

# BEE LINE

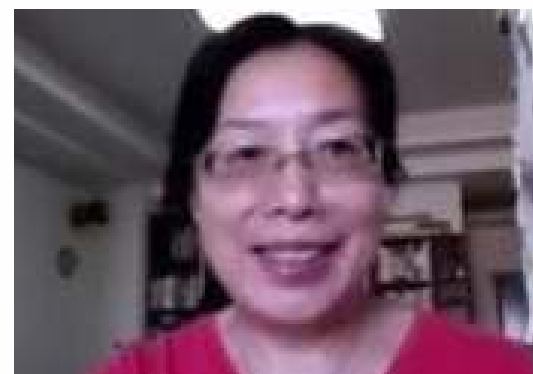
## NEWSLETTER



Shri Sanjiv Nandan Sahai, Secretary, MoP led Indian delegation during the 5<sup>th</sup> BRICS Energy Ministerial Meeting

Webinar on “Energy Efficiency in the time of COVID-19

18<sup>th</sup> meeting of SAMEEEKSHA





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## KEY POINTS

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**Abhay Bakre**  
Director General, BEE

## MESSAGE

India is a growing economy and is embarking on an ambitious path. Under the guidance of the Ministry of Power, BEE is working relentlessly to strengthen India's energy security and has been promoting energy efficiency with concerted efforts. For countries like India which has a high energy needs, energy efficiency provides considerable potential to promote low carbon transformation.

The Bureau of Energy Efficiency has executed several measures to achieve energy efficiency. A Potential Assessment Study for sectors under PAT scheme was conducted to measure benchmarks and assess further potential of energy efficiency in PAT cycles. I would also like to mention that BEE was given the responsibility to set standards and guidelines for setting up public charging infrastructure of Electric Vehicles (EV). Several guidelines have been revised and new EV policy are in pipeline.

BEE's schemes are formulated to improve energy efficiency and I appreciate the efforts of all the stakeholders for making amendments to further expand these schemes and widespread its benefits. I hope that this newsletter will encourage them to further enhance the endeavors for energy efficiency.



**R K Rai**  
Secretary, BEE

## MESSAGE

Global temperature is rising and to mitigate the climate change, BEE is incessantly exploring opportunities for energy efficiency, as it plays a crucial role in tackling climate change. Though, renewable energy technologies usually make the headline, energy efficiency works silently in the background to reduce the carbon emissions.

The energy intensive sectors in India play a critical role in developing and implementing strategies for energy efficiency. There is a need to put concentrated efforts by stakeholders to attain a sustainable future and adopt the best practices for energy conservation. The Bureau of Energy Efficiency organizes several Capacity building and training programs for Distribution Companies and working towards enhancement of energy conservation in the country.

With the schemes, BEE is continuously encouraging everyone to come forward and contribute towards making India energy efficient.

# Energy Security in MSME Sectors

The MSME sector contributes immensely towards economic growth, job creation, poverty alleviation and inequality reduction. For developing economies like India, the MSME sector assumes even greater importance due to its close linkages with socio-economic aspects; contribution in fostering entrepreneurship and generating employment opportunities at comparatively lower capital costs.

A large number of MSMEs continue to depend on obsolete, low efficiency technologies that lead to high energy costs and environment degradation. The MSME sector holds immense potential in fostering energy efficiency and upgradation of technologies, and hence can improve its competitiveness while simultaneously reducing its carbon footprint. With the programmatic interventions of Government of India, MSMEs are progressing towards attaining energy security.

*Key Initiatives taken for Energy Security in Indian MSME Sector:*

## 1. Development of Energy Conservation Guidelines for MSMEs

### **Objective:**

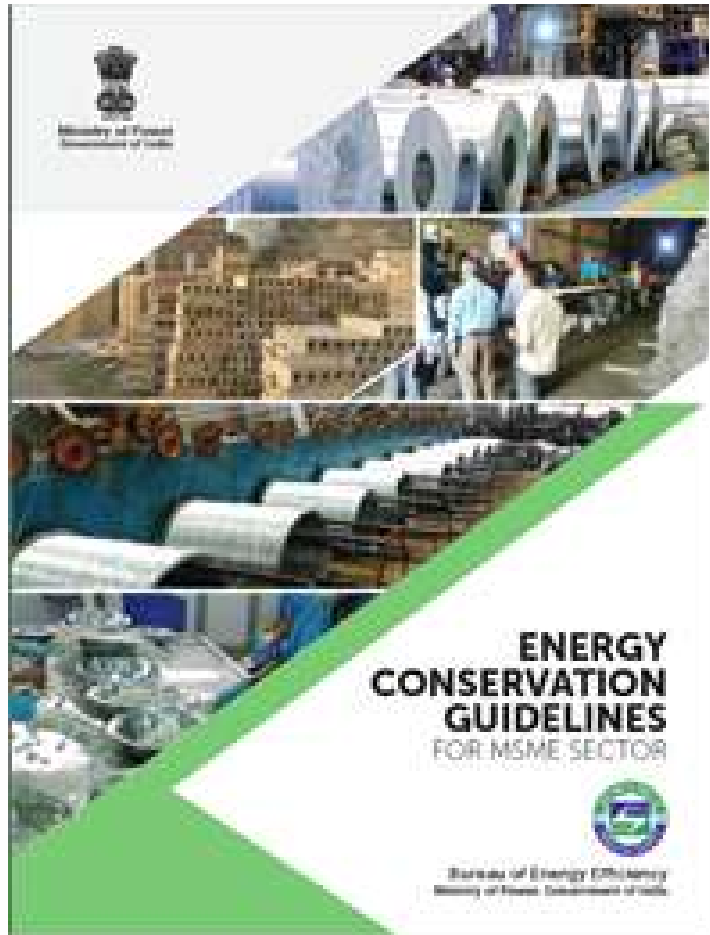
These guidelines enable the enterprise to prepare 'Energy Efficiency Manual', registering the performance of equipment, processes, steering the enterprises to unlock energy efficiency for the unit. The overall objective of the Energy Conservation (EC) Guidelines for MSMEs is:

- a) To guide the MSMEs to manage their energy consumption by standardizing energy performance values of equipment and systems; and
- b) To motivate MSMEs in adopting best operating practices in their processes; and
- c) To guide individual MSMEs to prepare its own "Energy Management Manual" for efficient operation of various energy consuming facilities.

