



ENERGY EFFICIENCY SERVICES LIMITED

A JV of PSUs under Ministry of Power, Government of India

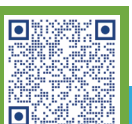
INNOVATING ENERGY

Hon'ble CM of Andhra Pradesh, Shri Chandrababu Naidu and EESL CEO Shri Vishal Kapoor Discuss Strategies to Make State the Most Energy-Efficient by 2028

September 2024



Switch karo, save karo



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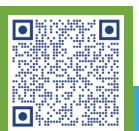
Noteworthy Energy Developments

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Editor's Note

By

Mr Nitin Bhatt,
Deputy General Manager,
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Dear Readers,

As we approach the final months of 2024, the challenges posed by climate change and rising energy demands have become undeniable. This past summer, marked by record-breaking temperatures, has been a stark reminder that the future we plan for must prioritise sustainability. Energy efficiency is not merely a technical adjustment; it is a fundamental shift in how we think about energy use in our daily lives. As we continue to face soaring demand for cooling, lighting, and cooking solutions, energy-efficient technologies offer the most viable path forward for meeting these needs sustainably.

In this edition, we explore a diverse range of initiatives that demonstrate how energy efficiency is paving the way to a net-zero future. From embracing cleaner cooking technologies to driving innovation in cooling and lighting solutions, these stories showcase the steps being taken to ensure a sustainable and equitable energy transition for all.

Our opening article, 'Transforming Purchases into Purpose: Embracing Energy Efficiency' redefines how we view everyday purchases. It highlights the subtle yet profound shift from focusing solely on products to prioritising the outcomes they deliver. At EESL, we believe that energy efficiency is more than just a cost-saving measure—it's an investment in the future of our planet. This article explores how our purchasing decisions contribute to the larger goal of sustainability, turning every purchase into an opportunity to support a cleaner, greener India.

Cooling is a vital aspect of this transition, especially

as extreme heatwaves become more frequent and intense. 'Sustainable Cooling: The Roadmap to Net-Zero India' emphasises the critical need for energy-efficient cooling solutions. The surge in cooling demand poses a significant challenge to India's climate goals, but by adopting energy-efficient appliances like BLDC fans and super-efficient air conditioners, we can mitigate the impact of rising temperatures while reducing emissions. EESL's demand aggregation strategy has made these cutting-edge technologies accessible, ensuring that sustainable cooling is not just an option, but a necessity for all.

Continuing on this theme, 'Lighting the Way to Net-Zero with LEDs' delves into the significant role that LED technology plays in reducing India's carbon footprint. The shift to LED lighting may seem simple, but its impact is transformative. By reducing energy consumption, lowering costs, and preventing mercury pollution, LEDs are not just illuminating homes and streets but also lighting the path towards India's ambitious net-zero targets. With EESL's programmes like UJALA and the Street Lighting National Programme (SLNP), LEDs are driving large-scale socio-economic transformation across urban and rural India.

The role of technology in driving sustainability is further explored in 'Energy efficiency marketplaces can contribute to our net-zero journey by helping us make smart, sustainable choices'. As the e-commerce sector continues to expand across



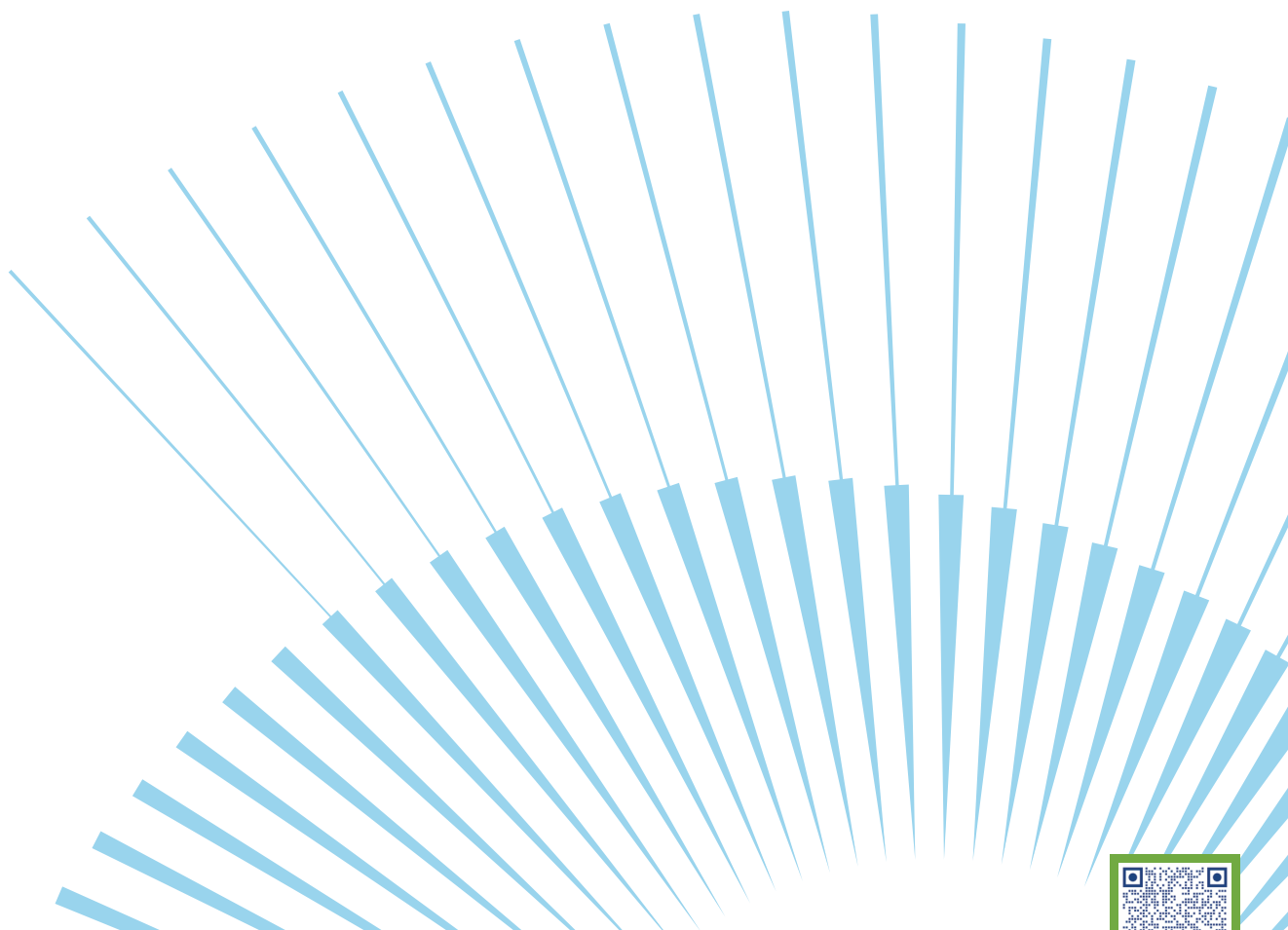
India, platforms like EESL Mart are bringing energy-efficient appliances to the fingertips of millions. This article discusses how online marketplaces, by offering accessible, affordable, and innovative products, are breaking barriers to energy efficiency adoption. From super-efficient air conditioners to BLDC fans, these products are designed to reduce both energy consumption and carbon emissions, helping India move closer to its climate goals.

Electric cooking technologies are another critical frontier in the battle for sustainability. 'Electric Cooking: A Key Ingredient for a Net-Zero Future' outlines the transformative potential of transitioning from traditional fuels to cleaner electric options. The article underscores the public health and environmental benefits of this shift, as well as the economic advantages, such as reducing India's reliance on LPG imports. EESL's National Electric Cooking Programme is making strides in this area, offering solutions that not only cut emissions but also empower communities through cleaner, faster, and more cost-effective cooking

options.

