society of energy engineers and managers



www.seemindia.org

**MAY 2021** 

#### **VIEW POINT**

#### "Winning zero"

It may sound a little ironic, but now the race is to reach zero. Yes, net zero has become the mantra and goal for the whole world and that is evidenced in the growing number of nations pledging their resolve to reach this goal by midcentury or thereabouts.

International Energy Agency has brought about a clear guide map (Net Zero by 2050, A road map for global energy Sector) which can be suitably adopted by nations to frame their own route maps to contain the emissions to render the world as net zero emitter by 2050. The deliberations towards evolving this guide map threw up following seven key principles which are sound being the distilled wisdom of many experts, on which the road map is pivoted.

- >The present situation of having to build back from the COVID pandemic provides every nation with a historic opportunity to progress towards net zero emissions.
- >National road maps with clear near term and long term goals and especially the action plans for immediate decade and their implementation on ground will establish international confidence in the required transition.
- > The challenges in transition are enormous including meeting the growth energy needs of underserved populations. Meeting those challenges can be through international sharing of resources both tangible and intangible.
- > The development, deployment and scaling up of climate neutral technologies complemented by energy efficiency can create deep sustainable energy transitions in many sectors which are essential to reach net zero targets. The value chain is complex and are often trans-border for some sectors and addressing the challenges have to be a collaborative
- >The investment requirements which are to be mobilised and deployed are quite large . Substantial international efforts are required to achieve the required mobilisation of investments into climate friendly energy transition particularly in emerging economies.
- >It has to be clearly understood that this transition to green energy is for the people and has to be by the people. Hence the policies aimed at this energy transition should have underpinning of concepts of fairness, affordability, minimisation of disruptions and wide and inclusive sharing of benefits.
- > The transitions to net zero are to be founded strongly with systems which are sustainable, secure affordable and resilient. Considerable extent of farsightedness, evaluation of local and cross border issues is required to ensure leveraging of existing infrastructure and designing futuristic framework towards diverse, sustainable and socially acceptable clean energy and technology mix.

All are encouraged to go through the IEA report which sets out four hundred odd milestones and goals covering all sectors and technologies. The energy engineering fraternity can derive enormous fuel to charge ahead to tap the huge potential the net zero transition in energy is going to offer. The opportunities are definitely not limited to technology or engineering but will transcend to areas of economics, finance, sociology and psychology to indicate a few. Stay safe, plan ahead jump ahead to agreat future riding the favourable trends in our domain.

## **G** Krishnakumar

Immediate Past National General Secretary & Chief Operating Officer

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#### **SEEM NATIONAL ENERGY MANAGEMENT AWARD 2020**

The sixth edition of SEEM AWARDS is scheduled to be held on 26th June 2021. Who's who of Indian business vied to prove their commitment to energy excellence and have won accolades. The energy performance parameters are weighed by an elite jury to confer the deserving recognition.

Apart from the celebrations SEEM award function is an occasion for learning new trends from industry stalwarts from far

Domain veterans share distilled insights on the occasion. The winners give a glimpse of their motivation, innovation, and implementation. An online tech

jamboree with an expected audience of 2000+ professionals.

Register in advance to be a part of this great energy event and enjoy from the comforts of your office/home.

Registration Link

www.seemawards.com



## COAL INDIA SUPPORTING HOSPITALS THROUGH SETTING UP **OXYGEN PLANTS, VENTILATORS AVAILABILITY**



Amid a continuous demand for medical oxygen for coronavirus patients in the country, State-owned Coal India Ltd (CIL) has started a mission 'Praana Vayu', under which it is facilitating setting up oxygen plants and ventilators availability at hospitals and Covid care centres. "Responding to the needs, Coal India has launched Mission 'Praana Vayu', which is about providing oxygen support in various forms right from oxygen plants to oxygen banks," the maharatna firm has said in a statement.