### **Salient Features of these Guidelines**

- MSMEs can become best energy performer units in their respective sector/cluster, motivating other SMEs in the cluster/sector for enhancing its competitiveness and energy security.

- 25 energy intensive MSME sectors have been covered as per the list enclosed at Annexure -1
- To disseminate the know-how, fifty (50) multimedia animated tutorials have been developed to compliment these guidelines.
- Dissemination programs are being organized in MSME clusters for wide spreading the use of these guidelines.
- Many MSMEs are volunteering adopting these guidelines, implementation support to more than 1000 MSMEs is being envisaged in coming years along with development of pictorial guidelines in vernacular languages.



## 2. Energy Management Centers

### Objective:

The main motive behind the energy management centers is

- To empower the MSMEs to carry out their energy audits on their own without depending on expensive external consultants/energy auditing firms.
- To increase ability of industry associations for aiding and advice to MSMEs within the clusters to improve energy efficiency levels.

### Salient Features of these Energy Management Centers for MSMEs

- Twelve (12) Energy Management Centers (EMC) has been established in MSME clusters. The list of these clusters is at Annexure – 2.
- Energy Management Centers are equipped with state-of-the-art energy auditing instruments, materials, and guidebooks, which would otherwise, are not easily accessible to MSMEs.

- Multiple skill development training programs have been organized for MSME units on handling of energy audit instruments, identification of energy conservation measures, and to carryout detailed energy audit among MSME members.
- Operational management of Energy Management Centers by MSME industry associations.

### **Some Achievement of Energy Management Centers**

- No. of MSME units benefitted – 345
- No. of EE/RE projects implemented – 603
- Technologies identified – 65 (some of them replicated multiple times)
- Energy Savings achieved – 10,850 MTOE per year
- CO2 emission reduction - 62,868 Tonnes per year
- Monetary savings achieved - INR 58.58 Crores per year
- Co-financing on EE/RE investments - INR 89.76 Crores.



## Annexure -1

### List of Energy Intensive Sectors for which Energy Conservation Guidelines have been developed.

| S. No. | Cluster Location             | Product/Sector      |
|--------|------------------------------|---------------------|
| 1      | Ahmednagar                   | Chemicals & Dyes    |
| 2      | Jamnagar                     | Brass               |
| 3      | Morvi                        | Ceramics            |
| 4      | Pali                         | Textiles            |
| 5      | Surat                        | Textiles            |
| 6      | Solapur                      | Textiles            |
| 7      | Warangal                     | Rice Milling        |
| 8      | Alwar                        | Oil Milling         |
| 9      | Bangalore                    | Machine Tools       |
| 10     | Batala, Jalandhar & Ludhiana | Foundry             |
| 11     | Bhimavam                     | Ice Making          |
| 12     | Bhubaneswar                  | Brass               |
| 13     | E&W Godavari                 | Refractories        |
| 14     | Ganjam                       | Rice Milling        |
| 15     | Gujarat                      | Dairy               |
| 16     | Howrah                       | Galvanizing         |
| 17     | Jagadhri                     | Brass & Aluminum    |
| 18     | Jodhpur                      | Limestone           |
| 19     | Jorhat                       | Tea                 |
| 20     | Kochi                        | Sea Food Processing |
| 21     | Muzaffarnagar                | Paper               |
| 22     | Orissa                       | Sponge Iron         |
| 23     | Vapi                         | Chemicals & Dyes    |
| 24     | Varanasi                     | Brick               |
| 25     | Vellore                      | Rice Milling        |

## Annexure -2

### List of Energy Management Centers in MSME clusters

| S. No. | Cluster Location | Product/Sector |
|--------|------------------|----------------|
| 1      | Jamnagar         | Brass          |
| 2      | Khurja           | Ceramics       |
| 3      | Thangarh         | Ceramics       |
| 4      | Morbi            | Ceramics       |
| 5      | Gujarat          | Dairy          |
| 6      | Sikkim           | Dairy          |
| 7      | Kerala           | Dairy          |
| 8      | Belgaum          | Foundry        |
| 9      | Coimbatore       | Foundry        |
| 10     | Indore           | Foundry        |
| 11     | Jalandhar        | Hand Tools     |
| 12     | Nagaur           | Hand Tools     |

# Energy and Resource Mapping of MSMEs

As the agency entrusted with executing the National Mission on Enhanced Energy Efficiency (NMEEE), the Bureau of Energy Efficiency (BEE) has spearheaded initiatives to improve the overall energy efficiency of the Indian economy.

Three major nationwide programs to accelerate the adoption of energy efficient (EE) technologies and practices in the Indian MSME sector were initiated during the 11th Plan (2007–12) and 12th Plan (2012–2017) periods: (1) the BEE SME Program, (2) the GEF-UNIDO-BEE program titled 'Promoting energy efficiency and renewable energy in selected MSME clusters in India', and (3) the GEF-World Bank-BEE program titled 'Financing energy efficiency at MSMEs'. These programs have focused on energy intensive MSME sub-sectors and their representative clusters.

Over the last decade, BEeline has registered periodically about these program developments, as well as other major initiatives in the MSME sector such as the TERI–SDC Partnership (TSP) program and schemes of Ministry of Micro, Small and Medium Enterprises, have enabled MSMEs in the targeted clusters to implement EE technologies and practices, and thereby benefit from reduced energy consumption and costs, increased productivity and profits, and reduced CO<sub>2</sub> emissions.

