# Tth-9th February 2024

Tagore Theatre, Thiruvananthapuram

# KERALA'S FIRST INTERNATIONAL ENERGY FESTIVAL OF KERALA 2024

# SPECIAL SUPPLEMENT

This year, EMC decided to celebrate its foundation day the 28<sup>th</sup> differently, initiating an Energy Festival in Kerala with a vision to repeat it every year. Thus, the International Energy Festival of Kerala – Edition –1, or IEFK 2024, was organized between 7<sup>th</sup> to 9<sup>th</sup> February 2024. This event showcased a diverse array of programs, drawing participants ranging from students to energy experts and the general public, reflecting EMC's inclusive approach.

The decision to host IEFK 2024 perfectly aligned with EMC's ethos, showcasing its commitment to inclusive participation and community engagement. The event was made possible with the wholehearted blessing of the Chief Patron, Shri. Pinarayi Vijayan, Hon'ble Chief Minister of Kerala, with the able support of Shri. K. Krishnankutty, Hon'ble Electricity Minister of Kerala, Shri. A. N. Shamseer, Speaker - Kerala Legislative Assembly, and Shri. Kadakampally Surendran, MLA Kazhakuttam Constituency. The inaugural ceremony was graced by the presence of Shri. Milind Bhikanrao Deore, Secretary-BEE, Shri. Abhishek Sharma, Director-BEE, Shri. G. Vinod, Chief Electrical Inspector, and Dr. T. N. Seema, State Coordinator, Harita Kerala Mission among a plethora of dignitaries. The distribution ceremony of the Kerala State Energy Conservation Awards 2023 also formed a part of the IEFK 2024.

Various agencies and institutions working in the field of energy collaborated with EMC to conduct the festival, turning it into a platform for networking in energy transition, fostering dialogue on innovative ideas in the energy sector, and recognizing exemplary contributions to energy conservation in Kerala. Beyond its celebratory nature, IEFK 2024 embodied EMC's multifaceted objectives, setting the stage for future collaborations and advancements in Kerala's energy sector. As EMC continues its pursuit of objectives, events like IEFK 2024 will undoubtedly play a pivotal role in driving progress and fostering a culture of energy conservation and sustainability.

In conclusion, IEFK 2024 not only honored EMC's rich legacy but also laid the groundwork for future collaborations and advancements in Kerala's energy sector. As EMC continues its pursuit of objectives, IEFK events are poised to play a pivotal role in driving progress and nurturing a culture of energy conservation and sustainability in the state.

> - Dr. R. Harikumar Director, EMC-Kerala



# INAUGURAL FUNCTION



A. N. Shamseer, Honb'le Speaker of the Legislative Assembly of Kerala, officially inaugurated the International Energy Festival of Kerala (IEFK 2024) and presented the Kerala State Energy Conservation Awards 2023 to the deserving recipients. Honb'le Minister for Electricity, K. Krishnankutty, delivered the presidential address from remote station followed by video message from Pinarayi Vijayan, Honb'le Chief Minister of Kerala. Milind B. Deore, Secretary of Bureau of Energy Efficiency, delivered the keynote address in the occassion.
Dr. S. Unnikrishnan Nair, Director of VSSC, delivered the foundation day address.
Dr. T. N. Seema, State Coordinator of the Nava Keralam Karma Padhathi, G. Vinod, Chief Electrical Inspector, Rakhi Ravikumar, Councillor of Thiruvananthapuram Corporation, and Venkatesh Dwivedi, Group Executive Director of EESL were spoken in the occassion.

The inaugural event marked the 28<sup>th</sup> Foundation Day of EMC, which was established as an autonomous organization under Department of Power, Government of Kerala, on 7<sup>th</sup> February 1996. The guiding philosophy of EMC has been to achieve sustainable development through enhanced total energy efficiency while promoting the application of renewable and environment-friendly energy systems across all sectors. EMC, since its inception, has been a front runner in Kerala's energy sector, consistently delivering exceptional results and driving impactful initiatives.



