

Total No. of Pages: 60

# AUGUST 2025 Rs. 50.00 Rs. 50.00

Regd. No. MCE/80/2024-26 at Mumbai Patrika Channel, Mumbai GPO on 27th & 28th of Previous month. R.N.I. Date of Publishing 26th of Every Previous

at Mumbai Patrika Channel, Mumbai GPO, Mumbai-1, on 27th & 28th of Previous month. R.N.I. No. 11498 / 57 Date of Publishing 26th of Every Previous Month

Organ of the Electrical Contractors' Association of Maharashtra (ECAM)





ROUND CONDUIT UPVC PIPES & FITTINGS



# pressfit.

# NO HEROES TV ADS

ONLY GREAT PRODUCTS

AT BETTER PRICES



pressfit



PVC CONDUIT PIPES | CASING -CAPPING BUILDING WIRES | MULTI-CORE CABLES SWITCHES | MODULAR BOXES | MCB | RCCB 1800-2121-770 pressfitindia.com

# Incicin Electrical Confrector Confrector Confrector Maharashtra (ECAM)

# **AUGUST ISSUE**





# SPECIAL INTERVIEWS





Mr. Dilip Joshi

**Eetamax Energy Solutions Pvt Ltd.** 











VINAY RATHI
Director
GLOSTER
CABLES LIMITED







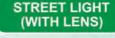
POST TOP /

**POLE LIGHTS** 



STREET LIGHT







UP - DOWN / **BULKHEAD LIGHT** 



TRACK LIGHTS

**FLOOD LIGHT** 

(ECONOMIC)

**TUBE LIGHTS** 



**BOLLARD LIGHTS** 

**PANEL LIGHTS** 



**DOWN LIGHTS** (COB)



**GATE TOP LIGHTS** 

**MOTION SENSOR** LIGHTS



STRIP LIGHT-**DRIVER-PROFILE** 

#### PARAG WORLDWIDE PVT. LTD.

(THE CAPACITOR PEOPLE)



- 520/22 Kalbadevi Road, near Edward Theatre, Mumbai 400 002., India Capacitor Division: Lighting Division:
- (91-22) 22010546, 22056141, 69333359, 69333440 22033405 / 6 / 7 / 8 / 9 paragin@yahoo.com 3 9321101234 / 8779691123
- info@worldtek.net
- 9326652147



# INDIA'S NO. 1 EXPORTER **OF WIRES & CABLES**



SAFE FOR YOU | SAFE FOR THE PLANET

SAFEST OF ALL



Regd. No. MCE/80/2024-2026 • RN 11498 / 57 • Vol.74 • No. 896 • AUGUST 2025

#### CREDITS

#### **INDIAN ELECTRICAL CONTRACTOR & TRADER**

is edited, printed and published by Mr. Satish P. Sinnarkar on behalf of the

**Electrical Contractors' Association of Maharashtra at** 

Stock Exchange Tower - 1st Basement, Dalai Street, Fort, Mumbai 400 023, on or about 28th of every month and printed at Shrirang Printers Pvt. Ltd.

A 101, Sandhya, Janakalyan Nagar, Kharodi, Marve Road, Malad (w), District- Mumibai. Maharashtra- 400095. All information contained and views expressed in the articles published in IECT are solely those of the authors, and may vary with time. ECAM and IECT do not necessarily subscribe to them, and hence will not be held accountable for the same. Ed.



#### **Electrical Contractors' Association of Maharashtra**



President

Umesh Rekhe - +91 9822288423

Hon. Gen. Secretary Devang Thakur - +91 9422249672

Publications & Publicity Committee Chairman Narendra Shindekar, Pune - 9823012424

Vice Chairman Arjun Sase, Ahmednagar - +91 9922664838

#### **Electrical Contractors' Association of Maharashtra**

Head Office: Stock Exchange Tower, 1st Basement, Dalai Street, Fort, Mumbai 400 023 Tel.: 022 22723667, 022 22723668 E-mail: ecamindia@gmail.com Website: www.ecam.org.in

#### **Editor, Printer Published Office**



311, 3rd Floor, Shree Krishna Commercial Centre, 6, Udyog Nagar, S. V. Road, Goregaon (West), Mumbai - 400 062. Mobile: 9821039722 l Email: info.cmasters@gmail.com

#### **Indian Electrical Contractor & Trader**

Editor - Satish Sinnarkar - 9821039722

- 8861357898 Asst. Editor - Prasanna

Marketing Head - Aashish Rejeshirke - 9821375185

Marketing Executive - Kaushal Ball - 9270663417

Subhash Jadhay - 9920523871

Design & DTP - Yatin Pawshe

#### **MASSAGES:**

- PRESIDENT'S DESK
- **GENERAL SECRETARY**
- **EDITOR'S DESK**

#### **INTERVIEWS**

Parag Jhaveri, Director Parag worldwide Pvt. Ltd.



Mr. Varun Joshi, Director Prolite Autoglo Ltd.



22 Sharmila Kumbhat, Director Klite Industries Pvt Ltd



36 Mr. Dilip Joshi, CEO Eetamax Energy Solutions Pvt Ltd.



Mr. Vinay Rathi, Director **GLOSTER CABLES LIMITED** 

#### **ARTICLE / NEWS**

- 28 How Light Pollution Harms Health across India
- New cooling gel could raise PV module efficiency by 12% 46 MNRE Launches Innovation Challenge for Circularity in Renewable Energy Technologies
- Ministry of Power launches ADEETIE scheme to promote industrial energy efficiency in MSMEs

#### मराठी बातम्या/लेख

- मॉडेल सौर ग्राम स्पर्धेध्ये राज्यातील ६३ गावांचा सहभाग विजेत्या गावाला केंद्राकडून एक कोटी रुपयांचे अनुदान
- वादळात सोलार पॅनल उलथून गेले; भरपाईसाठी अर्ज कोणाकडे कराल?
- वीज स्पर्धेत ग्राहक केंद्रस्थानी
- ऊर्जा क्षेत्रातील संशोधन व सहकार्यासंदर्भात महाराष्ट्र शासनाचा कॅलिफोर्निया विद्यापीठाबरोबर सामंजस्य करार
- 50-52 'इकॅमेक्स२६' ची घोषणा
- सेमीकंडक्टर म्हणजे नेकं काय आणि कुठे होतो याचा उपयोग? जाणून घ्या सविस्तर!

# **POLYCAB**

in O D

# WHAT RUNS BENEATH, PROTECTS BEYOND. POLYCAB GREEN WIRE

#### **FEATURES:**



FIRE SAFETY



**ENERGY** EFFICIENT



LEAD FREE INSULATION



SHOCK PROTECTION



LONG LASTING



Polycab Green Wire is built for large-scale commercial & residential developments where safety, reliability and sustainability are non-negotiable. An innovation at its best with lead-free, advanced fire-retardant and lower environmental impact design, Polycab Green Wire delivers dependable power while supporting greener construction.

Certified Housewire

Choose Polycab Green Wire. Choose Excellence.



#### अध्यक्षांच्या कलमातून....



उमेश रेखे प्रभारी अध्यक्ष, डकॅम

# ECAMEX 26 Situation Electrical safety & RENEWABLE ENERGY 26

नमस्कार मित्रांनो.

मंगळवार, २२ जुलै २०२५ हा आपल्या इकॅमच्या इतिहासामध्ये नोंदवला जाणारा महत्त्वाचा दिवस झाला आहे. प्रभादेवी, मुंबईच्या श्री

सिद्धीविनायक गणपतीचे आशीर्वाद घेऊन आपण याच दिवशी आपल्या आगामी 'इकॅमेक्स२६' या प्रदर्शनाची औपचारिक घोषणा केली. हा कार्यक्रम मंदिराच्या समोरील कोहिनूर पार्क या हॉटेलमध्ये सम्पन्न होत असताना एसएसईबी होल्डिंगचे स्वतंत्र संचालक मा. श्री विश्वास पाठक यांनी प्रमुख पाहुणे या नात्याने प्रदर्शनाला मनापासून शुभेच्छा दिल्या. या कार्यक्रमासाठी आपण पॉलिकॅब इंडियाचे संचालक श्री भरत जयसिंघानी, आर आर काबेलचे संचालक श्री सुधीर कासट, ग्रेट व्हाईटचे मुख्य अधिकारी श्री दिनेश अग्रवाल, अपार इंडस्ट्रिसचे युटीलीटी हेड श्री शक्तीमान मालविय, वाशी इंटीग्रेटेड सोल्यूशन्सचे श्री मदन दोडेजा, टाटा पावरचे श्री हितेश गोकाणी, सन केबलचे डॉ. कृष्णकुमार, आपले ज्येष्ठ सदस्य व कॉस्मा संघटनेचे सर्वेसर्वा श्री सतीश काझी अशा महनीय व्यक्तींना आदरपूर्वक निमंत्रित केले होते. या शिवाय इकॅमेक्स२४ मध्ये सहभागी झालेले सर्व स्टॉलधारक यांना देखील आमंत्रित केले होते.

अशा सर्व लोकांच्या उपस्थितीत श्री विश्वास पाठक यांनी 'इकॅमेक्स२६' चा पडदा उघडला आणि त्याच्या वेबसाईटचे उद्घाटन केले. याप्रसंगी इकॅमच्या सर्व रिजनचे अध्यक्ष व संचालक आवर्जून उपस्थित राहिले होते.

इकॅमेक्स२४ च्या अभूतपूर्व यशानंतर आता आपल्या सर्वांना 'इकॅमेक्स२६' देखील यशस्वी करायचे आहे. यासाठी सर्वांनी आतापासून प्रयत्नांची पराकाष्ठा करावी अशी मी सर्वांना विनंती करतो. या प्रदर्शनामध्ये विद्युत सुरक्षा आणि अपारंपरिक ऊर्जा असे दोन मुख्य विषय नजरे समोर ठेवले आहेत. यासंबंधी सविस्तर माहिती सर्वांना लवकरच कळविण्यात येईल. कार्यक्रमासाठी इकॅम टीम. आयईसीटी टीम यांनी जे परिश्रम केले त्याबद्दल मी त्यांचे अभिनंदन करतो. विशेषतः श्री अमेय कण्णव व श्री सतीश सिन्नरकर यांचा मी आवर्जून उल्लेख करत आहे.

सर्वांना श्रावणमासाच्या हार्दिक शुभेच्छा!











ONE STOP INTEGRATED SOURCING & PROCUREMENT PARTNER FOR ALL **INDUSTRIAL & COMMERCIAL NEEDS** 





### SPECIAL PRODUCT OFFERINGS FOR **PROJECT CONTRACTORS & DEVELOPERS**





Wires & Cables



Fans



**Modular Switches** & Accessories



Modular Switches & Accessories



**Modular Switches** & Accessories



**Modular Switches** & Accessories



Conduits & Accessories



Conduits & Accessories



Conduits & Accessories



Lighting



Lighting



Lugs & Glands



Cable Tray & **Busbar Trunking** 



MCB - DBs



MCB - DBs



MCB - DBs



MCB - DBs



**Ring Main Unit** 



Plug and Sockets



**EV Smart Charging** 



**Water Heaters** 





VASHI APP



#### महासचिवांच्या कलमातून.....





# ECAMEX 26 STOTE LECTRICAL SAFETY & RENEWABLE ENERGY

देवाग ठाकुर महासचिव, इकॅम

नमस्कार मित्रांनो.

दिनांक ९ जुलै २०२५ रोजी टाटा पॉवर ईझेड होम ऑटोमेशन विभागाचे प्रमुख श्री. विनोद कुमार, श्री. शाह यांनी धारावी रिसिव्हिंग सेंटरमध्ये ईझेड होम ऑटोमेशन बद्दल एक सेमिनार आयोजित केला होता. याप्रसंगी श्री. पुरन सागर, श्री. कल्पेश पटेल, श्री. विनोद शर्मा, श्री. अशोक कांबडी, श्री. शेषकुमार शर्मा, श्री. राज् वाकोडे आणि सभासद हजर होते. याप्रसंगी विशेष पाह्णे म्हणून टाटा पॉवर मुंबई वितरण कंपनीचे प्रमुख श्री. निलेश काणे आणि बिझनेस युनिट प्रमुख श्री. हितेश गोकाणी उपस्थित होते. श्री. विनोदकुमार शर्मा यांनी ऑटोमेशनचे फायदे आणि कमीत कमी नफा याबद्दल माहिती दिली. यावेळी श्री. पुरन सागर आणि श्री. कल्पेश पटेल यांनी इकॅम तसेच इकॅमेक्स २६ बद्दल सर्वांना थोडक्यात माहिती दिली.

दिनांक १० जुलै २०२५ रोजी मे. पॉलिकॅब इंडिया लिमिटेडच्या वतीने केबल टाकण्यासाठी व्यावसायिक मार्गदर्शन या विषयावर वेबिनार घेण्यात आला. केबल टाकण्यासाठी व्यावसायिक मार्गदर्शन अंतर्गत केबल्स हाताळण्याच्या. साठवण्याच्या व टाकण्याच्या योग्य पध्दती, स्थापनेपूर्वी केबलची चाचणी तसेच दरूस्ती व देखभाल पध्दती या विषयांवर मे. पॉलिकॅब इंडिया लिमिटेडच्या क्वालिटी कंट्रोलचे असोसिएटस व्हाईस प्रेसिंडेट श्री. सुरेंद्र चोकसे, श्री. मृगेश शहा, श्री. राजशेखर रेडडी, आणि श्री. चिरंजीव हे प्रमुख वक्ते होते. त्यांनी उत्तमरित्या विषय समजावून मार्गदर्शन केले. सदर वेबिनारला संचालक तसेच सभासदांकडून प्रचंड प्रतिसाद मिळाला.

अदानी इलेक्ट्रिसिटीच्या कार्यालयामध्ये मान्यताप्राप्त विद्युत ठेकेदारांना कालावधी निश्चित करण्यात आला होता. त्या संदर्भात दिनांक १८ जुलै २०२५ रोजी मुंबई संचालकांनी अदानीचे मुख्य कार्यकारी अधिकारी श्री. सूरज फलक सर यांच्याशी बैठक घेतली. याप्रसंगी पोर्टल सेवा, सबस्टेशन ओसी अंडरटेकींग बद्दल चर्चा केली गेली. अदानीचे मुख्य कार्यकारी अधिकारी श्री. सुरज फलक सर यांनी इमारत आणि वीज क्षेत्रात काम करणाऱ्या विद्युत ठेकेदारांना कधीही भेट मिळू शकेल. तसेच बाकीच्या चर्चेबाबत सकारात्मक प्रतिसाद दिला गेला.

इकॅम मुंबई संचालकांनी त्यांना इकॅमेक्स २६ बद्दल माहिती दिली आणि दिनांक २२ जुलै रोजी दादर येथे होणाऱ्या इकॅमेक्स २६ च्या Curtain Raiser Ceremony साठी त्यांना निमंत्रीत करण्यात आले.

दिनांक २२ जुलै रोजी दादर येथे इकॅमेक्स २६ ची Curtain Raiser Ceremony आयोजित करण्यात आली होती. सदर कार्यक्रमास प्रदर्शनामध्ये भाग घेणाऱ्या कंपन्यांचे प्रतिनिधी तसेच विद्युत कंपन्यांचे अधिकारी उपस्थित होते. सदर सोहळा थाटामाटात पार पडला.