CIL said that in the

once-in-a-century crisis arising out of COVID-19, the spotlight is on oxygen support. There is a surge in demand for medical oxygen as the therapeutic treatment of COVID-19 revolves around availability of this vital element, CIL said. For obvious reasons, oxygen capacity expansion has emerged as a major requirement towards boosting healthcare facilities in the fight against the pandemic, it added. The company is assisting District Hospital Simdega in Jharkhand to establish oxygen plant at a cost of Rs 99 lakh which also includes creation of ICU

#### infrastructure.

An oxygen plant is being set up at Railway Hospital Danapur (Patna) at a cost of Rs 55 lakh. This is a tertiary care hospital catering to East Central Railway and neighbouring zones.The company is supporting Rs 47 lakh towards ventilators for Covid facility in Kolkata Police Hospital at Bhowanipur, Kolkata. In a unique model, the company has engaged a voluntary organisation to establish oxygen banks at 10 locations of Jharkhand and Bihar at a cost of Rs 1.34 crore

https://energy.economictimes.indiatimes.com/news/coal/coal-india-supporting-hospitals-through-setting-up-oxygen-plants-ventilators-availability/82728501









#### EV STARTUP SIMPLE ENERGY TO LAUNCH FLAGSHIP E-SCOOTER ON AUG 15

SEEM member

Bengaluru-based electric vehicle startup Simple Energy announced it will launch its first flagship e-scooter, code-named Mark2, on August 15 this year. Simple Energy was earlier looking to roll out its maiden vehicle model by mid-this year.

The e-scooter will make its

debut in Bengaluru in the first phase, which will be followed by Chennai and Hyderabad, Simple Energy said in a release. The company plans to eventually expand its presence to other cities as well later on. it said. Besides setting up its manufacturing facility in Bengaluru, the metro city also houses its R&D unit.

Suhas Rajkumar, Founder and CEO, Simple Energy, said, "We are thrilled to be announcing the launch date. August 15 is a significant milestone for the nation, Simple Energy aims at creating history with a world-class product made by an Indian company."

https://energy.economictimes.indiatimes.com/news/power/ev-startup-simple-energy-to-launch-flagship-e-scooter-on-aug-15/82675868

#### COPPER HITS LIFETIME HIGH OVER BETS ON GREEN ENERGY



Copper soared this week to an all-time high, continuing a sizzling rally that's seen prices double in the past year. The previous copper record was set in 2011, around the peak of the commodities supercycle sparked by China's rise to economic heavyweight status - fueled by massive amounts of raw materials.

This time, investors are betting

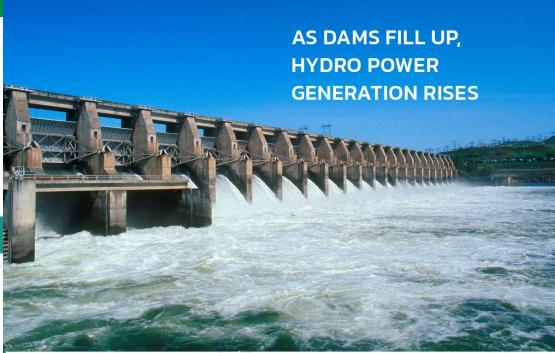
that copper's vital role in the world's shift to green energy will mean surging demand and even higher prices. Copper futures rose as high as \$10,440 a ton in London on Friday.

The reddish brown metal is mostly unrivaled as an electrical and thermal conductor, while also being durable and easy to work with. Today, a vast array of uses in

https://energy.economictimes.indiatimes.com/news/renewable/copper-hits-lifetime-high-over-bets-on-green-energy/82513665

all corners of heavy industry, construction and manufacturing mean it's a trends in the global economy. the first to react as Covid slumping by more than a quarter between January and March last year.

famously reliable indicator for The copper market was one of emerged in Wuhan, with prices



For the first time in years, more power was generated by hydel stations in the state than thermal power plants. In fact, green power - hydro, wind, solar and biomass - generation was close to half the total power generation in the state. The total hydro power consumption was 29.232 million units while 21.620 million units from Tangedco's thermal units were consumed. The total power consumption in the state was 306.741 million units and green power generation (hydro, wind, solar and biomass) came to 144.43 million units.

"With more water being released from Mettur dam, power generation increased. Apart from this the dams in Niligiri districts are also generating power. The hydro power generation has exceeded that of Tangedco's thermal units. We have most of the thermal units on standby," said a senior Tangedco official

Water release from Mettur was increased from 10.000 cusecs to 40,000 cusecs after the inflow into the Stanley reservior rose to 75.000 cucecs. "Hydro power generation will continue while the water release from Mettur is maintained at this level. Since it has been raining heavily in Nilgiris district, several reservoirs are likely to release more water and this will also add to hydro power generation," said the

official

With just a few weeks to go for the wind power season to end, hydro generation has come in handy for Tangedco. "Our coal stocks have improved. Hydro and wind are cheap and good for the environment. We prefer wind and hydro generation at any time," he said.

