



BRIDGE
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INDIA RE OUTLOOK 2019





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Executive summary

2018 was a [forgettable year](#) for the Indian RE sector. One silver lining was the surge in auctions as 20,436 MW of projects were awarded (+174% y-o-y) notwithstanding multiple tender cancellations. Most of the pain was self-inflicted. Relatively minor issues such as GST, safeguard duty and BIS standards caused major frustration. Solar park development stalled and transmission capacity also struggled to keep pace with needs of the sector. Market confidence was further eroded by undersubscription and cancellation of tenders, and the government's failure to implement much heralded schemes like SRISTI and KUSUM.

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The big event in 2019 is obviously the general elections. A policy purdah is imminent. Politics is likely to dominate over reforms and concrete action for most of the year. It means that swift resolution of sector problems is unlikely. On the plus side, we don't expect any retreat in push for RE irrespective of who comes to power.

So what can we look forward to in 2019? Our key predictions for the year:

- a. There should be good news on the project implementation front. Dictated purely by tender time-tables, capacity addition should jump from 10,560 MW last year to 15,860 MW. Most of the uplift will come from utility scale solar although rooftop solar is also expected to register another year of [fantastic growth](#).
- b. [Open access](#) would have a subdued year with capacity addition of about 600 MW, down 63% over last year.
- c. Module prices are expected to decline further to about USD 0.19/ W.
- d. We should see greater adoption of new technologies such as mono-type modules, micro inverters, storage (finally expected to start rolling with likely announcement of a National Storage Mission).
- e. [Floating solar](#) is expected to make major strides. Recent tender results indicate sharp dip in tariff premium over ground-mounted plants. Falling cost and constraints in land and transmission capacity would force policy makers to prioritise floating solar. We expect a surge in floating solar tenders with an aggregate issuance of up to 5 GW.
- f. We do not anticipate any notable development on [domestic manufacturing front](#). The integrated manufacturing tender has failed, and the government now seems keen to issue tenders with quotas for domestic manufacturers. It is possible that we would see petitions from the domestic manufacturers seeking higher duties.

We are looking forward to announcement of the National Storage Mission and rapid progress on floating solar. Two or three successful IPOs would go a long way in boosting market confidence.

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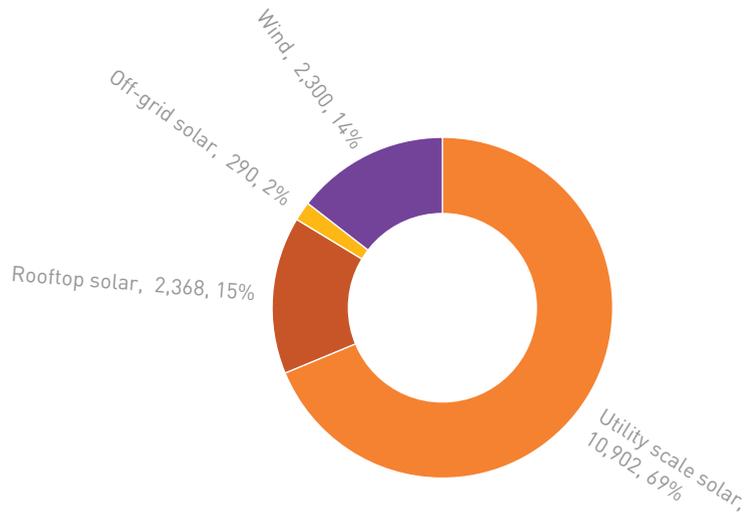
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1. Capacity addition

We expect a total RE capacity addition of 15,860 MW in 2019, a sharp jump of 50% over 2018. More than 69% of capacity addition is expected to come from utility scale solar projects.

