

ANDHRA PRADESH TO ROLL OUT ELECTRIC VEHICLES POLICY

Andhra Pradesh to roll out Electric Vehicles Policy (EV) soon to attract electric vehicles manufacturing companies, said Minister for Information Technology, Government of Andhra Pradesh Nara Lokesh today in Electric Mobility Stakeholders Meet in AP Secretariat, Amaravati.

The state of Andhra Pradesh which is already home to various reputed automobile and component manufacturers like Isuzu, Hero Motors, Kia Motors, Amar Raja and others is now keen to promote smart mobility by promoting the use of electric vehicles.

In this regard, the state is also engaging with all relevant stakeholders in the industry. Nara Lokesh met with representatives from various electric vehicle manufacturers and battery manufacturing companies and held discussions on increasing the use of electric vehicles in AP and steps to be taken in that regard. He also discussed on manufacturing less utility cost electric vehicles and new experiments in the area.

Nara Lokesh said, "We will soon bring out Electric Vehicles (EV) Policy to attract electric vehicles manufacturing companies to the state. Electric vehicles and batteries manufacturers should give their suggestions to design the policy to increase manufacturing and utility of electric vehicles in the state. The policy will be designed to also attract manufacturing companies of spare parts used in electric vehicles to the state".

Many companies have already been evincing interest in investing in electric mobility systems in Andhra Pradesh. Recently, Japan had come forward to collaborate with AP government to setup Electronic Vehicles City in the state. In another recent move, Andhra Pradesh Government has signed a MoU with Hyperloop Transport Technologies (HTT) to introduce futuristic Hyperloop transportation system between Amaravati and Vijayawada giving a fillip to smart mobility in the state.

"The utility of electric vehicles is increasing globally. The government will use electric vehicles in Amaravati, Visakhapatnam and Tirumala in the state. Everyone should cooperate for the implementation of Electric Vehicles pilot project in Visakhapatnam. Charging electric vehicles has become a big challenge today. Andhra Pradesh will become hub for smart

charging systems, new innovations and experiments in setting up of charging stations. The state government will extend full cooperation for the companies who come forward in setting up of smart charging systems and stations for charging electric vehicles in less time", Nara Lokesh said.

Link: <http://mitaanexpress.com/andhra-pradesh-to-roll-out-electric-vehicles-policy/>

SECI invites expression of interest for 20 GW solar PV unit

Taking a step ahead in domestic manufacturing of solar equipments the government has floated a document to gauge the market's interest in setting up 20 GW solar PV manufacturing facility in India in a span of three years.

Solar Energy Corporation of India (SECI) has floated an expression of interest (EoI) document, evincing interest to "invite bids for allocation of project capacities, from prospective solar manufacturers who are willing to set up vertically integrated solar PV module manufacturing facility in India, including ingots, wafers, cells, and modules."

MNRE recently announced its roadmap for achieving 175 GW of installed renewable energy capacity by 2022, which would require setting up of solar power plants of 77 GW capacity by 2020, entailing an investment of Rs 3,50,000 crore.

The 20 GW solar manufacturing tender was also a part of this roadmap. The government wants big chunk of raw materials and equipment to be used in the 77 GW capacity be made in India.

Reference: The Economic Times

<https://economictimes.indiatimes.com/industry/energy/power/solar-energy-corporation-of-india-invites-expression-of-interest-for-20-gw-solar-pv-unit/articleshow/62141549.cms>

In a first, France to ban all oil, gas production by 2040

France's parliament has approved a law banning all exploration and production of oil and natural gas by 2040 within the country and its overseas territories. Under that law that passed a final vote on Tuesday, existing drilling permits will not be renewed and no new exploration licenses will be granted.

The French government claims the ban is a world first. However, it is largely symbolic since oil and gas produced in France accounts for just 1 percent of domestic consumption. The rest is imported.