Finally, the importance of inclusivity in the energy transition is highlighted in an overview of a Gender Equality and Social Inclusion (GESI) Assessment Workshop held by USAID's South Asia Regional Energy Partnership (SAREP) Program, in collaboration with Energy Efficiency Services Ltd. (EESL) this month. The workshop provided critical insights into how gender equality and social inclusion can enhance the effectiveness of energy programmes. By incorporating GESI principles, EESL is not just driving energy efficiency but also ensuring that this transition is fair, inclusive, and equitable for all sections of society.

As always, we hope this edition provides valuable insights into the journey we are collectively undertaking. The path to net-zero is not without its challenges, but with innovation, inclusivity, and a commitment to sustainability, we are shaping a future that benefits both people and the planet.



Transforming Purchases into Purpose: Embracing Energy Efficiency



CEO's Desk

By
Mr. Vishal Kapoor
CEO, EESL

Energy efficiency is not just a buzzword; it's a way of life that promises better outcomes for our wallets and our planet. When we talk about energy efficiency, we are focusing on using less energy to achieve more—whether it's lighting up a room, cooling down a space, or powering our daily activities. It's about getting the best possible outcomes.

Let's think beyond just buying a bulb, fan, or AC. Instead, let's focus on what we're really buying—luminosity, fresh air, and cool comfort. The difference is subtle yet profound. The first focuses on the product; the second emphasizes the service and the experience it provides. Think of it as the difference between buying a car and buying the freedom of traveling the open road. It's not just the item; it's what it does for you!

So, when we make purchases, what are we really aiming for? Are we buying a brand or a product, or are we investing in the actual service and benefits that the product offers? Humanity has progressed from input to output, and from output to outcome. What we need are outcomes. Energy efficiency is a perfect example of this shift. It's about optimizing our resources to achieve the most significant impact with the least amount of waste. However, we also live in a parallel world that celebrates consumerism—buy more, spend more. But let's pause and reflect. Is this model sustainable? The essence of energy efficiency challenges this idea. It encourages us to think about cost efficiency and sustainability. These concepts promote a better future, not just for our wallets but for our environment.

At <https://EESLmart.in>, we embody this philosophy. We are not a trading store; we are an idea. We sell energy efficiency because it means cost efficiency, and it also means a planet that can make us and our future generations live longer. We want you to realize the savings and benefits in the long run. We want you to be able to run multiple generations after yours.

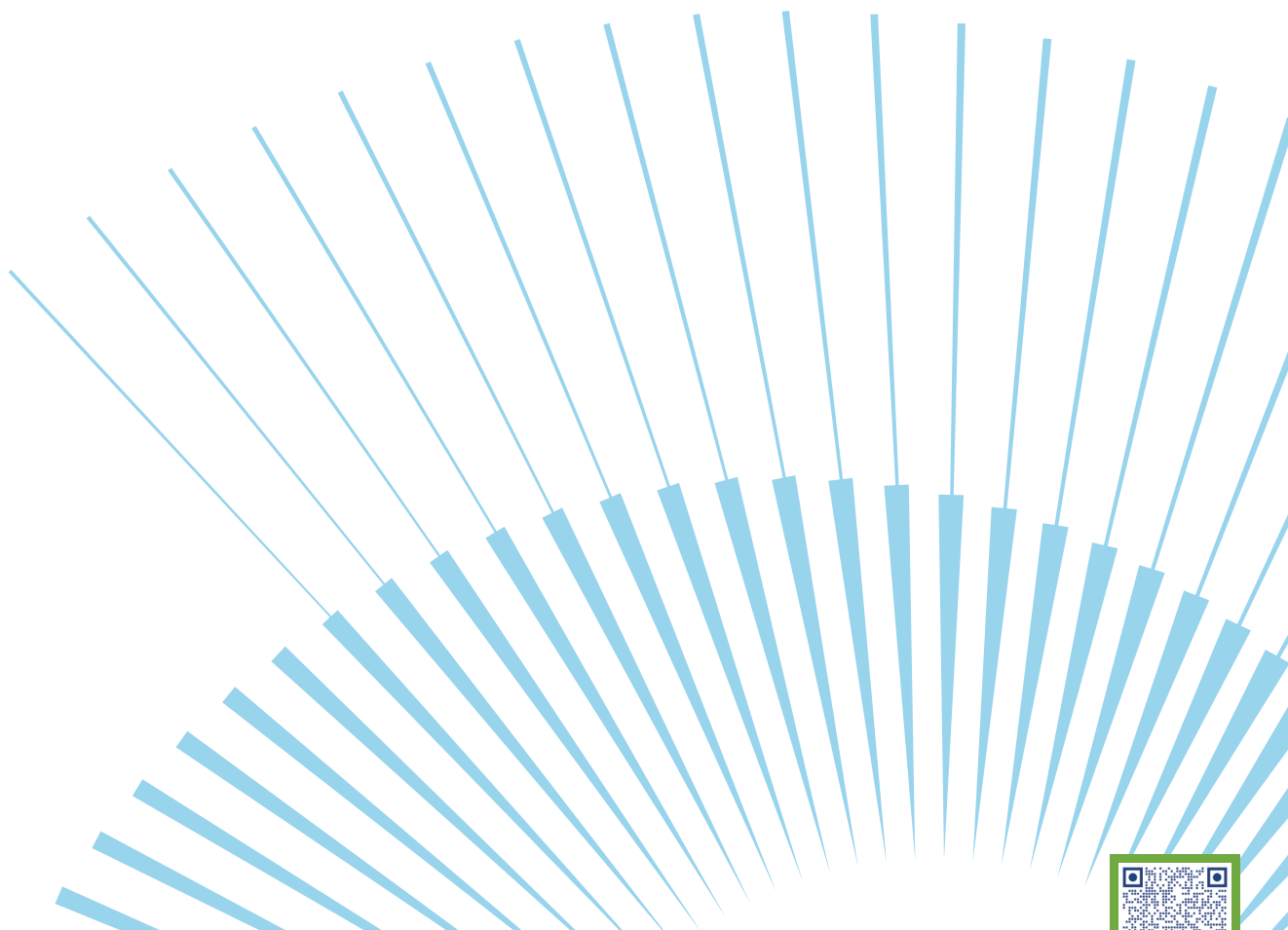
As a cog, you often don't see the entire wheel, but at <https://EESLmart.in>, we make sure you do. We tell



you exactly what your small effort means in the larger scheme of things. Your choice to buy energy-efficient products is a vital part of our collective journey towards a sustainable future. We take pride in associating you with our mission to make our country more energy efficient. When you buy from <https://EESLmart.in>, you are buying a service while getting the product at a

lower price. You are contributing to the planet. And you can be sure that anything coming from our portal is energy efficient.

Join us in this journey towards a sustainable future.



Paving the Path to Net-Zero with Energy Efficiency through a GESI Lens

In an era where the global focus is shifting towards sustainability and carbon neutrality, it is becoming increasingly evident that the transition to a net-zero future must be just and inclusive. This transition cannot only be about technological advancements; it must also address social inequalities and promote gender equity. Recognizing this, USAID's South Asia Regional Energy Partnership (SAREP) Program, in collaboration with Energy Efficiency Services Ltd. (EESL), hosted a Gender Equality and Social Inclusion (GESI) Assessment Workshop on September 2, 2024, in New Delhi. This workshop highlighted the vital role that GESI plays in the energy sector and how it can drive progress toward a more equitable and sustainable net-zero future. The GESI Assessment Workshop brought together senior officials from EESL and experts from USAID's SAREP to explore the intersections of gender equality, social inclusion, and energy efficiency. At the heart of the discussions was the understanding that integrating GESI principles into energy programs not only ensures fairness but also enhances the effectiveness of energy efficiency initiatives. This approach aligns with EESL's commitment to "Paving the Path to Net-Zero with Energy Efficiency," a theme that underscores the importance of inclusivity in creating a sustainable future.

