







# ANNUAL REPORT

— 2020-21 —

**BUREAU OF ENERGY EFFICIENCY**





# C O N T E N T S

| Index                            |   | Page No.   |
|----------------------------------|---|------------|
| <b>General</b>                   |   | <b>05</b>  |
| 1.1                              | The Mission   | 06         |
| 1.2                              | The Objectives of BEE and its Role  | 06         |
| 1.3                              | Governing Council Composition   | 08         |
| 1.4                              | Report of The Director General  | 10         |
| 1.5                              | Schemes of Bureau of Energy Efficiency                                      | 12         |
| 1.6                              | National Energy Conservation Award and Painting Competition                 | 54         |
| <b>International Cooperation</b> |   | <b>61</b>  |
| 2.1                              | International Bilateral Programmes  | 62         |
| 2.2                              | International Multilateral Programmes                                       | 71         |
| <b>Accounts of Bureau</b>        |   | <b>79</b>  |
| 3.1                              | Capital Structure   | 80         |
| 3.2                              | Summary of the Financial Result   | 80         |
| 3.3                              | Measures taken for Improving or Strengthening the Functioning of the Bureau | 80         |
| 3.4                              | Annual Statement of Accounts  | 80         |
| <b>Administration</b>            |   | <b>117</b> |
| 4.1                              | Grievance Redressal   | 118        |
| 4.2                              | Right to Information Act  | 118        |
| 4.3                              | Welfare of SC/ST/OBC  | 118        |
| 4.4                              | Welfare of Minorities   | 118        |
| 4.5                              | Implementation of Official Language   | 119        |
| 4.6                              | Vigilance   | 119        |
| 4.7                              | Welfare of Persons with Disabilities (PwDs)                                 | 119        |





# 1. General

- 1.1 The Mission
- 1.2 The Objectives of BEE and its Role
- 1.3 Governing Council Composition
- 1.4 Report of the Director General
- 1.5 Schemes of Bureau of Energy Efficiency
- 1.6 National Energy Conservation Award and Painting Competition



## 1.1 The Mission

The mission of the Bureau of Energy Efficiency is to develop policy and strategies with a thrust on self-regulation and market principles, within the overall framework of the Energy Conservation Act, 2001 (EC Act) with the primary objective of reducing energy intensity of the Indian economy. This will be achieved with active participation of all stake holders, resulting in accelerated and sustained adoption of energy efficiency in all sectors of the economy.

## 1.2 The Objectives of BEE and its Role

### Objectives of BEE

- To develop policies and programmes on efficient use of energy and its conservation with the involvement of stakeholders.
- To plan, manage and implement energy conservation programmes as envisaged in the EC Act.
- To assume leadership and provide policy framework and direction to national energy efficiency and conservation efforts and programmes.
- To demonstrate energy efficiency delivery mechanisms, as envisaged in the EC Act, through Public-Private Partnership (PPP).
- To establish systems and procedures to measure, monitor and verify energy efficiency results in individual sectors as well as at the national level.
- To leverage multi-lateral, bi-lateral and private sector support in implementation of programmes and projects on efficient use of energy and its conservation.
- To promote awareness of energy savings and energy conservation.

### Role of BEE

BEE coordinates with designated agencies, designated consumers and other organizations working in the field of energy conservation/efficiency to recognize and utilize the existing resources and infrastructure in performing the functions assigned to the Bureau under the Energy Conservation Act.

The Act provides regulatory mandate for: standards & labeling of equipment and appliances; energy conservation building code for commercial buildings; and energy consumption norms for energy intensive industries.

The EC Act was amended in 2010 to incorporate few additional provisions required to better equip BEE to manage ever evolving sphere of energy efficiency in the country.



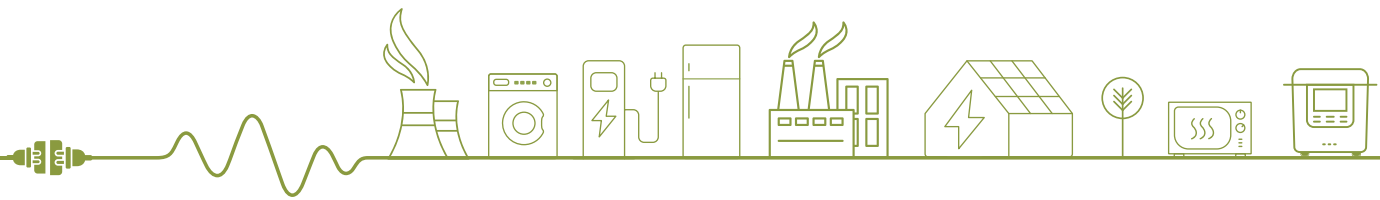
The main amendments made to the original Act are given below:

- The Central Government may issue the energy savings certificate to the designated consumer whose energy consumption is less than the prescribed norms and standards in accordance with the procedure as may be prescribed.
- The designated consumer whose energy consumption is more than the prescribed norms and standards shall be entitled to purchase the energy savings certificate to comply with the prescribed norms and standards
- The Central Government may, in consultation with the Bureau, prescribe the value of per metric ton of oil equivalent of energy consumed
- Commercial buildings which are having a connected load of 100 kW or contract demand of 120 kVA and above brought under the purview under the EC Act.

### **Promotional Role**

**The major Promotional Role of BEE includes:**

- Create awareness and disseminate information on energy efficiency and conservation.
- Arrange and organize training of personnel and specialists in the techniques for efficient use of energy and its conservation.
- Strengthen consultancy services in the field of Energy Efficiency.
- Promote research and development.
- Develop testing and certification procedures and promote testing facilities.
- Formulate and facilitate implementation of pilot projects and demonstration projects.
- Promote use of energy efficient processes, equipment, devices and systems.
- Take steps to encourage preferential treatment for use of energy efficient equipment or appliances.
- Promote innovative financing of energy efficiency projects.
- Give financial assistance to institutions for promoting efficient use of energy and its conservation.
- Prepare educational curriculum on efficient use of energy and its conservation.
- Implement international co-operation programmes relating to efficient use of energy and its conservation.



### 1.3 Governing Council Composition

The general superintendence, direction and management of the affairs of the Bureau vest in the Governing Council which consist of not less than twenty, but not exceeding twenty six, members to be appointed by the Central Government. The Governing Council consists of the following members:

- (a) The Minister in charge of the Ministry or Department of the Central Government dealing with the Power – ex officio Chairperson
- (b) The Secretary to the Government of India, in charge of the Ministry or Department of the Central Government dealing with the Power – ex officio member
- (c) The Secretary to the Government of India, in charge of the Ministry or Department of the Central Government dealing with the Petroleum and Natural Gas – ex officio member
- (d) The Secretary to the Government of India, in charge of the Ministry or Department of the Central Government dealing with the Coal – ex officio member
- (e) The Secretary to the Government of India, in charge of the Ministry or Department of the Central Government dealing with the Non-conventional Energy Sources – ex officio member
- (f) The Secretary to the Government of India, in charge of the Ministry or Department of the Central Government dealing with the Atomic Energy – ex officio member
- (g) The Secretary to the Government of India, in charge of the Ministry or Department of the Central Government dealing with the Consumer Affairs – ex officio member
- (h) Chairman of the Central Electricity Authority – ex officio member
- (I) Director-General of the Central Power Research Institute – ex officio member
- (j) Executive Director of the Petroleum Conservation Research Association – ex officio member
- (k) Chairman-cum-Managing Director of the Central Mine Planning and Designing Institute Limited – ex officio member
- (l) Director-General of the Bureau of Indian Standards – ex officio member
- (m) Director-General of the National Test House, Department of Supply, Ministry of Commerce and Industry – ex officio member



- (n) Managing Director of the Indian Renewable Energy Development Agency Limited  
– ex officio member
- (o) One member each from the five power regions representing the States of the region  
to be appointed by Central Government – Member
- (p) Such number of persons, not exceeding four as may be prescribed, to be appointed  
by the Central Government as members from amongst persons who are in the  
opinion of the Central Government capable or representing industry, equipment and  
appliance manufacturers, architects and consumers – Members
- (q) Such number of persons, not exceeding two as may be nominated by the Governing  
Council as members – Members
- (r) Director-General of the Bureau of Energy Efficiency – ex officio Member-Secretary

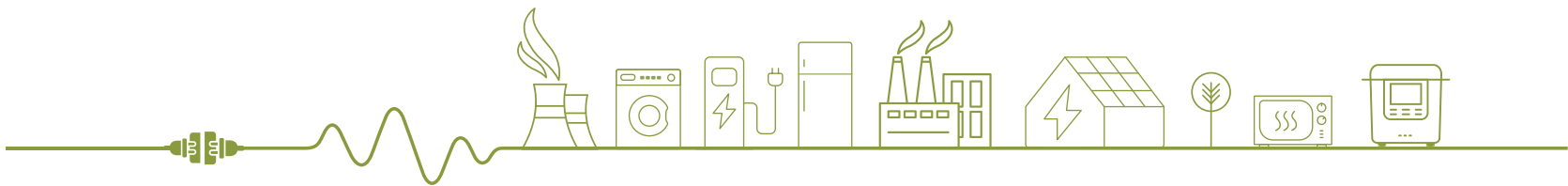


## 1.4 Report of the Director General

- India is one of the fastest growing economies among countries in the world and has witnessed rapid increase in the energy consumption. The rise in energy consumption is mainly attributed to rapid economic growth, access to affordable energy, increased industrialization, building infrastructure and other end uses of energy.
- In recent years, India has emerged as the global leader in addressing global climate change and promotion of sustainable development.
- Energy efficiency across all sectors of the economy is essential to enable decoupling of energy supply growth from economic growth, while ensuring that energy service demands are met.
- Perform Achieve and Trade (PAT) scheme, one of the flagship programmes of Bureau of Energy Efficiency is aimed at improving energy efficiency in energy intensive industries. The programme is a major contributor towards reduction in GHG gas emissions and energy savings. Adding to the success of PAT cycle –I, PAT cycle –II that was completed in 2019 which has resulted into energy saving of 14.08 Million Tonne of Oil Equivalent (MTOE) translating into avoiding of around 70 million tonne of carbon dioxide emissions.
- With an objective to accelerate Energy Transition in Industrial Sectors, BEE developed “User Manuals” for different stakeholders of PAT scheme. The User Manuals developed by Bureau of Energy Efficiency for key stakeholders will definitely be useful in providing necessary guidance for effective and efficient implementation of the PAT scheme.
- For improving energy efficiency in Small and Medium Scale Enterprises sector BEE has developed "Energy Efficiency Enterprise (E3) Certifications Programme for Brick Manufacturing Sector" The overall vision of the programme is to accelerate energy and resource efficient technology modernization in the clay brick manufacturing industry through market-based approach designed to create demand and push supply, and at the same time maximise skilled employment opportunities, manufacturing investments and environmental benefits in line with a resilient and green economic development pathway and to fulfil the vision for ‘Aatmanirbhar Bharat’.
- In an endeavour to continuously conserve and save energy, BEE envisages expansion of the PAT scheme to other sectors and development of a similar programme for Small and Medium Scale Enterprises in the future.



- In the appliance sector, the standard and labelling (S&L) programme of BEE has been very successful to provide the consumer an informed choice about energy intensive appliances and equipment. Voluntary star labelling program for UHD TV and Air Compressor was launched on 11th January, 2021. With these additions, the programme now covers 28 appliances out of which 10 appliances are under the mandatory regime while the remaining 18 appliances are under the voluntary regime. The programme resulted in electricity savings to the tune of 65 Billion Units of electricity during financial year 2019-20.
- In order to promote energy efficiency in new commercial buildings the updated Energy Conservation Building Code (ECBC) has been developed. Implementation of building energy efficiency lies at the state and local level through its integration in the Municipal bye-laws. As on April, 2021, 18 States and UTs have notified ECBC in their states and 48 Urban Local Bodies (ULBs) from 8 States have incorporated provisions of ECBC for building approval process.
- With an aim towards a Greener Transport Sector, BEE has been working towards promoting Electric Vehicles to meet multiple objectives, inter alia, attaining zero emission goals, energy security, energy efficiency etc. In this regard creation of Charging Infrastructure in the country has been identified as one of the critical areas to push the plan to promote Electric Vehicles in the country.
- "Charging Infrastructure for Electric Vehicles - Guidelines and Standards" were issued on 14.12.2018 which were revised on 01.10.2019 and thereafter on 08.06.2020 (Battery Swapping stations included in this revision).
- For transition from conventional to electric vehicles Hon'ble Minister for Road Transport & Highways and Micro, Small & Medium Enterprises Shri Nitin Gadkari in the august presence of Hon'ble Minister of Power launched the "Go Electric" Campaign on 19th February, 2021 to spread awareness on the benefits of e-mobility and EV Charging Infrastructure in India. The launch witnessed the unveiling of "Go Electric" logo which depicts the evolution of e-mobility eco-system.
- BEE organised the 30th National Energy Conservation Awards (NECA) function on 11th January, 2021. Hon'ble Minister of Power was the chief guest on this occasion. The virtual event had participation of 409 organizations who collectively achieved savings of 3007 Million units.
- For successful implementation of energy efficiency programmes through States, State-wise Actions on Annual targets and Headways on Energy Efficiency (SAATHEE) Portal Launched on 11th January, 2021. It is an interactive web portal for State Designated Agencies (SDAs) and will be helpful in capturing physical and



financial progress of energy efficiency activities being implemented by States/ UTs across the country.

- BEE has done extensive work in creating awareness among the consumers via media (digital, print and television). The awareness activities include TV commercials to encourage consumers to purchase BEE star rated appliances. Awareness related information regarding the proper usage of energy efficient appliances via social media handles of BEE.
- The independent assessment report highlighting the impact of various programs on energy efficiency during FY 2019-20 which was launched by Hon'ble Minister of Power in March, 2021 have led to:
  - ★ Electrical energy savings of 145.03 Billion Units worth INR 87,019 Crores and avoided capacity generation of 45.22 GW
  - ★ Thermal energy savings of 15.59 Million Tonnes of oil Equivalent worth INR 28,683 Crores
  - ★ Total energy savings of 28.06 Million Tonnes of oil Equivalent i.e., 3.03% of total primary energy supply of the country
  - ★ Total cost savings worth INR 115,702 crores approximately.
  - ★ Total reduction in CO2 emission is around 177.6 Million Tonnes
  - ★ Total CO2 reduction including LED bulbs sold by private industry is 310 Million Tonnes.
- The pandemic has introduced unprecedented challenges and reminds us of the importance of a stable, affordable, sustainable, and uninterrupted supply of power to meet demand, especially for essential services, such as healthcare, which is crucial to ensure that the global community can overcome this crisis, especially in developing and least developed countries. It is evident that energy efficiency will play a key role in stimulating the economy as well as supporting progress towards clean energy transition through these tough times of COVID19.

## 1.5 Schemes of Bureau of Energy Efficiency

### 1.5.1 National Mission for Enhanced Energy Efficiency (NMEEE)

National Mission for Enhanced Energy Efficiency (NMEEE) is one of the eight national missions under the National Action Plan on Climate Change (NAPCC) that was released in June 2008 by the Government of India. The primary objective of the mission is to develop regulations and policies that are instrumental in strengthening the market for energy efficiency. The thrust of the NMEEE for promoting energy efficiency is on self-regulation and market principles by putting in place the following four initiatives:



- (i) **Perform Achieve and Trade Scheme (PAT) scheme** – aimed at reduction of Specific Energy Consumption (SEC) in energy intensive sectors.
- (ii) **Market Transformation for Energy Efficiency (MTEE)** – aiming at transformation of market towards the use of energy efficient appliances.
- (iii) **Energy Efficiency Financing Platform (EEFP)** – for providing a platform for capacity building of financial institutions and other stakeholders on energy efficiency financing.
- (iv) **Framework for Energy Efficient Economic Development (FEEED)** – developing fiscal instruments to leverage finance for financing Energy Efficiency (EE) projects.

The status of four initiatives of NMEEE is as follows:-

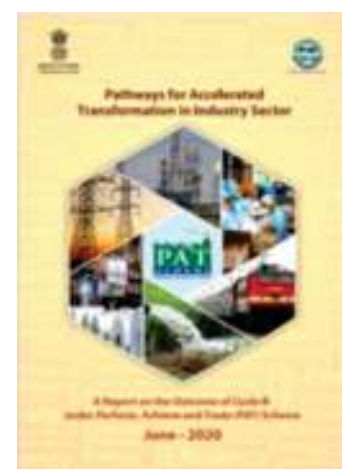
#### (I) **Perform Achieve and Trade Scheme (PAT)**

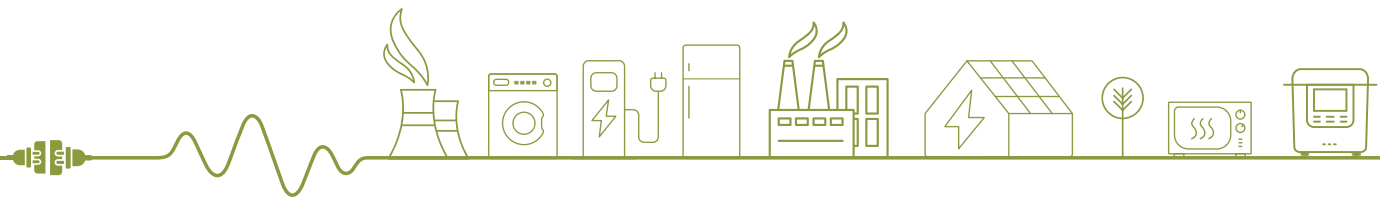
PAT is a mechanism designed to achieve the required energy efficiency in energy intensive sectors. Energy consumption norms and standards are set by the BEE for energy intensive industry sectors. Selected energy intensive entities are identified as Designated Consumers (DCs) within certain key sectors, which are required to comply with the notified norms, rules and regulations framed under Energy Conservation (EC) Act, 2001. The norms are primarily based on Specific Energy Consumption (SEC) in the manufacturing sectors such as Cement, Iron & steel etc. and other corresponding metric for energy efficiency in sectors such as Railways and DISCOMs.

It involves assessment of Specific Energy Consumption (SEC) etc. in the baseline year and projected SEC in the target year covering different forms of net energy going into the boundary of the plant and the products leaving it over a particular cycle. PAT is a multi-cycle programme with each cycle of 3 years in which SEC reduction targets are assigned to industrial units called Designated Consumers (DCs).

Since, PAT programme is a market-based mechanism, excess energy savings are converted into a tradable instrument called Energy Savings Certificates (ESCerts) that can be traded at the Power Exchanges.

'PAT cycle –II' that was notified in March, 2016 covering 621 DCs from 11 sectors which include eight existing sectors and three new sectors viz. Railways, Refineries and DISCOMs completed on 31st March 2019. The verification and assessment of energy savings were completed in 2020-21. Implementation of PAT cycle–II has resulted into total energy savings of about 14.08 MTOE. This energy saving is equivalent to avoiding emission of about 66.01 million tonnes of CO<sub>2</sub>.





The total monetary savings estimated from PAT cycle –II is approximately INR 31445 Crores and the DCs have made total investments of about INR 43721 Crores approximately to achieve the energy savings. The detailed outcome of PAT Cycle-II including energy savings, investment reported, technology up gradation as well as reduction in CO2 emission was documented by BEE as “**Pathways for Accelerated Transformation in Industry Sector**” and was released on 1st March 2021 by the Hon’ble Minister.

Subsequent to PAT cycle II, PAT cycle III, IV, V and VI were notified in 2017, 2018, 2019 and 2020 respectively. ‘**PAT Cycle –III**’ that was notified in April 2017 as a rolling cycle (notification of DCs/sectors every year starting from PAT cycle–III) was completed on the 31st of March 2020, verification of energy savings achieved under this cycle by 116 notified DCs is under progress. PAT cycle -III aims to achieve an overall energy consumption reduction of 1.06 MTOE.

‘**PAT Cycle –IV**’ commenced with effect from April 2018. A total of 106 DCs with a total reduction target of 0.6998 MTOE were notified under PAT cycle-IV. These DCs were from 8 sectors consisting of 6 existing sectors of PAT cycle-I and two new sectors namely Petrochemicals and Commercial Buildings (Hotels).

‘**PAT cycle –V**’ had commenced with effect from April 2019. Under PAT cycle –V, 110 DCs from the existing sectors of PAT i.e. Aluminum, Cement, Chlor-Alkali, Commercial Buildings (Hotels), Iron & Steel, Pulp & Paper, Textile and Thermal Power Plant were notified. PAT cycle –V aims to achieve total energy savings of 0.5130 MTOE.

‘**PAT cycle –VI**’ had commenced with effect from 1st April 2020. Under PAT Cycle-VI, 135 DCs from six sectors, i.e. Cement, Commercial buildings (hotels), Iron and Steel, Petroleum Refinery, Pulp and Paper and Textiles, were notified. With implementation of PAT cycle –VI, it is expected to achieve a total energy savings of 1.277 MTOE.

BEE has rolled out six PAT cycles till 31st March, 2020, with a total of 1073 DCs covering 13 sectors. It is projected that total energy savings of about 26 MTOE translating into avoiding of about 110 million tonnes of CO2 emissions will be achieved by March 2023.

#### **Feasibility Study for Identification of New Sectors:**

In order to widen the coverage of PAT scheme, feasibility study (Phase-1) was conducted and completed by BEE for the sectors namely Chemicals, Glass, Sugar, Ceramics, Non-Ferrous Metals (Zinc and Copper). The feasibility study in the Phase-1 provided outcomes in terms of threshold energy consumption of the new sector, energy consumption, percentage share in total energy consumption and probable number of Designated Consumers that could be notified from each sector based on the identified threshold.

The Phase-2 of the feasibility study is also being undertaken and is in process by BEE in the sectors namely Dairy, Edible Oils, Breweries & Distillery, Beverages (Non-Alcoholic), Food Processing, Cold Storage, Refractories and Heavy Engineering Manufacturing/ Heavy Industries (Forge & Foundry).



### **Potential Assessment Study:**

Bureau of Energy Efficiency has undertaken potential assessment study in various sectors under PAT scheme namely Cement, Pulp & Paper, Textile, Chlor Alkali, Aluminum and Sponge Iron plants. The aim of such study was identification of further potential that the Designated Consumers possess to improve energy efficiency where the possible measures for energy efficiency have already been undertaken in the previous PAT cycles. The basic objective behind carrying out this study was 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.

### **Notification of price of Metric Tonne of oil equivalent:**

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 14th 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.

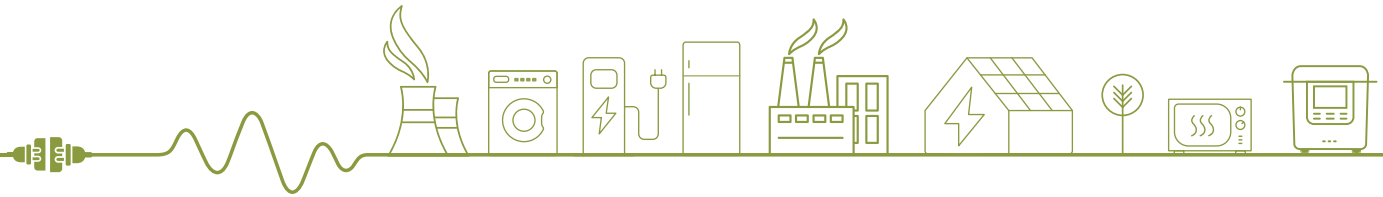
### **Assessment of various industrial sectors of the economy to meet NDC targets:**

Committed towards reducing its emissions, India has been participating in the Conference of Parties (COP) under the United Nations Framework Convention on Climate Change (UNFCCC) which aims to review the national communications and emission inventories submitted by the member countries. The twenty-first session of the COP that took place during November-December of 2015 in Paris reached a landmark agreement called the “Paris Agreement” to combat climate change. Subsequently, the Government of India submitted its Nationally Determined Contributions (NDCs) to UNFCCC in 2015, endorsing country’s commitment towards the issues related to climate change. India also played an active role during the climate change negotiations held in Paris at COP21 in December, 2015. India ratified the Paris agreement on Climate change in 2016, which required the member countries to make binding commitments to curb CO<sub>2</sub> emissions to keep global average temperatures rise below 2 degree C as compared to the pre-industrial years.

BEE has initiated a study in order to determine the targets based on India’s Nationally Determined Contributions (NDCs) in industrial sectors and other establishments till 2030. The study shall be based on total energy consumption pattern / energy intensity / contribution of the industrial sector in GDP, etc. The aim of the study is to reassess the energy target gap of each industrial sector and other establishments with NDC based on realistic data of the sectors.

### **Energy Mapping of Thermal Power Plants:**

In order to improve efficiency and performance optimization of Thermal Power Plants and also to identify the heat rate deviation gaps in the unit, Bureau of Energy Efficiency carried out the exercise of energy mapping of some of the most inefficient state/central thermal power plants.



The mapping study included the following:

- a) The performance evaluation of process, sub-process, equipment etc.
- b) Identification of the gaps in operating parameter as compared to design for each equipment.
- c) Comparison of Expected values and Operating values of the parameters, from which the degradation will be derived.
- d) Developing adequate saving measure.

The energy mapping study of most inefficient power plants has been completed and has provided a database and broadly identifies areas requiring for improving energy efficiency. The mapping report has also indicated measures that could be taken up immediately with comparatively small expenditure to improve plant performance before going in for regular R&M measure.

#### **Facilitating adoption of Industry 4.0 in PAT Industries:**

Industrial sectors continue to be the largest users of electricity. Internet of Things (IoT) and Industry 4.0 can aid in the conservation of energy and make industrial operations more energy efficient. It consists of a network of smart devices connected over the internet with access to a much larger network including sensors, smart phones, data management, report system and more. In a plant, an operator receives alerts from the hardware installed, and delivers live data on errors, malfunctions or deviations.

PAT scheme is the flagship program launched by BEE to reduce energy consumption and promote enhanced energy efficiency among specific energy intensive industries in the country. Adoption of IT, IoT (Internet of Things), smart equipment and industry 4.0 applications will facilitate the achievement of PAT targets also.

Further in this direction, capacity building programmes have been conducted by BEE for Designated Consumers already notified under PAT scheme. Further activities in order to fill the gaps are under process.

#### **User Manuals for PAT Scheme:**

User Manuals for PAT Scheme have been prepared by BEE to provide all the procedures and guidance drawn from the Energy Conservation Act, Rules and Regulations pertaining to the PAT scheme. These user manuals have been developed by BEE for various stakeholders involved in the implementation of the PAT scheme such as DCs, State Designated Agencies (SDAs)/SERCs, CERC/POSOCO and Accredited Energy Auditors in order to understand the roles and responsibilities with respect to the scheme. The User Manuals for PAT scheme were released on 1st March 2021 by the Hon'ble Minister.



**NMEEE revised to “Roadmap of Sustainable and Holistic Approach to National Energy Efficiency (ROSHANEE)”**

Further, In order to gear towards the commitments made under the Nationally Determined Contributions (NDCs), related activities having climate benefits warranted consolidation and alignment with the NDC goals. Thus, NMEEE has been revised to **“Roadmap of Sustainable and Holistic Approach to National Energy Efficiency (ROSHANEE)”** by BEE as a broader version of the Mission and includes all the current and potential areas of energy efficiency in each sector.

Thus, through ROSHANEE, NMEEE is being strengthened with a review of existing approaches and planning a new portfolio of strategies to strengthen energy efficiency across all sectors in the country till 2030. ROSHANEE also aims to bring together seemingly disparate national initiatives however, having common climate benefits such as Zero Effect, Zero Defect, Smart Cities, India Cooling Action Plan etc.



It is expected that the savings from the activities in the proposed scheme will contribute significantly to the India's NDC commitments. The activities proposed in ROSHANEE are expected to mitigate over 557 million tonnes of CO<sub>2</sub> by 2030 with co-benefits in employment generation, quality enhancement, energy security etc.

### **(ii) Market Transformation for Energy Efficiency (MTEE)**

This initiative under the Mission aims to accelerate the shift to energy efficient appliances in designated sectors through innovative measures to make the products more affordable. Under MTEE two programmes were introduced for the promotion of energy efficient products in the market viz. Bachat Lamp Yojna (BLY) and Super-efficient Equipment Programme (SEEP).

- The Bachat Lamp Yojana (BLY) was developed for the replacement of inefficient bulbs with Compact Fluorescent Lamps (CFLs). Presently BLY program involves support to LED deployment under UJALA by providing technical assistance to partner agencies such as EESL and REC.
- Super-Efficient Equipment Program (SEEP) is a program designed to bring market transformation for super-efficient appliances. For incentivizing the super-efficient appliances to enhance their market share, Energy Efficiency Services Limited (EESL) has initiated actions. Currently Super-Efficient Air Conditioning programme is under implementation on demand aggregation model. This Super-Efficient ACs provides 1.5-TR cooling capacity at high ambient temperature while also reducing the cost of cooling by 50%. As on date, around 1,300 Super-Efficient Air Conditioners have been sold.