French President Emmanuel Macron responded to the approval of the law on Twitter, saying in part: "Very proud that France has become the first country in the world today to ban any new oil exploration licenses with immediate effect and all oil extraction by 2040."

Environment Minister Nicolas Hulot says the law shows "current generations can take care of future generations."

The ban is part of a larger plan to wean the French economy from fossil fuels and to fulfill France's commitments under the [Paris climate agreement](#) to curb global warming.

Reference: CBS News

Link: <https://www.cbsnews.com/news/france-to-ban-all-oil-gas-production-by-2040/>

GE's 12,000 Job Cuts Highlight Uneasy Shift to Renewable Energy

After spending years building up its gas-power business, General Electric Co. is trying to figure out how to keep pace in a world that's no longer all that interested in fossil fuels.

The plan to cut 12,000 jobs, or almost one-fifth of the power division's global workforce, underscores GE's bad bet on an old-school industry as natural gas loses favor and renewable energy gains. The company's [\\$10 billion deal to buy Alstom SA's assets two years](#) ago has compounded the pain.

"They clearly misjudged the shift that's going on in the market," said Jeff Sprague, an analyst with Vertical Research Partners. "It's possible that there's some semblance of stabilization, but there's not really a good case for the business to go back to its former strength."

The world's largest maker of gas turbines says it needs to become leaner as its biggest business grapples with slowing demand. John Flannery, GE's new chief executive officer, aims to cut \$1 billion of costs from the power division next year as part of a sweeping plan to reshape the manufacturing icon and reverse a stock slump that's the worst in the Dow Jones Industrial Average this year.

GE on Thursday pointed to the growth of renewable as a factor in its decision to cut jobs. GE Power CEO Russell Stokes called the move "painful but necessary" to adapt to the market. The company isn't alone: Siemens AG announced a plan last month to eliminate 6,900 positions and close factories amid a sharp drop in orders for power-plant equipment.

Growing Share

Renewable forms of energy such as wind and solar are likely to grab a bigger share of the market in the coming decades, generating more electricity than coal worldwide by 2040, the International Energy Agency said last month. Renewables will reap about two-thirds of \$11.3 trillion in investment expected to flow to power plants over the period, the IEA said. While GE has a sizable wind-power business, there is fiercer competition than in the gas-power market it currently dominates alongside Siemens. Last year, GE slipped to No. 2 in the U.S. as Vestas Wind Systems was the largest turbine supplier to domestic wind projects.

Meanwhile, wind turbines don't have the same kinds of maintenance needs as the mammoth gas-powered machines, which require regular -- and lucrative -- aftermarket servicing from companies such as GE, Sprague said. As a result, a shift toward renewables may be a "net negative" for GE even if it wins contracts, he said.

"It's not as economically attractive," he said.

Biggest Business

Power was the company's top revenue generator last year, with sales of \$26.8 billion. The total would have been \$36.8 billion based on a reorganization this year in which GE added some energy businesses to the unit.

The power unit had expanded considerably with the 2015 purchase of Alstom's energy business, which bolstered GE's gas- and steam-turbine business and added to its renewable-energy operations. But the purchase turned into a drag, pushing GE Power's workforce to 65,000 at a time when the market was slowing.

At an investor meeting last month, Flannery acknowledged that the Alstom assets have "clearly performed below our expectations."

Reducing headcount will help GE reset its power business as it tries to navigate a path forward, said Nicholas Heymann, an analyst with William Blair & Co.

"It's clear we're reducing the amount of fossil generation in developed economies," he said. "It's not like the world's ending for gas, but I think you're going to change the customer base."

Discoms propose power tariff of ₹6.95 per unit for electric vehicles

For the first time, the Southern and Eastern Power Distribution Companies of Andhra Pradesh (A.P) have proposed a power tariff of ₹6.95 per unit for electric vehicles as part of their Annual Revenue Requirement for the FY 2018-19.

