

the leading electrical & electronics monthly

ieema journal

Volume 15 Issue No. 01 September 2023 CIN U99999MH1970GAP014629
Official Organ of Indian Electrical & Electronics Manufacturers' Association
Member: The Indian Newspaper Society

10

From the President's Desk

11

Samvaad

18

Cover Story

The Renewable Energy Blueprint: Harnessing Innovation for Sustainable Future

According to the latest assessment report from the Intergovernmental Panel on Climate Change (IPCC), there will be an estimated global temperature rise of 2.1– 3o C by the year 2100. IJ's cover story elaborates the nation's plans, efforts, local and governmental initiatives towards achieving clean energy transition.

26

IEEMA Events

The Significance of Testing Instrument Reliability

The Bengal IEEMA Roars!



Bengal Power Conclave- 2023' Webinar on Fundamental Electrical Safety Requirements in NEC 2023



18

Webinar on Electrical Safety



Participants pose for a group image after the successful completion of the webinar

32

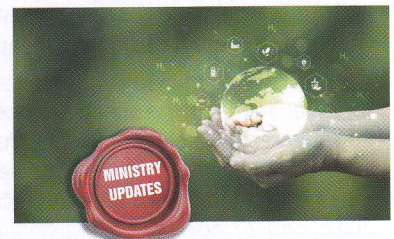
InFocus

Sparkling Future for EV Sparks!

IEEMA's inaugural edition of Electraverse Sparks – "Empowering Startups"

34

Ministry Updates



Indian minister for New & Renewable Energy projects reduction of 50MMT carbon emissions with the use of green hydrogen...

EAM S. Jaishankar envisions India as a trusted global electronics manufacturing partner at SemiconIndia 2023...

DPIIT Notifies Quality Control Orders for 'Smart Meters' and 'Welding Rods & Electrodes'

And other updates.

46

Case Study

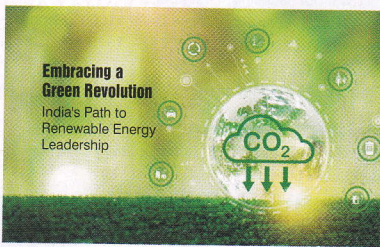
Ships Propelled by Wind Power and Solar are Cost Effective and Greener

Rathindra Nath Biswas shares key inputs and studies about the maritime industry's shift towards Green Ships.

56

Expert Speak

Embracing a Green Revolution India's Path to Renewable Energy Leadership



Atul Arya elaborates about India's adoption of renewable power, advantages of investment in technological advancement and other relevant issues.

58

Expert Speak

India's Energy Transition Towards a Cleaner Future

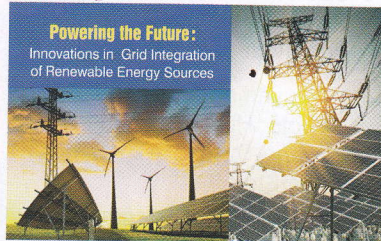


Ashok Kumar Rajput comments about the benefits of Hydrogen Economy promotion, challenges posed by RoW and other efforts of the Gol's efforts towards energy transition for a cleaner and greener future.

64

Expert Speak

Powering the Future Innovations in Grid Integration of Renewable Energy Sources



Hartek Singh envisions empowering the future through innovations in grid integration of renewable energy sources and elaborates upon the challenges.

66

Guest Article

Advancing Biomass Supply Chains through Artificial Intelligence

Colonel Pronob Roy (Retd) throws light on the integration of AI in maximizing the potential of biomass as a renewable energy source and driving India's transition to a sustainable future.

72

Guest Article

Firm & Dispatchable Renewable Power: A Pipe Dream or Reality?

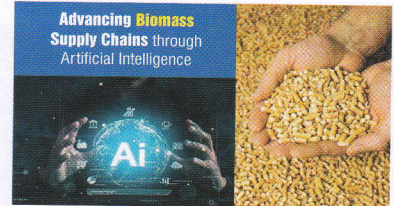


Abhishek Ranjan delves into the pervasive dilemma exploring the possibility of firm and dispatchable renewable power as a pipe dream or a reality.

76

Guest Article

Energy Storage Systems & Their Applications

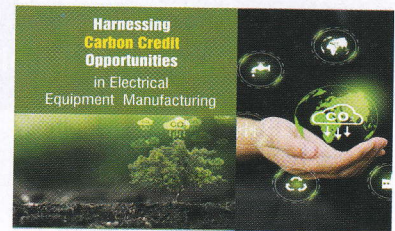


Harshita S. Kumar expounds upon energy storage systems, explaining their types, applications and covers many other relevant details.

78

Guest Article

Harnessing Carbon Credit Opportunities in Electrical Equipment Manufacturing



Manish Dabkara covers the topic of harnessing carbon credit opportunities in the manufacturing process of electrical equipment.

82

Guest Article

Fostering Renewable Energy Focussing on the Policies by the GOVERNMENT of INDIA



Vineet Mittal explicates about the policies implemented by the government of India fostering renewable energy, environmental initiatives and related topics.