सर्व सभासदांना कळविण्यात येत आहे की आपण ECAMEX 26 प्रदर्शन आयोजित करणार आहोत. त्या प्रदर्शनास यशस्वी करण्यास आपला हातभार लागणे गरजेचे आहे. आपणास मी आवाहन करीत आहे की आपण या प्रदर्शनामध्ये स्टॉल बुकींग करण्यासाठी प्रयत्न करावेत. तसेच आपणास ECAMEX 26 प्रदर्शनाच्या अनुषंगाने काही महत्वाच्या सूचना द्यायच्या असतील तरी आपण त्या इकॅम मुख्य कार्यालयाला कळवाव्यात.

आपणास नम्र विनंती आहे की आपणास जर आय.ई.सी.टी. मासिक मिळत नसेल तर आपण त्वरीत इकॅम मुख्य कार्यालयाशी ईमेलद्वारे संपर्क साधन त्वरीत कळवावे व जर आपला बदललेला पत्ता असेल तर तो ही कळवावा. हा पत्ता त्वरीत आय.ई.सी.टी. मासिकाशी संपर्क साधून त्यांना पाठविला जाईल.

ज्या सभासदांना आपले लेख किंवा आपण केलेल्या उपक्रमांसंबंधी काही माहिती आपल्या आय.ई.सी.टी. मासिकामध्ये छापण्यास द्यायची असेल तर ती त्यांनी इकॅम कार्यालयाकडे पाठवावी.

आपल्याला आपला व्यवसाय करताना काही समस्या येत असतील तर त्या समस्या आपण इकॅम मुख्यालयाला लेखी स्वरूपात कळवाव्यात. इकॅमच्या सभासदांना येणाऱ्या समस्यांचे निराकरण करण्यासाठी आम्ही कसोशीने प्रयत्न करू.

धन्यवाद!







# POWERING A WORLD OF LESS POSSIBILITIES





sales@orbitcables.com 🚷 www.orbitcables.com



#### **ORBIT WIRES (INDIA) LIMITED**

Survey No. 2450, Near Skoda Tube Ahmedabad- Mehsana Highway, Village-Rajpur, Mahesana, Taluka-Kadi, Gujarat - 382705.







#### The Editor's Desk



Satish Sinnarkar Editor, IECT



## The Indian Lighting Industry: **A Growing Market with Challenges**

The Indian lighting industry has witnessed significant growth in recent years, driven by increasing urbanization, government initiatives, and rising awareness about energy-efficient lighting solutions. The market is expected to continue its growth trajectory, with a projected compound annual growth rate (CAGR) of approximately 18% from 2023 to 2030, reaching a market size of USD 8.5 billion by 2030.

Key Drivers of Growth

Government initiatives have played a vital role in accelerating the adoption of LED lighting in India. Programs like UJALA (Unnat Jyoti by Affordable LEDs for All) and Street Lighting National Programme have promoted the use of energy-efficient lighting solutions. Rapid urbanization and infrastructure development are also driving demand for LED lighting in India, especially in commercial and industrial sectors. Additionally, the benefits of LED lighting, including low energy consumption, longer lifespan, and minimal maintenance, are becoming increasingly recognized by consumers and businesses.

Challenges and Drawbacks

Despite the growth prospects, the Indian lighting industry faces several challenges. High initial costs of LED lights may deter cost-conscious consumers. Limited awareness about the benefits of LED lighting, particularly in rural areas, is another significant challenge. The market also faces issues related to counterfeit and substandard LED products, which

impact quality and consumer trust. Furthermore, infrastructure challenges, such as limited access to electricity in some remote areas, hinder LED adoption.

**Trends and Opportunities** 

The Indian lighting industry is witnessing a shift towards smart lighting systems and IoT integration, providing opportunities for innovation and adaptation. Solar-powered LED lighting is gaining popularity in rural and remote areas due to its off-grid capabilities. As the industry continues to evolve, there are opportunities for growth and development in various sectors, including residential, commercial, and industrial.

The Indian lighting industry is poised for significant growth, driven by government initiatives, urbanization, and increasing awareness about energy-efficient lighting solutions. However, the industry also faces challenges related to high initial costs, lack of awareness, counterfeit products, and infrastructure challenges. As the industry continues to evolve, it is essential to address these challenges and capitalize on emerging trends and opportunities. With the right strategies and initiatives, the Indian lighting industry can achieve its growth potential and contribute to a more sustainable and energy-efficient future.

Friends, this issue of IECT is carrying interviews of industry leaders. We are sure that the opinions of these leaders will help us understand the future of the industry.









### Precision Tools for Every Professional's Kit...











45CF+

135P+

LCR99



4 Digit 9999 Counts Dual Display LCD with Backlight

Current upto 10A AC / DC

Voltage upto 750V AC / 1000V DC

Red & Green Light Indication To Guide I/P Terminal Selection

Infrared Remote Control Check (for 45CF+)

Bargraph







(Above 60.00V DC) (Above 36.00V AC)









































ISO 9001-2015 Certified Company

■ EL-1, MIDC Electronic Zone, TTC Industrial Area, Mahape, Navi Mumbai - 400710, Maharashtra, INDIA

Sales: +91-93233 32435 North India & Goa: +91-93244 11558 South India: +91-93242 89268 East India, M.P. & Gujarat: +91-93244 05281 Maharashtra: +91-93720 11735











ONE MISSION







Reliable Long-Lasting Affordable



### "WORLDTEK: Illuminating the Future of Lighting"

As a recognized industry leader and leading lighting supplier, WORLDTEK is committed to innovation, quality, and sustainability in all endeavors.

Parag Jhaveri

Director

Parag worldwide Pvt. Ltd.



#### Quality Control Measures for Reliability and Durability

At WORLDTEK, quality is a priority. The commitment to reliability and durability is ensured through a multi-layered quality control system:

- \* Rigorous Testing: Extensive tests are conducted at every stage of the product lifecycle, from initial design and material selection to manufacturing and pre-shipment inspections. These tests include:
- \* Functionality Tests: Ensuring products perform as intended.
- \* Durability and Fatigue Tests: Simulating long-term use to guarantee longevity.
- \* Safety Tests: High-potential (Hi-pot) tests to detect electrical leakage and electromagnetic compatibility (EMC) tests to ensure compliance with standards.
- Light Tests: Verifying brightness, color rendering, efficiency, and light distribution through integrating sphere measurements.

#### Reducing Waste and Minimizing Environmental Impact

WORLDTEK is deeply committed to sustainability and environmental responsibility. Efforts to minimize the environmental footprint are done through a holistic approach:

\* Energy Efficiency: LED lighting technology is actively

promoted and utilized in products and operations, recognizing its significant energy-saving potential compared to traditional lighting. Higher lumens per watt, extended lifespans, and improved recyclability are also prioritized in product development.

- \* Sustainable Manufacturing: Practices are explored and implemented to reduce waste during manufacturing, including optimizing material usage, incorporating recycled materials, and minimizing the use of hazardous substances.
- \* Life Cycle Assessment: The entire lifecycle of products is considered, from sourcing and production to use and disposal, to identify and address environmental impacts at each stage.
- \* Eco-Friendly Materials: Sustainable and ecofriendly materials, like bamboo and recycled metals, are researched and integrated into lighting fixtures and finishes.

#### R&D and Innovation to Stay Ahead of the Curve

Innovation is a core value at WORLDTEK. Staying at the forefront of lighting technology is achieved through continuous research and development:

- \* Investment in Advanced Technologies:
- \* Smart Lighting and IoT Integration: Smart lighting solutions that leverage the Internet of Things (IoT) are being developed and integrated. This includes features like remote control, personalized lighting

#### The Power Is Within .....

- Incorporated in 1995 at Secunderabad in Telangana State, INDIA.
- One of India's leading and fast growing cable manufacturing company, covering a wide spectrum of business segments and providing cable solutions to a host of industries across the country.
- Obsessed with a vision of delivering product of the highest quality.
- Quality and service are the cornerstones of Gloster Cables.
- Catering to the requirement of most of the India's leading Industries/ Consultants/EPC Contractors and Utilities sectors.
- Ensuring utmost customer satisfaction through prompt & personalized service.
- PAN India marketing and distribution network spread across length and breadth of the country to forge intimate relationship with our clients.

#### PRODUCT RANGE

- ► 1.1 KV Low Voltage PVC/XLPE Alum/Copper: Power & Control Cables
- ► 3.3 KV To 33 KV Medium & High Voltage HT Cables
- ► Triple Layer FRLSH Domestic Cables
- ► Industrial Flexible Cables
- ► Instrumentation Cables
- ► Braided Cables
- ► Solar Cables
- LT And HT Aerial Bunched Cables
- ► Triple Layer ZHFR Domestic Cables
- 3 Core Flat Submersible Cables
- ► PTFE Cables ► Elastomeric Cables
- ► Special Cables : Fire Alarm, Fire Survival etc.

LT CABLES

**HT CABLES** 

**AERIAL** BUNCHED CABLES

DOMESTIC CABLES

**FLEXIBLE** CABLES

FLAT CABLES INSTRUM CABLES

SOLAR CABLES

















Safety Is Not EXPENSIVE... It Is PRICELESS

#### GLOSTER CABLES LIMITED

Corp. Office: 183/184, (5-3-370 to 372-A), 2nd. Floor, Above Mody Motors, R P Road, Secunderabad 500 003 Works: Survey No.310/E & 293, NH-44, Kallakal (Vi), Manoharabad (Mn), Medak (Dt), Telangana - 502 336.

www.glostercable.com





- schedules, adaptive lighting based on occupancy or natural light levels, and integration with voice assistants and smart home systems.
- Human-Centric Lighting (HCL): HCL is advocated, designing lighting solutions that enhance wellbeing, mood, and productivity by mimicking natural light patterns.
- Design and Aesthetics: Flexible and customizable designs are embraced, utilizing the inherent flexibility of LEDs to create a wide array of lighting solutions, including bendable strips, ultra-thin panels, and modular systems.

#### **Exploring New Technologies and Materials for Future Products**

WORLDTEK is committed to pushing the boundaries of lighting technology. Currently, exploration includes:

- Multi-Protocol System-on-Chips (SoCs): These chips support multiple wireless communication protocols, enabling seamless interoperability and expanded functionalities for smart lighting devices within larger smart home ecosystems.
- Al and Machine Learning for Lighting Control: Investigation into artificial intelligence and machine learning is underway to develop more advanced and responsive lighting systems that can learn user habits, predict maintenance needs, and optimize energy consumption based on real-time data.
- Recycled and Biodegradable Materials: Constant research and integration of new recycled, biodegradable, or ethically sourced materials into product designs and manufacturing processes.

#### The Future of Exporting Lighting Products to **Different Regions and Cultures**

The global export market for lighting products holds immense potential, and WORLDTEK sees a bright future in expanding reach to diverse regions and cultures:

- Growing Demand for Energy-Efficient Solutions: The global shift toward sustainability and energy efficiency fuels the demand for LED lighting solutions across the world.
- Smart City Initiatives: Rapid urbanization and smart city development are creating substantial demand for advanced and intelligent lighting systems, particularly in Asia Pacific.
- Increased Infrastructure Development: Investments

- in public infrastructure projects and the hospitality sector in various regions, including the Middle East and Africa, are driving the need for advanced lighting solutions.
- Rising Disposable Incomes and Changing Lifestyles: Growing middle-class populations and increasing disposable incomes contribute to the adoption of sophisticated lighting solutions, particularly in the residential and commercial sectors.
- Cultural Adaptations: Attention is given to the diverse cultural preferences and aesthetic requirements of different regions, developing products and designs that resonate with local tastes and needs.

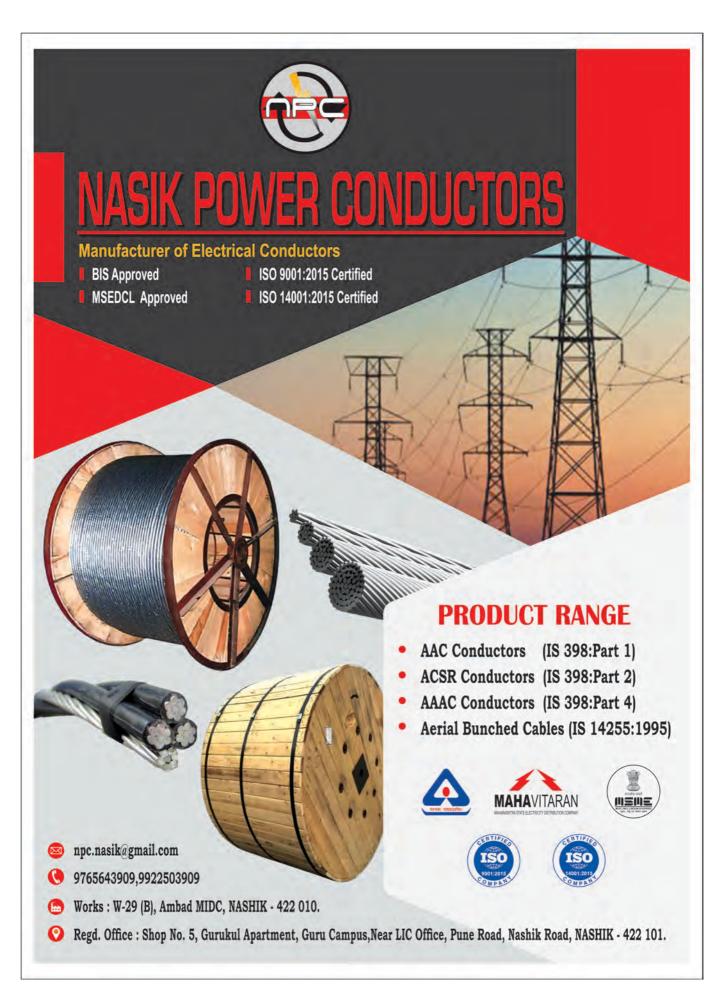
#### Trends Shaping the Future of the Lighting Industry

Several key trends are driving the evolution of the lighting industry:

- Sustainability and Green Innovation: The focus on energy efficiency, reduced environmental impact, and eco-friendly materials will continue to be a driving force.
- Smart Lighting and Connectivity: Integration with IoT, AI, and smart home systems will become the norm, enabling dynamic control and intelligent automation of lighting solutions.
- Human-Centric Lighting (HCL): The emphasis on the biological and emotional impact of light on human well-being will drive the development of adaptive and tunable lighting solutions in various environments.
- Personalization and Customization: The demand for tailored lighting solutions that cater to individual preferences and moods is increasing, leading to more flexible and customizable designs.
- Lighting as a Service (LaaS): The shift towards LaaS models, which reduce upfront costs and provide comprehensive maintenance and services, is gaining momentum.
- Circular Economy Principles: The industry will increasingly embrace circular economy principles, focusing on product longevity, repairability, and recyclability.

#### **Evolution in Terms of Smart Lighting, IoT** Integration, and Other Emerging Technologies

The lighting industry is undergoing a transformation driven by smart lighting and IoT integration:





- Intelligent Control and Automation: Smart lighting systems, powered by IoT-enabled sensors and advanced algorithms, will enable automated and dynamic control of light levels, color temperature, and scheduling, optimizing energy consumption and user experience.
- Enhanced Connectivity: Lighting fixtures will become integral parts of larger smart home and smart city ecosystems, seamlessly communicating and interacting with other IoT devices and systems like thermostats, security cameras, and traffic management platforms.
- Data-Driven Decision Making: The collection and analysis of data from smart lighting systems will provide valuable insights into energy usage, occupancy patterns, and environmental conditions, enabling data-driven decision-making for optimized lighting and city planning.
- Personalized Experiences: Al and machine learning will personalize lighting experiences based on learned user habits, preferences, and circadian rhythms, creating more comfortable and productive environments.
- Emerging Technologies: The adoption of technologies like Li-Fi for high-speed data transmission and advanced communication protocols like Bluetooth mesh and multi-protocol SoCs will further enhance the capabilities and flexibility of smart lighting systems.

