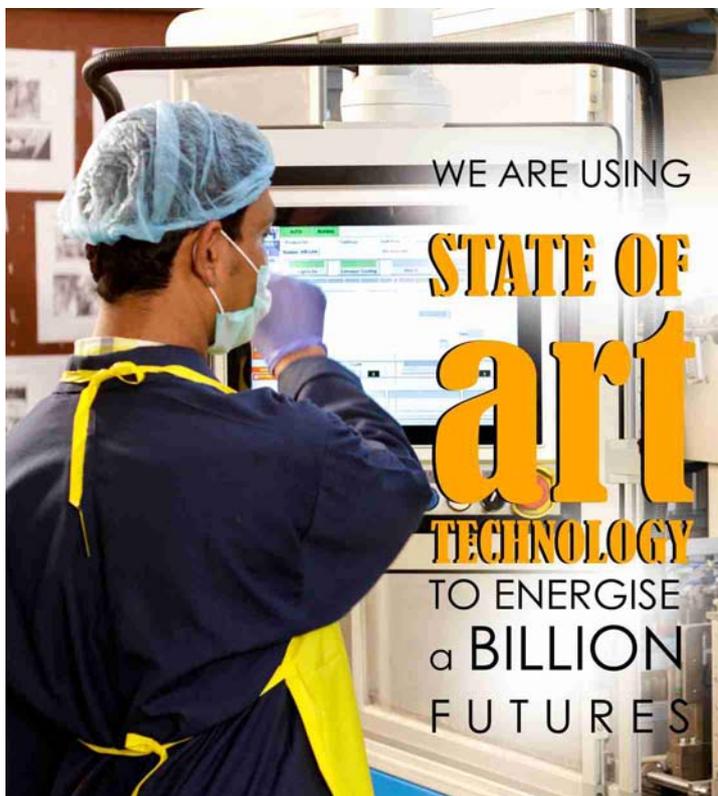


# SOVA SANDESH

News Letter of SOVA SOLAR LTD.



YEAR I | ISSUE III | FEB 2018

## EDITORIAL

The winter is on the verge of its retirement, as it seems while we take one more step forward to publish our third edition of Sova Sandesh. The New Year has already settled down and we have taken so many resolutions to make this year a memorable one, not only for us but also for the entire human race. We have involved ourselves in making the earth a better place to live on. We hope that our mission will be successful with all your blessings and we will keep updating you all our achievements through Sova Sandesh!

## CARTOON CORNER



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## Article of the Month

## SOLAR PV INDUSTRY TILL 2022

Photovoltaic systems play a vital role in the energy industry and are now a days widely utilized in various applications ranging from telecommunications towers to residential areas. The growth of the photovoltaic market is propelled by the growing energy costs and changes in climatic conditions. Furthermore, the growing importance of renewable and environmental friendly energy sources such as solar PV technology is driving the growth of this market. The photovoltaic market is also witnessing continuous advancements with respect to materials used in the manufacturing of photovoltaic components and techniques. electricity is being utilized as it requires minimum system maintenance, reduces the operating and maintenance costs, and is pollution-free. The PV market is observed to be growing at a rapid pace over the past few years. This is mainly attributed to the rising demand for energy, support extended by the government, and the growing concern regarding environment. Initially Europe was the largest and one of the most promising markets for PV, but currently it is at the second position due to various factors such as the 2012 European crisis which has resulted in reduced funding activities by governments and decline in the market expansion initiatives being undertaken by the players in the region. Currently, the major market share is occupied by the APAC region, primarily by China and Japan. This is due to the presence of the major industry players in the region and growing investment activity. India and Latin America has also emerged as the major hubs for the solar industry.

Though there is a 7% slow down predicted in 2017 in global PV demand, market researchers forecast that solar power will be back on a path of growth in the following 4 years. A cumulative forecast 2016 – 2021 of 506 GW with a 9% CAGR (Compound Annual Growth Rate) leaves space for optimism in the industry's future. Global PV demand registered a 20% growth in 2015 and a 34% growth in 2016, with the global utility-scale market being the primary driver in the last year, with residential growth mainly concentrated in Japan, US, Germany, Australia and the UK.

In 2016 China, US and Japan made up 66% of the 66GW market, with China being the number one market in the world, the US number two and India looking set to become one of the more interesting markets in the future, forecast to overtake Japan to become the third biggest market by 2018. India has registered a fabulous growth in the Solar Industry.

This is expected that Indian Solar Industry has to grow at a CAGR of more than 35% by 2022. Major solar installations so far, was dominated by the Southern region of India and it is predicted by the ongoing developments and projects in pipeline that, while approaching to 2022 Northern region will surpass the Southern region with maximum installed solar PV capacity.

Standard and advanced Multicrystalline module technology has the highest share with increasing scope and research on p-type and n-type monocrystalline silicon modules. With the increased cell efficiency of such advanced photovoltaic modules, solar plants capacity utilization factor has also gone up. The Government of India has sanctioned development of 40,000 MW of solar park infrastructure by the year 2020 with a financial support of M 81 billion (US \$ 1.2 billion). Solar projects with a total capacity of 8,900 MW have already been allocated in 8 solar parks.

However, despite this undeniable progress, solar will still go through cycles of prosperity and challenge. Although a highly unique and isolated situation, the SunEdison bankruptcy contributed to a sense of market uncertainty. While the ITC had the opposite effect (providing greater certainty), it also removed the urgency for power plant project construction in the second half of this year. When it comes to financing, we're seeing less competition. We're in another transitional period. Companies that make the right investments today and innovate with the long-term in mind will emerge as the solar energy companies of tomorrow. The road ahead won't be without its challenges, but there is laser focus on making strategic decisions with the long-term in mind. It's been embedded in our DNA since day one.

