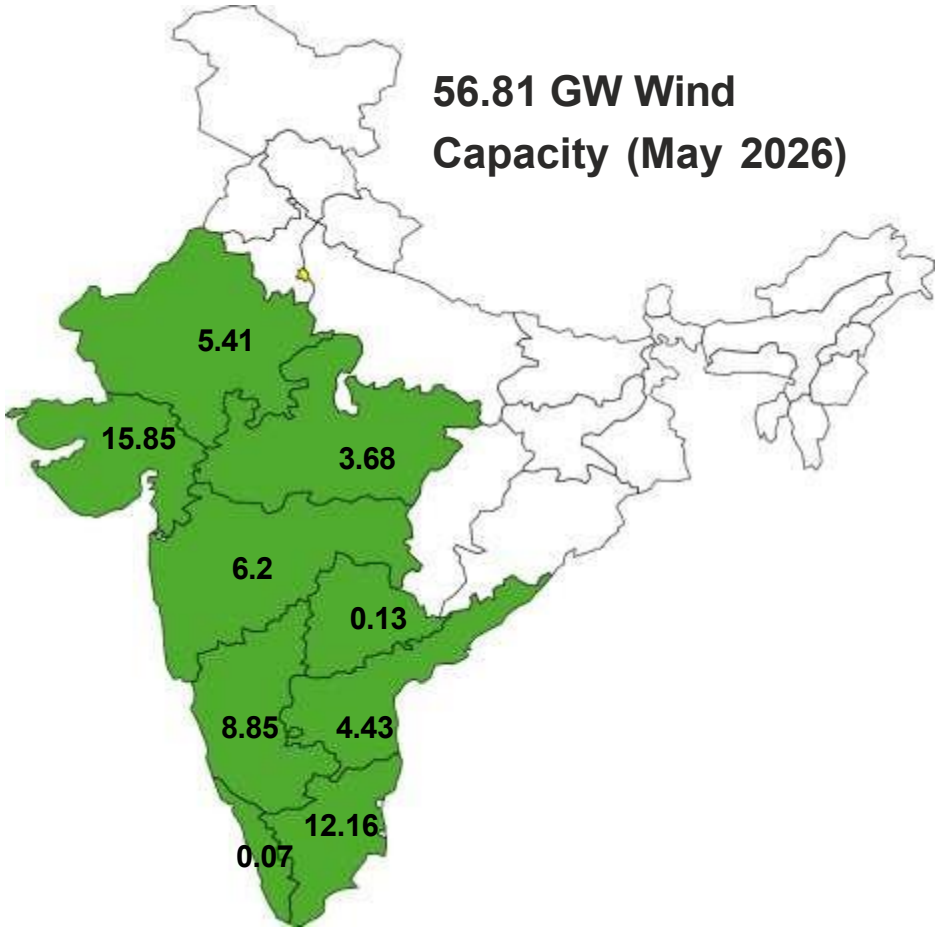
RENEWABLE ENERGY SEGMENT

Snapshot

Indicator	Value
Total Installed RE Capacity	282.7 GW
Installed Wind Energy Capacity	56.81 GW
Installed Solar Capacity	157GW
Share of RE in Grid	53%

- India has surpassed 539.16 GW of installed Power Capacity
- 53% (291.5 GW) of total installed capacity is from Non- Fossil sources, including 8.78 GW of Nuclear and 51.9 GW of large hydro as well.
- 370.45 MW Wind capacity addition in May 26.
- 712.2 MW Wind capacity addition in FY2026-27 (Q1) and 6057.02 MW Wind capacity added in FY2025-26.

Last three-year quarter average (MW)	
Q1	1039.70
Q2	855.68
Q3	912.99
Q4	1536.28



RE tendering and PPA signing

Status of Wind Capacity in competitive bids (Apr'19 - May'26)				
	Project Awarded Capacity / LOA GW	Project Cancelled Capacity GW	Commissioned Capacity GW	Balance Capacity GW
PPA Signed	33.5	4.1	11	18.4
PPA Not Signed	10.4	0	0	10.4
Total	43.9	4.1	11	28.8

Status of RE Capacity in competitive bids (Apr'19 - May'26)				
	Project Awarded Capacity / LOA GW	Project Cancelled Capacity GW	Commissioned Capacity GW	Balance Capacity GW
PPA Signed	75.71	2.2	24.30	50.35
PPA Not Signed	40.91	0	0	40.91
Total	116.62	2.2	24.30	91.26

Source : IWTMA research

Note For RE Capacity: The data presented in the above dataset is available only at the REIA level and covers the period from **April 2019 to May 2026**. It includes renewable energy capacity across **solar, wind, hybrid, hybrid-RTC, FDRE and standalone storage projects**.