Figure 1: Total RE capacity addition in 2019, MW

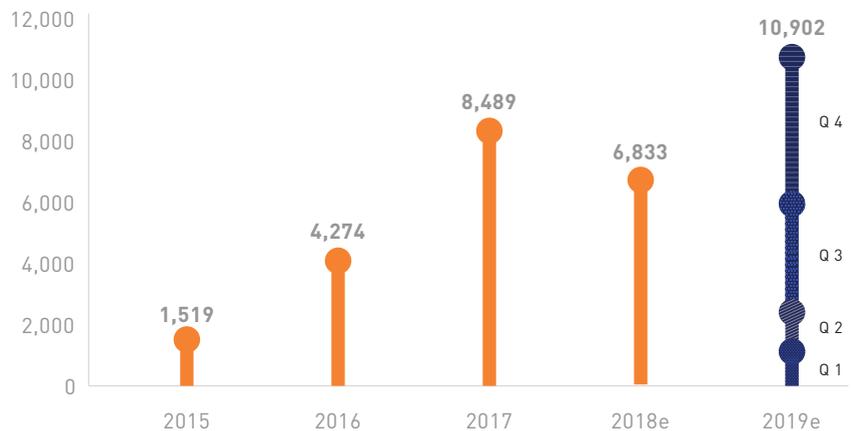


Source: BRIDGE TO INDIA research

Utility scale solar

2019 should register an all-time high in utility scale capacity addition, crossing 10,000 MW mark for the first time ever.

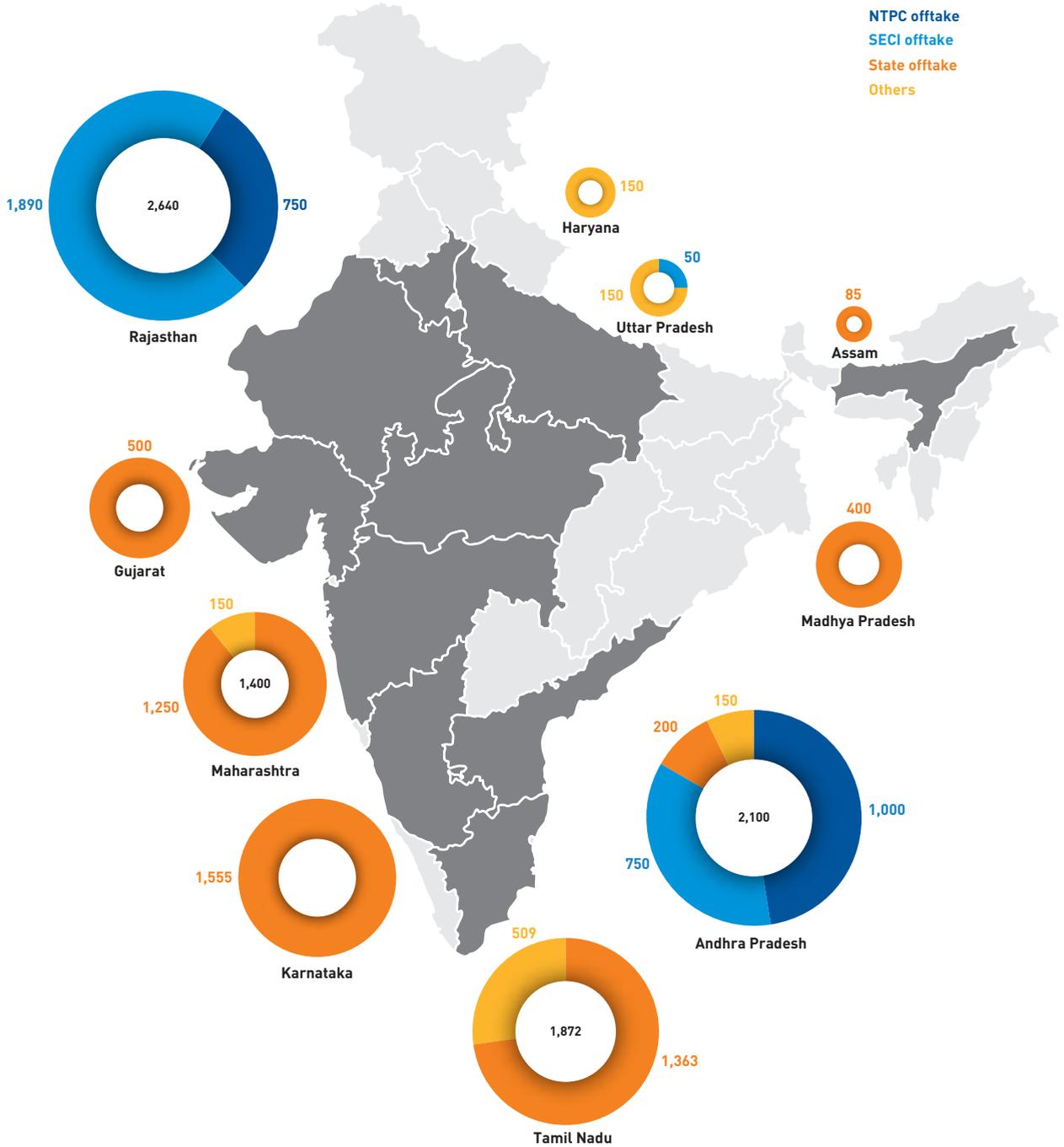
Figure 2: Utility scale solar capacity addition during 2015-2019, MW



