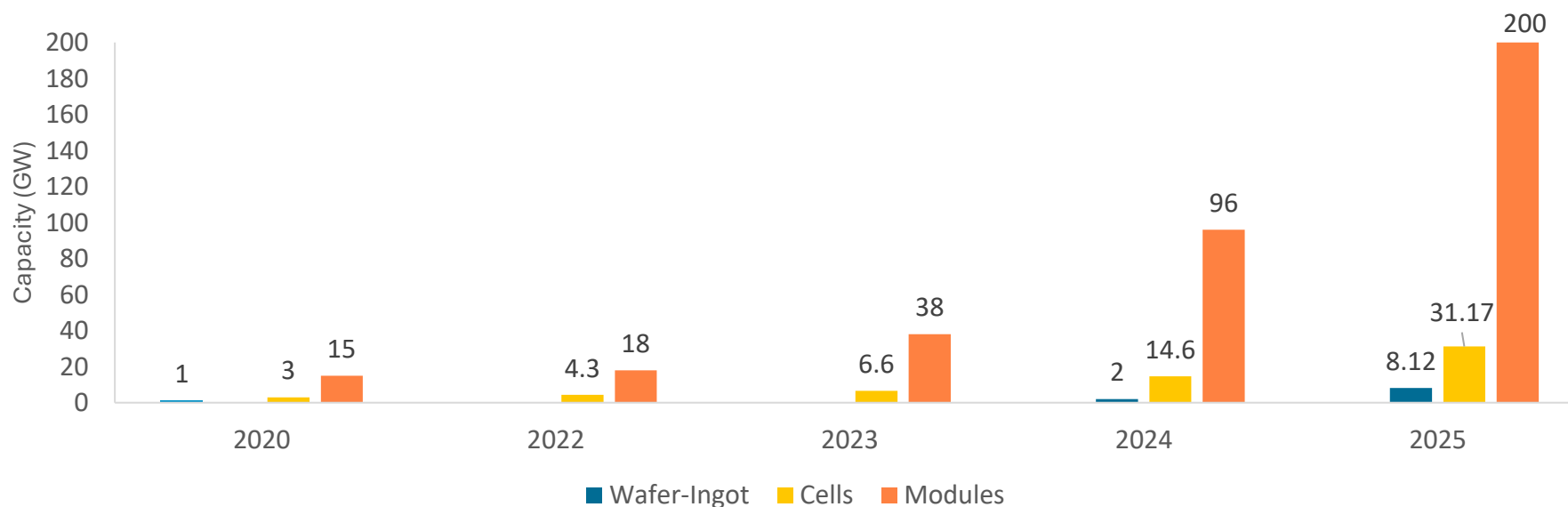
Chapter 6:

Solar Manufacturing

PV Manufacturing Capacity Addition

- Module capacity additions grew nearly 14-fold between 2020 and 2025, driven by strong policy support such as PLI incentives, ALMM implementation, basic customs duties on imports, rising domestic solar demand, and efforts to reduce import dependence, making final assembly the fastest-scaling segment of the PV value chain. As of 2025, India's total solar module manufacturing capacity stands at 200 GW, of which 145 GW is enlisted under the ALMM, while the remaining capacity is outside the approved list.
- Cell manufacturing capacity has reached 31.17 GW as of 2025, but expansion remains slower than modules due to high capital intensity. With the inclusion of cells under the Approved List of Cell Manufacturers (ALCM), domestic players are now better safeguarded from import competition, providing stronger policy support for local capacity growth. Of the total capacity, 17.88 GW capacity is enlisted under ALCM.
- Upstream capacity remains constrained, with only ~8.12 GW of wafer-ingot manufacturing and no domestic polysilicon production, indicating continued underinvestment relative to downstream segments.