Setting the Stage for a Just Transition

The workshop began with opening remarks from EESL's CEO Vishal Kapoor, who emphasized the importance of embedding inclusivity into all aspects of energy transformation. Apurva Chaturvedi, Senior Regional Clean Energy Specialist at USAID/India, followed with a welcome address that reinforced the need for gender equality and social inclusion in energy transition strategies. These introductory remarks set the tone for the workshop, which focused on equipping EESL's Project Heads with the knowledge and tools to incorporate GESI principles into their daily operations.

Empowering Change: Integrating GESI into Energy Efficiency Programs

The workshop provided participants with an in-depth understanding of how GESI can be used as a diagnostic tool to close gender gaps in the energy sector. The participants engaged in discussions on gender-responsive budgeting, tools for addressing gender disparities, and strategies for integrating GESI principles into EESL's various



By
Ms. Nidhi Prabha
Gender Equality and Social Inclusion Advisor (GESI) for USAID's SAREP

programs.

One of the key highlights of the workshop was a SWOT analysis from a GESI perspective. Participants examined the strengths, weaknesses, opportunities, and threats related to gender integration within EESL's operations through a hypothetical project. This exercise allowed the team to reflect on how GESI principles could enhance their ongoing projects and how they could be better incorporated into future interventions. By considering these aspects, EESL is positioning itself to be a leader in not just energy efficiency but also in driving a gender-inclusive energy sector.

The workshop also addressed the importance of continuous learning, with a focus on gender-transformative frameworks. Participants were encouraged to rethink traditional gender roles, particularly in the energy sector, and to envision a future where inclusivity is the norm rather than the exception. This forward-thinking approach is critical as EESL continues to expand its energy efficiency programs and moves toward achieving net-zero goals.



EESL Initiatives Promoting Gender Equality

Throughout the workshop, several EESL initiatives aimed at promoting gender equality were also highlighted. Key programs include:

Mobility Program: EESL has been training underprivileged women as commercial drivers, empowering them with skills to participate in the green economy.

Solar Mart Didis: Women are being equipped with technical knowledge on energy-efficient BLDC fans and marketing skills, allowing them to become active contributors to energy efficiency efforts in their communities.

Street Lighting National Program: A qualitative study on women's safety was conducted as part of this program, emphasizing the importance of gender-sensitive infrastructure in public spaces.

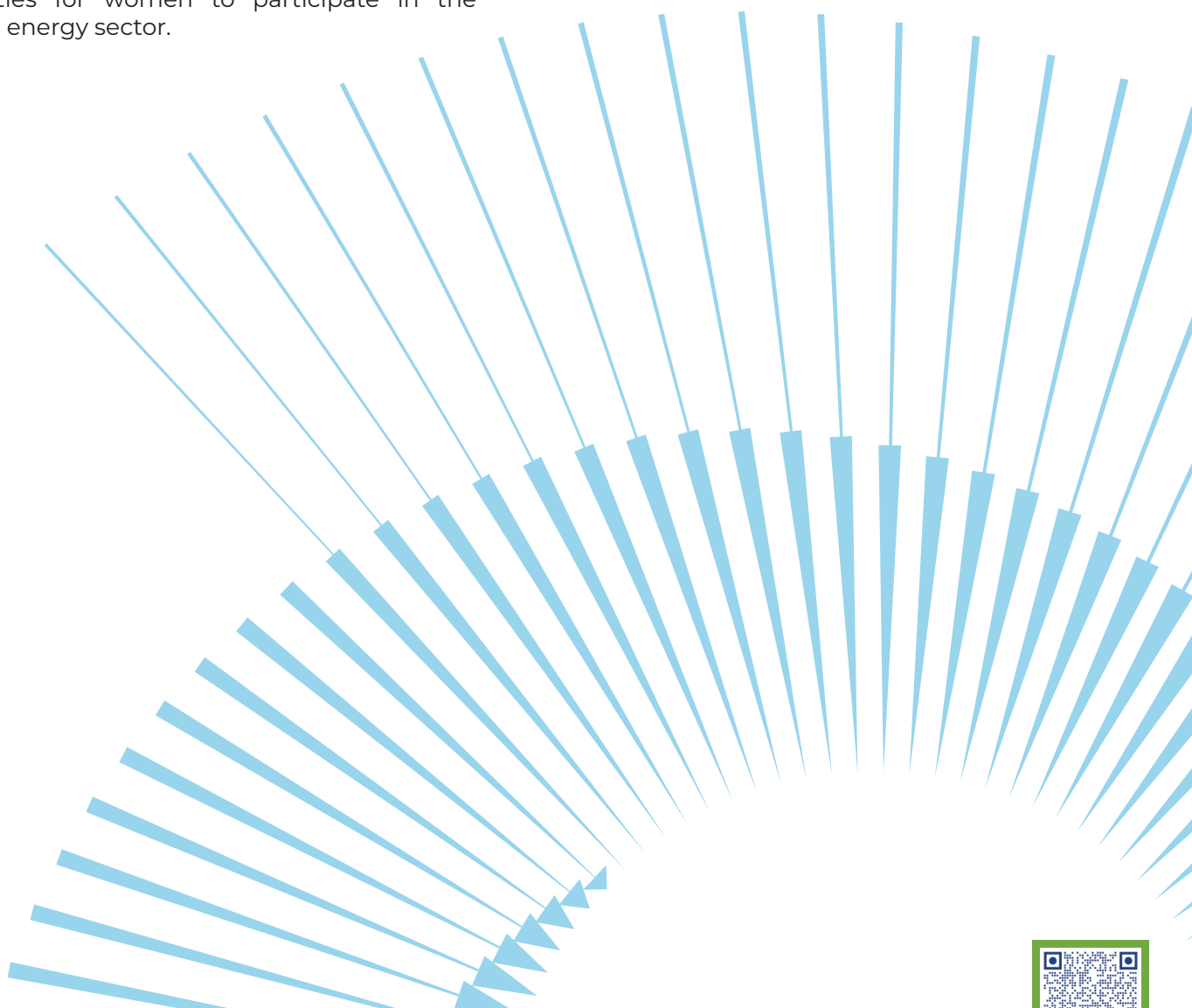
SOUL Program: Through this initiative, EESL is building the capacity of self-help group (SHG) women to assemble solar lamps, creating opportunities for women to participate in the renewable energy sector.

These among other programs showcased how gender inclusivity can drive innovation and create opportunities for marginalized groups to participate in the energy transition.

Paving the Path to Net-Zero: A GESI-Driven Approach

As the global energy landscape evolves, EESL's focus on energy efficiency places it at the forefront of the fight against climate change. However, the journey to net-zero cannot be achieved without a just transition. By embedding GESI principles into its operations, EESL is ensuring that its efforts toward energy efficiency are inclusive, equitable, and sustainable.

The GESI Assessment Workshop marked a significant step forward in this journey. By equipping EESL's leadership with practical strategies to integrate gender equality into their projects, the workshop has laid the foundation for a more inclusive approach to energy efficiency.



Sustainable cooling: The Roadmap to Net Zero India

Humanity at large blissfully kept ignoring the rising sea levels, melting glaciers, and intensifying storms, thinking "oh, it's just the problem of polar bears" or "only the island nations need to bother". But the severe heatwave finally came knocking on our own doorstep this year, converting our cities into sweltering ovens and forcing us to run for cover. July 2024 was the hottest month ever recorded since global temperature tracking began in 1850 and this record-breaking heatwave marked the 14th consecutive month of soaring temperatures. As rising mercury becomes the new normal, perhaps we'll realize that global warming is not just a distant threat, but a ticking time bomb waiting to unleash its fury on our very own doorsteps.