Tender Issued

Q1 FY2027 witnessed a notable slowdown in renewable energy tendering activity, with only **6.1 GW** of new tenders issued across technology segments. The quarter was primarily driven by **wind tenders (2.4 GW)**, which accounted for nearly 40% of total issuance, followed by **hybrid tenders (0.6 GW)**, **solar tenders (0.5 GW)**, and **storage tenders (0.5 GW)**. The lower tender volumes indicate a cautious start to the fiscal year, with limited participation across most technology categories and the absence of large-scale FDRE or hybrid-RTC tenders that had supported issuance in previous quarters.

Q1 FY2027 recorded **6.1 GW** of renewable energy tender issuance, significantly lower than the **14.4 GW** issued in **Q1 FY2026**, representing a **decline of 8.3 GW (-57.6% YoY)**. The sharp reduction reflects a substantial slowdown in procurement activity across most renewable energy segments.

The technology mix also changed considerably between the two periods. **Q1 FY2026** was dominated by **hybrid tenders (8.0 GW)** and **storage tenders (4.7 GW)**, which together accounted for nearly 90% of total issuance. In contrast, **Q1 FY2027** was led by **wind tenders (2.4 GW)**, while hybrid and storage tendering fell sharply to **0.6 GW** and **0.5 GW**, respectively. This represents a decline of **92.5% in hybrid tendering** and **89.4% in storage tendering** compared with the same quarter of the previous year.

The decline in tender issuance was primarily driven by the absence of large-scale hybrid, storage, FDRE, and hybrid-RTC tenders that had significantly boosted volumes in Q1 FY2026. While wind emerged as the largest contributor in Q1 FY2027, its volume was insufficient to offset the reduction in dispatchable renewable energy procurements.
Overall, the comparison highlights a shift from the storage- and hybrid-led procurement strategy observed in **Q1 FY2026** to a more subdued and wind-focused tendering landscape in **Q1 FY2027**. The lower issuance levels suggest a slower start to FY2027 and indicate that substantial tendering activity will be required in subsequent quarters to maintain the government's long-term renewable energy deployment targets.

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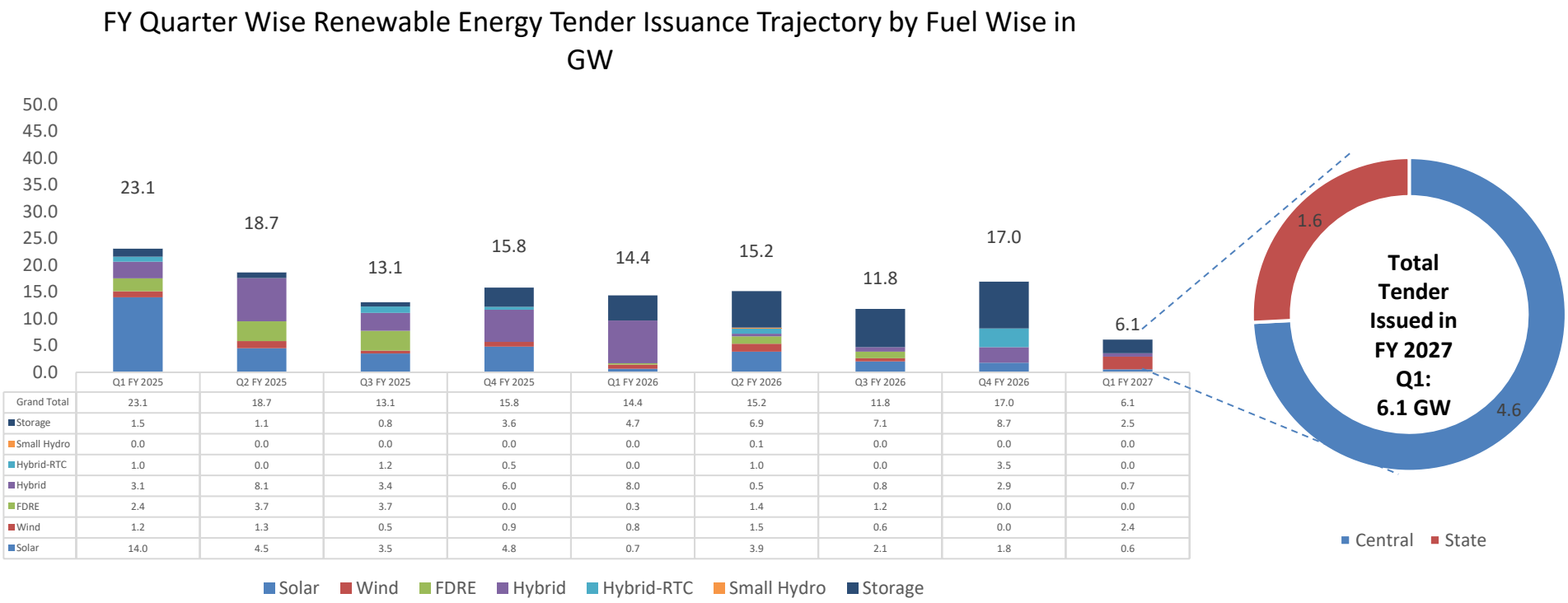
Tender Issued