# **7<sup>TH</sup> FEBRUARY 2024** MORNING SESSION

# **KERALA STATE ENERGY CONSERVATION AWARDS 2023** AWARD DISTRIBUTION CEREMONY







Large Scale Energy Consumers Kerala State Electricity Board Ltd. Best performance award



Large Scale Energy Consumers Apollo Tyres Ltd., Kalamassery



Medium Scale Energy Consumers HLL Lifecare Ltd.- Akkulam Factory



Institutions and Organizations K-DISC





Institutions and Organizations Green Technology Centre







Apollo Tyres Kalamassery

# "Right to Charge" book launch – International Copper Association India (ICA INDIA)

The unveiling of the book titled "Right to Charge" prepared by International Copper Association India (ICA India) in association with Society of Energy Engineers and Managers India (SEEM India) and Energy Management Centre (EMC) occurred in the afternoon session of day one. Mayur Karmarkar (Managing Director of ICA India) presented the book to Vinod G. (Chief Electrical Inspector) during its release in the presence of Dr. R. Harikumar (Director, EMC), K. N. Hemant Kumar (Director, ICA India), Krishna Kumar G (National General Secretary, SEEM India), Dr. Muhammad Sharif (Former Chairman, SEEM India Kerala Chapter) and Gayatri R. Nair (Project Lead).

Mayur Karmarkar gave a brief out. Ninety-five percent of electric vehicles in Kerala are charged at home, but creating infrastructure for charging them lacks proper safety regulations and norms. The safety issues of EV charging systems are not entirely covered by the CEA safety standards or the model building byelaws released by the Ministry of Housing & Urban Affairs. In this regard, the "Right to Charge" campaign was introduced in Kerala through cooperation with EMC and SEEM India and stakeholder interaction with the goal of fire safety and simple installation of EV charging stations in buildings.



Mr. Mayur Kamarkar

# "A Feasibility Study of Electric Bicycles"; Case of Manikkal Gram Panchayat, Kerala -Energy Efficiency Service Limited (EESL)



Presentation by Venkatesh Dwivedi

Honourable Speaker A. N. Shamseer released the book titled "A Feasibility Study of Electric Bicycles" prepared by Energy Efficiency Services Limited (EESL). The book was presented to Milind B. Deore, Secretary of the Bureau of Energy Efficiency (BEE), in the presence of Venkatesh Dwivedi, Group Executive Director of EESL.

The book discusses the challenges posed by limited public transport in rural areas, leading to increased use of private vehicles and consequently higher fuel consumption and emissions. To address this, Convergence Energy Services Limited (CESL) conducted field visits in various regions between March and June 2023 to assess the potential adoption of electric bicycles for short-distance travel (5-10 km). The visits aimed to identify target beneficiaries who could benefit from cleaner and more convenient commuting options. Initial findings suggest that e-cycles could serve as a viable alternative, fulfilling people's desire for private transportation while reducing emissions.



# **DAY 01 | TECHNICAL SESSIONS**

# **Decarbonization Pathways** for Indian Power Sector-**India Smart Grid Forum**

### Reji Kumar Pillai President, India Smart Grid Forum

Reji Kumar Pillai, the President of India Smart Grid Forum, presented a detailed strategy for reducing carbon emissions in India's power industry. It reflected India's dedication to global climate objectives, including achieving Net Zero status by 2070. The strategy emphasizes the widespread adoption of electric power in all sectors and advocates for a significant expansion of renewable energy generation. Key elements of the plan involve promoting flexibility to accommodate renewable energy growth, introducing innovative solutions like rooftop solar panels and energy storage, integrating electric vehicles, facilitating peer-to-peer trading of eco-friendly energy, and managing energy demand effectively. It also addresses the production of green hydrogen, updating existing thermal power plants, and phasing out coal-powered facilities. It highlights the significance of adopting new technologies and flexible solutions across different timeframes. He concluded the session by discussing ground breaking innovations expected to transform transportation, increase energy availability, and reshape business models, ultimately offering a roadmap for a sustainable and climate-resilient Indian power sector.

