

CII-SOHRABJI GODREJ GREEN BUSINESS CENTRE

# SYNERGY



25  
NATIONAL  
ENERGY  
AWARDS

QUARTERLY E-NEWSLETTER OF CII-GBC ENERGY



Confederation of Indian Industry

14<sup>th</sup> Edition

# Conference on Alternative Fuel & Raw Material Usage (AFR)

23 - 24 October 2024

Hotel Courtyard, Raipur, Chhattisgarh

Theme: Preparation for Net-Zero:  
Alternative Fuels & Raw material  
in Cement Manufacturing

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Mr Raju Goyal  
Chairman, AFR Conference 2024  
& Executive President, Chief Technical  
and Chief Sustainability Officer  
UltraTech Cement Limited

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# VRP Capacity Building Workshop - Jammu



## Capacity Building Workshop on Rooftop Solar Vendor Rating Program in Jammu on 27th July 2024

CII Godrej Green Business Centre along with USAID, in collaboration with Jammu and Kashmir Energy Development Agency (JAKEDA) organised a Capacity Building Workshop on Rooftop Solar Vendor Rating Program in Jammu on 27th July 2024, under USAID's South Asia Regional Energy Partnership (SAREP).

The workshop focused on the importance of quality, performance, and safety of rooftop solar installations. The event underscored the Vendor Rating Program (VRP), being implemented by CII Godrej Green Business Centre, for a 360-degree assessment of installers, considering their technical competence, financial strength and onsite workmanship, quality and performance of the system.

Dr M A Alim, Vice-Chairman of CII Jammu & Kashmir UT Council welcomed the participants and set the context for the workshop. This was followed by opening remarks by Ms Monali Zeya-Hazra, Senior Regional Energy Specialist where she highlighted the importance of vendor rating program. Dr P R Dhar, CEO of JAKEDA, in his special address, highlighted the growth of solar power in India and the unique opportunities available in Jammu and Kashmir. He stressed on the need for quality, safety, and after-sales services to the consumers.

Speakers from SAREP, CII Godrej Green Business Centre, Small Industries Development of India (SIDBI), Star Power Distribution Pvt. Ltd. and Optimistic Green Energy Pvt. Ltd. discussed topics including system quality, VRP's importance, rooftop solar financing, and industry best practices.

More than 70 participants attended the program and benefited.

VRP is making rapid strides towards improving the quality, and safety of RTS installation in India. This initiative will result in improving consumer and investor's confidence in rooftop solar systems, thereby significantly contributing to India's rooftop solar targets. CII Godrej Green Business Centre has so far certified 102 vendors across 17 states in the country.

# 3rd Edition of Green Steel Summit



The Confederation of Indian Industry- Green Steel Summit, a prestigious annual conference dedicated to advancing environmentally sustainable practices in the Indian steel industry, was held on 25 & 26 July at Mayfair Lake Resort, Raipur, Chhattisgarh. The summit brought together representatives from leading steel companies, policymakers, sector experts, and other stakeholders committed to fostering green practices in steel production. The central theme of the event is "Decarbonizing the Indian Steel Industry." The summit serves as a pivotal platform for industry leaders to collaborate, share ideas, and address challenges, aiming to pave the way for a greener future in the steel industry.

The event was inaugurated by Shri Vishnu Deo Sai, Honorable Chief Minister of Chhattisgarh. Esteemed dignitaries in attendance included Shri Amitabh Jain, IAS, Chief Secretary of the Government of Chhattisgarh; Mr. Suvendra Behera, Chairman of the CII Eastern Region; Mr. Ashish Saraf, Chairman of the CII Chhattisgarh State Council; Mr. Sanjay Jain, Vice Chairman of the CII Chhattisgarh State Council; Mr. Siddharth Agrawal, Chairman of the Metal & Mining Sub-committee, CII Eastern Region, and Immediate Past Chairman of the Chhattisgarh State Council.

The event saw robust participation with over 300 delegates from India and around the globe. It featured insights from more than 10 CEOs and over 25 thought leaders, along with 8 knowledge sessions and 4 case studies that provided actionable insights and real-world success stories in the journey toward decarbonization. Additionally, the event showcased cutting-edge technologies and solutions from over 25 exhibitors, aimed at enhancing efficiency and reducing carbon footprints.