Increasing frequency and length of extreme heat events has pushed more and more people into acquiring energy intensive active cooling measures like air conditioners, fans and air coolers, at extortionate costs. Moreover, this demand for cooling appliances is not a matter of luxury, but an essential need for survival. Going forward, heat waves in India are predicted to become more frequent, and with longer duration (number of extremely hot days) and consequently it is projected that by 2037, the demand for cooling will grow eight times (a new AC every 15 seconds) in India leading to a 435% rise in annual emissions.

This surge in usage of cooling appliances has not only resulted in inflated electricity bills and increased CO2 emissions, but also has wider knock-on effects. High demand of electricity led to straining of the existing transmission and distribution infrastructure during summer months, resulting in grid disturbance and frequent power cuts.

Also, most cooling systems use refrigerants such as HFCs, which are potent greenhouse gases. While

their usage is being phased down under international agreements like the Kigali Amendment, a rapid expansion of cooling solutions without proper regulations could lead to higher emissions of these gases, which have a far greater warming potential than CO₂.

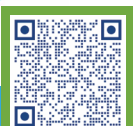
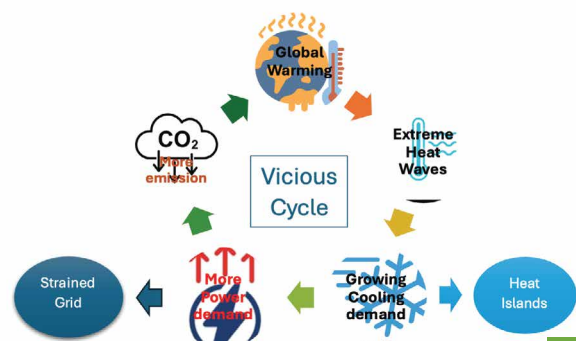
Furthermore, air conditioning units used in buildings release a great deal of heat into the outdoors increasing the surrounding air temperature, thus contributing significantly to the Urban Heat Island effect.

Apart from onset of severe heatwaves, other factors like continued economic growth, population increases, and industrial development will also contribute to surge in demand for cooling comfort, especially in developing nations like India, leading to further soaring of demand for power. This surge in power demand will result in more fossil fuel burning, increased greenhouse gas emissions, and further temperature rise, leading to enhanced demand for cooling appliance which in turn will need more electricity, resulting in the creation of a Vicious Cycle.

A rapid increase in cooling demand, driven by extreme heatwaves, can significantly hinder India's ability to



By
Santosh hakur
Chief General Manager
(CP/RTI), EESL



achieve its net zero target.

So how does one handle such soaring power demand while providing thermal comfort to the citizens and at the same time honor the country's environmental commitments?

Energy-Efficient cooling – The only sustainable solution

This unprecedented surge in power demand underscores the criticality of widespread adoption of energy efficient appliances. Setting higher efficiency standards for cooling appliances is one of the simplest yet most impactful step towards providing thermal comfort without putting much strain on power demand.

But it is easier said than done. While highly efficient air conditioners are available in the market, most efficiency standards – and consequently the units purchased by consumers – have lower efficiencies than the top-of-the class models mainly owing to their higher upfront cost. Also, only 3% of Indian households use energy efficient ceiling fans, which currently often entail a higher upfront cost but consume 50% less energy than conventional models (IEA – Energy Efficiency Report 2023).

EESL – the solution provider

Ever increasing frequency and length of extreme heat events has presented EESL with the opportunity to accelerate the adoption of energy efficient cooling appliances like BLDC fans and super-efficient ACs, thus fulfilling the dual objective of providing affordable cooling comfort to all while conserving energy.

The enormous cost reduction achieved through 'Demand aggregation & Bulk procurement' strategy adopted by EESL has helped in making the cutting-edge energy efficient technologies affordable for consumers. Energy-efficient cooling appliances offered by EESL not only help reduce energy consumption but also come with affordable price tags thus benefiting consumers and the planet simultaneously.

EESL's Super-Efficient ACs, for example, are specifically designed to operate efficiently in India's

high temperatures. These ACs come with a higher Indian Seasonal Energy Efficiency Rating (ISEER) and can cut cooling costs by 50%. This rating measures how well an air conditioner cools a space over an entire season, including both peak summer temperatures and cooler periods, ensuring optimal performance and energy savings throughout the year. For example, the 1.5-ton model offered by EESL features an ISEER of 5.8, making it significantly more efficient than conventional models while it is priced in the same range or lower than the 5 star rated ACs available in the market.

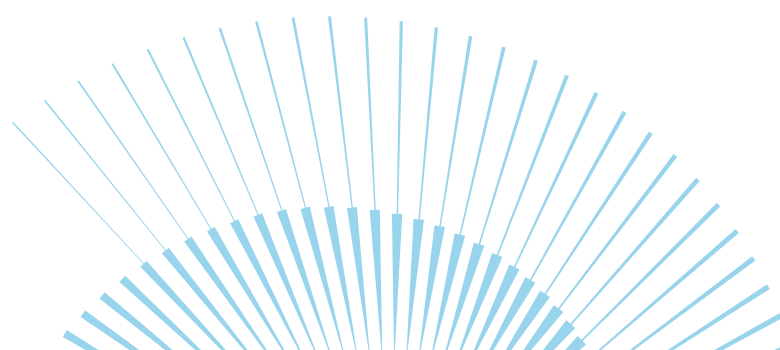
Similarly, EESL's BLDC fans consume up to 60% less electricity than conventional fans, offering longer lifespans, reduced electricity bills, and quiet operation. These fans are equipped with features like remote operation, timers, and 'sleep mode' for added convenience, making them ideal for residential use. Their efficiency, measured by the service value—air delivery divided by power consumption—is exemplary, with a service value of 7.3, exceeding the threshold specified for BEE 5-star rating.

Efficient Cooling solutions for India's net zero goals

Efficient cooling technologies are not just about saving electricity and costs—they are integral to achieving broader climate goals, including the global push for net-zero emissions. As India strives to meet its climate commitments, reducing energy consumption from cooling is a critical part of the equation. Efficient cooling appliances can significantly lower electricity demand, helping the country avoid the "cold crunch" where rising cooling needs would otherwise lead to increased emissions and greater strain on power grids.

By adopting energy-efficient cooling appliances, industries, households, and governments can collectively reduce emissions, improve energy use, and contribute to a more sustainable future. EESL's commitment to providing innovative, efficient cooling solutions is a step toward this greener future, where comfort and sustainability go hand in hand.

As the world grapples with the growing threat of climate change, sustainable cooling is no longer just



Energy efficiency marketplaces can contribute to our net-zero journey by helping us make smart, sustainable choices

Over the past decade, online marketplaces have expanded the reach of products and services to regions and markets that hadn't been tapped before. Hundreds and millions of people have smartphones today, and many of them use UPI apps or some form of online payment. This has enabled e-commerce to overcome many socioeconomic and geographic barriers. The e-commerce market in India has grown exponentially over the past decade. It was valued at \$57-60 billion in 2023 and is projected to reach a size of \$300 billion by 2030. The online medium can be used for more than market expansion and revenue generation, though. It can also be a powerful means of driving a mindset change or a nationwide transformation, such as the one that EESL is trying to enable in the sphere of energy efficiency.

There is little to say about energy efficiency that hasn't already been said before. Energy efficiency initiatives have helped India achieve its NDC target of reducing the emission intensity of its GDP 11 years ahead of target. Energy efficiency is rapidly gaining recognition as a vital element of the ongoing sustainability- and environment-focused initiatives of nations across the world. It complements the ongoing efforts to minimize pollution, generate clean energy and reduce greenhouse gas emissions. Participant nations at the COP28 summit last year committed to working towards doubling the global average annual rate of energy efficiency improvements from around 2% to over 4% every year until 2030.