### **(iii) Financing Energy Efficiency Programme (FEEP):**

Under NMEEE programme it has been proposed to create this umbrella programme FEEP for providing overarching support to financing mechanisms for energy efficiency. This umbrella programme will cover 'Energy Efficiency Financing Platform' and 'Framework for Energy Efficient Economic Development'.

#### **a. Energy Efficiency Financing Platform (EEFP)**

The objective of EEFP is to upscale energy efficiency financing in India by providing a platform where Financial Institutions (FIs) can interact with industries for financing and implementation of energy efficiency projects, technologies and appliances.

BEE has launched one day conferences named as "Investment Bazaar for Energy Efficiency" to accelerate and facilitate financing of EE projects/technologies through SDAs. This programme got launched by Andhra Pradesh SDA in March 2021 at Vizag. These 'investment bazaars' shall showcase viable EE projects/technologies in presence of representatives of FIs and industries, with an objective of bringing convincing deals for financing those EE projects. EE technologies were also demonstrated by manufacturers during this



conference in March 2021. First Investment Bazar was organized by APSECM in Vizag which was attended by more than 100 OEMs, Financial Institutions, ESCOs, manufacturers, etc.



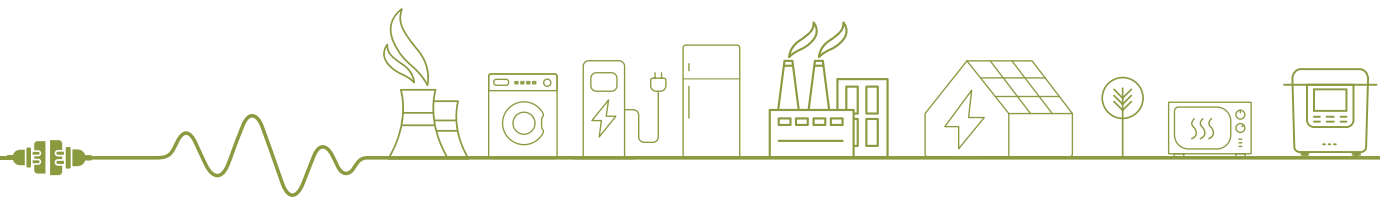
Photo: Investment Bazar One day Conference in Vizag

#### **(iv) Framework for Energy Efficient Economic Development (FEEED)**

The component FEEED is for development of fiscal instruments to promote energy efficiency. Under FEEED, Partial Risk Guarantee Fund for Energy Efficiency (PRGFEE) and Venture Capital Fund for Energy Efficiency (VCFEE) schemes were created to promote the Energy Efficiency financing in India. However, these schemes didn't take off due to lack of interest shown by Financial Institutions in implementing both the guarantee fund as well as equity fund, thus, both the funds have been short closed and the amount available with BEE along with interest is returned to MoP. The existing programmes under FEEED are:

##### **(a) Partial Risk Sharing Facility:**

Partial Risk Sharing Facility (PRSF) has been established by Clean Technology Fund (USD 25m) and Global Environment Fund (USD 12m) funds to provide partial credit guarantees to cover a share of the default risk that participating financial institutions face in extending loans to eligible Energy Efficiency sub-projects. World Bank had appointed SIDBI as Project Execution Agency for the facility. Technical assistance for developing end-to-end market solutions, with USD 6 million GEF was provided to SIDBI (USD 4 million) and EESL (USD 2 million). Each energy saving loans given by Participating Financial Institutions (PFIs) is partially guaranteed for a maximum tenure of 5 years with guarantee coverage ranging from 40-75% of the loan amount or Rs. 15 crore per project. BEE's Director-General/Secretary is co-chair of Advisory Committee of PRSF and provides policy & regulatory



guidance to this Programme in regular intervals. Till date, 35 projects are guaranteed amounting to USD 22.06 million and 16 PFIs are empanelled under this programme.

**(b) Energy Efficiency Financing Facility (EEFF)**

BEE has proposed a dedicated financing facility anchored by PFC and IREDA for taking care of financing requirements of large industries, project aggregation approach covering MSME clusters/ ESCO projects, re-financing to Banks who have lent for Energy Efficiency projects, upcoming energy efficiency areas such as smart grids, electric vehicles, and charging infrastructure. Till date, IREDA has sanctioned two EE loans under EEFF amounting to Rs. 5 crore and Rs. 9.91 crore.

**1.5.2 Energy Conservation Building Code (ECBC)**

**Energy Conservation Building Code (ECBC) for commercial Buildings.**

To improve the energy efficiency in the new commercial buildings, the Energy Conservation Building Code (ECBC) was formulated. ECBC was launched by Ministry of Power (MoP), Government of India, in 2007, as the first step towards promoting energy efficiency in the commercial building sector. The Energy Conservation Building Code (ECBC) sets minimum energy standards for new commercial buildings having a connected load of 100 kW or contract demand of 120 kVA or more. It is technologically neutral, promotes renewable energy and also emphasizes on life cycle cost of building.

The updated code was launched in 2017, which had additional priorities of renewable energy integration, ease of compliance, inclusion of passive building design strategies and, flexibility for the designers.

ECBC focuses on building envelope, mechanical systems and equipment including heating, ventilating, and air conditioning (HVAC) system, interior and exterior lighting systems, electrical system and renewable energy, and it also takes into account the five climate zones present in India.

Impact of the code: It is estimated that, India will be adding about 1 billion m<sup>2</sup> of new commercial buildings by 2030 with increased demands of Air conditioning and artificial lighting in the buildings. Based on the anticipated growth it is projected that if the future building stock is made in compliance with this code, about 300BU electricity will be saved by 2030. It will translate to peak demand reduction of 15 GW and about 250 mtCO<sub>2</sub>e GHG Abatement by the efficient built stock.

BEE has developed ECBC, whereas the implementation of the code lies with the State/ UT governments. The code and rules suitably modified, as per the local requirements and then the process of integration with the present building approval process is undertaken, which subsequently paves way for enforcement and implementation of the code in the said jurisdiction.



- **Regulatory framework for ECBC enforcement:**

- ◆ 24 No of ECBC cells have been working for all States/UTs in 2020-21. The aim is to provide technical assistance for effective implementation and enforcement of ECBC in the States/UTs. These ECBC cells oversee ECBC related activities in states/UTs.
- ◆ ECBC Rules and ECBC 2017 was notified by Assam, Mizoram and Sikkim. Arunachal Pradesh ECBC and rules approved by respective State Cabinet.
- ◆ Government Order issued in Andhra Pradesh by Municipal Administration & Urban Development Department to adopt ECBC, wherever applicable.
- ◆ Energy Conservation (Minimum Qualification for Energy Auditors, Energy Auditors (Building) and Energy Managers) Rules, 2020 notified on 28th Sep 2020.
- ◆ Government of Maharashtra vide GR dated 8th March 2021, has constituted Technical Steering Committee for ECBC notification and implementation in State.
- ◆ Energy efficient Building materials added in Madhya Pradesh Schedule of Rate (SoR)
- ◆ Indian Railway Stations Development Corporation Limited (IRSDC) has proposed inclusion of ECBC and ENS in Green building code for commercial development on railway land.
- ◆ Following activities have been taken up at State/UT level through ECBC Cell
  - Benchmarking study for commercial buildings - EPI base, has been conducted at State/UT level.
  - Draft guidelines for conducting regular and mandatory audits of energy intensive buildings in states/UTs.
  - Draft proposal for financial incentives to ECBC compliant buildings.
  - Mapping of Green building/ ECBC Compliant buildings in State/UT

- **ECBC Implementation and Compliance:**

- Implementation of ECBC has started in Andhra Pradesh, Andaman & Nicobar Island, Karnataka, Kerala, Punjab, Telangana. About 49 ULBs have covered under these states.
- Total 821 No. of buildings are approved by ULB/SDA at design stage and these buildings are at different stages of construction. In 2020-21, 172No. of buildings has been approved by ULB/SDA in 5 states namely Telangana (Total 328 buildings, 41 in 20-21), Punjab (Total 250 buildings, 90 in 20-21), Andhra Pradesh (Total 217 buildings, 34 in 20-21), Kerala (Total 14 buildings, 4 in 2021) and Uttarakhand (total 12 buildings, 3 in 20-21).



- **Pilot demonstration of ECBC compliance in building projects:**
  - Technical assistance has been provided for ECBC demonstration projects. About 38 No. of building projects for different categories of buildings in different climatic zones were supported to showcase ECBC compliance across the Country.
  - 5 No. building projects have been identified in different climatic zones (states) to showcase Super ECBC compliant buildings. Financial support of 5Cr (maximum) will be provided to these buildings. The first trench of 2.5 Cr has been released to 3 No. of SDA buildings namely; Maharashtra, Telangana and Uttar Pradesh.
- **Training and capacity building on ECBC:**
  - 515 No. of ECBC awareness webinar/online programs and 32 No. of physical ECBC technical training programs has been conducted in States/UTs which had participation from both Public and private sectors.
  - Webinars conducted on Energy Efficiency in Buildings / Energy Conservation Building Code for SDAs explained their roles and responsibilities in implementation of ECBC/ENS in State/UT
  - Webinar conducted for developers and builder associations for ECBC implementation
  - Video Conference with SDAs to review the progress of ECBC activities & status of ECBC implementation.

### **Energy Efficiency in Residential Buildings**

Rapid increase in residential building stock, coupled with increase in electricity use for space conditioning, is resulting in rapid increase in electricity use in residential buildings. Projection done by NITI Aayog indicates that the electricity consumption for the residential sector is expected to increase 6-13 times by 2047. Data collected from a sample of urban middle-income apartments shows that electricity for providing thermal comfort contribute to 30- 60% of the annual electricity consumption. Another important aspect is thermal comfort, which is of utmost importance in all kinds of housing, but more so in case of affordable housing, so as to ensure health and well-being of the occupants. BEE envisaged a phased approach for the development of the residential building energy conservation code.

### **Eco-NiwasSamhita 2018 (Part-I)**

The Eco NiwasSamhita (ENS), Part – I Building Envelope (Energy Conservation Building Code for Residential Sector) was developed and launched in 2018 on the occasion of National Energy Conservation Day by Hon'ble speaker of Lok Sabha and Hon'ble Minister of Power, New & Renewable Energy. It has been developed to set minimum building envelope



performance standards to limit heat gains (for cooling dominated climates) and to limit heat loss (for heating dominated climate) while ensuring adequate natural ventilation and day lighting.

**Eco-NiwasSamhita Compliance (ENS) Tool:** An online compliance tool has been developed by BEE to ensure ease of compliance and adoption by ULB's, home owners and developers. Part -1 is available on BEE's website. Part -2 of ENS Compliance Tool is presently in final stage of development.

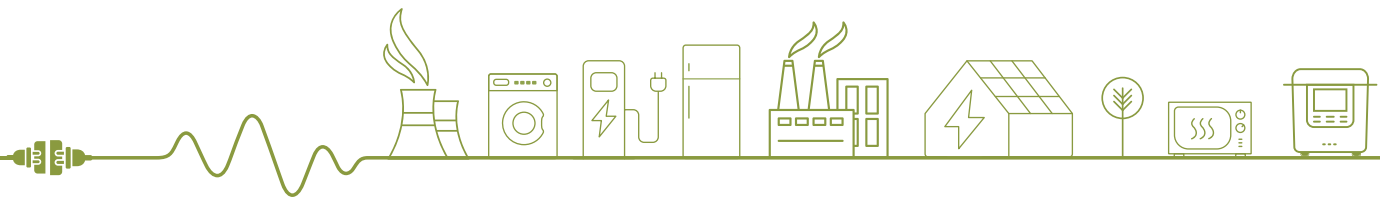
**ENS Cell:** Eco-NiwasSamhita (ENS) Cells were established in Delhi, Uttar Pradesh, Punjab, Karnataka and Maharashtra from January to December 2020, for implementation of the residential building Code.

**ENS Trainings:** Many stakeholder's workshops and trainings have been conducted across India to appraise participants with the code and its benefits

- 137 Awareness webinars on Eco-NiwasSamhita and Star Rating for Energy Efficient Homes were conducted in Delhi, Uttar Pradesh, Punjab, Maharashtra and Karnataka for architects, engineers, government officials and architecture students in association with GIZ and respective SDAs. Around 9,700 individuals have been trained.
- One Day Webinar on ENS Awareness and Training for Andhra Pradesh was conducted on 7th of May, 2020, in association with SDC.
- One Day Webinar on ENS Awareness was conducted for Gujarat on 18th July, 2020, in association with GEDA.
- One Day Webinar on ENS Awareness and Training for Andhra Pradesh was conducted on 18th of August, 2020, in association with SDC.
- A Webinar on ENS Awareness under Media Engagement Programme was conducted on 28th of May, 2020, in association with SDC.

#### **Other Schemes under Energy Efficient Residential Buildings Programmes**

- A Memorandum of Understanding was signed between UPNEDA and Lucknow Development Authority (LDA) on 2nd 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.
- Three webinars on "Developing a Catalogue of Replicable Designs for Energy Efficient Residential Buildings in India" in association with GIZ, and AB Lall Architects,
- Webinars on "Technology Mapping and Baseline Assessment of Indian Smart Home Market", 2020 in association with GIZ and Deloitte.
- First Stakeholder Consultation Meeting on Thermal Comfort Study was conducted on 20th August, 2020.



## Energy Efficiency Label for Residential Buildings

Energy Efficiency Label for Residential Buildings” was launched by Hon’ble Minister of State (IC) for Power and Renewable during the conference of Ministers for Power, New & Renewable Energy of States & Union Territories held at Gurugram, Haryana in 2019.

The key objective of the programme is to make a transparent instrument over the energy performance of a home which will gradually lead to an effective model taken into consideration while deciding over the home prices in future. The objective of the labeling program is to make the energy performance of a home an instrument of comparison while deciding over the home prices in the future. It also aims to provide a benchmark to compare one house over the other on the energy efficiency standards to create a consumer-driven market transformation solution for energy efficiency in the housing sector.

This program is another step towards realizing the vision of an energy surplus India with 24\*7 power to all. Proposed Labelling program will cover all types of residential buildings in India. All the envisaged objectives can be achieved through the proposed labeling mechanism by making it as mandatory information required in any real estate transaction/leasing.

- Webinar on Star Labelling for Energy Efficient Homes on 7th, 14th and 21st of May, 2020, in association with GIZ and PwC.
- An Interactive Webinar on initiatives for energy efficiency in residential buildings sector for financial institutions, on 21st of May, 2020, in association with GIZ and PwC.
- Technical Committee Meeting for the Development of Cold Climate Star Labelling Bands for Energy Efficient Homes was held online on 10th February, 2021.

## Sector under PAT Scheme

Buildings are identified as one of the most Energy Intensive Sector in India. There is a huge scope of energy saving from Building sector. ECBC are limited to new buildings only and can be implemented at design and construction phase only. However, existing buildings can also save a lot of energy.

In order to conserve energy and to promote energy efficiency in existing buildings, Commercial Buildings Sector covered under the PAT Cycle –IV and subsequent cycles there forth;

1. To start with Hotels, In PAT Cycle-IV, 37 Hotels were notified as Designated Consumers (DC) under Commercial Building regime having energy consumption more than 1000 TOE (Tons of oil equivalents).
2. While in PAT Cycle -V and forthcoming cycles of PAT threshold consumption has been revised to 500 TOE to qualify a hotel as a DC under commercial building sector. In PAT cycle V, 31 more Hotels were added as DCs with the saving potential of 1360 TOE till 2022.



3. Similarly in PAT cycle VI, 64 more Hotels were notified as a designated consumer with the target saving of 4154 TOE till 2023. Now, cumulatively 132 Hotels as DCs are covered under the PAT Scheme.
4. Airports are added as a new sub-sector under the Commercial Building Sector to be included under PAT Scheme. As per the gazette notification, Airports - Units of such airports under commercial buildings or establishments having energy consumption of 500 metric tonne of oil equivalent (mTOE) per year and above will be considered as a Designated Consumer under PAT Scheme.

### **Energy Efficiency in Transport Sector**

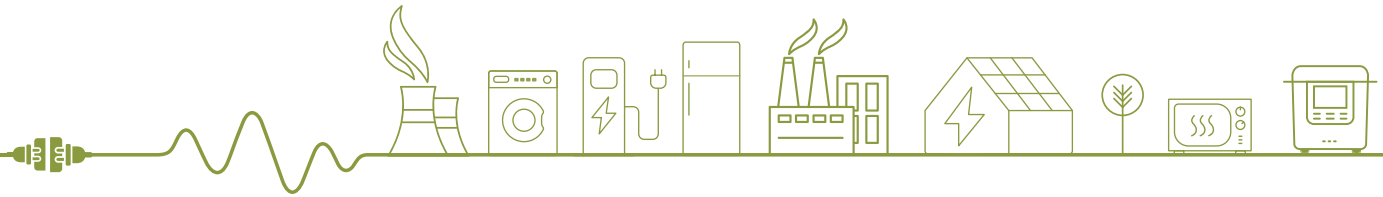
India's dependence on imported fossil fuels is rising continuously due to the limited domestic petroleum resources. India ranked as the fourth-largest petroleum consumer in the world following China, the United States, and Russia. The country's energy demand continues to climb because of its dynamic economic growth and modernization. India's consumption of petroleum products increased by 5.3% to previous year which is more than 200 MMT causing a significant expenditure on oil import.

Keeping in view the growing demand of fossil fuel and rapidly growing motor vehicle fleet in India, Govt. of India set a target to reduce 10% reduction on import by 2022. BEE works on Development of fuel efficiency norms for Vehicles that could moderate the rising demand of fuel. Apart from developing the Fuel Efficiency Standards for vehicles, BEE is working on development of testing facilities and tools and Star Labelling programme for Tyres.

### **Fuel Efficiency programmes:**

Following initiatives have been taken to boost Energy Efficiency in Transport Sector:

- 1) Corporate Average Fuel Efficiency (CAFE) Norms for Passenger Cars notified in April 2015 and phase-I of the norms implemented in 2017-18. BEE constituted a technical committee for "Tightening of Fuel Efficiency norms for Passenger Cars and Formulation of Carbon Credit Trading Mechanism". The committee is working on the revision of the CAFE phase-II norms and norms for upcoming phases will be developed subsequently.
- 2) Constant Speed Fuel Consumption Norms for Heavy Duty Vehicles having Gross Vehicle Weight more than 12 tonnes, notified in August 2017. The same is amended vide S.O. 3215 (E) dated 21st September 2020 because of the revision of Safe Axle Weight limits by Ministry of Road Transport & Highways.
- 3) Constant Speed Fuel Consumption Norms for Light & Medium Commercial Vehicles having Gross Vehicle Weight ranging between 3.5 Tonnes and 12 tonnes, notified in July 2019 and first phase of the norms was supposed to be implemented from 1st April 2020.



- 4) The Heavy-Duty Fuel Economy (HDFE) and Light & Medium duty Fuel Economy (LMDFE) norms notified earlier was for BS-IV complied vehicles. For BS-VI complied vehicles a correction factor is to be derived which can be applied on the HDFE and LMDFE norms equations for BS-IV complied vehicles.
- 5) A technical Committee constituted by BEE under chairmanship of ED, PCRA comprising members from SIAM, ICAT, ARAI and representatives from key vehicle manufacturers. The committee is looking into the provision of deriving correction factor or new set of norms for the BS-VI complied HDVs and L&MCVs.
- 6) Apart from the Development Fuel Efficiency Standards for Vehicles as a whole, Standards & Labelling Programme for Tyres has been developed also. Since more than 2/3rd of the Tyres market is replacement by Vehicle Owners itself, it is quite useful to create Demand Side Management in this sector to boost fuel savings. The proposal to launch voluntary phase of the scheme has approved by the ministry and expected to be launched soon.
- 7) BEE is working on the Development of Computer Based Simulation Tool for assessment of Fuel Efficiency of the Vehicles as per Indian Scenario. The tool may be the indigenous or may be any other tool being used in other countries and modified according to Indian specific conditions. A committee of technical experts has been constituted and work has been started to develop the same.

In addition to CAFE norms for passenger cars BEE is looking forward to developing the CAFE norms for Two-wheelers also. Proposal for fuel efficiency programme for tractors in form of Star Rating scheme was sent to MoP for approval of launch of the voluntary phase. However, Ministry has asked BEE to revise the same and to start awareness programme for farmers to educate them about the fuel savings by the tractors and other farm equipment. BEE is looking into other provisions to develop the fuel efficiency programme for tractors in line with suggestion of ministry.

### **E-Mobility**

The Electric Vehicle (EV) market in India is still in a nascent stage. Charging infrastructure is considered as one of the key enabling factor for electric mobility to take off in India as it remove 'range anxiety' which is one of the barriers for large scale penetration of EVs. As adoption of EVs increase, charging infrastructure requirements will also increase.

The Government of India (GoI) has taken multiple initiatives to promote manufacturing and adoption of electric vehicles in India. With support of the Government of India, adoption of electric vehicles has started picking up in the country. However, unavailability of adequate Public Charging Infrastructure (PCI), key requirements for accelerated adoption of electric vehicles, has deterred the growth of this vehicle segment in the country.



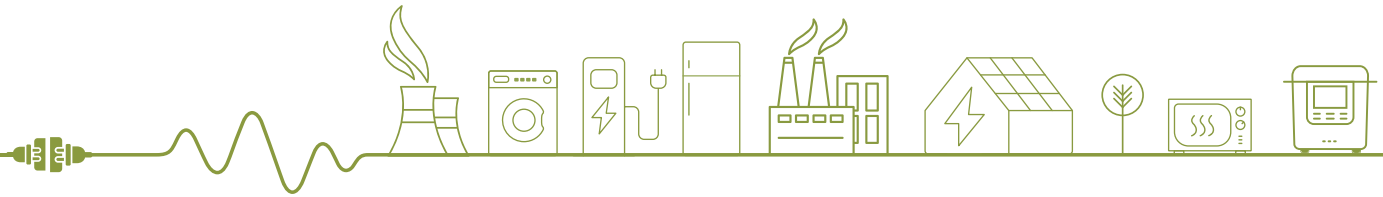
In this direction, the Ministry of Power, Government of India has taken several initiatives to create a reliable, affordable and safe Public charging Infrastructure in the country. Ministry of Power (MoP) issued Guidelines for Public Charging Infrastructure for Electric Vehicles on 14.12.2018 which was subsequently revised on 01.10.2019. Additionally, Ministry of Power supported Department of Heavy Industries (DHI) in sanctioning of 2,877 Charging Stations to 68 cities across the country under FAME -2 phase. Currently, the Ministry of power is supporting DHI in identifying and sanctioning charging stations for 9 Expressways and 16 Highways.

In terms of the Guidelines and standards for Public charging Infrastructure (PCI) issued by the Ministry of Power, Government of India, roll out of the public charging Infrastructure is proposed to be carried out in two phases, beginning with the cities having population of 4.0 Million plus as per 2011 census and the important Highways and Expressways connecting these cities. Nine such cities and corridors connected with these cities were identified by the Ministry of Power in the Guidelines and Standards. Guidelines also designated Bureau of Energy Efficiency (BEE) as the Central Nodal Agency for the purpose of roll of PCI in the country and defined that the State Nodal Agencies (SNA's) shall be designated by the state Governments for implementation of Public charging Infrastructure in states and coordination with the Central Nodal Agency (CNA).

In keeping with the implementation framework proposed in the said Guidelines and Standards for EV PCI, the Ministry of Power decided to first prioritize saturating the nine cities namely Delhi, Ahmedabad, Surat, Mumbai, Pune, Bengaluru, Chennai, Hyderabad & Kolkata, and connected corridors stated in its Guidelines and Standards for EV PCI with adequate Public EV charging Infrastructure.

Major achievements under BEE's e-mobility initiative are as follows :

1. Revision of Charging Infrastructure Guidelines and standards for EV in year 2020 to include Battery swapping, Battery charging stations, Tariff for supply of electricity to public charging stations.
2. Development and approval of High Energy Traction Battery star Labeling program from MoP.
3. Evaluation of proposals for deployment of Public charging stations in 68 cities, recommended setting up of 2877 public charging stations in the country.
4. Price Benchmarking of Public EV chargers of various configurations and Ratings for deployment in cities and on Highways/Expressways completed and approved by PISC constituted by DHI under FAME-2.
5. Development and Launch of "Go Electric campaign" in February, 2021 for creating awareness on Electric Mobility and Clean cooking.
6. Evaluation of Proposals for setting up of Public charging stations on 16 Highways and 9 Expressways in the country completed.



### 1.5.3 Standards and Labeling Scheme

Standards and Labelling (S&L) program was initiated with the key objective of providing consumers an informed choice regarding the energy savings and the cost saving potential of various energy consuming appliances. S&L scheme covers the star labelling program for 28 appliances, out of which 10 appliances are under mandatory regime and remaining 18 appliances are under voluntary regime.

The vital benefits of S&L scheme are:

- (i) Significant impact on consumers while purchasing energy efficient appliances through a structured consumer awareness program.
- (ii) Market Transformation from inefficient appliances to energy efficient ones

With the continuous efforts, Standards & Labeling has reached the following milestones during the 2020-21 Financial Year:

- (i) Introduction of Voluntary Energy performance standards for UHD TV, Air Compressors on 11 January, 2021.
- (ii) Extension in the energy consumption standards for Room Air Conditioners, LED lamps, Tubular Fluorescent Lamps, Storage Water Heater, Color Television, Distribution Transformers.
- (iii) Empanelment of 22 NABL accredited laboratories for check testing of star rated appliances.
- (iv) BEE attended Climate talks webinar on India cooling policy and international webinar on AC with other governments – Brazil and China to share policy experiences in July and August 2020.
- (v) BEE participated in the RE-INVEST event organized by MOEFCC during the month of November, 2020.
- (vi) Empanelment of 5 IAMEs for Check Testing & Application Scrutiny.

BEE has done extensive work in creating awareness about the Standards & Labeling Programme among the consumers via different media platforms. The awareness activities include the following:

- (i) TV commercials & Radio Jingles to encourage consumers to purchase BEE star rated appliances.
- (ii) Awareness related information regarding the proper usage of energy efficient appliances via social media handles of BEE.



- (iii) Retailers Training Programme to disseminate knowledge on star Label particulars among the retailers to enable them to explain and convince customers to prefer energy efficient appliances at the time of purchase. Retailers were trained in different programmes, organized in 56 cities across India in the Third Phase.

#### **1.5.4 Municipal Demand Side Management (MuDSM) Scheme**

In order to tap the energy savings potential of municipalities, BEE initiated nation-wide Municipal DSM (MuDSM) programs to address energy efficiency in water pumping, sewage pumping, street lighting and public buildings across Urban Local Bodies (ULBs) in the Municipality country. MuDSM programme aimed to improve the energy efficiency across water pumping, sewage pumping, street lighting and public buildings in the country.

Municipality sector is one of the sectors where there is still an immense potential to be realized from large scale implementation of energy efficiency interventions. Public lighting and public water works account for nearly 3.75% of India's net power consumption which stands at nearly 27.5 billion units and is expected to rise to approximately 51.23 billion units by 2021-22. As per a study, there is a savings potential of nearly 23% in municipalities by adopting demand side management initiatives.

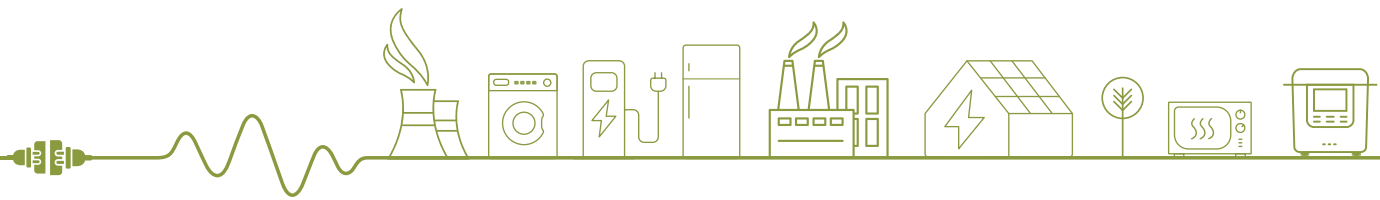
Major initiatives that are been taken to enhance the Energy efficiency in municipality sector are:

1. To drive stakeholder engagement and capacity building initiatives across the country alongwith the capacity building of various stakeholders such as SERCs, UDDs, ULBs, public water bodies etc. to promote wider adoption of Energy Efficient measures in municipal sector.
2. To address the energy inefficiencies and to quantize the energy saving potentials in municipality drinking and sewage water system, DPRs are being prepared for respective municipalities.

#### **Glimpses of the Capacity building programs held for the officials of Urban Local Bodies/Municipal Corporations etc.:**



A. Session on "Energy Efficiency Opportunities in Municipal Corporation of 'Madhya Pradesh' under MuDSM program



B. Capacity building program for the officials of Municipal Corporation / Urban Local Bodies etc. of UT- Chandigarh

### **Energy Service Companies (ESCOs)**

ESCO business model based on Public-private partnership (PPP) model is quite important for the energy efficiency sector in India and can help in making industries and establishments energy efficient. In recent years, there have been significant successes too in the implementation of energy efficiency projects through ESCO model in buildings, industries, and establishments.