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vo, 2024

Presentation by Reji Kumar Pillai

# **Kerala Energy Transition** Roadmap for 2040- Center for Study of Science, Technology and Policy (CSTEP), Bangalore

**Rishu Garq** Policy Specialist, CSTEP

# Malik E V

Senior Research Analyst, CSTEP

Kerala has been keen to develop a plan of action to achieve its green and decarbonisation goals. The state's energy dynamics are being studied by the Centre for Study of Science, Technology and Policy (CSTEP), which aims to diversify its energy mix, reduce dependency on external sources, and build a more sustainable energy system. Book titled "Kerala Energy Transition Roadmap 2040" prepared by CSTEP was released during the event.

The study predicts that the state's electricity demand will increase to 45,519 MU by 2040, with peak demand reaching 7,594 MW. The study suggests enhancing decentralised energy resources through rooftop photovoltaic systems, green building programs, and roof-leasing models, boosting renewable energy deployment through hybrid technologies, initiating demand response programs, implementing time-of-use tariffs for EVs and residential consumers, and developing an integrated platform for EV sales. The state must act quickly to harness the available renewable energy potential and develop gridflexibility mechanisms.



Presentation by **Rishu Garg** 

# DAY 02 | TECHNICAL SESSIONS

# Integrating Sustainable Cooling Strategies in Kerala's Energy Transition-WRI India

### Fahad Marzook

Climate Hazard Analyst, Kerala State Disaster Management Authority

# Madhusudhan Rapole

Managing Director, Oorja Energy Engineering Services Pvt. Ltd. Tirthankar Mandal Head, Energy Program, WRI India

### Abraham Koshy Assistant Coordinator, Harithakeralam Mission

Chandana Sasidharan Energy Program Research Fellow, WRI India

Tirthankar Mandal, Head of the Energy Program at WRI India and Dr. R. Harikumar, Director, EMC, signed the Memorandum of Understanding (MoU) aim to advancing efforts on promoting sustainable cooling practices and building energy efficiency in Kerala. As part of this event a panel discussion was conducted on the topic "Integrating Sustainable Cooling Strategies in Kerala's Energy Transition". The panelists for the program were Abraham Koshy (Assistant Coordinator of the Harithakeralam Mission), Fahad Marzook (Climate Hazard Analyst at the Kerala State Disaster Management Authority), Madhusudhan Rapole (Managing Director of Oorja Energy Engineering Services Pvt. Ltd.), Tirthankar Mandal (WRI India) and Chandana Sasidharan (Energy Program Research Fellow at WRI India).

The session, moderated by Tirthankar Mandal, discussed thermal comfort and the need for a multisectoral approach to mitigate heat stress hazards. The discussion focused on protecting people from extreme heat through sustainable cooling initiatives, securing the cooperation of local governments, and leveraging innovative technologies.



Panelists: (from left to rigth) Madhusudhanan Rapole, Fahad Marzook, Thirthankal Mandal, Chandana Sasidharan and Abraham Koshy



7<sup>th</sup>-9<sup>th</sup> FEBRURAY 2024

# Powering the Future: The Intersection of Energy and Electric Vehicles-Center for Study of Science, Technology and Policy (CSTEP), Bangalore

**Spurthi Ravuri** Senior Associate - Green Mobility, CSTEP

Spurthi Ravuri from the Center for Study of Science, Technology, and Policy (CSTEP) discussed the intersection of electric vehicle (EV) adoption and India's energy transition. She emphasized the crucial role of EVs in India's clean energy transition and climate change mitigation efforts. However, she cautioned that the anticipated 30% EV penetration by 2030 could strain local power infrastructure, particularly at the distribution level in cities. A current study by CSTEP in Bengaluru highlighted that EV charging could contribute up to 15% of the city's peak power demand by 2030. To address this issue, Spurthi presented a pilot project utilizing solar energy for EV charging, demonstrating its feasibility through net-metering and battery energy storage systems. The study suggested that net-metering was the most commercially viable option for EV users with lower charger utilization rates. Additionally, innovative approaches like open access, peer-to-peer trading, and time-of-day tariffs were proposed to facilitate renewable energy integration and manage peak loads, ensuring a sustainable future for both EVs and the power grid.



