

UPSavesEnergy News Letter

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

Quarterly Newsletter

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Inside :

- Background
- EC Day Celebration
 - State Energy Conservation Award
 - Painting Competition
- Energy Efficiency Programs in UP
 - MSME Workshop
 - Investment Bazaar
 - Building Energy Efficiency (ECBC)
 - Energy Audit in KGMU
 - Efficiency Measures in KGBV
- Case Study

Background :

Uttar Pradesh New and Renewable 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.

Uttar Pradesh is developing very fast in the country resulting in rapid increase in the energy consumption. Building infrastructure is also increasing continuously which also contribute to increasing the energy consumption. Uttar Pradesh (UP) has seen strong growth in power demand in the past decade. Uttar Pradesh has several renewable & non-renewable energy generation

resources. To reduce the energy demand, it is necessary to utilize energy in most energy efficient way. Increasing installation of Solar Power Plants is also necessary for the growth of Uttar Pradesh. Uttar Pradesh Solar Energy Policy 2017 is also being revised by UPNEDA. UPNEDA is also developing Uttar Pradesh Bio Energy Policy.



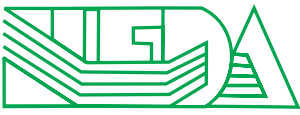
Vision :

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

EC Day Celebration :

National Energy Conservation Day is celebrated every year on 14th December to raise awareness on energy efficiency and its conservation.

UPNEDA celebrated EC day on 14 December 2022, at UPNEDA head office under the guidance of BEE, Ministry of Power, recognizes and encourages endeavors of industrial units, institutions and establishments in reducing energy consumption by felicitating them with Energy Conservation Awards. Various Energy Conservation activities were organized on the occasion of EC Day.

State Energy Conservation award:

To promote Energy Conservation activities in State of Uttar Pradesh; UPSDA has initiated the Energy Conservation Award scheme to give state-recognition through awards in various energy consuming sectors. The Awards were announced for the first time in

UP in the year 2016-17.

In the year 2022 the UP-State EC awards (UPSECA) were given in 13 sectors, including Thermal Power Plant, Fertilizer, Sugar, Indian Railway, Hotels, Refineries, Cement, Aluminum, etc.

The participating units have collectively invested Rs 1062.86 Crores in energy conservation measures, and achieved monetary savings of Rs 1130 Crores last year, once again proving the fact that energy conservation is the least cost option. The participating units have also saved 1787 million kWh of electrical energy equivalent.

The award winners of the current year included prominent companies and establishments such as Hindalco Industries Ltd., UltraTech Cement Ltd., Grasim Industries Limited (Chemical Division), Noida Power Company Limited, Kribhco Fertilizers Limited, The Oberoi Amarvilās (Agra), Tata Steel Limited, Yash Pakka Limited, Gail India Limited, Indian Oil Corporation Ltd. (Refinery Division), Banaras Locomotive Works, NTPC (Tanda Thermal Power Plant), and North Eastern Railway (Gorakhpur Zonal Railways).

Painting Competition:

UPNEDA organized Painting Competition at state level as an awareness Campaign to motivate educational institution to adopt energy conservation measures and practices in the state for students' class IIIrd to Class XIth. Children shown their talent by preparing beautiful paintings on energy conservation. These competitions are motivating them to think and act for energy saving.



Energy Conservation Day Celebration at UPNEDA, Lucknow.

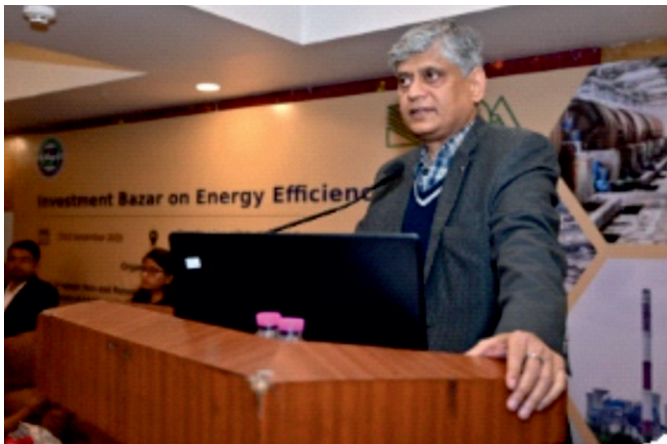


Workshop MSME:

Total 4 Workshops were planned for various MSME clusters through Green Tree Global with assistance of UNESCO. During 2nd quarter three workshop are organized. 1st Workshop Organized at Khurja on 17th July 2022. 2nd and 3rd workshops were organized at Agra (glass sector, foundries and other MSME industries) and Moradabad (Foundries and Brass wares) on 17 August 2022 and 3 September 2022 Respectively. 4th workshop for MSME organized at Lucknow on 7 October 2022.

