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BEE LINE

NEWSLETTER

19th Foundation Day

Launch of Star Rating Programme for Deep Freezer and LCAC

Launch of Urja Dakshata Information Tool (UDIT) Website

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KEY POINTS

Abhay Bakre
Director General, BEE

MESSAGE

India has been witnessing a significant rise in the demand for energy. Identifying the fact that energy conservation and its efficient use is one of the most effective options to meet this increasing demand, BEE is committed to developing new and effective techniques and measures for energy efficiency. Energy efficiency is a key element that can contribute to reducing the energy requirements of our country and the environmental implications related to it.

Bureau of Energy Efficiency has been taking various necessary steps for energy conservation through its programs like Standard and Labeling, Perform Achieve and Trade, etc. associated with the energy-intensive sectors like industries, appliances, transport, buildings, agriculture, etc. and its national and state-level capacity building workshops for its stakeholders. BEE recently celebrated its 19th Foundation Day on March 02, 2020. To mark the occasion, various new initiatives aimed at energy conservation were launched. BEE's Standard and Labeling programme now includes Deep Freezer and Light Commercial Air Conditioners under the voluntary regime. With the introduction of these two new appliances, the total number of appliances covered under the programme totals to 26. The BEE also launched the Urja Dakshata Information Tool (UDIT) website, the first-ever initiative to facilitate a database on energy efficiency by BEE with the World Resources Institute.

To develop a vision towards building an energy-efficient India and achieve a sustainable future, the BEE is dedicated to spread awareness amongst its stakeholders and the citizens of India and promote energy conservation.

R K Rai

Secretary, BEE

MESSAGE

Time and again, the Bureau of Energy Efficiency has taken a host of steps to ensure making India an energy-efficient nation and to spread awareness about energy conservation amongst its stakeholders as well as the people of our country. One such achievement in the recent time is the introduction of Deep Freezer and Light Commercial Air Conditioners under the Standard and Labeling Programme.

I take pleasure in sharing with you all that with the introduction of two more appliances under the Standard and Labeling programme, we are expecting to save approximately 6.2 billion units electricity from Deep Freezer and 2.8 billion units of electricity through Light Commercial Air Conditioner, which is equivalent to greenhouse gas reduction of 5.3 and 2.4 million tonnes of carbon dioxide, respectively, by 2030. The BEE is determined to contribute towards an energy-efficient economy and come up with more programs and initiatives to combat energy wastage in future.

Besides, the BEE plans to launch several extensive awareness campaigns through electronic, outdoor, print and other media to promote the message of energy conservation amongst the masses.

New Initiatives Mark 19th Foundation Day

The BEE observed its 19th Foundation Day in New Delhi on March 02, 2020. Several energy-efficiency initiatives aimed to conserve energy were launched on this date. The coverage of the Standards and Labelling programme was expanded with the introduction of star rating programme for Deep Freezer and Light Commercial Air Conditioners (LCACs) under the voluntary regime, bringing up the total of appliances covered under this programme to 26. A Stakeholder Consultation was also organised to develop a vision towards building an energy-efficient India. The BEE also launched Urja Dakshata Information Tool (UDIT) website to commemorate this day.

Star Labelling Program for Deep Freezers and Light Commercial Air Conditioners

Deep Freezer:

The commercial refrigeration sector consisting primarily of deep freezers is poised to multiply two-fold over the next decade leading to increased electricity demand. The total organied market size for chest- and upright-type deep freezer segment for the FY 2017-18 was about 5-6 lakh units. The market size increased by more than two times in the last three years with a CAGR of 28 per cent and is expected to grow at a higher CAGR. Chest-type freezers constitute about 99 per cent of the market share, leaving only one per cent for the upright-type. About 3.72 lakh deep freezer units were imported while the remaining are indigenously manufactured.

