

RENEWABLE ENERGY SEGMENT

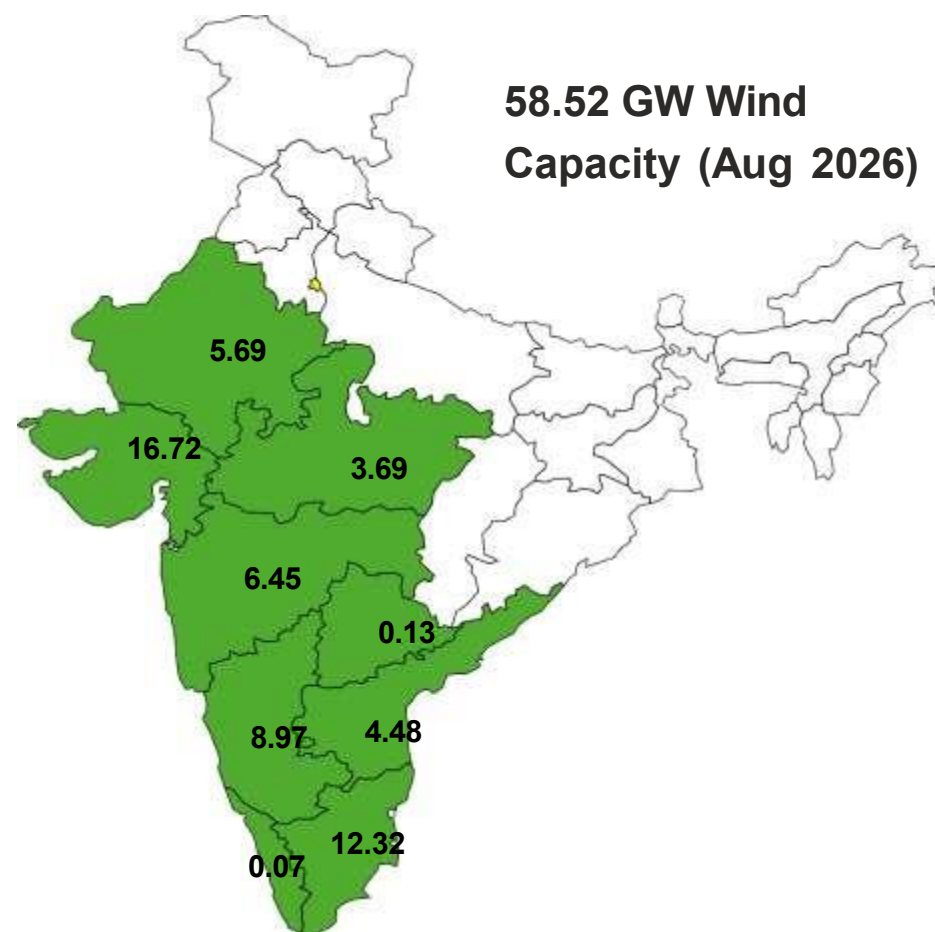


Snapshot

Indicator	Value
Total Installed RE Capacity	295.55 GW
Installed Wind Energy Capacity	58.52 GW
Installed Solar Capacity	168.04GW
Share of RE in Grid	55.13%

- India has surpassed 552 GW of installed Power Capacity
- 55.13% (304.3 GW) of total installed capacity is from Non- Fossil sources, including 8.78 GW of Nuclear and 52 GW of large hydro as well.
- 383.43 MW Wind capacity addition in Aug 26.
- 1076.93 MW Wind capacity addition in FY2026-27 (Q2) and 6057.02 MW Wind capacity added in FY2025-26.

Last three-year quarter average (MW)	
Q1	1610.79
Q2	855.68
Q3	912.99
Q4	1536.28



RE tendering and PPA signing

Status of Wind Capacity in competitive bids (Apr'19 - Aug'26)

	Project Awarded Capacity / LOA GW	Project Cancelled Capacity GW	Commissioned Capacity GW	Balance Capacity GW
PPA Signed	34.16	4.13	11.53	18.5
PPA Not Signed	11.82	0	0	11.82
Total	45.98	4.13	11.53	30.32

Status of RE Capacity in competitive bids (Apr'19 - Aug'26)

	Project Awarded Capacity / LOA GW	Project Cancelled Capacity GW	Commissioned Capacity GW	Balance Capacity GW
PPA Signed	77.7	29.68	25.19	22.83
PPA Not Signed	45.78	0	0	45.78
Total	123.48	29.68	25.19	68.61

Source : .

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 Aug 2026**. It includes renewable energy capacity across **solar, wind, hybrid, hybrid-RTC, FDRE and standalone storage projects**.

Tender Issued

FY2027 in the middle of Q2, renewable energy tendering stood at approximately **7.71 GW**, with the tender mix continuing to shift toward **storage-integrated and firm renewable power solutions**. **Storage emerged as the largest segment, accounting for 3,782.5 MW (49%)**, followed by **hybrid projects at 2,022 MW (26%)** and **solar at 1,905 MW (25%)**.

As Compare to Q1 FY2027, tender issuance moderated across most technologies. **Storage tenders** declined sharply from **5.5 GW to 0.7 GW**, while **solar** decreased from **1.3 GW to 0.7 GW**. **Wind (2.4 GW), FDRE (1.5 GW), and Hybrid-RTC (0.2 GW)**, which contributed to Q1 FY2027 activity, witnessed no new tender issuance in the opening month of Q2. However, **hybrid tenders increased from 0.9 GW to 2.0 GW**, emerging as the dominant technology and accounting for nearly **60% of the total tendered capacity**.