#### **Specific CSR Initiatives or Programs**

WORLDTEK believes in making a positive impact on the communities served and the environment. While specific programs may evolve, there is a commitment to initiatives focused on:

- Energy Access and Education: Providing sustainable and affordable lighting solutions to offgrid and underserved communities, potentially through solar lighting systems.
- Skill Development and Training: Investing in training programs for young students and individuals to become qualified electricians and solar technicians, empowering them with valuable skills for future employment.
- Environmental Stewardship: Promoting sustainable manufacturing practices, responsible sourcing, and waste reduction throughout operations.
- Community Engagement: Actively engaging with local communities, potentially through volunteering initiatives and supporting

- organizations aligned with core values, according to World Wide Technology | WWT.
- Humanitarian Aid: Exploring opportunities to provide lighting solutions in humanitarian crisis situations to aid relief efforts and improve safety.
- 9. Experience with Architectural Lighting Design and Installation
  - WORLDTEK possesses extensive experience in architectural lighting design and installation, transforming built environments through the skillful application of light:
- Enhancing Aesthetics and Functionality: Designs seamlessly integrate with architectural spaces, enhancing aesthetics, improving functionality, and creating immersive experiences.
- Wide Range of Applications: Lighting designs have been successfully implemented in diverse settings, including residential, commercial, industrial, and public spaces, showcasing the versatility of solutions.
- Creative and Innovative Solutions: Advanced LED technologies and dynamic lighting techniques are utilized to create custom solutions, whether it's accentuating facades with linear wall washers or transforming interiors with cove and strip lighting.
- Focus on Energy Efficiency and Performance: The architectural lighting solutions emphasize energy efficiency and luminous efficacy, utilizing highquality LED products that provide optimal illumination while minimizing energy consumption.
- Collaboration with Professionals: Collaboration with architects, designers, and other professionals ensures that lighting designs align seamlessly with the overall vision and functional requirements of each project.
- Expert Installation and Support: Experienced teams and a network of partners ensure professional and efficient installation, backed by comprehensive support and maintenance services.

WORLDTEK is excited about the future of the lighting industry and is committed to leading the way in innovation, quality, and sustainability. WORLDTEK believes that by embracing new technologies and responsible practices, a brighter, more sustainable, and human-centric world can be created, one light at a time.



# ASHIDA Smart Solutions for Power Protection & Control









#### NUMERICAL PROTECTION RELAYS

ASHIDA Electronics have introduced Enhanced and Modular series of Relays for Feeder, Transformer & Motor Protection.

ASHIDA is a leading Indian manufacturer & supplier of complete range of Numerical Protection & Auxiliary Relays. Protection Relays are used in Power Transmission & Distribution substations to protect instruments from getting damaged. ASHIDA is the first company in India to develop a range of Static and Numerical Relays indigenously. Additionally, ASHIDA manufactures Control & Relay Panels and have its own SCADA System with all latest specifications & communication mediums like IEC 61850. ASHIDA is the main supplier of Protection Relays to all the Electrical Utilities in India & abroad.

#### Numerical Protection & Auxiliary Relays for Power Generation. Transmission & Distribution

**Feeder Protection Relays Transformer Protection Relays Distance Protection Relays Traction Protection Relays** 

Self Powered RMU Protection Relays **Capacitor Bank Protection Relays Motor Protection Relays Auxiliary Relays** 



ASHIDA House, Plot No. A-308, Road No. 21, Wagle Industrial Estate, Thane - 400604, INDIA

: +91 - 22 - 2582 7524/6129 9100 : +91 - 22 - 2580 4262 Email : sales@ashidaelectronics.com Web : www.ashidaelectronics.com















# "Prolite is aligning with the new changes in time"

Mr. Varun Joshi
Director
Prolite Autoglo Ltd.

Prolite Autoglo Ltd. is world renowned in the field of egress route and escape related products. Awarded 'The Most Innovative Product Company', in a Fire India show Prolite now makes its 'Elegante' entry in the Way Finding segment.

 Quality Control Measures for Reliability and Durability

Prolite is particular about quality control right from procurement of raw material till manufacture and supply. We have a separate department to look after quality control and conduct random checkscwhere necessary

 Exploring New Technologies and Materials for Future Products

Smart, monitored and self contained Emergency lights and systems are the new trend so Prolite is aligning with the new changes in time, all the time.

 The Future of Exporting Lighting Products to Different Regions and Cultures

India remains a buge more less in itself for Drelif

India remains a huge market in itself for Prolite

but we have grown and expanded beyond borders to the Middle eastern region, SE Asia, Europe and other global markets

 Trends Shaping the Future of the Lighting Industry

The future of lighting is addressable, digital, monitored products and the challenge is to not just supply but ensure functionality 24x7 of emergency paraphernalia we make and sell

 Evolution in Terms of Smart Lighting, IoT Integration, and Other Emerging Technologies
 Emergency lights need to conform to mandated standards and there is little scope for major changes here. This is what makes them different from ordinary lighting products





# **Eetamax New Factory**

Inaugurated on 2nd March 2025
4000 lights per day manufacturing capacity
Fully automatic SMT line from Hanwha
JEDEC compliant & ESD safe manufacturing
Full-scope R&D lab, going for NABL soon
Smart Factory with our own intelligent
Building Management System (BMS)









Streetlights
Floodlights
High Bay lights
Tunnel lights
Stadium lights
Cleanroom lights
Paint booth lights
Flameproof lights
Inspection lights
Office Lights
Emergency Lights

DALI lighting solutions
Light Management System
Energy Management System
Building Management System
Tunnel Management System
CCMS for streetlights
ILM for streetlights
Daylight Harvesting
Sensor Based Smart lights
Auto scheduled dimming
Auto day/night ON-OFF





EETAMAX ENERGY SOLUTIONS PVT. LTD.

L-215/1, MIDC, Ahmednagar - 414111

Email: marketing@eetamax.com | Mobile No. +91 - 9552002173



# " **NEW TECHNOLOGY: LIGHTING AS A SERVICE** (LAAS) IS AN ALL INCLUSIVE **BUSINESS MODEL** ""



SHARMILA KUMBHAT **DIRECTOR** KLITE INDUSTRIES PVT LTD

Ms. Sharmila Kumbhat, Director K-Lite has responded to the questions regarding lighting inudstry. A few excerpts are presented here for the readers.

"Established in 1977, K-lite is renowned for its extensive range of high-quality architectural luminaires and poles that cater to diverse applications and design preferences."

Since its inception, K-lite through it manufacturing units in focusses on the production of sustainable and efficient LED luminaires. K-lite's products meet stringent quality standards while embodying elegant aesthetics.

#### What quality control measures do you have to ensure the reliability and durability of your products?

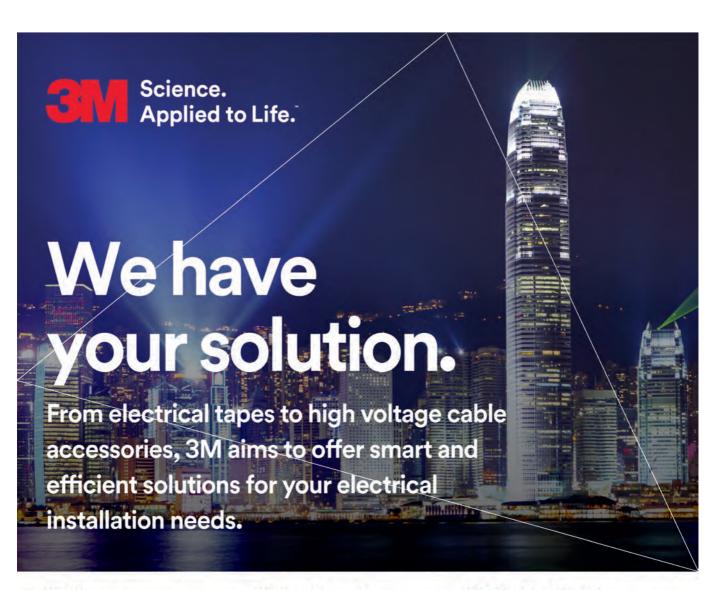
Establishing the NABL accredited optic lab right at the manufacturing plant and equipping the same with all testing and validation facilities is a major step to ensure the reliability and durability of our products. Over and above we have a full fledged QC team headed by a senior consultant and with a support team of qualified engineers and technicians in each area

#### Please describe your approach to reducing waste and minimizing environmental impact in your operations?

The step towards a green economy starts with the architectural design of all the K-Lite manufacturing units, which are installed with both rainwater and solar power harvesting systems.

Installing solar panels for 160 KW for supplemental power generation and the rainwater-harvesting facilities provide water for all the units thereby minimizing both the electricity and water loads on the local supply grids. Apart from this, the entire lighting systems in all units have been switched over to highefficiency LED lighting coupled with precise optical control to minimise power consumption and ensure longer life of the lighting system.

The use of CAD and 3D printing techniques during the initial designing and prototyping stages of product development blend software with hardware technology to reduce and optimise the usage and wastage of raw materials. The production process uses high quality raw materials Aluminium and marine-grade 316L stainless steel with low contents of copper and other hazardous heavy metals, thereby ensuring safer and longer lasting products. Shot blasting process is a method for removing corrosion or grease, and prepare the surface for painting or powder coating. This process eliminates the usage of harsh acids or chemicals to ensure no hazardous wastes are disposed off into the environment. Other processes such as powder coating also do not use any volatile organic compounds or toxic



3M Power
Cable Accessories



Electrical Solutions you can rely on.

3M Locating and Marking Solutions



Trace the underground assets with ease.

To know more, connect with 3M specialists. Scan the QR code or write to us.

3M Electrical Markets Division, 48-51, Electronic City, Hosur Road, Bengaluru, Karnataka – 560 100 | India

Toll Free #: 1800-425-3030 | Email: 3mindiaelectrical@mmm.com

Mobile: +91 99302 12503 (Regional Sales Head)

3M Electrical Insulation & Sealing Tapes



Designed to make your job easier.



neavy metals. Plastic has been phased out completely with a "NO Plastic" policy as the manufacture and disposal of plastic can be a big issue for the environment. The over sprayed powders in the powder coating process are also recycled and reused

The aim is to create LED lighting products with futureproof components that can be easily serviceable and

upgradabl e to last longer with the option of transferrin g to future modes of wireless control technology

Even the packing and shipping of all the K-Lite products is done in the most environme ntally responsibl





e manner by using completely recycled materials for packaging with no use of plastic and Styrofoam.

#### R&D and innovation is very important in every industry. How are you staying ahead of the curve?

The range and diverse nature of K-Lite outdoor luminaires to suit every need are by themselves a standing proof of our commitment to R&D and innovation. A full fledged Research Team headed by senior designers and supported by a fully equipped NABL accredited laboratory, integrated with the factory for developmental activities, allow us for fast developments and redesign to meet the clientele expectations and requirements. For outdoor luminaires we are proudly branded as pioneers for new luminaires and special applications

#### Are there any new technologies or materials that you're exploring for future lighting products?

A new concept that is fast gaining currently within the lighting industry is that of - Lighting as a Service (LaaS). This all-inclusive subscription-based business model

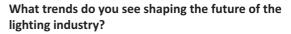
removes financial hurdles and relieves clients of the hassles of maintenance, ownership and upfront investments. The pay as you go model covers maintenance, optimization, and service efforts as clients pay only for the light they use. The business model is geared at making LED lighting a much more affordable option by breaking the costs down into smaller parts

> over time. However the applicability of LaaS within the Indian context requires better legal strategies and policies in terms of insurance and security of the investments made by the lighting manufacturers.

**Exporting lighting** products to different regions and cultures world over has a great future. Please comment.

The basic requirement for exporting of lighting fixtures to various countries, the

manufacturer has to have the approval of their products to conform to the standards of the respective country over and above the greater challenges. The culture, ethos, local conditions, financial capability, adaptability etc., have all a strong influence in their choice of lighting fixtures and the light sources. A simple example is the reaction of public in Mumbai when they switched over the marine drive lighting from yellow lights into cool white. Therefore, we have to study the respective culture before we proceed to supply/ manufacture their requirements



Gone are the days when the clients will be happy with a good lighting level as they choose. LED has transformed the whole scenario and the preference of consumers have drastically changed due to the various options available to them through colour tuning to suit different moods and activities, smart controls etc., The emerging trend in lighting design has to address





#### **CORPORATE OFFICE**

150 Upen Banerjee Road, Kolkata 700060 Email - info@bentecindia.com MUMBAI OFFICE - BENTEC INDIA LTD, 504, Aditya Banara Heritage, Behind Orbit Mall, Mind Space off Link Road, Malad ( West ), Mumbai - 400064 (Maharashtra), Phone - 022 28712686/87, Mobile - 09324287968/ 7303928980

#### **BRANCHES**

Ahmedabad, Bangalore, Bhubaneshwar, Chennai, Cochin, Delhi, Hyderabad, Indore, Jaipur, Lucknow, Mumbai, Nagpur, Patna, Punjab, Pune, Raipur, Ranchi, Srinagar, Surat.



- (a) Human-Centric Lighting: Mimicking natural daylight patterns by adjusting color temperature throughout the day to support circadian rhythms and enhance well-being.
- (b) Smart Controls and Integration: Voice-activated systems, app-based control and integration with other smart home devices for personalized lighting experiences.
- (c) Color Tuning: Precise control over color temperature to switch between warm and cool tones depending on the desired ambiance,
- (d) Minimalist Fixture Designs: Sleek, streamlined fixtures with clean lines and integrated LED technology. and (e) Natural Day Lighting: Incorporating natural light patterns and color variations to connect occupants with the outdoors.

#### How do you see the lighting industry evolving in terms of smart lighting, IoT integration and other emerging technologies?

Smart cities use Internet of Things (IoT) devices such as sensors, lights, and meters to collect and analyze data. The cities then use this data to improve infrastructure, public utilities and services, and more... Smart cities ensure that their citizens get from point A to point B as safely and efficiently as possible. IOT usage has facilitated for (a) Smart parking (b) Smart Street lighting control, (c) waste management. etc.,. Transformation of all cities (Tier 1 and Tier 2 to start with) has potentially increased bulk orders to the manufacturers and in particular the lighting business and the demand is expected to grow fast in the years to come LED, as a light source is the most energy efficient source compared to the earlier incandescent , FTL/CFL/ MV/ SV/ Metal Halide etc., and its life span is around 50000 burning hours. Sustainability is mainly addressed through reduced energy consumption due to the switching over to LED on a mass scale which has already proved its worth by reduction of environmental pollution levels. Over and above the long life span of these sources has also contributed to sustainability. By virtue of the Internet of Things (IoT), smart controllers and controllable colour changing options, the Architects can easily create comfortable and productive work spaces while minimising unnecessary lighting. Tactfully the designers also incorporate day light harvesting and utilise reflective surfaces to distribute natural light effectively

Consequent to the development of smart lighting, the lighting industry is integrating smart lighting systems into architectural projects by incorporating connected LED fixtures, sensors, and control hubs that can be

seamlessly managed through apps, allowing for customized lighting scenes, automated adjustments based on occupancy or daylight levels, and remote control, ultimately enhancing the user experience and promoting energy efficiency in both residential and commercial spaces. The challenges in such attempts are (a) ensuring inter-operability between different systems, (b) addressing privacy concerns related to data collection, and (c) designing aesthetically pleasing fixtures that integrate seamlessly with the architecture

.Beyond functionality, lighting has become an essential tool in architectural expression. Lighting is now being used as a design element to enhance the aesthetics and atmosphere of a space. In architectural lighting design, additional design elements come into play a significant role.