Source: BRIDGE TO INDIA research

Based on the time-table of various projects under execution and current implementation status, we expect capacity addition to be low in first half of the year (2,635 MW) and speed up in the second half (8,267 MW). More than 75% of this capacity is expected to come up in Rajasthan (over 2,000 MW), Andhra Pradesh (1,950 MW), Tamil Nadu (1,872 MW) and Karnataka (1,555 MW).

Figure 3: Capacity addition in individual states, MW



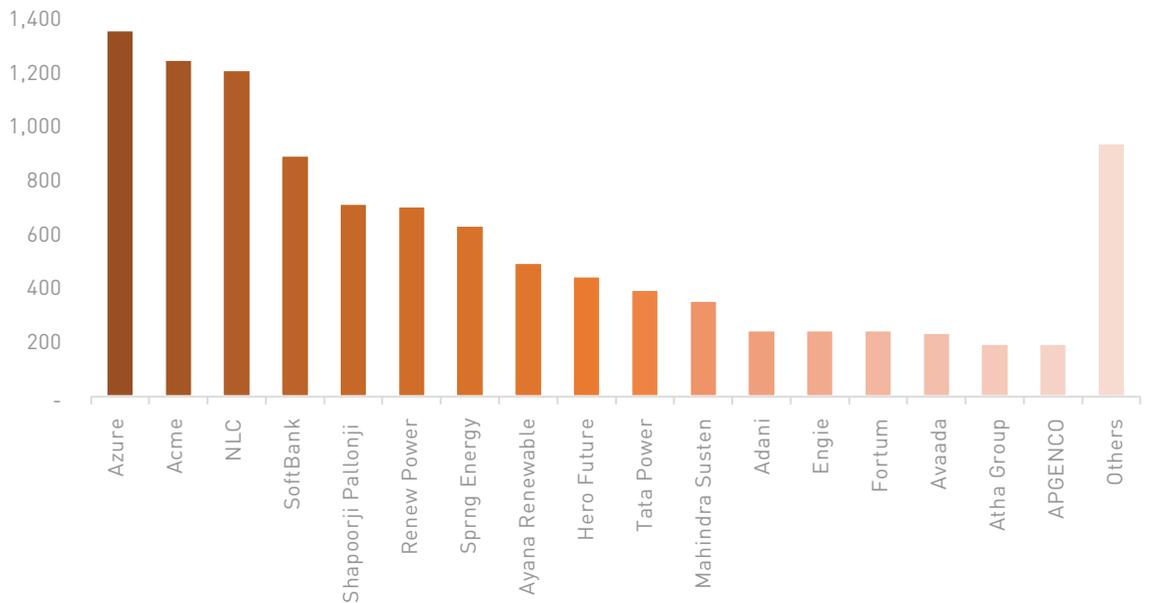
Source: BRIDGE TO INDIA research

Our estimates include 83 MW of floating solar capacity addition (33 MW, NTPC Kerala tender and 50 MW, SECI Uttar Pradesh tender). We also expect India's first utility scale storage project – 3 MW by SECI to be commissioned in Leh, Jammu & Kashmir during the year.

