

UPSavesEnergy News Letter

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

Quarterly Newsletter

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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.

In addition to its diverse responsibilities, UPNEDA is charged with tasks such as implementing energy-efficient measures, raising awareness about energy efficiency, collaborating with Designated Consumers to ensure adherence, formulating and updating the Energy Conservation Building Code (ECBC) for Uttar Pradesh, and overseeing its application and enforcement as mandated by

the EC Act. UPNEDA also plays a vital role in creating and implementing UP Eco Niwas Sanhita, an initiative aimed at enhancing energy efficiency in the residential sector. These responsibilities underline UPNEDA's crucial mission to promote sustainable energy practices and bolster energy conservation across the state.



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



HIGHLIGHTS

- Energy-efficient Street lighting initiatives, including the replacement of conventional streetlights with LED lights across the state.
- Integration of energy efficiency components in the construction of government buildings and public infrastructure.
- Replacement of lights and fans by LED lights and BLDC fans in selected hospitals is planned.
- Replacement of lights and fans by LED lights and BLDC fans in all the Kasturba Gandhi Balika Vidyalaya.
- Replacement of more than 8100 agricultural pumps by energy efficient pumps with smart panels.
- Energy audit of various buildings.
- Retailers Training Programs in 20 cities are planned.
- A series of Investment Bazar Conferences are scheduled across five cities to promote the funding of energy efficiency initiatives.
- Diverse workshops arranged for industrial sectors, along with capacity-building sessions tailored for municipal officers.
- Organizing State Energy Conservation Awards and competitions.
- Uttar Pradesh Energy Conservation Building Code is notified in 2018 and it has been incorporated in building Bye Laws. UP ENS has been developed and is submitted for approval of the Government.

Energy Efficiency Programmes

Agricultural Sector:

In Agriculture sector UPSDA, have organized many programs on energy efficiency. During 2018-19 and 2019-20, UPSDA have conducted 508 workshops for farmers in various villages with assistance from PCRA. During Ist Quarter of 2022-23 UPSDA conducted 40 agricultural workshops for farmers in various Krishi Vigyan Kendra (6 Agricultural workshops organized during April 2022, total 14 workshops during May 2022 and 20 agricultural workshops during June 2022 thus total 40 workshops in 1st quarter).

Students Capacity Building: Training Programme in KGBV

UPSDA has successfully conducted a comprehensive Student Capacity Building Program in Kasturba Gandhi Balika Vidyalayas (KGBVs) across the state of Uttar Pradesh. A total of 746 KGBVs were engaged in this initiative, covering every institution within the state. Throughout the 2021-22 academic year, a remarkable total of 380 programs were orchestrated, with 142 training sessions held during the first quarter alone. In the course of this initiative, alongside the training of students and educators, an energy survey is conducted, a Student Energy Club is instituted within the school, and quizzes are arranged for students. Over the past years, UPSDA has successfully executed 236 capacity-building programs for students in Madhyamic Shiksha schools across Uttar Pradesh.



Training Programme in KGBV

Workshop for Financial Institutions on Energy Efficiency Financing:

UPNEDA organized workshop on 20th April 2022 for Financial Institutions on “Energy Efficiency Financing” at UPNEDA Conference Hall. 28 Officials from 22 banks (SLBC, Nationalized, Scheduled, Private,



Energy Efficiency Workshop for FIs at NEDA Conference Hall

Rural & Micro-financing) have participated. Additionally, the workshop witnessed the virtual presence of 09 Energy Saving Companies (ESCOs) who actively engaged in the proceedings.

Building Energy Efficiency:

National ECBC-2017 has been adopted with amendments to suit the local climatic conditions i.e Composite climate for Uttar Pradesh and is known as UPECBC 2018, which is mandatory for all commercial and government buildings of UP that have plot area of the building is more than 1000 square



ECBC Training Programme

meter, with a minimum built up area of 2000 sqm. ECBC compliant buildings can save energy up to 30-40% approximately from conventional buildings. EEB Cell is

established by BEE at UPSDA. 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, Organize training to govt. and private stakeholders and Star rating program for energy efficient building (Commercial and residential) etc. During 1st quarter of 2022-23 total 5 training programs were organized in various development authorities and other organizations in which more than 250 participants were trained.

Regional Workshop :

A regional workshop took place in Varanasi on June 14-15, 2022, facilitated by BEE (Bureau of Energy Efficiency). The event saw the active involvement of SDAs (State Designated Agencies) and ECBC Cells from multiple states including Chhattisgarh, Gujarat, Jharkhand, Maharashtra, Rajasthan,



Regional Meet in Varanasi

Uttarakhand, and Uttar Pradesh.