Presentation by Spurthi Ravuri

# Nuclear Technologies with Wider Societal Benefits - Bhabha Atomic Research Centre (BARC)



Presentation by Dr. Sweetie R Kanatt

### **Dr. Sweetie R Kanatt** Scientific officer G, BARC

Dr. Sweetie R. Kanatt, the Scientific Officer at the Bhabha Atomic Research Centre (BARC), discussed a range of cutting-edge technologies developed by BARC on behalf of the session entitled "Nuclear Technology for Societal Benefits". These technologies are designed to harness nuclear energy for various aspects of society, including food production, water management, healthcare, and waste disposal. India stands out as the only developing nation with domestically developed nuclear reactors for power generation. BARC utilizes radiation processing techniques in the food industry to ensure food safety and facilitate global trade. Dr. Sweetie also highlighted BARC's progress in developing improved crop varieties, employing radiotracer technology for water resource management, manufacturing radiopharmaceuticals for diagnostic and therapeutic applications, and utilizing radiation technology in urban waste management and desalination processes.

# Navigating the Future: Strengthening ESCOs through Policy and Performance -Alliance for an Energy Efficient Economy (AEEE)

### Priyami Dutta

Team Lead, State and Local Actions, AEEE

### Vipin Rohilla

Programme Lead, ESCOs, AEEE

The session commenced with EMC Kerala and the Alliance for an Energy Efficient Economy (AEEE) signing a Memorandum of Understanding (MoU), with the objective of fostering collaboration to promote increased adoption of energy efficiency measures in the State. In this regard, AEEE representatives Priyami Dutta (Team Lead, State and Local Actions, AEEE) and Vipin Rohilla (Programme Lead, ESCOS, AEEE) delivered a session on the topic "Navigating the Future: Strengthening ESCOs through Policy and Performance". The speakers deliberated on the obstacles encountered by energy service companies (ESCOs) in India and emphasized the pivotal role of ESCOs in mobilizing private sector investments for energy efficiency projects and Measurement and Verification (M&V) processes. They further highlighted that the partnership between EMC Kerala and AEEE aims to expedite energy efficiency initiatives, thereby fostering sustainable development.





# Societal Impact through e-Cooking Transition - MECS and Finovista

Krishna Kumar Sinha Advisor, Finovista

Dr. R Harikumar Director, EMC-Kerala

Dr. Rudrodip Majumdar Assistant Professor, NIAS K N Hemanth Kumar Director, International Copper Association India

Parth Pradhan Product Manager, TTK Prestige

A panel discussion titled "Societal Impact through e-Cooking Transition" convened with Dr. R. Harikumar (Director, EMC), Dr. Rudrodip Majumdar (Assistant Professor, National Institute of Advanced Studies), K. N. Hemanth Kumar (Director of E-mobility, International Copper Association India), Parth Pradhan (Product Manager, TTK Prestige Ltd), and Krishna Kumar Sinha (Advisor at Finovista and Former Industrial Advisor at Department for Promotion of Industry and Internal Trade) as panelists. The discussion delved into the societal advantages of transitioning to e-Cooking, covering aspects such as behavioural shifts, appliance effects, policy interventions, and the move towards sustainable energy sources.