Open access solar capacity addition is expected to fall significantly from 1,630 MW last year to just around 600-650 MW in 2019. Maharashtra, Andhra Pradesh, Uttar Pradesh and Haryana are expected to lead the market.

32 developers are expected to commission utility scale solar projects in 2019. Azure, Acme and NLC are expected to be the leading developers. Ayana Renewable, Raasi Green Earth, Asian Fab Tec, Think Energy Partners (TEP) and Technique Solar are expected to commission their first ever projects in India in 2019.

Figure 4: Leading project developers to commission utility scale solar capacity in 2019, MW

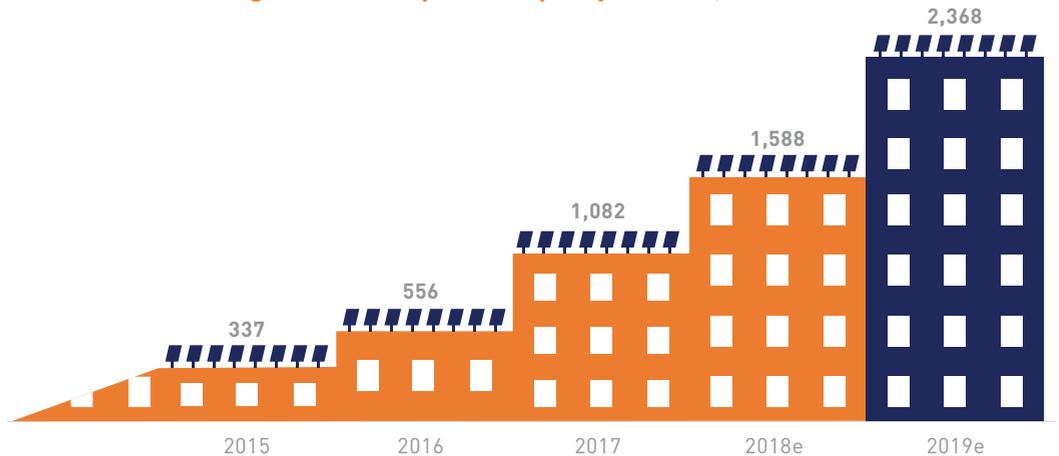


Source: BRIDGE TO INDIA research

Rooftop solar

Rooftop solar capacity addition in 2019 is expected at 2,368 GW, 49% higher than in 2018. We expect the market to be again dominated by C&I consumers as activity in other segments stays slow.

Figure 5: Rooftop solar capacity addition, MW



Source: BRIDGE TO INDIA research

Off-grid solar

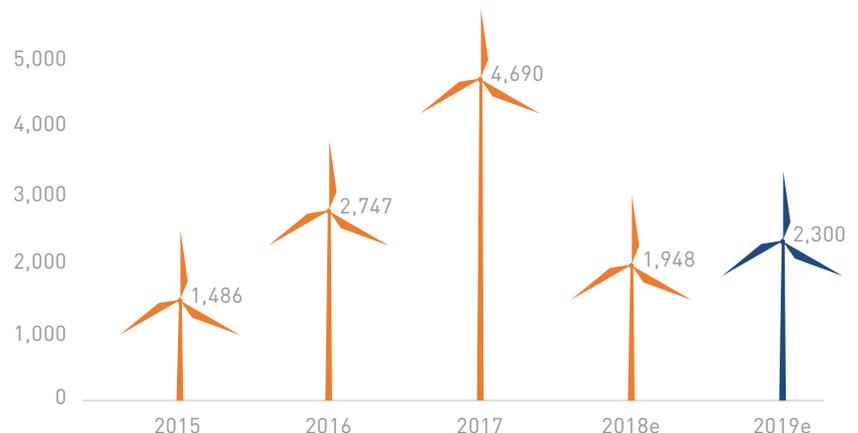
About 290 MW of aggregate off-grid capacity, mostly from solar pump installations, is also expected to be added in 2019.