In a very recent market survey report it is observed that although tier-one module manufacturers had high capacity utilization through scheduling order and overseas demand, the demand has weakened owing to various factors. These factors include the dramatic decrease of China's demand in January. The demand of distributed system in the end of December has mostly completed. The uncertainty of India, the main market in Q1, has increased because of recent trade issues. The module manufacturers will first cut down the order of PV cell, making the influence of the decreasing end-market demand approach to upstream supply chain and boosting price reduction for the supply chain. By Chinese New Year, module price is expected to decrease slowly on a weekly basis; after Chinese New Year, the price will remain stable due to the implementation of big projects.



Soumyen Mukherjee- President

Power management is one of the biggest threat to the Solar PV Market. Supply of PV power is sporadic, with output often peaking at a time of low demand, and vice versa. Output also often has to be distributed to other countries, due to insufficient grid capacity, such as California which often provide excess output of its PV power network, for 10% share of its power need, to other states. Given high PV cell cost, large-scale energy storage system is unfeasible for now. Data of U.S. Department of Energy shows that PV cells accounts for only 1.7% of U.S. grid's power storage, with the rest all being stored in the form of pumped-storage power stations. Ramez Naam, instructor for energy environment at Singularity University and a angel-fund investor, points out that the most direct solution to the problem is the installation of bigger and more distributed grid. The most ideal state for the U.S. is to connect the three major grids, covering eastern region, western region, and Texas, respectively, with new high-voltage power boxes, which, though, may cause confusion in power management.

Another identified problem area for Solar PV Market is high indirect cost. On top of technological problem, indirect cost for the installation of PV power plants is also very high, including design of the project, approval of the project, site selection, and grid connection, which could account for 64% of the total cost, leaving the remainder to PV cell and hardware, according to the U.S. Department of Energy.

However, it is undoubtedly accepted that Global Solar Industry will definitely shine inspite of having several political or non-political or financial or non- financial issues around the world. Along with the world market Indian Solar industry will reach its target of 100GW by 2022.

### Event of the month



35 nos of students(Asansol Polytechnic, Govt. of West Bengal) visited our plant. Organised by CSIR-CMERI, Durgapur under the Skill Development program driven by Govt. of India

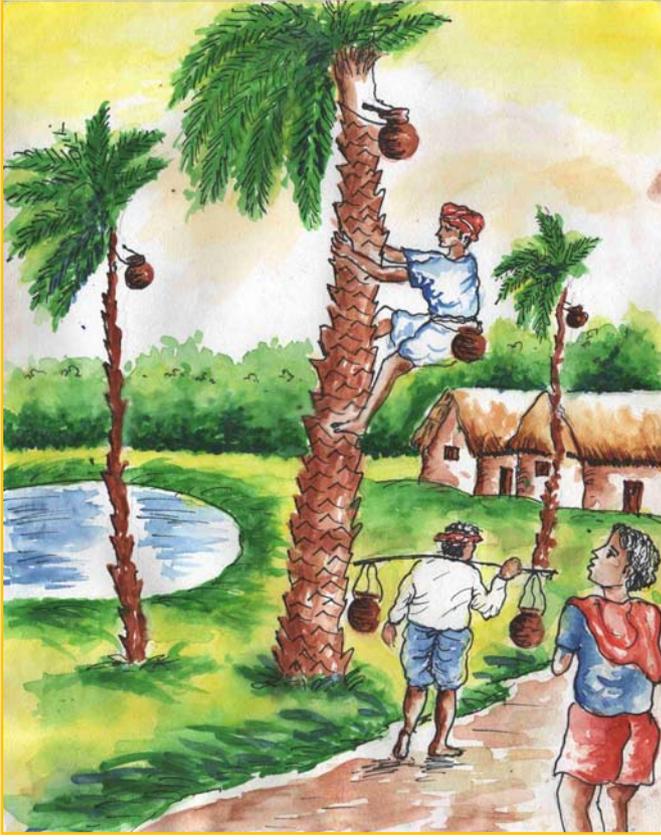
### Prestigious inspection of the month



Successful inspection done by Reserve Bank of India, Kolkata

### Product of the month





Drawn By: Prashanta Dey- QC

## আমার ঈশ্বর | অজয় চৌবে

আমি ঈশ্বরকে দেখেছি  
অন্ধকার গলির ভিতর  
অসহায় ক্ষুধার্ত ভিক্ষুকের পাশে  
বসে থাকতে নিখর।  
আমি ঈশ্বরকে দেখেছি পরিশ্রম বিমুখ  
মানুষদের ঘৃণা করতে,  
প্রতিনিয়ত অনুভব করি তাকে  
মানুষ হয়ে মানুষের পাশে  
না দাঁড়ানোর কষ্টে  
নীরব হয়ে থাকতো।  
আমি উপলব্ধি করেছি ঈশ্বর  
মন্দির, মসজিদ, গীর্জাতে  
থাকতে লজ্জা পান,  
যেখানে প্রতিনিয়ত দুঃশাসনের দল  
হরণ করে নারীর সম্মান  
ঈশ্বর কি করে থাকবে বলো  
আপন আদর্শে মহান?  
যেখানে ফুটপাথে, দেবালয়ের বাইরে  
বসে থাকা ভিক্ষুকেরা পাইনা  
কোনো সমাদর  
যেখানে অজস্র অসহায় মানুষ  
গৃহহীন যাযাবর,  
ঈশ্বর কি করে থাকবে বলো  
মন্দির, মসজিদ, গীর্জাতে  
নরম আনন্দে, পরম সুখে বিভোর?



## VICTORIAN SUNRISE



-Sougata Ghosh