



# UPSavesEnergy

News Letter

UPSDA's Energy Efficiency endeavors towards achieving a Net Zero status for Uttar Pradesh

Quarterly News letter

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Uttar Pradesh New and Renewable Energy Development Agency (UPNEDA) under the provisions of the Energy Conservation Act-2001, have been nominated as State Designated Agency to coordinate, regulate and enforce the provision of the Energy Conservation Act-2001 and implement schemes under the said Act within the State of Uttar Pradesh. UPNEDA is working as UPSDA since July 2015.

**State Energy Efficiency Index (SEEI) 2023**, developed by the Bureau of Energy Efficiency (BEE) in partnership with AEEE was launched on 1 March 2024 during the celebration of the 22nd Foundation Day of the BEE. The fifth edition of SEEI 2023 showcases exemplary energy efficiency (EE) practices at the state level, offering

valuable insights for enhancing policy adoption, implementation, and monitoring. SEEI 2023 evaluates states' EE performance across seven demand sectors: buildings, industry, municipal services, transport, agriculture, electricity distribution companies (DISCOMs), and cross-sector initiatives.

In SEEI 2023, fifteen (15) states have improved their scores compared to SEEI 2021- 22. **Uttar Pradesh, has demonstrated significant progress, improving by over 10 points compare to previous year, thereby achieved the achiever category with 59.75 points.**



To make a long-term commitment to energy efficiency and conservation through harnessing the vast energy saving potential in Uttar Pradesh by exploring all possible pathways for minimizing overall carbon footprints



The mission of the UPNEDA as State Designated Agency is to assist in developing policies and strategies with a thrust on self-regulation and market principles, within the overall framework of the Energy Conservation Act, 2001 with the primary objective of reducing energy intensity of the Indian Economy.

## Energy Efficiency Programs in UP

### Workshop on Energy Efficient Innovative Technologies

UPNEDA organized a workshop on "Energy Efficient Innovative Technologies" at hotel Renaissance Lucknow on March 15th, 2024. The topics covered in the workshop included Micro Turbine (Saturated Steam Turbine), X plate nanotechnology for improving the combustion efficiency, Carbon capturing utilization & Storage, Trigenation and bio energy-based Genset, Real-Time Power Factor Control, Energy Efficiency Financing Schemes of BEE, etc.



Sh. Pankaj Singh (Secretary UPNEDA), Sh. R P Singh (SPO UPNEDA), Sh. A K Asthana (Advisor, GIZ) and Sh. Girish Kumar (Sr. Energy Consultant , UPSDA)

Experts from various industries dealing with such technologies & officials from BEE and GIZ were invited to the workshop to share their experience in the session. Program was inaugurated by Secretary UPNEDA. Mr. A.K. Asthana and expert of GIZ delivered the key note address. Representatives of various industries (Designated Consumers under PAT Scheme, Sugar Industries and MSME etc.) actively participated in the workshop. The program was conducted in an interactive environment providing greater scope for discussion.

### Capacity Building Program on Implementation of provisions of EC Act

NPTI Badarpur, New Delhi Conducted a 2 days Residential "Capacity Building Program on

Implementation of Provisions of the Energy Conservation Act for North Zone" sponsored by BEE on 8-9th February at Hotel Hyatt Regency, Lucknow. This Programme served as a dynamic platform for stakeholders to engage in discussions, learning, and strategizing about the region's shift towards energy conservation and sustainable energy sources. With a focus on the unique challenges and opportunities within North India, the program aimed to foster a comprehensive understanding of the Energy Conservation Act.



Capacity Building Programme on Implementation of EC Act

There were a series of expert presentations, interactive sessions, and case studies. Participants explored innovative technologies, policy frameworks, and community engagement models relevant to the region's energy conservation goals. Representative from 8 SDAs participated in this residential workshop. Technologists from Central & State Utilities, Policy Makers, and Regulators addressed the participants.

### Workshop on "Best Practices in Energy Efficiency in Sugar Sector - A Path for Decarbonization:

The ASPIRE Programme, in collaboration with the BEE, organized a one-day workshop on "Best Practices in Energy Efficiency in the Sugar Sector: A Path for Decarbonization" on March 21st, 2024,