Wind power

About 2,300 MW capacity addition is expected in 2019, up 18% over previous year. Almost all this new capacity would come up in Tamil Nadu and Gujarat. Projects are expected to be commissioned under SECI tranche I, II and III tenders, and Gujarat and Maharashtra's 500 MW tenders.

Projects are expected to be commissioned by Adani, Orange Renewable, Engie, Sembcorp and Torrent Power.

Figure 6: Wind power capacity addition during 2015-2019, MW



Source: BRIDGE TO INDIA research

2. Domestic manufacturing

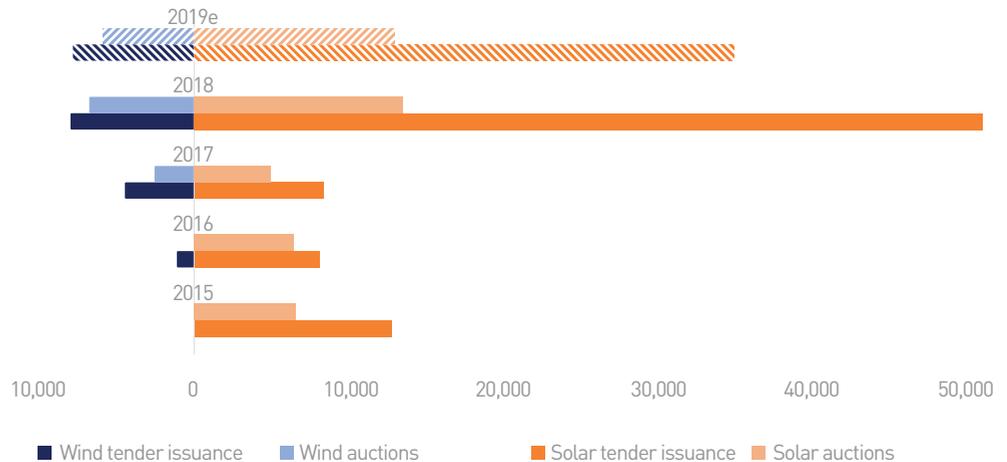
Safeguard duty on PV cell and module imports shall fall to 20% in July 2019. As observed over the past few months, we expect **no significant uplift in domestic PV manufacturing** sector. Total module manufacturing volume is expected to remain at about 3,000 MW. It is possible that domestic cell and module manufacturers may file another petition for trade protection.

3. Tender issuance and auctions

MNRE announced in December 2018 that it plans to issue 80 GW (60 GW solar and 20 GW wind) of tenders by March 2020. We believe that such large issuance is implausible and not consistent with overall power demand-supply situation or actual land and transmission infrastructure available. A pressure to issue more tenders would see a recurrence of problems witnessed last year – lack of planning, poor tender design, arbitrary tariff ceilings – resulting in under subscription and cancellations.

Successful implementation of the **SAUBHAGYA** scheme and cyclical power demand uplift before general elections may force some DISCOMs to fast track RE tenders.

Figure 7: Utility scale solar and wind tender announcements and auctions, MW



Source: BRIDGE TO INDIA research

We expect to see a strong emphasis on domestic manufacturing tenders. MNRE may yet issue more integrated tenders offering a mix of project development and manufacturing capacity. Large tenders are also expected with domestic supply restrictions for supplying power to public sector consumers.

4. Policy outlook

With general elections due in May 2019, we expect little development on policy front in the year. **RE has already been falling behind** in this government's policy priorities. If a coalition-based government is formed, as widely expected, the sector is likely to be pushed back further in the new government's policy agenda.

Some critical amendments have been proposed by the Modi government to the Electricity Act, 2003. But we expect no progress of the bill in the winter session of the Parliament

Some critical amendments have been proposed by the Modi government to the Electricity Act, 2003. But we expect no progress of the bill in the winter session of the Parliament. Time is also running out for announcement of a concrete plan on **SRISTI** or **KUSUM** schemes. However, as the government is under mounting pressure to help farmers before elections, it may yet allocate some budgetary allocation to KUSUM scheme.

