

Renewable Energy Monitor

July 2016

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 Policy

Separate auctions for solar ventures using Desi modules. The Ministry of New and Renewable Energy has decided to hold separate auctions for solar projects using domestically manufactured modules to help local producers of panels that can tap the sun's energy. For some auctions, the ministry is also dropping a requirement for panel makers to source locally made solar cells.

Although auctions of projects with only domestic equipment have been held earlier, they always required solar module producers to source locally made solar cells. In some future auctions, this norm will not apply. Such projects will help boost the sales of local module manufacturers since solar developers winning projects in India prefer to import equipment from China and Thailand, which are 8-10% cheaper due to economies of scale and technologically superior.

The second phase of the **JNNSM (Jawaharlal Nehru National Solar Mission)**, begun in late 2012, had mandated that “developing domestic manufacturing capacity across the value chain is one of the thrust areas.” While India's solar energy programme is expanding towards a target of 100,000 MW by 2022, its solar manufacturing has lagged behind. To help local manufacturing, some tenders floated by the ministry's solar energy arm, Solar Energy Corporation of India, have specified that only domestically made solar cells and modules should be used.

BIS-norm to be a must for solar water heaters. The Ministry of New and Renewable Energy is working on a ‘quality order’ to make it compulsory for all solar water heaters installed in buildings to be certified by the BIS (**Bureau of Indian Standards**), according to a senior ministry official. This follows a BIS announcement on the quality standards for evacuated tube collector-based solar water heaters, which have rapidly become the design of choice for such water heaters. The Indian government used to subsidise solar water heaters, but stopped the practice in September 2014, leading to an increase in imports from China, which offered products up to 50 per cent cheaper than Indian alternatives.

Government asks PFC, REC to focus more on funding renewable energy projects. The government has asked state-run PFC (Power Finance Corp) and REC (Rural Electrification Corp) to expand focus on funding renewable energy projects. The government is contemplating a \$1 billion (Rs 6,700 crore) fund to finance renewable energy projects. REC lends to such projects at rates between 10.5 per cent and 11.5 per cent, depending on factors like project viability and promoter's strength. Rates on loans to conventional and hydropower projects are higher at 11.75 per cent to 13.40 per cent. The move is aimed at giving a boost to the renewable sector as well as utilising the cash that the two financiers will receive in lieu of loans given to state-run power distribution companies post implementation of the UDAY (Ujwal Discom Assurance Yojana). Under the UDAY debt recast scheme, REC and PFC will recover their existing debt exposure to state discoms in cash. The two have an exposure of more than

\$20 billion to these distribution firms. The companies plan to utilise the cash to finance energy projects, mainly green energy projects such as solar, wind and biomass plants. Lack of new conventional coal and gas projects by private developers has prompted the two companies to shift focus to renewables.

Eight states to offer Rs 5,000-crore green-grid projects. Eight states will issue tenders worth Rs 5,000 crore for projects in a renewable energy transmission network. Six of these states have issued notices for tenders, inviting companies to bid for parts of this green corridor.

GOING GREEN

Tenders issued by the states

State	Total cost in ₹ cr	Status of issuance in ₹ cr
Tamil Nadu	1,593	1,593
Rajasthan	1,018	647
Gujarat	1,963	1,121
Andhra Pradesh	1,289	529
Madhya Pradesh	2,100	NA
Maharashtra	2,100	NA
HP	910	178
Karnataka	906	664
Total	11,879	4,732*

HP: Himachal Pradesh; * includes contracts awarded

Source: Ministry of new and renewable energy

Tamil Nadu, which issued the largest tender worth Rs 1,593 crore, has informed the renewable energy ministry it has awarded the contract.

Rajasthan, Karnataka, Gujarat and Andhra Pradesh will issue their tenders later in 2016. Rajasthan has awarded a contract worth Rs 383 crore and Andhra Pradesh has awarded a contract worth Rs 529 crore.