They are mainly to highlight the architectural features, bring into focus the textures and materials, manipulate shadows etc.,.The designers can also bring into play the emotional tone of a space through warm lights to create a sense of comfort and intimacy and through white cool light, feelings of sophistication and modernity. In turn, the lighting solutions are tailored to the desired mood and atmosphere

#### Are there any specific CSR initiatives or programs that you're particularly targeting?

Our participation in the EPR scheme of Govt of India for e-waste generation retrieval and recycling through authorised recyclers is by itself a CSR compliance. We have been consistently contribution towards green initiatives all around our workplace and vacant spaces in our units and the surroundings. The cleanliness of our manufacturing areas and the greens around our units are proofs of our commitment

#### Please share your experience with architectural lighting design and installation?

The lighting industry has seen significant advancements in both design and technology in recent years. Application of LED in architectural lighting has scaled up to a very high level and therefore the associated demand to get (a) more light per watt for effective energy savings, (b) design flexibility with controllers, (c) dimming and colour options etc., have resulted in some exciting innovations in LED technology to shape the future of architectural lighting . We have already been experiencing the smart lighting systems and the impact of Internet of Things (IoT) for intelligent controls d personalised lighting experience, application of geofencing under smart lighting controls etc.,

# POWER = FLEX® Wires & Cables

IS: 17048

CM/L: 6500061806





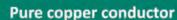


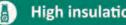
Approved by

















Eco friendly wire



20% High current carry capacity



Wire with added Heat resistance & Flame retardant properties



#### Kamadhenu Wires

Reg. Office & Works Coimbatore - 641 108

Tel: +91 422 240 3194, +91 422 240 0287

E-mail: corporate@powerflex.co.in

Branch Offices:

Banglore, Pune, Secunderabad, Chennai

www.powerflex.co.in





### **How Light Pollution Harms Health across India**

In September 2024, a 38-year-old woman consulted Narendra Kotwal, director of endocrinology at Paras Health, Panchkula. She reported persistent fatigue, difficulty falling asleep, irregular menstrual cycles, mood disturbances such as irritability and low mood, and had gained 5 kg over six months. The woman works nights at a call centre, and lives close to a brightly lit digital billboard.

On clinical evaluation, Kotwal--a retired lieutenant general in the Indian Army and president of the Endocrine Society of India--noted that the patient was overweight, and exhibited features suggestive of insulin resistance--skin tags, a high waist-to-hip ratio, and a large neck circumference--indicating a pre-diabetic state. That is not odd: A 2023 study showed that 136 million Indians are pre-diabetic, as we reported in August that year.

The patient also had pronounced dark circles under her eyes. Laboratory investigations revealed subclinical hypothyroidism and elevated evening cortisol levels, which disrupt the body's natural stress response and sleep cycle.

Kotwal attributed her condition primarily to light pollution or photo pollution--chronic exposure to artificial light at night during biologically-intended sleep hours.

Streetlights, illuminated billboards, neon signage, industrial and office lighting during night shifts, household lighting, and external security lights are the common sources of light pollution.

Kotwal's prescription started with a series of light hygiene measures: installing blackout curtains, wearing an eye mask during sleep, and using blue-light blocking glasses after sunset. Blue light is emitted by electronic gadgets such as smartphones and tablets. She was also advised to avoid screens for at least two hours prior to her intended sleep time.

To restore the patient's circadian (24-hourly) rhythm through chronotherapy, Kotwal recommended scheduled bright light exposure in the early evening to increase alertness during her desired wake phase, followed by a gradual dimming of ambient light to cue sleep readiness.

Stress management practices, including mindfulness and deep-breathing exercises, were also advised. Regular monitoring and control of the thyroidstimulating hormone and of blood glucose levels formed an essential component of her long-term care.

Diligent adherence to this integrative regimen



helped the patient experience significant recovery. However, Kotwal noted that in certain individuals, especially those with persistent sleep disruption and heightened stress, melatonin supplementation or sleeping pills may be required. Left unaddressed, such circadian misalignment may put individuals at the risk of--or exacerbate--metabolic disorders like type-2 diabetes.

Anoop Misra, chairman, Fortis-C-DOC Centre of Excellence for Diabetes, Metabolic Diseases and Endocrinology, says clinical practice is increasingly showing up patients of hormonal imbalances and metabolic dysfunction such as diabetes, where light pollution and the ensuing stress and sleep disturbances are suspected contributors.

This is, perhaps, an outcome of 80% of the world living under light-polluted skies, according to a world atlas of artificial sky luminance generated in 2016.

Misra stressed the need to establish a direct cause-and-effect relationship between light pollution



#### Contact us on

1800 212 2020 Info@fevino.com www.fevino.com

#### **FEVINO INDUSTRIESE LLP**

Corporate Office: Sr. No. 36/1/1,Sinhgad Rd, Near Lokmat Press, Vadgaon Khurd, Pandurang Industrial Area, Pune - 411041., India.



and metabolic disorders through controlled studies, which India has few of. However, a review of health studies conducted overseas shows that light pollution has a severe detrimental impact on human health, causing mental health issues, cancer and Alzheimer's.

#### How artificial light at night causes disease

Being exposed to artificial light at night reduces the production of melatonin, popularly called "the hormone of darkness" since it is produced at night. Insufficient melatonin, in turn, disrupts the body's circadian rhythm, the biological clock regulating the sleep-wake cycle. The fallout of this isn't just the obvious sleep disturbances--exacerbated metabolic, hormonal and immunological imbalances are some of the other outcomes.

A study published in Sleep and Vigilance in January 2021 described the role of melatonin in the development and growth of cancer, immune activity, anti-oxidation and free radical scavenging (neutralising free radicals that can potentially harm healthy cells and tissues). Co-author Manisha Naithani, professor of biochemistry at the All India Institute of Medical Sciences, Rishikesh, explained that the damage starts in the part of the brain called the suprachiasmatic nucleus, when it receives light signals from photosensitive cells in the retina. The suprachiasmatic nucleus is a part of the brain, located in the front part of the hypothalamus, the central control of the endocrinological system. It works as the brain's central clock, regulating the daily rhythm of the body.

Naithani's study cites epidemiological evidence supporting the cancer link. "A Spanish study showed greater breast cancer risk and prostate cancer risk in people exposed to higher artificial light levels at night," she said. "An Israeli study found a 73% increase in breast cancer incidence in areas with high night-time light."

"Female shift workers such as nurses and police personnel have a higher breast cancer risk (see here and here)," she said.

Naithani pointed out that insufficient sleep is associated with hormone-sensitive cancers, meaning cancers that develop as an outcome of hormonal disturbances, such as breast, colorectal and endometrial cancers.

Some other side effects of exposure to artificial light at night are weight gain, gut inflammation, mood disorders and low resistance to environmental and emotional stressors.

A review study published in August 2024 established a clear link between light pollution and sleep disturbances leading to mood alterations, a finding in line with psychiatrists' clinical experience.

"Poor sleep or insomnia is closely tied to depression and anxiety," said Kersi Chavda, consultant psychiatrist, P.D. Hinduja Hospital & Medical Research Centre, Mumbai. "People living in brightly lit urban areas often report feeling more stressed, anxious, or down. Night-time light exposure also makes seasonal depression worse for some, since the natural contrast between night and day gets blurred. Some victims find it harder to concentrate and think clearly during the day."

Both Naithani and Chavda cited the blue light from a cell phone, and LEDs, as a key contributor to light pollution. "Blue-enriched light affects the suprachiasmatic nucleus the most, causing chronic stress and potentially triggering inflammation and lowering immunity," said Naithani.

"Children, shift workers and those already dealing with mental health challenges are most vulnerable," added Chavda.

Higher outdoor night-time light has also been linked with a higher prevalence of Alzheimer's disease. In fact, it was found to be a bigger risk factor for Alzheimer's than factors such as alcohol abuse, chronic kidney disease, depression, heart failure and obesity, according to a study published in Frontiers of Neuroscience last year.

The challenge, Naithani said, is that the "potential detrimental effects of artificial light are not known to all, the hidden perils of light are yet to be brought in full public knowledge so that night-time light can be dealt with effectively."

#### Low awareness among those most exposed to light pollution

An online survey published in the Journal of Urban Management in September 2022 found very low awareness of light pollution among Indians aged 16 to 65 years--the age group that is most likely to have a nightlife and be exposed to various kinds of light pollution that the study described, such as light trespass, skyglow, over-illumination, light clutter and glare (see box).



# STHIRA LIGHTING

# Complete Lighting Solutions, All Under One Roof



#### We offer

- Industrial, Commercial,
- Residential & Institutional Lighting
- Decorative Poles

#### **Authorised Dealers:**

### Wipro | Klite | Legero | Luker

- Quality Products
- Competitive Pricing
- Timely Delivery
- Expert Support

Gat No 1552, Shelar Wasti, Dehu Alanndi Road, Chikhali, Pune - 411062 Call: 8767993029

email: sales@sthiralighting.com | website: www.sthiralighting.com

Lighting Spaces with Precision and Style

When respondents were asked how often they had heard of light pollution, 57% replied they hadn't heard of it at all. When they were asked to explain light pollution, some of them said it referred to "violation of UV and other harmful rays in the sunlight", "pollution which is not very harmful" and "maybe something related to environment".

Consequently, the authors concluded that the lack of awareness extended the threat associated with light pollution.

Public lighting is widely perceived to contribute to safety but research does not prove this link. In fact, a study conducted in the UK showed that darkness does not increase the risk of certain types of crime. "Outdoor lighting may lower safety by making victims and potential theft articles more easily visible," said Tanya Bedi, assistant professor, Department of Architecture, School of Planning and Architecture, Bhopal.

#### Poor enforcement allows light pollution to grow

Artificial light at night has been shown to increase with the growth of a country's gross domestic product (GDP). But this association is deeper. It's not the GDP volume as such that increases night-time brightness but the physical expansion of cities through real estate, highways, and urban sprawl, explained Bedi.

Essentially, "as a nation develops, infrastructure indicators such as road and streetlight density contribute to brightness levels," she said.

Studies in India comparing light pollution over time show how much more bright the night sky has become.

A study by Bedi and others at the School of Planning and Architecture, Bhopal, identified Bengaluru, Kolkata, Hyderabad, Delhi and Mumbai as India's most polluted cities from the perspective of light. Their research also found streets with illumination four times the Indian Standards recommendation.

A key reason for the excessive increase in nighttime luminosity is the outburst of development with no strict regulations.

"Urban local bodies like municipal corporations, development authorities, and gram panchayats are responsible for public lighting," said Bedi. "But compliance with the Indian Standards and the focus on curbing light pollution is usually hindered by a lack of awareness and specific regulations."

Bedi's study found the rampant use of lowmounted and densely packed luminaires, non-cut-off fixtures (fixtures that cannot direct the light downwards rather than upwards), and lamps of more wattage than required. Both administrative and local level measures are needed to reduce light pollution, she says.

Mumbai resident Nilesh Desai complained to the collector of Mumbai City about flood lights installed in the Wilson Gymkhana and the Police Gymkhana in Mumbai in 2017. Desai, who lives in the area, was disturbed by the excess lighting at night. The collector took prompt action, ordering the lights to be switched off at 10 p.m., and set up in a way that no resident is disturbed. He also instructed all gymkhanas to get prior permission to install lights.

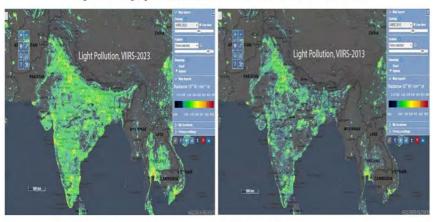
Since then, Desai has also complained to the Brihanmumbai Municipal Corporation about lighting on construction sites that work round the clock, and digital hoardings, both of which are meant to be switched off at 11 p.m.

The challenge is: "after the pandemic no

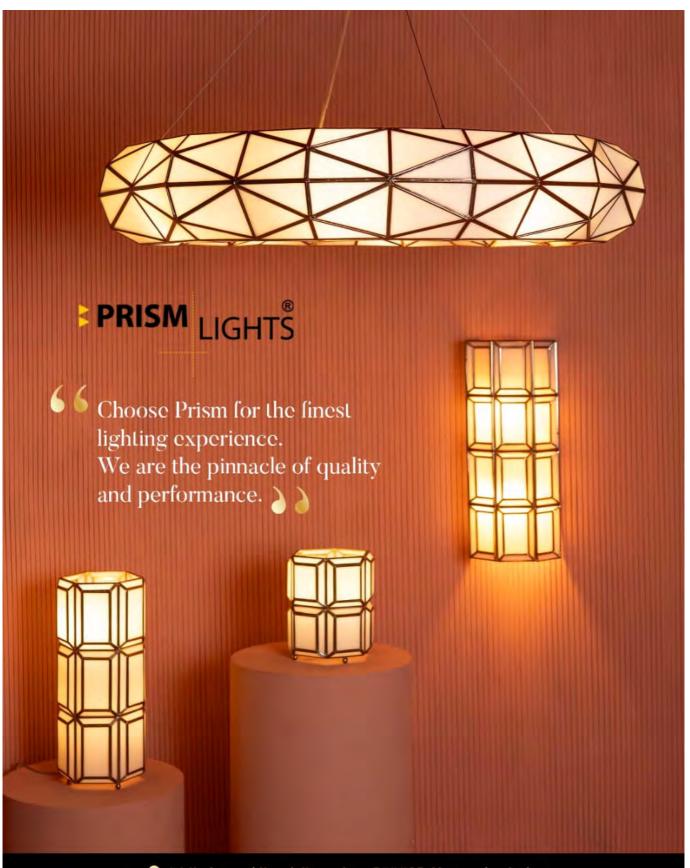
enforcement is happening," said Desai. "Night matches in the Police Gymkhana start at 11 p.m., it is a pity that awareness about light pollution is very low. I have written to the police commissioner to switch off the Police Gymkhana lights after 10 p.m. but no action has been taken so far."

Around the time Desai complained about light pollution from the gymkhanas near Marine

Comparison of Light pollution in India between 2013 and 2023 (VIIRS-2013 & 2023)



Source: July 2024 study by Hasibur Rahaman Molla, Journal of Global Resources





Lines, Sumaira Abdulali, founder of Awaaz Foundation, a not-for-profit working on environmental issues, also studied light pollution in Mumbai.

"We found that coloured LED lights put up at Juhu beach for a 'beautification' project was contributing to light pollution," Abdulali told IndiaSpend. "When we inquired, we were told that they were for safety but the light was focused and coloured so it could never serve to increase safety."