Panelists noted India's strides in enhancing electricity infrastructure, particularly in rural regions, which have substantially improved quality of life. They advocated for initiatives like the Go Electric campaign to promote clean electric cooking, aligning with global environmental endeavours such as Mission LiFE. The objective is to have 25% of households using electricity for cooking by 2030, recognizing the socio-economic benefits of e-Cooking. This transition enhances health, empowers women, facilitates child development, and fosters sustainability. Additionally, it brings economic advantages through infrastructure development, local value chains, and job creation.

The panel emphasized how sustainable practices positively influence child development and environmental responsibility. Ultimately, they stressed that e-Cooking contributes to societal well-being, environmental preservation, and a more sustainable future.



Panelists: (from left to right) Parth Pradhan, Dr. Rudrodip Majumdar, Krishna Kumar Sinha, Dr. R. Harikumar and K. N. Hemanth Kumar



# Energy Systems for Space and Societal Applications-Indian Space Research Organization (ISRO)

### Shooja A

Associate Director (Projects) VSSC

Dr. Manu S K Deputy Director, VSSC (PCM)

Mercy T D Group Director, Energy System Group, VSSC

### Sujatha S

Head, Energy Systems Development Division, VSSC

### Dr. Shaneeth M

Head, Fuel Cell Development Division, VSSC

The session commenced with an introductory address by Shooja A., Associate Director (Projects) at the Vikram Sarabhai Space Centre. He provided a brief overview of ISRO's recent achievements, such as Chandrayaan 3, and highlighted upcoming missions like Gaganyaan. Shooja also discussed the relevance of various energy systems in space transportation and their types. Following the address, a panel discussion ensued, focusing on the specialties associated with electrical energy systems for space applications compared to general societal applications. Topics included Lithium-ion and sodium-ion battery cells, supercapacitors, capacitors, hydrogen fuel cells, and their global and Indian manufacturing scenarios. The discussion highlighted the specific advantages of these systems in diverse applications ranging from mobile phones to electric vehicles to large-scale renewable energy storage. Emerging energy systems were also explored. The importance of electrochemical energy systems in societal applications and their role in reducing the carbon footprint of the energy sector was emphasized during the discussion. Participants included Dr. Manu S. K. (Deputy Director, VSSC), Mercy T. D. (Group Director of the Energy System Group), and Sujatha S. (Head, Energy Systems Development Division, VSSC). Dr. Shaneeth M. (Head, Fuel Cell Development Division at VSSC) contributed to and moderated the discussion.













# DAY 03 | TECHNICAL SESSIONS

# Micro-Mobility in India: Paving the Path for Energy Efficiency and Better Livelihoods - Council on Energy, Environment and Water (CEEW)

Nilanshu Ghosh Research Analyst, CEEW

**Dr. Himani Jain** Senior Programme Lead, CEEW Dinesh Kumar A N Joint Director, EMC

**D Dhanuraj** Founder-Chairman, Centre for Public Policy Research (CPPR)

The panel discussion revolved around the theme "Micromobility in India: Fostering Energy Efficiency and Improved Livelihoods," with panellists including Nilanshu Ghosh (Research Analyst, CEEW), Dr. Himani Jain (Senior Programme Lead, CEEW), Dinesh Kumar A N (Joint Director, EMC) and D Dhanuraj (Founder-Chairman, Centre for Public Policy Research).

The CEEW-hosted panel discussion centered on micromobility, emphasizing the necessity of e-cycles and e-mopeds in both rural and urban regions of Kerala. Experts underscored the potential of shared e-cycles, particularly in Kerala cities, with relatively flat terrains, robust tourism activities, and comparatively higher income levels and urbanization rates. As Kerala's urbanization is forecasted to reach 96% by 2035, there's a mounting demand for hyperlocal mobility solutions, including e-cycles and e-mopeds, to cater to spatial patterns and diverse mobility needs in medium and large cities.