Fig 6.1: Solar PV Manufacturing Capacity



Source: News Articles, JMK Research

PV Manufacturing – Module & Cell Manufacturing Capacity Addition in Q4 2025

- In Q4 2025, four manufacturers collectively added ~13.3 GW of module and ~1.13 GW of cell production capacity.
- Insolation led solar module manufacturing capacity additions with the largest expansion of 4.5 GW. Among other players, RPSG Solvanta entered the market with 4 GW of new module capacity, Goldi expanded by 1.2 GW.
- In this quarter, Waaree Energies Ltd added 3.6 GW of module manufacturing capacity, including the commissioning of 1.5 GW at its Samakhiali facility in Kutch, Gujarat. With the plant's total capacity rising to 3 GW, the company's cumulative domestic module manufacturing capacity reached 19.7 GW as of December 2025.
- In Q4 2025, a cumulative cell capacity of 1.13 GW was added by 2 players, 1 GW by Jupiter International, while ReNewSys added a small capacity of 0.13 GW.

Fig 6.2: Module Manufacturing Capacity added in Q4 2025

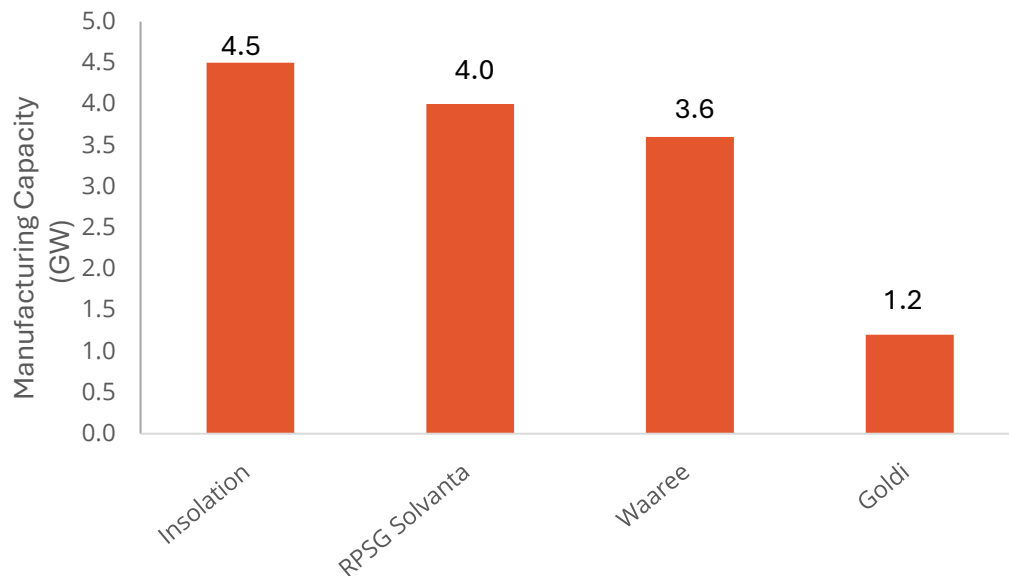
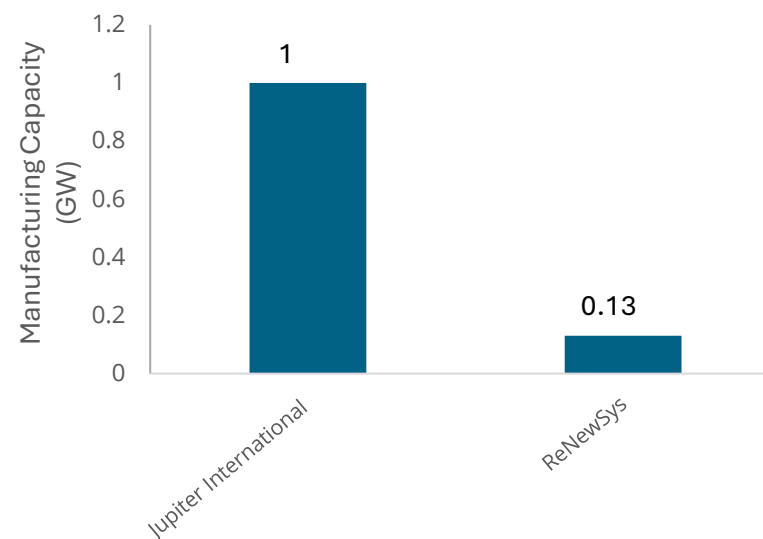