	Q1 FY 2025	Q2 FY 2025	Q3 FY 2025	Q4 FY 2025	Q1 FY 2026	Q2 FY 2026	Q3 FY 2026	Q4 FY 2026	Q1 FY 2027
Grand Total	23.1	18.7	13.1	15.8	14.4	15.2	11.8	17.0	6.1
Storage	1.5	1.1	0.8	3.6	4.7	6.9	7.1	8.7	2.5
Small Hydro	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0
Hybrid-RTC	1.0	0.0	1.2	0.5	0.0	1.0	0.0	3.5	0.0
Hybrid	3.1	8.1	3.4	6.0	8.0	0.5	0.8	2.9	0.7
FDRE	2.4	3.7	3.7	0.0	0.3	1.4	1.2	0.0	0.0
Wind	1.2	1.3	0.5	0.9	0.8	1.5	0.6	0.0	2.4
Solar	14.0	4.5	3.5	4.8	0.7	3.9	2.1	1.8	0.6

Early FY2027 (Q1) has commenced on a relatively subdued note, with approximately **6.1 GW** of renewable energy tenders issued to date. While this reflects a slower pace compared to the corresponding period in FY2026, tendering activity remains supported by a diversified mix of wind, solar, hybrid, and storage procurements. Additionally, the visible tender pipeline indicates the potential for stronger issuance in the coming quarters, particularly across **storage, hybrid, and RTC/FDRE segments**, which continue to be key focus areas for procurers.

The decline in tender issuance was primarily driven by the absence of large-scale hybrid, storage, FDRE, and hybrid-RTC tenders that had significantly boosted volumes in Q1 FY2026. While wind emerged as the largest contributor in Q1 FY2027, its volume was insufficient to offset the reduction in dispatchable renewable energy procurements.

Tender Issued

While, the focus has now shifted to **FY 2027**, which has begun on a relatively active note with early issuances across solar, wind, and hybrid technologies.

In **April–May 2026 (Q1 FY 2027)**, tender activity has been led by large **wind and hybrid tenders**, including **SECI's 2,000 MW ISTS Wind Tranche-XX tender** and **SECI's 500 MW renewable with/without ESS tender**, SECI allover tender capacity **2522MW** indicating continued preference for large-scale, grid-connected renewable procurement. Additional activity included **GUVNL's 250 MW wind tender**, **JBVNL's 100 MW wind project**, **NTPC 1200MW Storage-PSP** and hybrid tenders from **AMC in Gujarat** and **BHEL in Telangana**, reflecting growing adoption of storage-linked and integrated renewable solutions.

Storage procurement emerged as another major theme during the quarter. Large-scale tenders issued by **NTPC REL (2,000 MW/12,000 MWh PSP)**, **MPPMCL (282.5 MW/1,130 MWh BESS)**, **RUMSL (250 MW/1,400 MWh BESS combined)**, and **BSPGCL's PSP initiative** demonstrate growing confidence in both battery storage and pumped hydro storage technologies.

Standalone solar tendering remained active, although issuance volumes were comparatively lower than those observed in wind and storage segments. Key solar tenders were issued by **PSPCL (500 MW across two tenders)**, **Southern Railway (29 MW)**, **KRCL (5 MWp)**, **PAGREXCO (8.4 MW)**, and multiple rooftop solar tenders from **SECI** and **NREDCAP**.