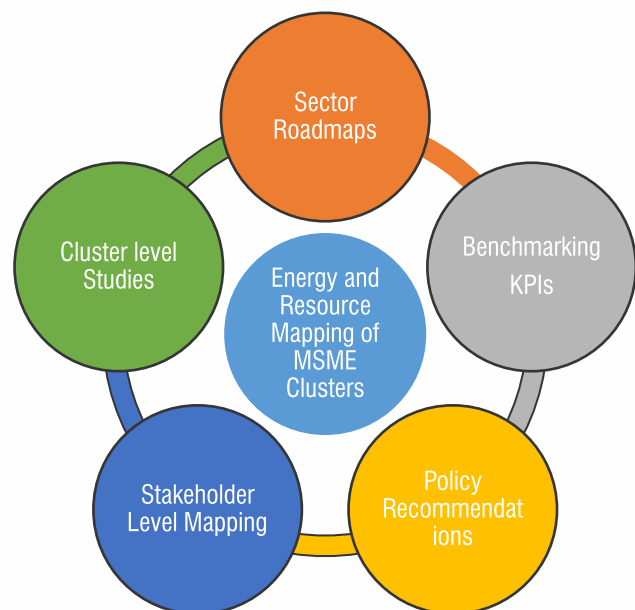
Yet, given the sheer size and spread of the Indian MSME sector, there is humongous opportunities for conserving energy in MSMEs, cross sectoral and cluster learnings and greater level of global developments in each sector. Similarly, in order to formalise the sector with best knowledge capacity and sustainable transformation, there are compounded barriers in terms of sizes, technologies, operational and M&V practices.

Taking forward strategic interventions in the MSME sector, BEE has now launched another program titled 'Energy and resource mapping of MSME clusters' with the aim of preparing a set of national-level roadmaps for selected energy intensive sub-sectors. Each sectoral roadmap will chalk out a path to bring about energy and resource-efficient development with the broader objective of bringing them on par

with global standards. The program entails detailed study on existing scenarios at sub-sector and cluster levels; gather and analyze energy-related data; identify possible EE solutions; and formulate appropriate technological interventions that can bring about significant energy savings and other benefits for the concerned industries and other stakeholders.

## The Programme

Under the program, nine energy intensive MSME sectors are selected (brick, chemicals, dairy, forging, foundry, glass & refractory, paper, pharmaceuticals, and steel rerolling mills) for conducting a comprehensive energy and resource mapping exercise. The program involves activities in three broad and overlapping domains, as summarized below.



### Sub-sector and cluster-level studies

Studies will be undertaken on each sub-sector, assisted by structured questionnaires and interactions with important stakeholders such as entrepreneurs and industry associations, R&D institutions, government agencies, and so on. The studies and stakeholder interactions will assist in developing a clear profile of each subsector including the important clusters, the diverse technologies and operating practices that are being used by MSMEs in different clusters, and market related information for their products as well as for raw materials and services. The exercise will also help identify the various entities that have linkages with the MSMEs at cluster/sector levels and outline the nature of support they provide to the MSMEs (materials, machinery/equipment, services, etc.). These entities would include local service providers (LSPs); equipment/machinery suppliers; technical/academic institutes;

banks and NBFCs; technical consultancy organizations; government departments such as MSME Development Institute (MSME-DI), District Industries Centre (DIC), state pollution control board, and so on.

Five clusters per sub-sector have been identified for detailed analysis. Detailed energy audits (DEAs) will be conducted on ten units in each of these five clusters. Information and insights will thereby be gathered on the following key aspects:

- Current energy consumption scenario at the subsector and cluster levels, covering the various kinds of fuels used and the quantities consumed.
- Various raw materials used and consumption levels.
- The existing manufacturing processes, including the machinery and equipment used, and the potential for energy efficiency improvements.
- Possible EE technological options and best operating practices (BOPs)
- Readiness of the MSMEs and other cluster-level stakeholders to adopt the identified EE options.
- Market-related information on both supply and demand sides, including prospects.
- Relevant policy-level aspects.

## **Benchmarking**

Based on the knowledge from the sub-sector/cluster level studies, key performance indicators (KPIs) will be determined for each energy intensive process and/or technology: for example, specific energy consumption (SEC) standards will be determined for each energy consuming technology/stage of the production process such as batch preparation, preheating, melting, reheating, drying, and so on. By comparing these KPIs with the best KPI levels achieved by other industries within and outside India, benchmark standards will be set for energy efficiency for each process/technology. This exercise will also help assess and quantify the potential for bringing about energy efficiency improvements in each technology/process stage.

## **Roadmap**

Based on the findings from the studies and the benchmarking exercise, a detailed road

map will be prepared for an energy efficiency intervention in each sub-sector, in close consultation with the concerned industry stakeholders. The road map will set out an implementation plan covering technological, financing and capacity building aspects, and include policy recommendations (i.e., specific policy-level measures that could create an enabling policy and institutional level environment for the uptake of EE technologies). The road map will include information on the following key elements.

- Production
- Energy consumption pattern
- Existing technologies
- Energy saving potential.
- EE technologies that can be adopted
- Financial and other resources that might be required by MSMEs to adopt the EE technologies.
- Awareness and capacity building measures that might be required at unit/cluster levels
- Existing institutional environment for supporting energy efficiency improvements
- Policy recommendations.

Several clusters have already been identified for coverage under the program in each of the nine industrial sub-sectors (Refer: Energy Mapping Map). This exercise is primarily focused on estimating the energy consumption, production, technology aspects in each sector and estimate the current scenario of the MSME sector as whole. Findings of this study will further help BEE to formulate policies and prepare implementation plan for pacing up the energy efficiency initiatives in the MSME clusters across India.

## HIGHLIGHTS OF THE QUARTER (October 2020 – December 2020)

### **Amendment to Energy Conservation Rules**

As required under the Energy Conservation Rules, 2012 (PAT Rules) to notify the price of one metric tonne of oil equivalent. Bureau of Energy Efficiency vide notification G.S.R. 779 (E) dated 14<sup>th</sup> December 2020 has notified that the value of per metric tonne of oil equivalent of energy consumed as eighteen thousand four hundred and two rupees only for the year 2018-19.