One of the first steps towards energy efficiency involves replacing some of the commonly used electrical appliances with energy-efficient models of the same. This calls for a change in mindset, a change in habits – which takes time and requires a fair bit of information-sharing and gentle nudging – as well as easy availability and affordability of energy-efficient products. EESL is trying to achieve this twin goal through its e-commerce portal EESL Mart.



By
Mr. Arvind Talan
Chief Financial Officer, EESL

EESL Mart is a gateway to a sustainable lifestyle, offering a range of energy-efficient appliances designed to meet the cooling and lighting needs of Indian consumers. These include super-efficient air conditioners of 1.0 TR and 1.5 TR capacities; BLDC ceiling fans that can either be regulated through a wall-mounted regulator or can be operated through smart remotes; LED bulbs in 5-star 6W and 3-star 9W variants; and 10-Watt 1050-Lumen rechargeable inverter bulbs with up to four hours of battery backup.

A beta version of the portal is operational for now, and EESL will expand the product offerings in due time to include electric bicycles and induction cooktops. The platform will also cater to the B2B sector in the future to help businesses reduce their overhead operating costs and their carbon footprint through the use of energy-efficient products.

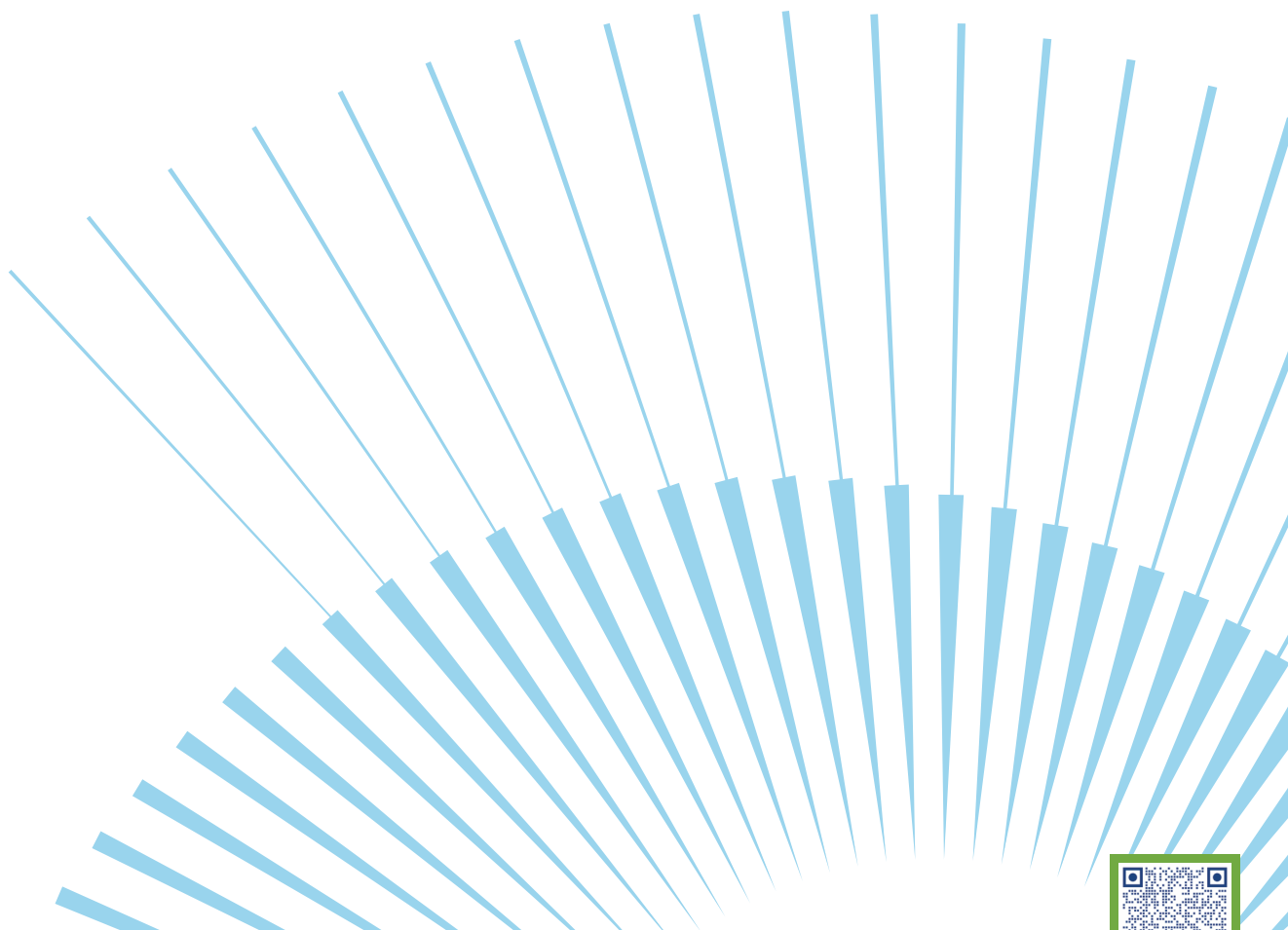
To make it easy-to-use and accessible for all, EESL has made the user interface very simple yet informative. Customers can easily browse, select, and purchase the products they need. Each product also comes with a detailed product description, customer reviews, and estimated energy savings. EESL Mart also provides exceptional customer service so that customers can avail of any support they might need to maximize the benefits of the



products they buy. Like with some of the best e-commerce portals in the country, EESL Mart too ensures a smooth procure-to-pay and order-to-cash experience to consumers, so that it is convenient even for first-time shoppers or people who have limited experience of online shopping.

Last, but not least, EESL Mart tries hard to dispel any misconceptions that consumers might have regarding the cost-effectiveness or the functional

benefits or the environment-friendliness of energy-efficient products. The combination of accessibility, affordability, functionality, sustainability, and knowledge that EESL Mart offers will drive the adoption of energy-efficient products and demonstrate how the online medium and online marketplaces can be used to bring about a mindset change that will nudge consumers to make responsible, sustainable choices in every sphere of life.



LEDs illuminate the way to a brighter future for India



By
Mr. Yogesh Gurjar
Head Corporate Contracts, EESL

14W CFL or a 60W ICL but saves almost 50% and 90% energy in comparison, respectively. A LED bulb consumes one unit of electricity when it is used for 140 hours, as compared to two units by a CFL and nine units by an ICL. Translated into annual cost of ownership, this means that a LED costs a third of a CFL and a tenth of

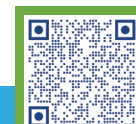
Nations today face the challenge of achieving inclusive development and robust economic growth while minimizing their carbon footprint. India, at the frontlines of the global war against climate change, has pledged to reduce the carbon intensity of its economy by 45% by 2030 and achieve net-zero carbon emissions by 2070. Energy efficiency is an effective and viable means of meeting these interlinked goals. Reducing energy intensity by achieving higher energy efficiency can accelerate India's progress towards its sustainability targets. EESL has been supporting India's energy transition for more than a decade with its flagship programmes – Street Lighting National Programme (SLNP) and Unnat Jyoti by Affordable LEDs for All (UJALA). The shift from traditional light bulbs and tube lights to LED bulbs and tubes might seem like a very simple change, but it is a hugely transformative one in terms of energy efficiency, cost savings, and environmental impact. Indeed, the International Energy Agency estimates that energy efficiency can contribute as much as a third of the total reduction in greenhouse emissions by the year 2030.