Fig 6.3: Cell Manufacturing Capacity added in Q4 2025



Source: Industry Insights, JMK Research

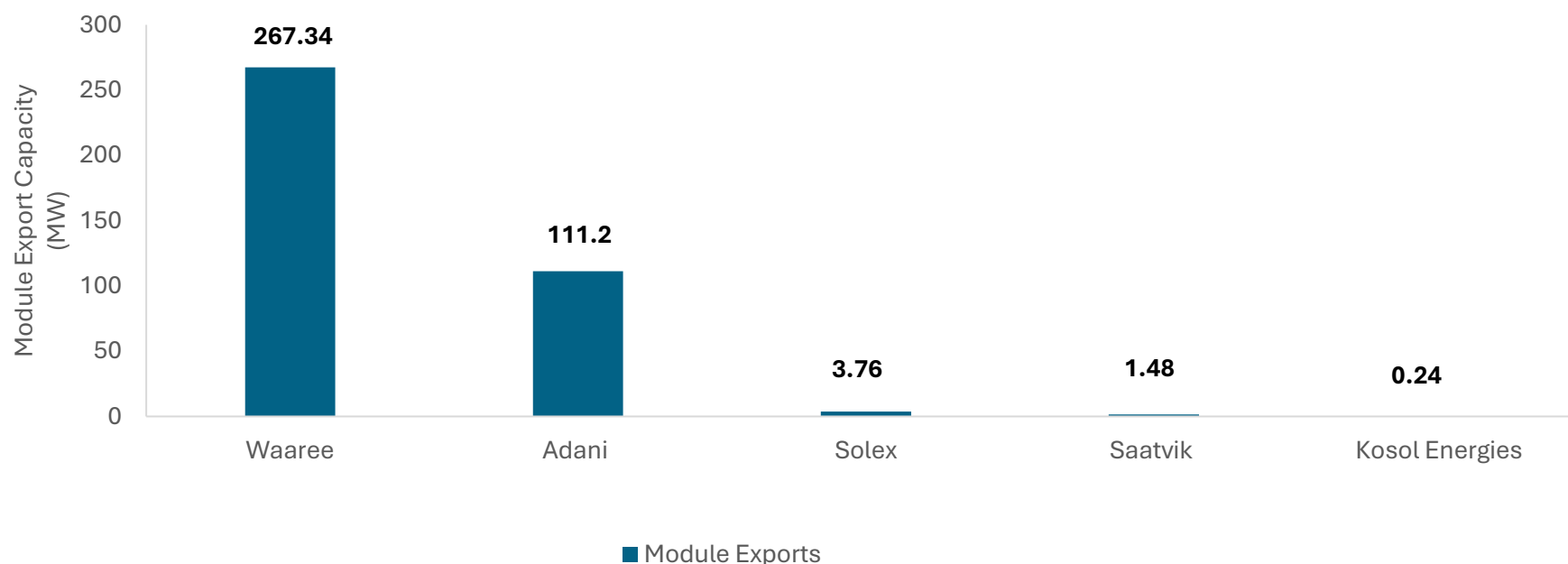
Exports by Key Domestic Players

In Q4 2025, module exports remained low, about 384.02 MW of modules were exported by 5 key players. This relatively low export volume suggests that recent US tariff hikes on Indian PV products may be dampening export momentum in the American market.

During the quarter, Waaree's exports declined sharply to 267.34 MW, marking a 65% drop from 758 MW in Q3 2025. In contrast, Adani's exports rose slightly to 111.2 MW, up from 100 MW in the previous quarter.

Other manufacturers, including Solx, Saatvik, and Kosol Energies, recorded relatively modest export volumes of 3.76 MW, 1.48 MW, and 0.24 MW, respectively.

Fig 6.4: Exports by Leading domestic module suppliers in Q4 2025



Source: JMK Research

Quarterly Import-Export Statistics

In Q4 2025, India's solar PV module exports reached US\$98.96 million, with the United States accounting for ~97% of the total export value.

