Brought to you by सीम्seem

enera

www.seemindia.org

Click here to subscribe to

VIEW POINT

These days it is exciting to see that the concepts of energy efficiency, energy management and renewable energy nuzzling their way from boiler rooms up to boardrooms. The awakening on the perils of climate change among financial czars has facilitated this phenomenon.

Click here to become a

The investment discussions these days are replete with terms ESG, greenium, greenaissance, carbon border taxes which bode well for energy management fraternity. The times had never been more conducive to sell the ideas of energy saving measures or switch to cleaner fuels. In order that energy management fraternity capitalize on this opportunity, we have to be alert to these tail winds which are helpful. It is very important to align our strategy and tactics to support those lofty objectives which readily appeal to top honchos of corporate and government sectors. This requires energy engineers to step beyond confines of sheer technicalities and understand the dynamics of business goals and even business speak. And that requires us to read, listen beyond technical discussions.

And we in India are specially placed to benefit from the much touted clean energy transition. As IEA energy outlook for India 2021 released recently proclaims that when world seeks to accelerate the pace of transformation in energy sector, India is uniquely placed pioneer a new low carbon inclusive growth. Innovation and experimentation will play a significant role in fashioning this transition.

Several areas are going to witness take offs towards this transition like decarbonization through large scale industrial electrification, improvements in material and energy productivity, renewable energy adoption. All these are going to be aided by wide scale deployment of artificial intelligence, machine learning, data gathering and data refining. This shift also is going to be challenging to the engineers. The engineers and energy managers have to get used to deciphering the insights spewed in terra bytes by these intelligent devices to actionable decisions where algorithmic decisions may fail to be effective. This will require us engineers to go deeper, to be one step ahead of the intelligent machines which will rule the roost tomorrow. So our challenges are going to be two fold- get more deep into our domain , have a fair idea of trends in finance and management - so that ewe can continue to contribute to the nation's progress to a clean future



G Krishnakumar Immediate Past National General Secretary & Chief Operating Officer

society of energy engineers and managers



NOVEMBER 2021

Seem NEWS

CONTENTS

International Training Workshop On Industry 4.0 And Energy Management

Preparatory course on EA/EM Examination

Panel Discussion on "Beyond COP26- Career paths in Clean, Green, and Environmental Fields

Webinar on the Role of Artificial Intelligence IoT in the Digital transformation of Energy Sector

Training Program on "Water Audit- The Need of the Hour"

Renewable gas can be solution to stubble burning in Punjab

India working on release of oil reserves after US request

Bounce Infinity to be launched on Dec 2; deliveries to commence from early 2022

Delhi to get its first lot of electric AC buses this week

Tata Group to set up 4-GW solar panel manufacturing unit in Tamil Nadu

15 years on, HP moves towards new hydro power policy

Servotech Power Systems bags off-grid solar project from UPNEDA

Adani Solar partners with KSL Cleantech to expand market share

Patron

Dr. Brahmanand Mohanty, Adviser for Asia, ADEME

Editorial Team

Chief Editor and Publisher Dr. C. S. Azad National General Secretary

Associates Mr. G. Krishnakumar Ms. Chithra V

SEEM Executive Council

President Mr. Mool Chand Jain Vice- President Mr. R. Jayakumar General Secretary Dr. C. S. Azad Joint Secretary Mr. Sunil Choudhary Immediate Past President Mr. U V K Rao Immediate Past General Secretary Mr. G. Krishnakumar

Disclaimer: The news published is directly picked up from the website and newspapers with the source and links provided. The views expressed need not be those of SEEM. Technical Support:



Brought out by Energy Press for Society of Energy Engineers and Managers SEEM Bhavan, KRA-A79, Kannammoola, Thiruvananthapuram – 695011 www.seemindia.org

INTERNATIONAL TRAINING WORKSHOP ON INDUSTRY 4.0 AND ENERGY MANAGEMENT JANUARY 19-20, 2022 (A VIRTUAL EVENT)

ORGANISED BY



SOCIETY OF ENERGY ENGINEERS AND MANAGERS (SEEM) INDIA & CENTRE FOR SCIENCE & TECHNOLOGY OF THE NON-ALIGNED AND OTHER DEVELOPING COUNTRIES (NAM S&T CENTRE) NEW DELHI. INDIA

The global manufacturing sector has witnessed various industrial revolutions. Currently in the fourth industrial revolution phase, high technological production strategies blended with intelligent decision support system, takes the sector to new heights of productivity.

The principle of Industry 4.0, unlike the traditionally hierarchical and centralized manufacturing system, exhibits a decentralized architecture in which autonomous industrial components connect with one another. These autonomous components interact among themselves with a connected *Decision Support System (DSS)* to self-diagnose and self-respond in the overall manufacturing scenario. The technologies that are incorporated for the decision-making are the Internet of Technology (IoT), Cloud Computing, and Big Data. The overall framework of these technologies is connected under a common platform called *Cyber Physical System (CPS)*. CPS is a backbone of Industry 4.0, where the physical world and virtual space are linked for a live communication environment of the shop floor. CPS provides a live digital copy of industrial assets and processes. The robust analytical decision-making system utilizes the real data captured from the various sensor devices attached to industrial physical environment. In the near future, inequalities between the economic developments of industrialized, emerging economies and developing countries could further deepen, if all countries cannot tap into digital development benefits.