### **Webinars for Capacity Building of Designated Consumers on Trading of ESCerts under PAT scheme**

Perform Achieve and Trade (PAT) is the flagship program under National Mission for Enhance Energy Efficiency (NMEEE). The mission is implemented by Bureau of Energy Efficiency (BEE) under Ministry of Power. PAT is a market-based mechanism in which identified energy intensive industries called Designated Consumers (DCs) are given targets for reducing their Specific Energy Consumption (SEC). Industries which over-achieve the given SEC target get incentives in the form of tradable instruments called Energy Saving Certificates (ESCerts). The ESCerts can be traded in two power exchanges namely IEX and PXIL.

BEE has launched newly developed PATNet and CRM platform for online submission of Performance Assessment Documents (PAD) under PAT Scheme and ESCerts trading on 17th March, 2020. Regional webinar series was conducted for the DCs of PAT Cycle II to PAT Cycle VI where they were trained on the new PATNet platform, Eligible Entity registration process and process for trading of ESCerts on both the Power Exchanges. Officials from BEE, Power System Operation Corporation (POSOCO) and Power Exchanges had delivered presentations to the DCs. BEE had conducted 6 webinars wherein about 500 DCs were trained.

## HIGHLIGHTS OF THE QUARTER (October 2020 – December 2020)

### ECBC Webinars and Physical Training Programs Conducted

201 ECBC Webinars and 9 Physical Training programs were conducted during October to December 2020. Out of these, 103 Webinars and 4 Physical Training programs were conducted in various States/UTs in the month of December. 79 Webinars and 5 Physical Training programs were conducted in the month of November and 19 Webinars were conducted in October 2020.



### Potential Assessment Study for sectors under PAT scheme

PAT cycle –II which included 621 Designated Consumers (DCs) from 11 energy intensive sectors was completed on 31st March 2019. Out of the 621 DCs in cycle -II, 448 DCs which had been notified SEC reduction targets in PAT cycle –II were also under PAT cycle –I. Further, in order to achieve the SEC targets notified to these DCs in PAT cycle –I and PAT cycle –II, these DCs had implemented various possible energy efficiency measures and technologies available and affordable with them and most of the low hanging opportunities have dried up. However, it is still expected that these DCs possess further potential within them to improve energy efficiency.

To assess such opportunities, Bureau of Energy Efficiency has initiated potential assessment studies in sectors namely Cement, Textile, Pulp & Paper, Chlor Alkali and Aluminium that have undergone two consecutive cycles under PAT scheme. The basic objective behind carrying out this study is reaching measurable benchmarks in respective sectors in order to assess further potential of energy saving and consequent fixation of energy saving targets in subsequent PAT cycles.

## HIGHLIGHTS OF THE QUARTER (October 2020 – December 2020)

### DG BEE as a speaker on The Peer Dialogue during the inauguration of BRICS

DG, BEE participated as a speaker on The Peer Dialogue during the inauguration of BRICS #TogetherBrighter International Energy Saving Festival, 10 October 2020 Organized by the Ministry of Energy of the Russian Federation, Government of Mordovia and BRICS Youth Energy Agency. In the virtual discussion, DG, BEE highlighted the energy efficiency achievements of India during the past year. The event was followed by a panel discussion and Q&A Session.

The #TogetherBrighter is a kind and challenging message for all, businesses and people, to adopt energy saving as a lifestyle. In the online opening ceremony, the results of the campaign were declared and a digital tour of the place where the Festival was supposed to take place, namely the capital of the Republic of Mordovia - City of Saransk was displayed.



### 18<sup>th</sup> meeting of SAMEEEKSHA

The 18<sup>th</sup> meeting of SAMEEEKSHA platform was virtually organized on 12<sup>th</sup> October. Considering the impact of COVID-19 on MSMEs, the discussions in the meeting was primarily focused on the impact and proposed remedial measures for MSMEs. The meeting oversaw the participation of Industry associations, MSMEs, Development Agencies having similar objectives, and State Designated Agencies.



## HIGHLIGHTS OF THE QUARTER (October 2020 – December 2020)



The SAMEEEKSHA (Small and Medium Enterprises: Energy Efficiency Knowledge Sharing) platform was set up jointly by Bureau of Energy Efficiency (BEE), Swiss Agency for Development and Cooperation (SDC), Ministry of MSME (MoMSME) and TERI during 2010. Now, Shakti Sustainable Energy Foundation is supporting this initiative. The platform synergizes the efforts of various agencies working towards the promotion of clean, energy efficient technologies and practices in the Indian MSME sector.

### Trainings on Eco-Niwas Samhita and Star Rating for Energy Efficient Homes

33 training programmes in October, 32 in November and 67 online training and awareness workshops were conducted in December on Eco-Niwas Samhita and Star Rating for Energy Efficient Homes for building professionals, developers, government officials and architecture colleges in Delhi, Uttar Pradesh, Punjab, Maharashtra and Karnataka in association with GIZ and respective SDAs & ENS Cells.

## HIGHLIGHTS OF THE QUARTER (October 2020 – December 2020)

### Webinar on “Energy Efficiency in the time of COVID-19

Shri Abhay Bakre, DG BEE, participated as a panelist in a webinar on “Energy Efficiency in the time of COVID-19: Supporting Economic Recovery in Emerging Asia” organized by International Energy Agency on 13<sup>th</sup> October. In the virtual discussion, DG, BEE highlighted the energy efficiency achievements of India and discussed the potential of energy efficiency stimulus measures which can create transformational impacts in the energy sector.



### Shri Sanjiv Nandan Sahai, Secretary, MoP, led Indian delegation during the 5th BRICS Energy Ministerial Meeting

Shri Sanjiv Nandan Sahai, IAS Secretary, Ministry of Power, GoI led Indian delegation during the 5<sup>th</sup> BRICS Energy Ministerial Meeting, Chaired by H.E. Alexander Novak, Russian Energy Minister.

Shri Sahai spoke about the impact of COVID-19 on physical and financial status of energy sector. He opined that current situation offers opportunity to enable energy transition in a sustainable way.