During the same period, India imported solar modules worth US\$216.25 million, with Vietnam, China, and Malaysia contributing 33%, 32%, and 31% respectively.

India has begun exporting solar modules to newer markets such as the UAE, Kenya, Portugal, Greece, Comoros, and Yemen, signalling a strategic effort to diversify its export portfolio. This broader outreach reduces reliance on a single trading partner and supports more resilient and sustained trade growth for the Indian solar manufacturing sector.

In Q4 2025, India's solar cell imports stood at US\$892.15 million, with China (67%), Thailand (11%), Indonesia (8%), and Ethiopia (6%) emerging as the key source markets.

Solar cell imports increased by 31% quarter-on-quarter (from Q3 2025), as Chinese manufacturers raised cell prices following the withdrawal of export rebates by the Chinese government.

Fig 6.5: Quarter-wise import-export trend for solar modules

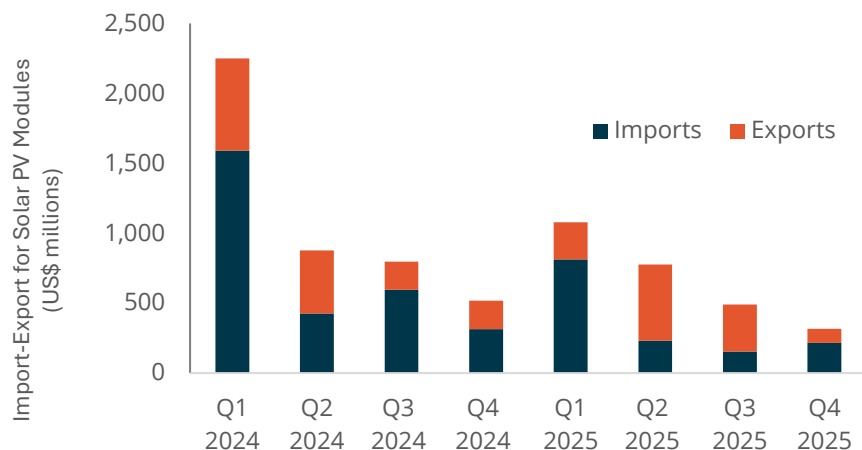
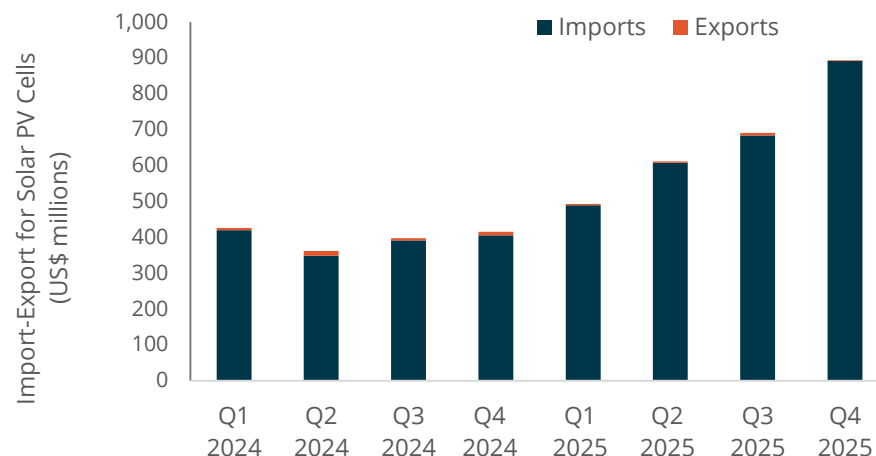