With the ESCO business model being a tool to lock in energy efficiency commitments, its application becomes much wider in existing facilities. A fairly large part of buildings, industries, and establishments spend is on operations and maintenance. Here, the scope for improving energy efficiency is significant. The use of long-term operations and/or maintenance contracts can bring in performance commitments, and associated payments. Wherever this is expected to be visibly lower than existing facilities spends, it would make for a viable ESCO model project. The cost savings can be channeled back into retrofitting costs.

Bureau of Energy Efficiency has taken the following measures in order to promote uptake of Energy Efficiency Projects through ESCO route-

- a) Carrying put empanelment of ESCOs with BEE since 2008. Currently, 127 ESCOs are empaneled with BEE.
- b) Organizing capacity-building programs for ESCOs and Industries to enhance understanding of ESCO business model, discuss challenges and opportunities for ESCOs in various sectors, and facilitating policy deliberations with key stakeholders.
- c) Concept note on the ESCO business model and a standard template for the Request for Proposal (RfP) and Energy Saving Performance Contracting (ESPC) document is being prepared and the process is underway to release it.



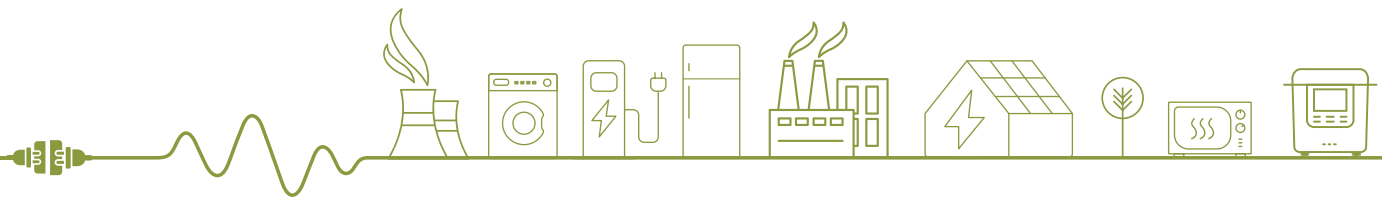
### 1.5.5 Agricultural Demand Side Management (AgDSM) Scheme

Agriculture plays a vital role in India's economy over 70% of the rural households depend on agriculture. Agriculture is an important sector of Indian economy as it contributes about 17% to the total GDP and provides employment to over 60% of the population. AgDSM programme consists of methodologies and policies aimed at bringing a change in the power consumption patterns of consumers (farmers). The objective of the AgDSM programme is to reduce peak electricity demand, and, ultimately, the total energy consumption of the agriculture sector. All project implemented under AgDSM in India have focused on replacement of existing inefficient agricultural pump sets with BEE star-rated energy efficient pump sets along with creating awareness for using Energy Efficient pump sets.

Prior to the FY 2019-20, a total of 63,615 BEE five star rated 5 HP pumps were installed across India. In the financial year 2019-20, there were a total 10,784 number of inefficient 5 HP pumps that were replaced by 5 HP BEE five star rated pumps. On account of number of energy efficient pumps getting distributed over the past few years, the impact of the scheme in terms of energy (electrical) saved across India in FY 2019-20 is 0.18 BU and reduction in emission of CO<sub>2</sub> is 0.148 Million Tonne.

To promote the Energy Efficiency in various fields of agriculture sector the major initiative that have been undertaken are:

1. BEE being the nodal agency of the country is focusing towards conducting large scale awareness programs for farmers to promote the adoption of Energy Efficient pumps, Energy Efficient tractors, tillers etc. by them. BEE is exploring different kinds of outreach channels such as local print and electronic media (including television and local radio channels), village cultural events, Grameen sabhas or other panchayat initiated public events, etc.
2. BEE is organizing training programs for pump technicians who have a major role to play in replacing old inefficient pumps with BEE star rated pump sets.
3. To demonstrate the "IoT and sensor based Climate Smart Agriculture Initiatives" in agriculture sector various pilot projects have been kicked up (eg. Uttarakhand, Sikkim, Arunachal Pradesh etc.) to showcase and mainstream the business model of climate smart sustainable agriculture practice.
4. BEE with support of World Bank Group, Energy Sector Management Assistance Program (ESMAP) has taken up the project titled "Cold Chain Energy Efficiency in India: Analysis of Energy Efficiency opportunities in Packhouses". The project analysed the energy efficiency potential for promoting Energy Efficiency in pack-houses in India. The report of the study incorporated comments of the stakeholders such as M/o Agriculture and Farmers Welfare, M/o Food Processing, MOEFCC, NITI Aayog. M/o Power, Department of Commerce and APEDA.



5. BEE is in the process of drafting Design Guidelines and Operation & Maintenance Guidelines for an Energy Efficient Packhouse.

### **1.5.6 Small and Medium Enterprises (SMEs)**

#### **Introduction to Sector**

The Micro, Small and Medium enterprise (MSME) sector accounts for a large share of world economic activity. 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.

There are approximately 64 million MSME units in India providing employment to over 110 million people and contributes to about 28% of the GDP. The MSME sector in India is characterized with presence of diverse industrial clusters representing various energy intensive sectors such as ceramics, brick, glass, textile, metallurgical industries etc.

MSMEs holds immense potential in fostering energy efficiency and upgradation of technologies. Energy Efficiency (EE) is the centre of improving the competitiveness of the MSME sector and reducing carbon emissions. Adoption of Energy Efficient Technologies (EET) and best operating practices in industrial process is of vital importance for mitigating greenhouse gases (GHG) emissions and tackling climate change.

To make Energy Efficient India and follow a path of sustainable development, it is important that the MSME sector adopt the green and efficient manufacturing processes. Various programme/schemes of Govt. of India and efforts by BEE remain a key driving force of energy conservation/uptake of energy efficiency among the SMEs. While these programmatic interventions have made an impact, there is a long way to go before majority of SMEs voluntarily increase their uptake of energy efficiency interventions.

#### **National Programme on Energy Efficiency and Technology Upgradation of MSMEs**

To improve energy efficiency of MSMEs, significant efforts and progress has been made by BEE since 2007 which includes activities jointly implemented with bilateral partnerships exclusively for MSME sector. However, many gaps still remain in the ecosystem for providing EE services to MSMEs. Accordingly, to enhance the energy efficiency of this sector and make the stakeholders aware about their energy efficiency gap, and support them towards best practices and sustainable pathways. Bureau had taken several initiatives in FY 2020-21.

- To understand the consumption of energy and its flow within the MSME facilities along with the classification of energy usage and its relationship to processes and production outputs in current scenario, Energy and Resource Mapping activities in 5 more energy intensive SME



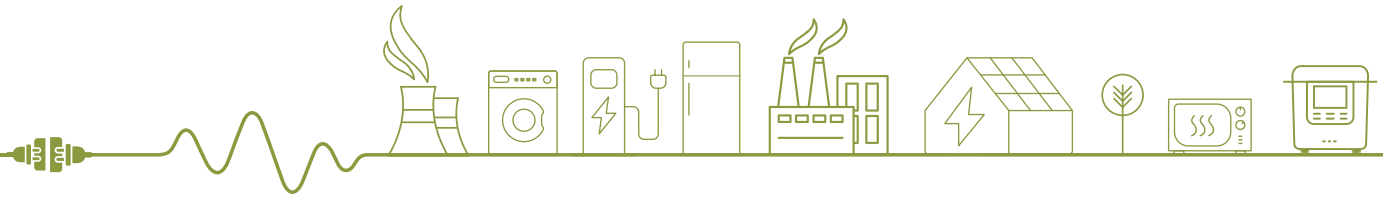
sectors (Glass & Refractory, Chemical, Bricks, Pharma and Dairy) were started. Activities for Foundry, Forging, Steel Re-Rolling and Paper sector are already under progress.

- Brick industry is the largest user of coal in India after Thermal Power Plant and Iron and Steel industry.
- Brick (MSME) sector alone consumes 45-50 million tonnes of coal equivalent annually, amounting to 5% to 15% of the total industrial energy consumption in the country. Recognizing the immense potential for energy efficiency in the bricks sector, conceptualized a scheme called Energy Efficient Enterprise (E3) Certification Scheme for clay brick manufacturing enterprises. The scheme was launched in March 2021 by Hon'ble Minister of State for Power & NRE. The scheme seeks to accelerate brick sector modernization, using market incentives to create customer demand to fulfil the vision for Aatmnirbhar Bharat. This scheme was launched as a part of 'Azadi ka Amrit Mahotsav' joining the celebration of 75th year of Indian Independence from imperial governance.



Launching of E3 Certification Scheme by Hon'ble Minister of State for Power & NRE (IC)  
with senior officials of Ministry of Power and Bureau of Energy Efficiency

- Taking forward the initiative of E3 Scheme with an aim to cover entire bricks sector, a mission document, namely National Bricks Mission, has been drafted based on the aforesaid E3 scheme. This mission document has been formulated with the following primary objectives:



- o To establish a market transformation mechanism based on 'Energy Efficient Enterprise (E3)' Certification Scheme for brick manufacturing enterprises, and its implementation framework.
- o To scale-up demand for resource efficient bricks produced by E3 certified enterprises in building construction through public procurement, market awareness, etc.
- o To develop an institutional and capacity support ecosystem for the brick industry to enhance uptake of E3 Certification.
- The Covid-19 pandemic, in FY 20-21, has forced the MSME sector to take a hard look at operational costs. A survey was conducted in association with GIZ to examine the impact of COVID-19 on Energy Efficiency Outlook of the MSME sector. The survey was quite successful; and laid down the areas of intervention in congruence with the expectations of MSMEs.
- Energy and Resource Mapping activities were initiated in forty (40) SME clusters of nine (9) sectors. More than three hundred (300) detailed energy audits have been carried out in MSMEs with detailed survey on the technological status, fuel type, operating practices, knowledge perception etc.
- The 18th and 19th meeting of SAMEEEKSHA (Small and Medium Enterprises Energy Efficiency Knowledge Sharing) platform was held on 12th October 2020 and 23rd February 2021, respectively. The discussions in the last meeting focused on the Energy Conservation (EC) guidelines for MSMEs and the actions required to implement these guidelines. The meeting was attended by senior officials from BEE, DC-MSME, MSME Associations, and entrepreneurs representing different energy intensive MSME sub-sectors across the country.
- In conjunction with Hon'ble Prime Minister call for making India self-reliant with Aatmnirbhar Bharat Abhiyan in India, a multi-institutional framework promoting concomitant capacity and institutional support was developed and shared with Ministry of MSME for modernizing the brick (MSME) sector with technological advancement and capacity building.

#### **Global Environment Facility (GEF) supported programmes in MSME Sector –**

Bureau of Energy Efficiency is also implementing EE technologies in many energy intensive clusters of India with the support from Global Environment Facility through UNIDO and World Bank towards common goal of facilitating the development of the SME sector in India through the promotion and adoption of clean, energy efficient technologies and practices.



## 1. GEF – UNIDO – BEE Project (2011-2021)

The project "Promoting Energy Efficiency and Renewable Energy in Selected MSME Clusters in India" has an objective to develop and promote market environment for introducing energy efficient technologies and enhancing the use of renewable energy technologies in process applications.

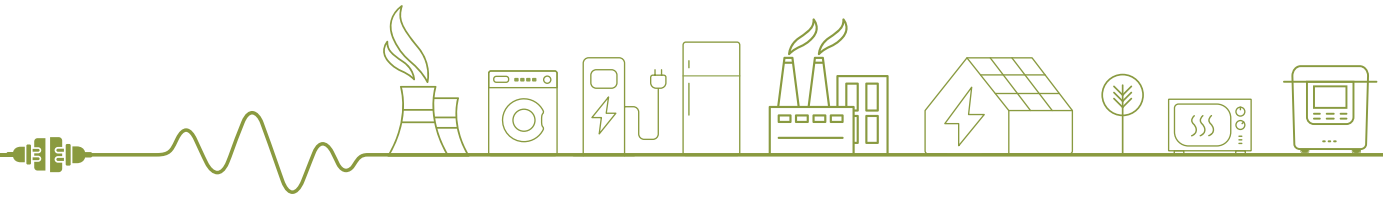
The project was initially operational in 12 MSME clusters across India in five sectors, and now has been scaled up to 11 new clusters in to reach out to MSME's at national level. The clusters are listed below. Lessons-learnt, knowledge and experience from the 12 clusters is being used to fast-track the implementation of EE/RE measures in the newly identified clusters so as to work in tandem in all the 23 clusters in the remaining timeframe of the project.

| Sector            | Clusters   |
|-------------------|--|
| Brass             | Jamnagar   |
| Ceramics          | Khurja, Thangadh, Morbi and Himmatnagar  |
| Dairy             | Gujarat, Sikkim, Kerala, Tamil Nadu, Odisha, Madhya Pradesh, Andhra Pradesh & Telangana, Haryana, Maharashtra and Punjab |
| Foundry           | Belgaum, Coimbatore, Indore, Ahmedabad and Howrah  |
| Hand Tools        | Jalandhar and Nagaur   |
| Mixed Engineering | Indore & Sikkim  |

Key achievements of this programme during FY 2020-2021 are as below:

- Facilitated installation of solar photovoltaic roof-top systems in 4 ceramic plants at Thangadh with a cumulative capacity of 250 kWp. Total roof-top PV installations in the cluster reached about 1.75 MWp.
- Development of 6 Promotional Videos and 15 Tutorial videos on EE/RE technologies have been started.
- Case studies flyers have been developed for the successful implementation of EE/RE technologies under Upscaling activity.

Project has scaled-up and expanded its activities to 11 new clusters, to the already existing 12 clusters. This is now bringing in more MSMEs under its umbrella and provide more technical support on energy efficiency at the National level.



### **Activities carried out by project under the upscaling phase:**

- As a part of implementation activities contractors have able to coordinate in procurement of 1081 EOI (Expression of Interest) from MSME units in all the clusters so far.
- 24 awareness workshops were organized to generate interest among the MSME units to participate in the assignment.
- Finalized 25 cluster specific EE and RE based technology compendiums covering 20 - 30 major energy saving measures possible in the clusters for the 5 sectors.
- So far 636 implementation plans were submitted to MSME units in different clusters for implementation of EE/RE technologies by the contractors.
- So far 257 implementations on EE/RE technologies were completed in MSME units across 23 clusters.

### **Benchmarking & Data Analytical Tool:**

Cluster level/unit level cloud-based data analytics tool is being developed for energy-use database and benchmarking system. This will provide the MSME entrepreneurs with simple way to keep round-the-clock track of the energy consumption in the industry. This will ensure avoidance of any energy loss in the operations by taking timely precautionary measures in the units.

- Cluster level survey/visits were carried out for understanding the processes and equipment's to develop the (Key Performance Indicators) KPI's
- Excel based KPI's has been developed for the different categories for the 12 clusters.
- Based on the excel based KPI's software tool is being developed.
- 10 MSME units per benchmarkable category have been identified to test the tool with active data.

### **Sustainability of Energy Management Centre**

Sustainability of EMC in the clusters is also being explored through developing sustainable business models for EMCs established under the project. This will provide sustainable models that can be adopted for EMC for continuation independently after the project duration.

- So far, preliminary consultations in 5 clusters are completed and remaining 3 clusters are ongoing.
- Round table consultation meeting will be organized once the feasibility report is finalized. Based on the inputs the final report on the sustainable models for the EMCs will be submitted.



### **Key indicators achieved by the project till March 2021.**

- Implemented 603 energy efficiency and renewable energy measures in 345 industries in 12 clusters.
- Achieved an energy savings of 10850 MTOE and avoided 62,868 Tonnes of CO<sub>2</sub> emissions per year.
- Achieved a monetary saving of INR 58.58 Crores and achieved investment of INR 89.76 Crores.

### **2. GEF – World Bank – BEE Project (2011-2019)**

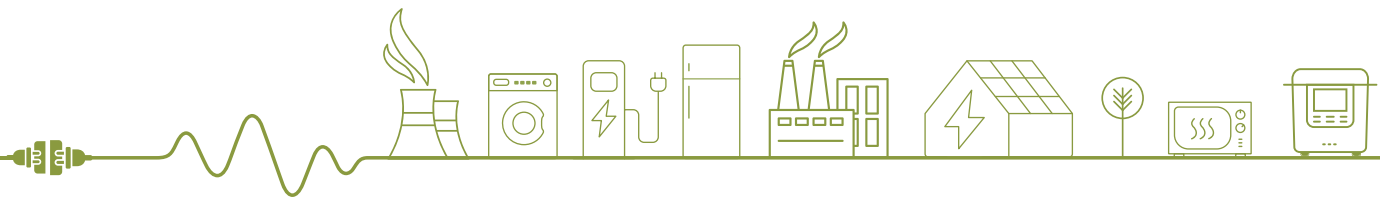
The project, having the objective of increasing demand for energy efficiency investments in targeted MSME clusters and to build their capacity to access commercial finance in more than 25 MSME clusters, was successfully concluded in May 2019. Implementation Completion Report of the project indicated that the project has created overall confidence and thrust in MSMEs for adopting energy efficient technologies and was able to satisfactorily achieve its envisaged outcome.

Although, the energy saving potential is immense in this sector, Bureau from here is looking ahead for overall industrial transformation along with energy efficiency featuring initiatives under decarbonization, Industry 4.0, ISO 50001 and implementation of energy efficiency guidelines. In this regard, BEE has drafted plan for 2021-2026 with a strategic vision incorporating the necessary supports which MSMEs are anticipating.

### **3. Facility for Low Carbon Technology Deployment Program (FLCTD Program)**

#### **Background:**

- Facility for Low Carbon Technology Deployment (FLCTD) ([www.low-carbon-innovation.org](http://www.low-carbon-innovation.org)) is a project implemented by Bureau of Energy Efficiency in collaboration with the United Nations Industrial Development Organization (UNIDO) and is funded by the Global Environment Facility (GEF).
- The main objective of the project is to facilitate the validation of innovative low carbon technology thereby assist in scale up. deployment and scaling up of low-carbon technologies in India to promote the use of innovative clean and low-carbon technologies in selected sectors and thereby address technology gaps to mitigate climate change.
- Under this project has developed and evolved a mechanism to identify early-stage innovations that address technology gap, and have potential for energy savings as well as replication. This is being achieved through a series of annual “Innovation Challenges” an open award competition calling for innovative solutions in 6 technology verticals of (i) Waste Heat Recovery, (ii) Pumps, Pumping Systems and Motors, (iii) Space Conditioning, (iv) Industrial Resource Efficiency, (v) Industrial IoT and (vi) Electrical Energy Storage.



- The project provides financial assistance up to US \$50,000 to the winners to validate the innovation and demonstrate its efficacy in the field conditions – a necessary pre-condition for commercialization.

### Activities carried out during 2020-21

1. In the financial year 2020-21 FLCTD launched third annual innovation challenge on 6th April 2020 in WHR, Space Conditioning and Pumps vertical. 4 outreach webinars were held in on 17th, 21st and 27th April which attracted participations of 766 participants across industries, startups, academia, and policy agencies and research organizations, among others. Also, the project successfully leveraged the GoI platforms like AGNIi and Startup India for wider publicity of the innovation challenge
2. On 22nd May, FLCTD held a half-day online workshop on “Mainstreaming innovation for adoption of low-carbon technologies”, with a panel of industry leaders and experts. The workshop was attended by 495 participants.
3. The FLCTD Accelerator call-for-application for the 2nd accelerator cohort was launched on Startup- India website on 5th June. After receiving 155 applications on 24th August the 2nd batch of FLCTD Accelerator was launched with 25 startups shortlisted for the programme and the 20 mentors.



4. The 3rd annual innovation challenge was closed on 31st May and received 177 expressions of interest i.e., 69 entries in Waste Heat Recovery vertical, 64 in Space Conditioning and 44 in Pumps & Motors technology vertical. After screening and shortlisting of the applications by the experts, 13 companies were announced as winners which are to be supported under the project.
5. The announcement of call-for-applications for the 2nd batch Accelerator was made in the 1st week of June jointly with “Startup India”. The call-for-applications to accelerator on Startup India web-portal was closed on 31st July 2020 and received 155 applications out of which 28 were selected.
6. On January 18th and 19th, competition was organized among the 40 participants including the participants from the 1st cohort who attended the accelerator programme.
7. The innovation challenge on three new technology areas 2) Industrial IoT b) Industrial Resource Efficiency c) Electrical Energy Storage was launched on FLCTD website on 31st October 2020 with the application submission deadline as 18th December 2020. A total of 6 webinars and 2 workshops were held in November and December to create awareness. A total of 219 expressions of interest were received for this innovation challenge from which the expert panel selected 20 winners.

#### **1.5.7 Capacity Building of DISCOMs**

The “Demand Side Management” program was commenced by BEE during 2014. Capacity Building of DISCOMs program is one of the components under this program.

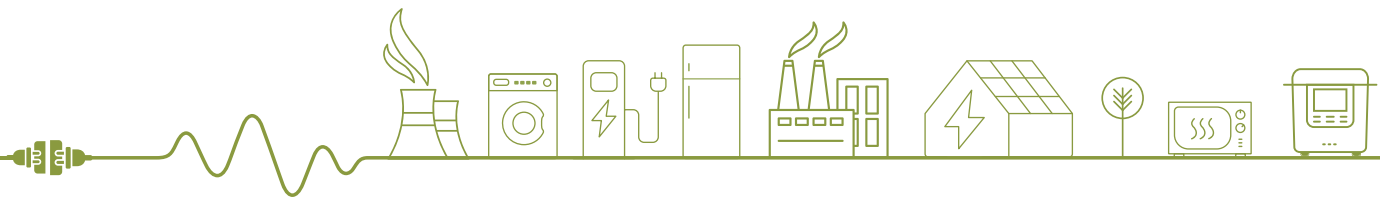
The objective of the program is capacity building of DISCOMs for carrying out load management program, development of DSM action plan and implementation of DSM activities in their respective areas, thereby reducing peak electricity demand. During the period 2014 - 2017, 34 DISCOMs participated in this program and during FY 2017 – 2020, 28 DISCOMs have participated under this program.

The major activities viz. carrying out load research activity & finalization of their DSM action plans, development of master trainers through ToT program, capacity building of circle level officials and providing manpower support to DISCOMs have been carried out by zone wise Project Management Consultant (PMC) engaged by BEE.

#### **Achievements:**

The major achievements under this component are as follows:

- 28 DISCOMs have participated on PAN India level as beneficiary DISCOMs under this programme.



- Dedicated DSM Cell has been established by 27 DISCOMs to carry out DSM activities.
- DSM regulations have been notified for 24 States and 7 UTs. Remaining states are pursuing to notify their DSM regulations for their respective states.
- BEE had engaged 5 Project Management Consultants and following activities have been completed so far.
  - ◊ Load research study has been conducted for 26 DISCOMs and their DSM action plans have been finalized.
  - ◊ 28 nos. of training of trainers programs have been organized and 920 senior officials have been trained on DSM and Energy Efficiency.
  - ◊ 88 nos. of capacity building of circle level officials of DISCOMs training program have been organized and imparted training to 2921 officials on DSM and Energy Efficiency under this program.
  - ◊ Manpower support was provided to 60 DISCOMs for implementations of DSM activities under this programme.
  - ◊ 69 DSM project proposals for various DSM interventions have been prepared and submitted to respective DISCOMs for implementation.
  - ◊ It is estimated that there is a saving potential of 13018 MW and annual saving of about 26575 MU may be achieved with the intervention of various DSM and Energy Efficiency program with the investment of Rs. 43,775 Crore.

#### **A. Training of Trainers program for DISCOMs on DSM and Energy Efficiency**

The training of trainers programs have been organized in association with the SDAs to develop the Master Trainers on DSM & Energy Efficiency from the senior/middle management level officials of DISCOMs. The aim of this program was capacity building of DISCOMs officials for carrying out DSM and Energy Efficiency activities in their jurisdiction and to impart training to the circle level officials.

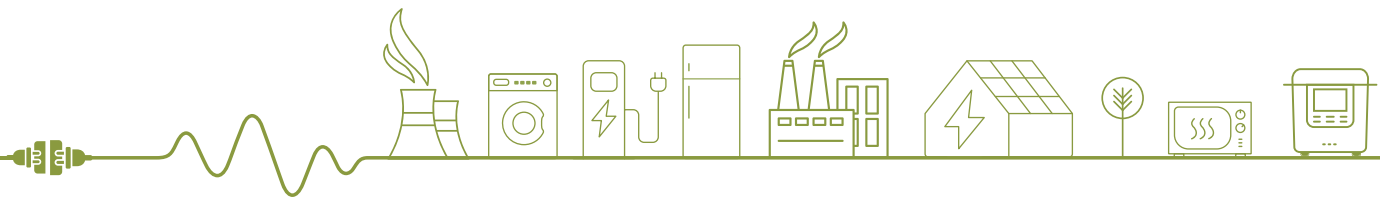
Training of trainers programme was designed to train senior officials of DISCOMs on Demand Side Management and Energy Efficiency to create master trainers on the subject. The programme covers basics of DSM, current status of power sector, energy conservation and DSM regulations. The programme also covers entire process of demand side management starting with load research activity, which helps in identifying DSM potential, followed by cost effectiveness of DSM measures, project design, DSM financing, implementation framework and monitoring, verification and reporting. The programme also includes a number of national and international case studies to share learning on DSM.



### **B. Capacity building of circle level officials of DISCOMs on DSM and Energy Efficiency**

Circle level training programs were the knowledge sharing sessions undertaken under the capacity building of DISCOMs program on DSM and Energy Efficiency. The primary objective of this program was to introduce the trainers to the changing dynamics of energy efficiency in the country. The program was mainly designed to provide basic concepts of DSM and various financial analyses involved in its implementation





### C. Preparation of DSM action plans based on load research study conducted for DISCOMs

On the basis of the load research study conducted, DSM action plans were prepared for the DISCOMs. These DSM action plans have been submitted to the DISCOMs for implementation.



It is expected that implementation of these interventions would contribute to the national efforts and combat climate change and would also encourage private investors and consumers to support energy efficiency market. The recommendations as part of the action plan include the followings:

#### Industrial consumers

- Implementation of focused Energy Efficiency Program in selected industrial categories
- Employee Awareness Program
- Promotion of energy efficient appliances/equipments

#### Domestic and Commercial consumers

- Promotion of energy efficient appliances
- Consumer awareness campaign

The funding mechanism identified includes models like ESCO Mode, on bill financing, Recovery Cost through ARR, Grants from State Government etc. apart from SME banking like SIDBI.

#### Rice Cookers for North–East states

Rice cooker is overwhelmingly used in North-Eastern states, specifically in the hill states. Most of the rice cooker used in this region are local or China made and hence energy inefficient. Along with this, there are scope to improve appliances in categories like Lighting, Fans and ACs in this region of the country.



#### D. Savings Estimation for utility on DSM & Energy Efficiency



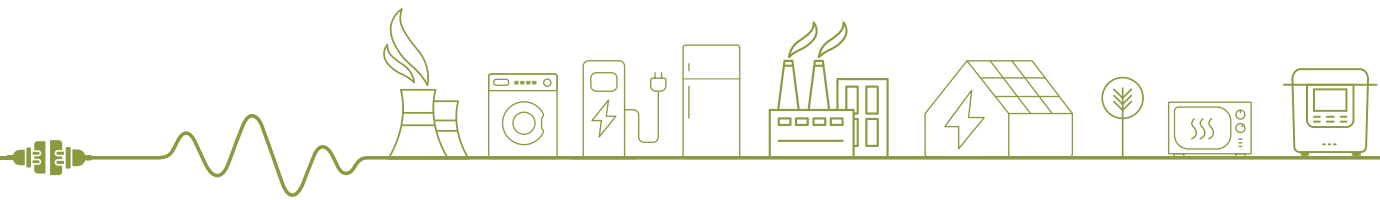
Based on the load research study, potential scope of electrical energy savings in the different consumer categories and possible interventions have been identified in various DISCOMs. 51 DSM proposals have been submitted to DISCOMs for implementation in their jurisdiction.

It is estimated that there is a saving potential of 13018 MW and annual saving of about 26575 MU lies with these 28 DISCOMs and investment requirement is about Rs. 43,775 Crore

##### 1.5.8 Strengthening of State Designated Agencies (SDAs)

The Energy Conservation Act (EC Act) mandates creation of a two-tier organization structure to promote the efficient use of energy and its conservation in the country with BEE as the nodal agency at central level and SDAs as nodal agencies at State / Union Territory (UT) level. Section 15(d) of the EC Act stipulates that the State Government / UT Administration may designate any agency at the State level to co-ordinate, regulate and enforce the provisions of the Act within the State/UT. Till date, 36 States/UTs have nominated a SDA in their respective State/UT. These agencies differ from State to State with Renewable Energy Development Agency comprising 44%, Power Department comprising 22%, Electrical Inspectorate comprising 17%, Distribution Companies comprising 11%, and Standalone SDA comprising 6%.