The country's renewable energy capacity is 40,000 Mw, of which wind power's share is 26,000 MW and solar power's 7,000 MW. The green corridor, a Rs 40,000 crore transmission network for renewable energy, was envisaged by state-owned **Power Grid Corporation** in 2011. The project was divided into two parts to speed it up. Power Grid is setting up the first corridor connecting states rich in renewable energy. Work is also on for a second corridor connecting solar parks in Andhra Pradesh, Madhya Pradesh, Karnataka, Rajasthan and Gujarat. The intra-state projects are worth Rs 11,000 crore. German bank KfW and the National Clean Energy Fund will pick up 40 per cent of the tab each and the states 20 per cent.

Smart grid project in Gurgaon to end use of diesel generators. A Rs 7,000 crore smart grid project being implemented by Haryana government to ensure uninterrupted supply of power in Gurgaon city will put an end to consumption of diesel through generator sets, Chief Minister Manohar Lal Khattar said. Mr Khattar held a meeting with Union power minister Piyush Goyal in Delhi to review the progress of the project. He said the project will not only prove beneficial for conservation of environment but also put an end to the role of builders and colonisers for power supply. Mr Goyal said this project will prove a milestone in the field of power supply in the country. While describing Gurgaon as an important cosmopolitan city, he said that the total transformation of Gurgaon through this project would be another feather in its cap. He said that in the first phase, the project involved an investment of Rs 1,382 crore.

Centre doubles solar power target to 40,000 MW. Government is working on doubling the power generation target from solar energy parks to 40,000 MW in the backdrop of slow offtake of rooftop solar and problems being faced by some project developers. The MNRE (Ministry of New & Renewable Energy) is keen to set up solar park projects with a cumulative capacity of 20,000 MW, in addition to the already launched such programme of 20,000 MW in 2014, a senior government official said. According to the official, there has been slow progress of rooftop solar projects as it is mainly being

implemented by institutions like government offices, schools and colleges. The scheme for **'Development of Solar Parks and Ultra Mega Solar Power Projects'** had been rolled out by the Ministry of New & Renewable Energy on December 12, 2014. The scheme has been conceived on the lines of **'Charanka Solar Park'** in Gujarat which is a first-of-its-kind large scale solar park in the country with contiguous developed land and transmission connectivity. This scheme envisages supporting the states in setting up solar parks at various locations in the country with a view to create required infrastructure for setting up of solar power projects. The solar parks will provide suitable developed land with all clearances, transmission system, water access, road connectivity, communication network, etc. This scheme will facilitate and speed up installation of grid connected solar power projects for electricity generation on a large scale. Difficulties are being faced by the developers in executing the projects as in the case of SunEdison which had bid aggressively and won the project at a tariff of below `5 per unit.

National lab policy for renewable energy soon. The ministry of new and renewable energy is in the process of finalising a national lab policy to set norms for testing, standardisation and certification of renewable energy related products, and define the infrastructure required for testing centres. The policy document is in the final stage of being prepared and is expected to be complete in a month's



time, a government official said. A committee headed by MNRE (ministry of new and renewable energy) director Mr BS Negi and NISE (National Institute of Solar Energy) director Mr OS Sastry has already prepared a draft policy document.

Noting that there are no existing standards for products such as solar pumps, solar batteries, solar lanterns and solar thermal systems, the draft said these need to be quickly put in place. It also spelled out the highly technical standards that each of these products should adhere to.

Currently, there are only three laboratories for testing solar equipment in the country Gurgaon-based NISE and two private laboratories in Bengaluru, owned by Germany-based TUV Rhineland and US-based UL. The policy document has identified four components as critical in the area of testing for solar photovoltaic (SPV) system: modules, inverters, batteries and water pumping systems. "During recent field surveys serious concerns on quality and reliability of the installed PV systems have been raised, as the observations showed more than the normal rate of degradations in several cases. It is felt that an immediate policy intervention is needed for quality improvement of all the components and SPV systems and power plant," the draft said.

Setting standards is in line with the government's thrust towards manufacturing more solar cells, modules, inverters and components indigenously. Currently there are no BIS standards for components of wind energy systems. The NIWE follows global IEC standards while assessing equipment.