Fig 6.6: Quarter-wise import-export trend for solar cells





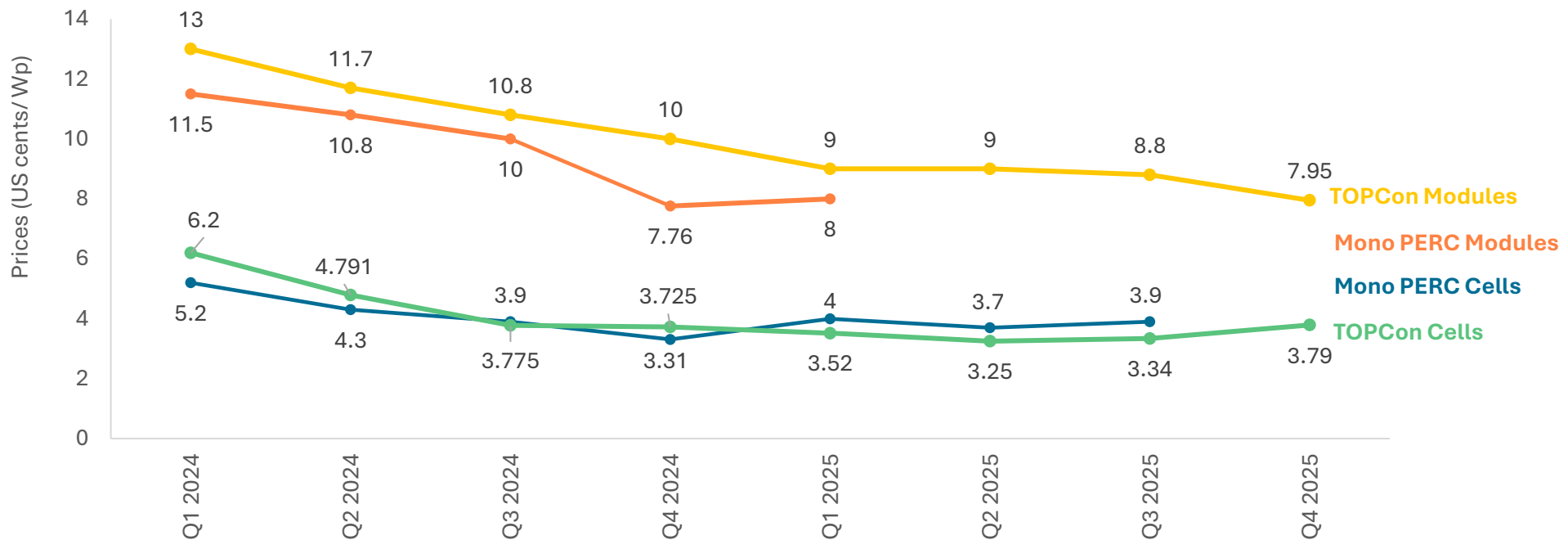
Chapter 7:

Price Trends

Global Average Prices Trends

- In Q4 2025, global TOPCon cell prices increased by around 13% QoQ, showing a recovery after earlier declines. The increase was mainly due to higher silver prices, which raised production costs since silver is a key material used in TOPCon cells. These higher input costs continued to support price increases in January and February 2026. On a YoY basis, prices were slightly higher up by (1.7%), indicating that the market had largely stabilized.
- TOPCon modules prices declined by approximately 9.7% quarter-on-quarter in Q4 2025, continuing the downward trend due to strong competition and softer demand. On a year-on-year basis, module prices fell significantly by around 20.5% compared to Q4 2024, reflecting ongoing oversupply, high inventory levels, and sustained margin pressure across manufacturers.