Energy availability, reliability and manageability are essential ingredients of energy-critical buildings and manufacturing processes in the scope of Industry 4.0. This is driven by a mix of environmental factors, cost challenges, regulations, proactive energy consumption capabilities and the integration of alternative sources of energy in the energy mix. Industry 4.0 requires innovative technological solutions capable of limiting energy waste and providing real-time control over consumption. In short, without energy management, there is no Industry 4.0.

To keep abreast of the growing significance of Industry 4.0, to deliberate upon the role of energy management in Industry 4.0, and to impart skills and knowledge on the principles and practices of energy management for emerging manufacturing processes and premises in future, the Centre for Science & Technology of the Non-Aligned and Other Developing Countries (NAM S&T Centre) jointly with the Society of Energy Engineers and Managers (SEEM), India is organizing a two days International Training Workshop on 'Industry 4.0 and Energy Management' during January 19-20, 2022 The Workshop will be held in Virtual Mode.

Objectives of the Training Workshop

The Training Workshop intends to provide basic knowledge on the subject through interactive lectures about various aspects of the Industry 4.0 framework and explore the disruptive management practices of Industry 4.0 with various opportunities and challenges of the energy management in Industry 4.0 era.

Topics to be Covered

- The Training Workshop will cover the following:
- State of the Art for Industry 4.0
- Industry 4.0: Concepts, Technologies and Challenges for Developing Countries
- Reactive to Proactive Maintenance through IoT
- Industry 4.0 and Sustainable Energy
- Driving Energy Efficiency through the Industry 4.0 Approach
- Energy Management for Industry 4.0 Technology and Products

IMPORTANT DATES

| Date of the Program | 19-20 January 2022 |
|--|--------------------|
| Submission of Application Starts | 08 November 2021 |
| Last Date for Submission of Application | 05 January 2022 |
| Last Date for Submission of Full Manuscript | 10 January, 2022 |
| Confirmation to Selected Applicants and | 12 January 2022 |
| Communication of Virtual Platform Details (Link) | |

A TENTATIVE PROGRAM SCHEDULE

| Programme (IST: | TOPICS | | |
|-------------------|---|--|--|
| GMT + 5.30hrs.) | 19 January 2022 | 20 January 2022 | |
| 10:00-11:00 AM | Inauguration | Industry 4.0 and Sustainable Energy | |
| 11:00 AM-12:00 PM | State of the Art for | Driving Energy Efficiency | |
| 12:00-1:00 PM | Industry 4.0 | Approach | |
| 1.00-2.00 PM | Break | | |
| 2.00-3.00 PM | Industry 4.0: Smart Manufacturing Concepts, | Energy Management for Industry 4.0 - Technologies and Products | |
| 3.00-4.00 PM | Technologies and Challenges for Developing Countries | | |
| 4.00-5.00 PM | Reactive to Proactive Maintenance through IoT | Concluding Session, Discussion and Feedback | |

SEEM NEWS NOVEMBER 2021

Subscription to SEEM NEWS is free for members and non-members

A final Session-wise Programme will be made available before the Workshop.

The Participants of the Virtual International Training Workshop will receive a Participation Certificate electronically.

INTERNATIONAL TRAINING WORKSHOP ON INDUSTRY 4.0 AND ENERGY MANAGEMENT JANUARY 19-20, 2022 (A VIRTUAL EVENT)

ABOUT THE ORGANISERS

NAM S&T CENTRE

The Centre for Science and Technology of the Non-Aligned and Other Developing Countries (NAM S&T Centre; www.namstct.org) is an Inter-Governmental Organisation with a Membership of 47 countries spread over Asia, Africa, Middle East and Latin America. The Centre was set up in 1989 in New Delhi, India based on decisions taken during various NAM Summits and mandated to undertake a variety of programmes, including organisation of workshops, symposiums and training courses and implementation of collaborative projects. It also offers shortterm Research Fellowships to scientists from developing countries in association with the Centres of Excellence in various countries. The Centre also brings out technical books, monographs and other scientific publications in different S&T subjects of interest to developing countries. The Centre's activities provide opportunity for scientist-to-scientist contact and interactions; familiarizing participants on the latest developments and techniques in the subject areas; identification of the requirements of training and expert assistance; locating technologies for transfer between the Members and other developing countries, and dissemination of S&T information etc. In addition, the Centre encourages Academic-R&D-Industry interactions in the developing countries through its "NAM S&T-Industry Network".