This suggests that the scaling up of the Electric Vehicle (EV) programme is around the corner against the backdrop of the recent signing of a MoU with Toyota Kirloskar Motors for a feasibility study on introducing plug-in hybrid electric vehicles and electric commuter buses and sanction of 1,500 electric cars by Energy Efficiency Services Limited (EESL).

The Discoms stated in the ARR proposals submitted to A.P. Electricity Regulatory Commission (APERC) Chairman Justice G. Bhavani Prasad in Hyderabad on Friday that charging infrastructure would be created in Visakhapatnam, Vijayawada and Tirupati and along the State and national highways.

The tariffs are subject to the approval of APERC.

Speaking to The Hindu, Principal Secretary (energy) Ajay Jain said Delhi took the lead in rolling out the EV programme by setting up some charging stations and proposing a tariff and other States were fast catching up.

As far as A.P is concerned, 500 electric cars each were likely to be despatched later this month to Visakhapatnam, Vijayawada and Tirupati where they would be under hire with the government departments.

The State is evolving an EV policy with the cooperation of the Japanese and other dominant players in the electric mobility space facilitated by the AP Economic Development Board. With this, A.P. will be one of the early movers tapping the immense potential for EV, he observed.

Reference: The Hindu

http://www.thehindu.com/news/national/andhra-pradesh/discoms-propose-power-tariff-of-695-per-unit-for-electric-vehicles/article21255573.ece?lipi=urn%3Ali%3Apage%3Ad_flagship3_feed%3B7rbeBqITRxi2fxX86lhV%2FQ%3D%3D

Rooftop Solar in India Is a \$23 Billion Opportunity

Bloomberg New Energy Finance (BNEF) in a new report said that India's 40-GW target for rooftop solar PV by 2022 represents a \$23 billion investment opportunity.

According to the report, rooftop solar is the fastest-growing renewable energy sub-sector in the country, achieving a cumulative capacity of 1.3 GW through March. BNEF added that growth for the sector will not pick up until after 2021. BNEF estimated that India will reach 9.5 GW of rooftop PV capacity by 2022.

The high cost of grid power has pushed commercial and industrial consumers to be early adopters of rooftop solar, according to the report.

The average installation size for this sector is steadily increasing, "made possible by better utilization of rooftop space and the willingness of consumers to meet a higher share of demand through on-site sources," BNEF said.

While India has made significant progress in rooftop solar deployments, BNEF predicts that the country will not meet its 40-GW target. The report noted that India could accelerate growth in the sub-sector by simplifying its net-metering scheme for residential solar and improving access to debt for developers or customers.

Reference: Renewable Energy World

Link: <http://www.renewableenergyworld.com/articles/2017/11/rooftop-solar-in-india-is-a-23-billion-opportunity.html>

Mytrah Energy to add 500-1,000 Mw renewable energy capacity annually

Renewable Energy company Mytrah plans to add 500 MW to 1,000 MW every year of wind and solar power, a top company official said.

Mytrah's current portfolio of 2,000 MW should be fully operational within the next few quarters, Vikram Kailas, Chief Executive Officer of Mytrah Energy said.

"The exact amount of capacity we sign up for will depend on the kind of opportunities that present themselves. We have always believed that each project that we take up should be independently viable. We will continue to use the same yardstick going forward even if this results in lower capacity addition in a given year," he said.

The firm, listed on the AIM of London Stock Exchange, has 1,500 MW of projects in wind and 500 MW in solar. The company had forayed into solar about two years. The company will remain equally focussed on wind and solar energy.

"We may end up doing more wind projects in one year and more solar projects in another depending on where the opportunities present themselves," he said. He believes the Indian renewable power sector is going through an interesting phase.

"The sector has seen a dramatic fall in prices over the last few years culminating in the sub-Rs 3 tariffs in auctions held a few months ago. This meant that the industry had reached a stage where tariff for renewable power was clearly lower than for power produced from coal, gas and other conventional sources," said Vikram.