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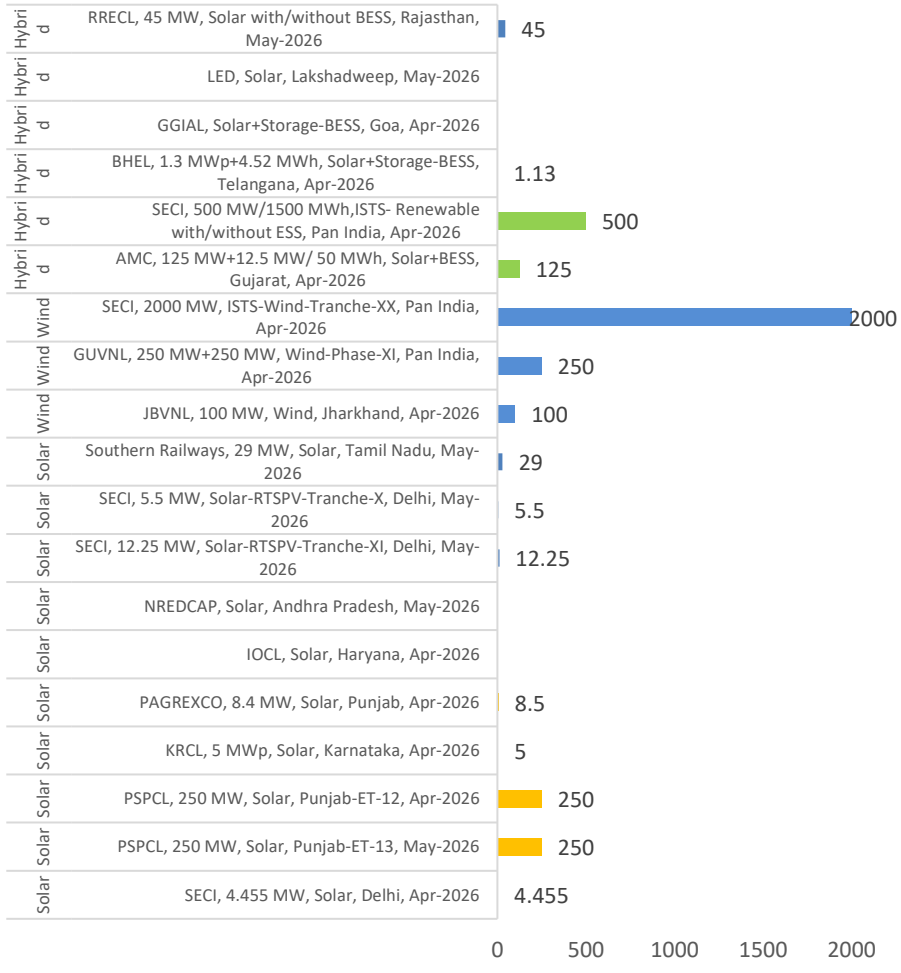
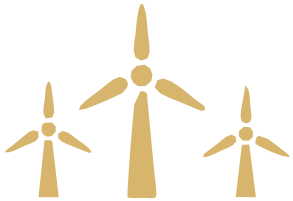
Renewable Energy tender issued in FY Q1 2027 in MW



Tender Issued

Solar:

In **Q1 FY2027**, standalone solar tendering activity remained concentrated in a limited number of state and central agency procurements, with total identified issuance of approximately **0.52 GW**. The quarter was primarily supported by **PSPCL's two 250 MW solar tenders in Punjab**, which together accounted for nearly **500 MW**, representing the overwhelming majority of the solar capacity tendered during the period.

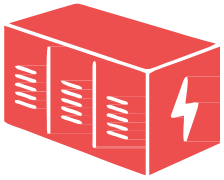


Wind:

Wind tendering activity gained momentum in FY 2027 Q1, with approximately 2.35 GW of new capacity issued during the quarter. The increase was primarily driven by large-scale interstate and state-level procurement initiatives, The strong start to FY 2027 indicates a revival in standalone wind procurement after subdued tendering activity witnessed during FY 2026.

Hybrid, FDRE and RTC:

Hybrid and RTC tendering activity remained relatively subdued in FY 2027 Q1, with around 0.63 GW of capacity issued during the quarter.. The quarter's activity highlights the continued shift toward dispatchable renewable energy solutions, with a growing emphasis on integrating battery energy storage systems (BESS) to enhance grid reliability and renewable energy firming.



Storage:

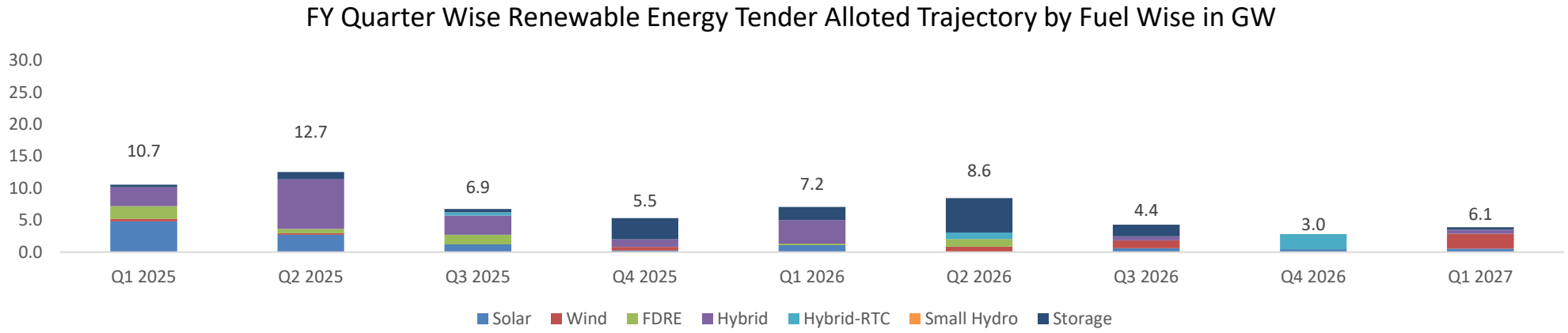
Energy storage tendering witnessed strong momentum in FY 2027 Q1, with significant capacity additions announced across both Battery Energy Storage Systems (BESS) and Pumped Storage Projects (PSP). The robust tender pipeline reflects increasing focus on large-scale energy storage deployment to support grid flexibility, renewable energy integration, and round-the-clock power supply requirements.