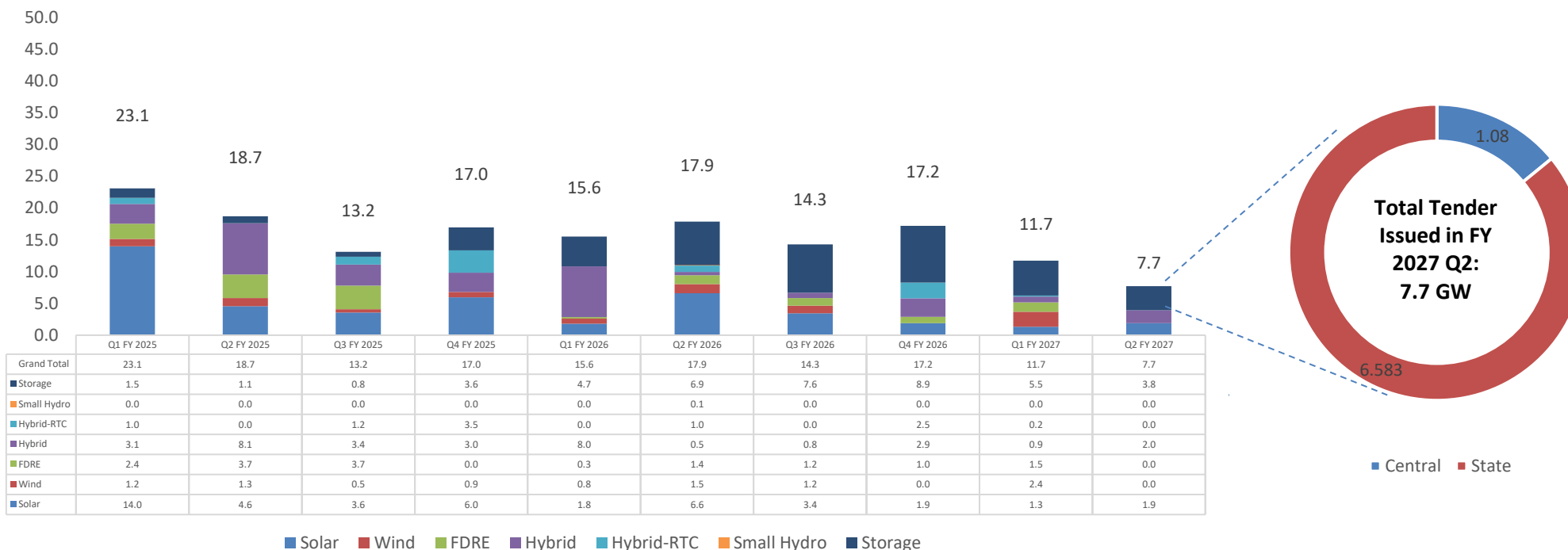
On a **year-on-year basis**, renewable energy tender issuance declined (**57%**) significantly from **17.9 GW in Q2 FY2026 to 7.7 GW in Q2 FY2027**, reflecting a more selective procurement approach. The decline was primarily driven by an **71% reduction in standalone solar tenders** (6.6 GW to 1.9 GW) and a **43.5% decline in storage tenders** (6.9 GW to 3.9 GW). Furthermore, **no tenders were issued for wind, FDRE, Hybrid-RTC, or small hydro**, compared with a combined **4.0 GW** in the corresponding period last year. Despite the overall slowdown, **hybrid tendering bucked the trend**, increasing from **0.5 GW to 2.0 GW**, making it the largest contributor to tender activity in Q2 FY2027.

Despite the sharp contraction in overall volumes, **hybrid tenders increased four-fold**, rising from **0.5 GW in Q2 FY2026 to 2.0 GW in Q2 FY2027**. As a result, hybrid projects accounted for nearly **60% of the total tendered capacity**, indicating a clear shift in procurement preferences towards integrated renewable energy solutions capable of delivering reliable and flexible power.

Overall, the tender mix suggests that procurement agencies are increasingly prioritising quality over quantity, with greater emphasis on hybrid and storage-backed projects rather than issuing large volumes of standalone renewable tenders. This evolving procurement strategy reflects the growing need to improve grid flexibility, support higher renewable energy penetration, and ensure reliable round-the-clock power supply as India's power system transitions towards a cleaner energy mix.

Tender Issued

FY Quarter Wise Renewable Energy Tender Issuance Trajectory by Fuel Wise in GW



Mid of FY2027 Q2 indicates that India's renewable energy procurement strategy continues to prioritise dispatchable and grid-supportive technologies over conventional standalone renewable capacity., with approximately **7.7 GW** of capacity Storage-BESS, accounting for roughly **49%** of total tendered capacity, driven by large awards like RRVUNL (1000 MW), GUVNL (1000 MW), and MPPMCL (625 MW). Hybrid, Solar + Storage projects contribute about **26%**, boosted heavily by KREDL's 2000 MW Karnataka tender, while standalone Solar makes up the remaining **25%**, anchored by SECI's 700 MW and BREDL's 500 MW awards. This split underscores storage's growing centrality in India's renewable procurement strategy as states move toward firmed, dispatchable clean power.