In recent years, amidst growing awareness about the need for energy efficiency and smarter power consumption, an increasing number of consumers are willing to buy LED lights and bulbs. Their decision is backed by perfectly sound economics. A 7W LED bulb provides the same amount of light as a

an ICL. LEDs also provide the added benefit of preventing the risk of mercury pollution associated with the other two. It is no surprise that LEDs are increasingly becoming the preferred choice for lighting in many industrial, commercial, and domestic applications.

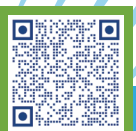
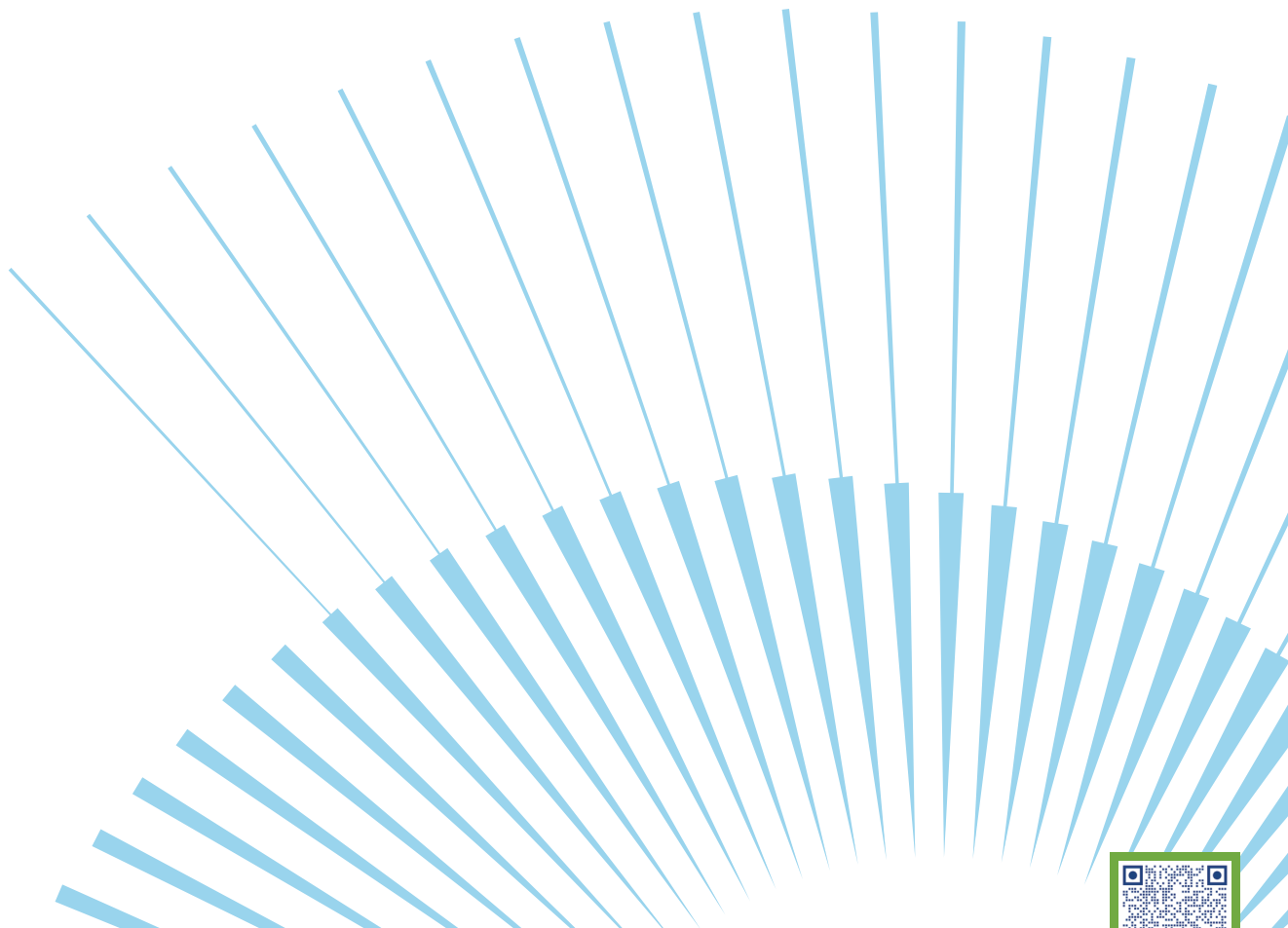
In the past decade, the market for LED lights in India had grown manifold while the price has come down sharply. A large part of the credit for this transformation goes to EESL, which has used the demand aggregation model to good effect for UJALA and SLNP. These programmes have enabled large-scale socioeconomic transformation and yielded significant benefits in terms of cost savings and reductions in emissions and peak demand. There is growing domestic demand for LEDs, driven by government initiatives and the pro-environment sentiment among industrial, corporate and retail consumers of electricity. Together, these factors have helped India emerge as the world's second largest producer of LEDs.

LEDs also have potential to give a boost to India's exports, employment, and economic growth, and put India at the forefront of a global movement towards energy-efficient lighting. On that front, the central government's Production-Linked Incentive scheme for white goods will help in making LED



manufacturing globally competitive by creating economies of scale. As India works to deliver on its medium- and long-term sustainability goals, energy efficiency will share the center stage along with the numerous clean energy initiatives that are

underway. There are significant opportunities for greater adoption of LED lighting in rural as well as urban India at all levels – domestic, commercial, and industrial. The stage is well set for LEDs to illuminate the way ahead for India towards its net-zero goals.



Electric cooking: A key ingredient for a net-zero future



By
Mr. Vineet Taneja
Head HR, EESL

Background : Worldwide, especially in Third World Economies , traditional methods of cooking like use of firewood, cow dung etc. is being done by population at the bottom of the pyramid. The above cooking methods are highly inefficient, lead to emission of local effluents & harmful particulate matters that causes respiratory issues to the house women besides being responsible for CO2 emissions.

If we slightly move up the economic ladder , Liquefied Petroleum Gas (LPG) replaces the traditional fuels of cooking. LPG as a fuel is more efficient and cleaner as it does not emit harmful local effluents but it nevertheless causes release of GHG emissions both at the time of its refining, production, packaging , transportation and its end use.

Issues with Traditional Cooking : The cooking sector alone contributed 1.69 Gigatons of CO2 equivalent emissions in 2020 globally. Advancement of clean cooking technologies has now assumed high importance for reducing global emissions and forms a vital actionable point to ensure compliance with targets of Paris Climate Agreement. Reducing these emissions is essential not only to mitigate climate change but also to safeguard and address larger public health issues.

Solutions- Overcoming Barriers : The switch over from traditional to modern cooking methods is the requirement of the day. The most viable switch option is a gradual transformation from traditional fuels and even LPG to a more efficient electric cooking through induction cookstoves. Currently, only about 5% of Indian households have embraced some form of electric cooking. The barriers to adoption of electric cooking are old habits, lack of awareness, lack of standards and labelling for electric cookstoves, requirement of special utensils, high electricity tariffs, power outages etc.

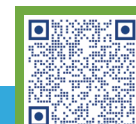
These barriers can be easily overcome by spreading awareness through mass media channels having high penetration amongst population at bottom of pyramid, lower middle class and middle class , innovative financing mechanisms to cover high upfront cost of adoption, standardization of induction cookstoves by BEE, lower electricity tariffs (upto 100-200 units) to incentivize electric cooking , nominating agencies to standardize technical specifications, aggregate demand and conducting bulk procurement to drive down prices etc.

Benefits of Clean Cooking The benefits of clean cooking are far-reaching, including promoting gender equity. Women and children, who often bear the responsibility for cooking and fuel collection, can benefit from time savings, improved health, and better livelihood opportunities. Thus, accelerating the adoption of electric cooking aligns with broader goals of gender equality and empowerment.