"A review of street lighting on Mumbai's main roads showed that it is quite effective in lighting up roads and isn't intrusive," added Abdulali. "However, what is intrusive and is getting worse over the years is lighting during festivals, and in recent years, digital hoardings, some building façades and construction sites, and advertisements of new properties. All these lights are intrusive, especially for drivers, in areas of natural beauty such as sea-fronts, and in residential areas, unless you use black-out curtains. Most people don't use these, and why should they?"

Abdulali wrote to the BMC and objected to the BMC's proposed hoarding policy, opposing brightly lit and moving digital hoardings as a safety hazard for drivers and a health hazard in residential areas. She was even called for a hearing in late 2024, but nothing has come of it as yet, she said.

IndiaSpend has reached out to the offices of the commissioners of the Brihanmumbai Municipal Corporation, the Municipal Corporation of Delhi and the Municipal Corporation of Greater Bengaluru. We will update this story when we receive a response.

### What must be done to protect India from light

A salient characteristic of light pollution is that it is localised and hence controllable. Unlike air pollution, it doesn't spread on a windy day.

"Government authorities should promote better lighting design," said Bedi. "State governments should adopt reference standards to control existing and proposed external lighting usage so that the concerned authority--municipal corporations in urban areas and gram panchayats in rural areas--can take necessary action towards responsible parties to resolve light nuisances and enforce dimming schedules for nonessential lighting during off-peak hours. Also practical issues like how tender specifications are framed, and limited technical capacity for monitoring lighting design must be addressed."

Practical strategies to mitigate light pollution include mandating the use of full cut-off luminaires and environment-friendly backlight-uplight-glare (BUG) rated lighting fixtures to minimise glare and skyglow, said Bedi. "Further, energy efficiency concerns have pushed the widespread adoption of LEDs, but warm-toned LEDs can help reduce circadian rhythm disruptions in both humans and wildlife."

Zoning can also play a key role in reducing light pollution. Creating lighting environmental zones, particularly in ecologically sensitive or biodiversity-rich areas, would allow for more adaptive and localised control, said Bedi. "Ward-level prioritisation maps would support a phased implementation approach, targeting the most ecologically vulnerable or lightpolluted areas first."

A lot can be done. But the experience of those who have complained shows that so far, light pollution isn't being taken seriously enough.

Courtesy: IndiaSpend



#### MNRE notifies amended guidelines for PM-Surva Ghar Yojana

The Ministry of New and Renewable Energy (MNRE) has notified amendments in guidelines for implementation of PM-Surya Ghar: Muft Bijli Yojana for the component of central financial assistance (CFA) to residential consumers.

According to the amended guidelines, the state or union government can now supplement the CFA given by the central government with an additional subsidy for rooftop systems. Furthermore, under the revised CFA structure of the PM-Surya Ghar Yojana, residential consumers will receive Rs 30,000 per kW for the first 2 kW of the solar capacity. An additional 1 kW capacity will attract Rs 18,000 per kW whereas no subsidy is available for capacities beyond 3 kW. Special category states and union territories have slightly higher CFA which is Rs 33,000 per kW for the first 2 kW and Rs 19,800 per kW for the next 1 kW. Additionally, group housing societies and residential welfare associations can also use CFA for common facilities such as lighting and electric vehicle charging. In such a scenario, CFA will be limited to a maximum of 3 kW per house, capped at 500 kW overall. Only projects with modules manufactured domestically and solar cells will be eligible for CFA. Further, the amended guidelines include a five year mandatory maintenance period by vendors and outlines penalties and de-registration in case of poor service.



### **ELLE ELECTRICALS PVT. LTD.**

Goregaon (E), Mumbai 400 063. Maharashtra, India. | Customer Care : 022 4005 8914. E mail : support@elleys.group | Website : www.elleys.group





## Our brand name "Eeta-Max" means maximum efficiency

Mr. Dilip Joshi CEO Eetamax Energy Solutions Pvt Ltd.

Eetamax is a manufacturer and supplier of high-performance industrial lights and lighting control solutions. With over two decades of experience in the lighting industry Eetamax we offers most energy efficient. The solutions are designed to include features like Daylight Harvesting, dimming, scheduling, energy monitoring, and fault detection & diagnosis. lighting solutions with high efficacy. Our Core competence of Eetamax is developing, manufacturing, and selling industrial and infrastructural purpose lighting systems.

#### What quality control measures do you have to ensure the reliability and durability of your products?

Eetamax has a state-of-the-art new factory having production capacity of 4000 streetlights per day. For quality assurance at this scale, we have systems in place for Inward Quality Check of all raw material components. All the finished goods are inspected 100% on-line testing for electrical and safety tests. In every lot, we also conduct tests on samples for photometry, thermals, and ingress protection from dust and water. We have an inhouse SMT line from Hanwha Korea. Being a fully automatic setup, it ensures excellent quality in our EMS production. Apart from this, we understand that LEDs, being electronics, need to be manufactured in JEDEC compliant environments. Accordingly, our entire factory production area is designed to be a centrally AC, dust free, and ESD safe. Our manufacturing processes follow the ISO:9001-2015 guidelines.

 Please describe your approach to reducing waste and minimizing environmental impact in your

#### operations?

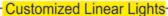
Our primary responsibility as lighting manufacturers, is to design, manufacture, and market lights which consume the least amount of energy for delivering the required illumination. Our brand name "Eeta-Max" also means maximum efficiency. Even when we used to make fluorescent lights, we used to deliver higher lumen efficacy and deliver energy savings for our customers. With LEDs also, we have developed and installed streetlights which deliver up to 180 lm/W system efficacy. We believe that delivering this benefit of energy savings to the world is our largest impact on the environment. At the same time, we also drive sustainable initiatives on our premises such as solar power generation, and full-fledged BMS including DALI based daylight harvesting, Energy Management System, and Water Monitoring System at our factory.

 R&D and innovation are very important in every industry. How are you staying ahead of the curve?

Our business model has always been about

# **ActiveStar Lighting LLP**

An ISO 9001-2008 Certified Company



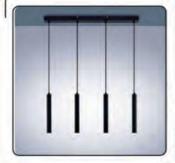








Customized Cylinder Lights-









Customized Suspended Lights -



































Gr. Floor 06, Parmar Techno Center, Phase 04, Vasai Phata, Vasai East 401208 Palghar Room No -19, 2nd Floor, Ajmera House, Next to BEST Building, Opp GT Hospital, Pathakwadi, Loharchawl - 400002 | Tel: 022 49749548 Mob: 8369971499 / 9867313994 / 9820056103 Email:inquiry.activeled@gmail.com | Web.: www.activeledlighting.com



staying ahead of the curve technologically. We have a team of product designers, and a fullfledged R&D lab in our facility. It has a dark room and LM79 Type-C Goniophotometer, 0.5m and 2m photometric integrating spheres, programmable environmental chamber, IP6x dust setup, IPx5 and IPx6 water test setup, Temperature Controlled Oven, ISTMT temperature rise test setup, Power Analyzer, Driver Testing Machine, Hi-Pot Test, Insulation Test, etc. Our R&D initiatives are focused on 3 aspects - firstly to deliver higher efficacy and more energy savings, secondly to integrate IoT smart applications with our lights, and thirdly to develop special application niche products such as tunnel lights & automation system, paint booth lights, inspection application lights, etc.

## Are there any new materials or new technologies that you are exploring for future lighting products?

We are a member of the international DALI alliance. We regularly execute lighting automation projects based on DALI. We are keenly looking forward to the newer developments in D4i and wireless DALI. We are also keen on exploring polymer-metal hybrid materials for making robust yet lightweight light fixtures. Most importantly, we look forward to the advancements in AC LED technology which will make it more reliable and suitable for use in Indian Outdoor Lighting environments with negligible failures.

## **Exporting lighting products to different regions** and cultures world over has a great future. Please comment.

India today is poised for growth with support from various Government initiatives, as well as a robust electronics manufacturing ecosystem. The Indian lighting market is approximately one tenth the size of the global lighting market. At Eetamax, we have already exported to 3 countries and are exploring associations with partners overseas. We firmly believe that compared to our neighbor China, exports is an avenue far less explored by Indian manufacturers. There is a general myth that Indian prices are higher and we cannot beat Chinese competition. I believe we can prove it wrong and develop India as an alternative to China or in some cases, even as a preferred source for some lighting products being sold in Europe and Africa.

## What trends do you see shaping the future of the lighting industry?

We are already seeing increased customer awareness about lumen efficacy, and most leading players launching high bay lights with efficacy of 160 to 180 lm/W in past few months. We believe this will soon reflect in other products such as streetlight and floodlights also. We also see quicker adoption of smart lighting technologies not only in domestic and commercial spaces, but in industrial and infrastructural projects too.

## How do you see the lighting industry evolving in terms of smart lighting, IoT integration and other emerging technologies?

Smart lighting is now no longer the next frontier; it is becoming the current norm. Smart homes are increasingly becoming commonplace. Majority of the streetlight projects in cities across India have CCMS based automation. Most smart city mission projects include Individual Luminaire Monitoring (ILM) solutions also. Eetamax also provides automation solutions for various applications such as high bay lights, streetlights, tunnel lights, inspection lighting applications, stadium lights, as well as smart paint booth lighting. Our Eetamax Light Management Systems (LMS) is unique in the sense that it can be easily scaled up to include Energy Management (EMS) as well as HVAC control. It can be customized for DALI based lighting automation in Tunnel Lighting Projects.

## Are there any specific CSR initiatives or programs that you are specifically targeting?

We conduct an annual function on the theme of "Samvedna-Jagruti" (re-sensitization). We believe that the daily rat race tends to numb people down to the pains of others. This event is a reminder to all of us to remain empathetic towards our fellow human beings. We firmly believe that extending one helping hand gives you two in return. Every year, we reach out to selected NGOs working for various social causes and contribute to their mission. Our team has also visited these NGOs and interacted to understand the social troubles and the work of the NGO.







# No Compromise when it comes to Fire Safety

Largest Range of **BIS** Certified Emergency Evacuation Product in **India** 













# मॉडेल सौर ग्राम स्पर्धेमध्ये राज्यातील ६३ गावांचा सहभाग विजेत्या गावाला केंद्राकडून एक कोटी रूपयांचे अनुदान

प्रधानमंत्री सूर्यघर मोफत वीज योजनेचा लाभ घेऊन देशातील प्रत्येक जिल्ह्यात एक मॉडेल सौर ग्राम निर्माण करण्यासाठी सुरू केलेल्या स्पर्धेसाठी राज्यातील सहा जिल्ह्यातील ६३ गावांची निवड करण्यात आली आहे. यशस्वी गावाला केंद्र सरकारकडून एक कोटी रुपयांचे अनुदान मिळणार असून या स्पर्धेत भाग घेणाऱ्या गावांपैकी सहा महिन्यात सर्वाधिक सौर ऊर्जा क्षमता निर्माण करणाऱ्या गावाची विजेता म्हणून निवड करण्यात येणार आहे, अशी माहिती महावितरणचे अध्यक्ष तथा व्यवस्थापकीय संचालक लोकेश चंद्र यांनी दिली.

राज्यातील शंभर गावांना सौर ऊर्जेचा वापर करून ऊर्जा स्वयंपूर्ण बनविण्यासाठीची सौर ग्राम योजना महावितरणने यापूर्वीच सुरू केली असून त्याच्या अंतर्गत आतापर्यंत १४ गावे सौर ग्राम झाली आहेत. महावितरणच्या योजनेखेरीज आता केंद्र सरकारच्या मॉडेल सौर ग्राम योजनेमुळे गावांना ऊर्जा स्वयंपूर्ण बनविण्यास अधिक चालना मिळणार आहे. महावितरणला मॉडेल सौर ग्राम योजनेच्या अंमलबजावणीसाठी महाराष्ट्र राज्यासाठी नोडल एजन्सी म्हणून नियुक्त करण्यात आले आहे.

किमान पाच हजार लोकसंख्या असलेल्या गावांना मॉडेल सौर ग्राम योजनेसाठीच्या स्पर्धेत भाग घेण्याची संधी आहे. विविध जिल्ह्यांमध्ये गावे निवडण्याची प्रक्रिया सुरू आहे. सध्या सहा जिल्ह्यातील काही गावांची योजनेसाठी निवड करण्यात आली आहे. त्यांना घरोघरी प्रधानमंत्री सूर्यघर मोफत वीज योजनेच्या अंतर्गत छतावरील सौर ऊर्जा निर्मिती प्रकल्प बसविण्यास प्रोत्साहन देण्यात येईल. तसेच त्या गावातील पथिदवे सौर ऊर्जेवर चालविणे, गावाची पाणी पुरवठा योजना सौर ऊर्जेवर चालविणे अशी विविध कामे सरकारी योजनांच लाभ घेऊन करण्यात येतील. ही स्पर्धा सहा मिहने चालणार आहे.

संबंधित ग्राम पंचायतींनी गावकऱ्यांना प्रधानमंत्री सूर्य घर योजनेचा लाभ घेण्यास प्रोत्साहन देणे तसेच सार्वजनिक योजनांसाठी सौर ऊर्जेचा वापर करणे अपेक्षित आहे. स्पर्धेचा कालावधी संपल्यानंतर त्या त्या गावात एकूण किती सौर ऊर्जा क्षमता निर्माण झाली याचा अभ्यास करून जिल्ह्यातील विजेत्या गावाला केंद्र सरकारकडून एक कोटी रुपयांचे अनुदान मिळणार आहे.

मॉडेल सौर ग्राम योजनेसाठी महाराष्ट्र राज्यातील परभणी जिल्ह्यातील सहा, अकोला जिल्ह्यातील २६, भंडारा जिल्ह्यातील सहा, बुलढाणा जिल्ह्यातील १५, वर्धा जिल्ह्यातील नऊ आणि गोंदिया जिल्ह्यातील एका गावाची निवड करण्यात आली आहे. या गावांमध्ये स्पर्धेला सुरुवात झाली आहे व जिल्ह्यानुसार नोव्हेंबर किंवा डिसेंबर महिन्यापर्यंत मुदत आहे. योजनेसाठी जिल्ह्यासध्ये योजनेची यशस्वी अंमलबजावणी करण्यासाठी देखरेख व समन्वय करण्यात येत आहे. या समितीकडून सुरुवातीला गावांची

निवड करण्यात येते व त्या गावांमध्ये स्पर्धा होते.

पंतप्रधान नरेंद्र मोदी यांच्या नेतृत्वात केंद्र सरकारने २९ फेब्रुवारी २०२४ रोजी प्रधानमंत्री सूर्यघर मोफत वीज योजनेला मंजुरी दिली होती. या योजनेत महिना तीनशे युनिटपर्यंत वीजवापर असलेल्या घरगुती वीज ग्राहकांना मोफत वीज मिळावी आणि अतिरिक्त वीज विकून उत्पन्नही मिळावे या हेतुने घरावर सौर ऊर्जा निर्मिती प्रकल्प बसविण्यासाठी केंद्र सरकारकडून थेट अनुदान मिळते. एक किलोवॅटला तीस हजार रुपये, दोन किलोवॅटला साठ हजार रुपये आणि तीन किलोवॅटला ७८ हजार रुपये अनुदान मिळते. राज्यात आतापर्यंत दोन लाखाहून अधिक वीज ग्राहकांनी या योजनेचा लाभ घेतला आहे.



# PFCCL incorporates two SPVs for transmission projects in Maharashtra and Andhra Pradesh

PFC Consulting Limited (PFCCL), a wholly owned subsidiary of Power Finance Corporation Limited (PFC), has incorporated two new special purpose vehicles (SPVs) for the development of interstate transmission systems in Maharashtra and Andhra Pradesh.