Allocated/Awarded Capacity

FY 2027 has just begun and 0.5GW solar, 2.4 GW for wind , 0.6 GW hybrid and 0.5 GW strong tender are rolled in the market

In **FY 2026**, renewable energy tender allotments remained subdued, totaling **20,2 GW across Q1–Q3**, with awards largely front-loaded in the first half of the fiscal year. **Q1 and Q2 together accounted for 15.7 GW**, while **Q3 moderated to 4.4 GW**, and only **3 GW was recorded in Q4**, reflecting delays in bid finalization and award announcements. Storage emerged as the dominant segment, contributing **~9.4 GW across Q1–Q3**, driven mainly by strong awards of **5.2 GW in Q2**. Hybrid and hybrid-RTC projects together accounted for **~5.3 GW**, largely concentrated in Q1 and Q4. Solar (**1.7 GW**) and FDRE (**1.5 GW**) saw limited allocations, while wind awards stood at **~2.1 GW**, highlighting continued preference for firm and storage-backed renewable capacity.

Despite low activity in Q4, only 3 GW including 2.5 GW Hybrid-RTC and .5 GW of Solar of tender were announced indicating continued caution among procurers and developers amid challenges around offtake visibility and tender-to-award conversion.



In contrast, **FY 2025 recorded significantly higher allotments of 30.3 GW across Q1–Q3**, reflecting stronger and more evenly distributed awards. FY 2026 allocations remained concentrated in the first half, indicating a loss of momentum as the fiscal year progressed.

The moderation in FY 2026 allotments reflects delays in PSA finalization, prolonged DISCOM approval cycles, and weaker tender-to-award conversion amid unsecured offtake arrangements. Heightened risk aversion, regulatory and tariff approval delays, and bankability concerns—particularly for variable renewable projects—continued to constrain awards, pushing procurement toward fewer but more execution-ready, storage-backed projects..

RE Key Winners

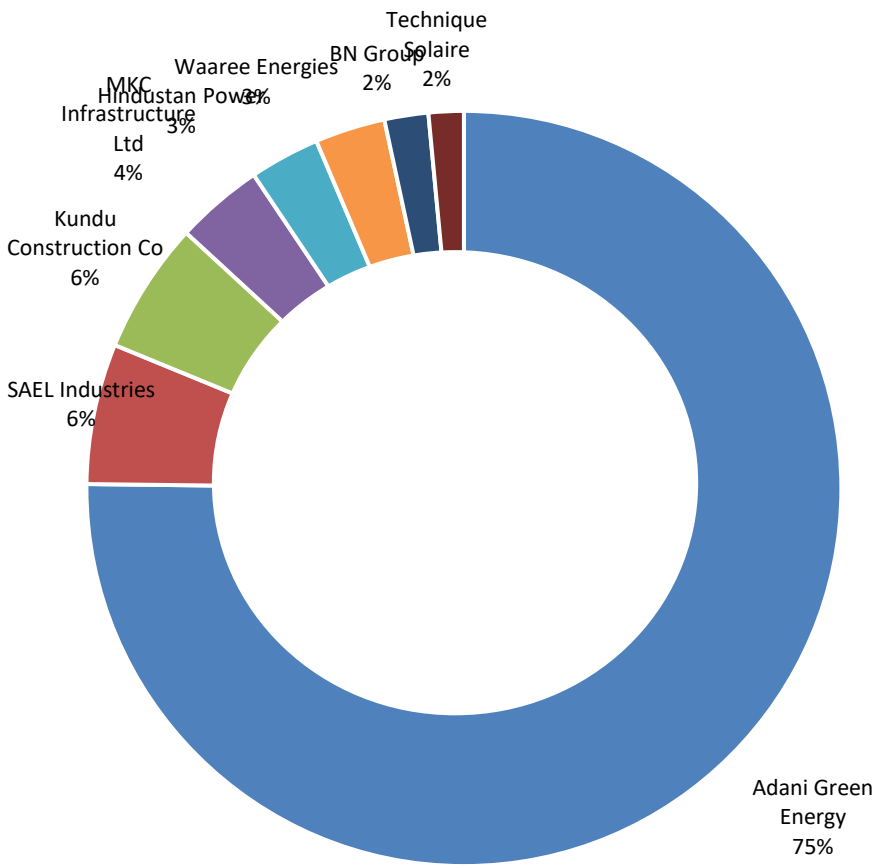
In **FY 2027 Q1 (April–May 2026)**, renewable energy capacity awards based on result announcement dates totaled **~3.3 GW**, reflecting relatively concentrated award activity led by a few large developers.