Investment Bazaar :

UPNEDA in association with the Bureau of Energy Efficiency organized "Investment Bazar for Energy Efficiency. The objective of the event was to create awareness among various stakeholders on different financing schemes, EE products/services, and ESCO modes of implementation of EE projects. The first one-day Conference was organized on 23rd December 2022 in Lucknow. More than 70 participants from various DCs, Industries, MSMEs, OEMs, Financial Institutions, and various Industry associations were present during the Session. Total 5 projects were



Sh. Ashok Kumar Srivastava, Sr. Project Officer-I, UPNEDA

showcased during the conference with a total energy saving potential of more than 1624 MWh equivalent. A total loan of Rs. 170 lakhs

were required for investment in EC projects.

Building Energy Efficiency :

The role of EEB Cell is Monitoring of implementation of UPECBC-2018, Technical support in the implementation of UPECBC to govt. stakeholder departments through demonstration building projects, Organizing training to govt. and private stakeholders regarding the ECBC code and Eco Niwas Sanhita for Residential buildings, and Star Rating program for energy efficient buildings (Commercial and residential) etc. During 3rd

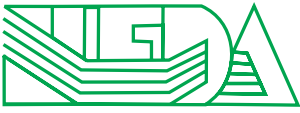


ECBC Training Programme in Jhansi

quarter of 2022-23 total of 9 training programs were organized (8 physical and one online) for officers of various Development Authorities & PWD and students etc. More than 300 participants were trained during these training programs.

Energy Audit:

Energy Audit of the KGMU campus has been done through a tripartite agreement between the KGMU, Uttar Pradesh New & Renewable Energy Development Agency (UPNEDA) and Bhagwat Technologies & Energy Conservation.



Implementation of Energy Efficiency Measures in KGBV:

In the 3rd quarter of the fiscal year 2022-23, UPSDA successfully extended energy efficiency initiatives across a substantial number of educational institutions. A total of 593 schools out of the 746 Kasturba Gandhi Balika Vidyalaya were encompassed in this effort, involving the upgrading of lighting systems to energy-efficient LED bulbs and tubes, as well as the substitution of conventional fans with more efficient BLDC fans.



Capacity Building Programme of students in KGBV

Case Study: - 1. Yash Pakka Limited, Ayodhya Uttar Pradesh –Replacement of Metallic blades fans with FRP blades for PP-2 CT fan .

In 2021-22 Yash paper limited has taken several initiatives for reducing the energy consumption of the plant. The existing heavier metallic bladed fans installed at PP-2 Cooling Tower were replaced with the latest lightweight and more efficient FRP-bladed fans. Before the replacement of fan blades the power, consumption was 15 kW and after replacement power saving is around 2.5 KW.



Cooling Tower and Fan

Case Study -2: Hindalco, Renukoot, Rectifier Plant-2 – Installation of Fan less Cooling Tower M/S Hindalco replaced all its cooling towers to fan-less cooling tower saving electricity for the cooling.

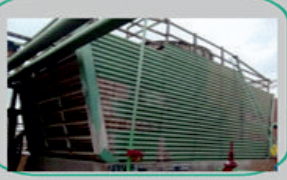
ADITYA BIRLA HINDALCO

Renukoot Rectifier Plant-2


Installation of Fan less Cooling Tower

Location – Cooling Tower #1C at Rectifier Plant-2

Before



After



Benefits (Tangible/Intangible):

Tangible :

- 1) Energy saving Rs 4 lac / annum against stoppage of Fan will be achieved
- 2) Maintenance cost against replacement of lubricant & bearing will be saved
- 3) Repair cost of motor overhauling, reduction gear overhauling will be saved

Intangible :

- 1) Cooling Tower efficiency increased
- 2) No wooden member hence damage of structure minimize
- 3) Damage due to vibration of cooling fan reduced
- 4) Sound level of surrounding area reduced

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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