[The Economic Times, 7 July 2016](#) | [Business Standard, 8 July 2016](#) | [The Hindu, 8 July 2016](#) | [The Economic Times, 12 July 2016](#) | [The Economic Times, 11 July 2016](#) | [The Asian Age, 19 July 2016](#) | [The Economic Times, 25 July 2016](#) |



Indian solar energy to get \$1 bn from World Bank. The World Bank Group signed an agreement with the ISA (International Solar Alliance), consisting of 121 countries, led by India. It has committed to provide \$1 billion support to Indian solar energy projects. The World Bank-supported projects include solar rooftop technology, infrastructure for solar parks, bringing innovative solar and hybrid technologies to market and transmission lines for solar-rich states. The cumulative investment in solar would be the World Bank's largest financing in this sector for any country.

The World Bank Group will develop a road map to mobilise financing for development and deployment of affordable solar energy, and work with other multilateral development banks and financial institutions to develop financing instruments in this regard. The World Bank also signed an agreement to give close to \$625 million for the **Grid Connected Rooftop Solar Programme** under the National Solar Mission. The project will finance the installation of around 400 megawatt of solar photovoltaic power projects. The development of a \$200-million shared infrastructure for the Solar Parks Project under a public-private partnership model, is also under preparation, said the Bank.

Experts slam omission of water heaters in Delhi solar policy. The **Delhi government's solar policy**, approved by its Cabinet in June 2016, fails to mention solar water heaters or extend to them the same benefits given to other solar installations, which is a grave error, according to industry experts. The Ministry of New and Renewable Energy stopped the subsidy on solar water heaters in September 2014. In ignoring the heating aspect of solar power, the Delhi government's solar policy is ignoring one half of the potential of solar power.

Scorpius inks MoUs with three solar entities. Pune-based **Scorpius Trackers**, promoted by entrepreneurs Mr Shailesh Vaidya and Mr Kiran Shah, has inked memorandum of understandings (MoUs) with three undisclosed entities, which are independently working to put up a combined solar capacity of 1,250 MW. Under the agreement, the Pune-based company will provide tracker solutions to them.



Tractor tracker, Source: <http://getpimby.blogspot.in/2015/06/solar-tt-tractor-tracker.html>

Tracking sun. Typically, these single-axis trackers — electro-mechanical devices — allow solar panels to track the sun from sunrise to sunset. One can re-orient the solar module accordingly to improve power output. Scorpius Trackers has initialled MoUs with an independent power producer (IPP), an EPC (engineering, procurement and construction) contractor, and a large open-access solar park developer.

Innovation-driven. Scorpius has positioned itself as an innovation-driven global tracker company. It aims to accelerate the journey to achieve wholesale grid parity for the Independent Power Producers.

The Scorpis tracking solution features its own patented IP such as 25-year maintenance-free bearings and also has some of the world's first features such as storm detection.

Solar panels to help monuments tap free energy. The ASI ([Archaeological Survey of India](#)) is proposing to install photovoltaic solar panels on the rooftops of all protected monuments. According to sources, the proposal has initial clearance from the ministry of culture and will be implemented in phases. Officials said that depending on the area, 5MW to 25MW solar power units would be installed at each monument site, which would help bring down power bills at the sites. There are over 3,600 protected monuments in the country, out of which 174 are in Delhi. Sources report that all centrally protected monuments with large, open areas would be considered. These include large sites like Red Fort, Humayun's Tomb, Tughlaqabad Fort, Purana Qila, Safdarjung Tomb etc, where experts say there is a lot of potential for solar installations. Officials said that the solar lens would help recover the costs of illumination and lighting during night hours. The project is yet to receive official approval from the ministry of culture, but sources said that there have been several rounds of discussions about costs and feasibility. As per project reports, the size and potential of panels will depend on the physical geography and magnitude of the site. It was also suggested that the success of solar panels will increase visitor interest in night time viewing of the protected monuments.