He is of the view that recent SECI bid for 5MW project indicates that the sector is maturing. The current year has seen a dramatic slowdown in the commissioning of new wind capacity.

"However, these are minor blips on a path with a clear, upward trajectory. We are very confident about the long-term prospects of the Indian renewable power sector," he said.

Kailas will be speaking at Global Entrepreneurship Summit (GES) at a session titled 'Getting on the Grid' which will focus on providing energy solutions to communities living off the grid.

Reference: The Economic Times - Energy

<https://energy.economictimes.indiatimes.com/news/renewable/mytrah-energy-to-add-500-1000-mw-renewable-energy-capacity-annually/61846104>

Japan's ROHM enters India's electric vehicles parts market

Japanese semiconductor manufacturer ROHM on Tuesday announced its plans to foray into India's electric vehicle (EV) and hybrid-electric-vehicles market, with a special focus on the two-wheeler segment.

The company announced the availability of new Nano Pulse Control Technology-based integrated circuit for the Indian market -- a 2MHz switching regulator with built-in MOSFET (metal-oxide-semiconductor field-effect transistor) -- required for 48V automotive systems, such as mild hybrid vehicles.

"Electrification of two-wheelers is happening rapidly and this will grow. We are seeing a lot of traction and that is why we are releasing this product at this point of time," said Britto Edward, Head, Design Centre, India, of ROHM.

"We are working with some tier one companies mostly in the two-wheeler segment because we are seeing a lot of traction in that segment," he added.

The company is a supplier of auto-electronic components providing energy efficient power solutions for hybrid electric vehicles.

"We are expecting, especially in the automotive segment, a CAGR (compounded annual growth rate) of 33 per cent in the next five years... Actually I'm expecting much more because of the EV and hybrid EV market that we'll be coming in now," said Daisuke Nakamura, Managing Director, ROHM Semiconductor India (RSI).

RSI was established in 2011 as a sales subsidiary of ROHM in India. It currently has bases in Bengaluru, Chennai, Pune and New Delhi.

In 2014, a design centre was opened in Bengaluru to provide local development support and propose reference designs.

Reference: The Economic Times - Energy

<https://energy.economictimes.indiatimes.com/news/power/japans-rohm-enters-indias-electric-vehicles-parts-market/61645953>

Mahindra Collaborates with Uber for EVs in India

Mahindra & Mahindra, a leading utility car manufacturing company decided to tie up with Uber, a global transportation company, for exploring more insights and deployments of Electric Vehicles (EVs) in the domestic market. This deployment will be carried out on Uber platform in various cities across the country. To start off with the process, both the companies will instate hundred of EVs in Delhi and Hyderabad which will include Mahindra cars like e2o Plus and eVerito sedan. The combined operation of electric vehicles will additionally strengthen the relationship between both the companies with strong deployment of Mahindra vehicles on Uber's platform.

Dr. Pawan Goenka, Managing Director, Mahindra & Mahindra Ltd. said, "Electric vehicle adoption is clearly gaining momentum in India. As the pioneers of electric vehicles in the country we would like to be at the forefront, leading this change toward smart and sustainable mobility. Our collaboration with Uber is an important next step to help accelerate the large scale adoption of electric vehicles on shared mobility platforms, and meet the nation's vision for EVs".

According to Mr. Madhu Kannan, Chief Business Officer, Uber India & Emerging Markets, "We are extremely excited about our collaboration with the Mahindra Group to deploy this electric vehicles pilot in India. Aligned with the government's vision, we aim to build a more sustainable future of mobility, moving more people needing on-demand services with fewer, fuller, and more efficient vehicle trips. We see a key role for high efficiency vehicle technologies, and therefore believe that this collaboration with Mahindra, the pioneers in the electric vehicles space, will be truly beneficial not just for Uber but for our driver partners, riders and the cities we operate in."