Figure 7.1: Quarter – wise Global price trends of Solar Cells and Modules



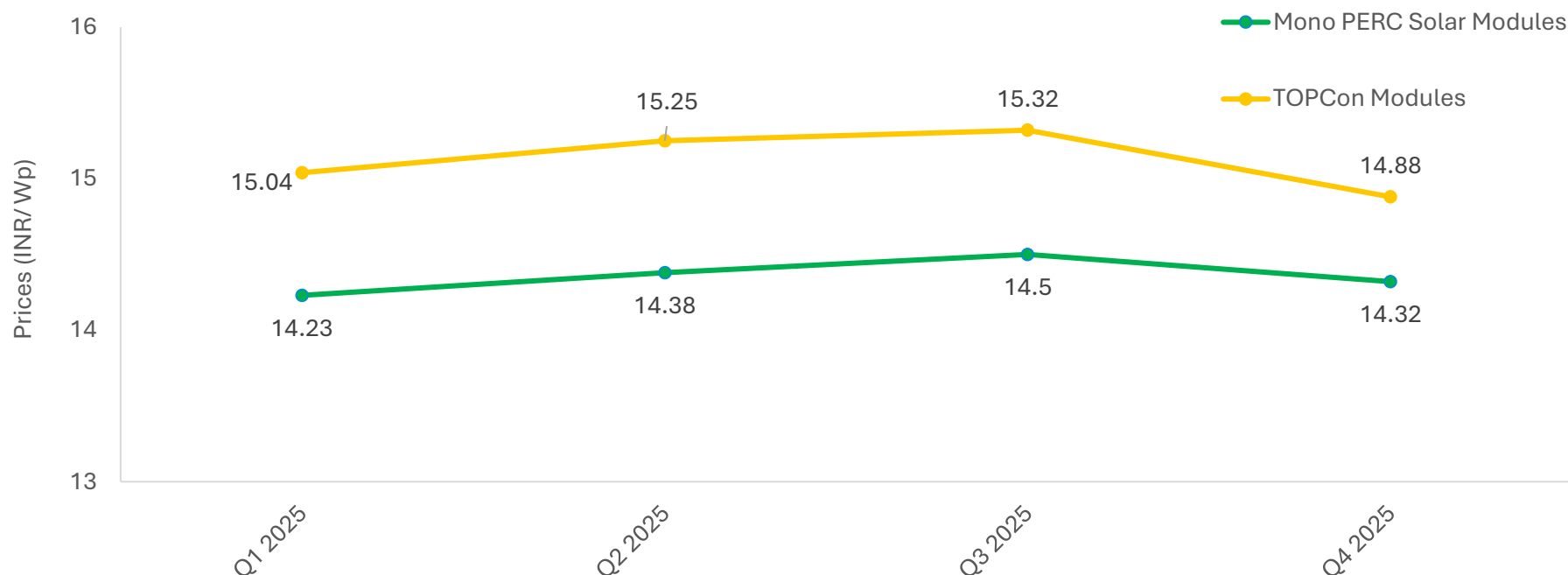
Source: PV Info, JMK Research

Note: Mono PERC module prices are no longer tracked separately as they have reached parity with TOPCon modules and are being phased out in favor of higher-efficiency TOPCon products.

Average Prices for Domestic Modules

- In Q4 2025, Mono PERC 500 Wp modules were priced at INR 14.32/Wp, reflecting a 1.24% fall from Q3 2025 and a 7.6% decrease compared to Q4 2024.
- In Q4 2025, TOPCon modules were priced at INR 14.88/Wp, reflecting a 2.95% fall from Q3 2025 and a 12.4% decrease compared to Q4 2024.
- Domestic solar module prices have been increasing since Q4 2024, largely due to a rise in global polysilicon, wafer, and cell prices. This increase followed production cuts and supply chain consolidation in China, which reduced global supply and made imported components more expensive for India.

Figure 7.2: Quarter-wise trends for Average Prices for Domestic Modules



Source: JMK Research

Note: All prices shown are ex-works. The figures in the chart represent non-DCR modules.



