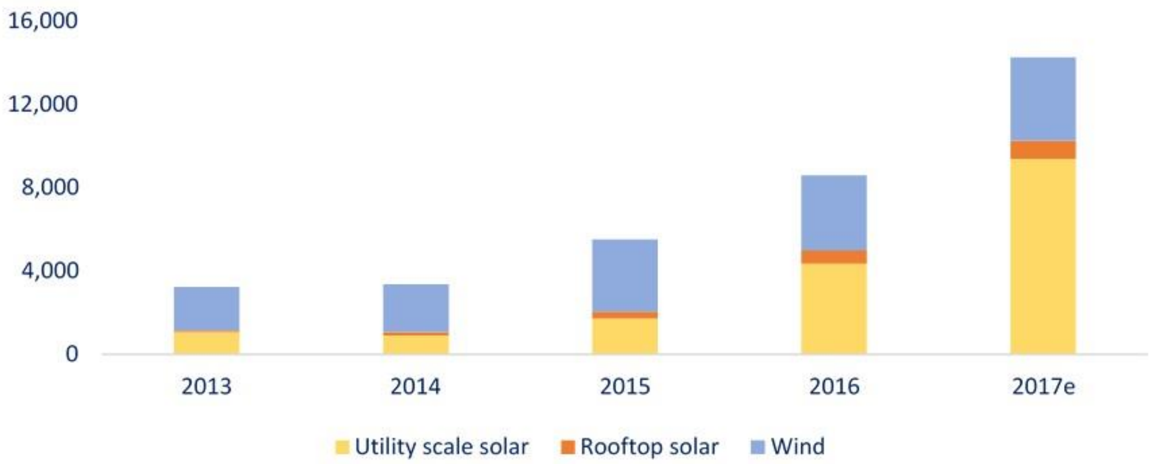
2017, a year of some 'highs' but many 'lows'

As the year 2017 comes to an end, we take stock of the progress made by the Indian renewable energy sector. It was an eventful year, during which annual capacity addition is estimated to touch record levels of 10.9 GW (+66% over 2016) including utility scale solar (9 GW, +110%), rooftop solar (887 MW, +60%) and wind (4 GW, +11%). Utility scale solar capacity addition actually exceeded our original estimate by 17% because of timeline extensions given in some states (Telangana, Karnataka) and large capacity addition in Karnataka under open access and farmers' schemes (total 450 MW).

Figure: Renewable energy capacity addition in India, MW



HIGHS

- New, improved competitive bidding guidelines were issued for solar projects. The new guidelines did not receive much attention but incorporate some fundamentally important protections for developers including better payment security, strict timelines for completion of solar parks, termination compensation and lender substitution rights. More importantly, the guidelines mandate use of standard contract documents for projects across India.
- Private sale business, both utility scale open access and rooftop solar, grew substantially during the year. Karnataka's liberal open access has already resulted in new capacity addition of over 200 MW this year and another 1,000 MW is expected to come online in the next 3 months. Meanwhile, rooftop solar OPEX capacity is estimated to grow by 270 MW in 2017, y-o-y growth of 157%. We see growing investment interest in this business, in part because of slowdown in utility scale segment.
- ReNew, Greenko and Azure Power accessed the green bond market on their own for the first time and raised a total of USD 2.1 billion between themselves. The funding allows them to diversify their debt sources and release banking lines for future expansion.