In order to stimulate EE & EC activities at State level with emphasis on building institutional, technical and financial capacities of the SDAs, the MoP had approved the scheme for “Providing financial assistance to the SDAs to coordinate, regulate and enforce efficient use of energy and its conservation at State level”. This scheme has been supplemented by “Contribution to State Energy Conservation Fund (SECF)” scheme. To continue with the efforts and future endeavors on EE & EC and to realize substantial energy savings in each State, the scheme for “Strengthening of SDAs to promote efficient use of energy and its conservation at State level” was continued for the FY 2020-21.



**A) Providing financial assistance to the SDAs to coordinate, regulate and enforce efficient use of energy and its conservation at the State level.** During FY 2020-21, fund amount of Rs. 29.56 crore was disbursed to 30 SDAs for implementation of EE & EC activities under the following sub-components.

- **State Partnership for Energy Efficiency Demonstrations (SPEED):** This sub-component involves implementation of demonstration projects in the areas of street lighting, water pumping (drinking water supply systems, agricultural water pumping systems, etc.), retrofitting of electrical equipment/appliances in buildings, installation of smart-meters in municipalities, Government buildings, etc., waste heat recovery, heating, ventilation and air conditioning, etc. Following are the main objectives of these demonstration projects.
  - To showcase the effectiveness of energy efficient devices/technologies through practical demonstrations.
  - To facilitate the State Governments in replicating these demonstration projects through various departments/agencies.

30 nos. of demonstration projects in the areas of street lighting, water pumping, retrofitting of electrical appliances in buildings, and waste heat recovery were implemented by 21 SDAs during FY 2020-21. In addition, 22 SDAs undertook replacement of existing conventional appliances with energy efficient appliances in 800 nos. of Government schools.

- **Model Energy Efficient Village Campaign:** This sub-component is undertaken by the SDAs wherein villages comprising of 200 – 250 households (relaxed for North Eastern States, UTs and other special category States) are converted to energy efficient villages by replacing existing inefficient equipment/appliances with star labeled appliances which may include water pumps, fans, induction cook stoves, diesel generators, water heaters, street lights and household lighting. While two to three villages in each state are likely to be covered under this campaign, more villages are likely to be benefitted with legislators' push for similar interventions through other resources to showcase the effectiveness of energy efficient devices/technologies in villages falling under their jurisdiction.

During FY 2020-21, 180 nos. of villages were taken up by 21 SDAs under this endeavor for converting them into model energy efficient villages by replacing existing inefficient electrical appliances with BEE star rated appliances including household bulbs, street lights, fans, water pumps, etc.

- **Institutionalization of enforcement machinery at State level:** Main objective of this sub-component is to develop robust enforcement mechanisms to ensure effective implementation of Bureau's various programmes like PAT, ECBC, S&L, etc. and undertake



capacity building of the enforcement machinery at State level including Inspecting Officers appointed at SDAs, Adjudicating Officers at SERCs and other government officials who may be associated with carrying out enforcement of the said programmes.

By end of FY 2020-21, 22 SDAs have appointed their Inspecting Officers, in keeping with the notified Inspection Rules.

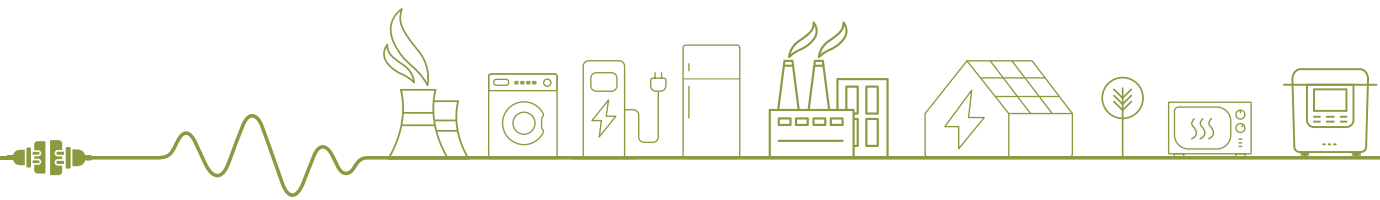
- **Manpower support to SDAs:** This constituent of the programme for Strengthening of SDAs enables SDAs to engage manpower at their offices who assist them in executing their functions smoothly and effectively.
- **State Energy Efficiency Research & Outreach Programme:** This sub-component has the following main objectives.
  - To strengthen partnership between policy makers & educational / technical / research institutions to forward energy efficiency drive.
  - To enhance the outreach activities undertaken by SDAs.

Many awareness campaigns physically / virtually have been conducted at regional/local level, wherein, awareness on Energy Conservation and Energy Efficiency is spread amongst the general public, officials of Govt. depts., school students & teachers, etc.

Wide-scale awareness on Energy Conservation and Energy Efficiency has been created through promotional material like pamphlets, booklets, banners, brochures, posters, etc. developed in English and local dialects.

Some other modes of awareness creation have been jingles being aired on radio channels, advertisements on FM, television, etc., hoardings at massed places like railway stations, etc.

- Workshops / capacity building of energy professionals: Main objective of this sub-component is to enable SDAs take all measures necessary to disseminate information for efficient use of energy and its conservation to all concerned stakeholders at State level. During 2020-21, about 130 nos. of such workshops cum training programmes were organized by the SDAs.
- Analysis and survey of the impact of energy conservation activities by SDAs: Main purpose of this constituent of the scheme is to enable SDAs document outcomes of various EE & EC activities undertaken by them at State level.
- Maintenance and updation of Internet platform and other database created: Primary objective of this part of the scheme is to enable SDAs to regularly update contents of their established website and various databases available on it. Information availed through websites of SDAs is beneficial and valuable for various stakeholders and all sections of the society.



- Student Awareness / Student Capacity Building Programme (SCBP): Following are the major activities being undertaken by SDAs under this component:
  - Development and incorporation of chapters on EC for School/ State Boards/ ITI/ Dip. Engg. College Curriculum.
  - Training of School Teachers/ Lecturers on new modules/chapters.
  - Debate and Quiz competitions in Schools and at Degree College level, ITI, Diploma Engineering Colleges (polytechnic), Engineering Colleges upon creation of energy clubs.

## **B) Contribution to State Energy Conservation Fund**

Section 16(1) of the EC Act 2001 requires State Governments/UT Administrations to constitute a fund called State Energy Conservation Fund (SECF) for the purposes of promotion of efficient use of energy and its conservation within the state. In this context, a scheme titled “Contribution to SECF” was approved by the MoP, during the XI plan which is being continued then onwards.

The SECF can facilitate to overcome major barriers in implementation of EE projects. For undertaking EE projects from SECF, major part of the funds disbursed under SECF is to be earmarked separately as Revolving Investment Fund (RIF). This RIF may be used to finance implementation of EE projects in public buildings including Central Government, State Government and Central or State Government undertakings’ / agencies’ buildings, EE street-lighting or common area lighting projects, EE projects in public drinking water pumping stations and water pumping in agricultural fields, EE projects in MSME industrial units in different clusters, etc.

The contribution under SECF is made to those State Governments/UT Administrations who have created their SECF and finalized the rules and regulations to operationalize the same. The scheme is for contribution by BEE to all the State/UTs with a maximum ceiling of Rs.4.0 crore for any State/UT provided in two installments of Rs.2.0 crore each. The second installment under contribution to SECF is released only after the states have provided a matching contribution to the BEE’s first installment. The matching contribution by State Government for North Eastern States and UT Administrations is relaxed to Rs.25.0 lakh instead of Rs.2.0 crore. As on date, 32 States have established

### **1.5.9 Miscellaneous**

#### **National Certification Examination for Energy Managers and Energy Auditors**

As per the Energy Conservation Act 2001, it is mandatory for all the designated energy consumers to get energy audit conducted by an Accredited Energy Auditor and to designate or appoint an Energy Manager.



BEE has regularly conducted the National Certification Examination, nation-wide, for Energy Managers and Energy Auditors since May 2004 and has created a cadre of professionally qualified energy managers and auditors with expertise in energy management, project management, financing and implementation of energy efficiency projects.

**The country has now total 17,256 Energy Auditors and Energy Managers, out of which 10,456 are qualified as Certified Energy Auditors,** from the previous 20 examinations conducted during 2004-2019.

The National Certification Examination exams are conducted normally in the month of September, the 21st examination was supposed to be held in September 2020 but due to covid-19 pandemic situation, the exam to be conducted in the year 2020 and 2021 has been scheduled in the year 2021. About 4881 registration for the 21st examination has been received. If the situation continues, conduction of on-line exam may also be explored.

The capacity building of energy managers and energy auditors through National Certification Examination route will have a long-term impact on the Indian economy by making it less energy intensive.

#### **i) Accreditation of Certified Energy Auditors**

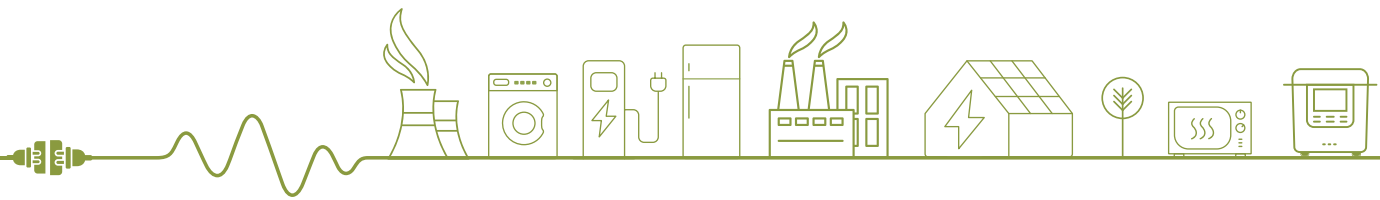
The Energy Conservation Act, 2001 provides powers to the Central Government to designate energy intensive industrial units and other establishments as “Designated Consumers”, who inter-alia, periodically have to get the energy audit carried out by Accredited Energy Auditors. The Act also mandates the Bureau of Energy Efficiency to accredit energy auditors for this purpose.

The certified energy auditors are assessed and recommended for accreditation by the Accreditation Advisory Committee, which is chaired by the Director General, BEE and members drawn from Central Electricity Authority, Ministry of Petroleum and Natural Gas and Ministry of Coal. These recommended names are then approved by the Management Advisory Committee of the Bureau.

At present there are **272 Accredited Energy Auditors in the country.**

#### **ii) Empanelment of Accredited Energy Auditor Firms under PAT**

It is mandatory for all Designated Consumers (DCs) to get Measurement & Verification (M&V) work from Accredited Energy Auditor empanelled firms. At present total no. of 85 empanelled Accredited Energy Auditor firms are operating to undertake the function of verification and check verification including Measurement & Verification (M&V), regarding compliance with the energy consumption norms and standards and issue or purchase of energy saving certificates, under Perform Achieve and Trade (PAT) scheme.



### iii) Refresher Course for the renewal of Energy Manager Certificate

As per the Energy Conservation Act, 2001, an Energy Manager is one who has passed three papers (General Aspects of Energy Management & Energy Audit; Energy Efficiency in Electrical Utilities; Energy Efficiency in Thermal Utilities) of the National Level Certification Examination conducted by Bureau of Energy Efficiency (BEE) annually.

Bureau of Energy Efficiency (BEE) issues certificate to the qualified Energy Managers/ Energy Auditors. Under Regulation 8 of the Bureau of Energy Efficiency (Certification Procedures for Energy Managers), 2010, this certificate has to be renewed after every five years, by attending a refresher training course conducted by the Bureau or approved institute or organization. The main objective of this course is to update these energy managers about the latest technologies for energy management while implementing energy norms and standards and also to boost their confidence and motivate them to take up challenging assignments.

**BEE has conducted 90 workshops in two phases and about 2,356 Energy Managers/ Energy Auditors have attended the course.**

#### **Awareness and Outreach (2020-21)**

The Bureau of Energy Efficiency (BEE) launched an 'Awareness Campaign' to create consciousness regarding energy conservation among the public. According to the guidelines laid down by the Ministry of Information and Broadcasting, a media campaign through electronic, outdoor and print media was carried out through the Directorate of Advertising & Visual Publicity (DAVP) and the National Film Development Corporation of India (NFDC). In order to create awareness about Energy Conservation and spread it among masses for wider coverage, BEE has undertaken several activities in Print, Electronic, Social, and Outdoor Media, which are listed as given below:

#### **1. Print Media:**

BEE has been releasing advertisements in Newspapers to spread awareness and educate people about star rating of electric appliances. This helps in educating people more about the labels and their use. In addition to this, advertisements were also released pan India for announcing National Energy Conservation Awards (NECA) under the categories of Industry, Institution, Appliance, Building, Transport etc.

#### **2. Electronic Media:**

##### **Radio Program:**

To encourage people participation, BEE has been running Bachat Ke Sitare - Dost Humare, a sponsored radio programme of 15 minute episodes (6 per week) in 19 languages. During the year, BEE has broadcasted its radio programme in All India Radio (FM GOLD, FM RAINBOW, Primary Channels and Vividh Bharti) in the evening time band between 7-8 pm from Monday to Saturday till March, 2021.



**Bachat Ke Sitare Dost Hamare**  
Radio Programme on Energy Conservation

**Schedule – Primary Channels**

| STATIONS  | TIMESLOT                            | STATIONS       | TIMESLOT       |
|-----------|-------------------------------------|----------------|----------------|
| Gowhat    | 09.00 PM                            | Ranchi         | 09.00 AM       |
| Ahmedabad | 11.30 AM                            | Bhopal         | MON - 12.30 PM |
| Jammy     | 02.45 PM                            |                | TUE - 06.50 AM |
| Kohima    | MON-FRI - 10.30 AM & SAT - 11.30 AM |                | WED - 08.50 AM |
| Gangtok   | 10.00 AM                            |                | THU - 12.30 PM |
| Srinagar  | 12.40 PM                            |                | FRI - 09.00 AM |
| Tura      | 07.30 PM                            | SAT - 12.30 PM |                |
| Imphal    | 08.30 PM                            | Shimla         | 11.30 AM       |
| Aizawl    | 07.15 PM                            | Bhopal         | 06.35 PM       |
| Agartala  | 07.15 PM                            | Jaipur         | 09.25 AM       |
| Patna     | 11.15 AM                            | Rajpur         | 08.00 PM       |
|           |                                     | Port Blair     | 07.00 PM       |

© beemedia | © bureauofenergyefficiency

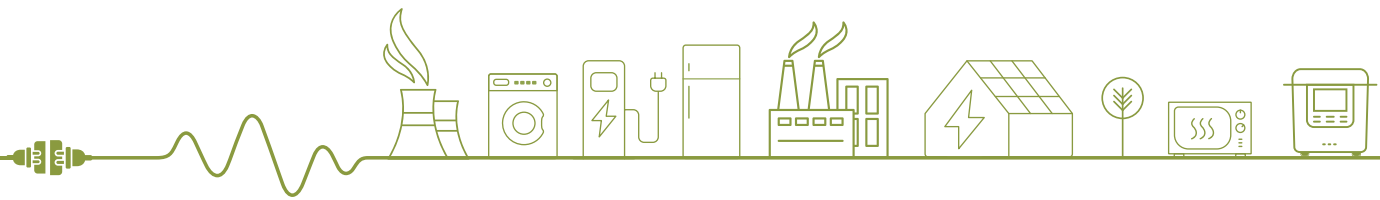
Each episode included awareness related to energy conservation, global warming and tips on energy consumption. In the programme general messages were duly integrated in an entertaining way.

### 3. Outdoor Media:

#### Branding of Lajpat Nagar Metro Station:

Bureau of Energy Efficiency in its endeavour to promote energy efficiency hired Lajpat Nagar Metro Station for branding and displaying awareness messages at the station. The station having strategic location provided unique promotional avenues like graffiti on walls. Various messages were displayed to cater to the general public commuting through the area.





#### 4. Social Media:

BEE has been actively disseminating information about its schemes, messages on energy conservation and tips to conserve energy through its social media handles. In the last year, over 1,200 messages were posted on BEE's all social handles. i.e. Facebook, Twitter, Instagram, LinkedIn, and YouTube channel.

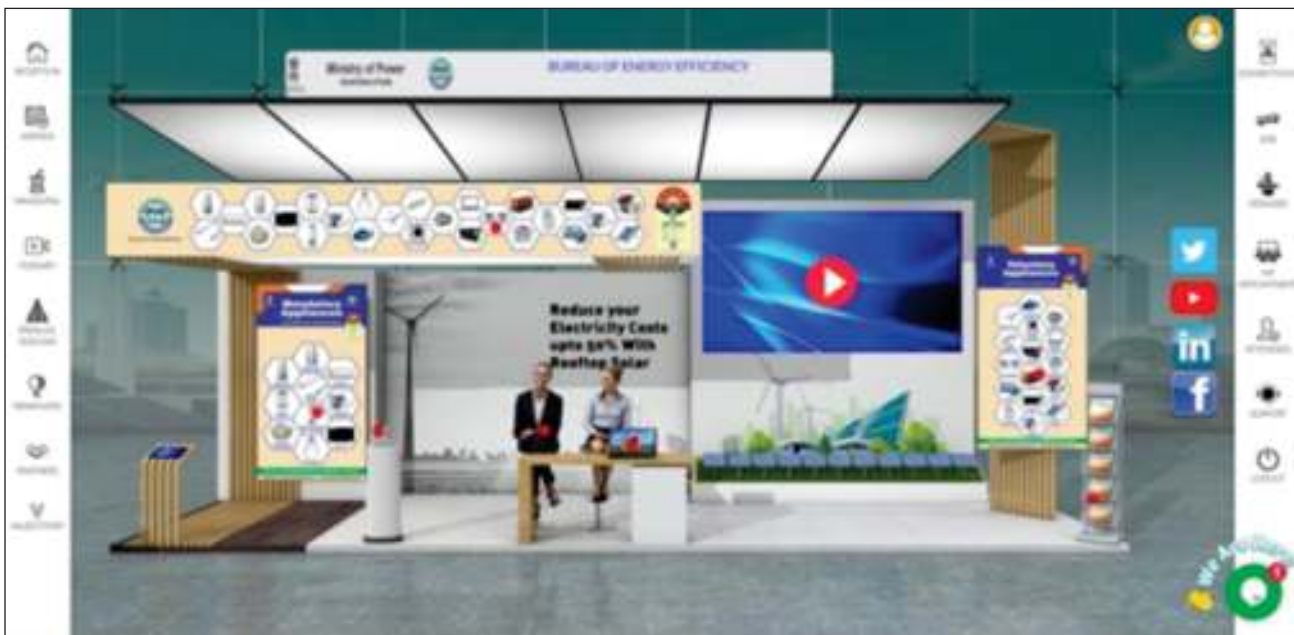
Live coverage of the National Energy Conservation Awards (NECA) 2020 hybrid event on various social media channels i.e. Twitter, Facebook and YouTube. The hybrid event witnessed more than 2,100 delegates, awardees and participants through video conferencing and other social media platforms.





## 5. Exhibition:

In the FY 2020-21, BEE participated in the 3rd Global RE-INVEST Renewable Energy Investors' Meet & Expo through virtual stall/booth in November, 2020. RE-INVEST 2020 included a two-day virtual conference on renewable and future energy choices and an exhibition of manufacturers, developers, investors and innovators engaged in the clean energy sector.



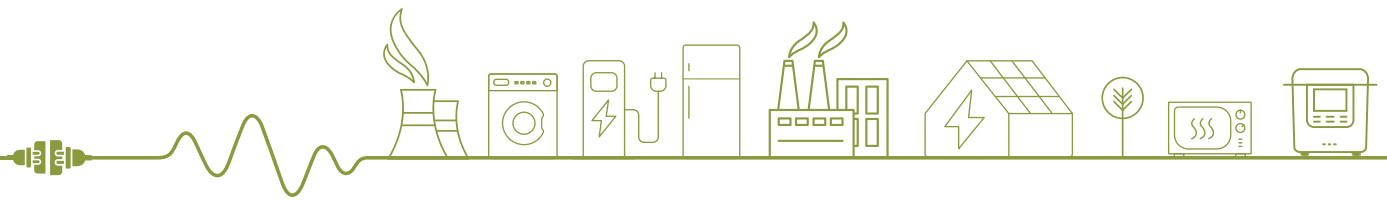
The event provided a great opportunity to various countries, states, business houses & organizations to showcase their strategies, achievements and expectations. It facilitated collaboration and cooperation with key stakeholders in India, which has emerged as one of the world's largest renewable energy markets today.

Ministerial Delegations from across the world, global industry leaders, and large number of delegates participated in the event. The event included 6 focused country sessions, alongside over 20 plenary and technical sessions, a special Chief Ministerial plenary session. Over 200 speakers including around 80 international speakers spoke in various sessions. RE-INVEST also included an exhibition with over 100 exhibiting companies.

## 6. Specific Awareness Campaigns

### Launch of 'GO ELECTRIC' Campaign

The Ministry of Power (MoP) has designated the Bureau of Energy Efficiency (BEE) as the Central Nodal Agency (CNA) under the issued Guidelines and Standards in terms of which Bureau of Energy Efficiency initiated a nationwide "Go Electric" media campaign to educate the general public regarding the benefits of E-Mobility and clean & safe cooking.



In this regard, “GO ELECTRIC” awareness campaign and a sideline E-Mobility Ecosystem Exhibition was inaugurated by Shri. Nitin Gadkari, the Union Minister for Road Transport & Highways, Micro, Small & Medium Enterprises in the august presence of Shri. R. K. Singh, the Minister of State (IC) for Power and New & Renewable Energy, Minister of State for Skill Development and Entrepreneurship on 19th February, 2021 at Vigyan Bhawan, New Delhi.





### **Launch of 'Amrit Mahotsav' in Power and Energy Sector by initializing of Energy Efficient Enterprise (E3) Certifications Program for Brick Sector.**

Shri RK Singh, Minister of State (I/C) for Power and New & Renewable Energy and Minister of State for Skill Development & Entrepreneurship, launches "Energy Efficiency Enterprise (E3) Certifications Programme for Brick manufacturing Sector" in order to kick-start a series of events from Ministry of Power, Government of India under 'Azadi Ka Amrit Mahotsav' in March, 2021.

On this occasion, Shri R K Singh appreciated the responses received from the bricks manufacturing enterprises for availing this certificate. He congratulated them for agreeing to shift from conventional to efficient technologies and product shift towards low density bricks with better thermal insulation.

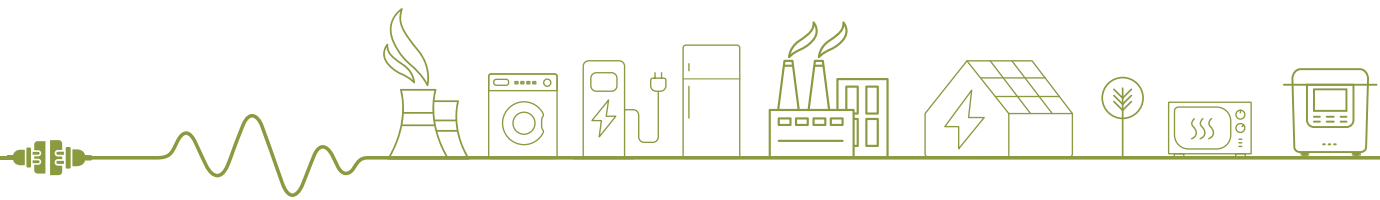


Live coverage of 'Amrit Mahotsav' in Power and Energy Sector by initializing of Energy Efficient Enterprise (E3) Certifications Program for Brick Sector on various social media channels i.e. Twitter, Facebook and YouTube and viewers were connected with the event through these platforms.

#### **7. Publication:**

Bureau published many documents and reports during this year. The copies were distributed to concerned stakeholders and were also uploaded on the website for wider dissemination. List of the documents and reports published during the year are given below:

- Bachat Ke Sitare 'Garah Patrika'
- Impact Assessment Report 2018-19 (English)
- Impact Assessment Report 2018-19 (Hindi)
- Unnatee Report
- Energy Conservation Guidelines for MSMEs
- Preliminary Findings of PAT Cycle-II



## 8. Other Awareness Activities:

- A Mascot Designing Competition was carried out by BEE through crowd sourcing at MyGov portal in March-April 2020.
- Print, electronic, and social media platforms were used effectively to propagate messages on Energy Conservation and Energy Efficiency.
- Created awareness videos for the Perform, Achieve and Trades scheme, Climate Change, Energy Transition and Multimedia Tutorials and uploaded on BEE website, and YouTube Channel of BEE.

## 1.6 National Energy Conservation Award and Painting Competition

### 1.6.1 National Energy Conservation Award

The Bureau of Energy Efficiency (BEE), under Ministry of Power, is mandated as per the Energy Conservation Act 2001, to regulate and promote energy efficiency and its conservation in India.



One of the important endeavor under awareness and outreach programme has been the Energy Conservation Awards. To raise awareness on energy efficiency and its conservation, the BEE, under the guidance of Ministry of Power, recognizes and encourages endeavors of industrial units, institutions and establishments in reducing energy consumption by felicitating them with Energy Conservation Awards on the occasion of National Energy Conservation Day, celebrated on 14th December every year.

The awards were given for the first time on December 14, 1991, which was declared as the 'National Energy Conservation Day'. Since then, National Energy Conservation Awards (NECA) has been attracting the attention of all the stakeholders and has witnessed increasing participation level year after year. These awards are presented on EC day by eminent dignitaries and highest functionaries such as Hon'ble President, Hon'ble Prime Minister and Hon'ble Union Minister of Power etc.

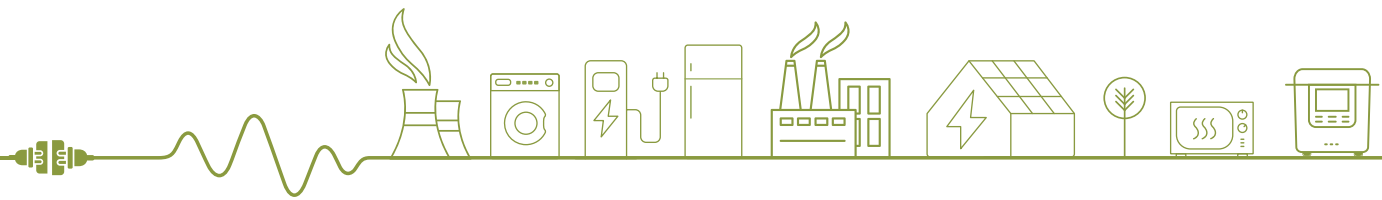
For 2020 year, the Award Committee has selected 16 units for First prize, 10units for Second Prize, 25 units for Certificate of Merit and 6 Awards for the Most Energy Efficient Appliance of the Year.

The National Energy Conservation Day 2020 was celebrated in hybrid mode in the august presence of Shri R.K. Singh, Minister of State (I/C) for Power and New & Renewable Energy and Minister of State in the Ministry of Skill Development and Entrepreneurship on 11th January 2021.



For NECA 2020, 409 Units have participated and collectively achieved an annual monetary savings of ₹1503 crores and saved 3007 Million units of electrical energy.

