

Paying It Forwards: How Investing In Experience From European Asset Managers Can Earn Over The Longer Term

- *Lessons Learned From The European Solar Sector*



The market in India is growing rapidly and, in its nature, is evolving much faster than the UK. The pace is exciting and India will inevitably become a key nation in the global solar sector. Regrettably, as with the adoption of any new technology, we are seeing the same development and construction related problems that were also experienced in Spain, Italy and the UK years before. Issues such as module defects, poor DC cabling, inappropriate drainage, all of which can result in a portfolio of sub-optimum assets.

For solar projects in India to become a high quality asset class, swift improvements in knowledge transfer are imperative to avoid the recurrence of common, chronic and avoidable pitfalls encountered by the earlier adopters in Europe.

Education and awareness raising is needed particularly around quality management and quality systems and processes and a much greater focus placed on the operational lifetime of these assets. Beyond the initial frenzy of project development, construction and commissioning, if not addressed, these issues will lock assets into operating sub-optimally for the next 25-35 years. The impact is tangibly on project IRR's (Internal Rate of Return) and here WiseEnergy will set out why and what needs to be done.

As has been widely documented, the cost of Solar in India has plummeted. In less than a decade, costs have fallen from INR 15 /kWh in 2009 to less than INR 3 /kWh in 2017. This fall has been driven largely by a decline in module prices and by aggressive bidding for government PPA contracts. Whilst the trend is broadly positive as the overall cost of solar becomes competitive vis a vis conventional power, many developers are struggling to build plants in the current environment and many built (at these tariffs) are now struggling. SolarQuarter has already commented that concerns have been raised over the long -term sustainability of projects in their online Industry Trends an Analysis piece last year, " Solar Power Industry in India: Trends and Analysis".

Why is this, when at INR 3 /kWh, the tariff is the same as successful USA assets where \$0.03/kWh is normal and there is less sunlight?

This operational and profit squeeze in India is a threat to the ambitions of the country and developers alike, and early conversations with Banks suggest will lead to a liquidity squeeze too. To maintain project finance IRRs at such low tariffs requires a fall in one or other of the key cost centres being, cost of capital, module prices, Balance of Systems costs (BoS), O&M and other operational costs. However, module prices are now stabilising and may even increase in the short to medium term as a result of the imposed import tariff on modules imported from China. Holding the cost of capital constant for a moment, it becomes clear that developers are left having to drastically cut costs in other critical areas or improving yields, which in India are typically around the P75 range.

Of course costs in solar must come down to ensure that the LCOE (Levelized Cost of Energy) falls below that of conventional power but if costs falls too quickly, the operational paradigm becomes perverse with overall project costs over the operational payback period rising above price. We have already seen reduced spend on CAPEX on large portfolios with no investment in essential SCADA systems and numerous projects with no quality management systems in place. Without proper oversight and input from experienced asset managers to improve the flow of information, financial models may as well be built on sand. The corollary is asset underperformance and reduced revenue leading to lower IRR's, a view documented by Crisil's Infrastructure Yearbook (Source: DNAIndia).

Additional operational pressures include the introduction of Forecasting, Scheduling and Imbalance Handling with financial deviation penalties, CEIG annual site inspections and annual meter calibrations. All of these carry costs which, as we have also seen, are not routinely captured in financial models during development. Operational costs creep upwards when there is imperfect market information and the financial model is wrong. Some projects are also experiencing significant cashflow issues with late revenue payments due by TRANSCO's delayed for as much as 5-6 months. Depending on the Debt/ Equity model, this could mean serious issues for loan cover or dividend payments. For all investors, foreign or domestic, overall project returns are being squeezed or even negated.

This is all very risky for the equity owner and lender alike. The short-term squeeze on OPEX means that there is no budget for high value asset management that brings with it quality management systems and services and crucially, experience. The best asset managers will improve yield and reduce total costs both of which mitigate these negative pressures on IRR.

The challenge is how to overcome this area of tension which is not unique to the Indian market, but where there is a perfect storm. It is for the experienced, UK, Asset Managers with a strong long-term service offering to break this cycle with the demonstration of proof and a clear proposition that overcomes price being driven down so severely.

In the UK and Europe, with project development activities curbed following the removal of subsidies, the focus has at last shifted away from short term development and construction budget cost cutting to long term asset profitability. The light is now shining on operational asset management services. Sadly, for experienced asset managers much of the work is focused on 'remediation' of underperforming assets suffering from all those issues identified rather than pure-play optimization. In India, there is a very real opportunity to capitalize on the mistakes made from the early European adopters by investing in quality measures early on in the asset lifetime. But support is required to transmit this message to developers, EPC's, and crucially, investors and asset owners before these mistakes are repeated.

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