Tender Issued

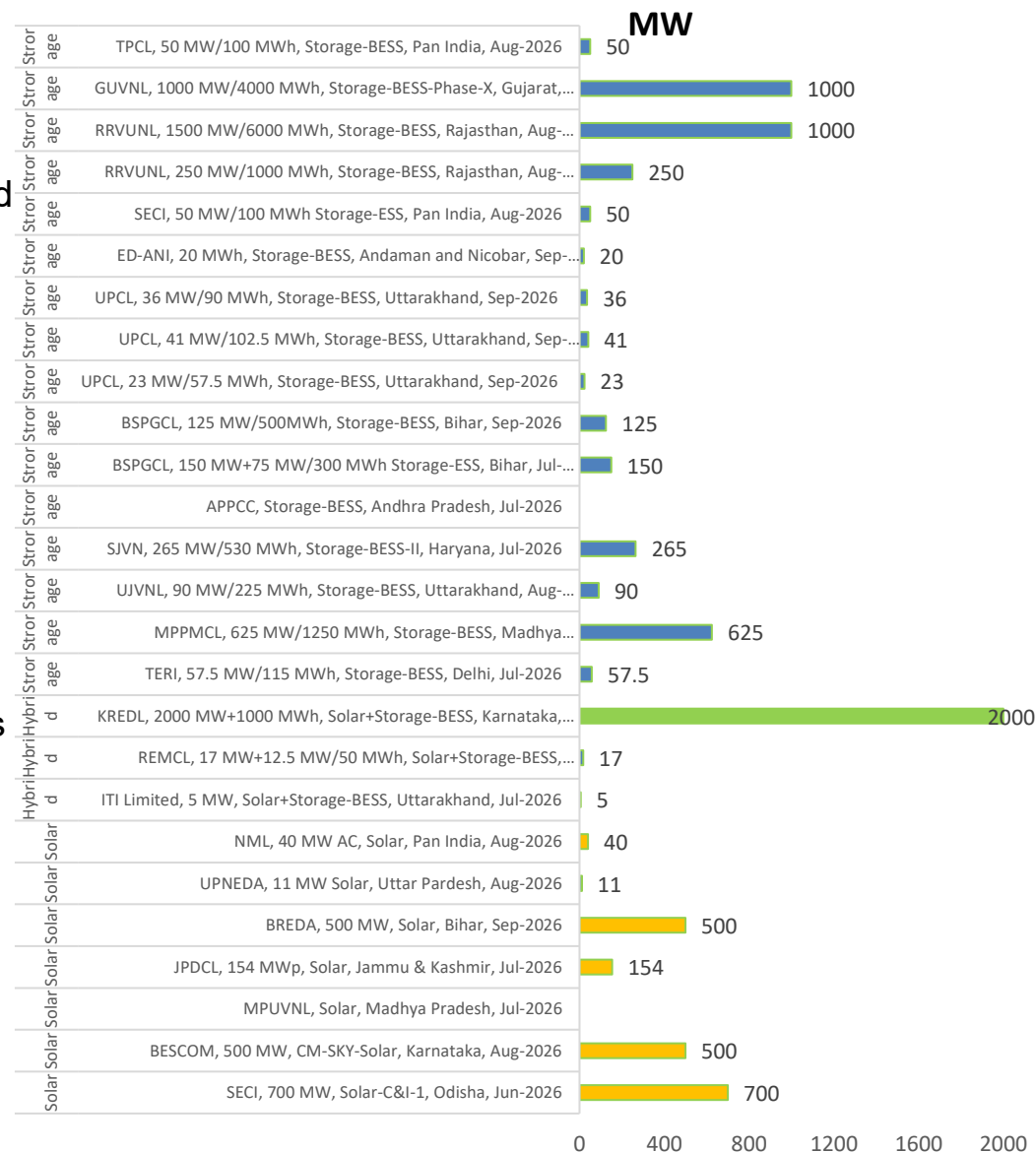
FY2027 in the middle of Q2, renewable energy tendering stood at approximately **7.71 GW**, with the tender mix continuing to shift toward **storage-integrated and firm renewable power solutions**. **Storage emerged as the largest segment, accounting for 3,782.5 MW (49%)**, followed by **hybrid projects at 2,022 MW (26%)** and **solar at 1,905 MW (25%)**.

The dominance of storage and hybrid projects, which together accounted for **5.80 GW or around 75% of total tendered capacity**, indicates a clear movement away from standalone renewable generation toward **dispatchable and grid-flexible capacity**.

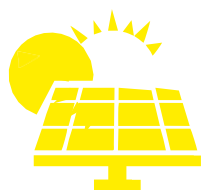
Solar tendering, at **1.91 GW**, remained substantial but represented only about **one-quarter of total tendering**. This comparatively lower share suggests that procurement priorities are increasingly moving beyond incremental standalone solar capacity toward **firm, flexible and dispatchable renewable configurations**.

Overall, the FY2027 Q2 mid-quarter tendering mix points to a continued structural shift in India's renewable procurement strategy, with **BESS and hybrid projects becoming central to integrating higher shares of variable renewable energy into the power system**.

Renewable Energy tender issued in FY Q2 2027 in

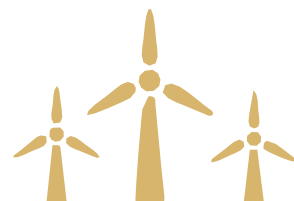


Tender Issued



Solar:

Standalone solar tendering continued with 1905 MW of announced capacity through a single tender, accounting for 25% of the total tendered capacity in Q2 FY2027. The quarter was marked by **SECI's 700 MW Solar-C&I-1** tender in Odisha, aimed at meeting the growing renewable energy demand from the commercial and industrial (C&I) sector. Although solar tender volumes moderated significantly compared to Q1 FY2027, the continued issuance of C&I-focused tenders highlights sustained demand for cost-competitive solar power outside the conventional utility-scale procurement segment.