He mentioned about India's special package of ₹ 20 lakh crores (USD 260 billion) - equivalent to 10% of GDP, to stimulate recovery from the impact of COVID-19. The

## HIGHLIGHTS OF THE QUARTER (October 2020 – December 2020)

package included ₹ 90,000 crore (USD 11.7 billion) infusion of liquidity in power distribution companies to meet the challenges.

He highlighted India's recent achievements in Power sector markets, Industrial energy efficiency and expansion of Renewable energy capacity. He stressed the need to further strengthening the BRICS energy cooperation under India's presidency in 2021.



### Workshop on 'Developing Energy Efficient Building Materials Directory for India'

Bureau of Energy Efficiency conducted a comprehensive study on the status of Energy Efficient Building Materials in India in association with Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) and contracted The Energy and Resources Institute (TERI) for this study.

The key objective of this program was to provide the consumer an informed choice about the energy-saving and thereby cost-saving potential of the relevant marketed product. The program goals to display a directory for energy-efficient building materials.



# HIGHLIGHTS OF THE QUARTER (October 2020 – December 2020)

## Building Energy Efficiency Project (BEEP) Student Camp

BEEP Student Camp was organised by Bureau of Energy Efficiency from 12 to 27 December. It was a unique opportunity for students to understand fundamentals of building physics and apply it in design exercises using integrated design process. The participants learned through group-work and sessions conducted by leading practitioners and educators.

## Webinar on Actions Towards a Billion-dollar ESCO Market

Mr. Arijit Sengupta, Director, BEE presented the keynote address at the webinar-Actions towards a billion-dollar ESCO market held on November 5, 2020. He provided insights on ESCO Market (National/International) and shared that ESCOs are the main vehicle to harness the huge EE potential in India. He discussed about various global best practices on ESCO market and shared the key lessons which can be used for promoting ESCO market in India.

## HIGHLIGHTS OF THE QUARTER (October 2020 – December 2020)

### Observance of Rashtriya Ekta Diwas

The officials of Bureau of Energy Efficiency took an e-pledge to commemorate the birth anniversary of Sardar Vallabhbhai Patel in observance of Rashtriya Ekta Diwas.

### Stakeholder Consultation on “National Policy Road Map for large-scale adoption of Smart Home Technologies”

Under the Smart Home Program Technology Assessment Study and Pilot Design project, a stakeholder consultation on policy roadmap for large-scale adoption of Smart Home Technologies was conducted with GIZ and Deloitte. The online meeting was attended by a variety of representatives from resident welfare associations, utility providers, real estate developers, manufacturers, designer & integrator and data & service providers' perspective. Mr. Saurabh Diddi, Director, BEE, gave the inaugural address.

### Roundtable Webinar on "Catalogue of Replicable Designs for Energy Efficient Residential Buildings”

The third webinar in the series of roundtable webinars was conducted in association with GIZ, AB Lall Architects, LEAD, KPMG and PHI, to take users through simulation results from different residential building design typologies to understand their environmental performance, energy efficiency and economics. Energy performance results were shared across different climatic zones and trends observed in different orientations and levels of energy performance, along with comparisons across different typologies.

### Signing of MoU between UPNEDA and LDA

A Memorandum of Understanding was signed between UPNEDA and Lucknow Development Authority (LDA) on 2<sup>nd</sup> December, 2020, for cooperation and support in providing star rating and monitoring of energy efficient buildings, construction of ECBC compliant buildings and capacity building of LDA officials.

### JAC Meeting of Indo-Swiss BEEP

Joint Apex Committee (JAC) Meeting of the Indo-Swiss BEEP was held on 18<sup>th</sup> December, 2020, via MS Teams. Senior Advisor, MoP, Shri Raj Pal and Head, Swiss Cooperation Office India, Dr. Jonathan Demenge, co-chaired the meeting.

## HIGHLIGHTS OF THE QUARTER (October 2020 – December 2020)

### Super-efficient Equipment Appliance Deployment (SEAD) Initiative Workshop

The IEA along with BEE hosted a Super-efficient Equipment Appliance Deployment (SEAD) Initiative Workshop for India on the 4 November at 15:00 –16:30 (IST). The virtual meeting provided an opportunity to engage in a discussion on current issues for product energy efficiency in India and opportunities for increasing ambition.



### VEF Virtual Series: Products Track

VEF Virtual Series: Products Track, October Edition was held on October 21, 2020. The topic for discussion was “Accelerating a market transformation towards efficient products addressing climate change with economic opportunities.”



The sessions in the Products Track were held to discuss pathways for energy efficiency action, with a view to increasing the market share and adoption of energy-efficient products and appliances in the building sector.

### Conclave on Regulatory and Policy in India e-mobility

Shri Sameer Pandita, Director, represented the Bureau of Energy Efficiency (BEE) at a conclave on Regulatory and Policy in India e-Mobility (Electric Vehicle & charging infrastructure). Shri Pandita highlighted that BEE was given the responsibility to set standards and guidelines for setting up public charging infrastructure. The guidelines were revised over the years as new technology and sectoral requirements came to light. Around 14 states have released their EV policy and some are in pipeline. BEE is planning to develop a countrywide awareness campaign for masses on benefits of e-mobility to encourage its uptake in the country.