SOCIETY OF ENERGY ENGINEERS AND MANAGERS (SEEM)

Society of Energy Engineers and Managers (SEEM), India is the national professional body of Certified Energy Managers, Auditors and Energy Professionals in India. SEEM has 15 chapters and 7 centers, spread over 22 states and is engaged in delivering networking and skill development opportunities to its members, by organizing training programs, workshops, etc. SEEM works to help industries achieve the important goal of realizing energy efficiency, choosing the right service that gives the best possible outcome from energy audits, and engaging in meaningful discussions to achieve industrial energy efficiency targets. To share knowledge, insights and case studies from other industries, experts and agencies from India and abroad, SEEM also publish a quarterly print magazine 'Energy Manager'.

For downloading the application form, please see our website www.seemindia.org

PARTICIPANTS

Researchers, scientists, technocrats, innovators, government officials and policy makers, legal experts, and representatives from industry and nongovernment organizations - who are engaged in the field of Technology, Industry and Energy, are invited to participate in this Virtual Training Workshop. The combination of participants from various developing countries will allow for exchange of knowledge, ideas and experiences as well as opportunities for global networking and collaboration.

English will be the official language of the bprogramme.

RESOURCE PERSONS

The resource persons for the Training Workshop will comprise eminent experts and professionals in the relevant fields from India and abroad.

SELECTION OF APPLICANTS

Selection of applicants will be made based on their academic and professional background. Successful applicants will be electronically informed about their selection by **12 January 2022.**

The details about the virtual platform that will be used for the Training Workshop and log-in details for joining the program will also be communicated to the selected applicants. Other details and terms & conditions for the participation of scientists from various countries will be given to the individual candidates on receipt of their applications.

SUBMISSION OF APPLICATION

Experts and scientists desirous of participating in the Training Workshop, excepting those from India, are required to submit their application electronically to the NAM S&T Centre (namstcentre@gmail.com) as early as possible, latest by 5th January 2022.

Applicants from India should, however, submit their requests directly to the SEEM, India.

The following documents must be submitted as e-mail attachments:

- a) Filled in Nomination Form (Blank form enclosed)
- b) Opinion (a short paragraph; in MS-Word format) how you qualify to participate in the Training Workshop
- c) A short CV (maximum two pages; in MS-Word format) [Format Enclosed]
- d) An Extended Abstract (in MS-Word only) of the Paper that would be presented at the Training Workshop

Note: The documents at (ii), (iii) and (iv) above must be in MS-Word format only; PDF or image files will not be accepted. Hard copies of the Application Form and the above attachments are NOT REQUIRED to be submitted.

PRESENTATION OF PAPERS

Delegates / Participants are expected to present a Country Status Report and / or a research/ scientific paper on any of the themes appropriate to the

PUBLICATION OF PROCEEDINGS OF THE TRAINING WORKSHOP

A publication edited by one or more international experts and based on the papers presented by the participants during the Workshop and also containing papers contributed by eminent experts in the field will be brought out in the form of a book as follow up of this program. Therefore, all participants are requested to submit the manuscripts of their full papers in MS-word format well in advance, but latest by 10th January 2022.

CONTACT DETAILS

NAM S&T CENTRE

Dr. Amitava Bandopadhyay Director General Centre for Science & Technology of the Non-Aligned and other Developing Countries (NAM S&T Centre) Core-6A, 2nd Floor, India Habitat Centre, Lodhi Road New Delhi – 110003, India Tel: +91-11-24645134, 24644974; Fax: +91-11-24644973 E-mail: namstcentre@gmail.com Website: http://www.namstct.org

SEEM

Dr. C S Azad General Secretary Society of Energy Engineers and Managers SEEM Bhavan, KRA A79, Kannammoola, Trivandrum Kerala, India - 695011 Tel: +91471 – 2557607 E-Mail: seemhq2011@gmail.com Website: www.seemindia.org

9

Subscription



society of energy engineers and managers सीमseem THE GT ACADEMY Learn | Aspire | Inspire **PREPARATORY COURSE ON EA/EM EXAMINATION - PAPER 1**

LEARN AT YOUR OWN PACE

31 Lessons Registration Fee: INR 500 Certificate Awarded



Registration fee:

 Paper 1
 - Rs. 500 + GST

 Paper 2
 - Rs. 1250 + GST

 Paper 3
 - Rs. 1250 + GST

 Paper 4
 - Rs. 1500 + GST

 Total Cost - Rs. 4500 + GST

If you would like to register for all 4 papers, the fees will be only Rs. 4000 + GST.

What Will You Learn?

This is the 21st National Certification Examination of Energy Managers and Energy Auditors, conducted by the Bureau of Energy Efficiency. This exam certifies energy managers and energy auditors in India.

This course will take you through Paper - 1 of the 4 books that needs to be referred during this examination.