Wind:

Wind Q2 FY2027, start with no tender. In Q1 2.35 GW of capacity tendered, accounting for 25.2% of the total quarterly capacity. The segment was dominated by **SECI's 2,000 MW ISTS Wind Tranche-XX** tender, supplemented by **GUVN's 250 MW** and **JBVNL's 100 MW** procurements. The concentration of large utility-scale tenders indicates continued preference for **high-capacity ISTS-connected wind projects** to accelerate renewable energy deployment.



Hybrid, FDRE and RTC:

FDRE, Hybrid, and Hybrid-RTC Q2 FY 2027 start with 2022 MW tender, in Q1 2027 has collectively contributed **2.17 GW (26%)** of the total tendered reflecting the growing emphasis on **firm, dispatchable, and storage-integrated renewable energy**. The segment was led by **SECI's 1,200 MW FDRE-IX** and **500 MW Renewable with/without ESS** tenders, alongside **RUMSL's 150 MW RTC** project and several **Solar+BESS** tenders from **AMC, RRECL, LED, and BHEL**. This trend highlights the market's increasing preference for reliable renewable power capable of supporting grid stability and round-the-clock energy supply.



Storage:

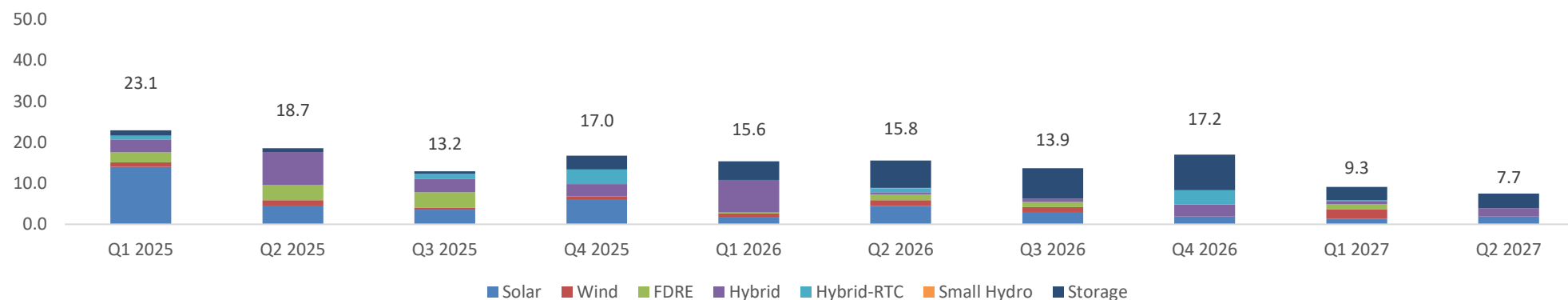
Storage procurement remained a key segment in Q2 FY2027, accounting for **3782.5 MW (49%)** of the total tendered capacity. Major issuances included **MPPMCL's 625 MW/1,250 MWh Battery Energy Storage System (BESS)** project in Madhya Pradesh and **TERI's 57.5 MW/115 MWh BESS** project in Delhi, reflecting the continued emphasis on standalone battery energy storage systems to enhance grid flexibility, improve renewable energy integration, and support reliable power supply...

Allocated/Awarded Capacity

FY2027 – Mid of Q2, renewable energy tendering totalled approximately **7.71 GW** across major projects, with **storage-backed capacity remaining the dominant theme**. Storage accounted for **3,782.5 MW (49%)**, followed by **hybrid projects at 2,022 MW (26%)** and **solar at 1,905 MW (25%)**. Together, **hybrid and storage projects represented nearly 75% of total tendered capacity**, highlighting the continued shift in the renewable energy market toward **firm, flexible, and dispatchable power solutions**. The strong share of storage also indicates growing emphasis on integrating renewable generation with energy-shifting capabilities to address intermittency and improve grid reliability.

Q1 FY2027 recorded **9.34 GW** of renewable energy tenders, the **lowest quarterly capacity** during the analysis period. Despite the lower overall volume, the procurement mix shifted significantly towards **Storage (3.48 GW; 37.3%)**, **Wind (2.35 GW; 25.2%)**, and **FDRE/Hybrid/Hybrid-RTC (2.17 GW; 23.2%)**, indicating a growing preference for **dispatchable and storage-backed renewable energy**. While **Solar remained the most active technology by number of tenders**, its capacity was limited to **1.34 GW (14.4%)**, reflecting fewer large-scale standalone solar procurements.

FY Quarter Wise Renewable Energy Tender Alloted Trajectory by Fuel Wise in GW



During **FY2026**, quarterly tender volumes remained relatively stable between **13.91 GW and 17.22 GW**. **Storage emerged as the dominant technology**, increasing from **4.72 GW in Q1** to **8.92 GW in Q4**, driven by large **BESS and Pumped Storage Project (PSP)** tenders. **Hybrid procurement peaked in Q1 FY2026 (7.98 GW)** before declining sharply, while **Hybrid-RTC rebounded to 3.50 GW in Q4 FY2026**. **Solar** procurement remained moderate throughout the year, whereas **Wind** and **FDRE** recorded consistent but relatively lower procurement.

In **FY2025**, renewable energy tendering reached its highest levels, with quarterly volumes ranging from **13.17 GW to 23.12 GW**. **Solar dominated early procurement**, peaking at **14.00 GW in Q1 FY2025**, while **Hybrid (8.07 GW in Q2 FY2025)**, **FDRE (3.70 GW in Q2 and Q3 FY2025)**, and **Hybrid-RTC (3.52 GW in Q4 FY2025)** also witnessed strong activity. During this period, procurement was primarily focused on **capacity expansion through standalone solar and hybrid projects**, with comparatively limited emphasis on energy storage.