The Star Labelling Programme for Deep Freezer was launched under the voluntary regime and covers hardtop and glass-top chest-type Deep Freezer of all capacities complying with requirements of IS 302-2-24 for safety and IS 7872 for

energy performance. The performance benchmarks/ energy consumption standards are based on Annual Energy Consumption (kWh/year) of Deep Freezers and will be effective up to 31st December 2021. This initiative is expected to save around 6.2 billion units by FY2030, which is equivalent to Green House Gas (GHG) reduction of 5.3-million-ton of Carbon Dioxide.

Light Commercial Air Conditioners:

The existing BEE star labelling program for Air Conditioners is based on Indian Standard IS 1391 part 1, part 2 and covers AC with cooling capacities upto 10.5 kW. In order to cover split ACs beyond the scope of the existing BEE star labelling program (up to a cooling capacity of 18 kW), BEE has initiated a star labelling program for split ACs having cooling capacities in excess of 10.5 kW and upto 18.0 kW. This category of Air Conditioners is termed as "Light Commercial Air conditioners (LCAC)" primarily due to their application in commercial air conditioning.

The program has initially been launched in the voluntary regime. From 1st January, 2022, it will be made mandatory after reviewing the degree of market transformation in this particular segment of appliances.

This initiative is expected to save around 2.8 billion units by FY2030, which is equivalent to Green House Gas (GHG) reduction of 2.4-million-ton Carbon Dioxide.

Stakeholder Consultation towards Developing Energy-efficient India

Stakeholders Consultation Workshops were also organized to commemorate BEE's 19th Foundation Day. The country's energy sector is set to grow as the government charts an ambitious development plan. Some of the intended projects include installation of a 175 GW renewable energy capacity by 2022, sustainable 24x7 power to all, housing for all by 2022, rejuvenation of the 100 Smart Cities Mission, promotion of e-mobility, electrification of the railway sector, complete electrification of households, solarisation of agricultural pump sets and promotion of clean cooking.

According to the World Energy Outlook (WEO 2010), energy efficiency has the maximum greenhouse gas (GHG) abatement potential followed by renewables, biofuels, nuclear, carbon capture and storage. This implies that India can refrain from working on 300 GW of new power generation up to 2040 through its ambitious energy efficiency policies (IEA–India 2020). Successful implementation of energy efficiency measures have contributed to electricity savings of 86.60 BUs. This is equivalent to 7.14 per cent of the total electricity India consumed during 2017-18.

Launch of UDIT Website

To mark the 19th Foundation Day celebrations, Urja Dakshata Information Tool (UDIT) (www.udit.beeindia.gov.in), a first-ever initiative to facilitate a database on energy efficiency by BEE with World Resources Institute (WRI), was also launched. A user-friendly platform that elucidates well the energy efficiency landscape of India, UDIT will also enable greater understanding of the energy sector's capacity building and new initiatives by the government across various sectors in the increasing energy efficiency domain.

Expanding the PAT Scheme:
The Way Ahead

The journey so far …

The Bureau of Energy Efficiency (BEE) launched its flagship programme "Perform, Achieve and Trade (PAT) Scheme" under the National Mission for Enhanced Energy Efficiency (NMEEE). The programme is aimed at reducing energy consumption and promote enhanced energy efficiency among specific energy-intensive industries in India.

The PAT Scheme was introduced to regulate specified energy consumption in energy-intensive industries. The scheme's associated market-based mechanism helps increase cost-effectiveness through certification of excess energy saving that can be traded. Under this scheme, specific energy-saving targets intended to reduce energy consumption were assigned to Designated Consumers (DCs) for three years. In its first cycle, 478 DCs from eight sectors, viz., Aluminium, Cement, Chlor-Alkali, Fertilizer, Iron & Steel, Paper & Pulp, Thermal Power Plant and Textile, were included.

PAT Cycle-I achieved an energy saving of 8.67 MTOE against the targeted energy saving of 6.68 MTOE, an overachievement of 30 per cent, which is equivalent to monetary savings of approximately ₹ 9500 crores.