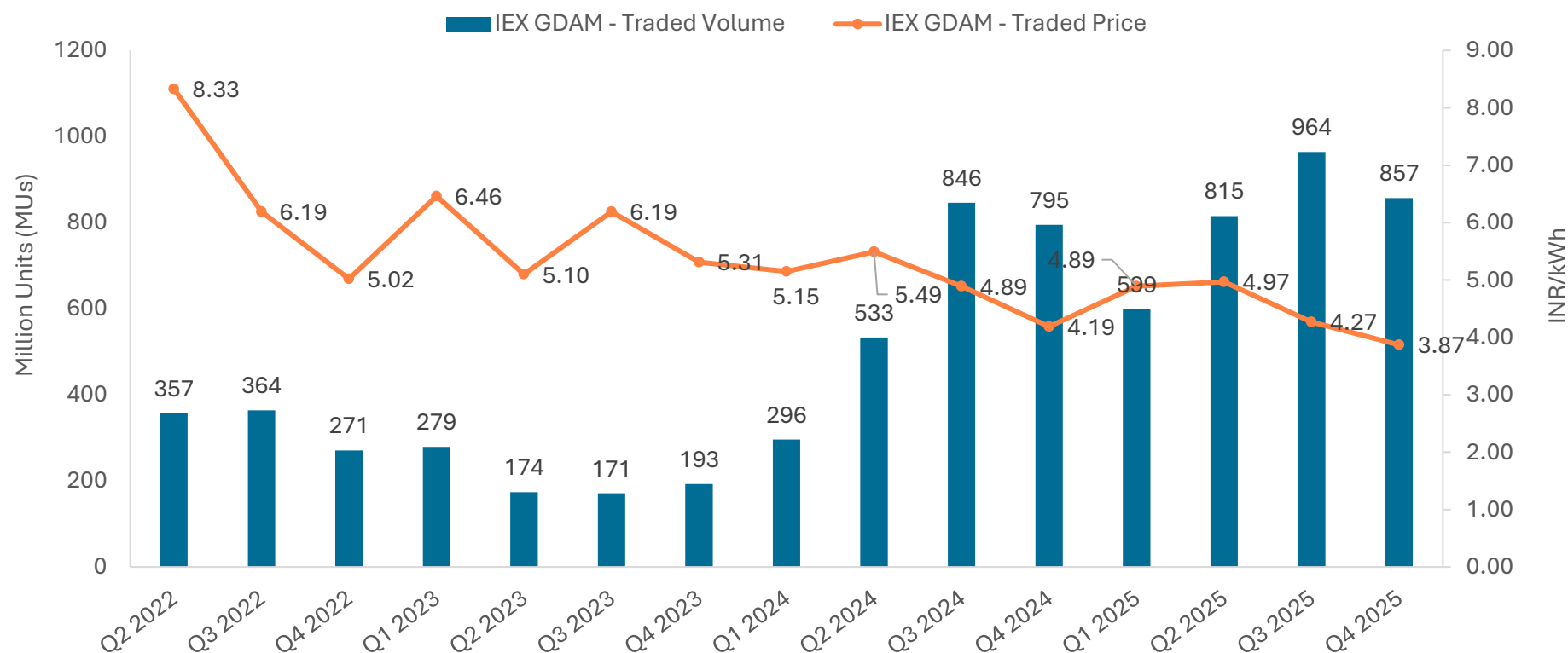
Chapter 8:

GDAM Traded Volume

GDAM TRADED VOLUME AND PRICE TREND

- IEX's GDAM average traded volume in Q4 2025 stood at approximately 857 MU, reflecting an 11.1% quarter-on-quarter decline from 964 MU in Q3 2025, attributable to seasonal demand moderation. However, volumes recorded a 7.8% year-on-year increase compared to 795 MU in Q4 2024, indicating sustained growth in market participation and liquidity.
- The average GDAM trade price declined to approximately INR 3.87/kWh in Q4 2025, representing a 9.4% quarter-on-quarter reduction from INR 4.27/kWh in Q3 2025 and a 7.6% year-on-year decrease from INR 4.19/kWh in Q4 2024, driven by higher renewable energy availability, improved supply conditions, and enhanced efficiency in price discovery.

Figure 8.1: Quarter-wise Average GDAM Traded Volume and Average Price Trend



GDAC & GTAM TRADED VOLUME AND PRICE TREND

- Combined GDAC and Daily GTAM traded volumes declined to 45 million units in Q4 2025, registering a 56% QoQ decline from Q3 2025 and a 50% YoY decline compared to Q4 2024, reflecting continued weakness in these green power market segments.
- In Q4 2025, GDAC prices rose modestly to INR 3.05/kWh (up 13% QoQ), while Daily GTAM prices remained largely stable at around INR 5.39/kWh (down 2% QoQ), indicating relatively balanced short-term supply conditions.