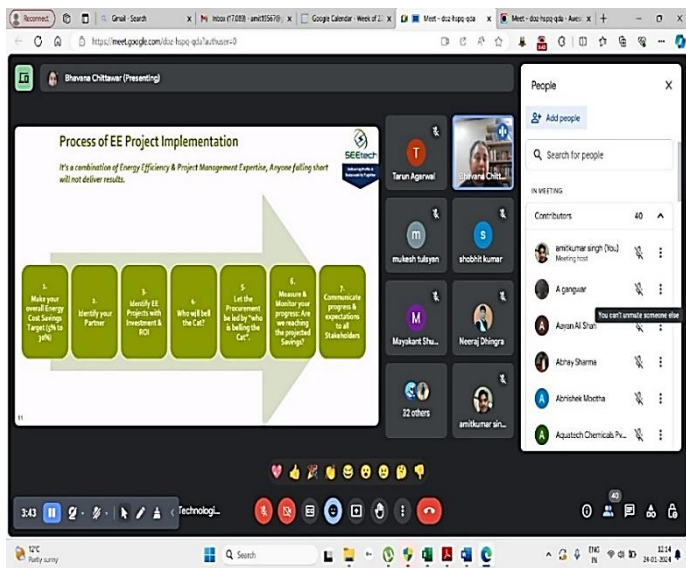


at Renaissance Hotel, Lucknow. The workshop covered various aspects of the sugar sector, including the PAT scheme, best practices, and technologies adopted by Indian industries, as well as new-age low-carbon technologies available globally to enhance energy efficiency and enable decarbonization. The workshop was designed to provide national and international exposure. The program was followed by study trip to BCML aimed to facilitate dialogue and knowledge exchange among industry stakeholders.

**Webinar- (PAT Cell): Capacity Building of Designated Consumers:**

**Two webinars organized during this quarter**

1. On January 24, 2024, a webinar was organized highlighting “Energy Efficient Technologies and BEE’s Financing Scheme for Industries.” This webinar delved into a wide array of topics, including 'Promoting low carbon initiatives in MSME Sector for Decarbonization', the 'Adoption of Energy-Efficient Technologies' such as Energy efficient blowers and motors, etc Furthermore, a segment was dedicated to exploring different 'Energy Efficiency Financing Schemes' provided by the Bureau of Energy Efficiency (BEE).



**Webinar on Energy Efficient Technologies**

This webinar was exclusively tailored for CII Members and attracted over 40 attendees from various SMEs.

**2. Another webinar organized on dated 05<sup>th</sup> March 2024 for the Power plant Designated Consumers.**

The Purpose of this webinar is to explain Various Forms under PAT Scheme (Form 1, 2 ,3, Form A, Form B & Form D) as well as M&V Audit and Normalization process.

**Workshops cum training program for farmers:**

UPNEDA has planned to organize training workshops for capacity building of farmers at 17 various Krishi Vigyan Kendra (KVK) of Uttar Pradesh. Target audiences are Farmers, Pump manufacturers, Local Service Providers (LSPs), pump & motor technicians available in the jurisdiction of KVK, Officers from Departments of Agriculture, Horticulture, Fisheries, Rural Development, UPPCL/DISCOMs, Public Representatives like Gram Pradhan etc, however, Major Participants among target audience will be Farmers.

**Energy Audit in Institutions**

Conducting an Energy Audit enables institutes to understand the potential energy savings through the implementation of conservation measures, along with associated expenses and payback periods. In light of this, UPNEDA (UPSDA) has commenced Energy Audit work for 11 government educational institutes in the state. Eight institutes have undergone energy audits during this quarter, while the process for auditing the remaining institutes is ongoing.

**BUILDING ENERGY EFFICIENCY (ECBC)**

BEE has established the Energy Efficiency Buildings Cell at UPSDA, which plays a crucial role in various



**Training Programme at National CPWD Academy, Ghaziabad, UP**

aspects related to energy efficiency in buildings. During this quarter, a total of four training programs (1 online + 3 Physical) were conducted. These programs were designed for officers from various

Development Authorities, building sector professionals, as well as students. Notably, these sessions collectively trained more than 200 participants.

### **Case Study: - Efficiency Enhancement by commissioning new efficient 9MW STG**

**About DC:** Genus Paper & Boards, a part of the Kailash Group of Companies, is a key manufacturer of kraft paper and paperboards with a production capacity of more than 450,000 TPA. Equipped with modern paper machines, their production units make premium quality packaging paper from recovered & virgin fiber through sustainable sources. Their facilities are located at Moradabad and Muzaffarnagar in Uttar Pradesh, India.

**Energy Conservation Measures:** Genus Paper and Board Ltd, Moradabad upgraded its turbine system by replacing two older turbines (6MW and 3MW) with a new 9MW Triveni turbine, aiming to reduce Specific Steam Consumption (SSC) and improve efficiency. **The SSC of the new turbine is 6.2 tons/MW, which is lower than the average SSC of the older turbines (7.4 tons/MW).**

After successfully commissioning the new turbine on January 21, 2024, company observed a significant reduction in SSC. The reduced SSC enables a quicker Return on Investment (ROI), which is projected to be achieved within a year of operation.



Pics during Commissioning of 9 MW STG in Genus Paper, Moradabad

**Uttar Pradesh New & Renewable Energy Development Agency  
(UPNEDA)**

**उत्तर प्रदेश नवीन एवं नवीकरणीय ऊर्जा विकास अभिकरण  
(Department of Additional Sources of Energy)**

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