For the second cycle (PAT Cycle-II), the BEE has notified new targets and introduced new sectors. Till date, the BEE has rolled out five cycles under the PAT Scheme covering 956 DCs in 13 energy-intensive sectors: Aluminium, Cement, Chlor-Alkali, Fertilizer, Pulp & Paper, Iron & Steel, Textile, Thermal Power Plant, Railways, DISCOMs, Petroleum Refinery, Petrochemical and Building (Hotel) sector.

Looking ahead

The BEE aims to include more players to ensure shared responsibility towards attaining the national goal of an energy-efficient India through widening of sectors, increase the number of DCs in every sector through lowering down primary criteria and threshold level of annual energy consumption as was done in Iron & Steel, Pulp & Paper and Building (Hotel) sectors.

The BEE plans to expand its ambit of energy efficiency by including more energy-intensive sectors in the subsequent PAT cycles. To widen the scope of energy efficiency in other energy-intensive sectors, the BEE carried out a feasibility study on the Sugar, Chemicals, Zinc, Copper, Ceramics, Glass & Mining sector. The next round of feasibility study may cover more industries such as Tyre, Dairy, Edible oil, Distillery, Brewery, Automobiles, Foundry, Refractory, Heavy industries, etc.

HIGHLIGHTS OF THE QUARTER (January - March 2020)

3 Days Residential Circle Level Training Program held under Capacity Building of DISCOMs Programme on DSM & Energy Efficiency at Various Places Across India

The objective of the training program was to make the participants understand the basic methodology and processes related to DSM & Energy Efficiency so that, they can contribute to implementation of the DSM projects in their jurisdiction.

Attendees: 41 officials of Madhya Pradesh Poorv Kshetra Vidyut Vitaran Company Ltd. (MPPoorvKVVCL)

Date: 6th-8th January 2020

Place: Sagar, Madhya Pradesh.

Attendees: 40 officials of Madhya Pradesh Paschim Kshetra Vidyut Vitaran Company Ltd. (MPPKVVCL)

Date: 13th-15th January 2020

Place: Indore, MP

HIGHLIGHTS OF THE QUARTER (January - March 2020)

Attendees: 39 officials of Madhya Pradesh Paschim Kshetra Vidyut Vitaran Company Ltd. (MPPKVVCL)

Date: 16th-18th January 2020

Place: Indore, Madhya Pradesh

Attendees: 25 officials of Electricity Department, UT of Chandigarh

Date: 23rd -25th January 2020

Place: Chandigarh

Attendees: 35 officials of Power Department, Government of Sikkim at Baiguney, West Sikkim

Date: 3rd-5th February 2020

Place: Sikkim

HIGHLIGHTS OF THE QUARTER (January - March 2020)


Attendees: 26 circle level officials of Electricity Department, UT of Chandigarh

Date: 3rd-5th February 2020

Place: Chandigarh


Attendees: 21 Circle Level Officials of Electricity Department, UT of Chandigarh

Date: 6th –8th February 2020

Place: Chandigarh


Attendees: 36 officials of Power Department, Government of Sikkim

Date: 6th – 8th February 2020

Place: Sikkim

HIGHLIGHTS OF THE QUARTER (January - March 2020)


Attendees: 35 officials of BSES Yamuna Power Limited (BYPL)

Date: 11th – 13th February 2020

Place: New Delhi


Attendees: 28 officials of the Northern Power Distribution Company Limited

Date: 13th-15th February 2020

Place: Adilabad


Attendees: 37 officials of Jharkhand Bijli Vitran Nigam Limited

Date: 17th – 19th February 2020

Place: Dumka, Jharkhand

HIGHLIGHTS OF THE QUARTER (January - March 2020)

Attendees: 25 officials of Manipur State Power Distribution Company Ltd.

Date: 26th-28th February 2020

Place: Imphal, Manipur

Attendees: 33 officials of Madhyanchal Vidyut Vitran Nigam Limited

Date: 4th – 6th March 2020

Place: Lucknow, UP

HIGHLIGHTS OF THE QUARTER (January - March 2020)

Regional Workshop on Benefit of Adopting ISO 50001:2018 Standards among PAT Industries

The first regional workshop on "Benefit of Adopting ISO 50001:2018 Standards among PAT Industries" was organized on 19th February 2020, in Vizag, AP, jointly by Bureau of Energy Efficiency (BEE) and Andhra Pradesh State Energy Conservation Mission (APSECM) along with Quality Council of India (QCI) as the technical partner. The aim of the workshop was to sensitize stakeholders and spread awareness. The implementation of ISO 50001:2018 standards will create positive consciousness among employees towards energy efficiency and develope a well-defined system to monitor and improve energy performance.