Adani Green Energy emerged as the dominant awardee, securing **2,500 MW** of capacity and accounting for the majority of awarded volume during the period. This was followed by **SAEL Industries (200 MW)** and **Kundu Construction Co (187.5 MW)**, indicating continued participation from both established renewable developers and infrastructure-focused players.

Additional capacity was awarded to **MKC Infrastructure Ltd (125 MW)**, **Hindustan Power (100 MW)**, **Waaree Energies (100 MW)**, **BN Group (62.5 MW)**, and **Technique Solaire (50 MW)**. The award mix remained relatively concentrated, with a limited number of developers accounting for most announced capacity.

Overall, **FY 2027 Q1 award activity reflects continued developer participation, though awards remain concentrated among select players**, highlighting ongoing challenges related to **PSA execution, tariff adoption, and offtaker approvals**, even as tendering activity continues across storage, hybrid, and renewable energy segments.

Projects Won by Developers in RE Segment in Q4 FY 2025



PPA Status Overview (FY April 2019 – May 2026)

REIA Wise PPA Status in terms of Capacity in MW					
REIAs	PPA Status				
	Cancelled	Conditional Yes	No	Yes	Grand Total
NHPC		12460		9195	21655
NTPC		11596	1300	6037	18933
SECI	1235	6100	2954	53308.8	63597.8
SJVN		4750	3928	7795	16473
Grand Total	**1235**	**34906**	**8182**	**76335.8**	**120658.8**

From **FY 2019 to May 2026**, renewable energy tenders issued by major RE Implementing Agencies (REIAs) have created a substantial pipeline of **236.76 GW**. However, conversion into executed **Power Purchase Agreements (PPAs)** remains uneven, with a significant portion of capacity still progressing through regulatory and approval stages.

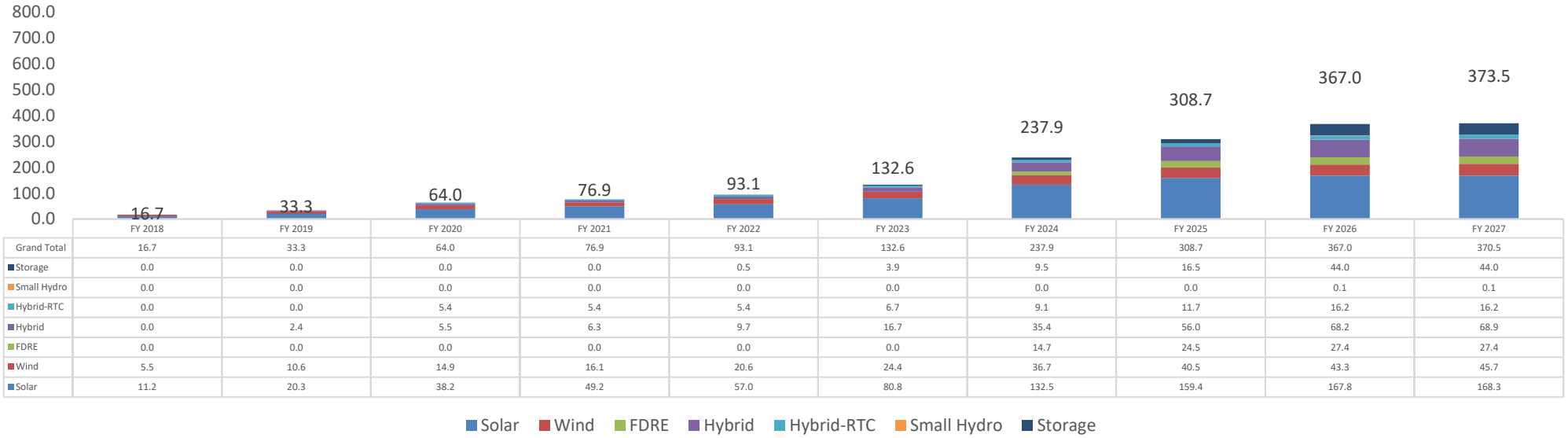
At an aggregate level, **76.33 GW has achieved executed PPAs**, while **44 GW remains without signed PPAs**. This includes **34.90 GW where petitions for tariff adoption or PPA approval have been filed and are awaiting regulatory or offtake clearances**, and **only 8.1 GW where filings are yet to be initiated**. In addition, **1.23 GW of capacity has been cancelled**, indicating limited but persistent attrition within the tendered pipeline.

