



UP Saves Energy

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



QUARTERLY NEWSLETTER

JUL-SEP:2023

ISSUE:6, FY :2023-24

Background

INSIDE

- 📁 Background
- 📁 Energy Efficiency Programs in UP
 - ❖ Capacity Building of DISCOMs
 - ❖ Regional Workshop on PAT
 - ❖ Webinar-Capacity Building of Dcs
 - ❖ Building Energy Efficiency
- 📁 Stakeholder Consultation Meeting on Deploying Low Carbon Levers
- 📁 Case Study

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.

The Global Biofuels Alliance (GBA) announcement was made by Indian Prime Minister Narendra Modi on September 9, 2023, on the sidelines of the G20 Summit held in New Delhi. It is an initiative to develop an alliance of governments, international organizations and industry to facilitate adoption of biofuels by bringing together the biggest consumers and producers of biofuels and positioning biofuels as a key to energy transition. To ensure energy security, affordability, and accessibility for the future, the GBA will facilitate global collaboration, supporting the development and deployment of sustainable biofuels. According to G20 Biofuels Study report, biofuels account for 0 to 7 per cent of G20 country's energy mix. GBA will help raise awareness of biofuels' vital role in greenhouse gas reduction.

Vision 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

Mission 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

Significant Energy Efficiency Programs in Uttar Pradesh

Capacity Building of DISCOMs

A series of three one-day Capacity Building Workshops focused on Demand Side Management (DSM) and Energy Efficiency have been organized for various DISCOMs (Distribution Companies). The first workshop took place on June 5, 2023, with a specific focus on officials from Madhyanchal Vidyut Vitaran Nigam Limited (MVVNL). Following that, the second workshops occurred on August 2, 2023, in Varanasi, catering to officials from Purvanchal Vidyut Vitaran Nigam Ltd, and the third workshop was conducted on September 2, 2023, in Aligarh, targeting officials from Dakshinanchal Vidyut Vitaran Nigam Limited. Approximately 190 government officials have undergone training through this series of workshops.

The primary objective of this program is to enhance the capabilities of DISCOMs officials in various aspects of energy efficiency & Demand Side Management, including executing load management initiatives, undertaking energy conservation projects, formulating effective DSM action plans, and implementing DSM activities effectively within their respective regions.



Trainer: Dr. H K Singh
(Agra Workshop)



Participants during Capacity
Building Programmer in Agra.



Trainer: Sh R N Vaisnav, AEA, Former SE, Ajmer Vidyut Vitaran Nigam Limited
(Government of Rajasthan); Varanasi Workshop

Regional Workshop on PAT and ESCERTs Trading:

Regional workshop on “**PAT Enforcement and ESCerts trading**” was organised by UPSDA (Uttar Pradesh New & Renewable Energy development Agency) in coordination with Bureau of energy efficiency (BEE) on Sept 12th, 2023 at Hotel Renaissance, Lucknow, Uttar Pradesh. The event garnered active participation from approximately 130 individuals from 10 different states (Ladakh, J&K, Himachal, Punjab, Haryana, Uttarakhand, Delhi, UP, Rajasthan and Chandigarh) representing various DCs from these states, prospective DCs of Sugar sector of UP, and SDA representative of States.

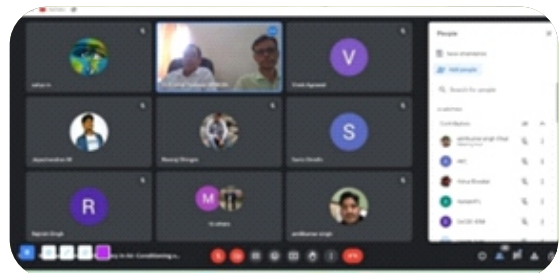
Mr. Avadh Mani Pandey (Senior Sector Expert, BEE), Mr. Ashish Ranjan Srivastava (Senior Sector Expert, BEE) and Mr. Vishal Mehta (Project Engineer, BEE) were the key speakers in Technical session. Various topics centered around the PAT Scheme and ESCERT trading were covered by speakers. The after noon session had more focuss on capacity building of prospective DCs of Sugar Industries and New DCs notified in PAT cycle VIII. The session was characterized by remarkable levels of participant engagement, highlighting the industry's enthusiasm for its recent inclusion in the PAT Scheme."