# HIGHLIGHTS OF THE QUARTER (October 2020 – December 2020)

## 3<sup>rd</sup> Global RE-INVEST Expo

Bureau of Energy Efficiency participated in the 3<sup>rd</sup> Global RE-INVEST Renewable Energy Investors' Meet & Expo, organized by Ministry of New and Renewable Energy (MNRE), Government of India. The 3<sup>rd</sup> Global RE-INVEST, was inaugurated by Hon'ble Prime Minister Shri Narendra Modi on 26<sup>th</sup> November 2020. The event was held on a virtual platform from 26<sup>th</sup> to 28<sup>th</sup> November 2020. The theme for the REINVEST 2020 was - 'Innovations for Sustainable Energy Transition' which aimed to accelerate the worldwide effort to scale up the development and deployment of renewable energy and connect the global investment community with Indian energy stakeholders.



| Savings of S&L program in 2018-19  |                   | Overall Achievements |  |
|------------------------------------|-------------------|----------------------|--|
| Electricity Saved                  | 55.6 Billion Unit | S.No                 | Key Indicators                                 |
| CO <sub>2</sub> Emission Reduction | 45.6 Million tons | 1                    | Consumers Certified/Registered Products        |
| Cost Saving                        | Rs. 27,846 Crores | 2                    | Annual Certified/Registered Products           |
|                                    |                   | 3                    | Individual Certified/Registered Product Models |
|                                    |                   | 4                    | Product Categories Eligible for Star Label     |
|                                    |                   | 5                    | Manufacturers Registered                       |
|                                    |                   | 6                    | Cumulative Energy Saving                       |
|                                    |                   | 2010                 | 2019   |
|                                    |                   | 177 Million          | 2077 Million                                   |
|                                    |                   | 24 Million           | 104 Million                                    |
|                                    |                   | 9562                 | 14799  |
|                                    |                   | 10                   | 29   |
|                                    |                   | 476                  | 1503   |
|                                    |                   | 1440                 | 301740   |

| Type of Labels | Typical Cycle for Developing Energy Performance Standards for Each Appliance |
|----------------|--|
|                |  |

## HIGHLIGHTS OF THE QUARTER (October 2020 – December 2020)

### Capacity Building of Circle Level Officials of DISCOMs

Under BEE's "Capacity Building of DISCOMs" program on Demand Side Management and Energy Efficiency (DSM & EE), a 3-days residential capacity building of circle level officials was organized for 31 officials of West Bengal State Electricity Distribution Company Ltd (WBSEDCL)-South by BEE in association with SDA-West Bengal during 10<sup>th</sup>–12<sup>th</sup> November 2020 at Midnapore, West Bengal. The programme was inaugurated by Mr Biswadeb Pandit, SE (E), WBSEDCL-South Zone.



## HIGHLIGHTS OF THE QUARTER (October 2020 – December 2020)

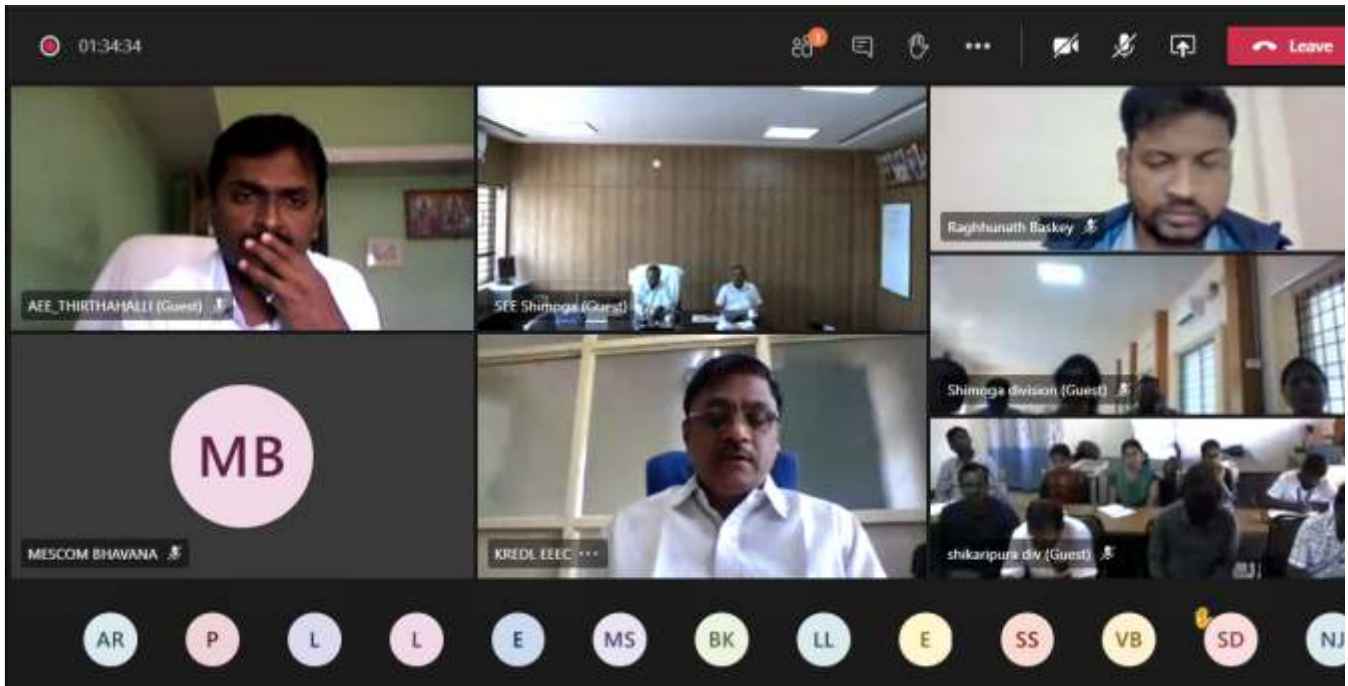
The objective of the training program was to make the officials of DISCOM understand the basic methodology and processes related to DSM Programs so that they can contribute to the implementation of DSM projects in future.



Another training program was organized for 30 circle level officials of West Bengal State Electricity Distribution Company Limited (WBSEDCL) in association with SDA – West Bengal during 1<sup>st</sup> - 3<sup>rd</sup> December 2020 at Burdwan, West Bengal. The program was inaugurated by Zonal Manager, WBSEDCL.

## HIGHLIGHTS OF THE QUARTER (October 2020 – December 2020)

The training programme for 39 circle level officials of Mangalore Electricity Supply Company Limited (MESCOM) was organized during 14<sup>th</sup> - 16<sup>th</sup> December 2020 through Video Conferencing. The program was inaugurated by Managing Director, MESCOM.



Another training program was organized for 33 circle level officials of Madhyanchal Vidyut Vitran Nigam Limited (MVVNL) in association with Uttar Pradesh New and Renewable Energy Development Agency on 14<sup>th</sup> – 16<sup>th</sup> December 2020 at Lucknow, Uttar Pradesh. The programme was inaugurated by Director Commercial, MVVNL.