The discussion also delved into decentralized e-cycle bike sharing initiatives and specialized applications like e-cycles equipped with cold storage boxes for women. Participants stressed the importance of government agencies, civil society, and researchers continually monitoring mobility and electric vehicle (EV) markets to inform planning and regulatory frameworks. They highlighted the necessity for collaboration among the government, original equipment manufacturers (OEMs), operators, and other stakeholders to facilitate effective policymaking and infrastructure development.



Panelists: (from left to right) D. Dhanuraj, Dr. Himani Jain, Dinesh Kumar A. N. and Nilanshu Ghosh







# Role of Demand Side Management in Energy Transition- Prayas (Energy Group)

Shweta Kulkarni Fellow, Prayas (Energy Group)

Aditya Chunekar Prayas (Energy Group)

### **Dr. R Harikumar** Director, EMC

Chandana Sasidharan Program Research Fellow, WRI

**Priyami Dutta** Team Lead, State and Local Actions, AEEE

A panel discussion titled "Role of Demand Side Management in Energy Transition" was organized, featuring Dr. R. Harikumar (Director, EMC), Shweta Kulkarni (Prayas Energy Group), Aditya Chunekar (Prayas Energy Group), Chandana Sasidharan (Programme Research Fellow, WRI India), and Priyami Dutta (Team Lead, State and Local Actions, AEEE).

With the escalating demand for electricity in India, the need for renewable energy sources has become increasingly vital. This transition will not only help mitigate future fuel imports but also promote environmental sustainability. However, effective management of renewable energy on the demand side is crucial. According to the National Electricity Plan, implementing energy efficiency measures could potentially save 12-15% of the expected electricity demand by 2030. Ongoing studies in Gujarat and Kerala suggest that such measures, particularly in residential, industrial, and agricultural sectors, can significantly reduce energy demand and improve grid stability, as highlighted by representatives from Prayas Energy Group. Discussions also emphasized the importance of economic models, consumer engagement, and regulatory frameworks in mainstreaming demand-side management practices. Dr. R. Harikumar, Director of EMC, underscored the significance of appropriately pricing electricity to incentivize energy conservation efforts. He further noted the existing implementation of demand-side management practices in various forms across Kerala.



Panelists: (from left to right) Swetha Kulkarni, Aditya Chunekar, Chandana Sasidharan, Dr. R. Harikumar and Priyami Dutta



# Development of Decarbonisation Strategies and Pathways towards making Kerala Carbon Neutral by 2050 - Vasudha Foundation

### Suneel Pamidi IFS

Director, Department of Environment and Climate Change, Government of Kerala

### Dr. V Beena

Associate Professor & Implementing Officer, Kerala Veterinary and Animal Sciences University

### Jayakumar C Director. Thanal

# Praveen K S

### Superintending Engineer, Kerala Water Authority

### Raman Mehta

Programme Director, Vasudha Foundation

### Shalini P N

Senior Scientist, National Transportation Planning and Research Centre (NATPAC)

# V N Prasad

Chief Safety Commissioner, KSEBL

A Panel Discussion titled "Development Decarbonisation Strategies and Pathways Towards a Carbon-Neutral Kerala by 2050" took place, with Suneel Pamidi IFS (Director, Directorate of Environment and Climate Change) moderating the discussion. The panel included experts such as Dr. V. Beena (Centre for Animal Adaptation to Environment and Climate Change Studies), Jayakumar C. (Director of Thanal), Praveen K. S. (Superintending Officer at the Kerala Water Authority), V. N. Prasad (Chief Engineer, Renewable Energy and Energy Savings, Kerala State Electricity Board), Salini P. N. (Senior Scientist, NATPAC), and Raman Mehta (Program Director, Vasudha Foundation).