83

Product Showcase

84

International News

- Electric Vehicle Charging Station Market is Projected to Grow at a CAGR of 37.7% by 2033: Visiongain
- EU Renewable Associations Call for Renewable Curtailment Solution
- GB Smart Meters Save an Estimated 1Mt of Carbon Annually, Finds DCC

86

National News

- Torrent Power Enters E-mobility Infrastructure Space; Sets-up Four Charging Stations in Gujarat
- BMW is Pumping More Cash into EVs 'Than Originally Planned'
- KEC International Shares Gain 1% on Order Win, Strong Q1 Earnings
- Apraava Energy Gets Two Green Energy Interstate Transmission Projects in Rajasthan

88

Corporate News

- NTPC Arm Wins Bid for 80 MW Solar Project in Khandwa
- SECI Invites Bids for 800 MW Dispatchable Renewable Energy Supply with Storage
- Matsuyama Mikan Energy Selects Hitachi's Grid Energy Storage System with E-mesh™ PowerStore™

90

ERDA

93

Advt Index

94

Power Scenario
Global Scenario
Indian Scenario

96

IEEMA Database
Basic Prices & Indices
Production Statistics

98

Sparks Sans Shocks

CORRIGENDUM

The IEEMA Conference on Public Procurement, Quality and Cost-Based Selection (QCBS), and Reverse Auction article of the August 2023 issue of IEEMA JOURNAL contains errors on pages 33 and 35, paragraphs 3 and 2, respectively.

1. Paragraph 3 (Pg. 33)

"A report has been released on the identifications of gaps and the implementation status of government policies by different procurement agencies."

The intended message's actual content was:

"The objective of the Conference was to bring the Government Ministries, Procurement Agencies, Industry Leaders, and other stakeholders to come together and deliberate on the following:

Identification of gaps and implementation status of Government policies by various procurement agencies.

Expectations of the suppliers and procurement agencies for smooth functionalities of the Public Procurement System."

2. Paragraph 2 (Pg. 35) under the heading "The General Financial Rules have been announced"

"A proposal has been made to include...."

The intended message's actual content was:

"Propose guidelines to Incorporate Quality Standards and Environmental Health and Safety, as part of the Binary evaluation method."

The errors are regretted.

Editorial Board

Advisory Committee

Founder Chairman
RG Keswani

Chairman
Sunil Singhvi

Members
Rohit Pathak
A Naveen Kumar
R Krishnakumar
Mustafa Wajid
Atul Arya
Imteyaz Siddiqui

Editor
Ms Charu Mathur

Circulation Incharge
Ms Chitra Tamhankar

Advertisement Incharge
Ms Pooja Tawte

Statistics & Data Incharge
Ms. Anuja Korgaonkar

Designed by:
Reflections
Processed at:
India Printing Works

Regd Office - Mumbai

501, Kakad Chambers, 132, Dr A Besant Road, Worli, Mumbai 400 018.
Phones: +91 (0) 22 24930532 / 6528
Fax: +91 (0) 22 2493 2705
Email: pooja.tawte@ieema.org

Corporate Office - New Delhi

Rishyamook Building, First floor, 85 A, Panchkuian Road, New Delhi 110001. Phones: +91 (0) 11-23363013, 14, 16
Fax: +91 (0) 11-23363015
Email: delhi@ieema.org

Branch Office - Bengaluru

204, Swiss Complex, 33, Race Course Road, Bengaluru 560 001.
Phones: +91 (0) 80 2220 1316 / 1318
Fax: +91 (0) 80 220 1317
Email: bangalore@ieema.org

Branch Office - Kolkata

503 A, Oswal Chambers, 2, Church Lane, Kolkata 700 001.
Phones: +91 (0) 33 2213 1326
Fax: +91 (0) 33 2213 1326
Email: kolkata@ieema.org

Website: www.ieema.org

Articles: Technical data presented and views expressed by authors of articles are their own and IEEMA does not assume any responsibility for the same. IEEMA Journal owns copyright for original articles published in IEEMA Journal.

Representatives:

Guwahati (Assam) - Nilankha Chaliha
Email: nilankha.chaliha@ieema.org
Mobile: +91 9706389965

Chandigarh (Punjab & Haryana)
Rajnish Kaushik
Email: rajnish.kaushik@ieema.org
Mobile: +91 9 991110246

Jaipur (Rajasthan)
Devesh Vyas
Email: devesh.vyas@ieema.org
Mobile: +91 8955093854

Lucknow (U.P. and Uttarakhnad) -
Anuj Kumar Chaturvedi
Email: anuj.chaturvedi@ieema.org
Mobile: +91 9839603195

Srinagar (Jammu & Kashmir)
Mohammad Irfan Parray
Email: irfan.parray@ieema.org
Mobile: +91 9858455509

For subscription queries write to:
chitra.tamhankar@ieema.org

Edited, Printed and published by Ms. Charu Mathur on behalf of Indian Electrical and Electronics Manufacturers' Association, and Printed at India Printing Works, India Printing House, 42, G. D. Ambekar Road, Wadala, Mumbai 400 031 and Published at 501, Kakad Chambers, 132, Dr. Annie Besant Road, Worli, Mumbai 400 018.