## HIGHLIGHTS OF THE QUARTER (October 2020 – December 2020)



Another training program was organized for 26 officials of Brihanmumbai Electricity Supply & Transport Undertaking in association with Maharashtra Energy Development Agency (MEDA) on 10<sup>th</sup>–12<sup>th</sup> December 2020 in Mumbai, Maharashtra.

The last training program under the series was organized for 30 officials of West Bengal State Electricity Distribution Company Limited - South (WBSEDCL-South) in association with SDA–West Bengal during 22<sup>nd</sup> - 24<sup>th</sup> December 2020 at Berhampur, West Bengal. The program was inaugurated by Zonal Manager, WBSEDCL.



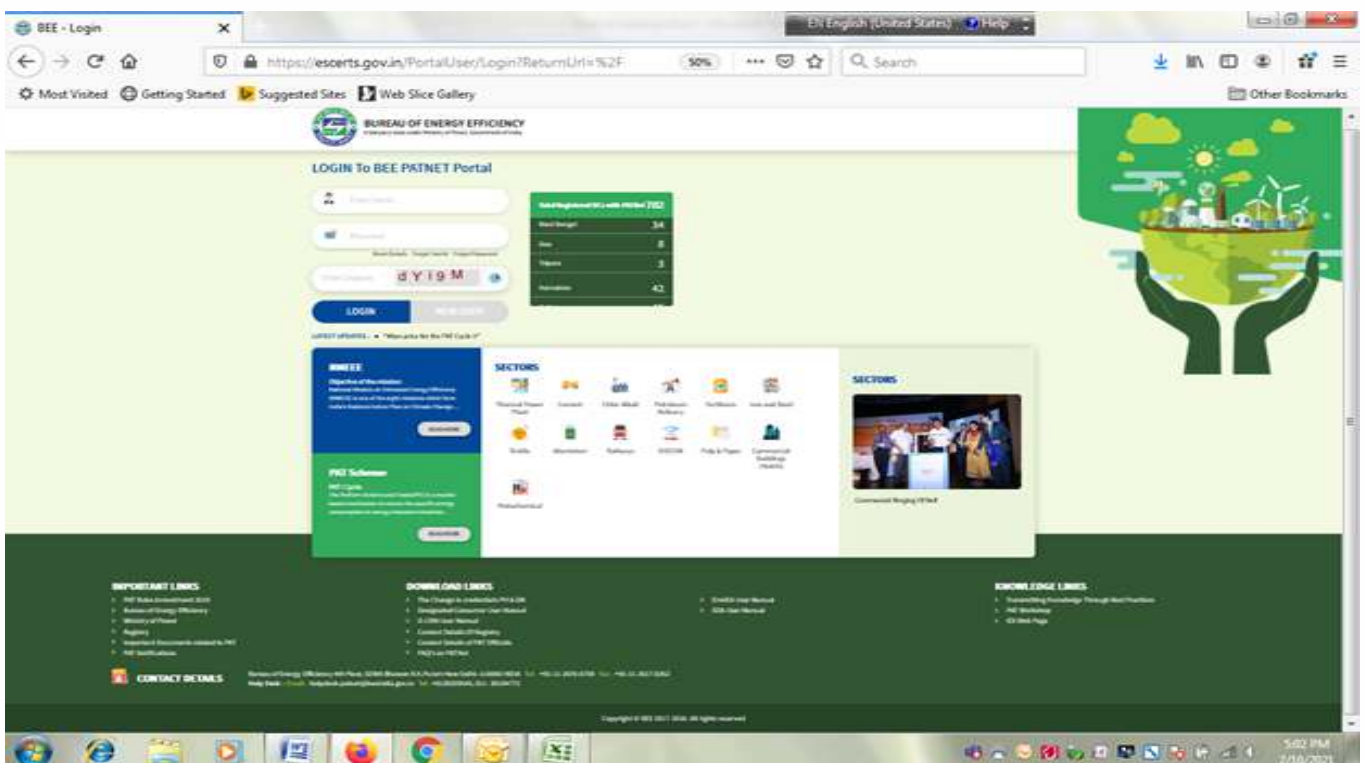
# HIGHLIGHTS OF THE QUARTER (October 2020 – December 2020)

## Capacity building of DCs on PATNet and trading of ESCerts

Perform, Achieve and Trade programme is a flagship programme under National Mission for Enhanced Energy Efficiency (NMEEE). This is a market based regulatory mechanism for introducing energy efficiency in large industries and institutions. Under the PAT Scheme, currently there are 6 PAT Cycles in which more than 1000 Designated Consumers (DCs) are participating and 13 sectors are covered. At the end of each PAT Cycle, based on the performance of the notified DCs ESCerts are either issued / entitled to be purchase by the MoP. BEE has developed a PATNet platform in which DCs, EmAEAs, and SDAs participate on regular basis for uploading their forms related to this PAT scheme. In March 2020 BEE launched new platform for PATNet in which till date 782 DCs are registered from various sectors.

At the end of each Cycle, MoP issues ESCerts to DCs or directs DCs to purchase ESCerts based upon their performance in respective cycle. Subsequently, trading of the ESCerts takes place which ultimately incentivize the DCs on the investment made

PATNet platform (<https://escerts.gov.in/PortalUser/Login?ReturnUrl=%2F>)



## HIGHLIGHTS OF THE QUARTER (October 2020 – December 2020)

to reduce their SEC for achieving their targets. For trading of ESCerts the regulations and procedure have been issued by CERC, being a regulator for trading of ESCerts. BEE is Administrator and POSOCO is Registry for trading of ESCerts. IEX and PXIL have been participating as two power exchanges for this trading of ESCerts.

In order to educate the DCs on trading platform in which their registration for becoming eligible entity and rules for trading sessions are concerned, BEE has been organizing capacity building workshops on VC with various SDAs. Till date BEE has conducted 7 such webinars. In these 7 webinars, 11 states have been covered that includes approx. 500 DCs from PAT Cycle II to PAT Cycle VI.