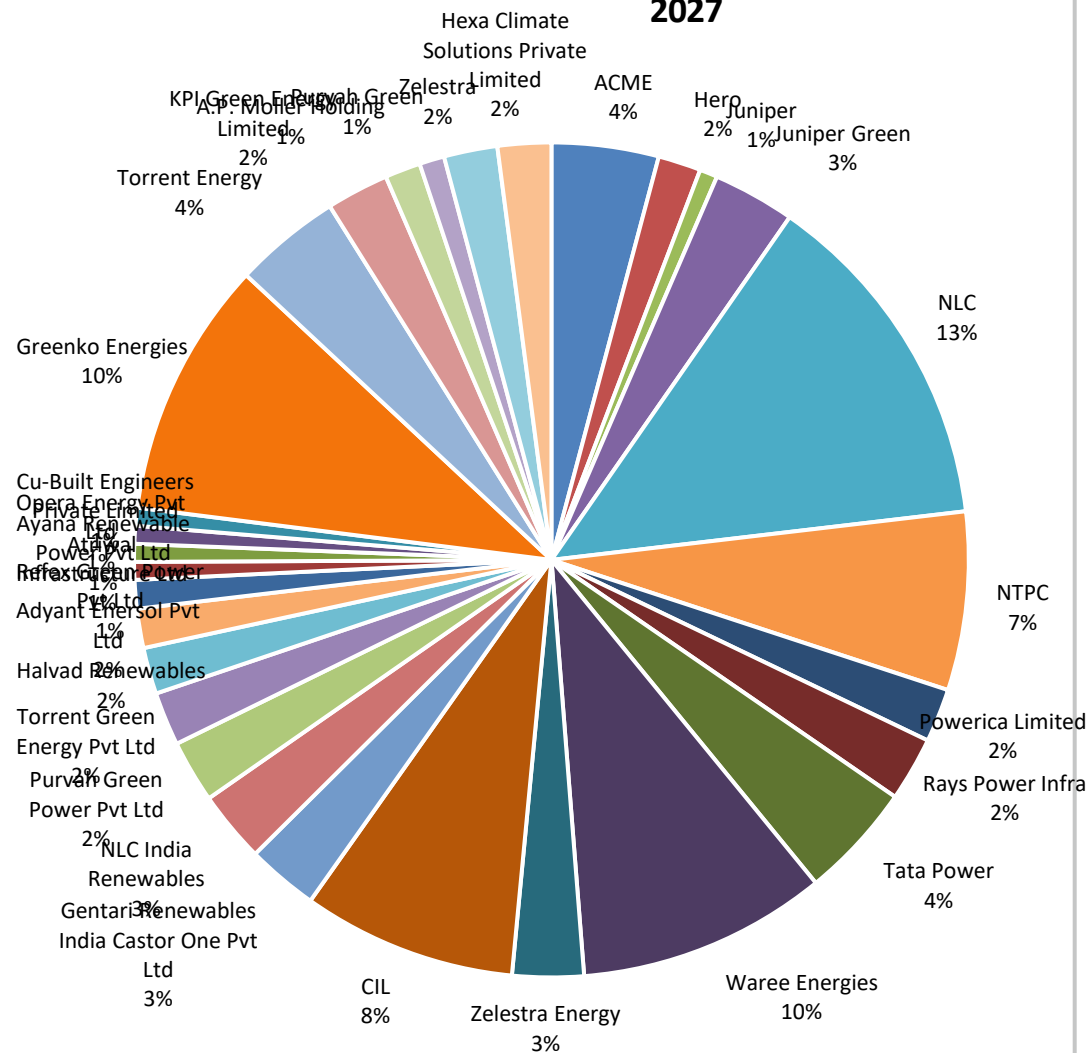
RE Key Winners

As Mid of FY2027 Q2, a total of 7,239 MW was awarded across six tenders. **Wind and Storage together formed the backbone of this round, totaling 3,539 MW.** Storage led at 1,794 MW combined, split between SECI's 1,500 MW Pumped Storage (PSP) tender — dominated by Greenko Energies Private Limited (720 MW). Wind followed at 1,745 MW, driven mainly by SECI's 2,000 MW ISTS-Wind-Tranche-XX, where 1,495 MW was allocated among twelve winners including Gentari Renewables (200 MW), Ganeko Four Energy (200 MW), and NLC India Renewables (200 MW)

FDRE and its round-the-clock variant, FDRE-RTC, contributed a combined 2,500 MW. Plain FDRE accounted for 1,500 MW through SECI's FDRE-IX tender, sharply concentrated in Waaree Forever Energies' 700 MW win — nearly half the tender — with NTPC Renewable.

Solar rounded out the total at 1,200 MW, awarded entirely through NHPC's Uttar Pradesh tender and split evenly between Coal India Limited and NLC India Renewables (600 MW each). Across all six tenders and 7,239 MW awarded, NLC India Renewables stands out as the most diversified single winner, capturing capacity in solar, wind (both tenders), and battery storage for a combined ~1,175 MW, well ahead of any single-fuel specialist.