As a part of this collaboration, the driver partners on the Uber app will be offered with a package comprising of competitive prices, attractive financing and insurance premiums as well as comprehensive maintenance packages on Mahindra electric vehicles. Going with the

fact that the electric vehicles will play an essential role for reducing urban pollution affecting various cities and resulting in health hazards across the country. The country and the citizens stands a chance of benefiting through increased penetration of EVs and eventual 100% transition in the near future.

Reference: India.com

<http://www.india.com/auto/car-news/mahindra-collaborates-with-uber-for-evs-in-india-37419/>

Gujarat & Tamil Nadu powerlooms reaped max benefits of solar energy scheme

Textile Commissioner Kavita Gupta today said maximum benefits of government's promotional schemes for powerloom textile industry have been taken by entrepreneurs from Gujarat and Tamil Nadu.

"The ministry of textiles has announced several promotional schemes for powerloom textile industry but there is hardly any awareness in the industry. The maximum benefit of these schemes have been taken by the entrepreneurs of Gujarat and Tamil Nadu," Gupta said at the Buyer-Seller Meet and Textile Exhibition here.

The textile ministry has recently announced Solar Energy Scheme for small powerloom units, on-grid solar PV plant (without battery back up) and off-grid solar PV plant (with battery back up), where government will provide Rs 2.50 lakh subsidy per unit.

She said this scheme will help the unit to pay back bank loans within 3-4 years, after which the unit shall get practically free electricity.

Currently, there are 25 lakh powerlooms in the country out of which 50 per cent are in Maharashtra. Also, there are 108 powerloom clusters in the country and 72 textile parks.

Meanwhile, Clothing Manufacturers Association of India (CMAI) President Rahul Mehta said the apparel export for 2016-17 was 16.8 billion dollars and the target for 2017-18 is 20 billion dollars.

"However, the export target for 2017-18 will not be attainable and is likely to remain at the last year's level. Also the new duty drawback rates, that ended on September 30 are not yet announced. If these rates are around 2-3 per cent, the total incentive will be around 8 per cent, which was 11.50-12 per cent earlier," Mehta said.

Reference: The Economic Times - Energy

<https://energy.economictimes.indiatimes.com/news/renewable/guj-tn-powerlooms-reaped-max-benefits-of-solar-energy-scheme-official/61813424>

Telangana to launch electric vehicle policy next month

The Telangana government will next month launch its policy for electric vehicles to provide incentives to manufacturers and private players setting up charging stations, a senior government official said on Thursday.

Jayesh Ranjan, Principal Secretary, Industry, Commerce and Information Technology, said the policy will offer incentives for setting up charging stations and enable creation of infrastructure like allotment of lands.

The policy will also provide necessary regulatory framework for the sector. The government will amend certain laws so that the power can be drawn from power stations for charging facilities, he told reporters on the sidelines of an event where Mahindra Electric and Zoomcar announced launch of shared mobility in Hyderabad.

Zoomcar has deployed 20 Mahindra e20Plus on its platform for hire.

Ranjan said the EV policy was almost ready and they were waiting for feedback from the Transport and Municipal Administration Departments on the proposals. "Once we get their feedback, the policy draft will be sent to Chief Secretary and later to the Chief Minister for approval," he said.

He said they already consulted industry and experts on the EV policy. The state government also hopes to attract EV manufacturers.

The EV market is currently small but once it starts growing, Mahindra will ramp up the production at its facility in Zaheerabad in Telangana, he said.

Ranjan said he feels that electric vehicles could also play a key role in ensuring last mile connectivity for commuters of Hyderabad Metro, which is set to be launched next week.

Hyderabad Metro Rail (HMR) has already tied-up with Uber and Ola to ensure last mile connectivity to and from metro stations. The commuters will have multiple options including electric cycles and pedal cycles from the stations to reach their destinations.