# Flex India 2024

The Flex India conference is organized by the Confederation of Indian Industry (CII) in collaboration with Electric Power Research Institute (EPRI) to bring together key stakeholders from across the thermal power plant sector. The summit focuses on the critical importance of flexible operations in India's power generation landscape.

The Flex India Summit 2024 was held on August 22 & 23 at the India Habitat Centre (IHC) in New Delhi. It focused on several key areas:

- Examination of flexible operations both within India and internationally
- In-depth analysis of the technologies enabling these operations
- Strategies for mitigating the challenges associated with flexible operations
- Insights from plant operators actively implementing these practices

The Flex India Summit 2024 provided participants a comprehensive understanding of the regulatory framework governing flexible operations, equipping them with the knowledge needed to navigate the evolving landscape of power generation. Additionally, the summit offered valuable insights into conducting load tests and monitoring critical parameters during low-load operations. Attendees learned about the specific challenges and risks associated with operating power plants at reduced loads, including which parameters tend to degrade under such conditions.



Confederation of Indian Industry

14<sup>th</sup> Edition

## Conference on Alternative Fuel and Raw Material Usage (AFR)

23 & 24 October 2024, Hotel Courtyard, Raipur

**Theme - "Preparation for Net-Zero: Alternative Fuels & Raw material in Cement Manufacturing"**

### Focus Areas

- ❖ Technological Advancements in AFR Co-Processing
- ❖ Infrastructure and Supply Chain Development in waste management
- ❖ Embracing Circular Economy in Cement Manufacturing
- ❖ Sustainable & Economical Waste Co-Processing Models for Cement Manufacturing
- ❖ Cross-Border Knowledge Exchange: Leveraging National and International Experience in AFR Co-processing
- ❖ Opportunity to meet & interact with Industry leaders and key stakeholders.
- ❖ Exposition on Innovative Products, Technologies, and Services



**Mr Raju Goyal**  
Chairman, AFR Conference 2024  
& Executive President, Chief  
Technical and Chief Sustainability  
Officer  
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# Energy Efficiency Summit 2024



The CII-GBC (Confederation of Indian Industry - Green Business Centre) organized a two-day Energy Efficiency Summit on 11th and 12th September 2024 at HICC, Hyderabad, focusing on the theme "Accelerating the Transition to a Low-Carbon Economy through Energy Efficiency." The summit brought together industry leaders, policymakers, and technical experts to discuss and explore innovative solutions aimed at promoting energy efficiency and advancing India's low-carbon transition.

The Inaugural session was attended by distinguished dignitaries, including:

- Mr. Ravichandran Purushothaman, Chairman, Energy Efficiency Council & President, Danfoss Industries Pvt. Ltd.
- Dr. Ashok Kumar, Deputy Director General, Bureau of Energy Efficiency

Following the inauguration, the event featured panel discussions, master speaker sessions, and a special session on Latest Technologies for Energy Efficiency and Low-Carbon Transition. These sessions aimed to facilitate knowledge sharing, introduce cutting-edge technologies, and provide national and international perspectives on best practices. The summit also sought to reinforce the National Energy Conservation Movement and encourage energy efficiency financing in India.

Key topics discussed during the two-day summit included:

- Prioritizing energy efficiency as a key enabler for the transition to a low-carbon economy and the achievement of net-zero goals
- The role of Gen AI in energy efficiency technology interventions, advancing the vision of Industry 4.0
- Showcasing latest technologies for energy efficiency and low-carbon transition
- A sectoral approach for decarbonization in hard-to-abate sectors, reflecting on the progress made and future roadmaps
- Fostering an ecosystem that encourages energy efficiency in India
- Developing an approach toward a clean energy transition





# Energy Efficiency Summit 2024



The summit attracted an impressive turnout with over 1,800 delegates, 60+ expert speakers, and 100+ technology expositions. The event served as a significant platform for industry leaders to deliberate on the future of energy efficiency, share actionable insights, and outline the steps needed to achieve India's decarbonization and sustainability goals.

## Signature Campaign- Net Zero Program

A signature campaign was launched during the Energy Efficiency Summit to engage industry leaders, stakeholders, and participants in a collective effort to promote sustainable practices and drive the transition toward a low-carbon future. We received an overwhelming response, with hundreds of attendees signing the pledge wall, showcasing their dedication to net-zero initiatives.



# National Award for Excellence in Energy Management 2024

The National Award for Excellence in Energy Management celebrated 25 years of recognizing outstanding contributions to energy efficiency and sustainability. Organized by the CII-GBC on September 11 and 12, the event honored organizations and individuals who have made significant strides in advancing energy conservation, innovative technologies, and sustainable practices across various sectors.