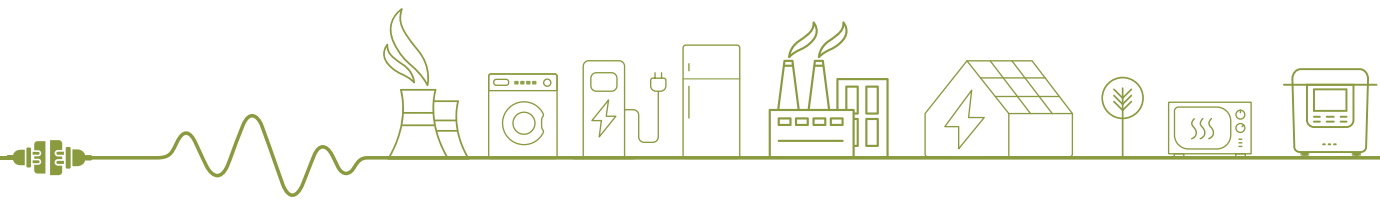
The list of Award Winners in Industry, Building, Transport, Institutions and Energy Efficient Appliance Manufacturers is:



| NATIONAL ENERGY CONSERVATION AWARD – 2020 |                  |                     |                      |  |  |  |
|---|------------------|---------------------|----------------------|--|--|--|
| SR. NO.                                   | SECTOR/ CATEGORY | SUB-SECTOR          | SUB-DIVISION         | FIRST PRIZE  | SECOND PRIZE   | CERTIFICATE OF MERIT   |
| 1.1                                       | INDUSTRY         | THERMAL POWER PLANT | >100 MW (Coal & Gas) | GMR Warora Energy Ltd - 2 x 300 MW, Chandrapur (Maharashtra)           | JSW Energy (Barmer) Limited, Barmer (Rajasthan)        | IL & FS Tamil Nadu Power Company Limited, Chennai, (Tamil Nadu)    |
|   |                  |                     |                      |  |  | Nabha Power Limited, Rajpura (Punjab)                              |
|   |                  |                     |                      |  |  | Rihand Super Thermal Power Station, Sonebhadra (Uttar Pradesh)     |
|   |                  |                     |                      |  |  | Budge Budge Thermal Power Station, South 24 Parganas (West Bengal) |
|   |                  |                     | <100 MW (Coal & Gas) | UltraTech Cement Ltd. - Awarpur Cement Works, Chandrapur (Maharashtra) | –  | –  |
| 1.2                                       |                  | DAIRY               | –                    | Heritage Foods Limited, Chittoor (Andhra Pradesh)                      | Heritage Foods Limited, Visakhapatnam (Andhra Pradesh) | Heritage Foods Limited, Bengaluru (Karnataka)                      |
| 1.3                                       |                  | ALUMINIUM           | LARGE                | Vedanta Limited Smelter Plant-1, Jharsuguda (Odisha)                   | –  | –  |
|   |                  |                     | SMALL                | Vedanta Limited (Lanjigarh), Kalahandi (Odisha)                        | –  | –  |



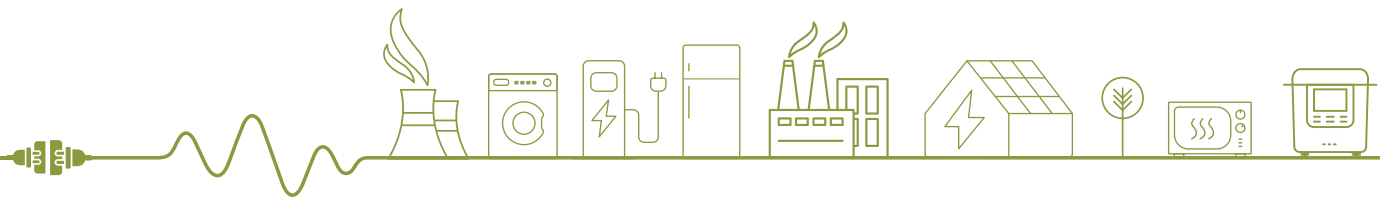
| <b>NATIONAL ENERGY CONSERVATION AWARD – 2020</b> |                         |                           |                              |  |   |  |
|--|-------------------------|---------------------------|------------------------------|--|---|--|
| <b>SR. NO.</b>                                   | <b>SECTOR/ CATEGORY</b> | <b>SUB-SECTOR</b>         | <b>SUB-DIVISION</b>          | <b>FIRST PRIZE</b>   | <b>SECOND PRIZE</b>   | <b>CERTIFICATE OF MERIT</b>  |
| 1.4  |                         | <b>PETROLEUM REFINERY</b> |                              | IOCL-Paradip Refinery, Jagatsinghpur (Odisha)  | –   | Bharat Petroleum Corporation - Kochi Refinery, Ernakulam, Koshi (Kerala)               |
| 1.5  |                         | <b>AUTOMOBILES</b>        |                              | Tata Motors Limited, Dist. Jamshedpur (Jharkhand)  | Tata Motors Limited, CVBU, Lucknow (Uttar Pradesh)                                    | Tata Motors Ltd, Pantnagar Plant, Udham Singh Nagar (Uttarakhand)                      |
|  |                         |                           |                              |  |   | Honda Motorcycle & Scooter India Pvt Ltd, Kolar (Karnataka)                            |
| 1.6  |                         | <b>FERTILIZER</b>         | <b>UREA BASED FERTILIZER</b> | Indian Farmers Fertilizer Cooperative Limited, Phulpur Unit-I, Prayagraj (Uttar Pradesh) | Indian Farmers Fertilizer Cooperative Limited, Aonla Unit-I, Bareilly (Uttar Pradesh) | Kribhco Fertilizers Limited, Shahjahanpur (Uttar Pradesh)                              |
|  |                         |                           | <b>COMPLEX FERTILIZER</b>    | Indian Farmers Fertilizer Cooperative Ltd., Paradeep Unit, Jagatsinghpur (Odisha)        | –   | Indian Farmers Fertilizer Cooperative Limited, Aonla Unit-II, Bareilly (Uttar Pradesh) |
| 1.7  |                         | <b>SECONDARY STEEL</b>    | –                            | Tata Steel Long Products Limited, Saraikela-Kharsawan Jamshedpur, (Jharkhand)            | –   | Kirloskar Ferrous Industries Ltd, Koppal (Karnataka)                                   |



| NATIONAL ENERGY CONSERVATION AWARD – 2020 |                  |                                  |              |   |   |   |
|---|------------------|----------------------------------|--------------|---|---|---|
| SR. NO.                                   | SECTOR/ CATEGORY | SUB-SECTOR                       | SUB-DIVISION | FIRST PRIZE   | SECOND PRIZE  | CERTIFICATE OF MERIT  |
| 1.8                                       |                  | RAILWAY WORKSHOPS                | –            | Diesel Loco Shed, South Central Railway, Vijayawada Division, Vijayawada (Andhra Pradesh) | Kanchrapara Workshop, Eastern Railway Workshop, North 24 Parganas (West Bengal) | Mechanical Workshop, North Eastern Railway, Izzatnagar, Bareilly (Uttar Pradesh)                    |
|   |                  |                                  |              |   |   | Central Railway Workshop, Mysore (Karnataka)  |
|   |                  |                                  |              |   |   | Mechanical Workshop, Dibrugarh North-East Frontier Railway, Dibrugarh (Assam)                       |
|   |                  |                                  |              |   |   | Central Workshop, Ponmalai, Southern Railways, Tiruchchirappalli (Tamil Nadu)                       |
| 2   | TRANSPORT        | ZONAL RAILWAYS                   | –            | Western Railway, Churchgate, Mumbai (Maharashtra)   | Eastern Railway, Kolkata (West Bengal)  | North Eastern Railway, Gorakhpur (Uttar Pradesh)<br>South Central Railway, Secunderabad (Telangana) |
|   |                  | STATE ROAD TRANSPORT UNDERTAKING | –            | –   | –   | Pune MahanagarParivahanMahamanda ILtd., Pune (Maharashtra)  |



| <b>NATIONAL ENERGY CONSERVATION AWARD – 2020</b> |                         |                                |                     |  |  |  |
|--|-------------------------|--------------------------------|---------------------|--|--|--|
| <b>SR. NO.</b>                                   | <b>SECTOR/ CATEGORY</b> | <b>SUB-SECTOR</b>              | <b>SUB-DIVISION</b> | <b>FIRST PRIZE</b>   | <b>SECOND PRIZE</b>  | <b>CERTIFICATE OF MERIT</b>  |
| 3  | INSTITUTION             | MUNICIPALITY                   | –                   | Chandigarh Municipality, Chandigarh                              | –  | North Delhi Municipal Corporation (NDMC), Delhi                                      |
|  |                         | STATE DESIGNATED AGENCIES -SDA | –                   | Energy Management Centre – Kerala                                | New and Renewable Energy Department, Haryana (HAREDA)            | Maharashtra Energy Development Agency (MEDA)   |
|  |                         |                                |                     |  | Telangana State Renewable Energy Development Corporation Limited | Punjab Energy Development Agency (PEDA)  |
| 4  | BUILDING                | GOVT OFFICES                   | –                   | DRM Office, Western Railway, Bhavnagar Para, Bhavnagar (Gujarat) | Divisional Railway Manager Office Building, Rajkot, (Gujarat)    | LekhaBhavan (Financial Advisor and Chief Accounts Officer), Secunderabad (Telangana) |
|  |                         |                                |                     |  |  | Electrical Department DRM Office North Eastern Railways Lucknow (Uttar Pradesh)      |
|  |                         | CORPORATE OFFICES              | –                   | UN House, Dwarka, New Delhi                                      | Candor Gurgaon One Realty Projects Pvt Ltd, Gurgaon (Haryana)    | Allianz Technology SE along with Allianz Services Pvt Ltd, Trivandrum (Kerala)       |
|  |                         |                                |                     |  |  | WNS Global Services (P) Ltd., Weikfield IT-CITI INFOPARK, Pune (Maharashtra)         |



| SR. NO. | CATEGORY              | SECTOR                     | Most Energy Efficient Appliance of the Year | Manufacturing Unit Address                                  |
|---------|-----------------------|----------------------------|---|---|
| 1       | APPLIANCE OF THE YEAR | AC – Fixed Speed           | Voltas<br>(Model No. 4011315)               | Voltas Limited, Udham Singh Nagar<br>(Uttarakhand)          |
| 2       |                       | AC – Variable Speed        | Voltas<br>(Model No. 4502530)               | Voltas Limited, Udham Singh Nagar<br>(Uttarakhand)          |
| 3       |                       | Storage Type Water Heaters | Ariston<br>(RACOLD ESWH-25V)                | Ariston Thermo India Private Limited, Pune<br>(Maharashtra) |
| 4       |                       | LED Bulb                   | Signify Innovations<br>(9290011984)         | Signify Innovations India Limited,<br>Gurugram (Haryana)    |
| 5       |                       | Pumps                      | CRI<br>(CRI4R-5/07)                         | C.R.I. Pumps Private Limited, Coimbatore<br>(Tamil Nadu)    |
| 6       |                       | Ceiling Fans               | Versa Drives<br>(Super Q)                   | Versa Drives Private Limited, Coimbatore<br>(Tamil Nadu)    |

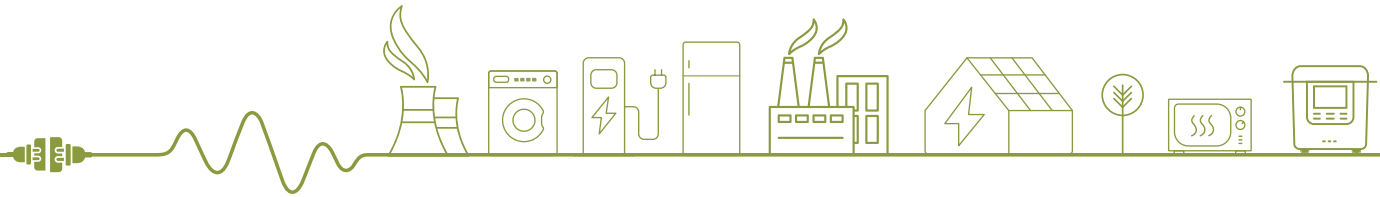
### 1.6.2 Painting Competition on Energy Conservation for School Children

BEE on behalf of Ministry of Power organizes National Painting Competition on energy conservation with the help of 11 PSUs and 36SDAs. In year 2020, Painting Competition on Energy Conservation for school children was deferred due to Covid 19.



## 2. International Co-operations

- 2.1 International Bilateral Programmes
- 2.2 International Multilateral Programme



## 2.1 International Bilateral Programmes

### A. Countries with Active Participation

#### 1. Indo-German Energy Programme

##### - Indo German Energy Forum (IGEF)

The Indo-German Energy Forum (IGEF) was established in April, 2006 between Government of the Federal Republic of Germany and Republic of India to intensify the Indo-German Co-operation to promote dialogue and cooperation with involvement of public and private sector in the areas of energy security, energy efficiency, renewable energy, investment in energy projects and collaborative R&D. While the IGEF is a high-level policy dialogue between India and Germany, the IGEF Support Office is incorporated in the structure of the Indo-German Energy Programme (IGEN).

Under the Indo-German Energy Forum there are 4 sub-groups. Sub-group 1 is efficiency enhancement in fossil fuel-based power plants, sub-group 2 is renewable energy, sub-group 3 is demand side energy efficiency and low carbon growth strategies and sub-group 4 is green Energy Corridors. In the sub-group 3, the Indian Ministry of Power (MOP) and the German Federal Ministry of Economic Affairs and Energy (BMWi), together with the Federal Ministry for the Environment, Nature Conservation, Buildings and Nuclear Safety (BMUB) are working together to put in place a positive environment for enhancing energy efficiency in their respective countries. This is achieved by facilitating a constructive dialogue between decision-makers in Government and the private sector in both countries.

Eight IGEF meetings have been held with the last meeting held on 1st November, 2019. For the Sub-Group 3 meeting held on 17th June, 2020, the Indian side was co-chaired by Shri Abhay Bakre - Director General, Bureau of Energy Efficiency while German side was co-chaired by Dr. Falken-Grosser, Head of Division, Bilateral Cooperation, Federal Ministry for Economic Affairs and Energy (BMWi), Government of Germany. The meeting was attended by representatives of Bureau of Energy Efficiency (BEE), Embassy of Germany, KfW and GIZ.

Sector dialogue on Energy between the Ministry of Power (MoP), Government of the Republic of India and the Federal Ministry of Economic Cooperation and Development (BMZ), Government of the Federal Republic of Germany was held virtually on 03rd November 2020. From the Indian side, the discussions were led by Mr. Vivek Kumar Dewangan, Joint Secretary, MoP and from the German side, the discussions were led by Mr. Philip Knill, Head of Division, India; South Asia BMZ.



Pic: Sub-Group 3 meeting held on 17th June, 2020

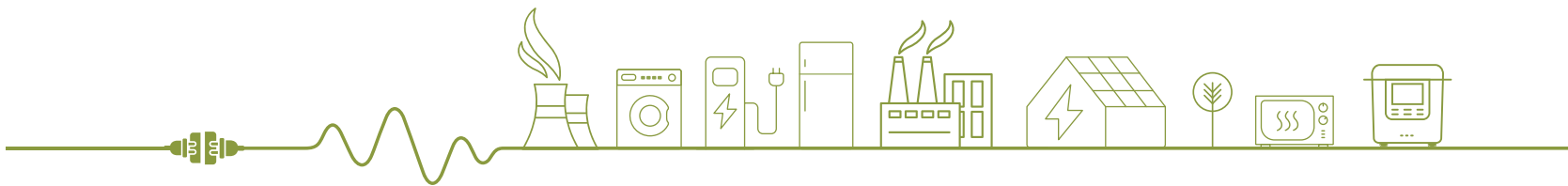
Programme on Knowledge exchange on different business models used by ESCOs in Germany along with supporting method by Participating Financial Institutions (PFI) was held in January, 2020. Mr. Geissler, Managing Director of German Energy Agency (Berliner Energieagentur) and Advisor on Energy Efficiency to German Ministry of Power attended the programme from German side.

**- Indo German Energy Programme (IGEN)**

The Indo-German Technical Co-operation in the field of Energy Conservation has been going on since 1995, when the Indo-German Energy Efficiency project, was launched in May 1995, by the Energy Management Centre, a predecessor organization of the Bureau of Energy Efficiency (BEE), through Tata Energy Research Institute, Bangalore. The project was completed in September 2000. With the enactment of the Energy Conservation Act 2001 and establishment of Bureau of Energy Efficiency with effect from 1st March 2002, the cooperation in the field of energy conservation continued under the project "Indo-German Energy Programme (IGEN) with the objective to support policies and programmes of the Energy Conservation Act.

GIZ TA support on the following verticals concluded by Dec 2020:

- The support from the German side has been instrumental in successful completion of PAT cycle – I and the partnership has been continued by taking up subsequent



cycles of PAT through expansion of coverage by inclusion of new sectors as well as enhancing industries covered under the existing sectors of PAT.

- On the residential buildings sector, BEE and GIZ worked together for formulating energy efficiency building codes for the multi-storey residential buildings, development of National Energy Efficiency Standards for New Large Residential Buildings and support to incorporate provisions regarding mandatory introduction of Energy Efficiency Standards in New Multi-Storey Residential Building. An online tool - ECO-NIWAS was jointly developed by BEE and GIZ to guide the public in incorporating energy efficiency elements in their homes, such as building materials, its design features and appliances.
- Support to BEE towards conducting annual National Painting Competition and National Energy Conservation Awards through GIZ.

### **Energy Efficiency in Industry and Data**

The Indian and German Government, in their Government to Government negotiations in 2019, agreed to provide technical assistance up to EUR 4 million for promoting energy efficiency in steel, pulp and paper or any other similar industry sector. Inline with this commitment, a new project “Energy Efficiency in Industry and Data” has been commissioned by BMZ Germany, with a planned duration of 3 years. The project focusses to strengthen the secondary steel and the paper sectors through various technical and policy level aspects at state and national level. The main objectives of the project are:

- I. Capacity building of selected SDA’s to promote energy efficiency in Non-PAT industries
- ii. Providing Non-PAT secondary steel and pulp and paper industries with access to information on key energy efficiency processes and technologies
- iii. Institutionalization of peer-to-peer learning among SDAs and Non-PAT secondary steel and pulp and paper industry clusters
- iv. National Energy Efficiency dialogue for secondary steel and pulp and paper sector between policy makers, research institutions and business associations.

## **2. Indo—Japan Energy Dialogue**

As an outcome of the visit of Hon'ble Prime Minister of India to Japan in December 2006, Indo-Japan Energy Dialogue co-chaired by Deputy Chairman Planning Commission and Minister of Ministry of Economy Trade and Industry METI was initiated to promote cooperation in energy sector.



## ACTIVITIES UNDERTAKEN:

- **Development of Energy Conservation Guidelines and Energy Management Manual**

A meeting was organized at Bureau of Energy Efficiency on 17th November, 2016 to discuss about the Energy Conservation Guidelines and Energy Management Manual that are being used by the Industries in Japan having the participation of officials of Bureau of Energy Efficiency (BEE), The Energy Conservation Centre, Japan (ECCJ), The Energy and Resources Institute (TERI) and Designated Consumers (DCs) representing various industry sub-sectors. The benefits of the Energy Conservation Guidelines and Energy Management Manuals that are being used by the industries in Japan were highlighted. These guidelines and manuals would help Indian Industries in achieving energy efficiency.

Further, for implementation of Energy conservation guidelines and development of Energy Management Manuals, 9 model factories from various PAT sectors were selected. Virtual meeting with ECCJ to discuss the activities and timeline for EC Guidelines and EM Manual for 2020 held on 27th May 2020 and 30th June 2020.

As per the current Covid situation, ECCJ and BEE agreed to disseminate the EM Manuals through web meetings and webinars. Thus, the activities were divided into Plan A, B and C are as below:

### **Plan A: Dissemination of EC Guidelines and EM Manuals**

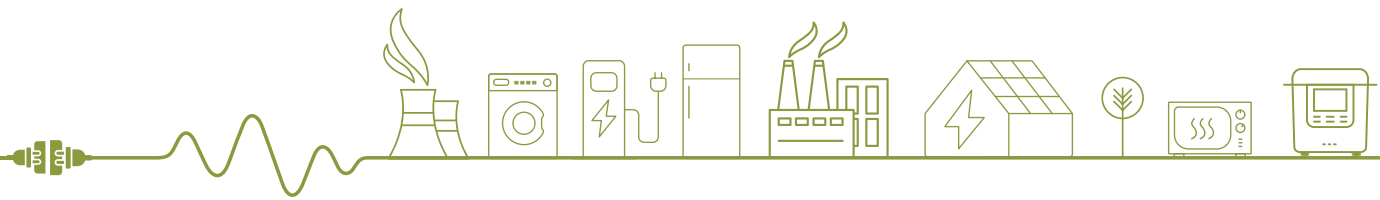
The Plan A was to disseminate the EC Guidelines and EM Manuals to more Designated Consumers from all PAT sectors. Till date, 3 zonal webinars for North, South and East Regions have been conducted on 30th July 2020, 27th October 2020 and 15th February 2021 respectively, with approximately 100-150 participants in each webinar.

### **Plan B: Improvement in the EM Manuals by Model Factories**

For Plan B, two webinars were conducted for Model Factories for improvement in EM manuals on 5th August 2020 and 21st October 2020.

### **Plan C: Development of verification system for EC Guideline compliance**

For development of Verification system for EC Guidelines, the webinar was conducted on 28th September 2020 with officials from BEE and SDAs. The SDA officials and sector experts from BEE shared their understanding and learning of the ECG verification system during the webinar.



To update and status of activities for FY 2020, two meetings were conducted with BEE and ECCJ on 9th September 2020 and 22nd December 2020.

The wrap up meeting for FY 2020 was held on 9th March 2021. The achievements for FY 2020 were discussed and the ways forward for 2021-22 were discussed in details.

### 3. India — US Collaboration

The Indo- US Energy Dialogue was launched in May, 2005 and has the following objectives:

- To enhance mutual energy security,
- Promote increased energy trade and investment,
- Facilitate the deployment of clean energy technologies.

U.S. Department of Energy's Office of Energy Efficiency and Renewable Energy (EERE) and India's Bureau of Energy Efficiency (BEE) collaborate under the aegis of the Power and Energy Efficiency Working Group. The main goal of the collaborations was to support development and implementations of energy efficient policies and best practices that can help achieve national energy efficiency goals and significant reductions in greenhouse gas emissions. For implementation of projects identified in the Working Group (Power and Energy Efficiency)

#### Current Progress:

US Dept. of Energy (DOE), and BEE are exploring areas for collaboration to enhance energy efficiency and energy savings in the industrial sector by advancing a comprehensive energy management system in accordance with ISO50001, waste heat recovery, industry deep-decarbonization and use of hydrogen.

After detailed deliberations between BEE and US Dept. of Energy (DOE), area for collaboration to enhance energy efficiency and energy savings in the industrial sector by advancing a comprehensive energy management system in accordance with ISO50001 has been finalized.

### 4. India - UK

The Memorandum of Understanding (MoU) between India and the United Kingdom on cooperation in the energy sector was signed during the visit of Hon'ble Prime Minister of India to UK during November, 2015.

The MoU provides framework for technical assistance, including in-kind grant, and other support, as mutually agreed, through relevant projects initiated by the United Kingdom. The MoU also encourage development of project specific agreements on time-to-time basis.



A PPR of India-UK new partnership programme of Technical Assistance Collaboration on Power Sector was approved by the Screening Committee of Department of Economic Affairs. Accordingly, a DPR has been submitted by the UK side for further taking up the project.

The project will focus on the following themes outlined below. All the themes will aid India's efforts to transition towards a low carbon economy as well as deepening UK-India collaboration in advance of COP26 in Glasgow 2021.

Theme 1: Electricity distribution sector

Theme 2: Energy Efficiency includes 2 sub-themes:

- Industrial Energy Efficiency; and
- Electric mobility charging infrastructure

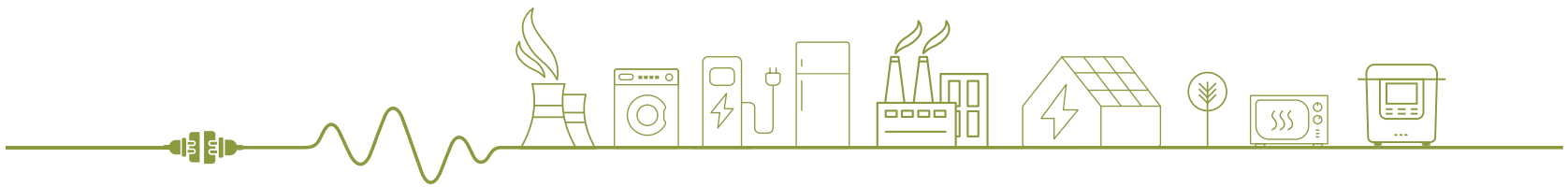
## 5. Indo-Switzerland

The Indo-Swiss Building Energy Efficiency Project (BEEP) is a bilateral cooperation between the Ministry of Power (MoP), Government of India and the Federal Department of Foreign Affairs (FDFA) of the Swiss Confederation. The Bureau of Energy Efficiency (BEE) is the Implementing agency on behalf of the MoP while the Swiss Agency for Development and Cooperation (SDC) is the agency on behalf of the FDFA.

Consequent to the Cabinet Approval by the Govt. of India, an MoU for a five-year joint project with an overall objective to reduce energy consumption in new buildings in India was signed between the two governments on 8th November 2011 and was valid till 7th November 2016. The successful implementation of the project during 2011-2016, resulted in the two governments agreeing to extend the MoU for 5 years. Hence, the extension of the MoU for a follow-up phase of BEEP (8th November 2016 – 7th November 2021) was signed in the month of November 2016. The MoU's for the follow-up phase were exchanged between the two countries on 28th November 2016 at the BEEP International Conference in the presence of Mr. Piyush Goyal, the then Minister of State (IC) for Power, Coal, New & Renewable Energy, Mines, Govt. of India. The project is also in the process of seeking an extension till December 2022 to complete the activities delayed due to the COVID-19 pandemic.

### Activities completed under the bilateral (FY 2020-21):

- Eco-Niwas Samhita Implementation: BEEP is providing technical support to BEE with the implementation of Energy Conservation Building Code for Residential Buildings or Eco-Niwas Samhita (ENS). BEEP successfully conducted market surveys on ENS compliant building materials in Rajasthan and Gujarat. Standard



solution sets for building envelope technologies have also been developed at the National level and specific to Rajasthan and Gujarat.

Over 700 participants attended the webinars conducted by BEEP in the three partner states on ENS. BEEP has also conceptualized an ENS training program in collaboration with Andhra Pradesh State Energy Conservation Mission (APSECM) and Andhra Pradesh State Housing Corporation Ltd. (APSHCL). The training programme aims to train 13,000 Engineers of Gram Ward and Village Secretariat of the Andhra Pradesh government involved in the implementation of the Pedalandariki Illu Scheme. Under the Pedalandariki Illu Scheme, Andhra Pradesh government plans to construct 28.3 lakh houses for poor. The pilot phase of the training program shall be implemented by BEEP through Administrative Staff College of India (ASCI), Hyderabad during FY 2021-22.

- **Technical support to large Private and Public Developers:** BEEP is providing technical support to Mahindra Lifespace Developers Ltd. (MLDL) for the climate responsive building design of 6 residential building projects located at Pune, Mumbai and Bengaluru comprising of around 6000 housing units. BEEP also provided technical support for ECBC compliance to 1 commercial building project for Rajasthan State Road Development & Construction Corporation Ltd. (RSRDC) and ENs compliance for 1 residential building project for Rajasthan Police Housing & Construction Corporation Ltd.
- **Tools and Technologies:** BEEP has developed a simulation software “Vayu Pravah” to analyze the natural ventilation potential in buildings through Computational Fluid Dynamics (CFD). BEEP has also developed a manual for building designers on the External Movable Shading Systems (EMSyS), used to shade windows, available in the Indian market. The project also undertook a study to measure the reduction in room temperature and savings in electricity used for air-conditioning through the use of EMSyS products. The study was conducted in an apartment block located at Gurugram. A survey of window openings in newly constructed multi-story residential buildings was undertaken across 7 Indian cities from different climatic zones. This characterization study of window openings would help in the development and identification of standardized EMSyS products for residential buildings.
- **Architecture & Engineering Student Education & Training:** BEEP is focusing on training under-graduate and post-graduate Architecture & Engineering students in integrated energy-efficient building design. BEEP organised the 3rd edition of its



flagship BEEP Student Camp (originally a 1-week residential program) as a 2-week online program due to the COVID-19 pandemic. The program was attended by 60 participants pan India, comprising of both students and young professionals from architecture and engineering backgrounds. BEEP in collaboration with IIT Bhilai has also developed a book “Building Heat Transfer: Understanding through Numerical Examples” comprising of 20 numerical problems on building heat transfer for engineering students. An elective course on ‘Simulations for Energy Efficient Building Design’ was also developed and delivered for 6th Semester B. Arch students of Sri Sri University, Cuttack.

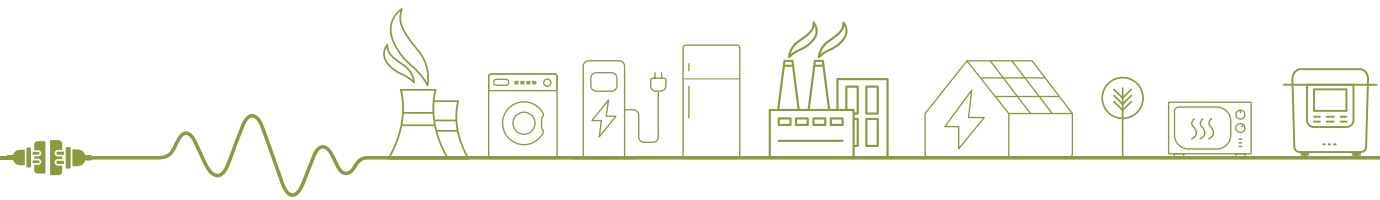
- **Media Engagement on Energy Efficient Buildings:** BEEP is supporting BEE in increasing media engagement on the issue of energy efficiency in buildings. BEEP has partnered with the Centre for Media Studies (CMS) to conduct a series of workshops on the topic for journalists. During 2020-21, over 40 news stories were published/broadcasted in print, digital and electronic mediums of leading national and regional publications as an outcome of the 12 fellowships awarded to selected journalists.
- **NEERMAN Awards:** With an aim to recognize and award exemplary commercial and residential buildings which comply with ECBC and ENS, BEEP is assisting BEE with the conceptualization and implementation of the NEERMAN awards. In consultation with BEE and a technical committee the award concept and methodology were finalized. The first set of awards are due to be awarded in FY 2021-22.

## 6. India - France

A declaration of cooperation was signed between Bureau of Energy Efficiency, Ministry of Power and the French Environment and Energy Management Agency (ADEME), on Feb 20, 2006. The MoU between BEE and ADEME was renewed on 17th April 2009 for a period of 2 years.