SECI continues to lead in scale, with **63.59 GW under executed PPAs**, though it still has **10.2 GW pending across regulatory and filing stages**, along with cancelled capacity, reflecting execution complexities. **NTPC shows a notable execution gap**, with **18.9 GW pending against 6.03 GW executed**, largely due to approval timelines and offtake delays. **NHPC has executed 21.65 GW**, while **9.19 GW remains under regulatory stages**, indicating slower conversion. **SJVN reflects a similar trend**, with **4.7 GW executed and 16 GW awaiting closure**, highlighting ongoing regulatory and offtake challenges.

For **Unsigned PPA** MNRE has proposed a **One-Time Relief Package** for **44.8 GW of renewable energy projects** where LoAs have been issued by REIAs, but PPAs/PSAs remain unsigned as of **30 April 2026**. The proposal follows a high-level government review and complements ongoing CERC proceedings related to GNA connectivity and milestone extensions as Encourage signing of PPAs/PSAs within **90 days (ISTS Charge Waiver, BESS Support, STU Connectivity, Deemed RPO/RCO Compliance, Deemed Tariff Adoption). Exit LoA, Retain Connectivity, LoA Substitution, Penalty-Free Exit**

Tender Issued Over the Years - Cumulative

Tender Issued By Fuel Type Year On Year Basis



	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027
Grand Total	16.7	33.3	64.0	76.9	93.1	132.6	237.9	308.7	367.0	370.5
Storage	0.0	0.0	0.0	0.0	0.5	3.9	9.5	16.5	44.0	44.0
Small Hydro	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1
Hybrid-RTC	0.0	0.0	5.4	5.4	5.4	6.7	9.1	11.7	16.2	16.2
Hybrid	0.0	2.4	5.5	6.3	9.7	16.7	35.4	56.0	68.2	68.9
FDRE	0.0	0.0	0.0	0.0	0.0	0.0	14.7	24.5	27.4	27.4
Wind	5.5	10.6	14.9	16.1	20.6	24.4	36.7	40.5	43.3	45.7
Solar	11.2	20.3	38.2	49.2	57.0	80.8	132.5	159.4	167.8	168.3

From **FY 2018 to FY 2020**, renewable energy tendering in India was largely driven by **standalone solar and wind**, rising from **16.7 GW in FY 2018 to 64.0 GW in FY 2020**. Procurement structures during this period were relatively simple, supported by clearer offtake visibility and faster PPA closures, enabling smoother execution, while hybrid and RTC formats remained limited.

During **FY 2021–FY 2022**, the market began diversifying as **hybrid and RTC technologies gained traction** alongside solar and wind. Total issuance increased to **76.9 GW in FY 2021 and 93.1 GW in FY 2022**, with gradual expansion in hybrid and RTC tenders. Although solar and wind continued to dominate, increasing complexity led to longer approval cycles and emerging delays in PPA execution.

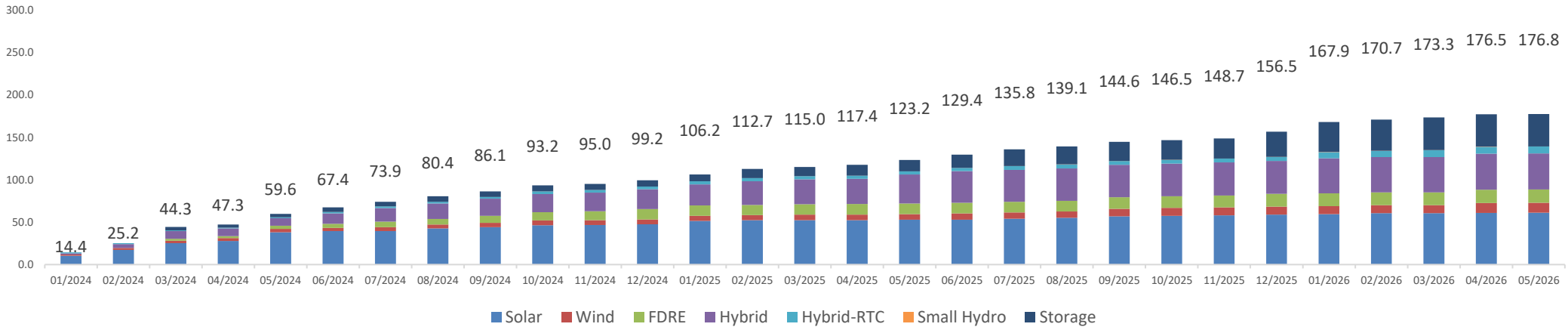
From **FY 2023 onward**, the tendering landscape shifted toward **hybrid, RTC, FDRE, and storage-backed configurations**, reflecting a push for **firm and dispatchable renewable power**. Issuance rose sharply from **132.6 GW in FY 2023 to 237.9 GW in FY 2024**, with storage gaining prominence as grid reliability and peak demand management became key priorities.