Figure 8.2: Market clearing volume of green power markets, Quarter-wise

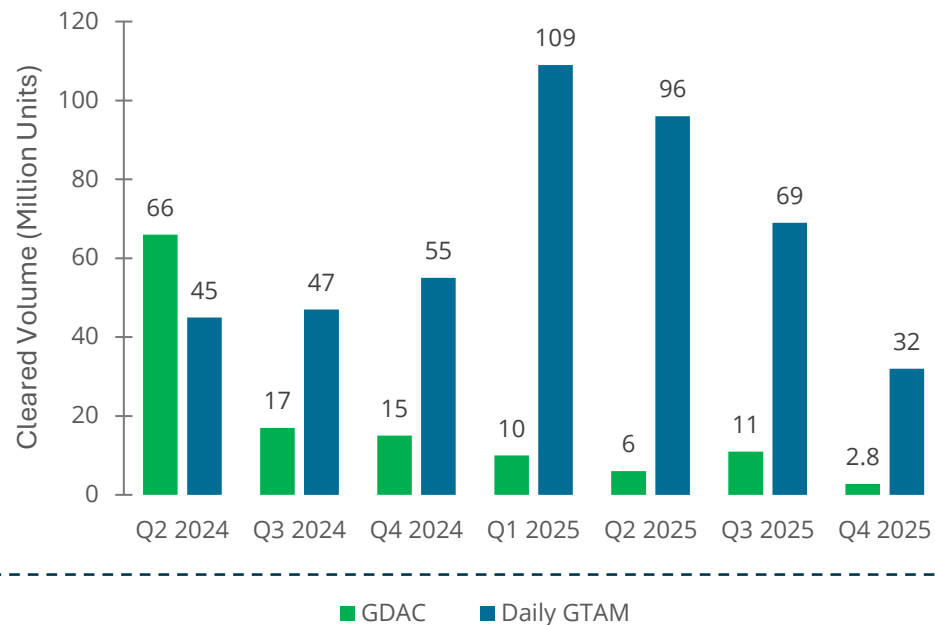
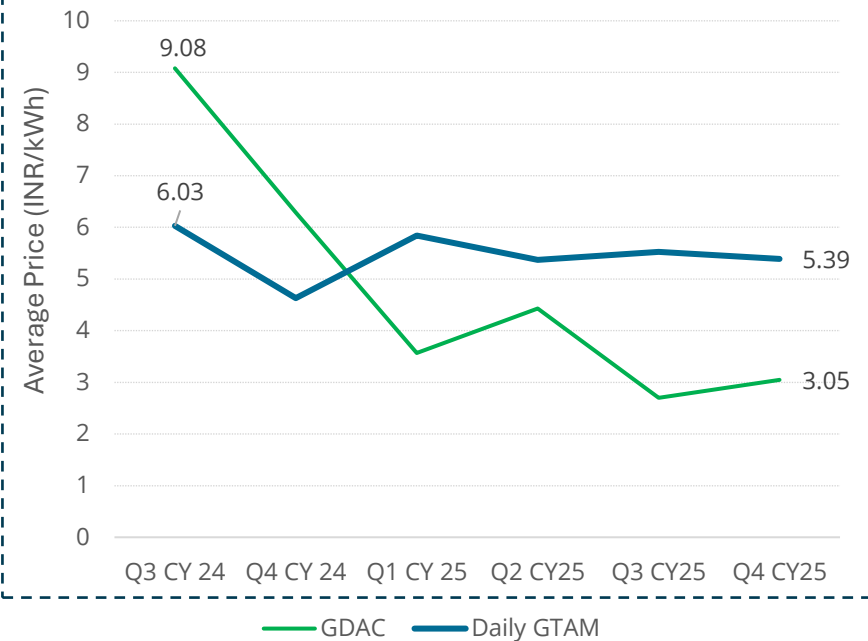


Figure 8.3: Average clearing price for green power markets



Note: GDAC data for Q4 2025 is based on trading activity observed in October and November only.

Source: JMK Research, CERC IEX, PXIL, HPX

Thank You!!

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