Achievements of the Indo-French Cooperation: -

- (i) Energy Information centres for creating awareness on energy efficiency have been established at two state designated agencies HAREDA and PEDDA.
- (ii) DSM Internet Portal has been successfully created and commissioned with assistance of ADEME.
- (iii) Benchmarking and Mapping the MSMEs energy consumption: Data collected from BEE was analysed for various SME clusters following which Interim report was circulated.



In order to revive the cooperation in the field of energy efficiency, and subsequently upon receiving necessary approvals, the MoU was signed on 17th October 2018 between BEE and ADEME. Following are the scope of cooperation between BEE and ADEME:

- Development of sustainable mobility, with specific focus on electric transport (charging infrastructure, smart chargers, smart grid interaction, etc.);
- Development of tools for collection, use and analysis of energy efficiency related data across sectors leading to energy efficiency indicators;
- Development of tools for collection, use and analysis of CO2 emissions and GHG data for tracking global emissions for INDCs.

After several rounds of discussions between BEE and ADEME officials, draft Terms of Reference for Cooperation between BEE & ADEME on the implementation of a national energy efficiency monitoring system in India were developed.

#### **7. India - Russia**

A Memorandum of Understanding (MoU) was signed between BEE and Russian Energy Agency (REA) in February, 2020 at Moscow to promote cooperation in the area of Energy Efficiency. The sides noted the interest in cooperation in the field of energy audits and participation in international Energy Efficiency festivals.

#### **8. India and the European Union**

Cooperation between India and the European Union (EU) in the energy sector is guided by the India – EU Energy Panel. The Energy Panel is led by MEA from the Indian side. The last meeting of the Panel was held on 26/10/2016, to discuss cooperation in the field of energy.

The Panel broadly agreed to achieve the target outlined through a work plan 2016-18. It was also decided to add clean energy and climate partnership in addition to exploring possible cooperation on energy efficiency in industry, exchanges on storage, battery technology and electric vehicles, enhancing the flexibility of thermal power plants and finally support the financing of investments in RE's Projects. The work plan was proposed to be executed through joint working groups:

- i. JWG on Energy Security (co-chairs: DG ENER and MEA/MoPNG).
- ii. JWG on Renewable Energy (co-chairs: DG ENER and MNRE).
- iii. JWG on Energy Efficiency, Smart Grids and Electricity Markets (co-chairs: DG ENER and MoP).
- iv. JWG on Clean Coal (co-chairs: DG ENER and MoP + MoC).



The first meeting of Joint Working Group on “Energy Efficiency, Smart Grids and Electricity Markets” with the EU was held on 15.03.2019 in New Delhi.

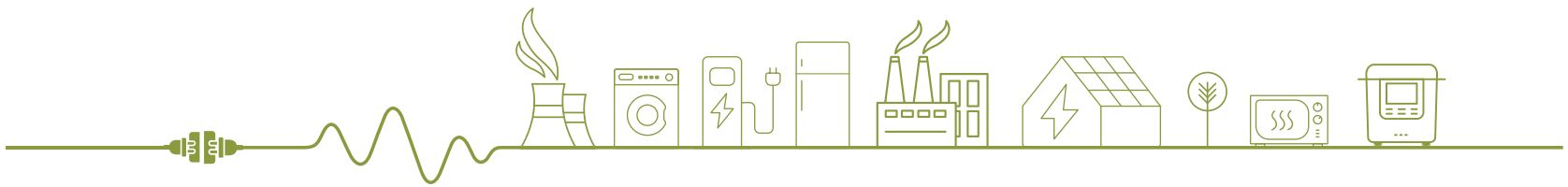
The second meeting of Joint Working Group on “Energy Efficiency, Smart Grids and Electricity Markets” with the EU was held virtually on 04.12.2020. The meeting was chaired by Additional Secretary (Internal Co-operation), Ministry of Power, Govt. of India and Head of Unit International Relations (ENER) from EU side.

## 2.2 International Multilateral Programme

### 1. Clean Energy Ministerial (CEM)

Created in 2010, the Clean Energy Ministerial (CEM) is a global forum where major economies and forward leaning countries work together to share best practices and promote policies and programmes that encourage and facilitate the transition to a global clean energy economy.

- As of March 2021, there are 27 member countries in CEM: Australia, Brazil, Canada, Chile, China, Denmark, the European Commission, Finland, France, Germany, India, Indonesia, Italy, Japan, Korea, Mexico, Netherlands, New Zealand, Norway, Russia, Saudi Arabia, South Africa, Spain, Sweden, the United Arab Emirates, the United Kingdom and the United States and 2 observer countries including Poland and Portugal.
- 18 wide ranging CEM work-streams (initiatives and campaigns) help drive the global clean energy transition. These are yearlong activities which are led by one or more CEM members with coordination with one or more departments within the countries.
- As of March 2021, India is part of following initiatives and campaigns of CEM
  - ❖ 21st Century Power Partnership (21CPP) Initiative: Co lead
  - ❖ International Smart Grid Action Network (ISGAN) Initiative: Co-lead
  - ❖ Super-efficient Equipment and Appliance Deployment (SEAD) Initiative: Co-lead
  - ❖ Bio future Platform Initiative: Co-lead
  - ❖ Power System Flexibility Campaign (PSF) Campaign: Co-lead
  - ❖ Electric Vehicles Initiative (EVI)
  - ❖ Carbon Capture, Utilization and Storage Initiative (CCUS) Initiative
  - ❖ Hydrogen Initiative (H2I)



- ❖ Clean Energy Solutions Center Initiative
- ❖ Clean Energy Education and Empowerment Initiative
- ❖ CEM Investment and Finance Initiative
- ❖ Long-term Energy Scenarios (LTES) Initiative
- ❖ EV30@30 Campaign
- Several of the world’s best technical expert organisations (such as IRENA, IEA, UNEP, UNIDO, NREL, LBNL, etc.) lend their technical assistance and advice to support the work of the CEM.
- The 11th Clean Energy Ministerial Preparatory Meeting and the Mission Innovation Gathering was held in Riyadh, Saudi Arabia between 1st - 5th February, 2020. Shri Abhay Bakre, Director General, BEE, attended the 11th Clean Energy Ministerial Preparatory Meeting and the Mission Innovation Gathering



*The 11th Clean Energy Ministerial Meeting Virtual Gathering held in Riyadh, Saudi Arabia -22 September 2020*

The 11th Clean Energy Ministerial (CEM11), hosted by the Kingdom of Saudi Arabia, convened at a critical moment to consider the role of clean energy in supporting a rapid, sustainable recovery, and the role of the CEM community in shaping the next clean energy decade.



The theme of CEM11 was “Supporting the Recovery, Shaping the Future”. Its unofficial mantra was “bring actions not words”. The guiding principles for CEM11 were to have positive and inclusive event that strengthened and showcased our community.

Co-located with the G20 Energy Ministerial for the first time, the CEM11 programme included 16 high-level pre-events and culminated with its Ministerial Plenary. CEM11 was all-virtual, all-livestream, and open to all viewers for the first time.

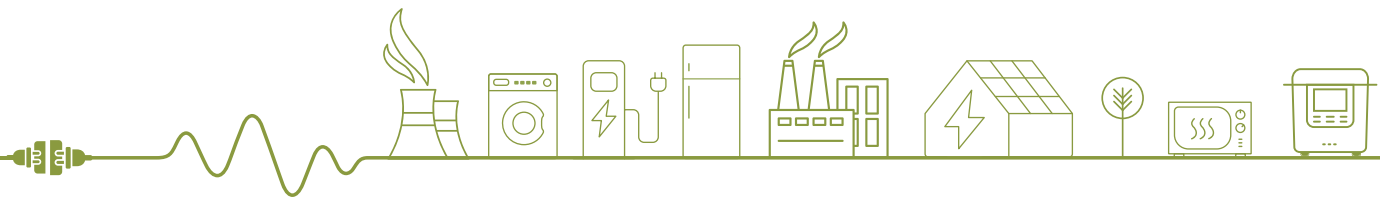
CEM12 is hosted by the Government of Chile under the theme “We work together to move the world towards a clean energy future”. It will bring together in a virtual environment ministers and heads of delegations from the 25 CEM member countries and the European Commission, as well as business leaders and experts, to focus on clean energy policies and their technical solutions.

### 3. **BRICS**

The BRICS forum consists of 5 member countries namely, Brazil, Russia, India, China and South Africa. In 2006, the four countries initiated a regular informal diplomatic coordination, with annual meetings of Foreign Ministers at the margins of the General Debate of the UN General Assembly (UNGA). This successful interaction led to the decision that the dialogue was to be carried out at the level of Heads of State and Government in annual Summits. At the First Summit, held in Yekaterinburg in 2009, the depth and scope of the dialogue among the Members of BRIC – which became BRICS in 2011 with the inclusion of South Africa – was further enhanced. More than an acronym that identified countries emerging in the International economic order, BRICS became a new and promising political-diplomatic entity, far beyond the original concept tailored for the financial markets.

India has been the active member of the BRICS forum and enjoys very special status in its agenda and dialogue undertaken by the BRICS member countries. Currently, the BRICS presidency is with Russia since April, 2015 and will be passed onto India in 2021.

Russia after assuming the Presidency of BRICS in April, 2015 proposed to initiate cooperation in the field of energy, efficiency and sustainable development. In this regard, a representative from member countries met at the BRICS High-Level Meeting on Energy Efficiency in Merida, Mexico, on 26th May, 2015 to coordinate their actions in response to increasingly unfair competition in international energy markets and artificial restrictions on the free movement of capital and energy-efficient technology trade. As part of meeting, the Russian side circulated copy of the Memorandum of Understanding (MoU) in Energy Savings and Energy Efficiency promotion for consideration of BRICS member countries.



The MoU was signed on 20th November, 2015 at Russia during the first meeting of the Energy Ministers of BRICS member countries. Under the framework of this MoU, a Working Group on Energy Savings and Energy Efficiency was established. The first Working Group meeting on “Energy Savings and Energy Efficiency” was held in Vizag on 5th July, 2016. The second meeting of Energy Ministers was held in Beijing China on 7th June, 2017.

As a precursor to the 3rd Ministerial Meeting, a Third Working Group meeting on Energy Savings and Energy Efficiency was held at Cape Town, South Africa on 17th and 18th May, 2018. The purpose of the meeting was to engage into high level (ministerial) discussions and endorsements towards the outcome of Energy Efficiency Working Group actions and deliberations. The high-level engagements by the ministers of member countries pushed forward joint collaboration and the knowledge sharing in the field of energy efficiency as well as Renewable energy programmes.

In continuation to the first and second meeting of Energy Ministers held earlier, the 3rd Ministers meeting was hosted by South Africa in Gauteng Province in the city of Johannesburg during 28-29th June, 2018.

Further, the Senior Officers meeting in connection with 4th meeting of BRICS Energy Ministers was held on 8th November, 2019 in Brasilia, Brazil. The Indian delegation was led by Economic Advisor and In-charge (EC), Ministry of Power and accompanied by Director, Bureau of Energy Efficiency. All the Senior Officers representing from all BRICS member countries were present in the meeting. The purpose of the meeting was to finalise the Communique for BRICS Energy Ministers meeting and Terms of Reference of the BRICS Energy Research Cooperation Platform (ERCP).

Thereafter a BRICS Senior Officials Meeting (SOM) was held at Moscow, Russia on 20th – 21st February, 2020 under Russian Presidency to take forward the BRICS Energy Research Cooperation (ERCP) Terms of Reference (ToR) which was finalised during the last BRICS Energy Ministers meeting held at Brasillia, Brazil on 11th November, 2019.

The Second meeting of Senior Energy Officials and Fourth meeting of Energy Efficiency Working Group were held on 27-28th of July, 2020 in teleconference format under the chairmanship of Russian Presidency. Secretary, BEE and Director, BEE attended the meetings from BEE. During the meeting a Report on the Energy Sector of BRICS counties and BRICS Technology Report were adopted.



*Figure: 5th BRICS Energy Ministerial meeting, 13-14 October 2020, Moscow*

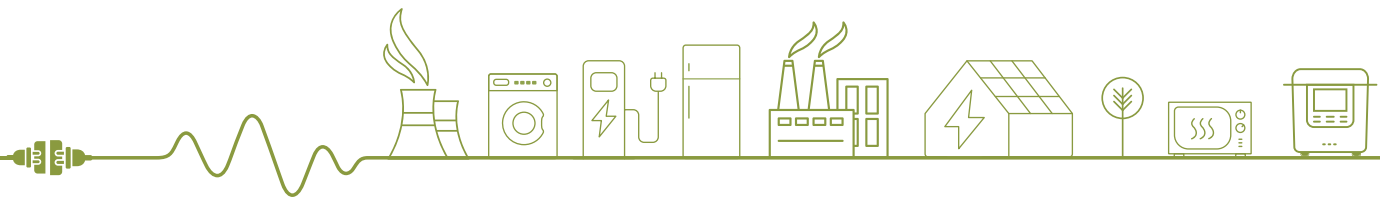
The 5th BRICS Energy Ministerial meeting was held on 13-14th October, 2020 through VC under the chairmanship of Russian Presidency.

India assumed the rotating presidency of BRICS for the year 2021. The 2021 BRICS summit is the thirteenth annual BRICS summit. It will be the third time that India will be hosting the BRICS Summit after 2012 and 2016. BRICS countries produce 22% of the global crude oil and consume around one quarter of the total global oil production.

#### **4. G20 (Group-20)**

The G20, or Group of 20, is the main international forum for economic, financial and political cooperation: it addresses the major global challenges and seeks to generate public policies that resolve them. It is made up of the European Union and 19 countries: Germany, Saudi Arabia, Argentina, Australia, Brazil, Canada, China, South Korea, United States, France, India, Indonesia, Italy, Japan, Mexico, United Kingdom, Russia, South Africa and Turkey. Together, the G20 members represent 80% of the global GDP, 60% of the world population and 75% of global exports.

During Kingdom of Saudi Arabia (KSA) Presidency of G20 from 1st December, 2019 to 30th November, 2020, G-20 Ministerial Meeting on Energy Sustainability Working Group was held virtually at Riyadh, KSA from September 27-28, 2020. The meeting was attended by a delegation from India under the Leadership of Hon'ble Minister of State (I/C) Power and New and Renewable Energy, Govt of India. This meeting was organised under the Presidency of Kingdom of Saudi Arabia to engage Apex level dialogue among the Energy Ministers of G-20 Member countries. The G20 Saudi Presidency identified cleaner energy systems for the new era, universal access to affordable energy, more secure energy markets and institutional frameworks for market stability as priority areas for deliberation.



The presidency released a CCE Guide that summarized the concept of a circular carbon economy and detailed out the different options available under the 4 Rs of Reduce, Reuse, Recycle and Remove. In line with this, the CCE Accelerator was also released to facilitate CCE implementation, advancing research and development of technologies and aiding national and international cooperation.



*G-20 Energy Ministerial Meeting (Virtual), Riyadh, Kingdom of Saudi Arabia, September 27-28, 2020*

In 2021, for the first time in G20 history, Italy is hosting the G20 Summit. Italy assumed the rotating Presidency of the G20 for the period of 1st December, 2020 to 30th November, 2021. The approach of the G20 Italian Presidency hinges around “3 Ps”: People, Planet, and Prosperity, underlining, at the same time, the strategic nexus between energy and climate sectors, to accelerate the clean energy transition and to halt the climate change. The Energy Transition Working Group and the Climate Sustainability Working Group work side by side with an objective to capitalise on the clear synergies existing between the agendas of the two Working Groups, allowing for both common meetings and parallel streams. The first meeting of the G20 ETWG-CSWG was held virtually on 22-23 March, 2021. The G20 presidency outlines priority areas and accordingly the Italian presidency has circulated the following Priority areas prior to the first meeting:

- foster the role played by sustainable, resilient and smart cities, for a future with net-zero emissions
- advance towards a sustainable and green recovery, seizing the opportunities offered by innovative energy technological solutions
- make use of the opportunities offered by the COVID-19 crisis to accelerate the alignment of global capital flows towards a green transition and energy inclusivity



## 5. IEA (International Energy Agency)

The cooperation between India and the IEA intensified and broadened significantly as a result India's participation in the IEA 2009 and 2011 Ministerial meeting, and the endorsement of a joint statement by the Ministry of power, Government of India and the International Energy Agency (IEA) on both occasions during the November 2013 IEA Ministerial meeting.

In March 2017, after a series of intensive consultations with all the relevant ministries, India joined the IEA as an Association country. This was a major milestone for global energy governance and another major step towards the IEA becoming a truly global energy organization and strengthening ties with the key energy players. Since then, Indian delegations have actively participated in IEA committees, meetings and workshops. The IEA launches major publications in New Delhi to share our findings with Indian energy communities and policy-makers. The International Energy Agency (IEA) released the first in-depth review of India's energy policies in January 2020.

### **Activities so far:**

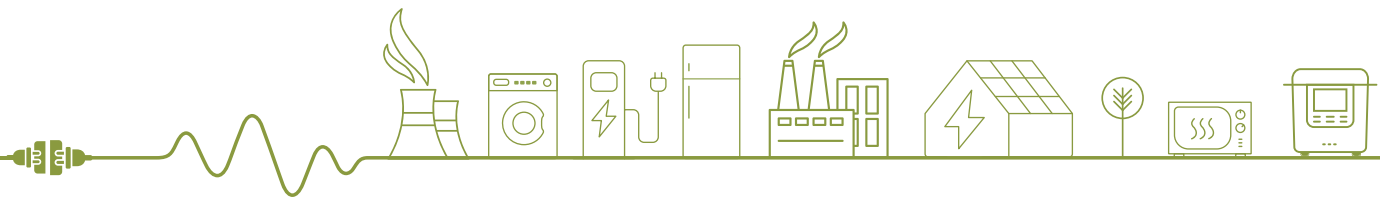
In India, the IEA has been a long-standing partner in enhancing energy efficiency since 2014. The IEA has established strong relationships with the Bureau of Energy Efficiency. IEA's Energy Efficiency work in India has been broad and has included research and development of roadmaps, conducting workshops, and capacity building of professionals.

Under the 'Energy Efficiency for Emerging Economies' collaboration programme, the IEA and BEE have initiated projects on:

- Roadmap for Mainstreaming on Energy Efficiency in Residential Buildings in India
- Developing a Policy Package for Unlocking the Energy Efficiency Potential in MSME Segment of Textile Sector in India
- Developed a report on An Energy Efficient Economic Recovery in India

The IEA and BEE are working together to highlight the significant progress in energy efficiency achieved by India and to share best practices developed by India internationally. Economic Advisor of the Ministry of Power delivered a presentation on Indian energy efficiency successes at the IEA 2019 Global Conference on Energy Efficiency.

As part of the strong relationship between BEE and IEA, on Energy Efficiency, the Director General of BEE participated in the Global conferences on Energy Efficiency and Working Party Meeting on Energy Efficiency organized by IEA in 2020 and 2021.



India as the Co-lead for the SEAD initiative of CEM is also engaging with the IEA to develop the ladder approach for energy efficient appliances covered under the initiative. The IEA along with the UK partners are also working with the BEE to strengthen the UK's CoP-26 initiative on Product Energy Efficiency.

On 9 February 2021, the International Energy Agency (IEA) released the India Energy Outlook 2021 report. The report explores the opportunities and challenges ahead for India to ensure reliable, affordable and sustainable energy to a growing population.

## 6. United Nations Development Program (UNDP)

The United Nations Development Programme (UNDP) is the United Nations' global development network. It advocates for change and connects countries to knowledge, experience and resources to help people build a better life for themselves. It provides expert advice, training and grants support to developing countries, with increasing emphasis on assistance to the least developed countries. It promotes technical and investment cooperation among nations.

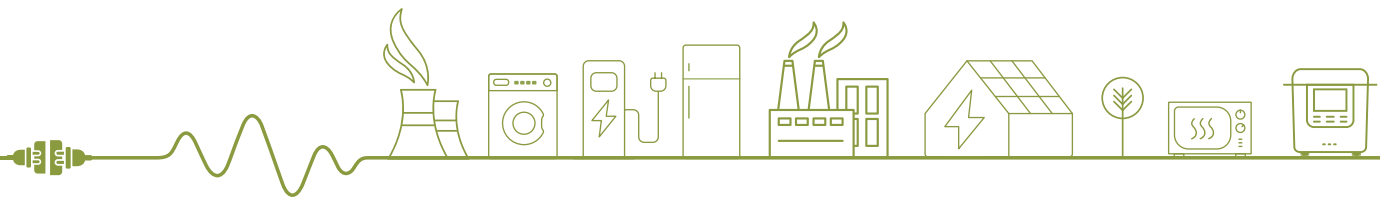
The Global Environment Facility (GEF) was established on the eve of the 1992 Rio Earth Summit to help tackle our planet's most pressing environmental problems. The GEF unites 183 countries in partnership with international institutions, civil society organizations (CSOs), and the private sector to address global environmental issues while supporting national sustainable development initiatives. An independently operating financial organization, the GEF provides grants for projects related to biodiversity, climate change, international waters, land degradation, the ozone layer, persistent organic pollutants (POPs), mercury, sustainable forest management, food security, sustainable cities.

UNDP in co-ordination with BEE has received clearance for Work Program Inclusion and Project Preparation Grant Approval to the Global Environment Facility (GEF) Secretariat against project proposal titled "Accelerating adoption of super-efficient technologies for sustainable thermal comfort in buildings in India" for the Project Identification Form (PIF) for consideration under GEF-7.



## 3. Accounts of Bureau

- 3.1 Capital Structure
- 3.2 Summary of the Financial Result
- 3.3 Measures taken for Improving or Strengthening the Functioning of the Bureau
- 3.4 Annual Statement of Accounts



### 3.1 Capital Structure

The Corpus Fund of ₹50 crore received from the Ministry of Power has been used for the establishment of Central Energy Conservation Fund under Section 20 of the EC Act, 2001. This Corpus Fund of ₹50 crore has been invested with NTPC with the approval of Governing Council in the form of Secured, Non-Convertible, Non-Cumulative Redeemable Taxable NTPC Bonds of ₹10 lacs each (Series XVII) for 20 years w.e.f. 1 May, 2003 stipulating inter-alia payment of ₹4.24 crore (approx.) per annum as interest. The interest is being utilized to meet the recurring and non-recurring expenditure of the BEE and no fresh infusion of funds from Government was made during the year. Apart from the above an amount of ₹45.00 crore has been received from Ministry of Power towards Augmentation of BEE Corpus Fund. An amount of ₹2.69 crore has been earned as an interest by investing this Corpus Fund of ₹45.00 crore in fixed deposits with nationalised bank during financial year 2021-22. The total of BEE Corpus Fund along with this addition stands to ₹95.00 crore as on 31/03/2021.

### 3.2 Summary of the Financial Results

During the financial year 2020-21, Bureau had earned ₹424.00 lakhs as interest on Corpus Fund of ₹50 crore invested with M/s. NTPC Ltd. and, 269.25 lakhs as interest on additional Corpus Fund of ₹45.00 crore invested with Nationalized Bank. Further, the Bureau also earned ₹261.45 lakhs from the fee charged from the candidates for the 21 National Certification Examinations for Energy Managers & Energy Auditors. The expenditure of the BEE on Establishment, Administration expenses, Non-Recurring and Project expenses had been ₹988.20 lakhs, ₹114.91 lakhs, ₹62.15 lakhs and ₹0.22 lakhs respectively. Further, an expenditure of ₹56.48 lakhs was incurred towards 21 National Certification Examination for Energy Managers & Energy Auditors. The surplus of income over expenditure of ₹292.84 lakhs has been transferred to the Corpus Fund.

### 3.3 Measures taken for improving or strengthening the functioning of the Bureau

01 Dy. Director General appointed on deputation w.e.f 17.12.2020, 01 PS was promoted as Sr. PS w.e.f 27.11.2020, 01 Accountant promoted as F&AO w.e.f 22.06.2020 and 01 Stenographer promoted as PS w.e.f 03.02.2021. 01 Consultant (Finance) and 01 Consultant (MoP) were appointed on contract basis during the year 2020-21.

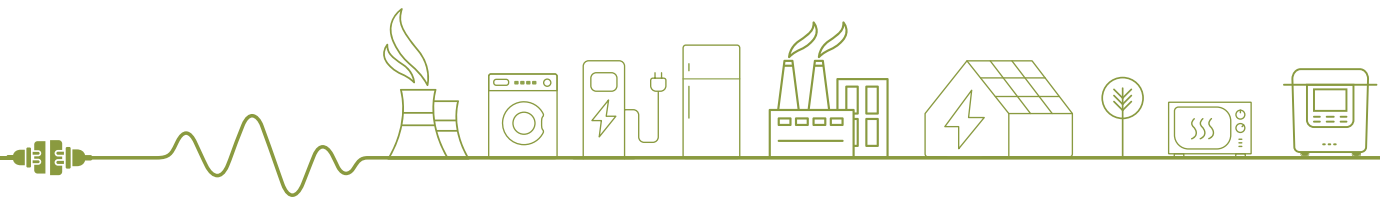
### 3.4 Annual Statement of Accounts

Annual Statement of Accounts i.e., Balance Sheet, Income & Expenditure Statement and Receipt & Payments Statement of Accounts duly audited are attached herewith.



## **SEPARATE AUDIT REPORT OF THE COMPTROLLER & AUDITOR GENERAL OF INDIA ON THE ANNUAL ACCOUNTS OF BUREAU OF ENERGY EFFICIENCY, NEW DELHI FOR THE YEAR ENDED 31 MARCH 2021**

1. We have audited the attached Balance Sheet of Bureau of Energy Efficiency (BEE), New Delhi as at 31 March 2021, the Income & Expenditure Account/Receipts & Payments Account for the year ended on that date under Section 19(2) of the Comptroller & Auditor General's (Duties, Powers & Conditions of Service) Act, 1971 read with Section 25(2) of the Energy Conservation Act, 2001. These financial statements are the responsibility of BEE's Management. Our responsibility is to express an opinion on these financial statements based on our audit.
2. This Separate Audit Report contains the comments of the Comptroller & Auditor General of India (CAG) on the accounting treatment only with regard to classification, conformity with the best accounting practices, accounting standards and disclosure norms, etc. Audit observations on financial transactions with regard to compliance with the Law, Rules & Regulations (Propriety and Regularity) and efficiency-cum-performance aspects etc., if any, are reported through Inspection Reports/CAG's Audit Reports separately.
3. We have conducted our audit in accordance with auditing standards generally accepted in India. These standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free from material misstatements. An audit includes examining, on a test basis, evidences supporting the amounts and disclosure in the financial statements. An audit also includes assessing the accounting principles used and significant estimates made by management, as well as evaluating the overall presentation of financial statements. We believe that our audit provides a reasonable basis for our opinion.
4. Based on our audit, we report that:
  - i. We have obtained all the information and explanations, which to the best of our knowledge and belief were necessary for the purpose of our audit.
  - ii. The Balance Sheet, Income & Expenditure Account/Receipts & Payments Account dealt with by this report have been drawn up in the format as prescribed by Ministry of Finance and adopted by BEE under section 25(1) of the Energy Conservation Act, 2001.
  - iii. In our opinion, proper books of accounts and other relevant records have been, maintained by BEE as required under Section 25(l) in so far as it appears from our examination of such books,
  - iv. We further report that:



## **A. COMMENT ON ACCOUNTS**

### **1. Balance Sheet**

#### **Schedule 1B others – PRGFEE & VCFEE Fund: ₹17,232.76 lakh**

Schedule 1B includes Partial Risk Guarantee Fund for Energy Efficiency (PRGFEE) and Venture Capital Fund for Energy Efficiency (VCFEE). As on 31.03.2021, PRGFEE Fund was ₹12,110.97 lakh whereas VCFEE Fund stood at ₹5,121.79 lakh.

Ministry of Power (MoP) decided (March 2021) to short-close the schemes and return the fund to the MoP along with interest thereon. Accordingly, both the funds should have been shown under Current Liabilities. However, BEE has shown the above funds in Schedule-1B and has also not given any disclosure in its Notes on Accounts regarding the fact that these schemes have been short-closed and these funds are to be returned to the MoP.

This has resulted in overstatement of 'Others - PRGFEE & VCFEE Fund' (Schedule-1B) and understatement of 'Current Liabilities' (Schedule-7) by an amount of ₹17,232.76 lakh each apart from deficiency in the Notes on Accounts to that extent.

#### **1.2 Earmarked Funds (Schedule-3): ₹8,563.64 lakh**

**1.2.1** BEE has booked an amount of ₹97.35 lakh under S&L scheme in respect of Electric Vehicle Charging Infrastructure which is not related to S&L scheme. This should have been accounted for as under:

- an amount of ₹32.45 lakh as Prior Period expense, as it pertains to the period from November 2019 to March 2020
- ₹64.90 lakh as current year expense, as it pertains to the period from April 2020 to January 2021 and
- ₹12.98 lakh as a liability, being in respect of unpaid amount for February and March 2021.

Thus, it has resulted into understatement of 'Earmarked/Endowment Funds' (Schedule-3) by an amount of ₹97.35 lakh, Other Administrative Expenses etc. (Prior Period) by ₹32.45 lakh, 'Other Administrative Expenses' (Schedule-21) by ₹77.88 lakh and 'Current Liabilities and Provisions' (Schedule-7) by ₹12.98 lakh. Further, there is overstatement of 'Excess of income over Expenditure' by an amount of ₹110.33 lakh.