Reference: Economic Times – Energy

<https://energy.economictimes.indiatimes.com/news/power/telangana-to-launch-electric-vehicle-policy-next-month/61768778>

Nagpur Metro to get solar power at less than Rs 4.50 a unit

Nagpur Metro has decided to go in for captive solar power generation and will get it at Rs4.50 a unit. It will use costly conventional power in evening.

Mahametro managing director Brijesh Dixit said that the earlier state power generation company Mahagenco was to generate solar power for Nagpur Metro. "It was costing us Rs7.50 per unit and hence we decided to go for self generation in open access captive mode," he added.

Mahametro will tie up with Solar Energy Corporation of India (SECI), a central government undertaking, for solar generation. "We will go only for SECI registered companies. The current rate offered by SECI is Rs4.50 a unit. We have made it clear that we want power at

less than this rate," Dixit further said.

Nagpur Metro needs 14MW solar power to meet 65% of its energy needs. Earlier, Mahametro had decided to float a tender for entire 14MW. Now, it will install solar panels in stages. "The first tender will be only for three stations in the at grade section — Khapri, New Airport and Airport South — which will be used by public from January 2018. The rate of solar power is reducing by the day and we want to take advantage of this trend. We will increase our solar capacity as and when required," the MD said.

The advantage of open access captive mode is that no permission is required from Maharashtra Electricity Regulatory Commission (MERC). "Earlier, we wanted to generate power under solar roof top policy. The problem is that there is a cap of 1MW under this policy. We had filed a petition in MERC to remove the cap for us as a special case but were not successful," he told TOI.

Mahametro plans to install solar panels atop its stations and along the boundary wall of the at grade section. Nagpur Metro is the first one in the country to go for solar power right from inception. Other Metros installed solar panels atop their stations much after commencement of commercial operation. Mahametro's green initiative has been lauded by foreign lending agencies.

Reference: Economic Times - Energy

<https://energy.economictimes.indiatimes.com/news/renewable/nagpur-metro-to-get-solar-power-at-less-than-rs4-50-a-unit/61790458>

India plans to amend the Electricity Act for private investors

India plans to amend the Electricity Act for private investors to set up charging stations for electric vehicles as the government pushes to cut reliance on fossil fuels to check import bill and reduce emissions.

A power distribution company can only sell electricity in India, according to the 2013 law. That's a technical hurdle to build charging infrastructure in the country for electric cars. "We are going to provide deemed distribution licences for those who want to set up charging stations. The Electricity Act will be amended," RK Singh, minister of state for power, new and renewable energy, told BloombergQuint on the sidelines of an event in New Delhi today. "Let the other amendments also come. We will discuss it with states and then will bring it to the Ministry of Law."

The charging infrastructure for electric vehicles is part of the government's push to make all cars electric by 2030. It has already floated a tender for 10,000 battery-powered sedans. Tata Motors Ltd. and Mahindra and Mahindra Ltd. will provide the first 500 of them.

Leaving the charging infrastructure business to private investors will bring in a lot of reliability and competition, Awadhesh Kumar Jha, vice-president at Charge & Drive & Sustainability, Fortum India, told BloombergQuint in an interview. It should be treated as a service and not sale of electricity, he said.

Niti Aayog is the nodal agency for drafting rules for electric vehicle charging stations. "They are working on it and respective ministries will follow whatever rules they make," Ajay Kumar Bhalla, secretary at the Ministry of Power, said.

PK Pujari, former secretary at the ministry, said the regulator doesn't need to necessarily grant the licence. "A discom could be the authority to issue such licences on certain conditions. The discoms will also have to fix a tariff such that charges can be recovered from users."

The Electricity Amendment Bill, 2014 is pending in Lok Sabha since December 2014. It's likely to come up in the upcoming winter session in Parliament.

Reference: <https://www.bloombergquint.com/law-and-policy/2017/11/24/private-firms-may-soon-be-allowed-to-set-up-electric-car-charging-stations>