Adoption of clean cooking would also help in savings scarce resources of India. India's crude oil import bills stand at USD 130 billion in 2023. India spends USD 23.4 billion on import of 48.1 million tons of LPG. The switch to clean electric cooking would save billions of foreign exchange , improve the balance of trade, make our currency stronger internationally and will give a boost to economic development by channelizing resources from fuel imports to priority social sector.

In India, while electric cooking methods are gaining traction, they are still in their early stages of adoption. However, factors such as rising LPG costs and increasing awareness of energy-efficient solutions are making electric cooking more attractive. Notably, the electric kitchen appliances market is projected to grow at a compound annual growth rate (CAGR) of 11-12% from 2016-17 to 2027-28.

Role of Energy Efficiency Services Limited: Under



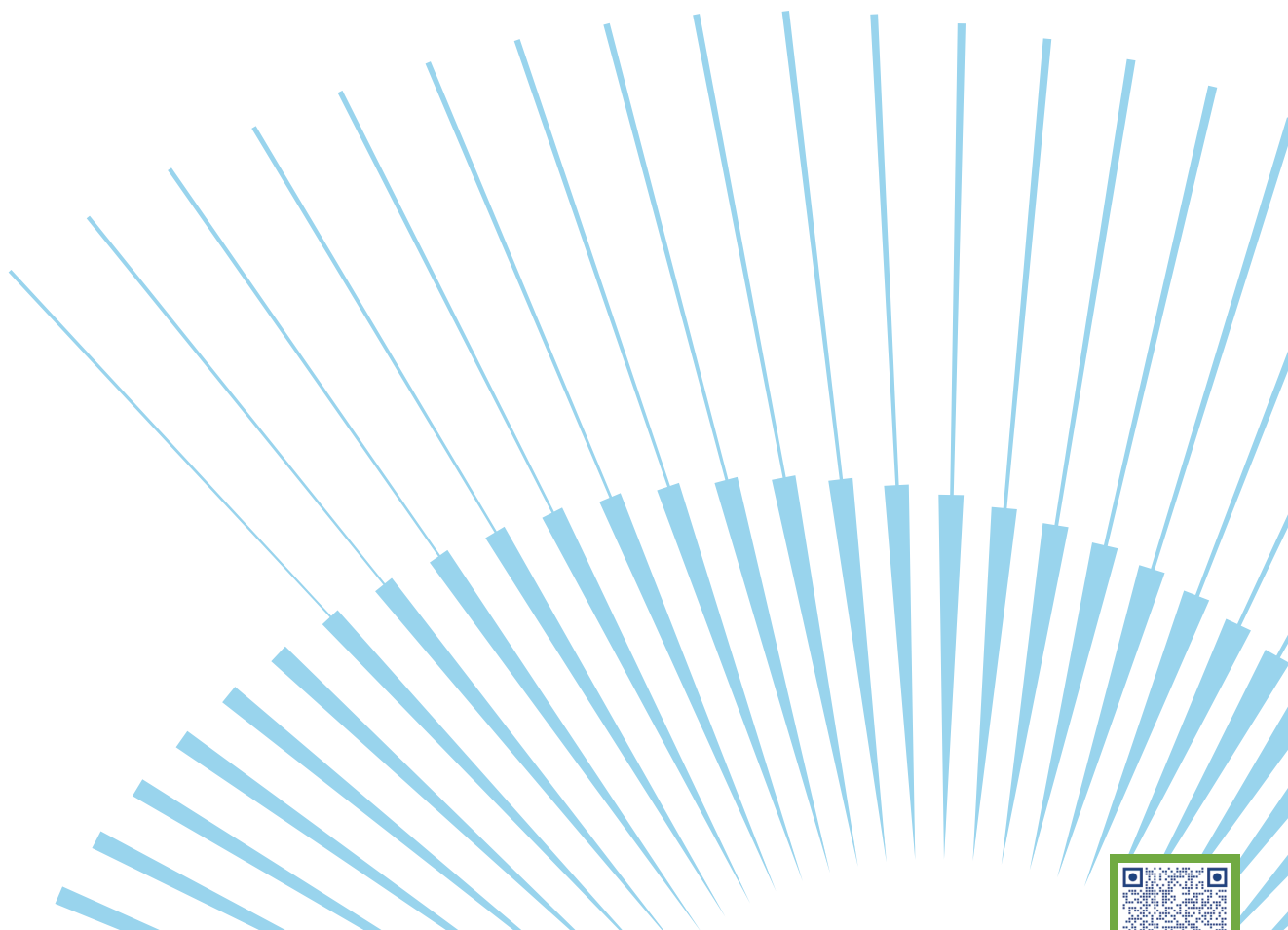
times and potential cost savings of 25-30%.

NECP (National Electric Cooking Programme), EESL has planned to play a pivotal role in driving this transformation and to market 100,000 electric induction cook stoves. EESL's e-cooking program has yielded promising results, equipping community centers & Anganwadi centers with 2000 electric induction cook stoves in each, Ladakh and Tripura with the help of SDA. Additionally, EESL is to initiate an electric pressure cooker programme with help of MECS (Modern Energy Cooking Services).

The positive impact of these initiatives extends beyond individual households, contributing to several Sustainable Development Goals (SDGs), including poverty alleviation, gender equality, good health, and climate action. Induction stoves are about 10% more efficient than conventional electric stoves and three times more efficient than gas stoves. This efficiency translates into faster cooking

India's push for electric cooking aligns with its broader commitment to reducing greenhouse gas emissions and promoting sustainable lifestyles. Government initiatives such as Mission Life emphasize responsible resource use and sustainable living, and electric cooking technologies are a crucial component of these efforts. EESL's continued work in this sector demonstrates the potential of energy-efficient solutions to transform India's kitchens and contribute to a net-zero future.

The path to clean cooking is not only about technology but also about empowering communities, ensuring public health, and protecting the environment—one electric stove at a time. Let us cooperate to make this Earth a cleaner, greener and better place to live in!



Discover EESLMart's Energy-Efficient Appliances: Smart Choices for a Sustainable Future



1.0 TR Super-Efficient 5 Star Split AC:
Maximize cooling and energy savings with our 1.0 TR Split AC, featuring an impressive ISEER of 6.2



1.5 TR Super-Efficient 5 Star Split AC:
Experience superior comfort and energy efficiency with our 1.5 TR Split AC that comes with an ISEER of 5.8



5 Star BLDC Ceiling Fan (with remote):
Experience the perfect blend of air circulation and energy efficiency with our 5 Star BLDC Ceiling Fan



BLDC Ceiling Fan – 5 Star (without remote):
Superior cooling meets energy efficiency with our 5 Star BLDC Ceiling Fan, designed with a wall-mounted regulator



Emergency LED Bulb 10W, 1050 Lumens:
Light up during power outages with our 10W Emergency LED Bulb, offering 4 hours of backup.



5 Star 6W LED Bulb:
Our 5 Star rated 6W LED Bulb provides an impressive luminous efficacy of 150 lumens per watt, making it a superior replacement for ordinary bulbs



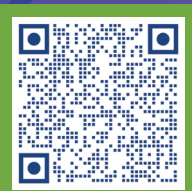
20W Int Batten Tubelight:
Enjoy 10% brighter light with our 20W Int Batten Tubelight. It comes with an impressive light output of 2200 lumens and a power consumption of just 20 watts



9W LED Bulb:
Save energy and brighten your home with our eco-friendly 9W LED Bulb, offering 945 lumens.