**1.2.2** BEE along with POSOCO has been authorized by MoP to facilitate trading of ESCerts which are issued to eligible consumers upon achieving energy savings beyond specified targets. The necessary infrastructure viz. software, portal etc. is being maintained by BEE/POSOCO and a fee of ₹5 per ESCerts issued is levied/collected and distributed equally between BEE and POSOCO along with one-time registration fee required for trading of ESCerts.



BEE has been booking expenditure on creation/ maintenance of portal etc. for ESCerts in NMEEE whereas income has been booked separately under 'Corpus/Capital Fund' instead of booking the same under 'Earmarked/Endowment Funds' under NMEEE.

This has resulted in overstatement of 'Corpus/Capital Fund' and understatement of 'Earmarked / Endowment Funds' by an amount of ₹67 lakh."

### **1.3 Investments from Earmarked/Endowment Funds (Sch.9): ₹64,298.48 lakh**

As per BEE (Form of Annual Statement of Accounts and Records) Rules 2007 (notification issued by the Ministry of Power dated 28 February 2007), amount held as 'Bank Balances against earmarked/endowment funds' should be separately disclosed in Schedule 11- Current Assets, Loans, Advances etc.

However, BEE, under 'Investment from Earmarked/Endowment Fund' (Schedule-9) has included an amount of ₹59, 298.48 lakh (excluding ₹5,000 lakh in respect of NTPC Bonds) on account of augmented Corpus Fund of NMEEE, PRFGEE, VCFEE and S&L Fee which are held under FDR/Savings & Sweep Account. The same should have been shown under 'Bank Accounts with Scheduled Bank' held against earmarked funds in Schedule-11 in line with the above mentioned rules.

This has resulted in overstatement of 'Investments from Earmarked Funds' (Schedule-9) by ₹59,298.48 lakh and understatement of Bank Balances with Scheduled Banks held against earmarked funds under "Current Assets, Loans, Advances etc.' (Schedule-11) by the same amount.

This issue was also raised in Separate Audit Reports for the year 2018-19 and 2019-20 and BEE had assured to take corrective action thereon. However, no correction has been done by BEE in its Annual Accounts for the year 2020-21.

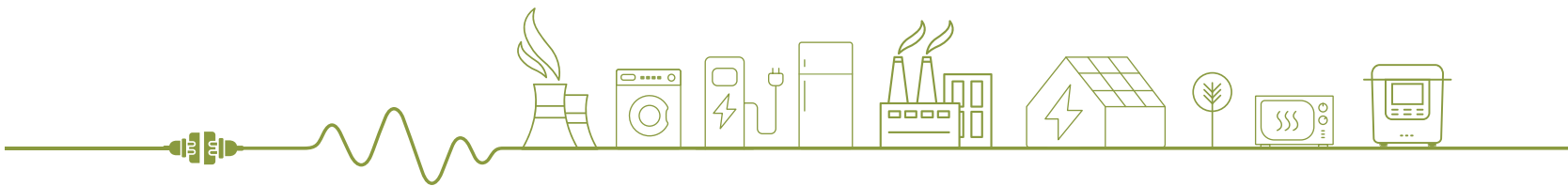
### **B. Grants-in-aid**

Out of the Grants-in-aid of ₹178.49 crore (including ₹117.49 crore unspent from previous year), BEE utilized a sum of ₹100.72 crore during the year leaving a balance of ₹77.77 crore as unutilized on 31 March 2021.

### **C. Management Letter**

Deficiencies which have not been included in the Separate Audit Report would be brought to the notice of the Chairman, BEE through a Management Letter issued separately for remedial/corrective action.

- v. Subject to our observation in the preceding paragraphs, we report that the Balance Sheet and Income & Expenditure Account/Receipts & Payments Account dealt with by this report are in agreement with the books of accounts.



- vi. In our opinion and to the best of our information and according to the explanations given to us, the said financial statements read together with the Accounting Policies and Notes on Accounts and subject to matters mentioned in the Annexure-1 to this Separate Audit Report, give a true and fair view in conformity with accounting principles generally accepted in India:
- a) in so far as it relates to the Balance Sheet, of the state of affairs of Bureau of Energy Efficiency as at 31 March 2021; and
  - b) in so far it relates to Income & Expenditure Account, of the excess of income over expenditure for the year ended on that date.

**For and on behalf of C&AG of India**

**Sd/-**

**(Keerti Tewari)  
Director General of Audit (Energy),  
New Delhi**

**Place: New Delhi  
Date: 29 November, 2021**



## Annexure-I

|   |  |  |
|---|--|--|
| 1 | Adequacy of Internal Audit System  | BEE is not having Internal Audit Wing. Internal Audit is being conducted by pay and Account Office (MoP); however, Internal Audit for the year 2020-21 has not yet been conducted. Further, various old observations are pending for settlement since long.  |
| 2 | Adequacy of Internal Control System  | Internal Control System in BEE needs to be strengthened for the following: <ul style="list-style-type: none"> <li>• Submission of utilization Certificates by state Designated Agencies</li> <li>• Reconciliation between Physical Verification Report and the Stock Registers</li> <li>• Booking of Fixed Assets under 'Repairs and maintenance', 'Other Administrative Expenses'</li> <li>• Accountal of various expenses remaining unpaid as at year end, under 'Provisions'</li> </ul> |
| 3 | System of verification of fixed Assets   | Physical Verification was carried out in June/ July 2021.  |
| 4 | System of Physical verification of Inventory   | However, no certificate regarding availability or shortage/ excess noticed etc. during verification of the assets was found recorded. Further, the reconciliation between Physical Verification Report and Asset/ Stock Register was not found on record.  |
| 5 | Regularity in payment of Statutory Dues applicable to them.  | Yes  |
| 6 | Significant risk to financial reporting observed during the course of audit  | As per observation included in DSAR.   |
| 7 | Details of loss of cash or Government property due to theft, misappropriation, fraud and embezzlement etc. during the year | Management certified that no such case was noticed/ reported during the year.  |

**Director General of Audit (Energy)**

## FORM OF FINANCIAL STATEMENTS (NON-PROFIT ORGANISATIONS)

Name of the Entity **BUREAU OF ENERGY EFFICIENCY**

### BALANCE SHEET AS AT 31<sup>st</sup> MARCH, 2021

(Amount - ₹)

| CORPUS FUND AND LIABILITIES  | Schedule | Current Year          | Previous Year         |
|--|----------|-----------------------|-----------------------|
| ENERGY CONSERVATION FUND   | 1A       | 5,60,54,89,087        | 4,87,50,13,023        |
| OTHERS - PRGFEE & VCFEE FUND   | 1B       | 1,72,32,76,254        | 1,52,94,25,206        |
| RESERVES AND SURPLUS   | 2        | -                     | -                     |
| EARMARKED/ENDOWMENT FUNDS  | 3        | 85,63,63,726          | 1,22,12,66,584        |
| SECURED LOANS AND BORROWINGS   | 4        | -                     | -                     |
| UNSECURED LOANS AND BORROWINGS   | 5        | -                     | -                     |
| DEFERRED CREDIT LIABILITIES  | 6        | -                     | -                     |
| CURRENT LIABILITIES AND PROVISIONS                                       | 7        | 17,01,46,736          | 18,20,99,872          |
| <b>TOTAL</b>   |          | <b>8,35,52,75,803</b> | <b>7,80,78,04,685</b> |
| <u>ASSETS</u>  |          |                       |                       |
| FIXED ASSETS   | 8        | 1,66,97,399           | 1,39,49,716           |
| INVESTMENTS - FROM EARMARKED/ENDOWMENT FUNDS                             | 9        | 6,42,98,47,600        | 5,47,45,13,528        |
| INVESTMENTS - OTHERS   | 10       | -                     | -                     |
| CURRENT ASSETS, LOANS, ADVANCES ETC.                                     | 11       | 1,90,87,30,804        | 2,31,93,41,441        |
| MISCELLANEOUS EXPENDITURE<br>(to the extent not written off or adjusted) |          |                       |                       |
| <b>TOTAL</b>   |          | <b>8,35,52,75,803</b> | <b>7,80,78,04,685</b> |
| SIGNIFICANT ACCOUNTING POLICIES  | 24       |                       |                       |
| CONTINGENT LIABILITIES AND NOTES ON ACCOUNTS                             | 25       |                       |                       |

Date : 5<sup>th</sup> July, 2021

Place : New Delhi

**Rakesh Kumar Gupta**  
Finance & Accounts Officer

**Rakesh Kumar Rai**  
Secretary

**Abhay Bakre**  
Director General



**FORM OF FINANCIAL STATEMENTS (NON-PROFIT ORGANISATIONS)**

Name of the Entity **BUREAU OF ENERGY EFFICIENCY**

**INCOME AND EXPENDITURE ACCOUNT FOR THE YEAR ENDED 31<sup>st</sup> MARCH, 2021**

(Amount - ₹)

|   | Schedule | Current Year        | Previous Year       |
|---|----------|---------------------|---------------------|
| <b>INCOME</b>   |          |                     |                     |
| Income from Services  | 12       | -                   | -                   |
| Grants/Subsidies  | 13       | -                   | -                   |
| Fees/Subscriptions  | 14       | 2,61,84,423         | 4,30,32,476         |
| Income from Investments (Income on Invest from earmarked/endow. Funds transferred to Funds) | 15       | 6,93,25,134         | 6,98,21,773         |
| Income from Royalty, Publication etc.   | 16       | -                   | -                   |
| Interest Earned (Net)   | 17       | 5,07,18,241         | 6,04,54,146         |
| Other Income  | 18       | 9,58,447            | 10,26,583           |
| Increase/(decrease) in stock of Finished goods and works-in-progress                        | 19       | -                   | -                   |
| <b>TOTAL (A)</b>  |          | <b>14,71,86,245</b> | <b>17,43,34,978</b> |
| <b>EXPENDITURE</b>  |          |                     |                     |
| Establishment Expenses  | 20       | 9,88,19,705         | 7,80,16,334         |
| Other Administrative Expenses etc.  | 21       | 82,24,822           | 2,21,61,367         |
| Other Administrative Expenses etc. (Prior Period)   | 21       | 32,66,403           | 4,28,720            |
| Other Expenses (Project Expenses)   | 21       | 56,70,419           | 4,05,23,745         |
| Expenditure on Grants, Subsidies etc.   | 22       | -                   | -                   |
| Interest  | 23       | -                   | -                   |
| Depreciation  | 8        | 18,91,683           | 13,65,098           |
| Loss on Sale of Fixed Assets  | 8        | 29,325              | 4,09,846            |
| <b>TOTAL (B)</b>  |          | <b>11,79,02,357</b> | <b>14,29,05,110</b> |
| <b>Balance being excess of Income over Expenditure (A-B)</b>                                |          | <b>2,92,83,888</b>  | <b>3,14,29,868</b>  |
| Transfer to Special Reserve   |          | -                   | -                   |
| Transfer to/from General Reserve  |          | -                   | -                   |
| <b>BALANCE BEING SURPLUS/(DEFICIT) CARRIED TO ENERGY CONSERVATION FUND</b>                  |          | <b>2,92,83,888</b>  | <b>3,14,29,868</b>  |
| SIGNIFICANT ACCOUNTING POLICIES   | 24       |                     |                     |
| CONTINGENT, LIABILITIES AND NOTES ON ACCOUNTS   | 25       |                     |                     |

Date : 5<sup>th</sup> July, 2021

Place : New Delhi

**Rakesh Kumar Gupta**  
Finance & Accounts Officer

**Rakesh Kumar Rai**  
Secretary

**Abhay Bakre**  
Director General





# FORM OF FINANCIAL STATEMENTS (NON-PROFIT ORGANISATIONS)

## Name of the Entity BUREAU OF ENERGY EFFICIENCY

### RECEIPTS AND PAYMENTS FOR THE YEAR ENDED 31<sup>ST</sup> MARCH, 2021

| RECEIPTS   |  | DETAILS      |              | (Amount - ₹)      |                   | PAYMENTS  |  | DETAILS      |  | (Amount - ₹)      |                   |
|--|--|--------------|--------------|-------------------|-------------------|---|--|--------------|--|-------------------|-------------------|
| B/F  |  |              |              | Current Year      | Previous Year     | B/F   |  |              |  | Current Year      | Previous Year     |
| Security Deposit & Performance Security (Schedule - 7) (B/F) |  |              |              | 3,98,07,00,650.00 | 5,22,47,53,765.00 | EMD Refund (Schedule - 7) (B/F)                 |  |              |  | 2,26,75,98,168.00 | 3,17,14,30,208.00 |
| Kalyani Energy Solution                                      |  | 53,673.00    | -            | -                 | -                 | The Energy Research Institute (TERI)            |  | 6,00,000.00  |  | -                 | -                 |
| L.G.Airconditioners  |  | -            | 32,400.00    | -                 | 32,400.00         | TLC India                                       |  | -            |  | 50,000.00         | 50,000.00         |
| Lloyd Insulation India Ltd.                                  |  | 56,160.00    | -            | -                 | -                 | Tuv Sud South Asia Pvt. Ltd.                    |  | 50,000.00    |  | -                 | -                 |
| MCJ Energy Engineers   |  | -            | 3,00,000.00  | -                 | 3,00,000.00       | Walia & Co.                                     |  | -            |  | 50,000.00         | 50,000.00         |
| Nairinder Kumar & Sons                                       |  | -            | 1,18,140.00  | -                 | 1,18,140.00       | Wishmakers                                      |  | -            |  | 6,50,000.00       | 50,000.00         |
| Namdhari ECO Energies  |  | 1,07,638.00  | -            | -                 | -                 | Other Payments                                  |  |              |  |                   |                   |
| National Council for Cement & Building Materials             |  | 42,000.00    | -            | -                 | -                 | Unpaid Cheques (Schedule - 7)                   |  |              |  |                   |                   |
| National Productivity Council                                |  | 1,00,000.00  | -            | -                 | 1,15,000.00       | PAO (BOC etc.)                                  |  | 18,936.00    |  | 96,610.00         | -                 |
| NIN Energy India Pvt. Ltd.                                   |  | 80,000.00    | -            | -                 | -                 | Rana Motors Pvt. Ltd.                           |  | 40,49,760.00 |  | 40,68,696.00      | -                 |
| NITCON   |  | 2,45,000.00  | -            | -                 | -                 | SDA-Jammu & Kashmir                             |  |              |  |                   |                   |
| NITRA  |  | 1,79,522.00  | -            | -                 | 1,84,055.00       | Other current Liabilities (Others) (Schedule-7) |  |              |  |                   |                   |
| Operative Save Ujja  |  | 2,550.00     | -            | -                 | -                 | UNDP Payable                                    |  |              |  |                   |                   |
| PGS Energy Services Pvt. Ltd.                                |  | 1,10,663.00  | -            | -                 | 2,000.00          |   |  |              |  |                   |                   |
| Pricewaterhouse Coopers Pvt. Ltd. (PwC)                      |  | 3,59,055.00  | -            | -                 | 1,63,100.00       |   |  |              |  |                   |                   |
| RV Solutions Pvt. Ltd.                                       |  | 76,346.00    | -            | -                 | 12,02,650.00      |   |  |              |  |                   |                   |
| S.S.Traders  |  | -            | 2,000.00     | -                 | 2,54,300.00       |   |  |              |  |                   |                   |
| Stag Energy Service  |  | -            | 18,18,990.00 | -                 | 3,18,000.00       |   |  |              |  |                   |                   |
| The Energy Research Institute (TERI)                         |  | 12,49,600.00 | -            | -                 | 1,31,50,000.00    |   |  |              |  |                   |                   |
| Tuv Sud South Asia Pvt. Ltd.                                 |  | -            | 2,000.00     | -                 | -                 |   |  |              |  |                   |                   |
| Vishal Taxi Service  |  | 3,00,000.00  | -            | -                 | 86,25,000.00      |   |  |              |  |                   |                   |
| Vivekananda Global University                                |  | -            | 30,15,307.00 | -                 | -                 |   |  |              |  |                   |                   |
| VK Environmental   |  | -            | -            | 30,15,307.00      | -                 |   |  |              |  |                   |                   |
| Security Deposit (Liabilities)                               |  |              |              |                   |                   |   |  |              |  |                   |                   |
| Standard & Labeling (S&L) (Schedule - 7)                     |  |              |              |                   |                   |   |  |              |  |                   |                   |
| Earnest Money Deposit (Schedule-7)                           |  |              |              |                   |                   |   |  |              |  |                   |                   |
| Active Energy OPC Private Limited                            |  |              |              |                   |                   |   |  |              |  |                   |                   |
| Akmanada Advertising Pvt. Ltd.                               |  |              |              |                   |                   |   |  |              |  |                   |                   |
| All India Institute of Local Self Government (AIILSG)        |  |              |              |                   |                   |   |  |              |  |                   |                   |
| ARS Energy Auditors  |  |              |              |                   |                   |   |  |              |  |                   |                   |
| Atria Energy Services Pvt. Ltd.                              |  |              |              |                   |                   |   |  |              |  |                   |                   |
| Audiotech Industrial Services Pvt. Ltd.                      |  |              |              |                   |                   |   |  |              |  |                   |                   |
| Central Power Research Institute                             |  |              |              |                   |                   |   |  |              |  |                   |                   |
| Confederation of India Industry                              |  |              |              |                   |                   |   |  |              |  |                   |                   |
| Delhi Test House Sonipat                                     |  |              |              |                   |                   |   |  |              |  |                   |                   |
| Deloitte Touche Tomatsu India                                |  |              |              |                   |                   |   |  |              |  |                   |                   |
| Earhood Services Pvt. Ltd.                                   |  |              |              |                   |                   |   |  |              |  |                   |                   |
| Ernst & Young LLP  |  |              |              |                   |                   |   |  |              |  |                   |                   |
| Environmental Design Solutions Pvt. Ltd.                     |  |              |              |                   |                   |   |  |              |  |                   |                   |
| Erzen Global Solutions Pvt. Ltd. (EGSPL)                     |  |              |              |                   |                   |   |  |              |  |                   |                   |
| ELA Green  |  |              |              |                   |                   |   |  |              |  |                   |                   |
| Electrical Research & Development Association (ERDA)         |  |              |              |                   |                   |   |  |              |  |                   |                   |
| Federation of Indian Chambers of Commerce & Industry (FICCI) |  |              |              |                   |                   |   |  |              |  |                   |                   |
| GEED   |  |              |              |                   |                   |   |  |              |  |                   |                   |
| Global Cansugar Service Pvt. Ltd.                            |  |              |              |                   |                   |   |  |              |  |                   |                   |
| ICF Consulting India Pvt. Ltd.                               |  |              |              |                   |                   |   |  |              |  |                   |                   |
| IDBI Intech  |  |              |              |                   |                   |   |  |              |  |                   |                   |
| Invicta Advertising  |  |              |              |                   |                   |   |  |              |  |                   |                   |
| CIF  |  |              |              | 3,99,25,85,957.00 | 5,24,58,83,650.00 | CIF   |  |              |  | 2,27,23,16,864.00 | 3,17,35,65,384.00 |



**FORM OF FINANCIAL STATEMENTS (NON-PROFIT ORGANISATIONS)**  
Name of the Entity **BUREAU OF ENERGY EFFICIENCY**

**RECEIPTS AND PAYMENTS FOR THE YEAR ENDED 31<sup>ST</sup> MARCH, 2021**

| RECEIPTS<br>B/F   | Details     | (Amount - ₹)             |                          | PAYMENTS<br>B/F                       | Details         | (Amount - ₹)             |                          |
|---|-------------|--------------------------|--------------------------|---------------------------------------|-----------------|--------------------------|--------------------------|
|   |             | Current Year             | Previous Year            |                                       |                 | Current Year             | Previous Year            |
| <b>Earnest Money Deposit (Schedule-7) (B/F)</b>               |             | <b>3,99,25,65,957.00</b> | <b>5,24,58,83,650.00</b> |                                       |                 | <b>2,27,23,16,864.00</b> | <b>3,17,35,65,384.00</b> |
| Intertek India Pvt. Ltd.                                      | 25,000.00   | -                        | -                        | VII. Closing Balances (Schedule - 11) |                 |                          |                          |
| Kerala State Productivity Council                             | -           | 94,500.00                | -                        | a) Cash in Hand                       |                 |                          | 2,430.00                 |
| Kishore Kumar Elec. & Mechanical Engineering                  | -           | 10,000.00                | 10,000.00                | b) Bank Balances                      |                 |                          |                          |
| KPMG Advisory Services Pvt. Ltd.                              | -           | 2,00,000.00              | 2,00,000.00              | i) Savings Accounts - BEE             | 6,08,65,091.00  |                          | 12,54,37,744.00          |
| Lloyd Insulation India Ltd.                                   | 1,00,000.00 | -                        | -                        | ii) Deposit Accounts                  | 85,42,54,524.00 |                          | 76,65,70,803.00          |
| MCJ Energy Engineers  | -           | 50,000.00                | 50,000.00                | iii) Savings Accounts - Plan Scheme   | 80,58,02,106.00 | 1,72,09,21,721.00        | 1,18,29,61,713.00        |
| Mitcon Consultancy Services                                   | -           | 1,00,000.00              | 1,00,000.00              |                                       |                 |                          |                          |
| MSME Technology Development                                   | -           | 1,00,000.00              | 1,00,000.00              |                                       |                 |                          |                          |
| National Institute of Secondary Steel Technology              | -           | 1,00,000.00              | 1,00,000.00              |                                       |                 |                          |                          |
| National Productivity Council                                 | -           | 6,50,000.00              | 6,50,000.00              |                                       |                 |                          |                          |
| National Council for Cement & Building Materials              | 50,000.00   | -                        | -                        |                                       |                 |                          |                          |
| North India Technical Consultancy Organization Ltd. (NITCOON) | -           | 1,00,000.00              | 1,00,000.00              |                                       |                 |                          |                          |
| North India Textile Research Association (NITRA)              | -           | 1,00,000.00              | 1,00,000.00              |                                       |                 |                          |                          |
| Pricewaterhouse Coopers Pvt. Ltd. (PwC)                       | 1,50,000.00 | -                        | -                        |                                       |                 |                          |                          |
| Rolleract Press Services                                      | 5,000.00    | -                        | -                        |                                       |                 |                          |                          |
| Steag Energy Service  | 50,000.00   | -                        | -                        |                                       |                 |                          |                          |
| The Energy Research Institute (TERI)                          | -           | 7,50,000.00              | 7,50,000.00              |                                       |                 |                          |                          |
| The National Industries Corporation Ltd.                      | 25,000.00   | -                        | -                        |                                       |                 |                          |                          |
| TLG India Pvt. Ltd.   | -           | 50,000.00                | 50,000.00                |                                       |                 |                          |                          |
| TUV India Pvt. Ltd.   | 1,00,000.00 | -                        | -                        |                                       |                 |                          |                          |
| URS Verification  | 50,000.00   | 5,55,000.00              | 1,00,000.00              |                                       |                 |                          |                          |
| VK Environmental  | -           | -                        | -                        |                                       |                 |                          |                          |
| <b>Other Receivables (Assets) (Schedule- 11)</b>              |             |                          |                          |                                       |                 |                          |                          |
| Abhay Bakre   | -           | 11,537.00                | 11,537.00                |                                       |                 |                          |                          |
| Ashok Kumar   | -           | 11,572.00                | 11,572.00                |                                       |                 |                          |                          |
| Hemendra Kumar  | -           | 11,400.00                | 11,400.00                |                                       |                 |                          |                          |
| India International Centre                                    | 1,17,628.00 | 6,926.00                 | 6,926.00                 |                                       |                 |                          |                          |
| Milind B. Deore   | -           | 1,16,164.00              | 1,16,164.00              |                                       |                 |                          |                          |
| NTPC Ltd.   | -           | -                        | -                        |                                       |                 |                          |                          |
| <b>TOTAL</b>  |             | <b>3,99,32,38,585.00</b> | <b>5,24,85,38,074.00</b> | <b>TOTAL</b>                          |                 | <b>3,99,32,38,585.00</b> | <b>5,24,85,38,074.00</b> |

Date : 5<sup>th</sup> July, 2021  
Place : New Delhi

Rakesh Kumar Gupta  
Finance & Accounts Officer

Rakesh Kumar Rai  
Secretary

Abhay Bakre  
Director General

**FORM OF FINANCIAL STATEMENTS (NON-PROFIT ORGANISATIONS)**  
Name of Entity **BUREAU OF ENERGY EFFICIENCY**

**SCHEDULES FORMING PART OF BALANCE SHEET AS AT 31<sup>st</sup> March, 2021**

**SCHEDULE 1**

(Amount - ₹)

| <b>SCHEDULE 1 - ENERGY CONSERVATION FUND</b>   | <b>Current Year</b> |                       | <b>Previous Year</b> |                       |
|--|---------------------|-----------------------|----------------------|-----------------------|
| <b>A. ENERGY CONSERVATION FUND</b>   |                     |                       |                      |                       |
| 1. <u>Corpus Fund</u>  |                     |                       |                      |                       |
| Opening balance brought forward  |                     |                       |                      |                       |
| Balance as at the beginning of the year (BEE)  | 50,00,00,000        |                       | 50,00,00,000         |                       |
| Contribution towards Corpus Fund (Augmentation of Corpus Fund - NMEEE)                               | 45,00,00,000        |                       | 31,49,11,500         |                       |
|  | 95,00,00,000        |                       | 81,49,11,500         |                       |
| Add: Addition during the year Contribution towards Corpus Fund (Augmentation of Corpus Fund - NMEEE) | -                   | 95,00,00,000          | 13,50,88,500         | 95,00,00,000          |
| 2. <u>Standard &amp; Labeling Fee (S&amp;L)</u>  |                     |                       |                      |                       |
| Opening balance brought forward  | 3,15,21,11,652      |                       | 2,78,56,36,722       |                       |
| Less: Fund transferred to Scheme during the year   | 6,76,25,017         |                       | 39,74,41,650         |                       |
| Add: Addition during the year  | 60,72,03,219        |                       | 55,56,06,568         |                       |
| Add: Interest during the year  | 16,10,60,918        | 3,85,27,50,772        | 20,83,10,012         | 3,15,21,11,652        |
| 3. <u>Building Labeling Fee</u>  |                     |                       |                      |                       |
| Opening balance brought forward  | 54,00,000           |                       | 45,00,000            |                       |
| Add: Addition during the year  | 2,00,000            | 56,00,000             | 9,00,000             | 54,00,000             |
| 4. <u>E-Certs Trading Fee</u>  |                     |                       |                      |                       |
| Opening balance brought forward  | 63,46,932           |                       | 62,40,958            |                       |
| Add: Addition during the year  | 3,53,056            | 66,99,988             | 1,05,974             | 63,46,932             |
| 5. <u>Opening Balance of Excess of Income over Expenditure</u>                                       | 76,11,54,439        |                       | 72,97,24,571         |                       |
| Add: Balance of net income transferred from the Income & Expenditure Account                         | 2,92,83,888         | 79,04,38,327          | 3,14,29,868          | 76,11,54,439          |
| <b>Total - 1A</b>  |                     | <b>5,60,54,89,087</b> |                      | <b>4,87,50,13,023</b> |
| <b>B. OTHERS - PRGFEE &amp; VCFEE FUND</b>   |                     |                       |                      |                       |
| 1. <u>PRGFEE</u>   |                     |                       |                      |                       |
| Opening balance brought forward  | 1,04,15,80,981      |                       | 41,23,12,428         |                       |
| Less: Expenditure during the year  | 4,39,352            |                       | 17,09,305            |                       |
| Add: Addition during the year  | 7,68,85,940         |                       | 58,91,42,082         |                       |
| Add: Interest during the year (includes interest received from RECPDCL)                              | 9,30,69,409         | 1,21,10,96,978        | 4,18,35,776          | 1,04,15,80,981        |
| 2. <u>VCFEE</u>  |                     |                       |                      |                       |
| Opening balance brought forward  | 48,78,44,225        |                       | 46,57,48,319         |                       |
| Less: Expenditure during the year  | -                   |                       | 3,49,849             |                       |
| Add: Interest during the year  | 2,43,35,051         | 51,21,79,276          | 2,24,45,755          | 48,78,44,225          |
| <b>Total - 1B</b>  |                     | <b>1,72,32,76,254</b> |                      | <b>1,52,94,25,206</b> |

