

TECHNICAL ACTIVITY CARRIED OUT BY CENTRES

Name of Centre		Meerut Local Centre
Title of Activity:		Energy Conservation Day
Activity under Divisional Board		Statutory Days
Date:	14-12-2025	Venue:
L.C. office IEI, Meerut		
(Insert photo)		(Insert photo)
		
Title of photo : Some of the attendees in the seminar		Title of photo: Dignitaries on Dais

Brief Report :-

The Meerut Local Centre, The Institution of Engineers (India), organized a seminar on December 14, 2025 on the occasion of Energy Conservation Day, under the chairmanship of Er. S. C. Mittal, Chairman, LC Meerut. The event was convened by Er. Prashant Sharma. Three lecture sessions were arranged to deliberate in detail and emphasize, energy conservation.

The theme of the seminar was “Promoting Energy Efficiency as the First Fuel: Addressing Climate Change, Resource Depletion and Environmental Degradation”, with a focus on solar and renewable energy.

After the welcome address by the Chairman, Er. S. C. Mittal, the Convener introduced the theme of the seminar. To begin the technical sessions, he invited the speaker for the first session, Er. Arvind Raja, Director, Shiven Energy & EV Pvt. Ltd.

In his address, Er. Raja explained the purpose of celebrating Energy Conservation Day (ECD):

1. To create awareness about saving energy.
2. To promote clean and renewable energy such as solar energy.
3. To reduce the burden on conventional power sources.
4. To mitigate climate change and protect the environment.
5. To promote India’s sustainable development goals.

He briefly explained UN Sustainable Development Goal No. 7 and its importance. He

thereafter explained how we can contribute to it:

1. Expanding access to clean and reliable solar energy.
2. Helping to reduce dependency on conventional energy sources.

Prof. Raja then briefed the audience on the Government scheme of PM Surya Ghar: Muft Bijli Yojana, highlighting its salient features and advantages. He also gave an account of solar technologies that strengthen goal implementation. He explained on-grid, off-grid and hybrid solar systems, along with the benefits associated with these systems. These systems will improve renewable energy commitments and help India move closer to UN SDG 7 and the Net Zero Emission target by 2070.

He elaborated on how individuals can contribute to energy conservation and concluded with a positive note for a sustainable tomorrow, urging everyone to act today for a cleaner and greener India.

In the second session, the Convener invited Er. Ashish Gupta, Director, Shiven Energy & EV Pvt. Ltd., to deliver his presentation. Er. Gupta explained energy efficiency from the Indian perspective and highlighted India's energy and climate challenges. He explained why solar energy is necessary for India and discussed its benefits in the context of climate change. He also explained how water can be saved by using solar energy as compared to coal-based energy. Limited coal stocks can also be conserved through increased use of solar energy.

Regarding transmission and distribution losses in conventional systems, he explained that solar power reduces line losses and grid load. He also highlighted the associated economic and social benefits and emphasized the important role of citizens and organizations. He concluded by outlining the way forward and advised adopting solar energy as the key to a sustainable India, urging action today for a greener tomorrow.

In the third session, the Honorary Secretary, Er. Nikhil Kishore, delivered a lecture highlighting several developments in the field of energy conservation in India and abroad. He began by referring to an interview of Elon Musk by Mr. Nikhil Kamath, wherein Musk stated that in the next 10–20 years, money may not be in currency terms but in terms of energy, as daily needs would increasingly be met through robots and artificial intelligence. Er. Kishore stated that World Energy Conservation Day focuses on boosting sustainable innovation and developing new technologies for energy efficiency. He emphasized the role of citizens, explaining how individual actions can lead to significant energy conservation. He also highlighted the importance of renewable and clean energy sources such as solar, wind, nuclear, etc., in achieving global goals aligned with climate neutrality and sustainable development.

He highlighted the four 'Ps' of energy conservation:

1. Planning – setting goals.

2. Perseverance – staying dedicated to adopting energy-efficient habits.
3. Practice – implementing daily actions to reduce wastage.
4. Propagation – spreading awareness and inspiring others to save energy.

Er. Kishore also shared details of recent developments at IIT Bhilai, where a smart polymer gel has been developed that changes its properties according to weather conditions, resulting in significant energy savings. In summers, the gel adjusts its transparency to partially block sunlight and heat from entering rooms through gel-coated windows, resulting in natural cooling and reduced need for air conditioning. In winters, the transparency adjusts to allow more sunlight and heat, keeping rooms warm throughout the year. In addition, the gel can act as an electrolyte in energy generation devices, enabling electron flow and thus contributing to clean energy production. This dual functionality enables both energy savings and economical energy generation, representing a revolutionary development in the field of energy conservation.

After the sessions, interactive discussions were held, during which esteemed members raised queries that were duly addressed.

In the end, Er. Nikhil Kishore, Honorary Secretary, Meerut Local Centre, IEI, presented the vote of thanks.