Projects Won by Developers in RE Segment in Q2 FY 2027



PPA Status Overview (FY April 2019 – Aug 2026)

REIAs	REIA Wise PPA Status in terms of Capacity in MW				
	PPA Status				Grand Total
	Cancelled	Conditional Yes	No	Yes	
NHPC	30	12760	1200	8895	22885
NTPC	120	11596	900	6437	19053
SECI	2285	4830	8815	54722.3	70652.3
SJVN	150	5798	2880	7645	16473
Grand Total	2585	34984	13795	77699.3	129063.3

From **FY2019 to Aug 2026**, major Renewable Energy Implementing Agencies (REIAs) have awarded **129.06GW** of renewable energy capacity. Of this, **77.7 GW (60.20%)** has achieved executed PPAs, while **48.78 GW (37.80%)** remains unsigned, including **34.98GW** under conditional approvals awaiting regulatory clearance and **13.8 GW** where PPAs are yet to be signed. In addition, **2.59 GW (2.01%)** of awarded capacity has been cancelled, indicating limited project attrition.

SECI continues to dominate the REIA pipeline with **70.65 GW** of awarded capacity, of which **54.72 GW** has secured PPAs. However, around **13.65 GW** remains pending across conditional approvals and unsigned PPAs, along with **2.28 GW** of cancelled capacity. **NHPC** has awarded **22.89 GW**, with **8.89GW** under executed PPAs, while **13.96 GW** remains pending regulatory approvals or PPA execution. **NTPC** has a total awarded capacity of **19.05 GW**, with **6.44 GW** under signed PPAs and approximately **12.49 GW** awaiting approval or execution. **SJVN** has awarded **16.47 GW**, of which **7.65 GW** has achieved PPA closure, while **8.68 GW** remains under conditional approvals or pending execution.

Overall, while more than 60% of the REIA-awarded capacity has secured PPAs, nearly 48.78 GW of projects are still awaiting regulatory approvals or offtake agreements. Accelerating tariff adoption and PPA execution will be critical for translating the existing tender pipeline into on-ground renewable energy capacity and meeting India's clean energy deployment target

Policy Analysis: Addressing Unsigned PPAs to Accelerate Renewable Energy Deployment

The **MNRE's proposed One-Time Relief Package** represents a significant policy initiative to unlock approximately **44.8 GW of renewable energy capacity** that remains stranded due to **unsigned PPAs/PSAs** despite the issuance of Letters of Award (LoAs). The package aims to accelerate project execution by providing developers with a **90-day window** to conclude PPAs/PSAs, supported by a comprehensive set of financial, regulatory, and contractual relief measures.

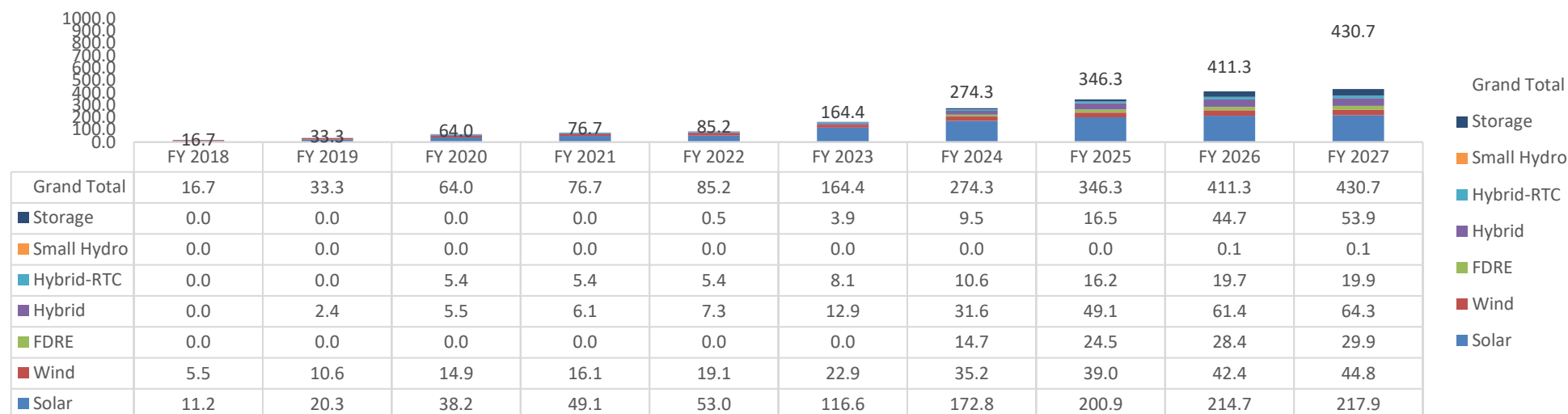
Key incentives include a **100% waiver of ISTS transmission charges**, support for **Battery Energy Storage Systems (BESS)**, access to **State Transmission Utility (STU) connectivity**, **deemed RPO/RCO compliance** for procuring entities, and **deemed tariff adoption**, thereby improving project bankability and reducing regulatory uncertainties. These measures are expected to enhance the commercial viability of delayed projects and facilitate faster financial closure.

The proposal also introduces greater contractual flexibility through provisions such as **LoA substitution**, **retention of granted connectivity**, and **penalty-free exit** for eligible developers. These reforms are intended to enable the transfer of stalled projects to capable developers while preserving valuable transmission infrastructure and minimizing execution delays.

Overall, the relief package is expected to reduce the backlog of unsigned PPAs/PSAs, improve investor confidence, accelerate renewable energy project commissioning, and support India's long-term clean energy and energy transition targets by ensuring that awarded projects are successfully implemented rather than remaining stranded.

Tender Issued Over the Years - Cumulative

Tender Issued By Fuel Type Year On Year Basis



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.