Dates of examination - 25th & 26th September 2021

Topics Of Interest

- Energy Conservation Act 2001 & Related Policies
- Energy Scenario Global & Indian
- Energy & Financial Management
- Energy Monitoring & Targeting
- Project Management Cycle
- Renewable Energy
- Measurement &
- Verification
 Material & Energy Balance

For more details and registration, please Paper 1 <u>Click Here</u> Paper 2 <u>Click Here</u> Paper 3 <u>Click Here</u> Paper 4 <u>Click Here</u>

Contact : Mr. Mohammed Arshad Mob : 87448 15570 E-mail : training@greentree.global

REPORTS

Panel Discussion on "Beyond COP26-Career paths in Clean, Green, and Environmental Fields

SEEM Karnataka Chapter is organised a "Panel Discussion on "Beyond COP26- Career paths in Clean, Green, and Environmental Fields" on 13th November 2021 at 07:30 pm to 08:30 pm. This webinar was beneficial for students, sustainability enthusiasts, energy professionals and aspirants who wants to contribute to carbon emission reduction and others to understand various ways to achieve emission reduction targets, Job opportunities and career paths in energy, green building, and sustainability field. Mr. Jayaprakash Narayan (Scientist GOI, Founder Director Enercon Systems) Chairman SEEM Karnataka Chapter, Mr. Mahesh Kumar M, Principal Consultant, TransGreen Sustainability Solutions, Mr. Antony Gerald, Treasurer, SEEM Karnataka Chapter, and Mr. Benet George, Secretary SEEM Karnataka Chapter were the Panelists of the discussion.

Webinar on the Role of Artificial Intelligence IoT in the Digital transformation of Energy Sector

SEEM Kerala Chapter organised a Webinar on "Role of Artificial Intelligence IoT in the Digital transformation of Energy sector" on 11th November 2021 at 07:30pm to 08:20pm. Prof. Dominic Mathew (Adjunct Professor in Rajagiri School of Engineering & Technology (RSET), Member, SEEM was the presenter. He has published around 32 research papers related to Signal Processing, Artificial Intelligence and Machine Learning as well as Electric Drives and Controls in his 14 years stint in research and academics. He is a reviewer for many reputed international journals/conferences, a Blogger on AI and ML topics and a contributor to AI and ML broadcasts by the Sasthra Deepthi program of Kochi FM Radio.

Training Program on "Water Audit- The Need of the Hour"

SEEM Tamil Nadu Chapter organized a Training Program on "Water Audit- The Need of the Hour" on 29th and 30th October 2021. Dr. R. Pannirselvam, (Retired Deputy Chief Engineer from Tamil Nadu Water Supply and Drainage Board and a Freelance Environmental Engineering Consultant with specialization in Waste water Treatment) was the Trainer. About 300 participants were attended the program. The Participants included Students, College Faculties, Industry Professionals from Railways, MILMA, TWAD etc.

Coming soon...

SEEM NATIONAL ENERGY MAMAGEMENT AWARDS 2021

566

Renewable gas can be solution to stubble burning in Punjab

Chandigarh: Invest Punjab on Monday signed a memorandum of understanding with Punjab State Office-Renewable Gas Association of India (PSO-RGAI) for the promotion of setting up biofuel projects and compressed biogas plants (bio-CNG) in Punjab.

RGAI president Subodh Kumar, who was also former executive director, Indian Oil, said, "This will serve as an advocacy voice for the protection, preservation and promotion of renewable gas to create additional and diverse market demand for renewable gas."

Maninder Singh, general secretary, RGAI, said, "We will encourage renewable gas produced from all feedstocks, using competing and sustainable technologies for all end-use applications. This will help scale up the potential primarily due to the abundance of unutilised agriculture feedstock – an estimated 140 million tonnes of agricultural residues are generated annually – supported by growing consumption of CNG and bio-CNG, the most cost-effective fuel compared to petrol or diesel in India.

Ashish Kumar, managing director of VERBIO India Pvt Ltd, which is setting up India's largest biofuel plant in Punjab, added, "PSO-RGAI will advocate and educate for sustainable development, deployment and utilization of renewable gas and byproducts so that present and future generations will have access to domestic, renewable, clean fuel and energy."

He said renewable gas could emerge as one of the most promising industrial sectors with sustainable and an all-inclusive growth for Punjab. With an annual surplus volume of 20-25 million tonnes of agricultural residue, most of which is burnt, leads to 31 MT of GHG emissions in a span of less than 75 days (mid-Sep to end-Nov), he said.



India working on release of oil reserves after US request

New Delhi: India could release oil from its strategic reserves in coordination with other countries in a show of resentment against high oil prices, backing the US plan for collective buyers' action to send a strong signal to producers that have artificially curbed supplies.

Top officials of the petroleum and external affairs ministries were working late on Monday to arrive at the most optimal response to the Biden administration's call to coordinate the emergency stock release.



A final call to release oil from the strategic reserves will be taken at the highest level, a person with knowledge of the matter said. An announcement in this regard may come as early as Tuesday, he said.