## Evolution:

CII initiated national award for excellence in energy management in 1999. This award program is India's largest, oldest growing event in energy efficiency. The CII is now celebrating the 25th anniversary of its national award for excellence in energy management. The uniqueness of this award program is comprehensive evaluation of participating companies, premier learning and networking platform, exclusive showcase of energy efficient products, unmissable opportunity for the industries.



Companies are evaluated by the expert panel of judges based on global/ national best in SEC, reduction in SEC in the last 3 years, energy saving projects implemented in the last 3 years, utilization of renewable energy & waste, teamwork and monitoring systems, innovation in projects implemented.

**Types of awards:** Excellent Energy Efficient Unit, Energy Efficient Unit, Most Innovative Product/ Service, Innovative Product/ Service, Young & Emerging Leader in Energy Efficiency, National Energy Leader, High impact Program for Energy Efficiency

**Benefits for the participating companies:** Provides national recognition for commitment towards energy conservation, imparts an added dimension to the public positioning of the company, excellent platform for sharing best practices amongst industries.

## Growth of CII Energy Awards in 25 years:

- Sector participation- 6 to 18 numbers
- Applications- 150 to 550 companies
- Winners of the award program- 50 to 200 numbers
- Evaluation parameters- 2 to 10 numbers
- Panel of judges- 15 to 35 numbers
- Four panel events along with energy awards
- Exhibition with 100 plus technologies

## Key trends of the energy transition observed in last 25 years:

- Adoption of energy efficient measures
- Technological innovation
- Growth of renewable energy
- Regulatory, and policy support
- Industry leadership, and best practices
- Energy savings, and environmental impact
- Capacity building and awareness

## Summary of Findings:

- Indian industries have reduced specific energy consumption SEC across all sectors.
- The main drivers for this reduction are part implementation and technological advancements.
- Many innovative projects have been globally implemented for the first time.
- Indian cement and steel sectors are setting global benchmarks in energy efficiency.
- Energy awards data highlights significant investment in solar PV across sectors.
- Number of green certified buildings are increasing showing growing benefits from certification.





# Energy Awards 2024



## Overview

This year, the CII National Award for Excellence in Energy Management saw exceptional participation from around the country, with registrations from over 570 companies across more than 15 sectors. A total of 207 companies were shortlisted for the final round, representing the highest standards in optimizing energy use and implementing innovative solutions.

The program celebrated outstanding achievements in various sectors, including Automobile, Buildings, Cement, Chemical, Data Centers, DISCOM, Electronics, Engineering, Fertilizer, Metal, MSME, Paper, Petrochemical, Pharma, Power, Railways, Sugar, Textile, Tyre etc.

With a focus on innovation and excellence, the program highlighted the crucial role of AI and other technologies in driving the transition toward a Net Zero future, fostering collaboration across industries and inspiring further advancements in energy-efficient practices.

The awards aimed to encourage best practices, promote knowledge sharing, and inspire a commitment to achieving national energy goals. With a diverse range of categories, the program showcased exemplary projects that demonstrated measurable impacts in reducing energy consumption and enhancing environmental performance.

## Award Categories & Number of Winners

1. National Energy Leader: 21 Units  
(represents consistency in energy performance for three consecutive years)
2. Excellent Energy Efficient Unit: 82 Units
3. Energy Efficient Unit: 115 Units
4. Most Innovative Product/Service: 2
5. Innovative Product/Service: 2
6. Young & Emerging Leader in Energy Efficiency: 4
7. High Impact Program for Energy Efficiency: 2 Organizations

**CII National Energy Leaders 2024:**

1. Adani Dahanu Thermal Power Station, Dahanu
2. Bharat Aluminium Company Limited, Korba
3. Central Workshop, Southern Railway, Ponmalai
4. Dalmia Cement (Bharat) Limited, Ariyalur
5. Dalmia Cement (Bharat) Limited, Dalmiapuram
6. Dalmia Cement (Northeast) Limited, Lanka
7. Fortis Healthcare Limited, Mohali
8. GMR Hyderabad International Airport Limited, Hyderabad
9. GMR Warora Energy Limited, Warora
10. ITC Limited, Kidderpore
11. JK Cement Limited, Balasinor
12. JK Cement Limited, Jharli
13. JK Paper Limited, Unit: JKPM, Rayagada
14. Kirloskar Oil Engines Limited, Kagal, Kolhapur
15. NTPC Limited, Sipat
16. Orient Cement Limited, Chittapur
17. Rashtriya Ispat Nigam Limited, Visakhapatnam
18. Seshasayee Paper & Boards Limited, Erode
19. Tata Motors Limited, Pantnagar
20. Tata Steel Limited, Jamshedpur
21. Wipro Limited, Kodathi, Bengaluru