HIGHLIGHTS OF THE QUARTER

(January - March 2020)

The second regional workshop on ISO 50001:2018 was organized on 12th March 2020 in New Delhi by the BEE along with Quality Council of India (QCI) as the technical partner. The case studies of NFL - Panipat (Fertilizer), NTPC - Kawas (TPP), PACL - Nangal (Chlor-Alkali) and NSPCL - Bhilai (TPP) were showcased for the savings achieved while implementing the standards.

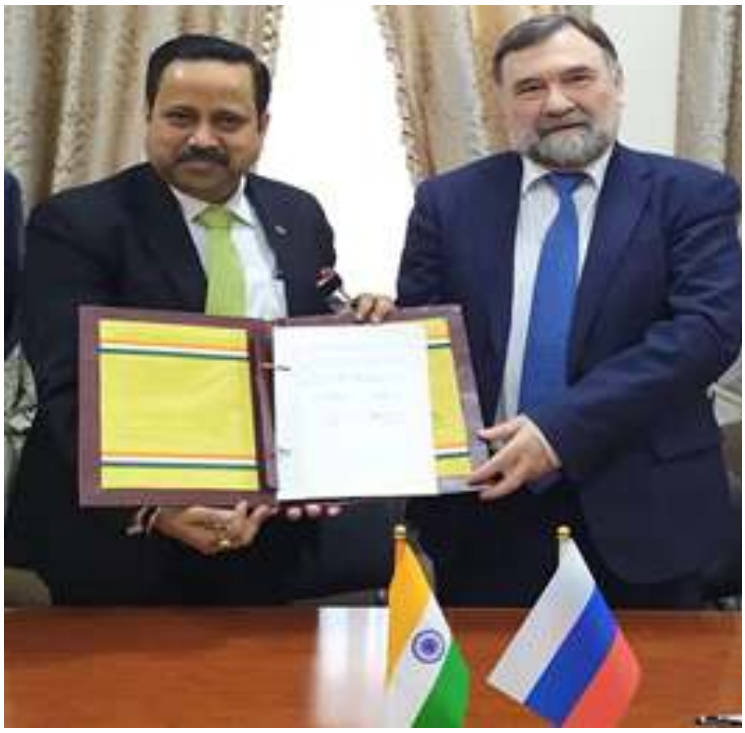
HIGHLIGHTS OF THE QUARTER (January - March 2020)

Collaboration with Energy Conservation Centre of Japan (ECCJ), Government of Japan

Under Indo-Japan Energy Dialogue, the Ministry of Power, Government of India, through Bureau of Energy Efficiency (BEE), and the Ministry of Economy, Trade and Industry (METI), Government of Japan through the Energy Conservation Centre of Japan (ECCJ) collaborated to focus on reducing India's energy intensity among high energy-consuming industry sub-sectors. Under this partnership, BEE has prepared Energy Conservation (EC) Guidelines for large, as well as medium and small-scale Industries. The EC Guidelines for large industries were released by Shri R. K. Singh, Hon'ble Minister of State (I/C) for Power and New and Renewable Energy, Government of India. Based on these EC Guidelines, a select set of Designated Consumers (DCs) have prepared their Energy Management Manuals for high energy-consuming equipment.

HIGHLIGHTS OF THE QUARTER (January - March 2020)

Memorandum of Co-operation Signed with Russian Energy Agency



A Memorandum of Co-operation was signed between Bureau of Energy Efficiency and Federal State Budgetary Organization "Russian Energy Agency" of the Ministry of Energy of the Russian Federation. The Memorandum was signed by Mr. R K Rai, Secretary, BEE, and Mr. Alexey Bednov, Deputy Director General of the Russian Energy Agency.