Solar power generation remains unaffected by the monsoon as the solar power projects are situated mostly in Ramanathapuram and nearby districts, which haven't seen much rain. The demand has come down in the last few weeks. This also helps in keeping the thermal units on standby.

Source













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#### **GLOBAL GREEN BOND ISSUANCE HIT NEW RECORD HIGH LAST YEAR**



Green bonds are a growing category of fixed-income securities that raise capital for projects with environmental benefits, such as renewable energy or low-carbon transport. Global green bond issuance reached a record high of \$269.5 billion by the end of last year and could reach \$400-\$450 billion this year, a report by the Climate Bonds Initiative (CBI) showed on Monday

Green bonds are a growing category of fixed-income securities that raise capital for projects with environmental benefits, such as renewable energy or low-carbon transport. Although issuance reached a new record in 2020, the figure was just above 2019's total of \$266.5 billion as issuance slowed in the second guarter due to the effects of the coronavirus crisis before rebounding in the third quarter.

"The impact of COVID-19 in 2020 proved a huge economic and social negative. In that context, the resilience of green finance markets led to a record year of issuance," the report said. "2021 may enable a sustained resurgence," the CBI added.The CBI is a London-based non-profit which promotes investment in the low-carbon economy.

Source:

https://energy.economictimes.indiatimes.com/news/renewable/global-green-bond-issuance-hit-new-record-high-last-year-report/80441529

#### WEBINAR ON ELECTRICAL SAFETY

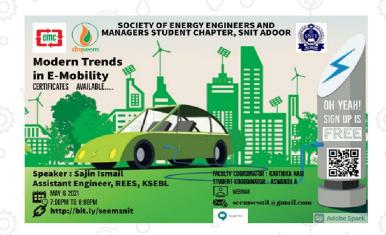
Society of Energy Engineers and Managers, Karnataka Chapter conducted a webinar on "Electrical Safety" on 08-05-2021 by Mr. Jayaprakash Narayan, SEEM Karnataka Chapter Chairman.

Mr. Jayaprakash Narayan has around 35 years experience in R&D, product development, power quality and electrical safety. He has carried out power quality and safety audits in 21 countries.



100 people attended the webinar. He has shared overview to regulations, Electrical Safety methodology, earthing, electrical fire safety and Case Studies. Webinar was very insightful and well accepted by the participants.

#### **MODERN TRENDS IN E - MOBILITY**



The Society of Energy Engineers and Managers (SEEM) Student Chapter of Sree Narayana Institute of Technology had organized a power packed and vibrant webinar program on the topic: "MODERN TRENDS IN E-MOBILITY". The speaker for the session was Er. Sajin Ismail, REES, KSEBL. The program was conducted via Google Meet platform.

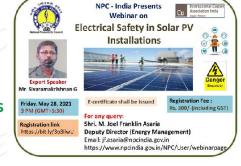
The program was started with welcome address by Aswanth A, the Student Coordinator SEEM SNIT SC. He welcomed Dr. Radhakrishnan R, the Principal of SNIT and the honorable speaker, Er. Sajin Ismail, REES, KSEBL. Then he addressed Mr. Richu Zachariah, Joint Secretary (Academics), SEEM Kerala and our HODs from various

departments. And finally, our SEEM SNIT SC Faculty Coordinator, Asst. Prof: Ms. Karthika Nair, our SEEM members and at the last but not the least, all our participants. Later, the webinar session was taken by the speaker. The main topics discussed in the session were about electric and hybrid vehicles, its advantages and disadvantages, different modes of charging vehicles, various types of connectors, various types of batteries and its charging capacities, etc. After the speaker's talk, a doubt clearing session was conducted. Also, we had received many new topics as suggestion for the future sessions. Then our SEEM member, Ajesh R Kumar delivered an extended heartfel

vote of thanks to all present in the webinar. The session was started at 7.00 pm and it came to an end by 8.15 pm. A total of 100 participants attended the webinar program representing the students, professors and research scholars. The session was really incredible, engaging, informative, inspiring for each and every participants. The speaker had shared his valuable time and knowledge for his audience.

The committee solicits wholehearted cooperation. involvement and support of all members to make SEEM more vibrant and relevant to the energy community and society at large.