China is already on board while Japan is considering the US proposal. If China, Japan, India, South Korea, and the US finally agree to a coordinated release, it will be the first such instance in the history of the oil market.

"This will be an expression of resentment against high oil prices," the person cited above said. The volume of oil as well as the timing of the release are still being worked out.

The quantity of oil released from the strategic reserves of each country may not be very large but synchronised action by the world's top consumers will send a strong signal to OPEC+, the producers' cartel that has reined in supply despite a rapid recovery in demand and a price surge.

Analysts See Temporary Impact on Prices

The US urged key consumers to coordinate the release of oil from their strategic reserves after OPEC+ ignored President Joe Biden's call to step up supplies earlier this month. Similar calls by India, Japan and other consumers too have had little effect on the cartel's supply plans. A coordinated release is expected to temporarily calm prices that are generating a political backlash against governments in the US, India and many other countries.

India and other nations have created strategic petroleum reserves mainly to meet supply disruptions, and not to tackle high prices. Prices are high mainly because of the supply shortage and a coordinated release can help meet that deficit, said the person cited above.

Just the news that the US and other countries are considering synchronised action to influence the oil market has lowered prices by a few dollars per barrel in the past few days. Analysts expect the coordinated release to have only a temporary effect on prices, but believe it may pressure OPEC+ to step up supplies in the coming months.

India has 5.33 million tonnes of strategic reserves, enough for about nine days of pre-pandemic national consumption.

Source:: https://energy.economictimes.indiatimes.com/news/oil-and-gas/india-working-on-release-of-oilreserves-after-us-request/87859606

Bounce Infinity to be launched on Dec 2; deliveries to commence from early 2022

New Delhi: Electric scooter rental startup Bounce has said that its maiden consumer e-scooter, Infinity, is set to be rolled out early next month and the deliveries are expected to commence from early 2022. The Bangalore-based firm had acquired 22Motors, including its manufacturing unit at Bhiwadi, Rajasthan, in a deal valued at \$7 million.

The company also said that it is looking to set up another plant, in South India, considering the potential of the domestic market.

Besides, earlier this month, it announced \$100 million investing across manufacturing of e-scooters and expanding the battery swapping infrastructure over the next 12 months. Bounce is set to launch its first consumer electric scooter, Bounce Infinity, on December 2 and the bookings would also commence from the same day, the company said in a statement.



cement-commits-to-100-renewable-energy-usage-by-2050/86476335

However, deliveries are slated for early next year, Bounce said, adding, the advanced 'Made in India' scooter can be booked by making an initial payment of just Rs 499.

The Bounce Infinity will be equipped with a smart, removable Li-ion battery, which can be taken out and charged as per a customer's convenience and requirement, it said.

Bounce also claimed offering a firstof-its kind option in the domestic EV space, in which customers can also purchase its e-scooter at an affordable price without the battery and use Bounce's extensive battery swapping network to be on the move, apart from acquiring the vehicle along with the battery pack, it said.

Customers will only have to pay for the battery swaps, whenever they exchange an empty battery with a fully-charged one from Bounce's swapping network, it said.

As part of the deal with 22Motors, Bounce acquired its manufacturing plant at Bhiwadi, Rajasthan and intellectual property. The state-ofthe-art plant has a capacity to manufacture 180,000 scooters per vear.

Delhi to get its first lot of electric AC buses this week

New Delhi: Delhi is all set to get its first batch of air-conditioned electric buses this week with three prototype buses joining the Delhi Transport Corporation(DTC)'s fleet. These prototypes are part of the 300 low-floor buses that were approved by the Delhi cabinet in March.

"The 300 buses that are being engaged are from two different bus manufacturers and three prototype buses out of these will arrive this week. After inspection and necessary approvals, these will be deployed for trial runs," said an official who didn't wish to be identified.

"The buses and drivers will be provided by private entities and DTC will operate these on its routes and deploy its conductors. The rest of 297 electric buses will arrive in different batches and have a separate colour scheme, he said.

The electric buses shall be parked at depots in Rohini, Subhash Place, Mayapuri, Rajghat and Mundela Kalan. The two bus depots at Rohini and the one at Mundela Kalan are ready and have been provided power connectivity through transformers for charging of the buses.

According to the schedule, 118 buses were to arrive in October, 100 by November and 60 buses by December 2021. The remaining 20 buses were scheduled to arrive by January 2022. The devastating second wave of Covid-19 cases, however, affected the delivery of electric buses and the creation of supporting infrastructure such as charging stations at designated bus depots.

The private entities, which would maintain the e-buses, will be paid operating cost per kilometre under 'Operating Expenses' model. The bus depots with most of the primary infrastructure and power connectivity have been created separately for electric buses and will be handed over to the private entities, who will bring the required paraphernalia. The replacement of the battery will be the obligation of the private entity, which is generally done after 5 years, and the cost of electricity consumption will be borne by DTC.