During the panel discussion, participants delved into Kerala's emission profile and the potential of forests and wetlands as carbon sinks, underlining the necessity for an integrated decarbonization strategy for transportation. The discussion also emphasized the significance of modal shift and consumerlevel behavioural change in reducing carbon emissions from the transport sector. Suggestions were put forth for promoting a diversified livestock mix and implementing conditional licensing for largescale farmers to attain carbon neutrality. Additionally, ideas were proposed for scaling payment for ecosystem services and rejuvenating waterway transport. Kerala's advancements in renewable energy and initiatives like the SOURA scheme were also part of the conversation. Furthermore, the importance of addressing emissions from wastewater through innovative water treatment methods was highlighted. The discussion underscored the need for collaboration among stakeholders and advocated for the establishment of an empowered authority to coordinate and drive efforts for behavioural change.



Panelists: (from left to right) V. N. Prasad, Raman Mehta, Jayakumar C., Suneel Pamidi IFS, Dr. V. Beena, Praveen K. S. and Shalini P. N.



# Need for, and Importance of Low Carbon Building Transition in Kerala - GGGI, EESL and WRI India

### S P Garnaik

Country Representative-India (i/c), Project Lead (IKI-ALCBT)& Asia Regional Lead (Energy Efficiency), GGGI

### Girja Shankar GM-Technical, EESL

**Dr. R Harikumar** Director, EMC

Shyny Sam Senior Project Associate, WRI

P B Sajan Chief Architect & JD COSTFORD

A panel discussion was conducted on the topic "Necessity and Significance of Low Carbon Building Transition in Kerala," featuring participants such as Dr. R Harikumar (Director, EMC), S P Garnaik(Indian representative, GGGI), Shyny Sam (Senior Project Associate, WRI), Girja Shankar (General Manager Technical, EESL) and P. B. Sajan (Chief Architect and Joint Director, COSTFORD).

During the session led by S P Garnaik discussed the Asia Low Carbon Buildings Transition (ALCBT) Project, aiming to mainstream Low Carbon Buildings (LCB) in Kerala, Haryana, and Uttar Pradesh. This project, with Global Green Growth institute (GGGI) and Energy Efficiency Services Limited (EESL) as key partners, includes initiatives like LCB assessment tools development and capacity building programs. Shyny Sam emphasized the need for Kerala to create a decarbonization roadmap for its building sector, while Girja Shankar discussed the rising electricity demand for cooling and the need for enhanced energy efficiency. P B Sajan advocated for the use of climate-adaptive materials, and Dr. R. Harikumar highlighted the importance of effective energy pricing and sustainable construction practices. Overall, the session marked a significant move towards integrating sustainability in Kerala's building sector.



Panelists: (from left to right) S. P. Garnaik, Girja Shankar, P. B. Sajan, Shyni Sam and Ashok Kumar Thanikonda









# Potential for Scaling Electric Cooking in Kerala - CECFEE

### Dr. Eshita Gupta

Technical Director- KPMG India, Clean cooking expert, Aspire Program Senior Fellow - CECFEE

**Dr. R Harikumar** Director, EMC

Abhishek Gupta Head of International Strategy Project Evaluation Assessment, EESL

### K N Hemanth Kumar

Director, International Copper Association (ICA)

### Sunil Kumar V S National Sales Head, ICT and ERC, V-Guard Industries, Kochi

Archana Chauhan Head, Energy Sector Reforms at British High Commission

Parth Pradhan Product Manager, TTK Prestige

The panel discussion on "Possibilities of Electric Cooking Scaling in Kerala" was organized by the Centre for Research on Economics of Climate, Food, Energy, and Environment (CECFEE), the Foreign Common wealth and Development Office (FCDO), and the International Copper Association (ICA).

In the discussion, participants included Dr. R. Harikumar (Director, EMC), Dr. Eshita Gupta (Technical Director, KPMG India), Abhishek Gupta (International Strategy Project Evaluation Assessor, IESA), K N Hemanth Kumar (Director, E-mobility at ICA India), Parth Pradhan (Product Manager, TTK Prestige Ltd), Sunil Kumar V. S. (National Sales Head, V-Guard), Archana Chauhan (Energy Sector Reforms Assessor, British High Commission) and Fiz Suheil (Research Associate, CECFEE).