## Winners Speak!



"This program provided me with valuable insights on how to be a leader in energy efficiency and how to drive energy efficiency initiatives for both the country and my company. This is how I will contribute to the proud mission of Viksit Bharat."- **Mr. Paras Sharma, Young & Emerging Leader in Energy Efficiency**

"We learned a lot from previous years and worked to implement those lessons this year, which contributed to our receiving this prestigious award. I am grateful for the opportunity to learn and be motivated by the experiences shared at the summit." - **Rajani Kumar, AGM-Dodla Dairy, Hyderabad- Excellent Energy Efficient Unit**



"By participating in this conclave, we have gained insights into the latest technologies and the challenges faced by other industries, as well as how they have overcome these obstacles. It is an excellent platform that provides significant knowledge to everyone involved, and winning this award further reinforces our commitment to learning and growth." **Kumaresan, DM-Dalmia Cements (Bharat) Limited, Dalmiapuram- National Energy Leader**

"I congratulate the CII and the Green Business Centre for conducting energy awards systematically and successfully for the past 25 years. Receiving this award on behalf of my organization, Rashtriya Ispat Nigam Limited, is a testament to our commitment to the cause of energy conservation. With this award, RINL is recognized as national leader in the field."

**K Sudhakar, GM- Rashtriya Ispat Nigam Limited- National Energy Leader**



"Getting this award is very important for our organization because it serves as motivation for both our officers and lower-level staff, helping us to improve our efficiency and overall performance."- **Shiva Kumar- Tamil Nadu Newsprint & Paper Limited, Excellent Energy Efficient Unit**



# Energy Trends During the Last Decade

Data gathered for the CII Energy Awards during the last decade was analyzed to identify the trends to show how the Indian industrial scenario is changing. For analysis major sectors like Cement, Power Plants, Steel, Aluminum, Sugar, Paper & Pulp industry are studied. Following are the observations:

## 1. Specific Energy Consumption (considering 2014 as a base year)

Sector	Reduction	Reasons for reduction in SEC
Power Plants (IPP)	11%	VFDs, Improved operating practices, automation, AI
Cement	12%	Higher fly ash utilization, 1000+ MW WHR installation, RE
Paper & Pulp	7%	Black liquor indirect heater, condensing turbines, anaerobic digester & better operational practices
Aluminum	15%	Recycling of scraps, WHRS, Continuous casting etc
Steel	19%	Recycling of scraps, WHRS, Continuous casting etc
Sugar	7%	Incentive for exporting power, process optimization, automation of control systems etc

## 2. Comparison of Indian SEC with Global Benchmark (sector wise)

The Indian sectors are divided into two categories. The one which is doing better than the global benchmark and the other which requires more efforts to reach the Global Benchmark numbers.

### Sectors doing well:

Sectors	Unit Of Measurement	Global Benchmark	Average	Best Achieved
Power (APC)	%	7.71	6.92	4.56
Cement	kWh/T	83	70.47	52

### Sectors that require more effort:

Sectors	Unit Of Measurement	Global Benchmark	Average	Best Achieved
Paper	Gcal/T	6.85	7.52	5.85
Steel	Gcal/T	4.88	6.65	5.3
Sugar	kWh/T of cane crushed	20	26.41	21.75
Aluminium	Gcal/T	12.1	13.05	12.09

## 3. Investment & Savings as a % of Total Energy Bill

The comparison of investment & savings as a % of Total Energy bills shows that the investment is increasing year on year while the savings are decreasing.

Year	Savings	Investment
2010	6.30%	5.90%
2014	5.20%	6.80%
2018	4.40%	7.40%
2022	3.80%	7.80%
2024	3.10%	8.30%

- The low hanging fruits have already been plucked. The energy savings measures that are basic and require less investment like installation of VFD, LED lighting, energy efficient pumps and compressors etc have been explored.
- Now in 2024, the industries are spending in more sophisticated technologies requiring higher investment. These technologies include Waste Heat Recovery Boilers, VAMs, ORC power generation etc.