Rajasthan is most attractive solar project destination in India, proves NTPC auction'. Rajasthan confirmed its position as the most attractive solar project destination in the country with the latest NTPC auction in the desert state, which saw the winning bids falling to Rs 4.35-4.36 per kWh. Of the 130 MW on offer, 50 MW was won by Shapoorji Pallonji Infrastructure Capital and 60 MW by Mahindra Susten, both offering to sell electricity produced from their projects at an identical Rs 4.35 per kWh. The remaining 20 MW was won by Prayatna Developers of the Adani Group at Rs 4.36 per kWh. In these reverse auctions, the developer that offers to sell electricity at the lowest price wins.

No land is being provided developers will have to locate and develop the land themselves, a condition which may have contributed to keeping the tariff marginally higher. The latest Rajasthan auction, however, has belied those apprehensions. Not only has the tariff fallen, but the interest shown was also enormous, with 21 developers, including many of the top names in the business, making bids. The auction thus underlines Rajasthan's inherent solar advantage, due to the high radiation it receives. It also shows that both tariff and developer interests depend crucially on project location. Rajasthan has the highest solar installed capacity in the country, around 1,286 MW out of the total of 7,564.86 MW

NLC plans 300-MW solar plant in Odisha. Chennai-based NLC ([Neyveli Lignite Corporation Ltd](#)), a Navratna public sector undertaking, has evinced interest in establishing a 300-MW solar power plant in Odisha's Balasore district. The cost of setting up the plant is not known though creating 1 Mw solar capacity entails an investment of Rs 7-8 crore. Odisha, has unveiled an ambitious plan to establish a 1,000-MW solar park, aiming to tap its enormous potential for solar power. The state government has proposed to set up a 1,000-MW solar park in cluster mode since it is not feasible to procure 5,000 acres of contiguous land needed for the Mega Park. The park, to be developed on the public-private partnership (PPP) mode, has been formally approved by the MNRE. It is poised to attract investments to the tune of Rs 6,500 crore.

Solar lighting could create 2 million jobs. Switching from fuel-based lighting such as firewood and kerosene lanterns to solar-LED systems also create two million potential new jobs in developing countries like India, a first-of-its-kind study has found. [Lawrence Berkeley National Laboratory](#) (Berkeley Lab) researcher [Dr Evan Mills](#) conducted the first global analysis of how the transition to solar-LED (light-emitting diode) lighting will impact employment and job creation.

In countries such as Mali, Niger, Sierra Leone, India, Indonesia, and Kenya, fuel-based lighting is not particularly “job-intensive.” Individual entrepreneurs sell lanterns, wicks, candles, fuel dippers and kerosene in small quantities, often in local markets or on the roadside, but few jobs are created and many are part-time.

Researchers found that fuel-based lighting today provides 150,000 jobs worldwide. He did a similar analysis for the emerging solar-LED industry and also collected data on employment rates for larger manufacturers and distributors representing the majority of global production of products quality assured by the [World Bank’s Lighting Global initiative](#) at the time. He found that every one million of these lanterns provides an estimated 17,000 jobs. These values include employees of these companies based in developing countries but exclude upstream jobs in primary manufacturing by third parties such as those in factories in China. Assuming a three-year product life and a target of three lanterns per household, this corresponded to about two million jobs globally, more than compensating for the 150,000 jobs that would be lost in the fuel-based lighting market, researchers said. They also found that the quality of the jobs would be much improved.

Chandigarh gets floating solar power plant. A floating solar power plant pilot of 10 kw peak (kWp) the peak power has been commissioned at Dhanas lake in Chandigarh amid efforts by the government to develop the Union Territory as a solar city. It has been designed to supply power to fountains at the lake for aeration. The Unique Selling Proposition is its dual-axis tracking technology that has been developed indigenously, which is capable of generating 30% or more power than conventional solar photovoltaic ones mounted on the ground.



