

THE SOLAR ENERGY SUPPLY CHAIN AND COVID-19: New challenges and opportunities



It is no secret that the Covid-19 pandemic has upturned the world economy and disrupted industries and global supply chains. This has also affected the solar energy industry, which has seen tremendous growth and falling costs over the past decade.

EPC companies in the solar space, too, have grappled with limited or no availability of raw material and labour. Regulatory restrictions have pushed up material costs, with additional overheads incurred by manufacturers due to new guidelines and compliance protocols enforced during the pandemic.

This has meant an overall increase in prices borne by EPCs that must be passed on to customers. For example, prices of polysilicon, a key component in the manufacture of solar panels, went up by 175% between January and mid-June 2021. These are expected to stay in the high range until mid-2022, according to IHS Markit. As a result, prices of solar modules rose 16.3% in the six months ending March 2021. Other input factors such as labour and materials such as silver, copper, aluminium and steel have also seen an abnormally high price increase reminiscing 2008 levels through 2020 and now in 2021 as well.

For solar EPC companies, there were other factors to contend with - non-availability of containers, cancellation of vessels, abruptly increased freight costs and administrative delays that included prolonged bank LC confirmation and documentation, quarantine time and delays in customs clearances.

Suppliers, on their part, have been under much stress due to these factors, which has slowed down their order deliveries. They have been unable to adhere to their contractual terms due to the restrictions and input price escalations.

These factors have put pressure on EPC players as they've had to ensure that projects get commissioned and handed over on time, as per contractual obligations.

Reinventing through a crisis

For Sterling and Wilson Solar, the pandemic has been a challenge and an opportunity to find new solutions to fulfil client commitments amidst a new reality.

Since 2020, we have been focused on improving our processes and cost efficiency measures to mitigate the cost and time impact of supply chain disruptions due to Covid-19. We have worked to prioritise the supply chain and brought alternative supply locations as well as order diversions among our suppliers. Our adaptive strategy now emphasises identifying and developing a local supplier pool that would reduce the risks associated with global networks, when a disruptive emergency arises.



We switched from manual endorsement of documents to online transfers of digital documents, to ensure we met the requisite compliance norms during the restrictive and limited work environment.

Difficult times call for open and honest communication more than anything else. While we absorbed the cost impact in our projects on account of freight and supplies, we also made sure to engage with our clients for their extended support on cost and time escalation in our EPC projects. Staying in touch with clients and communicating on the evolving scenario and its implications was beneficial as they understood our concerns and appreciated the mitigation efforts we had been taking. We were successful in getting EOT claims for projects once mitigation plans were shared transparently.

At the same time, we continued to anticipate the issues that kept emerging in our supply chain activities due to the pandemic to ensure damage control and minimise the impact. We discussed and managed resolution on suppliers' concerns due to cost variations.

Our international projects faced challenges on account of on-time completion of site commissioning activities as the engineers couldn't be made available on the site as scheduled. Despite this, we managed the ongoing project work by coordinating between the team on-site and suppliers remotely through regular interaction via video calls. Due to this, we ensured the commissioning of projects without any significant delay and achieved high levels of customer satisfaction.

Based on the uniquely challenging experience during the past 18 months, Sterling and Wilson Solar has developed some post-pandemic best practices in its supply chain.

A model approach for the future

Strong focus on developing local suppliers



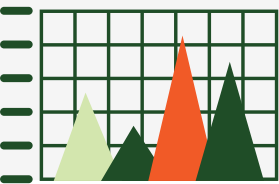
Establishing global suppliers with multiple supply locations

Splitting up of orders to minimise the risk of supply delays



An emphasis on virtual meetings to expedite and follow-up on ongoing orders and contracts

Ensuring that contractual obligations for pandemic-related and *force majeure* clauses in EPC contracts are discussed with clients early on during the bid stage



Planning for any back-to-back price variations, and working with clients and suppliers to address price uncertainties

Understanding suppliers' concern and addressing their pain areas by offering alternate payment terms



As the world slowly returns to a degree of normalcy, supply chains will need a serious rethink amidst cautious optimism and a sense of concern. This pandemic has taught us that no matter how prepared we are, new disruptive forces can hit businesses and economies in unexpected ways.

The answer lies in only being more agile, innovative, and committed to finding practical and relevant solutions and not being tied to historical notions of doing business. Covid-19 has been the much-needed wake-up call for companies and countries to reassess their supply chain framework and focus on building new, more adaptive models for the future. This is the only way forward! ■