According to the MoC, both the parties jointly agreed on any specific co-operative activities, taking account of the priorities of the energy policy of the respective Governments and the general lines of the programmes of work and budgets of the REA and BEE. The BEE and REA will also meet at an appropriate level, whenever necessary, to interim review the progress of mutual activities undertaken and plan proposals for further activities on cooperation.

HIGHLIGHTS OF THE QUARTER (January - March 2020)

MoU Signed with Indian Railways Institute of Electrical Engineering Nasik (IRIEEN)

An MoU was signed between Bureau of Energy Efficiency and IRIEEN (Indian Railways Institute of Electrical Engineering Nasik) for accelerating Energy Conservation and Energy Efficiency activities in Indian Railways. The MoU was signed by Shri Sanjay Deep, Director General, IREEN and Shri Abhay Bakre, Director General, BEE.

HIGHLIGHTS OF THE QUARTER (January - March 2020)

Workshop on Indian Air Conditioning Industry Aligning Business Growth & Energy Conservation

Shri Abhay Bakre, Director General, BEE addressed the Industry representatives in a workshop titled "Indian Air Conditioning Industry Aligning Business Growth and Energy Conservation", organized jointly by Refrigeration and Air-conditioning Manufacturers association (RAMA) and BEE. Shri Bakre emphasized Indian Industry to take leadership role in making India a hub for manufacturing of energy efficient air conditioning.

17th Meeting of SAMEEEKSHA

The 17th meeting of SAMEEEKSHA was organized at New Delhi after organizing 3 regional meetings at Kolkata, Rajot and Coimbatore. Senior officials from TERI, Ministry of MSME and other stakeholders participated and shared their views for energy transformation of India's SME sector.

HIGHLIGHTS OF THE QUARTER (January - March 2020)

Farmers Training on Energy & Water Conservation held in Punjab

The training programme was held on 11th February 2020 at KVK Samrala, Punjab. The awareness programs were aimed on the theme of Energy Conservation and Energy Efficiency as per DSM scheme to all ULB Officers in the state of Punjab.




Another Farmers Training on Energy & Water Conservation was organised at KVK, Patiala. It aimed at spreading the awareness and benefits of 5 Star Rated Pumps & Water Conservation Tips under the AgDSM Scheme.


HIGHLIGHTS OF THE QUARTER (January - March 2020)

Interactive Webinar for Industries (DCs) was held in New Delhi

An Interactive webinar for Industries (DCs) to build understanding on PATNet and Trading of ESCerts was held in New Delhi. Over 400 energy professionals including DCs, EmAEA firms and SDAs registered themselves for the webinar. Dr Ashok Kumar, Director, BEE and Mrs Vineeta Kanwal, Director, BEE emphasized the need and procedures to register on PATNet, filing Energy Return Forms, and presented an overview on ESCerts trading on the newly developed PATNet platform. The role of registry (POSOCO) as well as of Power Exchanges (PXIL & IEX) in trading of ESCerts were also elaborated in the webinar.

Participation of BEE in the India Ceramic Asia Expo 2020

Bureau of Energy Efficiency participated in 'India Ceramic Asia 2020' - Exhibition cum Business Expo at Gandhinagar, Gujarat from 4th-5th March 2020. This is India's largest event for ceramic and brick raw materials and technology providers. The participation show-cased the concept and pilot initiative on 'Energy Efficient Enterprise (E3)' certification for the brick industry. BEE's exhibit at the event was supported by the Indo German Energy Forum (IGEF) and GIZ.

HIGHLIGHTS OF THE QUARTER (January - March 2020)

BEE Participated in the 107th Pride of India Exhibition

Bureau of Energy Efficiency participated in the 107th Indian Science Congress – Pride of India exhibition, India's largest annual gathering of scientific achievers from around the world, held at University of Agricultural Sciences, GKVK, Bengaluru. The event was inaugurated by the Prime Minister Shri Narendra Modi on January 03, 2020, at UASB, GKVK Campus. The event provided an excellent platform for the science fraternity of the country and abroad for discussing new scientific ideas and hope to see the deliberations offer a roadmap for accelerating science and technology contributions to the improvement of living standards of rural people for their sustainable livelihoods.