The first SPV, Waghdari Transmission Limited, has been incorporated for the development of a 400/220 kV substation at Waghdari in Solapur district, Maharashtra. The second SPV, Kurnool IV REZ power transmission Limited, will be responsible for implementing the transmission system for Kurnool-IV REZ – phase-II (3 GW) in Andhra Pradesh. Both SPVs have been set up to carry out preparatory activities such as project profiling, land acquisition, forest clearance, surveys, and report preparation. Upon conclusion of the bidding process, the SPVs will be transferred to the successful bidders, who will be responsible for project execution.



















# वाद्ळात सोलार पॅनल उलथून गेले; भरपाईसाठी अर्ज कोणाकडे कराल?

सध्या पाऊस पाण्याचे दिवस आहेत. वादळी वाऱ्यामुळे शेतामध्ये बसविण्यात आलेले सोलार पॅनल उलथून जाते, अशा परिस्थिती शेतकरी गोंधळून जातो. नुकसानभरपाई बाबत माहिती नसल्याने अनेक शेतकरी हतबल होतात. परंतु नुकसानग्रस्त शेतकरी महावितरणच्या मध्यवर्ती ग्राहक तक्रार सेवा केंद्राशी संपर्क साधु शकतील.

मे महिन्यात वेळोवेळी पाऊस झाला, अनेक ठिकाणी वादळ वाऱ्यासह पाऊस झाल्याची नोंद आहे. जून महिना सुरू झाल्यानंतर काही ठिकाणी वादळ वाऱ्यासह पाऊस झाला होता. वाऱ्यामुळे अनेक ठिकाणी बसविण्यात आलेले सोलार पॅनल उलथून पडले. सोलार पॅनलचे नुकसान झाल्यास शेतकरी तक्रार करु शकतात.

सध्या पावसाळ्याचे दिवस आहेत. यामुळे वादळी वाऱ्यामुळे शेतामध्ये बसविण्यात आलेले महागामोलाचे सोलार पॅनल उलथून त्याचे नुकसान होते. प्रसंगी हे सौर पॅनल तुटतात. यामुळे शेतकऱ्यांचे आर्थिक नुकसान मोठ्या प्रमाणावर होते. यासाठी अशा नैसर्गिक आपत्तीमुळे नुकसान झालेले शेतकरी महावितरणच्या ग्राहक तक्रार सेवा केंद्राशी संपर्क साधून सोलार पॅनलचे नुकसान झाल्याची तक्रार नोंदवू शकतात. सौर कृषिपंप देखभाल व दुरुस्तीचा कालावधी ५ वर्ष आहे. या कालावधीत हे कृषिपंप नादुरुस्त झाल्यास दुरुस्ती व देखभालीसाठी निश्चित कालावधीत विनामूल्य जबाबदारी एजन्सीची असते

## वीज संरक्षण यंत्र बसविले जाणार

सध्या बाजारात उपलब्ध असलेले सोलर पॅनल हे अत्याधुनिक तंत्रज्ञानाने बनवले असून क्षचितच वीज, वादळ, गारा या नैसर्गिक आपत्तीमुळे त्याचे नुकसान होते.

एखाद्या वेळी वीज पडल्यामुळे सौर पॅनलचे नुकसान होऊ शकते. हा धोका टाळण्यासाठी सौर पंपासोबत वीज संरक्षण यंत्र (लायटनिंग अरेस्टर) बसविण्यात येणार आहेत.

## नुकसान भरपाई मिळेल का ?

सौर कृषिपंपाची देखभाल व दुरूस्तीचा कालावधी ५ वर्ष आहे.

या कालावधीत सौर कृषिपंप नादुरूस्त झाल्यास दुरूस्ती व देखभालीसाठी निश्चित केलेल्या कालावधीत विनामूल्य दरुस्ती करण्याची जबाबदारी एजन्सीची आहे.

शेतकऱ्यांना सौर कृषिपंप नाद्रूस्त झाल्यास महावितरणच्या मध्यवर्ती ग्राहक तक्रार सेवा केंद्राला तसेच संबंधित एजन्सीच्या ग्राहक सेवा केंद्राला तत्काळ कळविणे आवश्यक आहे.

# सौर कृषिपंपाची देखभाल व दुरुस्तीचा कालावधी किती ?

सौर कृषिपंपाचा ५ वर्षांकरिता पंप आस्थापित करणाऱ्या एजन्सीद्वारे विमा उतरविण्यात येतो.

त्यामुळे सदर लाभार्थीचा सौर पंप, विमा कंपनीकडून नुकसान भरपाई करिता पात्र ठरेल.

विमा कंपनीकडून नुकसानभरपाई करिता पंप आस्थापित करणारी एजन्सी सहकार्य करेल.

## सौर कृषिपंपाच्या साहित्याची चोरी झाली तर काय करावे ?

सौर कृषिपंपाच्या साहित्याची चोरी झाल्यास त्वरित पोलिस ठाण्यात एफआयआर दाखल करावा; तसेच त्याची माहिती महावितरण कार्यालयास व संबंधित एजन्सीच्या ग्राहक सेवा केंद्राला देण्यात यावी.

सौर कृषिपंपाबाबत शेतकऱ्यांची काही तक्रार असल्यास शेतकऱ्यांनी महावितरणच्या मध्यवर्ती ग्राहक तक्रार सेवा केंद्राशी संपर्क साधून आपली तक्रार नोंदवावी. त्यासाठी महावितरणचे टोल फ्री क्रमांक १८००-२३३-३४३५ किंवा १८००-२१२-३४३५ वर कॉल करावा. मध्यवर्ती ग्राहक तक्रार सेवा केंद्राकडे आलेली तक्रार संबंधित एजन्सीकडे पाठविण्यात येईल. सदर एजन्सीकडून शेतकऱ्यांच्या तक्रारींचे निवारण करण्यात येईल.

### धनंजय पवार

जनसंपर्क अधिकारी, महावितरण



# Andritz secures order from AGEL for 1,500 MW Tarali PSP in Maharashtra

Andritz has secured an order from Adani Green Energy Limited (AGEL) for the supply of electromechanical equipment for the 1,500 MW Tarali pumped storage project (PSP) in Satara district, Maharashtra.

As part of the contract, the technology group will supply pump turbines, motor-generators, and other associated electromechanical systems. The order includes the design, manufacturing, installation, testing, and commissioning of the pumped storage units. The project will be executed using Andritz's local manufacturing facilities in India, supported by its global network.

# IIuminate Your Path to Success with our Electrical Expertise

DAMODAR M TIWARI

# Narrendra **Electricals**

**Govt. Licensed Contractor & Engineer** 

28, 9th Floor, Bldg. No. 3, Navjeevan Comm. Prem. Society, Lamington Road, Tardeo, Mumbai - 400 008.



damodar@narrendraelectricals.com narendraelectricals1971@gmail.com



022 2309 8331/4014 0443 90048 63750/9323282007



www.narrendraelectricals.com



Land Scape



Panel Work





Office

Residential

- 1. Understanding Electrical Standards
- 2. Application of Works Principles
- 3. Blueprint Interpretation
- 4. Precision and Coordination
- 6. Commitment to Safety 7. Critical Thinking
- 8. Logical Problem Solving
- 9. Customer Service Skills

5. Time Management and Coordinatiion

What We Do

# SERVING TO THE SOCIETY FOR THE PAST 35 YEAR'S

धुळे नंदूरबार रिजन तर्फे मीर्चा





दि. ०४/०७/२०२५ रोजी, गेल्या वर्ष भरातील प्रलंबित देयके मिळावित यासाठी बांधकाम ठेकेदारांच्या विविध संघटना व आपल्या इकॅमच्या वतीने एकत्रित मोर्चा काढण्यात आला. सदर मोर्चा सा. बां. विभागीय कार्यालयापासून ते जिल्हाधिकारी कार्यालयापर्यंत पायी काढण्यात आला. या प्रसंगी मा. जिल्हाधिकारी, धूळे जिल्हा यांना निवेदन देण्यात आले. मा. जिल्हाधिकारी कार्यालयात नसल्या कारणाने सदर निवेदन मा. अप्पर जिल्हाधिकारी साहेब यांना देण्यात आले. या प्रसंगी इकॅमचे सर्व पदाधिकारी व सभासद मोठ्या संख्येने उपस्थित होते.



# वीज स्पर्धेत ग्राहक केंद्रस्थानी

'एसईबी'चे 'महावितरण' होऊन आता २० वर्षे लोटली आहेत. आत्तापर्यंत मक्तेदारीसदृश्य असलेले हे क्षेत्र आता स्पर्धात्मक होत आहे. त्यात चोखंदळ ग्राहक केवळ सेवा व दर यावरच कुठल्या कंपनीकडे जायचे हे ठरवतील, असे तज्ज्ञ सांगतात.

मुंबई वगळता राज्यातील इतर ठिकाणी वीज महटले की एमएसईबी (महाराष्ट्र राज्य विद्युत मंडळ) हेच सगळ्यांना एकेकाळी ठाऊक होते. एमएसईबी हे मंडळ होते. ति बरखास्त करून सन २००५ मध्ये वीज वितरण, वीज निर्मिती व चीज पारेषण अशा प्रमुख तीन कंपन्या तयार झाल्या. त्यातील वीज वितरण करणारी कंपनी म्हणजे महावितरण मंबई महापालिका क्षेत्रातील निवडक भाग व पढे महामंबई व संपूर्ण कंपनी विजेचे वितरण करीत आहे. आज त्यांच्या ग्राहकांचा आकडा ३.४० कोटींच्या घरात आहे. महावितरणला स्पर्धाच नसल्याने आज संपून आहे. या मक्तेदारीपुढे आता खासगी कंपन्यांकडून आव्हान उभे राहाते आहे.

महामुंबईतील महावितरणच्या प्रमुख पाच महापालिका क्षेत्रांत एकाचवेळी तीन खासगी कंपन्यांनी बीज वितरण परवान्यासाठी अर्ज केला आहे. त्यात मुंबईत बोज वितरण करणान्या अदानी इलेक्ट्रिसिटी, पॉवर महावितरणसाठी सध्या म्हणून काम करणान्या टोरेट पॉवरचा समावेश आहे. या तीन कंपन्यांना महाराष्ट्र वीज नियामक आयोगाने वीज वितरणचा मरवाना दिल्यास महावितरणसाठी ते मोठे आशान असेलच, मात्र त्यात ग्राहकहित नेमके कसे असेल, हेदेखील जाणून घ्यायला हवे.

याबाबत ज्येष्ठ वीज तज्ज्ञ अशोक पेडसे सांगतात, 'महामुंबईत मुंबई महापालिका क्षेत्राबाहेर जेथे आज केवळ महावितरण वीज देते, त्याठिकाणी वितरणासाठी आवश्यक असलेल्या पायाभूत सुविधा म्हणजेच आमुख्याने नेटवर्क हे त्यांचेच आहे. या तिन्ही कंपन्यांसाठी परवाना मिळाल्यानंतरही स्वतःचे नेटवर्क उभे करून मग बीज वितरणाची सुरुवात करणे, हे आर्थिकदृष्ट्या महागडे व त्याचवेळी वेळखाऊ असेल. त्यामुळे या कंपन्या किमान सुरुवातीला तरी महावितरणचेच नेटवर्क वापरतील. म्हणजे वीज त्यांची स्वतःची व नेटवर्क महाविरणचे, असे चित्र असेल. तसे हे चित्र मुंबई महापालिका क्षेत्रात अनेक ठिकाणी सध्याही आहेय, आता महावितरण या कंपन्यांना नेटवर्क वापरण्यासाठीचे भाडे आकारेल. ते भाडे वहन आकार, क्रॉस सब्सिडी या स्वरूपात असेल. तो खर्च या कंपन्यांना ग्राहकांना देण्यात येणाऱ्या मूळ दरात जोडता येईल, तसे केल्यास त्यांचे दर महाग होऊ शकतात. मग याठिकाणी ग्राहक खेचण्यासाठी खासगी कंपन्या नेटवर्क वापरण्यासाठीचा खर्च स्वतः सहन करून ग्राहकांना किती कमी दरात वीज देऊ शकतात, हे बघणे औत्सुक्याचे असेल. जसे महावितरणच्या क्षेत्रात खासगी कंपन्यांनी वीज वितरण परवान्धारराठी अर्ज केला आहे. त्याचप्रमाणे महावितरण कंपनी मुंबईत वीज वितरणारराठी सज्ज होत आहे. महावितरणनेदेखील मुंबईत आधीच कार्यरत असलेल्या तीन कंपन्यांच्या स्पर्धेत उतरून चीज वितरण परवान्यासाठी आयोगाकडे अर्ज केला आहे मुंबई महापालिका क्षेत्रात (भांड्रप-मुलुंडचा भाग वगळून) अदानी इलेक्ट्रिसिटी, टाटा पॉवर व बेस्ट यांच्याकडून ५० लाख प्रग्राहकांना विजेचे वितरण होते. त्यांना दररोज सरासरी ३२०० मेगावॉट वीज पुरवली जाते. पामध्ये नेटवर्कसंबंधी जी स्थिती महामुंबईत पेऊ शकते, ती स्थिती मुंबईत अनेक वर्षांपासून आहे.