1200W Induction Cooktop:
Ensure safe and efficient cooking with our 1200W Induction Cooktop, featuring auto shut-off and child lock safety features



Key EESL event highlights

EESL and Andhra Pradesh's CM Discuss Strategies to Make State Most Energy-Efficient by 2024

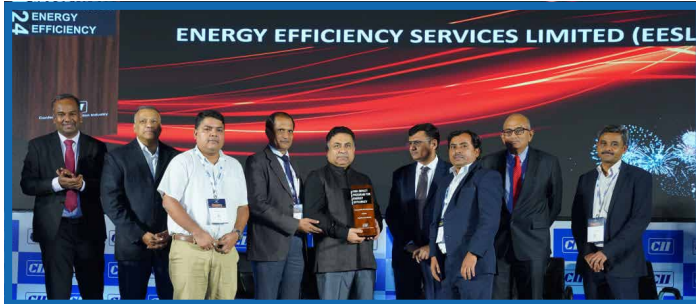
The EESL team, led by CEO Shri Vishal Kapoor, met with the Hon'ble Chief Minister of Andhra Pradesh, Shri Chandrababu Naidu, to discuss strategies for making the state the most energy-efficient economy by 2028. CEO EESL presented the benefits of energy efficiency measures and highlighted potential savings in the industrial and domestic sectors. Shri Naidu expressed the state's commitment to collaborate with EESL, emphasizing the importance of balancing short-term and long-term benefits in decision-making.

Animesh Mishra, Head PR & Sales at EESL, along with Ms. Ritu Singh, Head of the E-Bicycle Programme, also briefed the CM on the transformative impact of E-bikes for Self-Help Group (SHG) women in rural areas. The CM highlighted the role SHGs can play in raising digital and energy efficiency awareness while promoting state schemes. Additionally, EESL's CEO shared plans to supply energy-efficient appliance packages to 300,000 households. Both EESL and the Andhra Pradesh government reaffirmed their commitment to a sustainable future through close collaboration.



Key EESL event highlights

EESL wins the CII's National Award for Excellence in Energy Management 2024 for UJALA Programme in the category "High Impact Program for Energy Efficiency"



EESL co-hosted a workshop on 'Gender Equality and Social Inclusion' with USAID's SAREP program



EESL in collaboration with the Bureau of Energy Efficiency (BEE) hosted a workshop aimed at advancing the adoption of energy-efficient technologies in India's industrial sector



Take Charge of Your Carbon Footprint: Simple Daily Habits to Cut Emissions and Live Greener

- 1** Adopt low-emission commuting options. Carpooling, biking, walking, or using public transportation can significantly reduce individual carbon footprints
- 2** Upgrade to energy-efficient appliances at home, like LED bulbs, BLDC fans, and Energy Star-rated devices. These use less electricity, reducing your overall carbon footprint
- 3** Avoid single-use plastics, reuse items where possible, and recycle waste properly to minimize your environmental impact
- 4** Turn off lights, fans, and electronics when not in use. Unplug chargers and devices that aren't needed to avoid phantom energy consumption
- 5** Fix leaks, take shorter showers, and use water-efficient appliances. Reducing water consumption also reduces the energy required for water heating and treatment.
- 6** For short distances, choose walking or biking instead of driving. This not only cuts emissions but also promotes a healthier lifestyle.
- 7** Improve air quality and reduce the need for artificial air purification by adding indoor plants. Plants naturally filter the air, removing toxins and carbon dioxide.
- 8** Plan your meals, store food properly, and compost organic waste. Reducing food waste lowers the emissions associated with food production, transportation, and disposal



India-US sign pact to unlock one billion dollars for clean energy technology manufacturing

India and the US have signed an agreement to unlock one billion dollars for clean energy technology manufacturing in India and having a resilient supply chain of clean energy components, the Ministry of External Affairs said on September 22. "President Biden and Prime Minister Modi welcomed the U.S.-India Roadmap to Build Safe and Secure Global Clean Energy Supply Chains, which launched a new initiative to accelerate the expansion of safe and secure clean energy supply chains through U.S. and Indian manufacturing of clean energy technologies and components," the Ministry of External Affairs said.



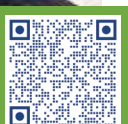
Govt rolls out new EV charging guidelines to fuel electric vehicle boom across India

In a significant push to promote sustainable transportation, the Government of India has unveiled a robust framework for enhancing the electric vehicle (EV) charging infrastructure across the nation. Announced on September 17, 2024, by the ministry of power, these guidelines aim to massively increase the accessibility and density of EV charging stations, with ambitious targets set for urban and highway locations by 2030.



Rs 32.45L cr investment pledged in renewables by 2030: Joshi

Union new & renewable energy minister Pralhad Joshi on Tuesday said a total investment of Rs 32.45 lakh crore has been committed in renewable energy projects till 2030. This assumes significance in view of India's ambitious target of over 500GW of renewable energy capacity by 2030. Addressing a press conference at the fourth Global Renewable Energy Investment Meet & Expo (RE-Invest), Joshi said that state govts have given 'Sankalp Patra' (commitment) of 520GW of renewable energy capacity in India by 2030.



PM inaugurates 4th Global Renewable Energy Investor's Meet in Gandhinagar

Prime Minister Narendra Modi inaugurated 4th Global Renewable Energy Investor's Meet (RE-INVEST) 2024 in Gujarat's Gandhinagar district on Monday. Hosted by the Ministry of New and Renewable Energy (MNRE), the three-day conference is anticipated to draw over 10,000 delegates, including influential figures from government, industry, and financial sectors. Union Minister for New and Renewable Energy Pralhad Joshi, Gujarat Chief Minister Bhupendra Patel, Andhra Pradesh CM N Chandrababu Naidu, Rajasthan CM Bhajanlal Sharma, Madhya Pradesh CM Mohan Kumar Yadav, Chhattisgarh CM Vishnu Deo Sai and Goa CM Pramod Sawant were also present on the occasion.



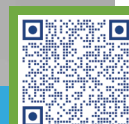
Govt launches PM E-Drive scheme to replace FAME, no subsidies for electric or hybrid Cars

The Union Cabinet on Wednesday approved a new scheme to promote electric vehicles in India. The scheme, called PM Electric Drive Revolution in Innovative Vehicle Enhancement (PM E-DRIVE), will replace the existing FAME programme that ran for nine years till March. However, under the scheme there is no support for electric cars. It has also excluded hybrid cars contrary to expectations. The Centre has allocated Rs 10,900 crore for two years for the PM E-Drive scheme which will subsidise electric two wheelers, three wheelers, and buses. Hybrid ambulances and electric trucks will also be aided under it. It will support 24.79 lakh electric two-wheelers, 3.16 lakh e-three wheelers, and 14,028 e-buses. The govt will offer e-vouchers for EV buyers to avail demand incentives under the scheme. At the time of purchase of the EV, the scheme portal will generate an Aadhaar-authenticated e-Voucher for the buyer.



Govt. to increase quality of energy-efficient appliances in India

The Bureau of Energy Efficiency (BEE) in the Ministry of Power (MoP) and National Test House (NTH) in the Department of Consumer Affairs have signed a memorandum of understanding (MoU) to strengthen the standards and labelling (S&L) programme and ensure high quality of energy-efficient appliances. The MoU was signed by Secretary of BEE Milind Deora and Director-General of NTH A.K. Srivastava in New Delhi on Saturday in the presence of Secretary, the MoP, Pankaj Agarwal, Secretary, the Department Consumer Affairs, Nidhi Khare and Additional Secretary, the MoP, Srikanth Nagulapalli, who also officiates as the Director-General of BEE.





ENERGY EFFICIENCY SERVICES LIMITED

A JV of PSUs under Ministry of Power, Government of India

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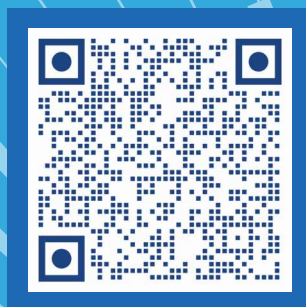
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