#### 4. Sectors Meeting COP-28 Goal of 4% Improvement in Productivity

At COP-28, one of the key productivity goals is to double the global average annual rate of energy efficiency improvements from around 2% to over 4% every year until 2030.

Based on the energy award data, the identification of sectors meeting the productivity goals was carried out.

Sectors	Level of Energy Efficiency Improvement	Shortfall
Power	3.46%	0.54%
Paper	3.60%	0.4%
Cement	3.62%	0.38%
Aluminium	3.64%	0.36%
Steel	3.76%	0.24%
Sugar	4.00%	Meeting the goal

#### 5. GHG reductions in NSE 500 companies (considering 2020-21 as base year)

Sector	Reduction in GHG Emissions
Cement	5%
Metal	5%
Paper	8%
Automobile	44%
Power Plants	0.2%

#### 6. Flexible Operations of Power Plants:

The comparison of investment & savings as a % of Total Energy bills shows that the investment is increasing year on year while the savings are decreasing.

Year	Plant Load Factor (PLF)
2012-2013	90%
2018-2019	72%
2023-2024	73%

The same is expected to further reduce as the installed capacity of Thermal Power Plants is further projected to reduce to 34% by the end of 2032.



# PaperTech 2024



The 18th edition of PaperTech 2024 was organized by the CII Green Business Center in partnership with IPMA (Indian Paper Manufacturers Association), on 10th & 11th September, with the event theme: "To Make Indian Pulp and Paper World Class."

It brought together key industry leaders, industry stalwarts, industry associations and entrepreneurs, all of who focused on advancing energy efficiency and decarbonization in the Indian pulp and paper sector. They highlighted that the industry has successfully reduced emissions by 20% over the past decade, highlighting its commitment to sustainability. With plantation-based paper, offering the potential to grow trees in just 4-5 years, the future of the industry looks promising, combining environmental resilience with long-term growth.

Alongside the engaging discussions and keynote addresses, PaperTech 2024 prominently featured the launch of the "Best Practices Manual in the Paper Sector - Volume 12," which highlighted cutting-edge advancements and innovations related with the industry.

The conference also honored Dr. ARK Rao, (Chairman of Paper & its products sectional committee of Bureau of Indian Standards (1991-2001), Additional Director- Sree Sakthi Paper Mills Ltd.) with a Distinguished Personality award, recognizing his outstanding contributions to the pulp and paper sector.

The event saw robust participation with over 300 delegates from India and around the globe. It featured insights from more than 10 CEOs and over 25 thought leaders, along with 8 knowledge sessions and 4 case studies that provided actionable insights and real-world success stories in the journey toward decarbonization. Additionally, the event showcased cutting-edge technologies and solutions from over 25 exhibitors, aimed at enhancing efficiency and reducing carbon footprints.



# Green Sugar Summit 2024



The Confederation of Indian Industry (CII) organized the 9th edition of the Green Sugar Summit 2024, on 10th and 11th September 2024 at the Hyderabad International Convention Centre (HICC). Themed "Making Indian Sugar & Biofuels Industry World Class in Green," this summit focused on advancing sustainability and innovation within the sector.

The CII Green Sugar Summit 2024 is a significant event focused on sustainability, innovation, and transformation in the sugar industry. The summit brought together several leaders and experts to discuss the future of sustainability in this sector. Some key focus areas included:

- Industry leaders urged the need for a transition from traditional sugar production to bio-refineries, assessing emerging opportunities and challenges in converting sugar mills into multi-output facilities that produce biofuels, bioplastics, and other green products.
- The summit showcased cutting-edge technologies aimed at enhancing the sustainability of sugar production. This included energy-efficient methods, renewable energy integration, and advanced automation solutions that optimize operations while reducing environmental impacts.
- Latest advancements in sugar and ethanol production were elaborately presented by technology suppliers, focusing on increasing productivity and efficiency while minimizing carbon footprints.
- Key challenges and opportunities faced by the sugar sector, including resource management, waste reduction, and regulatory compliance were discussed.
- With a growing focus on renewable energy, the summit highlighted the potential for compressed biogas (CBG) production from sugar industry by-products, positioning the sector as a key player in the clean energy transition.
- Leading industry experts shared best practices for enhancing energy efficiency in sugar mills, cogeneration plants, and distilleries. Strategies for reducing energy consumption, improving operational performance, and optimizing utilities were included.