**ELECTRICAL** SAFETY IN SOLAR PV **INSTALLATIONS** 



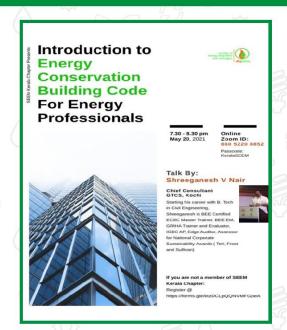
NPC presents a webinar on Electrical Safety in Solar PV Installations by the expert speaker Mr.Sivaramakrishnan on 28th May 2021 at 3 pm.







# WEBINAR ON INTRODUCTION TO ENERGY CONSERVATION BUILDING CODE FOR ENERGYPROFESSIONALS



SEEM Kerala chapter conducted a Tele talk on the topic Introduction to Energy Conservation building code for Energy Professionals on 20th May 2021 at 07:30pm. Mr. Shreeganesh V Nair was the speaker of the webinar. Many of the Energy Professionals were attended the program. He explained about the Energy Conservation building code. It was a nice talk. Finally they cleared the doubts and successfully completed the program by 08:30pm.

SEEM Tamil Nadu chapter welcomes you to the webinar on the topic "Climate change & Global warming" on 5 June 2021 at 6:30 to 7:30 pm.

SEEM TamilNadu Chapter conducted a webinar on 22nd May 2021 on the topic Water Conservation. Dr. R. Pannirselvam, was the speaker of this webinar. He was the

retired Dy Chief Engineer (TWAD) & Visiting Faculty (Anna University). In the webinar he explained the current scenario of water, Shared success stories of Water Management, Explained the Standards of Water Quality etc . Finally suggested 10 tips on Water conservation for homes.



**NEWS** 

## **SEEM NATIONAL ENERGY MANAGEMENT AWARDS 2020**













https://youtu.be/rcxKpw gjiyw





**NEWS** 

# **SPONSORSHIP** DOSSIER

SEEM member

SEEM NATIONAL **ENERGY MANAGEMENT** AWARDS 2020

Society of Energy Engineers and Managers (SEEM) is a national network of energy professionals in India, established in 2005 as a not-for- profit society to support and inspire the cause of energy efficiency in various sectors. SEEM network is spread across 22 Indian states with 15 chapters and 7 units, and more than 800 members. Since its inception, SEEM has been carrying forward its objective through international, national and state level programs, publications including exclusive technical magazine "energy manager", monthly e-newsletter "SEEM News", and other initiatives.

SEEM proposes to organize its 6th edition of SEEM National Energy Management Awards 2020 Ceremony in New Delhi during September 2020

The award ceremony will be attended by about 500-600 energy auditors and managers from across the country, representatives from large/small industries and government agencies like SDAs, DCs and other working energy professionals from various industries.

This event is being held as part of the efforts to encourage and motivate Certified Energy Auditors, Certified Energy Managers, Energy audit firms, Industries and facilities who have made remarkable initiatives to promote energy conservation in Indian organizations during the year 2019 - 2020

SEEM India is organizing a training cum exposition program in tandem with the National Energy Management Awards Ceremony to familiarize genuine service/ equipment system providers to an interested group of energy industry professionals. It is a felt need assessed by energy auditing fraternity that many genuine energy saving equipments, services and measurement devices and monitoring systems still remain unexposed to a large sections of energy professionals who still grope in dark or play into hands of black sheep.

We will be giving opportunity to 15-20 selected Energy Efficient Equipment / Energy Monitoring Equipment / Energy Service provider during this function to present their product after an initial scrutiny of experts. Those who are willing to undergo this process of endorsement will be given an opportunity to show case their product through various Forums of SEEM (Such as Print Magazine, Web, Monthly news letter etc.) other than the venue where presence of more than 300 experts are assured, at a very reasonable cost.

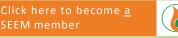
We request you to be a part of the SEEM National Energy Management Award function by availing various sponsorship options as per the details given in the website and register.

We are keen to work out best option for your organisation, once we receive your preference at the earliest as to how you would like to exploit this opportunity. For leveraging branding, sponsorship and exhibition opportunities, write to at awards@seemindia.org or call at 9446067607 / 0471-2557607.

http://seemindia.org/sponsorship/









SEEM member

### **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
- Opportunity to attend workshops and trainings by third parties at special rates offered to SEEM
- 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  Energy Manager / Energy Auditor certified by Bureau of Energy Efficiency		
Member			
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.		