

Webinar Title: METHODS/PRACTICES FOR ACHIEVING HIGHER ENERGY EFFICIENCY IN INDUSTRY

Registration Fee (including GST): - Rs 499/- (Rupees four Hundred Ninety-Nine Only) per participant inclusive of GST

Expert Speaker (Name/ Designation) – Dr. Balkar Singh, Independent Advisor (Energy Efficiency) and Former Joint Director, Punjab Energy Development Agency, Chandigarh

Webinar Date: 23.05.2021 Duration: 11.00 hours to 12.30 hours (one hour thirty minutes)

About Webinar (Brief One Para):

Higher Energy efficiency for any industry is very important for financial savings, improving efficiency and productivity and environmental protection. Achieving higher Energy efficiency helps in reducing cost, improving profit margin and saving scarce energy resource too.

Manufacturing industries use billion dollars on the power facilities and the energy waste counts for about 30% of it. Imagine how much extra money you are paying for the energy you didn't even use and now imagine, how much you could save by becoming more energy-efficient. Industrial utilities need a huge amount of power supply to operate. But most of the energy – nearly half of it – goes to waste because of negligence and absence of any energy management program.

Every industry, company and organization need to take steps for achieving energy efficiency.

Following are some of effective ways/methods for achieving energy efficient for industry:

1. Energy Management Team: . One of the best ways to manage energy and improve efficiency is to create an energy management team that will handle all the information, oversee and calculate the usage and also help in saving energy. Team must have a representative from each department.

The team will :

- Create a plan to monitor energy usage
- implement ideas to save energy
- Add incentives and bonus to make people work hard

Taking an initiate towards energy efficiency is important for the better future of the company as well as the environment.

2. Energy Audits: Performing energy audits is one of the best ways to achieve energy efficiency for industry as it is done very thoroughly and accurately. The results can be used to identify the

problem areas and come up with a plan to achieve energy efficiency for industry.. Energy audit company have an expert team specializing in energy auditing and help companies become more efficient. Energy audit will help quantify energy consumption of each department, peak consumption times and days and where the waste is happening. After the audit is done, the team will recommend the necessary steps for achieving better energy efficiency of industry and saving the cost.

3. Reducing electricity consumption : Reducing electricity consumption is one of the best ways to become more energy efficient for any industry. Using an electricity consumption system like ENERTEQ, industries can better manage their energy consumption. The ENERTEQ system offers stable and effective network current, which will help in saving energy up to 20%.

4. Control and Manage Machinery Use: In industries, machineries operation consumes a huge chunk of energy. By controlling and carefully using the energy for the operation of the machineries, industries can reduce cost and improve efficiency. By strategically scheduling machinery use, you can reduce the waste and save energy cost.

5. Using LED and Solar lighting: It is important that companies take appropriate steps to reduce energy waste by switching off lights and using energy-efficient lighting like LED and solar lighting. Here are some of the ways you can do it:

- Automated lighting systems based on room's occupancy or daylight availability can reduce energy waste
- Install motion detector sensors to automate light switching on and off as per the need
- Using efficient LED material for achieving energy efficiency and saving up to 80% of the lighting cost.
- Installing solar LED lamps to improve energy efficiency as they have solar panels and batteries that supply energy to the luminaires

Using the lights consciously can help in reducing the energy waste and improve performance.

6. Optimizing Air Compressors: Air compressors are installed in the industrial areas for various reasons and they are also responsible for huge energy consumption. A lot of waste is also involved in it. The fault lies in incorrect designing, incorrect installation and maintenance. Leaks in the air compressors can amount to huge energy waste. Multiple leaks can add so much to the energy cost. It is important to keep the air compressors at optimal level and ensure they are sealed properly and don't have any leaks. An energy audit will cover it and help come up with a plan to tackle the problem in a most efficient way.

7 Importance of Regular Maintenance: Cleaning and maintain the systems is one of the best ways to ensure your commercial space is energy efficient. Make sure the system, equipment, machinery, lights, HVAC system and other important components are cleaned and maintained regularly. By keeping the system efficient, you can reduce the energy wastage, improve efficiency and also increase the lifespan of each component. You can reduce the chance of sudden system breakdowns with an efficient maintenance program for your various important components.

This webinar will focus on discussing methods and practices for achieving higher energy efficiency in industries so that industries become competitive by reducing cost of operations.

Webinar Coverage: -

- Understanding the importance of higher energy efficiency
- Current energy consumption pattern in industries
- Effective ways/methods for achieving higher energy efficiency
- Comprehensive Energy Audit
- Improving energy efficiency in processes
- Higher energy efficiency in thermal and electrical utilities
- Energy efficient technologies
- Planned maintenance
- Energy efficiency analytics
- Best energy efficient practices in manufacturing sector
- Strategies to improve industrial energy efficiency
- Case studies and examples

Speaker Profile (Brief One Para & Photograph): - Dr. Balkar Singh is an Advisor (Energy Efficiency), having Professional Experience more than 32-year (Technical, Managerial and Academic) in the field of Civil Engineering, Renewable Energy, Energy Efficiency, Construction Technology & Management, Green Building, ECBCs, Energy Auditing. He is Former Joint Director, Punjab Energy Development Agency, Chandigarh. Recipient of State Award “Punjab Govt. Parman Patra” for his exemplary services rendered in the field of Science and Technology. He has been honoured with “Distinguished IEI Graduate Engineer” Award by the Institution of Engineers (India). He is Honorary Co-Chairman, Green & Eco-friendly Movement Punjab Chapter. He possesses

degree in ME(CTM), M.Sc. (IT) and Certified Energy Auditor. Fellow of The Institution of Engineers (India), Member of ASHRAE, ISHRAE and SEEM. He has international exposure of Japan and Germany. Published 17 national and international research papers and made more than 110 presentation on green building and energy efficiency.



Register to learn (Key Learning's' in bullet points):

- Understanding the importance of higher energy efficiency
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- Comprehensive Energy Audit
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- Planned maintenance
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- Strategies to improve industrial energy efficiency
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Thanks, and regards

S.P.Singh

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