The CII Green Sugar Summit continues to emphasize the integration of sustainability, innovation, and collaboration, leading to an industry that is not only more environmentally responsible but also more resilient and competitive.



# Power Plant Summit 2024



The Power Plant Summit organized by the Confederation of Indian Industry (CII) at the Hyderabad International Convention Centre (HICC) on September 10th and 11th, 2024, was a significant event in the energy sector, drawing over 400 participants. The summit was chaired by Mr. S.K. Ghosh, Executive Director (Operations Services) at NPTC, and co-chaired by Mr. Dharmendra Srivastava, Whole Time Director at L&T MHI Power Boilers Pvt. Ltd.

This event featured a series of technical sessions that addressed critical aspects of power plant operations, focusing:

- enhancing operational flexibility,
- renovation and modernization of existing infrastructure,
- reducing auxiliary power consumption,
- minimizing emissions and improving overall plant availability and efficiency.

One of the key highlights of the summit was the participation of prominent technology providers who delivered presentations on various cutting-edge topics. These included:

- effective condenser tube cleaning techniques,
- strategies for enhancing the performance of cooling towers.
- Biomass co-firing
- carbon capture technologies

These presentations underscored the importance of adopting advanced technologies to achieve sustainability goals and improve the operational efficiency of power plants.

The role of CII in organizing this summit was pivotal. By developing a platform for stakeholders and technology providers to collaborate, CII facilitated discussions and knowledge sharing on the latest advancements and best practices in the power sector. This initiative not only provided a venue for networking and collaboration but also highlighted the importance of continuous improvement and innovation in the industry.



## Training Program for BEE Energy Manager and Energy Auditor Exam 2024

CII-Godrej Green Business Centre conducted a training program for the BEE Energy Manager and Energy Auditor Exam 2024. Designed to equip aspiring Energy Managers and Energy Auditors with essential skills and knowledge, the program prepared participants to excel in the BEE exam and obtain certification. Over the course of five days, attendees engaged in comprehensive classroom sessions, assessments, and assignments.

The program included 35 hours of intensive training delivered by Accredited Energy Auditors and was attended by over 35 aspirants.



## CII- ISA SunSpark Incubation Program

The Confederation of Indian Industry is supporting the International Solar Alliance (ISA) in developing an enterprise incubation framework to promote solar energy uptake in ISA member countries. This initiative is currently being piloted in Ethiopia and Bangladesh.

As part of the pilot phase of the SunSpark Incubation Program: Igniting Innovation for Solar Solutions and following a training program in Ethiopia, CII in collaboration with ISA, conducted a three-day training session for selected solar startups from July 1 to 3, 2024, at Bidyut Bhaban in Dhaka, Bangladesh.

The sessions covered crucial topics such as business model development, business planning, IPR, legal considerations, internal finance management, product testing & validation, scale-up strategies, pitch deck creation, fundraising, market research, business branding, and networking strategies.





## CII @ ASCI BRSR Program

Administrative Staff College of India (ASCI) had conducted a three-day residential program on "Business Responsibility and Sustainability Reporting An ESG Tool for Sustainability" from 2nd to 4th September 2024 and the participants were from top 1000 NSE listed companies. We took a session on "GHG Inventorization & Planning for Road Map for Carbon Neutrality" on 3rd September, 2024 with topics Climate Change, Carbon neutrality, Net Zero and Climate Neutral terminologies, GHG Inventorization, Exercises on Scope-1,2,3 calculations, Case studies on Decarbonization measures etc.



## CII @ Indian Printers Summit 2024

Kannan Vairavan represented CII-GBC and shared insights on sustainability and print innovation at the Indian Printers Summit 2024, the 32nd annual conference of WAN-IFRA in India, held on September 23-24. The summit celebrated the success of print in the region and brought together experts in newspaper printing and publishing to shape the future of this enduring medium.

Participants explored the latest trends, challenges, and opportunities in the newspaper industry through two parallel tracks focused on print production and advertising. Our mini-expo showcased innovative solutions, with technical discussions, panels, and exhibits all conveniently located in one place.



## Energy Audits

Between July and September, CII-GBC conducted detailed and mandatory energy audits across 12 industrial units in sectors including cement, plastic packaging, polymers, poultry, building, pulp & paper, pharma, and semiconductors.

These audits identified 195 energy-saving projects with a total potential savings of ₹401.32 million, with an average payback period of 16 months.