Source: quru.mavin.com

In a move towards realising the broader objective, **Yellow 2 Gen Energy Pvt**, which installed the plant recently, has proposed to the CREST ([Chandigarh Renewable Energy and Science & Technology Promotion Society](#)) for innovative development of the land-neutral solar photovoltaic (floating SPV) plants. This technological innovation means the platform could be set up on small water bodies for meeting captive energy requirements as well as conservation of lakes and ponds. The floating power plant in the planned city is yet another attempt to achieve practical and tangible progress in harnessing solar energy and facilitate large-scale generation of electrical energy through solar radiation at economically viable cost. The government has earlier chosen Chandigarh to develop it as a model solar city and has an ambitious plan for deployment of 175 GW renewable power capacity by 2022, including 100 GW in solar energy.

[Business Standard](#), 1 July 2016 | [The Hindu](#), 4 July 2016 | [The Hindu](#), 5 July 2016 | [The Times of India](#), 10 July 2016 | [The Economic Times](#), 14 July 2016 | [Business Standard](#), 16 July 2016 | [The Economic Times](#), 20 July 2016 | [Business Standard](#), 25 July 2016



Tamil Nadu govt seek PM's help for evacuation of surplus wind power.

Chief Tamil Nadu government said it was in a position to sell surplus wind power generated in the state and urged the Centre to allocate dedicated transmission capacity on a priority basis for its evacuation. Chief Minister J Jayalalithaa in a letter to Prime Minister Narendra Modi said the wind season in the state was from June to September and presently, 4400 mw of this power was being utilised in Tamil Nadu Grid based on the evacuation infrastructure available. The State decided to establish an intra-state green energy corridor in 2013. Based on financing from the **NCEF** and further assistance from the German aid agency, **KfW**, such a corridor is well on its way to being fully operational, she said. However, even with the implementation of the intra-State evacuation infrastructure, the entire wind energy generated in the State could not be fully consumed in Tamil Nadu, Ms. Jayalalithaa said explaining the reason for the need for an inter-state corridor.

40% of wind power capacity under cloud Leading wind power producers are facing problems over payments and demand that affect close to 11,000 Mw, or 40 per cent of the wind power generating capacity in the country. Tamil Nadu, Rajasthan and Maharashtra are yet to clear payments to wind power producers. These states, along with Madhya Pradesh (MP), have also asked power producers to curtail generation by 50 per cent or more. Wind power producers operating in these states include Suzlon, Enercon, Gamesa, ReNew Power, Hero Future Energies, Orange Wind Energy, NuPower Renewable, NSL Renewable and Inox Energy. Rajasthan has asked producers to curtail generation by close to 40 per cent and Tamil Nadu by 20-30 per cent. The period of peak wind power generation matches peak demand during summer.

TOUGH TIMES		
States' capacity of wind power		
State	Major players	Capacity (Mw)
Tamil Nadu	CLP India, Suzlon, Gamesa, Orient Green Power	7,613
Maharashtra	Suzlon, NSL, Orange, Inox, NuPower, Hero, CLP India, ReNew Power	4,653
Madhya Pradesh	Suzlon, Enercon, NEPC India, Hero, ReNew Power	2,141
Rajasthan	RRB Emegy, Gamesa, Suzlon, Inox, Enercon, CLP India, ReNew Power	3,993
Gujarat	Suzlon, Inox, CLP India, Veer Energy, CLP, ReNew Power	3,948
Karnataka	CLP India, Suzlon, ReNew Power	2,869
Andhra Pradesh	ReNew Power, Suzlon	1,431
Total		26,648

Sources: States, MNRE & Industry

Source: Business Standard, 19 July 2016

The host states were also delaying payments, said one of the representative associations for the industry. Industry executives said the combined backlog was close to Rs 5,000 crore. Rajasthan owes Rs 1,500 crore and has not disbursed payments since August 2015. Maharashtra's payments are pending for six months and Tamil Nadu has not made any significant payment since January. The Supreme Court last July directed the Tamil Nadu Generation and Distribution Corporation to disburse 12 per cent of the delayed payments. The petition was filed by the Indian Wind Power Producers' Association. No payment had been received yet, the association said.