मुंबईत सुरुवातीला बेस्ट व बीएसईएस या दोन कंपन्या वीज वितरण करीत होत्या. पढे बीएसईएस ही रिलायन्स इन्फ्रास्ट्रक्चरकडे व

त्यानंतर २०१८मध्ये अदानी इलेक्ट्रिसिटीने खरेदी केली. मात्र बहतांश भागात वीज वितरणाचे जाळे म्हणजेच नेटवर्क हे पूर्वाश्रमीच्या बीएसईएसचे आहे. सन २०११ मध्ये सर्वोच्च न्यायालयाच्या एका आदेशानंतर टाटा पॉवर कंपनीला मुंबईत उपनगरात वीज वितरणाचा परवाना मिळाला. आज टाटा पॉवर मुंबईतील साडेसात लाख ग्राहकांना वीज वितरण करते, मात्र बहतांश विकाणी ने अदानी इलेक्ट्रिसटीच्या (पूर्वाश्रमीच्या बीएसईएस) जाळयांचा वापर करतात. आता महावितरणला मुंबईसाठी वीज वितरणाचा परवाना मिळाल्यास त्यांनादेखील वीज ग्राहकांपर्यंत पोहोचविण्यासाठी अन्य कंपनीच्या नेटवर्कचा वापर करावा लागेल. त्यासाठी त्यांना अतिरिक्त शुल्क त्या कंपनीला द्यावे लागेल. तो खर्च अखेरीस ग्राहकांकडूनच वसूल करावा लागू शकतो. त्या स्थितीत आधीच तीन कंपन्या स्पर्धेत असताना महावितरणचे हा खर्च धरून असलेले वीजदर तुल्यबळ ठरतील का, असा प्रश्न वीज तज्ज्ञ उपस्थित करतात. 'घरगुती ग्राहकाचा सरासरी बोज वापर ३०० युनिट असताना त्यांचे मासिक देयक ३५०० रुपयांच्या घरात असते. सर्वसामान्य ग्रहकांना वीज दर, यहन आकार, अन्य शुल्क वगैरेशी घेणे-देणे नसते. त्याचे देयक किती कमी होईल किंवा किती अधिक असेल, पांत त्याला रस असतो. त्यामुळे अन्य कंपनीचे देयक दोन-तीन टक्के इतकेच कमी येत असेल तर ग्राहक मीटर व कंपनी बदलाग्याचा विचार करत नाही. मात्र आठ ते दहा टक्के दर कमी-अधिक असल्यास ते विचार करतात. त्याचवेळी लाखो रुपयांचे देयक देणारे व्यावसायिक व औद्योगिक ग्राहक एक ते दोन टक्क्यांचादेखील विचार करतात. मुंबईत असे महक मोठ्या प्रमाणात आहेत. त्यांना डोळ्यासमोर ठेऊनच महावितरण मुंचईत येत आहे', असेही पेंडसे यांनी

या सर्व पाश्वभूमीवर ग्राहकांना मिळणारी सेवा हा कळीचा मुद्दा असेल, स्पर्धेत ग्राहकांना आपल्याकडे खेचण्यासाठी विविध प्रकारचे अत्तिरिक्त भार कंपन्या कदाचित स्वतः सहन करतील किंवा ते भार ग्राहकांवर टाकल्यानंतरही दर कमी–अधिक असताना सेवेच्या जोरावर कंपन्यांना ग्राहक मिळू शकतील. या स्थितीत सेवेचा विषय आला की महावितरणला फटका बसण्याची शक्यता आहे. आज 'बेस्ट' ही सार्वजनिक क्षेत्रातील उपक्रम कंपनी असली तरी मध्यरात्रीदेखील वीज गेल्यास, तक्रारी आल्यास ते ग्राहकांना प्रतिस्सद देतात. खासगी कंपनीची सर्व कामे ऑनलाइन होतात, ग्राहकाला उपकेंद्रात जावेच लागत नाही, अन्य खासगी कंपन्या त्यांच्या अधिक देयक असलेल्या ग्राहकांचा वर्षातुन एकदा मोठा सत्कार करतात. महावितरण याप्रकारच्या सेवेत खासगी कंपन्यांपासून कोसो दर आहे. ग्रामीण व औद्योगिक क्षेत्राला दिवसाकाठी १२ तासांच्यावर वीज अनेक भागांत मिळत नाही. त्यांच्या समस्या महिनोमहिने तशाच असतात. या स्थितीत दर घोडे अधिक असले तरीही चालतील, पण सेवा हवी, या मानसिकतेमधून ग्राहक खासगी कंपन्यांना जवळ करू शकतात. अशा स्थितीत महावितरणसमोर स्पर्धेचे कडवे आव्हान उभे ठाकेल, यात शंका नाही.







कर्जा क्षेत्रातील संशोधन व सहकार्यासंदर्भात महाराष्ट्र शासनाचा कॅलिफोर्निया विद्यापीठाबरोबर यामंजस्य करार

या करारामुळे महाराष्ट्रातील उर्जा क्षेत्रात संशोधन, तांत्रिक नवकल्पना आणि धोरणात्मक सहकार्याला गती मिळणार आहे. ऊर्जेचा स्वच्छ, विश्वासाई आणि परवडणारा पुरवठा, ऊर्जा साठवणुक उपाय, वीज बाजार रचना, ग्रीड प्रसारण प्रणालीतील

स्धारणा, हवामानाशी जुळवून घेणारी धोरणे आणि प्रशिक्षण कार्यक्रम या क्षेत्रांमध्ये संयक्त काम होणार आहे.

महाराष्ट्र सरकार आणि कॅलिफोर्निया विद्यापीठ. बर्कले यांच्यातील हे सहकार्य परस्पर विश्वास, समानता आणि सामूहिक हिताच्या तत्त्वांवर आधारित असून, राज्याच्या उर्जा क्षेत्रातील बदलत्या गरजांनुसार स्थानिक उपाययोजना विकसित करण्यावर भर दिला जाणार आहे.

हा करार लवचिक स्वरूपाचा असून त्यामुळे भविष्यातील प्रकल्पानुसार सहकार्याचे दरवाजे खुले राहतील. या करारामुळे महाराष्ट्रातील शैक्षणिक संस्था, संशोधन केंद्रे आणि प्रशासन यांना नवसंशोधन, क्षमता वृद्धी व प्रशिक्षणाची संधी मिळणार आहे. त्यामुळे पर्यावरणस्नेही आणि शाश्वत उर्जेच्या दिशेने राज्याचा प्रवास अधिक गतिमान होईल, असा विश्वास ऊर्जा विभागाच्या अपर मुख्य सचिव आभा शुक्ला यांनी व्यक्त केला.

या सामंजस्य करारामध्ये खालील महत्त्वाच्या क्षेत्रांमध्ये ज्ञानसंपादन, संशोधन आणि प्रशिक्षणाची संधी मिळणार

- स्वच्छ. विश्वासाई आणि परवडणाऱ्या विजेचा विकास
- ऊर्जा साठवण तंत्रज्ञानावर संयुक्त संशोधन
- वीज मार्केटची रचना आणि धोरण निर्मिती
  - ग्रीड प्रसारण क्षेत्रातील नवोन्मेष
- हवामान अनुकूलता (climate resilience) उपाययोजना
- कौशल्यविकास आणि प्रशिक्षण उपक्रम





# New cooling gel could raise PV module efficiency by 12%

Researchers in Saudi Arabia have developed a hydrogel composite that absorbs moisture in solar modules overnight and facilitates evaporative cooling throughout daylight hours. The system has undergone lab tests and outdoor experiments on two continents.

A group led by scientists from Saudi Arabia's King Abdullah University of Science and Technology (KAUST) has developed a novel, low-cost passive cooling technology for PV panels.

It consists of polyacrylic acid sodium salt (PAAS) and lithium chloride (LiCl) hydrogel composites applied to the rear side of the solar module. "We specialize in materials that enable passive cooling," said researcher Qiaoqiang Gan. "These materials are thin and can be placed on different systems that require cooling to operate, like greenhouses and solar cells, without affecting performance."

To create the composite, the researchers combined LiCl and PAAS at a ratio of 2:1. After mixing the materials, they poured the mixture into a mold, where it was cured for one hour to form a flat shape. According to the academics, the specific ratio was selected to ensure the composite's resilience under extreme conditions, such as relative humidity levels of above 90% and temperatures over 30 C.

To test their new development, the team used a polycrystalline silicon PV panel measuring 54 mm × 54 mm. A 7 mm thick layer was applied to its back, expanding to about 10 mm once water was absorbed. It was then tested in several locations, in laboratories both in Saudi Arabia and the United States, as well as in field tests. A 21-day field test took place in Saudi Arabia's city of Thuwal, while a month-long field experiment occurred in Buffalo, New York.

Regarding the outdoor testing in Saudi Arabia, with a temperature of 37 C and a relative humidity of 53%, a sustained evaporative cooling power of 175 W/m² was achieved. "Significant temperature decrease of up to 14.1 C was recorded around midday (12.5 C on average from 12:00–13:00), leading to a substantial increase in power conversion efficiency, from 13.1% to 14.7%—an improvement of approximately 12.2%," they stressed.

Through the testing in the United States, the team also concluded that the enhancement in cooling efficiency extends the operational lifespan of PV panels by over 200% and reduces the levelized cost of electricity by 18%. They also calculated that the material cost is approximately \$ 37/m², and highlighted that it is "lower than most of the previous studies using hydrogel or non-hydrogel cooling methods."

# MNRE Launches Innovation Challenge for Circularity in Renewable Energy Technologies

The Ministry of New and Renewable Energy (MNRE) has launched an INR 10 crore Innovation Challenge to drive circular economy breakthroughs in battery storage and solar PV technologies, aiming to promote sustainability, reduce waste, and accelerate research under its RE-RTD Scheme. Proposals can be submitted till July 15, 2025. June 17, 2025. By Mrinmoy Dey

The Ministry of New and Renewable Energy (MNRE) has announced an "Innovation Challenge for Circularity in Renewable Energy Technologies," allocating INR 10 crore to support R&D focused on circular economy solutions in battery storage and solar PV technologies.

Proposals can be submitted under the Ministry's Renewable Energy Research and Technology Development (RE-RTD) Scheme until July 15, 2025.

The circularity innovation challenge specically focuses on identifying innovations which are ecient, reliable and scalable three themes – design and manufacturing innovations, second-life use and recycling innovations and operational management innovations...

According to the Ministry's notication, the challenge is open to Indian-based R&D organisations, academic institutions, universities, and startups. All proposals must be submitted online via MNRE's dedicated research portal.

All applications will be screened by the Secretariat, and by an independent Jury composed of sector experts. The Jury will consist of subject experts empanelled as per MNRE R&D Project Appraisal Committee (RDPAC) guidelines, it said.

Funding under the scheme will be extended across three categories, based on the Technology Readiness Level (TRL) of the innovation. Projects in the "Proof of Concept" stage (TRL 1–3) are eligible for up to INR 10 lakh. Innovations at the "Potential" stage (TRL 4–5) can receive up to INR 30 lakh. For "Proven" technologies (TRL 6 and above), funding of up to INR 2 crore or 50 percent of the total project cost, whichever is lower, will be provided.

# We've launched a dedicated product line for EV charging infrastructure cables and are scaling up for solar DC cables and high-capacity wind turbine cables. ""



GLOSTER CABLES LIMITED, is one of the leading cable manufacturers and suppliers of cables to power utilities in India, Headed by Ashish Modi, a renowned business icon from Hyderabad and Vinay Rathi as Director emphasizing on marketing assignment. Today Gloster is having as many as 31 marketing station across PAN India with exponential growth in business. In the field of power segment in our Country, Gloster is the synonymous in cable field.

Mr. Vinay Rathi
Director
GLOSTER CABLES LIMITED

# Pristine Engg. Services Pvt. Ltd., Mumbai.

Solution Provider for Medium / High Voltage Electrical Engg.

- Supply Installation of Heat Shrink / Cold Shrink / Premolded Cable Termination / Joints Separable Screened Connectors (Touch Proof Kits) Inner Cone / Outer Cone Termination in RMU / GIS for Multiple Run Cables
- We specialize in Design and Manufacturing of Customized Junction Box (Extensively Used for Underground Metro Rail / Coastal Road/Tunnel Boring)

Distributor and after sales services for HV/MV Switchgear, Cable terminations/joints, Heat shrink sleeves, Bus bar tubes, Wire nut, Protection Relays, Ritter make High current DC switchgear, OLTC.



3M India Ltd
Authorized distributor (Electrical and personal safety division)



www.pristineengineering.in | www.pristineengg.in Landline No. 022 41221221 | Mob. 9867018848 Email Id: pristine.engg@gmail.com | rohit.pespl@gmail.com





#### **Quality Control Measures**

We implement a rigorous multi-stage quality control system, beginning with raw material inspection and extending through in-process checks to final product testing. Every batch of wires and cables undergoes dimensional, electrical, and mechanical testing. We've also adopted Six Sigma and Lean principles to minimize defects and enhance product reliability.

Compliance with Standards (BIS, IEC, UL, etc.) We manufacture in strict compliance with national and international standards such as BIS (ISI certification), IEC, UL, RoHS, and others, depending on the market. Our design, production, and testing departments are aligned with these benchmarks, and our certification status is regularly audited both internally and by third-party bodies.

## Testing Procedures and Certifications

All our products go through high-voltage tests, insulation resistance testing, tensile strength checks, and flame retardant tests. We hold certifications like ISO 9001:2015, ISO 14001:2015, OHSAS 18001, and are also NABL accredited for our in-house testing labs, ensuring global recognition of our quality practices.

### Handling Customer Complaints

We follow a zero-delay policy in responding to quality concerns. Complaints are logged, investigated with root-cause analysis, and closed with corrective and preventive actions. We also maintain a customer satisfaction index that is reviewed monthly by the management team.

#### **New Technologies and Materials**

We are actively exploring nanotechnology-based insulation, fire-retardant low-smoke compounds, and recyclable polymers. Additionally, aluminum alloy conductors and superconducting cables are under R&D to meet the demands of modern infrastructure and grid systems.

#### Recent Innovations

We recently introduced thermoplastic high heatresistant wires (TPHHR) and smart cables with embedded sensors for predictive maintenance. On the process side, Al-based quality inspection systems and IoT-enabled manufacturing have enhanced our productivity and product traceability.

#### Staying Up-to-Date

Our leadership team is involved in **international** forums, technical committees (BIS, IEEE, etc.), and we subscribe to leading trade journals. We also partner with engineering institutes and innovation hubs to keep our tech roadmap ahead of the curve.

**Emerging Technologies as Opportunities** Absolutely. Electric vehicles (EVs) and renewable **energy systems** such as solar and wind present massive growth potential. We've launched a dedicated product line for EV charging infrastructure cables and are scaling up for solar DC cables and high-capacity wind turbine cables.

#### Trends Shaping the Future

Key trends include electrification, digitalization, and green materials. We're investing in digital twin technology for cable modeling and recyclable cable components to align with ESG goals. Our flexible production system allows us to adapt quickly.

**Evolution in Sustainability and Environment** The industry is transitioning toward halogen-free flame retardant (HFFR) materials, lead-free compounds, and eco-friendly packaging. We've reduced water and energy usage in production by over 30% in the last five years through smart manufacturing initiatives.

#### **Role in Smart Grids and Cities**

As a core enabler of infrastructure, we provide intelligent cabling systems for smart grids, IoTdriven utilities, and building automation. Our cables are equipped with real-time monitoring capabilities to support predictive diagnostics and grid reliability.

### **Challenges and Disruptions**

Potential disruptions include supply chain volatility, raw material cost inflation, and geopolitical trade restrictions. We're mitigating these through strategic sourcing, local backward integration, and establishing regional manufacturing hubs.

#### **Research & Development Focus**

Our R&D strategy is structured around customer pain points, regulatory forecasts, and technological foresight. We allocate around 5% of annual revenue to R&D, and maintain a dedicated innovation lab with advanced simulation and prototyping tools.

Balancing Quality with Cost Efficiency
 We achieve this through automation, ERP-driven
 process optimization, and continuous improvement
 initiatives. Cost-saving never comes at the expense
 of quality—we believe durability and reliability
 ultimately reduce lifecycle costs for our clients.

Differentiation from Competitors
 Our edge lies in customization, agility, and digital transformation. Unlike volume-centric competitors, we focus on engineered solutions, faster

turnaround, and post-sale technical support. Our

brand is synonymous with trust, performance, and innovation

#### Industry Collaborations

We actively contribute to **industry bodies such as IEEMA**, **CIGRE**, **and NEMA**, and participate in **joint development projects** with OEMs and utilities. These collaborations help shape future standards, influence policy, and promote knowledge sharing across the sector.



# Govt launches ₹2.3-cr startup scheme to boost rooftop solar installations

This innovation challenge aims to identify and support breakthrough solutions for India's rooftop solar and distributed renewable energy ecosystem

The Ministry of New & Renewable Energy (MNRE) on Saturday announced the launch of a Rs 2.3-crore startup innovation challenge with an aim to accelerate rooftop solar installation and renewable energy adoption in the country. This innovation challenge aims to identify and support breakthrough solutions for India's rooftop solar

and distributed renewable energy ecosystem, a ministry statement said. It is being implemented under the aegis of MNRE with support from the National Institute of Solar Energy (NISE), and in coordination with StartUp India, DPIIT. According to the statement, the Innovative Projects Start-Up Challenge on Rooftop Solar (RTS) and Distributed Renewable Energy (DRE) Technologies was launched during the National Conference on Skill Development for the Renewable Energy Workforce.