While the Delhi government plans to induct total 1,000 e-buses under the Cluster Scheme too, the DTC Board approved the induction of 1,015 electric buses and 230 CNG-run buses in the financial year 2021-22 in a recent meeting chaired by Delhi's transport minister Kailash Gahlot, who is also the DTC chairman. The Delhi government plans to eventually replace all CNG-run buses in the national capital's public transport fleet with electric buses as part of a shift towards cleaner fuel.

Source:: https://energy.economictimes.indiat imes.com/news/power/delhi-toget-its-first-lot-of-electric-acbuses-this-week/87864690



Tata Group to set up 4-GW solar panel manufacturing unit in Tamil Nadu

Chennai: Tata Group's solar power arm is in final stages of negotiations with the Tamil Nadu government as it plans to set up a 4GW integrated solar photovoltaic cell manufacturing unit in Gangaikondan near Tirunelveli.

"The investment by Tata would be around Rs 3,000 crore with an employment potential of 2,000 locals, predominantly women," highly placed officials in the Tamil Nadu government said. The investment commitment by Tata Group is viewed as "significant", as it will help the state to showcase itself as an attractive solar power manufacturing location. It is also expected to boost investments to southern states which have not attracted too many till now.

The state is already home to Vikram Solar, which inaugurated its factory in July to make panels with 1.2GW capacity in Oragadam. US-based First Solar is breaking ground for its greenfield plant in Pillaipakkam near Chennai on Tuesday. First Solar is investing \$684 million in a fully vertically integrated photovoltaic thin-film solar module manufacturing facility with a capacity of 3.3GW and is expected to commence operations in the second half of 2023.

Solar panel manufacturing is the next hot area for investment flows as the scramble for renewable energy, more specifically solar, gains momentum. More so with the Prime Minister committing to meet 50% of the country's energy requirements from renewable energy by 2030. of solar power.

Billionaire Mukesh Ambani-led Reliance Industries would build four 'Giga' factories in Jamnagar to make solar photovoltaic cells, green hydrogen, batteries and fuel cells for Rs 60,000 crore. These manufacturing units will power Reliance's dreams to build 100GW of solar energy generation capacity. Adani Group is also getting aggressive on the solar front with plans to manufacture photovoltaic cells for 3.5GW of solar power.



Source:: https://energy.economictim es.indiatimes.com/news/ren ewable/tata-group-to-setup-4-gw-solar-panelmanufacuring-unit-in-tamilnadu/87859959

15 years on, HP moves towards new hydro power policy

The analysis Shimla: After 15 years, Himachal Pradesh is going to change its hydro power policy to address fresh challenges in hydro, biomass and solar power development. The state has prepared a draft energy policy 2021 that aims to promote green, clean and sustainable generation of energy to enable quick harnessing of full potential of Himachal Pradesh.

It also aims to harness and commission 10,000 MW of hydro energy by 2030 to have an operational capacity of 20,948 MW beside upgrading the existing run of river hydro plants for pumped storage plants/hybrid power plants.

According to officials, the hydro power policy 2006 of the state has served its objectives well and over the last 15 years, there has been a paradigm shift in energy scenario of the country. The country is moving towards renewable energy that is total green energy as per the Paris Agreement signed in December 2015. The solar and wind power share is increasing at a faster rate than the hydro. Hydro power along with hybrid, battery and pumped storages and hydrogen energy is going to be the focus areas in coming years.

To cater to the challenges and changes in the demand of energy sector of the country, the hydro policy of the state needed to undergo an overhaul, in conformity with the new policies, regulations and unfolding energy scenario and also to address the fresh challenges in hydro, biomass & solar power development in the state. Hence, the need for a new energy policy 2021 of Himachal Pradesh was felt, officials said.

Himachal Pradesh is blessed with hydro potential of 24,587 MW distributed over five river basins, out of which 10,948 MW has been harnessed (as on October 31 this year) and out of 13,639 MW, maximum potential will be harnessed by 2030.

As on August 31 this year, a total allotted solar power capacity is 55.47 MW and out of which 26.50 MW has been commissioned and 1,995 MW solar potential will be added by 2030. Other energy sources like wind, biomass, and waste to energy will also be added in the state's energy basket.

Himachal Pradesh is leader in hydro power generation in the country and contributing nearly one-fourth of total hydro generation in the country. Approximately 45% of total hydro potential in the state has been harnessed and in next 10 years, nearly 10,000 MW renewable energy will be added.

State consumers' interest will be taken care of by the smart and robust distribution network. Sustainable environmental and social measures in conformity of the Government of India and state commitments towards locals.

The principal objectives of draft policy aims to promote green and clean and sustainable generation of energy to enable quick harnessing of full potential of Himachal Pradesh. It aims to expedite development of hydro-electric projects by adopting a four pronged strategy by way of participation of state, joint, central and private sectors.

Under new policy, it has been proposed to promote storage or pondage, including pumped storage power plants/combined cycle power plants, battery storage and other emerging technologies such as Hydrogen storage, capable of quick ramp up and ramp down and store energy with higher efficiency for long duration.