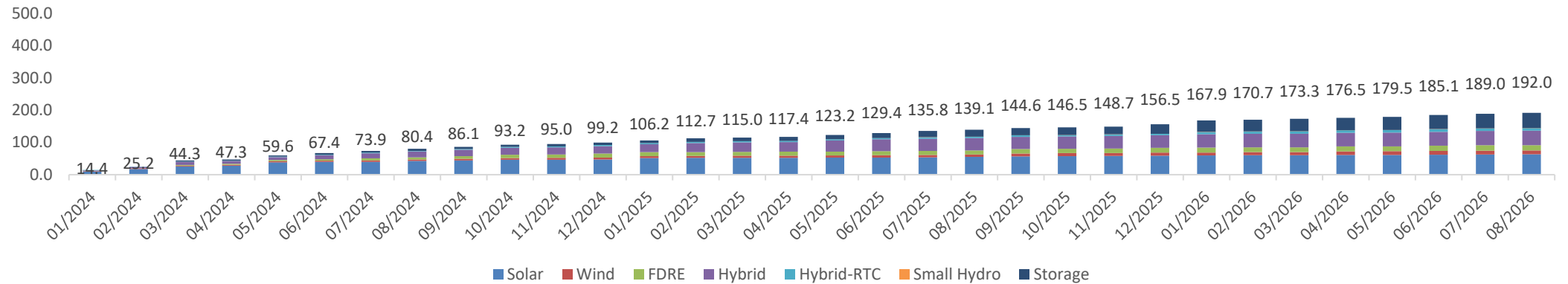
FY2021–FY2024: Renewable energy tendered capacity increased substantially from **76.68 GW in FY2021 to 269.22 GW in FY2024**, driven by rapid growth in **Solar (49.13 GW to 164.04 GW)** and **Wind (16.10 GW to 36.67 GW)**. **Hybrid** capacity expanded from **6.05 GW to 33.76 GW**, while **Hybrid-RTC** nearly doubled to **10.56 GW**. **Storage** procurement gained momentum, increasing from **0 GW to 9.47 GW**, and **FDRE** was introduced in **FY2024** with **14.73 GW**, reflecting a strategic shift toward firm, dispatchable, and storage-integrated renewable energy procurement.

FY2025–FY2026: Renewable energy tendered capacity increased from **341.22 GW to 403.66 GW**, driven by continued growth across all major technologies. **Solar** crossed **200 GW**, **Hybrid** expanded to **63.56 GW**, **Wind** reached **43.92 GW**, and **FDRE** increased to **27.38 GW**. The most significant growth was observed in **Storage**, which surged from **16.52 GW to 44.65 GW**, while **Hybrid-RTC** increased to **20.73 GW** and **Small Hydro** recorded its first procurement (**0.095 GW**), highlighting the growing emphasis on storage-backed and dispatchable renewable energy solutions.

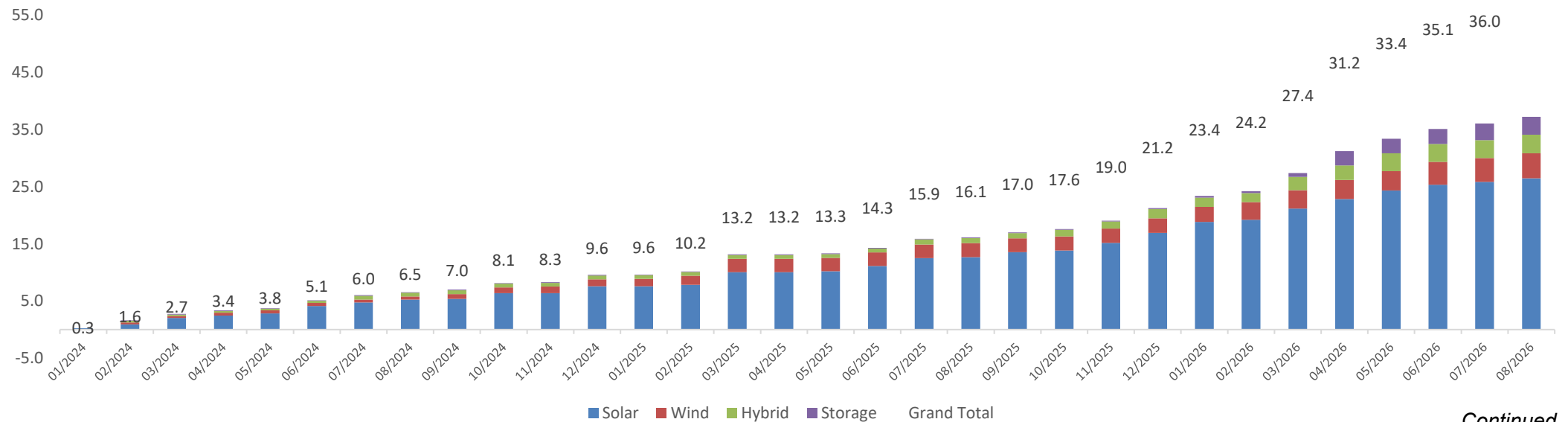
FY2027 (up to the Middle of Q2) saw cumulative renewable energy tendered capacity reach approximately **430.7 GW**. **Solar** continued to dominate the pipeline with **217.9 GW**, followed by **Hybrid (64.3 GW)**, **Storage (53.9GW)**, **Wind (44.8 GW)**, and **FDRE (29.9GW)**. The continued addition of hybrid and storage projects highlights the increasing focus on dispatchable renewable energy and strengthening grid reliability alongside conventional renewable capacity additions..