The panel discussion focused on the possibilities of increasing electricity cooking scale in Kerala by joining the Induction Stove with projects such as rooftop solar. However, in the context of concerns about safety and mental barriers among consumers familiar with LPG and firewood, as well as the costs and benefits associated with electric cooking, awareness and training are necessary. The discussion emphasized the need for projects that integrate renewable energy into cooking to increase energy efficiency and clean cooking. Panelists highlighted the importance of consumer confidence in transitioning to electric cooking and comprehensive services, stressing the importance of these factors in changing consumer behaviour towards electricity cooking.



Panelists: (from left to right) Eshita Gupta, Parth Pradhan, Archana Chouhan, Abhishek Gupta, K. N. Hemanth Kumar and Sunil Kumar V. S.



# PROGRAMME LAUNCHES & STAMP RELEASE



# **Urja Kiran** Summer Campaign

NGOs are invited by EMC to participate in the process of conducting an awareness campaign on "Importance of Energy Conservation in Summer" in collaboration with all KSEBL Section Offices in the State.



# Centre for Energy Studies

Centre for Energy Studies (CES) is being set up under the auspices of EMC in all technical educational institutions of the state to impart concepts of energy and sustainability to the students.



# IEFK Stamp Releasing Ceremony

To mark the inaugural International Energy Festival of Kerala, the IEFK Special Stamp was introduced in collaboration with the Indian Postal Department.



# **Cool Roof Project**

As part of the Cool Roof project, EMC aims to raise public awareness about cool roofs, provide financial and technical assistance for cool roofs in governmentowned buildings, and provide necessary instructions to customers who are interested in cool roofs.

# MOU SIGNING & BOOK RELEASES

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EMC has entered into a Memorandum of Understanding (MoU) with WRI India with the objective of advancing initiatives to promote sustainable cooling practices and enhance building energy efficiency in Kerala



Book titled "Kerala Energy Transition Roadmap for 2040" prepared by CSTEP was released by Rishu Garg, Prof. POJ Labba, KarakkamandapamVijayakumar, Dr. R. Harikumar, Dr. RVG Menon, M. K. Shinemon



EMC signed MoU with AEEE aim to collaborate for enhanced adoption of energy efficiency in the State

THROUGH THE ESCOS RO

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Honb'le Speaker A. N. Shamseer releasing the EMC Award Booklet by presenting to Milind B Deore, Secretary of Bureau of Energy Efficiency, Govt of India.



The book entitled "Right to Charge" crafted by ICA India in association with SEEM India and EMC- Kerala released by Mayur Karmarkar (MD, ICA India) presented to Vinod G. (Chief Electrical Inspector)

Honb'le Speaker A. N. Shamseer released the book entitled"A Feasibility Study of Electric Bicycles" by EESL by presenting to Venkatesh Dwivedi





Dr. RVG Menon, Vice Chairman of EMC, released the book entitled "Rajatham" prepared by EMC

# **COMPETITIONS &** PRIZE DISTRIBUTION





































# **GLIMPSES OF IEFK24**





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Editorial Board Dr. R. Harikumar (Chief Editor) Er. Dinesh Kumar A. N. (Editor) Er. Tomson Sebastian (Member) Er. Anoop Surendran (Member) Ms. Kumari Sheela (Circulation)



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# ON 9<sup>TH</sup> FEBRUARY 2024, @4 PM



The closing ceremony was held on 9<sup>th</sup> February 2024 at 4 pm, and inaugurated by **Kadakampally Surendran**, MLA, Kazhakoottam. Additional Chief Secretary **K. R. Jyothilal IAS** Presided over. He also conducted the poster launch of latest activities envisaged by EMC like Urja Kiran Summer Campaign, Center for Energy Studies and Cool Roofing of Government Buildings. Dr. R. Harikumar, Director, EMC, carried out the welcome speech and Dinesh Kumar A. N., Joint Director, delivered vote of thanks.