Energy Conservation Day 2021 Celebration:

UPSDA celebrated Energy Conservation Week 2021 and Energy Conservation Day on 14 December 2021. During this period various workshops were organized. Radio Jingle was played on various radio channels. Online Painting Competition was organized for class 3 to 5, class 6 to 8 and class 9 to 11. 5 winners were selected from each category by experts. UPSDA also organized online quiz competition and other competitions. Winners



EC Day Celebration

of each completion were awarded on EC Day (14th December 2021). Uttar Pradesh Energy Conservation Award 2021 was also organized for different categories including, Industries, Buildings, and other sectors. The winners were awarded on EC Day..

Farewell to Shri Alok Sinha:

Shri Alok Sinha, Principal Secretary, Energy & Additional Sources of Energy, Government of Uttar Pradesh was transferred to Government of India, as Secretary Ministry of Power on during April 2022.

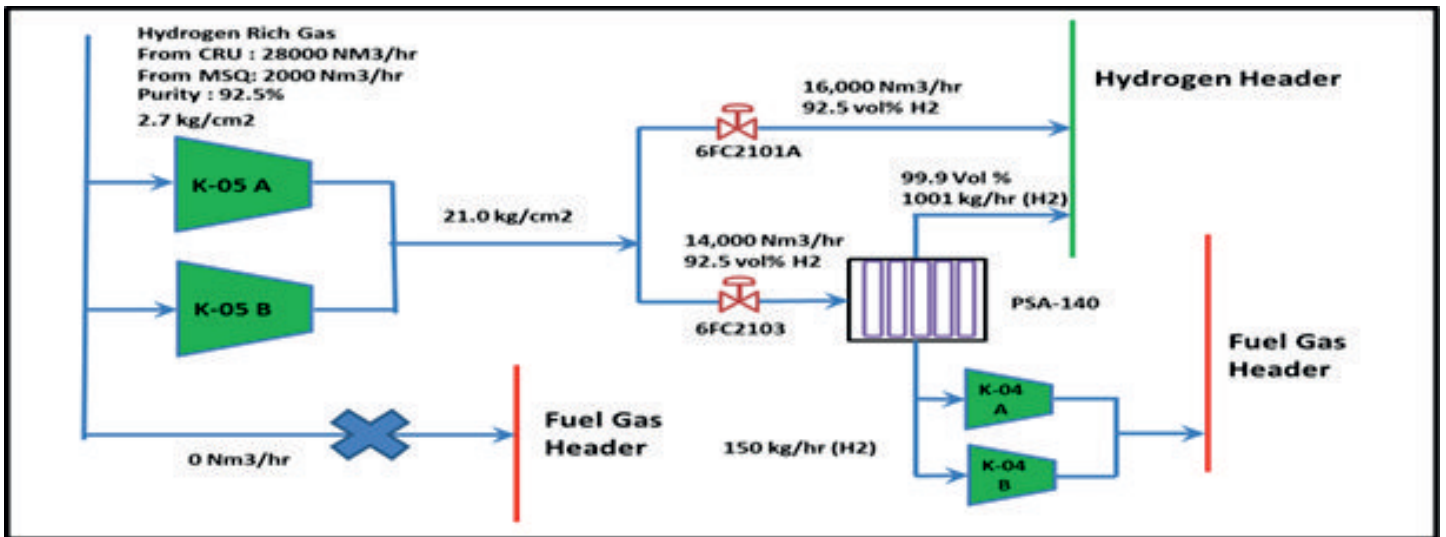
Case Study:

IOCL Mathura: Prevention of H₂ ingress into refinery generated fuel gas to increase burner efficiency

As per earlier practice in IOCL Mathura, only one compressor K-05A was continuously operated to further purify Hydrogen rich gas (92% purity, generated from Catalytic Reforming Unit, CRU) in Pressure Swing adsorption (PSA) unit. Balance amount of rich gases was routed to Refinery generated fuel gas (RFG) header thereby increasing its H₂ %. This RFG is internally consumed in all furnaces. To prevent this, both compressors are now operated and all the CRU H₂ rich gases are now routed to PSA for further purification.

Benefit achieved

Problem solving: H₂ % in Refinery Fuel gas has been reduced leading to improved Burner performance and reduced H₂O loss and less O₂ requirement



Uttar Pradesh New & Renewable Energy Development Agency
(UPNEDA)

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