Despite Central Electricity Regulation Commission (CERC)'s recent decisions granting relief to developers from **GST** and **safeguard duty**, we expect uncertainty to persist through the year. The DISCOMs do not have the financial capacity to compensate developers upfront and are in any case going to wait for direction from the respective state regulators.

5. Equipment prices and tariffs

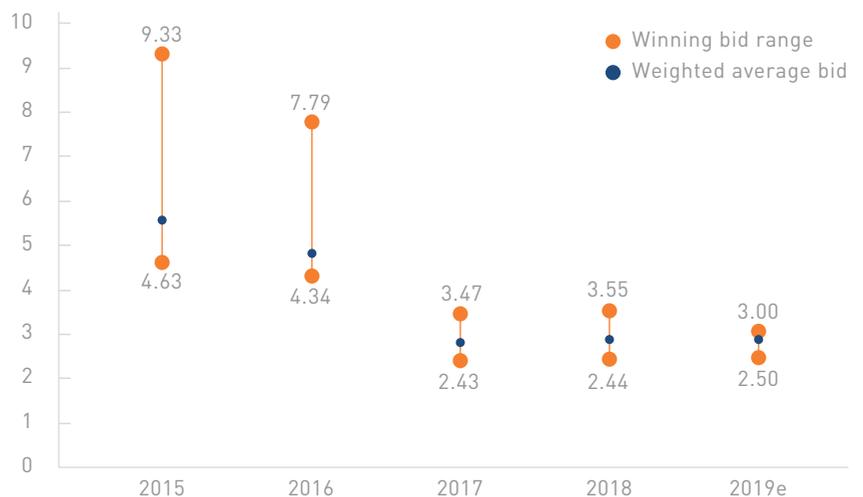
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It is widely believed that module prices will continue to soften through the new year due to oversupply in the global market. There are many estimates of prices falling below USD 0.18/W in the year. We believe that scope for any significant decline is limited as demand from Europe and US is likely to be strong. Even China might announce a boost to its solar programme, which means that price fall may be much more muted. We expect average prices of about USD 0.19-0.20/W in the year, a decline of 26% over mid-2018 prices (USD 0.24/W).

Consequently, we expect solar EPC costs to decline only marginally from current levels. Our estimate for utility scale solar EPC cost by year-end is INR 26/Wp. We see almost no room for bid tariffs to fall in 2019. Tariffs are likely to stay range bound within INR 2.50-3.00/kWh depending on project location and offtake risk profile.

No major change is expected in EPC cost or tariffs for wind power plants.

Figure 8: Bid tariff trends, INR/ kWh



6. Financing

Successful IPOs would boost confidence in the overall sector but prospects are unclear due to political uncertainty and stock market volatility

RE projects have been facing [debt financing challenges](#) due to increasing cost of debt and tight liquidity in the financial markets. The liquidity situation would probably ease-off by Q2 although financing cost is expected to stay firm throughout the year. Also, if no clear way out is found for GST and safeguard duty pass-through, lenders would continue to be highly selective in the sector.

Many companies including ReNew, Acme, Sembcorp and Sterling & Wilson have announced their IPO plans. Successful IPOs would boost confidence in the overall sector but prospects are unclear due to political uncertainty and stock market volatility.

The sector has seen gradual consolidation through both organic and inorganic activity. Project pipelines of leading developers are in the range of 1,000 -2,000 MW suggesting significant capital raising activity in 2019. Most of the new capital is expected to come from large international pension funds and sovereign wealth funds. But capital raising may face challenges due to squeezed returns and unfavorable risk profile. M&A activity is also likely to be subdued due to [mismatch in valuation expectations](#).

7. Conclusion

Except for rooftop solar, Indian RE is getting stuck in the slow lane. The sector needs fresh thinking and concrete, decisive policy action to go up a gear. But that seems unlikely in an election year. On the other hand, problems associated with GST, safeguard duty, BIS quality standards, land and transmission constraints etc. look likely to linger for some time.

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