Notably, ₹69.8 million of the savings come from projects requiring little or no investment. The identified opportunities span various areas of the plants, including processes, utilities, electrical distribution, and power generation.

In addition, energy audits were also conducted for semiconductor facilities in South Korea and Japan.



## Launch of India Green Steel Coalition (IGSC)

### ***CII's initiative to support Indian green steel evolution***

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## Launch of Short-term Accelerator – Karnataka Cleantech Startup Accelerator

The Green Entrepreneurship Council (GEC) working with clean technology startups has seen a progressive quarter (July – September 2024) starting with the highlight of the quarter, i.e., the launch of short-term state specific accelerator – ‘Karnataka Cleantech Startup Accelerator’.

On the 4th of September 2024, the accelerator program was launched by the Hon'ble Minister Mr. Priyank Kharge, Department of IT, BT, and S&T, Govt. of Karnataka, at CII Innoverge India 2024 in Bangalore, Karnataka. The Karnataka CleanTech Startup Accelerator, initiated by CII-GEC in partnership with the Government of Karnataka, Department of Electronics, Information Technology, Biotechnology, and Science & Technology, is designed to catalyze the growth of cleantech startups in India.



This dynamic 6-month business accelerator program serves as a dedicated platform for nurturing innovative cleantech startups with market-ready products and technologies. The program's primary goal is to help these startups scale their operations within Karnataka, fostering an environment that promotes sustainable development and technological innovation.

## CII-GEC ACE Annual Meeting 2024

The session was chaired by Mr. Pradeep Dhobale, Chairman-GEC and 5 members of the GEC Advisory Board. The session had introductions from the Advisory Board and from the participating GEC companies.

As part of the cohort cycle, the GEC has the ACE annual meeting in the month of September coinciding with the Energy Efficiency Summit.

During this session, GEC has introduced the new Advisory Board members to all the current cohort members. The startups have shared their technologies and put forth their requests to CII for supporting them in certain areas such as policy advocacy, solution awareness and market penetration. The session was filled with interactions & discussions on progress, challenges, opportunities, and way forward.



## Accelerating Cleantech Enterprises Cohort 2024

Green Entrepreneurship Council announced the list of companies selected for the Accelerating CleanTech Enterprises Cohort 2024. These enterprises are at the forefront of driving sustainable solutions in the CleanTech sector.

1. AIRTH– Transforming Air, Transforming Lives!
2. Arion Techsol Private Limited– Smart Water Management for a Sustainable Future
3. Cleanergy– Compact Biogas Solutions for a Greener Tomorrow
4. Frinks AI – Intelligence Beyond Boundaries
5. Kaashyap Envergy Infrastructures Pvt Ltd– Transforming Waste into Valuable Energy
6. Varistor– Empowering Solar Solutions for a Clean Energy Era





Confederation of Indian Industry

23<sup>rd</sup> Edition

# GREEN POWER 2024



20 – 21 November 2024 Hotel Taj Willington Mews, Chennai

**Theme: Accelerating Deployment of Renewable Energy  
for Achieving Net Zero**



**MR RAMESH KYMAL**

Chairman,  
Renewable Energy Council,  
CII – Godrej GBC &  
CHAIRMAN, GREEN POWER 2024

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Exposition :

Rs.7000 + GST per sq. mt.

For details, please contact

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# Best Practices Manual in Paper Sector - Volume 12

The Indian pulp and paper industry stands at a critical juncture, where the need for sustainable practices is more urgent than ever. This Best Practices Manual has been meticulously compiled to provide industry stakeholders with a comprehensive guide to the most effective energy efficiency measures currently in practice across the sector. As the industry seeks to balance growth with environmental responsibility, this manual serves as an essential resource for driving improvements in energy performance. By presenting real-world examples and actionable insights, this manual aims to drive the sector towards more sustainable and efficient operations.

The manual was created using data gathered from the energy saving projects implemented by Indian paper industry. It contains 15 case studies, collected from among the leading and most efficient paper manufacturing organizations, the technology suppliers and some case studies in other sectors that have a high replicability potential in the Indian Paper sector. These case studies highlight the diverse approaches taken by different mills to address their specific energy challenges, offering valuable insights into the practical applications of these technologies.

In addition to these case studies, the manual provides comprehensive data on the best specific energy consumption (SEC) values—both electrical and thermal—achieved by leading Indian paper mills. These Specific Energy Consumption figures serve as a critical reference point for other mills aiming to enhance their energy efficiency.