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



Continued

Tender Issued and Project Commissioned Analysis- MOM Basis

Renewable energy commissioning activity in August covered 16 projects totaling 944 MW, alongside 15 MW of storage and 200 MWh of standalone storage across six states. Solar remained the largest contributor, led by Coal India's 200 MW Gujarat project under GUVNL's Solar-Tranche-XXI, SJVN's 75 MW Bihar project and Tata Steel's 72.5 MW Rajasthan project. Smaller C&I/captive solar additions also remained active.

Wind additions stood at **~210 MW**, with Juniper Green commissioning 107 MW across Gujarat and Rajasthan and Juniper Green Beam Eight adding 50 MW in Maharashtra, while Oyster Green Hybrid One added 52.8 MW in Gujarat. The concentration of wind commissioning in three states highlights the continued build-out of wind capacity alongside the conversion of earlier project awards into operational assets.

Separately, 130 MW of hybrid capacity was commissioned by KPI Green in Gujarat under GUVNL's 500+500 MW Solar-Wind-Hybrid Tranche-II. Tata's 190.5 MW FDRE project in Rajasthan, together with storage additions by ACME Suryodaya and Serentica, further points to a growing focus on firm and dispatchable renewable capacity.

Overall, August reflects a broadening commissioning mix, with solar leading capacity additions while wind, hybrid, FDRE and storage increasingly complement standalone renewable projects.

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FY-wise Trend Analysis

FY2020-21 to FY2026-27 (Q2) |

FY	FDRE(₹/kWh)	Hybrid(₹/kWh)	Hybrid-RTC(₹/kWh)	Solar(₹/kWh)	Solar+Storage(₹/kWh)	Wind(₹/kWh)
FY 2025	4.75	3.42		2.68	3.32	3.76
Q1		3.42		2.84		
Q2	4.68	3.55		2.66	3.42	3.87
Q3	4.46	3.31		2.62	3.52	3.68
Q4	5.47	3.43		2.54	3.09	3.78
FY 2026	5.85	3.75	4.68	2.46	3.24	3.65
Q1			5.07		3.32	3.76
Q2	4.78			2.44	3.18	
Q3	6.74		4.35	2.68	2.86	3.44
Q4	6.28	3.75		2.34	3.85	3.67
FY 2027			5.90	3.00	2.60	3.82
Q1			5.90	3.07	2.60	4.15
Q2	6.00			2.73		3.78

Based on the data for **FY2021–FY2027**, **Solar has remained the most cost-competitive standalone renewable technology**. The lowest tariff in the period was recorded for **Solar at ₹2.42/kWh in FY2021**, while the tariff remained below ₹2.80/kWh through FY2025. Although solar tariffs increased to **₹3.00/kWh in FY2027**, they remained relatively lower than most other renewable technologies.

Wind tariffs were comparatively higher, increasing from **₹2.86/kWh in FY2021 to ₹3.82/kWh in FY2027**, but remained relatively stable over the period. **Hybrid tariffs** also increased steadily from **₹2.46/kWh to ₹3.75/kWh**, reflecting the additional value of combining multiple renewable sources.

In contrast, **FDRE and Hybrid-RTC attracted significantly higher tariffs**, reached **₹6/kWh in FY 27**. This premium reflects the additional cost of providing firm, flexible and round-the-clock renewable power. **Solar+Storage recorded ₹2.60/kWh in FY2027**, making it particularly competitive among newer dispatchable renewable configurations.

Overall, the tariff data highlights a clear **cost advantage for standalone solar**, while the higher tariffs of FDRE and Hybrid-RTC indicate the growing cost of reliability, flexibility and dispatchability in renewable power procurement.

Quarterly Trend Analysis – Last 9 Quarters

FY2024-25 Q1 to FY2026-27 Q2 |

FY	FDRE(₹/kWh)	Hybrid(₹/kWh)	Hybrid-RTC(₹/kWh)	Solar(₹/kWh)	Solar+Storage(₹/kW)	Wind(₹/kWh)
FY 2021		2.46	2.90	2.42		2.86
FY 2022		2.44	3.01	2.44		2.91
FY 2023		2.84		2.69		3.02
FY 2024	4.55	3.34	4.25	2.79		3.43
FY 2025	4.75	3.42		2.68	3.32	3.76
FY 2026	5.85	3.75	4.68	2.46	3.24	3.65
FY 2027	6.00		5.90	3.00	2.60	3.82

Renewable tariffs showed a mixed trend, with for FY 2027 Highest Tariff recorded as **₹6/kWh for FDRE**, **Hybrid-RTC tariff at ₹5.90/kWh**, reflecting the premium for firm and round-the-clock renewable supply. **Solar averaged ₹3.00/kWh**, while **Wind stood at ₹3.82/kWh** and **Solar+Storage at ₹2.60/kWh**. In **Q2 FY2027**, solar and wind tariffs moderated to **₹2.73/kWh and ₹3.78/kWh**, respectively, from ₹3.07/kWh and ₹4.15/kWh in Q1, indicating a near-term easing in tariffs despite the continued shift towards firm and dispatchable renewable solutions.

FY 2025: Tariffs remained relatively moderate, with **Solar at ₹2.68/kWh**, **Hybrid at ₹3.42/kWh**, **Solar+Storage at ₹3.32/kWh** and **Wind at ₹3.76/kWh**. FDRE stood at **₹4.75/kWh**, indicating an early premium for firm renewable supply.

FY 2026: Tariffs showed a broader upward movement in firm and dispatchable technologies. **FDRE increased to ₹5.85/kWh**, while **Hybrid-RTC stood at ₹4.68/kWh**. Solar tariffs declined to **₹2.46/kWh**, whereas Solar+Storage remained broadly stable at **₹3.24/kWh**. Wind also remained relatively stable at **₹3.65/kWh**.