Policy aims to develop adequate and efficient transmission network in the state and to evolve a dynamic and robust electricity infrastructure for better consumer services. It also



proposes to revitalize state utility for distribution of power and to establish and promote a power trading entity in the state.

Source: <u>https://energy.economictimes.indiatimes.com/news/renewable/15-years-on-hp-moves-towards-new-hydro-power-policy/87860018</u>

Servotech Power Systems bags offgrid solar project from UPNEDA

New Delhi: Servotech Power Systems has bagged off-grid solar PV plant order from Uttar Pradesh New & Renewable Energy Development Agency (UPNEDA). "Leading manufacturer of LED Lights and Solar Products, Servotech Power Systems Ltd has bagged off-grid Solar PV Plant order from UPNEDA", a company statement said.

Servotech will supply, erection, testing, and commission the off-grid Solar PV power plant in different government offices buildings in Uttar Pradesh, the statement said.

The total value of the project is Rs 37.20 crore and it is valid for a year span. Initially, Servotech has been issued an LOI (letter of intent) of Rs 11.16 crore that needs execution in a short span of time.

The project's execution is scheduled to begin in the first week of December 2021, and the project's completion is anticipated by March 2022.

"I am certain that this off-grid solar PV project will be completed on time, and our collaboration will continue to assist India in meeting its goal of becoming carbon neutral by 2070, said Raman Bhatia, Managing Director, Servotech Power Systems.

The Servotech Power Systems is engaged in Renewable Energy and is a leading manufacturer of Inverter, Batteries, LED Lights, Solar Products, Oxygen Concentrator, and UVC Germicidal Products with a proud legacy of 17 years.

Source::<u>https://energy.economictimes.indiatimes.com/news/renewable/servotech-power-systems-bags-off-grid-solar-project-from-upneda/87869121</u>

Adani Solar partners with KSL Cleantech to expand market share

New Delhi: Adani Solar has partnered with Kolkata-based solar PV firm, KSL Cleantech, to expand its retail distribution business in the east and northeast regions of India, it said on Tuesday in a press release.

According to the official release, Adani Solar has estimated a 130-MW opportunity within the rooftop segment in these two regions. The target customers include the rooftop, utility-scale, residential, commercial & industrial, and solar pump segments.

"We are delighted to partner with KSL Cleantech in the retail distribution space... KSL Cleantech, as the authorised channel partner of Adani Solar will be responsible for all the solar retail requirements in the region," said Ramesh Nair, chief executive officer, Adani Solar.

He added that the firm will target a 50 per cent market share.

"We look forward to achieving a higher reach and visibility for our product nationally by increasing power consumption through alternative forms of energy like solar energy," said Nair.

The release said that the installation of Adani's off-grid panels will help consumers mitigate the risks of power-cuts while their on-grid panels will assist in reducing electricity costs.

Adani Solar reached over 1,000 towns for the distribution of solar panels in India, it added.

Source:

https://energy.economictimes.india times.com/news/renewable/adanisolar-partners-with-ksl-cleantechto-expand-market-share/87866577





SEEM Individual Memberships Fee & Benefits

| SI.No | Membership Category | Membership Fee | Annual Fee | Total Amount (Including tax) |
|-------|--|----------------|----------------|---------------------------------|
| 1. | Annual Membership / Annual Associate Membership | Rs. 2500 | Rs. 500 | Rs. 3540 |
| 2. | Annual Fellowship | Rs. 3000 | Rs. 1000 | Rs. 4720 |
| 3. | Life Membership | Rs. 6750 | Not Applicable | Rs. 7965 |
| 4. | Life Fellowship | Rs. 12,000 | Not Applicable | Rs. 14160 |
| 5. | Student Membership | Rs. 500 | Rs. 500 | Rs. 1180 |

Who can join SEEM?

- BEE Certified Energy Auditor
- BEE Certified Energy Manager
- Engineers working in energy related field holding a position of high responsibility with minimum 20 years experience
- Any Degree/ Diploma holders working in the field of Energy Efficiency/ Energy Conservation/
- Renewable Energy for the last two years
- Engineering students and students who would like to do research or undertake projects in the energy
 sector

Benefits to Members

- Opportunities to get your case studies published in SEEM print magazine "Energy Manager"
- Opportunities to publicize your efficiency initiatives in the monthly e-newsletter SEEM News
- Speaking / Presentation opportunities at various forums
- Opportunities to constructively participate in various discussions in the energy sector
- Opportunities to become a SEEM Trainer / Expert Faculty
- Opportunities to become a SEEM Mentor for Student Chapters
- Leadership and participation opportunities in various SEEM programmes
- · Networking opportunities with many energy professionals from across the country
- Knowledge enhancement platform in the energy sector
- Right to cast vote at the SEEM Annual General body Meeting
- All communications, which includes: notices about meetings, invitation to events, announcements about the SEEM activities.
- Priority to participate in funded projects carried out by SEEM in the energy sector, on the terms and conditions appropriate to such projects
- Support for addressing relevant grievances