Gamesa receives 100MW orders from Orange Renewable. [Gamesa](#) a renewable energy company, has received turnkey orders from [Orange Renewable](#), developer and operator of renewable energy projects, for its upcoming wind projects in Maliya, Gujarat and in Gurmitkal, Karnataka. The company will deliver turnkey solutions for a 40MW project in Gujarat and a 60MW project in Karnataka with the supply of 20 units of G114-2.0 MW T106 and 30 units of G97-2.0MW T104 turbines, respectively. Both the projects are scheduled to be commissioned by March 2017.

[The Indian Express](#), 9 July 2016 | [Business Standard](#), 19 July 2016 | [The Times of India](#), 25 July 2016

Bioenergy

India's first biofuel refinery to harness fuel out of bamboo. Bamboo from the verdant hills of the North-East could soon fire up cars on our roads. A biofuel refinery, the first-of-its-kind in India, is being set up at the NRL ([Numaligarh Refinery](#)) in Assam, which will soon process biofuel from bamboo, abundantly found in the region. The project, Rs1,000 crore joint venture between NRL and Finnish company Chempolis Oy, was signed in October 2014.



Source: DNA, 10 July 2016

The three-member team that NRL is sending to Finland will study [Chempolis Oy's](#) patented method, named [formicobio](#), which extracts ethanol and biofuel from non-food crops. In October 2015, NRL signed an MoU with the APBRDA (Arunachal Pradesh Bamboo Resources Development Agency) to procure 3 lakh tonnes of bamboo annually. The refinery also signed an MoU with the NBDA (Nagaland Bamboo Development Agency) to procure 2 lakh tonnes of bamboo in December 2015.

Fuel retailers invite tenders for 20 million litres of biodiesel. State fuel retailers are seeking to purchase 20 million litres of biodiesel from local manufacturers to blend with diesel. BPCL (Bharat Petroleum) has invited tenders on behalf of all three state fuel retailers to procure 20,460 kilo litres of biodiesel, of which 43% would go to Indian IOC (Oil Corporation) and the balance will be almost equally split between HPCL (Hindustan Petroleum) and BPCL. The fuel retailers will mostly require the supply of biodiesel in Andhra Pradesh, and also in Gujarat and Tamil Nadu between July and September. Vendors will have to submit their bids online by July 25 2016, according to the tender document. The contract for the supply of biodiesel shall be awarded on location-wise lowest net delivered cost basis. Vendors have the option to choose a location and offer a quantity that can't be less than 500 kilo litres nor more than the requirement of that location.

Saving the city, through bio-fuel. The state transport in Karnataka scripted a new turn in its history by launching its first fully bio-fuelled bus early on July 4 2016. The KSRTC ([Karnataka State Road Transport Corporation](#)) bus which left on its maiden passenger service to Chennai from Bengaluru marks the start of a shift towards 100% renewable energy which also results in benefits for the

environment. It will not only cost less but would also ease pressure on import of fossil fuels and help farmers earn revenue from infertile lands by growing bio-diesel yielding trees like honge.

The KSRTC operates 8,300 buses daily which consume 583,000 litres of diesel. The BMTC ([Bangalore Metropolitan Transport Corporation](#)) buses serving commuters in Bengaluru consume another 357,000 litres of diesel. The use of bio-fuel would save these undertaking Rs. 5 on each litre they spend on diesel for running the passenger trips. The KSRTC has been running 10 buses since October 2 last year with a 20% share of bio-fuels. Following the success of the pilot project, the State government undertaking will be introducing bio-fuel with a similar share in another 1,700 buses. Sources in KSRTC say the letter of intent for the purpose has been signed.

Policy: Five cornerstones of a global bioeconomy. More than 40 nations are proposing to boost their 'bioeconomy' the part of the economy based in biology and the biosciences. Around US\$2 trillion of products in agriculture and forestry, food, bioenergy, biotechnology and green chemistry were exported worldwide in 2014, amounting to 13% of world trade, up from 10% in 2007.