# Curtain Raiser Ceremony

Celebrated on Tuesday 22nd July 2025





🚞 4, 5, 6 April 2026 @ NESCO, Mumbai

Themes

Clean Energy: Bright Future **Electrical Safety For All** 

**Chief Guest** Hon'ble Shri Vishwas Pathak Independent Director, MSEDCL

# Sincerely yours

Umesh Rekhe

President

**Devang Thakur** General Secretary

Raosaheb Rakibe Jt. Sec. & Treasurer

Amey Kannav Chairman Ecamex26 Satish Sinnarkar

Convenor Ecamex26

**Contact for Booking** 

Ashish Rajeshirke

98213 75185

Kaushal Bali

92706 63417

**ELECTRICAL CONTRACTORS' ASSOCIATION OF MAHARASHTRA** 



ecamex26@gmail.com, ecamindia1@gmail.com



www.ecamex.co.in





# **MECO "DIGITAL 1000A AC** CLAMPMETER – Model 2250 Jr"

MECO Introduced NEW 3½ Digits 1999 Counts Digital Clampmeter - Model 2250 Jr. with Digital LCD Display with Backlight having Voltage Range up to 1000V AC/DC, Current Range up to 1000A AC and Resistance Range up to 2K Ohms.

Basic accuracy for DC Voltage  $\pm$ (1.5% rdg + 8 dgt), for AC Voltage ±(1.5% rdg + 8 dgt) and for AC Current ±(2.0% rdg + 5 dgt).

Accessories are One Pair of

Test Leads, Two 1.5V "AAA" Battery installed, Instruction Manual and Carrying Case.

#### **Key Features:**

- ✓ Digital LCD Display with Backlight
- ✓ Jaw Opening: Cable Dia. 38mm (max.)
- ✓ Auto Power Off
- ✓ Buzzer & EF Strength
- ✓ Live Test
- ✓ Data Hold
- ✓ NCV Test & Torchlight
- ✓ Audible Continuity & Diode Test
- ✓ Low Battery Indication

For more details please contact:

#### MECO INSTRUMENTS PVT. LTD.

W:www.mecoinst.com

E:sales@mecoinst.com

M: 093244 11558 / 093233 32435





# YOUR LINK TO CUSTOMISED POWER SOLUTIONS



## **DOWELLS PRODUCT RANGE**

- Aluminium / Copper Cable Lugs And Terminations
- Aluminium / Copper Cable Connectors
- Insulated / Non-insulated -Ring, Pin, Fork Type Lugs
- Bimetallic Friction Welded Cable Lugs & Connectors
- Sector Shaped Cable Lugs & Connectors
- Cable Glands
- Earth Tags & Shrouds
- Smart Crimping Systems

MUMBAI (H.O.): 501-505, A Wing, Express Zone, W. E. Highway, Malad (East), Mumbai - 400 097, India.

Tel:+91-22-6144 1600 @ 87900 05363



Email:info@aakashpower.com www.aakashpower.com







# **AUTHORISED CHANNEL PARTNER**

POLYCAB SIEMENS @ dowell's UNIMAG



# Curtain Raiser Ceremony of ECAMEX



## Held on Tuesday 22nd July 2025 at Hotel Kohinoor Park, Prabhadevi, Mumbai



Lighting of Lamp by the Chief Guest Shri Vishwas Pathak along with Guests of Honour and office bearers of ECAM



# Welcome Speech

"Ladies and gentlemen, esteemed guests, and honored participants,

President (ECAM) Gen.Sec. (ECAM) Treasurer (ECAM)

It is my great pleasure to welcome you all for the curtain raiser ceremony of Ecamex26, the premier exhibition of the electrical industry, organised by our 100 year old Association, the Electrical Contractors' Association of Maharashtra, Ecam. Today marks the beginning of a

showcase that will highlight the latest innovations, technologies, and trends in the electrical sector.

Chairman

Fcamex 26

Convenor

Ecamex 26

I welcome our chief guest hon'ble Shri Vishwas Pathak, director of, MSEB holding looking after generations, transmission and distribution of power in Maharashtra

I welcome our guests of honour & all our invitees from different companies and of course past presidents, directors and members of Ecam, coming from all corners of Maharashtra.

As you know, exhibitions like Ecamex provide a unique platform for industry professionals,

manufacturers, and stakeholders to come together, share knowledge, and explore opportunities.

I would like to extend my gratitude to our past and would be exhibitors, sponsors, and partners for their support and participation. My special thanks to our sponsors in Ecamex24, RR Kabel, Polycab India and Greatwhite.

Dear friends, Your blessings and contributions will only make this exhibition a resounding success.

Friends, last year in Ecamex24, the focus was on Electrical Safety, which is of paramount importance in ensuring the wellbeing and protection of our beloved citizens. The concern of Electrical safety remains the same for Ecamex26 also. We aim for Surakshit Bharat!

We have added one more very important aspect of Indian economy, the Renewable Energy as our theme. Making India an energy independent nation is the goal given by our Prime Minister. As manufacturers, traders and contractors, we all are directly associated with this National goal.

To our distinguished guests, I request you to guide us and support us.

# Ministry of Power launches ADEETIE scheme to promote industrial energy efficiency in MSMEs

The Ministry of Power (MoP) has launched the Assistance in Deploying Energy Efficient Technologies in Industries & Establishments (ADEETIE) scheme for Rs 10 billion to support micro, small, and medium enterprises (MSMEs) in adopting energy-efficient technologies.

The scheme will be implemented by the Bureau of Energy Efficiency and offers both financial and technical support. This will also include interest subvention of 5 per cent for micro and small enterprises and 3 per cent for medium enterprises. The scheme includes Rs 8.75 billion for interest subvention, Rs 0.50 billion for investment-grade energy audits and Rs 0.75 billion for implementation support. It is expected to mobilise Rs 90 billion in overall investment and aims to enhance productivity and competitiveness in MSME sector.

# NHPC announces auction results of 1,200 MW solar projects with 2,400 MWh energy storage

NHPC Limited has announced the auction results of 1,200 MW solar projects with 2,400 MWh energy storage under its tranche XI auction to set up interstate transmission system-connected solar power projects.

Reliance Infrastructure, JBM Renewables, PNC Infratech, and SAEL Industries were each awarded capacities at a uniform tariff of Rs 3.13 per kWh for 390 MW, 150 MW, 300 MW, and 300 MW respectively. Navayuga Engineering Company secured 60 MW of its quoted 200 MW under the bucket-filling method at the same tariff.





# सेमीकंडक्टर म्हणजे नेमकं काय आणि कुठे होतो याचा उपयोग? जाणून घ्या सविस्तर!

सेमिकंडक्टर म्हणजे असा पदार्थ जो विद्युत् चालवण्याच्या बाबतीत अर्ध—चालक असतो. याचा वापर संगणक, मोबाइल, टीव्ही आणि इतर इलेक्ट्रॉनिक उपकरणांमध्ये मोठ्या प्रमाणावर होतो. सेमिकंडक्टरची महत्त्वपूर्ण भूमिका आधुनिक तंत्रज्ञान आणि इलेक्ट्रॉनिक्समध्ये आहे. त्याचा उपयोग आणि प्रकार जाणून घेण्यासाठी हा लेख वाचा....

स्मार्टफोन, संगणक, गाड्या, स्मार्ट टीव्ही, डिजिटल कॅमेरे, एटीएम कार्ड्स आणि अगदी मिसाइल्सपर्यंत सगळीकडे या छोट्या सिलिकॉन चिप्सचा वापर होतो. भारतात आता या चिप्स बनवण्यासाठी जोरदार हालचाल सुरू आहे. केंद्र सरकारने ग्रेटर नोएडाच्या जेवरमध्ये नवीन सेमीकंडक्टर यूनिटला मंजुरी दिली आहे. HCL आणि फॉक्सकॉनच्या संयुक्त उपक्रमातून उभारली जाणारी ही यूनिट भारतातील सहावी यूनिट आहे. केंद्रीय मंत्री अश्विनी वैष्णव यांनी सांगितलं, की यावर्षींच एका यूनिटमधून उत्पादन सुरू होईल.

## सेमीकंडक्टर म्हणजे काय?

सेमीकंडक्टर म्हणजे सिलिकॉन किंवा जर्मेनियमपासून बनलेली

एक छोटी चिप. ही चिप विद्युत प्रवाह नियंत्रित करते. एका नखाएवढ्या चिपवर अब्जावधी सूक्ष्म स्विचेस असतात. ही चिप डेटा प्रक्रिया, माहिती साठवण आणि इलेक्ट्रॉनिक उपकरणांचं नियंत्रण करते. स्मार्टफोनपासून गाडच्यांपर्यंत सर्व आधुनिक उपकरणांमध्ये सेमीकंडक्टर हा आधार आहे.

# कुठे होतो याचा वापर?

सेमीकंडक्टरचा वापर आज प्रत्येक क्षेत्रात आहे. मोबाइल फोनमध्ये प्रोसेसर आणि मेमरीसाठी, संगणकात डेटा प्रक्रियेसाठी आणि गाड्यांमध्ये हायटेक वैशिष्ट्यांसाठी सेमीकंडक्टर आवश्यक आहे. उदाहरणार्थ, गाड्यांमध्ये हेड्स-अप डिस्प्ले, सेन्सर्स, ऑटोनॉमस ड्रायव्हिंग, रिअर कॅमेरे, ब्लाइंड स्पॉट डिटेक्शन, एअरबॅग आणि इमर्जन्सी ब्रेकिंगसाठी याचा वापर होतो. स्मार्ट टीव्ही, डिजिटल कॅमेरे, संचार उपकरणे, ट्रेन आणि वैद्यकीय उपकरणांमध्येही सेमीकंडक्टर आहे.

## का आहे इतकं मौल्यवान?

सेमीकंडक्टर हा आधुनिक तंत्रज्ञानाचा गाभा आहे. स्मार्टफोन, AI, मशीन लर्निंग, इलेक्ट्रिक वाहनं आणि 5G यासारख्या तंत्रज्ञानाला याची गरज आहे. त्यामुळे त्याची मागणी प्रचंड वाढली आहे. २०२० नंतर कोविडमुळे उत्पादन घटलं, आणि मागणी-पुरवठ्याचा ताळमेळ बिघडला. यामुळे अनेक उद्योगांना फटका बसला, विशेषतः गाड्या आणि

मोबाइल उत्पादन क्षेत्राला. भारतात २०२१ मध्ये सेमीकंडक्टर बाजार २७.२ अब्ज डॉलरचा होता आणि २०२३ मध्ये तो ६४ अब्ज डॉलरवर पोहोचला. २०३० पर्यंत हा बाजार ११० अब्ज डॉलरचा होईल, असा अंदाज आहे.

### भारतात सेमीकंडक्टर निर्मिती

भारतात सेमीकंडक्टर बनवण्यासाठी मोठी पावलं उचलली जात आहेत. सरकारने २०२१ मध्ये ७६,००० कोटींच्या भारत सेमीकंडक्टर मिशन (ISM) ला सुरुवात केली. याअंतर्गत गुजरात आणि आसाममध्ये तीन यूनिट्स मंजूर झाल्या, आणि आता जेवरमध्ये सहावी यूनिट येत आहे. टाटा, वेदांता आणि अदानी समूह यासारख्या कंपन्या या क्षेत्रात उतरल्या आहेत. जेवर यूनिट ३,७०० कोटींच्या गुंतवणुकीसह २०२७ पर्यंत उत्पादन सुरू करेल. यातून लॅपटॉप, स्मार्टफोन आणि गाड्यांसाठी चिप्स बनतील. यामुळे आयात कमी होईल आणि रोजगार वाढतील.



# Hindustan Power begins work on 435 MWp solar project in Uttar Pradesh

Hindustan Power has commenced construction of a 435 MWp solar power project in Lalitpur, Uttar Pradesh.

The project was awarded by the Uttar Pradesh Power Corporation Limited through a competitive bidding process in April 2025 and is expected to supply clean electricity to the state for 25 years. It was announced at the Clean Energy Summit 2025 in Lucknow and aligns with Uttar Pradesh's goal of achieving 22,000 MW of renewable energy capacity by 2026–27.

# Ministry of Finance grants IREDA bonds tax-exempt status

The Ministry of Finance through the Central Board of Direct Taxes has notified that bonds issued by Indian Renewable Energy Development Agency Limited (IREDA) will qualify as 'long-term specified assets' under section 54EC of the Income-tax Act, 1961 from July 9, 2025.

This enables eligible investors to claim exemption on long-term capital gains up to Rs 5 million per financial year by investing in IREDA bonds redeemable after five years. The proceeds from these bonds will be used exclusively to finance renewable energy projects with self-sustaining revenue streams.



# EYELITE LUMINAIRES

**AUTHORISED DISTRIBUTOR** 



















EGC - 813

EGC - 814

EGC - 815

EGC - 816

EGC - 817

EGC - 818

great-white.in | f ⊙ 🗶 🕞 in



# WHERE INNOVATION MEETS A REFRESHING BREEZE

Flying Wali Feeling



GO FOR GREAT

Combating the heat with superior performance & quality, GreatWhite's range of Airus Fans fit seamlessly into any space. These new-age performers are dynamically designed for that 'Flying wali feeling'.



Fans



# Supreme Creation SAFETY SIGNAGES







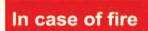








# Safety Rules are Your **Best Tools**



















- (®) +91 91522 00534 +91 91522 06447
- sales@supremecreation.in
- www. supremecreation.in
- (P) D/001, Samarth Krupa, Near Western Express Highway, Akurli Road, Kandivali (E), Mumbai 400101.













PASSION THAT FABRICATE EXCELLENCE



# SUJEET INDUSTRIES PVT. LTD.

E-21, MIDC Industrial Area Malegaon, Sinnar, Nashik-422113 Maharashtra (India).

9225145222 / 9588492048 / 9225146555

# Facade Luminaires

Powerful Design . Powerful Light







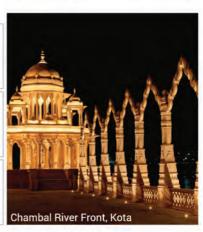


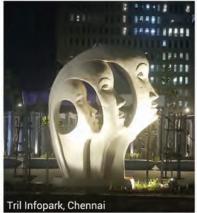




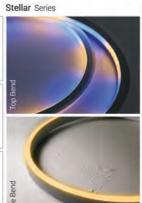




















# K-LITE **K-LITE** INDUSTRIES PVT.LTD

D-10, Ambattur Industrial Estate, Chennai - 600 058. Tel: 26257710, 48581950 Cell: 95000 79797, 95000 85511 Email: info@klite.in Website: www.klite.in

















**Wires & Cables** 

PRINCIPAL PARTNER









Toll Free No: 1800 410 0000

www.kei-ind.com 🚯 🚳 📵 🙃 /keicables

World class Quality, Incredible Range. Wires and cables Specialist.













































WIDEST RANGE OF WIRES AND CABLES FROM 1.1KV UP TO 400KV



## **Registered and Corporate Office:**

**KEI Industries Limited:** D-90, Okhla Industrial Area Phase-1, New Delhi-110020 (India) Tel: +91-11-2681-8840 / 8642 / 0242 CIN No: L74899DL1992PLC051527