• An opportunity for cross-fertilization of ideas with access to lessons learnt by others

Discounts available to SEEM Members:

- Upto 50% discount on registration fee for seminars / workshops and other training events conducted by SEEM.
- Opportunity to attend workshops and trainings by third parties at special rates offered to SEEM
 Members
- A discount of 50% on priced publications brought out by SEEM
- Upto 50% discount on applications to SEEM National Energy Management Awards every year
- Discounts on any other programmes/ products or services offered by SEEM

Your membership kit includes:

- SEEM membership ID card
- SEEM Membership Certificate
- Subscription to SEEM print magazine Energy Manager
- Subscription to monthly e-newsletter SEEM News

Membership Categories & Eligibility

| Category | Eligibility |
|------------------|---|
| Member | Energy Manager / Energy Auditor certified by Bureau of Energy Efficiency |
| Associate Member | Any diploma / degree holder who is working in the field of energy efficiency/conservation/ renewables for the last two years. |
| Fellow | Engineers working in energy related field holding a 'position of high responsibility' with minimum 20 years experience and who have been certified as Energy Managers or Energy Auditors by the Bureau of Energy Efficiency, Ministry of Power. |
| Honorary Fellow | Persons who are qualified to be Fellows invited to join SEEM as Honorary Fellows, subject to the approval of the Executive Council. |
| Student Member | Engineering students or students who would like to do research or undertake projects/studies in energy related fields. |

SEEM

9



the **best medium** to reach **great heights...**



Click here to subscribe to energy

Click here to become a

To read, Subscribe and advertise contact:

SEEM | KRA-A79 | SEEM Bhavan | Kannammoola| Thriruvananthapuram – 695011 | Kerala | India T::0471 – 25576507 | M::9446067607 E::seemhq2011@gmail.com | www.seemindia.org

Andhra Telangana | Assam | Chattisgarh |Gujarat | Karnataka | Kerala | Madhya Pradesh |Maharashtra | New Delhi | Orissa | Punjab | Rajasthan | Tamil Nadu | Tripura | Uttar Pradesh | West Bengal Forthcoming issue:

"Energy Effiency –Key to post Covid recovery of MSME's"

| Subscription Price | | | | | | |
|--------------------|--------|--------|-------|--------------|-----|---------------|
| Term | Issues | Indivi | duals | Institutions | | Special Offer |
| | | | | | | rate |
| | | INR | USD | INR | USD | INR |
| 1 year | 4 | 1000 | 45 | 1500 | 70 | 500 |
| 3 years | 12 | 2500 | 115 | 4000 | 180 | 1250 |

energyⁿ manager. Your medium to succeed.

Click here to subscribe to energy



Readership Profile

- Accredited ESCOs & Energy Consultants
- Certified Energy Professionals
- Consultants, Planners and Architects
- Distributors and Marketing Agencies
- EE & RE Equipment Manufacturers
- Energy Intensive Industries (DCs)
- Engineering & Technical Institutions
- International Organizations
- Political & Executive decision makers
- Policy Bodies, NGOs

Editorial Profile

- Energy management
- Energy audit
- Energy financing
- Research and Innovation
- Best practices
- Case Studies
- Renewable energy Sustainable Living
- Global focus
- Focus India
- Events, and others

DATA

Title: energy¹ manager Language: English Pages: 64, 213 GSM Frequency: Quarterly Print: Four Colour, 8" X 11" Circulation: 5000 Market: International

energyⁿ manager is the only magazine in India that exclusively focuses on energy efficiency

Click here to become a

- The right blend of high quality articles that appeal to the industry and academia, presented in a layout of exceptional standards
- Cover feature in each issue focus on one most appropriate contemporary topic on energy efficiency
- Guest editorial by renowned ٠ domain experts
- Articles contributed by leading ٠ personalities in the energy sector
- Published since January 2008 and circulated in print to more than 5000 readers
- Brought out by Energy Press, the publishing wing of the Society of Energy Engineers and Managers (SEEM), India













HIHseem

S

EV

Z

SEEM

Ad Rates

| Options | Size | Published rate (Rs.) | Special discounted rates | | |
|---------------------|---|-------------------------|--------------------------------|--|--|
| Back Cover | | 1,50,000 | 25000 | | |
| Inside Front Cover | Bleed size : 21cmx29cm Trim size : 20cmx28cm | 1,20,000 | 20,000 | | |
| Inside Back Cover | Type safe area: 18cmx 24cm | 1,20,000 | 15,000 | | |
| Inside Full Page | | 70000 | 10,000 | | |
| Half Page | 18cmx12cm | 45000 | 7,500 | | |
| Inside Quarter Page | 9cmx12cm | 25000 | 5,000 | | |
| | | | | | |

Special Offer: 30 % discount for one year contract