By adopting the best practices and learning from the experiences of the industry leaders featured in these case studies, other paper mills can replicate these successes, contributing to the overall goal of a more sustainable and energy-efficient industry.

This manual is intended for use by industry professionals and all stakeholders involved in the pulp and paper sector. It aims to inspire ongoing efforts to improve energy efficiency and environmental performance, ultimately supporting the industry's long-term sustainability goals.

**Download Link:**

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# A global target to double efficiency progress is essential to keep net zero on the table

--**Brian Motherway, Head of Energy Efficiency and Inclusive Transitions Office**

Doubling efficiency progress is a challenge that requires a global step change in ambition. But many governments have set a precedent. In fact, of 150 countries analysed by the IEA, almost all (91%) improved their energy intensity by 4% or more at least one year in the past ten. More than half (52%) did so at least three times.

Governments at COP28 should build on this year's momentum and commit to doubling energy efficiency improvements. The updated Net Zero Roadmap from the International Energy Agency (IEA) shows that while the path to limiting global warming to 1.5 °C has narrowed, it is still achievable – if governments build on strong growth in clean energy technologies such as solar PV and electric vehicles with even greater ambition.

Doubling energy efficiency improvements means stronger policies and actions that improve people's lives. The IEA's Net Zero Roadmap shows what must happen by 2030 if governments are serious about achieving net zero emissions by mid-century and limiting global warming to 1.5 °C.

Achieving this target would lead to energy savings in 2030 equivalent to all the oil that the global road transport sector consumed in 2022. Key actions to double efficiency progress – namely improvement in the technical efficiency of buildings and equipment, material efficiency, behavioural changes, and greater electrification – reduce emissions by more than 7 Gt in 2030 in the IEA's net zero scenario, accounting for nearly half of all reductions achieved that year.

**Source:** <https://www.iea.org/commentaries/a-global-target-to-double-efficiency-progress-is-essential-to-keep-net-zero-on-the-table>





# EVENTS

## Calendar 2025



Confederation of Indian Industry

**Green Cementech  
& Capative Power  
Plant Conference  
2025 - MAY**

**Hyderabad**

**ChemPharma  
Summit  
2025 -JUNE**

**Hyderabad**

**Green Steel  
Summit  
2025 - JULY**

**Raipur**

**Flex India  
2025 - August**

**New Delhi**

**National Awards for  
Excellence in Energy  
Management  
2025 - September**

**Hyderabad**

**Energy  
Efficiency  
Summit  
2025 - September**

**Hyderabad**

**PaperTech  
2025 - September**

**Hyderabad**

**Power  
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2025 - September**

**Hyderabad**

**Alternative Fuel &  
Raw Material  
Usage (AFR)  
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**CII Perfomance Excellence  
Award 2024 for Solar,  
Wind and Hybrid Plants  
2025 - October**

**Hyderabad**

**Green Power  
2025 - November**

**Chennai**

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## GREEN BUSINESS CENTRE

CII-Sohrabji Godrej Green Business Centre (CII-Godrej GBC) was established in the year 2004, as CII's Developmental Institute on Green Practices & Businesses, aimed at offering world class advisory services on conservation of natural resources. The Green Business Centre in Hyderabad is housed in one of the greenest buildings in the world and through Indian Green Building Council (IGBC) is spearheading the Green Building movement in the country.

The Services of Green Business Centre include- Energy Management, Green Buildings, Green Companies, Renewable Energy, GHG Inventorization, Green Product Certification, Waste Management and Cleaner Production Process. CII-Godrej GBC works closely with the stakeholders in facilitating India emerge as one of the global leaders in Green Business by the year 2022.

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The Confederation of Indian Industry (CII) works to create and sustain an environment conducive to the development of India, partnering Industry, Government and civil society, through advisory and consultative processes.

CII is a non-government, not-for-profit, industry-led and industry-managed organization, with around 9,000 members from the private as well as public sectors, including SMEs and MNCs, and an indirect membership of over 300,000 enterprises from 286 national and regional sectoral industry bodies. With 65 offices, including 10 Centres of Excellence, in India, and 8 overseas offices in Australia, Egypt, Germany, Indonesia, Singapore, UAE, UK, and USA, as well as institutional partnerships with 350 counterpart organizations in 133 countries, CII serves as a reference point for Indian industry and the international business community.

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