Mr. Gaurav Shukla (PCS), Secretary, UPNEDA addressing Guests during Workshop

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

A comprehensive webinars were organized on August 25th, 2023 on topics 1-"Enhancing Energy Efficiency in Air-Conditioning Systems and 2-Exploring the Use of VAM Technology". The webinars were organized by UPSDA - PAT Cell. The event garnered active participation from approximately 40 and 35 individuals respectively representing diverse sectors, including various DCs and the Sugar sector of Uttar Pradesh. Participants were quite attentive in theses webinars and they had various queries which were resolved by experts. The presentation also delved into various types of chillers, providing a holistic grasp of the subject matter. Additives for air-compression based refrigeration systems, to improve energy efficiency, were also discussed.



Webinar on "Enhancing Energy Efficiency in Air-Conditioning Systems and Exploring the Use of VAM Technology"

BUILDING ENERGY EFFICIENCY (ECBC)

BEE has established the Energy Efficiency in Buildings Cell at UPSDA, which plays a pivotal role in multiple areas. This encompasses supervising the implementation of UPECBC-2018, offering technical guidance for government stakeholder departments to showcase implementation of UPECBC in building projects, conducting training sessions for both government and private stakeholders on the ECBC code and Eco Niwas Sanhita for residential structures, and overseeing the Star Rating program for energy-efficient buildings, encompassing



Mr. Saifuddin, ECBC Expert, during training programs at UP Project Corp Ltd. Lucknow

both commercial and residential structures. During the second quarter of the 2023-24 fiscal year, a total of three physical training programs 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 70 participants.

Stakeholder Consultation Meeting on Deploying Low Carbon Levers

In the fight against climate change, India has taken a firm stance by presenting its climate pledges in multiple global forums. India is at the forefront of numerous efforts, including advancing renewable energy, expediting eco-friendly transportation, promoting international collaboration, and providing financial support for transitioning from conventional energy sources to environmentally friendly and efficient technologies. To expedite the efforts, AEEE is conducting a study in the state of Uttar Pradesh on the MSME sector to identify the clusters where low carbon levers such as electrification of thermal processes, energy efficiency, alternate fuels, carbon capture, and other cleaner technologies, can be deployed. In the view of above AEEE organized stakeholder consultation meeting at Moradabad and Varanasi.

- 1. Brass Sector at Moradabad:** Workshop was organized at Moradabad for Brass foundries on Sept 23, 2023 with more than 50 participants.
- 2. Brick Sector at Varanasi:** Another workshop was organized in Varanasi for the Brick Sector on Sept 27, 2023 with more than 55 participants:

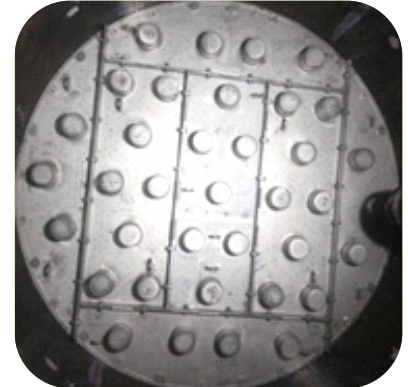
Case Study:

Replacement of Urea reactor trays from conventional Sieve type energy efficient Super cup trays in Unit-11 of KRIBHCO Fertilizers Ltd

KRIBHCO Fertilizers Limited manufactures nitrogenous fertilizer viz. urea and Ammonia, commissioned in November'1995, at Shahjahanpur UP with installed capacity of 8,64,600 MTPA of Neem Coated Urea and 5,01,600 MTPA of Ammonia. The plant is ISO 9001:2015, ISO 14001:2015 and ISO 45001:2018 certified.

Replacement of Urea reactor trays from conventional Sieve type to SAIPEM Make

energy efficient Super cup trays in Unit-11, has saved 82 Kg/MT of Steam, which in turn, has reduced Urea SEC by 0.024 Gcal/MT with monetary savings of Rs. 989.53 Lacs per annum with an investment of Rs. 1085.8 Lakh, having payback period 1.1 year only. This scheme also contributes to reduction in Carbon Emissions by 14,700 MT per Year.



Urea Reactor Super Cup trays

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

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