By **FY 2025–FY 2026**, tendering momentum remained strong, increasing from **308.7 GW to 367 GW**, with a diversified mix led by solar, hybrid, and storage. However, delays in tariff adoption, PPA finalization, and commissioning continue to widen the gap between capacity tendered and realized,highlighting execution as the key bottleneck.

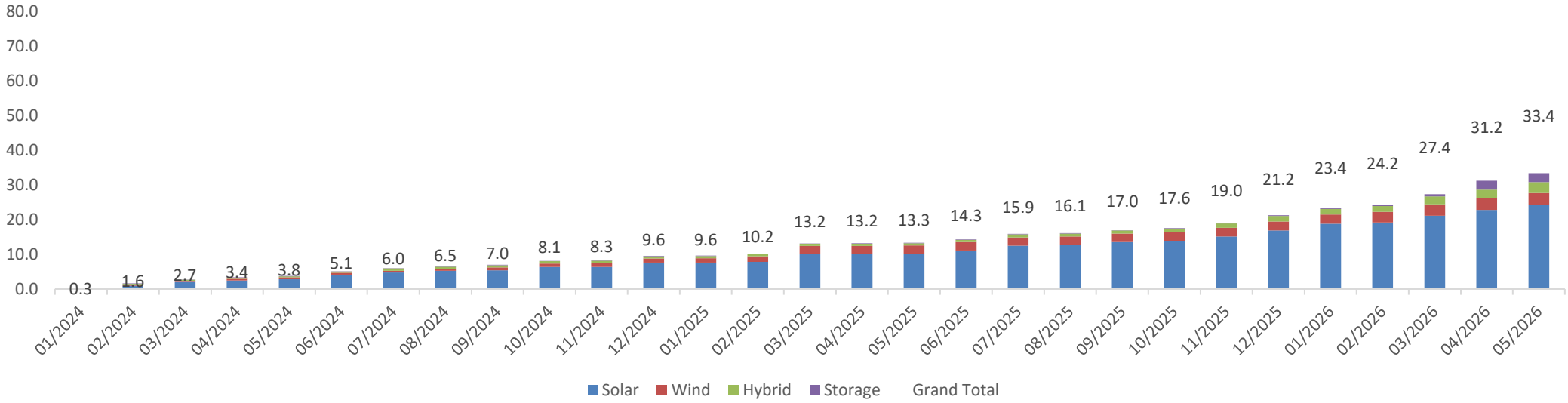
FY 2027 coming in place we have seen around 3.5 GW of tenders been issued so far with more tenders be coming in same quarter is expected to grow, supported by continued policy focus on **storage, hybrid, and firm renewable capacity**, along with improving momentum in tender issuance and project execution.

Tender Issued and Project Commissioned Analysis- MOM Basis

Tender Issued For 2 Years, Month on Month Basis in GW



Capacity Commissioned For 2 Years, Month on Month Basis



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Tender Issued and Project Commissioned Analysis- MOM Basis

In **April–May 2026**, renewable energy commissioning activity strengthened significantly and became increasingly diversified across **solar, wind, hybrid, storage, and PSP projects**, with additions concentrated largely in **Gujarat and Rajasthan**, alongside notable commissioning activity in Andhra Pradesh, Telangana, Karnataka, Tamil Nadu, Odisha, Punjab, Madhya Pradesh, and Uttarakhand.

Storage remained the dominant segment, led by **Adani Green in Gujarat**, which commissioned over **3.37 GW of BESS/Solar and wind capacity**, alongside multiple projects by **ACME across Rajasthan**,which commissioned over 1.57**GW of BESS/Solar** including several medium-scale installations. Additional storage capacity was commissioned by **Juniper Green across Gujarat and Rajasthan**, while **THDC India Ltd commissioned a 250 MW PSP project in Uttarakhand**, reflecting continued momentum in long-duration storage deployment.

Solar remained the largest contributor to renewable energy commissioning during the period, accounting for approximately **3.4 GW of newly commissioned capacity**. Capacity additions were led by large utility-scale projects, with **Adani Green Group** emerging as the largest solar contributor, commissioning around **838 MW** across multiple projects. **SAEL Solar** followed closely with **600 MW**, while **AMPIN Energy** commissioned **445 MWp**, including projects catering to commercial and industrial consumers.Other notable solar additions included **Juniper Green (259 MWp)**, **NTPC Group (367 MW, including a 100 MW floating solar project)**

Hybrid renewable projects continued to gain momentum as developers increasingly focus on improving generation profiles and reducing intermittency risks. Approximately **200 MW of hybrid capacity** was commissioned during the period.
The segment was led by **Clean Max Enviro Energy Solutions**, which commissioned a **185 MW hybrid project**, representing the majority of hybrid additions. **JSW Renew Energy** contributed an additional **15 MW** hybrid project