Policy: Five cornerstones of a global bioeconomy

- **International collaborations between governments and public and private researchers are essential for optimizing resource use and sharing knowledge.**
- **Ways to measure the bioeconomy's development and its contributions to the SDGs need to be found.**
- **Bioeconomy initiatives need to be linked more closely with multilateral policy processes and intergovernmental discussions, particularly the SDG 2030 agenda and follow-ups to the Paris climate and Aichi biodiversity agreements.**
- **Educators should collaborate internationally to define the knowledge, skills and competencies required for developing a bioeconomy that enhances the sustainable use of bio-based materials in manufacturing and in consumer products.**
- **Research-and-development support programmes are needed to encourage global collaborations in a few breakthrough projects.**

Source: [Nature.com](#)

These sectors are central to at least half of the UN Sustainable Development Goals (SDGs), from food security to ensuring energy access and health. But conflicting national priorities make it hard to align bioeconomy policies to meet the SDGs on a global scale.

[DNA](#), 10 July 2016 | [The Economic Times](#), 12 July 2016 | [Nature.com](#), 12 July 2016 | [The Hindu](#), 29 July 2016



Corporates

Renewable energy sector in consolidation mode. As the entire renewable energy sector is going through a consolidation phase, mergers and acquisitions are poised to accelerate, say sector players. The acquisition of Welspun Energy assets by Tata Power's renewable arm, and the induction of China Light Power as a strategic partner by Suzlon Energy for a solar project in Telangana are two of the recent developments pointing towards consolidation.

The M&A activity is aimed at churning the projects, divesting completed ones, and freeing up debt and equity to redeploy in other projects. Sembcorp hiking stake in Green Infra and Welspun acquisition by utility companies and long term asset owners shows that this is just the beginning. The recent developments at the US-based major SunEdison at the global level has opened up another potential channel for merger or joint development of projects in Andhra Pradesh and Telangana, where the company had aggressively bid out others. CLP India, a wholly-owned subsidiary of the Hong Kong-based CLP Holdings Ltd, (formerly China Light Power), announced acquisition of 49 per cent stake in SE Solar of Suzlon for a cash consideration of Rs73.5 crore with an option to acquire the balance 51 per cent within one year of the commercial operations date. This entails joint development of 100 MW of solar power project at Veltoor in Telangana. While the Tata Power's Rs9,249 crore deal with Welspun for 1140 MW was one of the biggest witnessed in the country, a number of smaller mergers and acquisitions are in the making. Sources indicate that it is poised for another major deal.

Industry gears up for Renewable Energy India Expo 2016. [UBM India](#), India's leading exhibitions organiser will host the 10th edition of its flagship event, REI ([Renewable Energy India Expo](#)) from 7th to 9th September 2016 at the India Expo Center, Greater Noida. REI is a global platform where India's green economy community including overseas participants will congregate to discuss industry trends, challenges and market insights including the Indian regulatory framework. The event aims to further upscale and mainstream the applications of renewable energy resources, showcase product launches, innovations and augment the forethought through international exhibition and conference platform.

The three-day conference themed **"Renewables: Surging Ahead"** comprises sessions on 'Market landscape: Taking stock of India's RE goals; milestones achieved; and challenges ahead', 'Tipping Point: The rising trend of Competitive Bidding, 'Wind: Policy Roadmap for the 60 GW target; How far we have reached; What are the specific challenges of the sector; Financing challenges for the Offshore and policy incentives', 'Looking Beyond Installation: Operation and Maintenance towards Sustainability of Long Term Projects', 'On Top of the Roof: Assessing the 40 GW of Rooftop target in respect to residential Solar' and 'Riding the Manufacturing high: , How Much? How Far? How Long? Make in India' to enhance the usage of Renewable Energy in India.

Eminent industry speakers from across the world will discuss on key issues and trends related to Renewable Energy. Other highlights include World of Innovation Arena for Tech talk & Product launch, Multiple workshops, CEO conclave, Session on Smart Grid, Finance Roundtable and a Skill development program by National Institute of Wind Energy.

[The Hindu Business Line](#), 11 July 2016 | [IIFL](#), 22 July 2016