The 'Pride of India' expo has emerged as a unique platform for organizations from government, private and public sector to showcase their achievements in the field of science and technology. The BEE focused on the theme 'Science & Technology: Rural Development' and exhibited the energy-efficient technologies including star labelled pump sets and other integrated agricultural technologies that aims to bring innovation and conserve energy in the agriculture sector. People were educated about the benefits of star rated pump sets over non-star rated set. Students and teachers gathered information and tips on how they can contribute towards an energy efficient future by conserving energy at home and school.

BEE witnessed many visitors from the agriculture sector, corporate sector, scientific fraternity, R&D institutes, government organization etc during the 5-day event. Delegates from various national and international organizations visited the BEE's stand and applauded BEE's intervention in making India an energy-efficient economy.

HIGHLIGHTS OF THE QUARTER (January - March 2020)

9th International Engineering Sourcing Show

Bureau of Energy Efficiency participated in the 9th International Engineering Sourcing Show, held at CODISSIA Trade Fair Complex, Coimbatore. The 3-day event was inaugurated on 4th March 2020 at the CODISSIA Trade Fair Complex. The IESS provided a platform to promote India as a smart manufacturing hub to encourage and expose the local manufactures to use smart factories. The event aimed at showcasing India as a hub for the engineering industry and sourcing opportunity for a wide range of high-quality engineering items at very competitive rates.

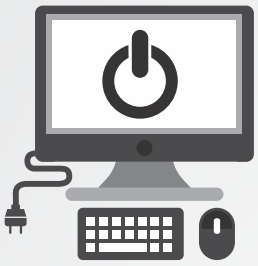
HIGHLIGHTS OF THE QUARTER

(January - March 2020)

The BEE focused on the theme 'Industry Transition 4.0' and India as a 'Smart Manufacturing Hub' and portrayed the outcome of various energy-efficient technologies used in the industries under the PAT scheme and how India has become a LED manufacturing hub. Currently, India is the being the second largest LED manufacturer in the world. The audience were educated about the need and benefits of implementing innovative technologies and how it can help in building an energy-efficient India. Further, the benefits of using LEDs over incandescent bulbs were also shared with the crowd visiting the BEE stall.

The BEE also witnessed many visitors from exporters of engineering products, businessmen, importers, buyers, dealers, distributors and wholesalers of engineering product etc during the 3-day event. Delegates from various national and international organizations visited the BEE's stand, interacted with the team and commended the organization's intervention in making India an energy-efficient nation.

Energy Conservation Tips

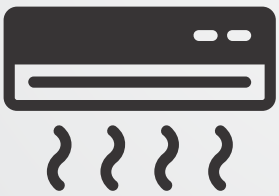


Don't leave your computer/laptop/lights/ heater/AC/ fan 'On' all day long.
Switch on only when required.

Be careful about **overfilling refrigerator & freezers** as it reduces air flow and cause the appliance to work harder.

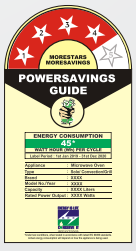
Turn off the Lights
when they're not in use.
Lighting accounts for about
12% of a typical residential utility bill.

Set your **refrigerator temperature** as per outside weather to avoid energy wastage.



Maintain **AC temperature at or above 24°C** for good health and comfort.

Use **BEE star rated appliances**.



BEE STAR RATING FOR APPLIANCES

The star label rates the energy performance of appliances on a scale of 1 to 5, 5 star being the most energy efficient appliance

Higher the star rating,
Higher is the energy savings.

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Ministry of Power
Government of India

PAT SCHEME
PERFORM, ACHIEVE & TRADE

स्वच्छ भारत
एक कदम स्वच्छता की ओर

Bachat Ke Sitare Dost Hamare