LOWS

- Weak power demand in the country resulted in continued slowdown in new solar tender activity. Tender issuance during the year fell to 7 GW, down 37% over 2015. Notwithstanding the new bullish plan of the new Power Minister, we believe that DISCOMs remain reluctant to buy more power and total renewable capacity addition will stay below 2017 levels until at least 2020.
- Project developers, anxious to scale up, bid solar tariffs to all-time lows of INR 2.44 (down 44% in just 16 months) in the SECI Bhadla auction in May 2017. Steep fall in tariffs led to many tender cancellations (total 2.7 GW), tariff renegotiations and contractual uncertainty in many states including Uttar Pradesh, Jharkhand, Andhra Pradesh, Karnataka and Tamil Nadu.
- India conducted its first wind project auction in February 2017 and again, the low bid tariffs – INR 3.46, about 25% lower than average FIT across the country – resulted in not only overnight cancellation of all FIT schemes, but also contractual uncertainty for all projects under construction. As a result, wind sector activity almost stalled after Q1. Tariffs fell to an unbelievable INR 2.64 in subsequent auctions.
- There were many nasty surprises for developers on the execution side. Module prices started rising from May 2017 onwards and securing supplies even at USD 0.36/Wp (+20% in less than six months) became difficult. GST implementation and import duties on modules resulted in further increase of 10% in project cost.
- UDAY, Government of India's financial and operational reform package for DISCOMs, has been successful in improving their balance-sheets. But operational improvements – reduction in T&D losses, separation of agricultural feeders, transformer level metering – have proven much more difficult. Moreover, tariff increases have been below required levels meaning that overall, UDAY has failed to have the widely expected positive impact on power demand or payment track record of DISCOMs.
- Domestic manufacturing continued in doldrums with imports meeting as much as 85% of total solar module demand in the last 12 months. The government seems keen to support manufacturing and is mulling over imposition of anti-dumping duty on solar cells and modules, creating another risk for project developers. But ironically, wind turbine manufacturing, a relative strength in the sector, suffered badly due to sharp fall in demand with manufacturers closing down plants and laying off workers.

MNRE announces a dizzying plan for the sector

The Ministry of New and Renewable Energy (MNRE) has announced a new RE rollout plan entailing 91 GW of new solar and wind project tenders by March 2020. It is an ambitious attempt by the new MNRE administration to address private sector concerns about slowing project pipeline and lack of a clear roadmap. It envisages 67 GW of new solar project tenders and 24 GW of new wind project tenders by March 2020 as well as 20 GW of integrated solar module manufacturing capacity addition. With these planned projects, the new Minister for power and new and renewable energy, R.K. Singh, believes that India would "…comfortably achieve a rather conservative RE target of 175 GW by 2022 and even exceed it…."

The new plan provides new annual targets – 17 GW of solar projects are expected to be tendered out by March 2018, another 30 GW in the next 12 months and a further 30 GW in the subsequent 12 months. Similarly, 4 GW of wind projects are expected to be tendered out by March 2018, another 10 GW in the next 12 months and a further 10 GW in the subsequent 12 months. In total, it equates to issuing new tenders of 3.5 GW capacity every month – in contrast to an average of less than 0.6 GW every month in the last year. The plan includes development of up to 10 GW of capacity to come from floating solar power projects, offshore wind and hybrid solar-wind power systems.

The Minister has also separately laid out broad contours of a new domestic manufacturing policy – 30% capital subsidy is proposed to be allocated to integrated manufacturers (from polysilicon extraction to module manufacturing) on the basis of auctions. The winning bidders shall also be given priority in specific project development tenders.

Quite how the new plan makes sense in the current political and financial set up with weak power demand growth and stretched DISCOM finances is not clear to us. It seems more like a simple mathematical exercise rather than a well-considered, rigorously debated plan. We noted last week that the 175 GW target for 2022 is too ambitious in the context of India's power needs and actual performance is lagging significantly behind targets compelling the government into making ever bolder announcements. The new plan has no detail on how it will address shortcomings of the earlier plan except the Minister stating that Renewable Purchase Obligations (RPOs) are mandatory and need to be adhered to strictly.

We find it hard to take the new plan seriously when it probably doesn't even have support from other parts of the central government. The state governments and DISCOMs will also fiercely resist any encroachment on their decision-making authority. It lacks sufficient detail, is off-putting for all stakeholders and instead of providing comfort to the private sector, it unfortunately presents a picture of disarray and confusion.