In these webinars, speakers from BEE, SDA, POSOCO, IEX and PXIL deliberate on their roles in trading mechanism and guide DCs on the activities they need to perform with respective stakeholders. BEE as Administrator of the Scheme trains DCs on the overall ESCerts Trading mechanism, PATNet portal and CRM platform. POSOCO as Registry trains DCs on the overall procedure to register themselves as Eligible Entity and with regard to Fee Order. Power Exchanges (IEX and PXIL) deliberates on their respective Business Rules to register and trade on their respective platforms.

BEE also keeps one session by any financial institution to deliberate upon various financing mechanisms available to industries for making investment in energy efficiency measures. IREDA has been actively participating in these webinars and inform all DCs regarding their loan portfolios.

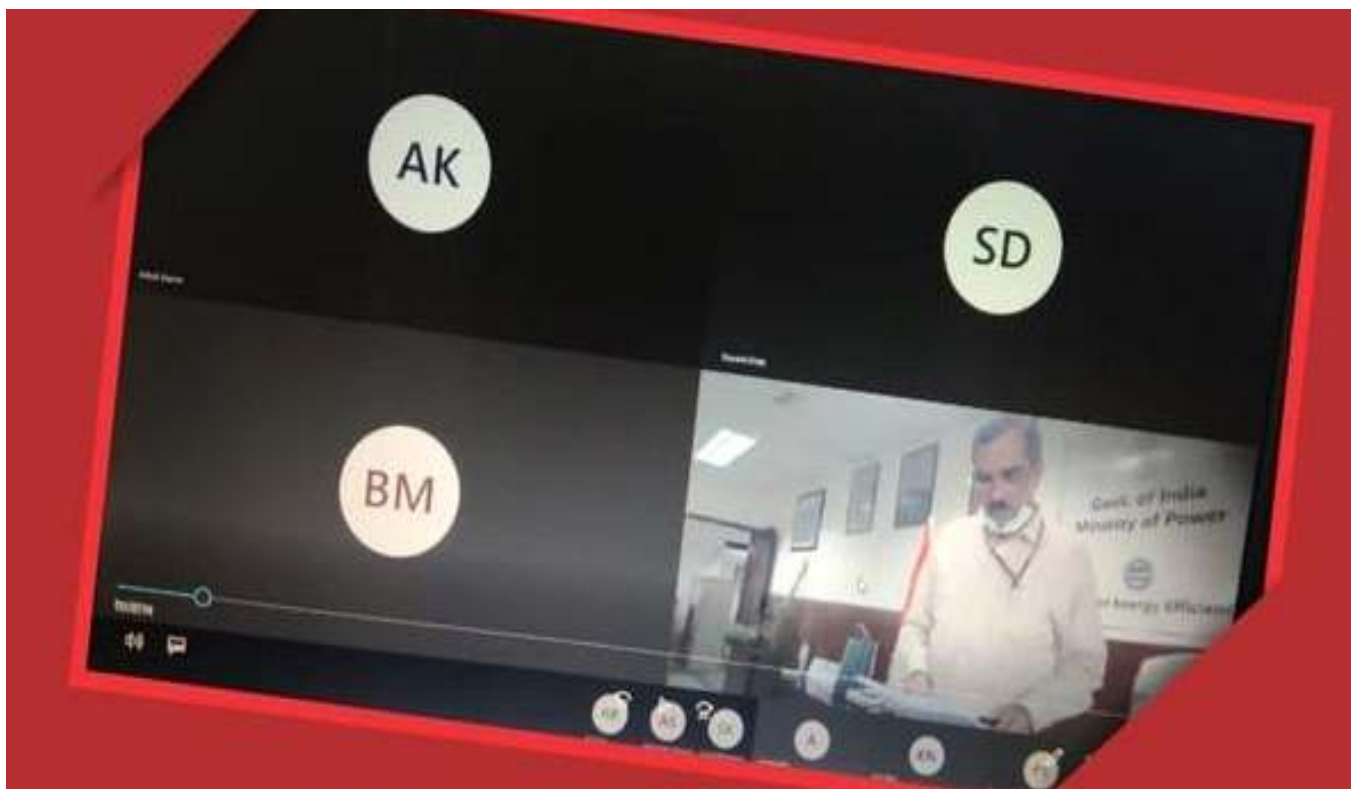
BEE has been consistently working on capacity building of all the DCs under PAT programme towards making them aware of PATNet and trading of ESCerts. And, the target is to cover all concerned states by end of March 2021 with the support of DCs and SDAs.



## HIGHLIGHTS OF THE QUARTER (October 2020 – December 2020)

### Vigilance Awareness Week

Bureau of Energy Efficiency observed Vigilance Awareness Week from 27<sup>th</sup> October to 02<sup>nd</sup> November 2020, on the theme Vigilant India Prosperous India. Adhering to the COVID-19 guidelines, awareness activities was held through online medium. The officials of BEE took the Integrity pledge under the 'Vigilance Awareness Week'. The e-pledge was administered by the Director General, BEE, Shri Abhay Bakre.



## HIGHLIGHTS OF THE QUARTER (October 2020 – December 2020)

### Virtual Roundtable on "Sustainable Air Conditioning with District Cooling System"

Arijit Sengupta, Director, BEE delivered the Special Address during the ISGF & Economic Times Virtual Roundtable on "Sustainable Air Conditioning with District Cooling System" presented by Carrier India & Associate Partner Tabreed on December 17, 2020.



# घर और ऑफिस हो ENERGY EFFICIENT

स्मार्ट बनें, बिजली बचाएं

ऊर्जा दक्ष निवास  
ENERGY EFFICIENT HOME

आवासीय भवनों के लिए इको  
निवास संहिता और व्यवसायिक  
भवनों के लिए ऊर्जा संरक्षण भवन  
संहिता का पालन करें।

## बिजली बचाएंगे तो रोशन होगा इंडिया



ऊर्जा दक्षता ब्यूरो (बी ई ई)

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