**SCHEDULE 2**

| <b>SCHEDULE 2 - RESERVES AND SURPLUS:</b>                   | <b>Current Year</b> |          | <b>Previous Year</b> |          |
|---|---------------------|----------|----------------------|----------|
| 1. <u>Capital Reserve:</u> [Grants-in-Kind (USAID)] - (BEE) |                     |          |                      |          |
| As per last Account   | -                   |          | 7,778                |          |
| Less : Sale of Assets during the year                       | -                   |          | 50                   |          |
| Less : Loss on Sale of Assets during the year               | -                   |          | 7,728                | -        |
| 2. <u>Revaluation Reserve:</u>                              |                     |          |                      |          |
| As per last Account   | -                   |          | -                    |          |
| Addition during the year                                    | -                   |          | -                    |          |
| Less : Deductions during the year                           | -                   |          | -                    |          |
| 3. <u>Special Reserve:</u>                                  |                     |          |                      |          |
| As per last Account   | -                   |          | -                    |          |
| Addition during the year                                    | -                   |          | -                    |          |
| Less : Deductions during the year                           | -                   |          | -                    |          |
| 4. <u>General Reserve:</u>                                  |                     |          |                      |          |
| As per last Account   | -                   |          | -                    |          |
| Addition during the year                                    | -                   |          | -                    |          |
| Less : Deductions during the year                           | -                   |          | -                    |          |
| <b>TOTAL</b>  |                     | <b>-</b> |                      | <b>-</b> |



**FORM OF FINANCIAL STATEMENTS (NON-PROFIT ORGANISATIONS)**  
Name of the Entity **BUREAU OF ENERGY EFFICIENCY**

**SCHEDULES FORMING PART OF BALANCE SHEET AS AT 31<sup>st</sup> MARCH, 2021**

|  | UNIDO-GEF-BEE PROJECT |                    | STANDARD & LABELING PROGRAMME |                     | (Amount - ₹)        |                       |
|--|-----------------------|--------------------|-------------------------------|---------------------|---------------------|-----------------------|
|  | Current Year          | Previous Year      | Current Year                  | Previous Year       | Current Year        | Previous Year         |
| <b>A. Grants in Cash</b>   |                       |                    |                               |                     |                     |                       |
| a) <b>Opening balance of the funds</b>                               | 3,15,70,030           | 6,34,61,934        | -                             | -                   | 3,15,70,030         | 6,34,61,934           |
| b) <b>Additions to the Funds:</b>                                    |                       |                    |                               |                     |                     |                       |
| i. Donations/grants  | -                     | -                  | 6,76,25,017                   | 39,74,29,532        | 6,76,25,017         | 39,74,29,532          |
| ii. Income from investments made on account of funds/Saving interest | -                     | -                  | -                             | -                   | -                   | -                     |
| iii. Other additions/Rate difference                                 | -                     | -                  | -                             | -                   | -                   | -                     |
| <b>TOTAL (a+b)</b>   | <b>3,15,70,030</b>    | <b>6,34,61,934</b> | <b>6,76,25,017</b>            | <b>39,74,29,532</b> | <b>9,91,95,047</b>  | <b>46,08,91,466</b>   |
| <b>c) Utilisation/Expenditure towards objectives of funds</b>        |                       |                    |                               |                     |                     |                       |
| i. <b>Capital Expenditure</b>  |                       |                    |                               |                     |                     |                       |
| - Fixed Assets   | -                     | 1,03,890           | 80,000                        | -                   | 80,000              | 1,03,890              |
| - Check Testing Equipments (Stock in Hand)                           | -                     | -                  | 32,53,404                     | 35,29,904           | 32,53,404           | 35,29,904             |
| <b>Total</b>   | <b>-</b>              | <b>1,03,890</b>    | <b>33,33,404</b>              | <b>35,29,904</b>    | <b>33,33,404</b>    | <b>36,33,794</b>      |
| ii. <b>Revenue Expenditure</b>                                       |                       |                    |                               |                     |                     |                       |
| - Salaries, Wages and allowances etc.                                | 65,51,164             | 95,33,007          | 62,65,302                     | 1,11,54,891         | 1,28,16,466         | 2,06,87,898           |
| - Other Administrative/Project expenses                              | 66,068                | 2,22,55,007        | 5,80,26,311                   | 38,27,44,737        | 5,80,92,379         | 40,49,99,744          |
| - Amount refunded/transferred  | -                     | -                  | -                             | -                   | -                   | -                     |
| <b>Total</b>   | <b>66,17,232</b>      | <b>3,17,88,014</b> | <b>6,42,91,613</b>            | <b>39,38,99,628</b> | <b>7,09,08,845</b>  | <b>42,56,87,642</b>   |
| <b>TOTAL (c)</b>   | <b>66,17,232</b>      | <b>3,18,91,904</b> | <b>6,76,25,017</b>            | <b>39,74,29,532</b> | <b>7,42,42,249</b>  | <b>42,93,21,436</b>   |
| <b>Amount transferred to Income &amp; Expenditure A/c</b>            |                       |                    |                               |                     |                     |                       |
| <b>NET BALANCE AS AT THE YEAR END (A)</b>                            | <b>2,49,52,798</b>    | <b>3,15,70,030</b> | <b>-</b>                      | <b>-</b>            | <b>2,49,52,798</b>  | <b>3,15,70,030</b>    |
| <b>B. Grants in Kind</b>   |                       |                    |                               |                     |                     |                       |
| a) <b>Opening balance of the funds</b>                               | 1,19,663              | 60,917             | 1,16,98,181                   | 88,25,547           | 1,18,17,844         | 88,86,464             |
| b) <b>Additions to the Funds:</b>                                    |                       |                    |                               |                     |                     |                       |
| i. Other additions/ Assets/ Funds transfer                           | -                     | 1,03,890           | 1,20,000                      | -                   | 1,20,000            | 1,03,890              |
| ii. Check Testing Equipments (Stock in Hand)                         | -                     | -                  | 32,53,404                     | 35,29,904           | 32,53,404           | 35,29,904             |
| <b>TOTAL (a+b)</b>   | <b>1,19,663</b>       | <b>1,64,807</b>    | <b>1,50,71,585</b>            | <b>1,23,55,451</b>  | <b>1,51,91,248</b>  | <b>1,25,20,258</b>    |
| <b>c) Utilisation/Expenditure towards objectives of funds</b>        |                       |                    |                               |                     |                     |                       |
| i. <b>Capital Expenditure</b>  |                       |                    |                               |                     |                     |                       |
| - Fixed Assets   | -                     | -                  | -                             | -                   | -                   | -                     |
| - Loss on Sale of assets   | -                     | -                  | 77,986                        | -                   | 77,986              | -                     |
| <b>Total</b>   | <b>-</b>              | <b>-</b>           | <b>77,986</b>                 | <b>-</b>            | <b>77,986</b>       | <b>-</b>              |
| ii. <b>Revenue Expenditure</b>                                       |                       |                    |                               |                     |                     |                       |
| - Salaries, Wages and allowances etc.                                | -                     | -                  | -                             | -                   | -                   | -                     |
| - Other Administrative expenses (Depreciation)                       | 38,743                | 45,144             | 4,74,810                      | 6,57,270            | 5,13,553            | 7,02,414              |
| <b>Total</b>   | <b>38,743</b>         | <b>45,144</b>      | <b>4,74,810</b>               | <b>6,57,270</b>     | <b>5,13,553</b>     | <b>7,02,414</b>       |
| <b>TOTAL (c)</b>   | <b>80,920</b>         | <b>1,19,663</b>    | <b>1,45,18,789</b>            | <b>1,16,98,181</b>  | <b>1,45,99,709</b>  | <b>1,18,17,844</b>    |
| <b>NET BALANCE AS AT THE YEAR END (B)</b>                            | <b>2,50,33,718</b>    | <b>3,16,89,693</b> | <b>1,45,18,789</b>            | <b>1,16,98,181</b>  | <b>3,95,52,507</b>  | <b>4,33,87,874</b>    |
| <b>GRAND TOTAL (A+B)</b>   |                       |                    |                               |                     |                     |                       |
|  |                       |                    |                               | Schedule-3          | 81,68,11,219        | 1,17,78,78,710        |
|  |                       |                    |                               | Others              | 3,95,52,507         | 4,33,87,874           |
|  |                       |                    |                               | <b>Total</b>        | <b>85,63,63,726</b> | <b>1,22,12,66,584</b> |



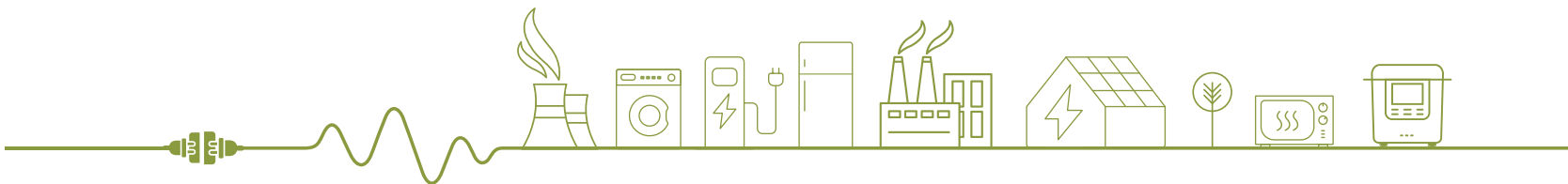
**FORM OF FINANCIAL STATEMENTS (NON-PROFIT ORGANISATIONS)**  
Name of Entity **BUREAU OF ENERGY EFFICIENCY**

**SCHEDULES FORMING PART OF BALANCE SHEET AS AT 31<sup>st</sup> March, 2021**

**SCHEDULE 4**

(Amount - ₹)

| <b>SCHEDULE 4 - SECURED LOANS AND BORROWINGS</b> | <b>Current Year</b> |          | <b>Previous Year</b> |          |
|--|---------------------|----------|----------------------|----------|
| 1. Central Government                            |                     | -        |                      | -        |
| 2. State Government                              |                     | -        |                      | -        |
| 3. Financial Institutions                        |                     |          |                      |          |
| a) Term Loans                                    | -                   |          | -                    |          |
| b) Interest Accrued and due                      | -                   | -        | -                    | -        |
| 4. Banks:  |                     |          |                      |          |
| a) Term Loans                                    | -                   |          | -                    |          |
| - Interest accrued and due                       | -                   |          | -                    |          |
| b) Other Loans                                   | -                   |          | -                    |          |
| - Interest accrued and due                       | -                   | -        | -                    | -        |
| 5. Other Institutions and Agencies               |                     | -        |                      | -        |
| 6. Debentures and Bonds                          |                     | -        |                      | -        |
| 7. Others  |                     | -        |                      | -        |
| <b>TOTAL</b>                                     |                     | <b>-</b> |                      | <b>-</b> |



## FORM OF FINANCIAL STATEMENTS (NON-PROFIT ORGANISATIONS)

Name of Entity **BUREAU OF ENERGY EFFICIENCY**

### SCHEDULES FORMING PART OF BALANCE SHEET AS AT 31<sup>st</sup> March, 2020

#### SCHEDULE 5 & 6

Amount - ₹)

| SCHEDULE 5 - UNSECURED LOANS AND BORROWINGS | Current Year | Previous Year |
|---|--------------|---------------|
| 1. Central Government                       | -            | -             |
| 2. State Government                         | -            | -             |
| 3. Financial Institutions                   | -            | -             |
| 4. Banks:                                   |              |               |
| a) Term Loans                               | -            | -             |
| b) Other Loans                              | -            | -             |
| 5. Other Institutions and Agencies          | -            | -             |
| 6. Debentures and Bonds                     | -            | -             |
| 7. Fixed Deposits                           | -            | -             |
| 8. Others                                   | -            | -             |
| <b>TOTAL</b>                                | <b>-</b>     | <b>-</b>      |

| SCHEDULE 6 - DEFERRED CREDIT LIABILITIES                                     | Current Year | Previous Year |
|--|--------------|---------------|
| a) Acceptance secured by hypothecation of capital equipment and other assets | -            | -             |
| b) Others  | -            | -             |
| <b>TOTAL</b>   | <b>-</b>     | <b>-</b>      |



**FORM OF FINANCIAL STATEMENTS (NON-PROFIT ORGANISATIONS)**  
Name of Entity **BUREAU OF ENERGY EFFICIENCY**

**SCHEDULES FORMING PART OF BALANCE SHEET AS AT 31<sup>st</sup> MARCH, 2021**

**SCHEDULE 7**

(Amount - ₹)

| <b>SCHEDULE 7 - CURRENT LIABILITIES AND PROVISIONS</b>                          | <b>Current Year</b> |                     | <b>Previous Year</b> |                     |
|---|---------------------|---------------------|----------------------|---------------------|
| <b>A. CURRENT LIABILITIES</b>   |                     |                     |                      |                     |
| <b>Sundry Creditors</b>   |                     |                     |                      |                     |
| <b>Sundry Creditors (Others)</b>  |                     | 45,49,667           |                      | 1,20,21,504         |
| <b>Earnest Money Deposits</b>   |                     | 66,24,220           |                      | 1,03,39,220         |
| <b>Security Deposit</b>   |                     | 1,81,27,867         |                      | 1,66,86,314         |
| <b>Security Deposit (Standard &amp; Labelling)</b>                              |                     |                     |                      |                     |
| Security Deposit (Standard & Labelling) - (Airconditioning)                     | 1,33,50,000         |                     | 1,29,00,000          |                     |
| Security Deposit (Standard & Labelling) - (Lighting)                            | 26,50,000           |                     | 26,50,000            |                     |
| Security Deposit (Standard & Labelling) - (Refrigeration)                       | 1,01,00,000         |                     | 94,50,000            |                     |
| Security Deposit (Standard & Labelling) - (Transformers)                        | 2,36,75,500         |                     | 2,32,25,500          |                     |
| Security Deposit (Standard & Labelling) - (Ballast)                             | 2,25,000            |                     | 2,25,000             |                     |
| Security Deposit (Standard & Labelling) - (Ceiling Fan)                         | 96,00,000           |                     | 89,75,000            |                     |
| Security Deposit (Standard & Labelling) - (Chiller)                             | 7,50,000            |                     | 6,25,000             |                     |
| Security Deposit (Standard & Labelling) - (Computers)                           | 14,25,000           |                     | 14,25,000            |                     |
| Security Deposit (Standard & Labelling) - (CTV)                                 | 1,00,75,000         |                     | 93,00,000            |                     |
| Security Deposit (Standard & Labelling) - (Deep Freezer)                        | 2,00,000            |                     | -                    |                     |
| Security Deposit (Standard & Labelling) - (DG Set)                              | 3,75,000            |                     | 3,75,000             |                     |
| Security Deposit (Standard & Labelling) - (Gas Stove)                           | 20,05,000           |                     | 20,30,000            |                     |
| Security Deposit (Standard & Labelling) - (Geysers)                             | 2,25,000            |                     | 2,25,000             |                     |
| Security Deposit (Standard & Labelling) - (Inverters - ACs)                     | 1,08,000            |                     | 1,08,000             |                     |
| Security Deposit (Standard & Labelling) - (Inverters)                           | 1,00,000            |                     | 1,00,000             |                     |
| Security Deposit (Standard & Labelling) - (LED Lamps)                           | 66,25,000           |                     | 59,50,000            |                     |
| Security Deposit (Standard & Labelling) - (LPG Gas)                             | 4,50,000            |                     | 4,50,000             |                     |
| Security Deposit (Standard & Labelling) - (Microwave Oven)                      | 9,00,000            |                     | 6,00,000             |                     |
| Security Deposit (Standard & Labelling) - (Monoset Pump)                        | 2,25,000            |                     | 2,25,000             |                     |
| Security Deposit (Standard & Labelling) - (Motors)                              | 11,75,000           |                     | 11,75,000            |                     |
| Security Deposit (Standard & Labelling) - (Office Automation Products)          | 1,00,000            |                     | 1,00,000             |                     |
| Security Deposit (Standard & Labelling) - (Open Well Submersible Pump Set)      | 8,50,000            |                     | 6,50,000             |                     |
| Security Deposit (Standard & Labelling) - (Pump)                                | 1,39,25,000         |                     | 1,39,25,000          |                     |
| Security Deposit (Standard & Labelling) - (Submersible Pump Set)                | 19,00,000           |                     | 15,75,000            |                     |
| Security Deposit (Standard & Labelling) - (TFL)                                 | 1,00,000            |                     | -                    |                     |
| Security Deposit (Standard & Labelling) - (Washing Machine)                     | 30,50,000           |                     | 19,75,000            |                     |
| Security Deposit (Standard & Labelling) - (Water Heater)                        | 2,08,50,000         | 12,50,13,500        | 2,00,75,000          | 11,83,13,500        |
| <b>Duties &amp; Taxes</b>   |                     | 5,31,032            |                      | 62,36,330           |
| <b>Other Current Liabilities</b>  |                     | 1,53,00,450         |                      | 1,85,03,004         |
| <b>TOTAL (A)</b>  |                     | <b>17,01,46,736</b> |                      | <b>18,20,99,872</b> |
| <b>B. PROVISIONS</b>  |                     |                     |                      |                     |
| 1. For Taxation   |                     | -                   |                      | -                   |
| 2. Gratuity   |                     | -                   |                      | -                   |
| 3. Superannuation/Pension (Leave Salary/Pension Contribution for deputationist) |                     | -                   |                      | -                   |
| 4. Accumulated Leave Encashment   |                     | -                   |                      | -                   |
| 5. Trade Warranties/Claims  |                     | -                   |                      | -                   |
| <b>TOTAL (B)</b>  |                     | -                   |                      | -                   |
| <b>TOTAL (A+B)</b>  |                     | <b>17,01,46,736</b> |                      | <b>18,20,99,872</b> |

**FORM OF FINANCIAL STATEMENTS (NON-PROFIT ORGANISATIONS)**  
Name of Entity **BUREAU OF ENERGY EFFICIENCY**

**SCHEDULES FORMING PART OF BALANCE SHEET AS AT 31<sup>st</sup> MARCH, 2021**

| S. No.                             | SCHEDULE 8 - FIXED ASSETS DESCRIPTION | Rate of Depreciation | GROSS BLOCK         |                           |                    | DEPRECIATION BLOCK  |                  |                  | NET BLOCK          |               |                    |                    |                |
|------------------------------------|---------------------------------------|----------------------|---------------------|---------------------------|--------------------|---------------------|------------------|------------------|--------------------|---------------|--------------------|--------------------|----------------|
|                                    |                                       |                      | As on 01/04/20      | Additions during the year | Sale               | Adjustment          | As on 31/03/21   | As on 01/04/20   | for the year       | Sale          | Adjustment         | As on 31/03/21     | As on 31/03/20 |
| <b>BUREAU OF ENERGY EFFICIENCY</b> |                                       |                      |                     |                           |                    |                     |                  |                  |                    |               |                    |                    |                |
| (A)                                | <u>Tangible Assets</u>                |                      |                     |                           |                    |                     |                  |                  |                    |               |                    |                    |                |
| 1                                  | Land                                  |                      | -                   | -                         | -                  | -                   | -                | -                | -                  | -             | -                  | -                  | -              |
| 2                                  | Building                              |                      | -                   | -                         | -                  | -                   | -                | -                | -                  | -             | -                  | -                  | -              |
| 3                                  | Furniture & Fixtures                  | 10%                  | 1,43,30,119         | 24,60,199                 | -                  | 1,67,90,318         | 8,65,817         | -                | 1,00,41,375        | 67,48,943     | 51,54,561          |                    |                |
| 4                                  | Office Equipments                     | 15%                  | 96,33,877           | 16,07,052                 | 7,06,274           | 1,05,34,655         | 6,28,533         | 5,96,949         | 74,18,152          | 31,16,503     | 22,16,971          |                    |                |
| 5                                  | Vehicle                               | 15%                  | 28,07,424           | -                         | -                  | 28,07,424           | 81,823           | -                | 22,80,458          | 5,26,966      | 6,08,789           |                    |                |
| 6                                  | Computer                              | 40%                  | 1,86,32,330         | 3,75,157                  | -                  | 1,90,07,487         | 3,33,308         | -                | 1,83,33,884        | 6,73,603      | 6,31,754           |                    |                |
| (B)                                | <u>Intangible Assets</u>              |                      |                     |                           |                    |                     |                  |                  |                    |               |                    |                    |                |
| 1                                  | Computer - Software                   | 40%                  | 2,72,53,363         | -                         | -                  | 2,72,53,363         | 12,540           | -                | 2,72,31,762        | 21,601        | 34,141             |                    |                |
|                                    | <b>TOTAL</b>                          |                      | <b>7,26,57,113</b>  | <b>44,42,408</b>          | <b>7,06,274</b>    | <b>7,63,93,247</b>  | <b>19,22,021</b> | <b>5,96,949</b>  | <b>6,40,10,897</b> | <b>30,338</b> | <b>1,10,87,616</b> | <b>86,46,216</b>   |                |
| <b>ASSETS UNDER GRANT IN KIND</b>  |                                       |                      |                     |                           |                    |                     |                  |                  |                    |               |                    |                    |                |
| (A)                                | <u>Tangible Assets</u>                |                      |                     |                           |                    |                     |                  |                  |                    |               |                    |                    |                |
| 11                                 | Land                                  |                      | -                   | -                         | -                  | -                   | -                | -                | -                  | -             | -                  | -                  | -              |
| 2                                  | Building                              |                      | -                   | -                         | -                  | -                   | -                | -                | -                  | -             | -                  | -                  | -              |
| 3                                  | Furniture & Fixtures                  | 10%                  | 7,22,097            | 20,761                    | -                  | 7,42,858            | 52,529           | -                | 2,59,716           | 4,83,142      | 5,14,910           |                    |                |
| 4                                  | Office Equipments                     | 15%                  | 1,00,74,845         | 1,53,180                  | 2,43,263           | 99,84,762           | 4,23,085         | 1,65,277         | 69,96,955          | 29,87,807     | 33,14,057          |                    |                |
| 5                                  | Vehicle                               | 15%                  | -                   | -                         | -                  | -                   | -                | -                | -                  | -             | -                  | -                  | -              |
| 6                                  | Computer                              | 40%                  | 85,96,914           | 15,99,557                 | -                  | 1,01,96,471         | 7,09,232         | -                | 84,00,205          | 17,96,266     | 9,05,941           |                    |                |
| (B)                                | <u>Intangible Assets</u>              |                      |                     |                           |                    |                     |                  |                  |                    |               |                    |                    |                |
| 1                                  | Computer - Software                   | 40%                  | 1,08,23,178         | -                         | -                  | 1,08,23,178         | 2,26,024         | -                | 1,04,80,610        | 3,42,568      | 5,68,592           |                    |                |
|                                    | <b>TOTAL</b>                          |                      | <b>3,02,17,034</b>  | <b>17,73,498</b>          | <b>2,43,263</b>    | <b>3,17,47,269</b>  | <b>14,10,870</b> | <b>1,65,277</b>  | <b>2,61,37,486</b> | <b>21,641</b> | <b>56,09,783</b>   | <b>53,03,500</b>   |                |
|                                    | <b>GRAND TOTAL</b>                    |                      | <b>10,28,74,147</b> | <b>62,15,906</b>          | <b>9,49,537</b>    | <b>10,81,40,516</b> | <b>33,32,891</b> | <b>7,62,226</b>  | <b>9,14,43,117</b> | <b>51,979</b> | <b>1,66,97,399</b> | <b>1,39,49,716</b> |                |
|                                    | <b>PREVIOUS YEAR</b>                  |                      | <b>11,16,29,936</b> | <b>16,90,990</b>          | <b>1,04,46,779</b> | <b>10,28,74,147</b> | <b>28,36,221</b> | <b>99,45,209</b> | <b>8,89,24,431</b> | <b>-</b>      | <b>1,39,49,716</b> | <b>1,55,96,517</b> |                |



**FORM OF FINANCIAL STATEMENTS (NON-PROFIT ORGANISATIONS)**  
Name of Entity **BUREAU OF ENERGY EFFICIENCY**

**SCHEDULES FORMING PART OF BALANCE SHEET AS AT 31<sup>st</sup> MARCH, 2021**

**SCHEDULE 9 & 10**

(Amount - ₹)

| <b>SCHEDULE 9 - INVESTMENT FROM EARMARKED/ENDOWMENT FUNDS</b>  |                | <b>Current year</b>   | <b>Previous Year</b>  |
|--|----------------|-----------------------|-----------------------|
| 1. In Government Securities                                    |                | -                     | -                     |
| 2. Other approved Securities                                   |                | -                     | -                     |
| 3. Shares  |                | -                     | -                     |
| 4. Corpus Fund   |                |                       |                       |
| i. Bonds of NTPC (20 year)                                     | 50,00,00,000   |                       | 50,00,00,000          |
| ii. Bank of Baroda - FDR (Augmentation of Corpus Fund - NMEEE) | 45,00,00,000   | 95,00,00,000          | 45,00,00,000          |
| 5. Subsidiaries and Joint Ventures                             |                | -                     | -                     |
| 6. <u>Others</u>   |                |                       |                       |
| Bank of Baroda - PRGFEE  | 1,21,10,96,978 |                       | 1,04,15,80,981        |
| Bank of Baroda - VCFEE   | 51,21,79,276   |                       | 48,78,44,225          |
| Bank of Baroda - S&L Fee                                       | 3,75,65,71,346 | 5,47,98,47,600        | 2,99,50,88,322        |
|  |                |                       |                       |
| <b>TOTAL</b>   |                | <b>6,42,98,47,600</b> | <b>5,47,45,13,528</b> |

(Amount - ₹)

| <b>SCHEDULE 10 - INVESTMENT - OTHERS</b> |  | <b>Current Year</b> | <b>Previous Year</b> |
|--|--|---------------------|----------------------|
| 1. In Government Securities              |  | -                   | -                    |
| 2. Other approved Securities             |  | -                   | -                    |
| 3. Shares                                |  | -                   | -                    |
| 4. Debentures and Bonds                  |  | -                   | -                    |
| 5. Subsidiaries and Joint Ventures       |  | -                   | -                    |
| 6. Others                                |  | -                   | -                    |
| <b>TOTAL</b>                             |  | <b>-</b>            | <b>-</b>             |

**FORM OF FINANCIAL STATEMENTS (NON-PROFIT ORGANISATIONS)**  
Name of Entity **BUREAU OF ENERGY EFFICIENCY**

**SCHEDULES FORMING PART OF BALANCE SHEET AS AT 31<sup>st</sup> MARCH, 2021**

**SCHEDULE 11**

**(Amount - ₹)**

| SCHEDULE 11- CURRENT ASSETS, LOANS, ADVANCES ETC.     | Current Year |                       | Previous Year  |                       |
|---|--------------|-----------------------|----------------|-----------------------|
| <b>A. CURRENT ASSETS:</b>                             |              |                       |                |                       |
| <b>I. Cash-in-Hand</b>                                | -            | -                     | 2,430          | 2,430                 |
| <b>II. Bank Accounts</b>                              |              |                       |                |                       |
| a) <u>With Scheduled Banks:</u>                       |              |                       |                |                       |
| - FDRs with Scheduled banks (Bank of Baroda)          | 85,42,54,524 |                       | 76,65,70,803   |                       |
| - On Savings Accounts                                 |              |                       |                |                       |
| BEE (Bank of Baroda Saving & Sweep A/c - BEE)         | 1,53,88,666  |                       | 9,46,98,186    |                       |
| BEE (Bank of Baroda Saving & Sweep A/c - Plan Scheme) | 80,58,02,106 |                       | 1,18,29,61,713 |                       |
| BEE (Bank of Baroda Saving - Examination)             | 4,51,88,579  |                       | 3,05,05,627    |                       |
| BEE (IOB, Chennai)                                    | 2,32,541     |                       | 2,02,205       |                       |
| BEE (IOB, Delhi)                                      | 55,305       | 1,72,09,21,721        | 31,726         | 2,07,49,70,260        |
| <b>III. Postage Stamps in hand</b>                    |              | 12,566                |                | 12,566                |
| <b>IV. Check Testing Equipment (S&amp;L Project)</b>  |              | 1,27,57,708           |                | 95,04,304             |
| <b>Total (11A)</b>                                    |              | <b>1,73,36,91,995</b> |                | <b>2,08,44,89,560</b> |



**FORM OF FINANCIAL STATEMENTS (NON-PROFIT ORGANISATIONS)**  
Name of Entity **BUREAU OF ENERGY EFFICIENCY**

**SCHEDULES FORMING PART OF BALANCE SHEET AS AT 31<sup>st</sup> MARCH, 2021**

SCHEDULE 11

(Amount - ₹)

| SCHEDULE 11- CURRENT ASSETS, LOANS, ADVANCES ETC.              | Current Year |                       | Previous Year |                       |
|--|--------------|-----------------------|---------------|-----------------------|
| <b>B. LOANS, ADVANCES AND OTHER ASSETS:</b>                    |              |                       |               |                       |
| <b>I. Other Advances</b>                                       |              |                       |               |                       |
| Assitant Directorate of Estate                                 | 4,18,200     |                       | -             |                       |
| Central Power Research Institute, Bangalore                    | 6,76,872     |                       | 6,76,872      |                       |
| Conformity India International                                 | 10,00,000    |                       | 10,00,000     |                       |
| CSOI   | -            |                       | 50,000        |                       |
| National Productivity Council, Chennai                         | 94,36,436    |                       | -             |                       |
| The Ashok - ITDC   | 33,26,270    |                       | -             |                       |
| SGS  | 10,00,000    | 1,58,57,778           | 10,00,000     | 27,26,872             |
| <b>II. Staff Advances</b>                                      |              |                       |               |                       |
| Hemendra Kumar   | -            |                       | 1,17,628      |                       |
| Ompal  | -            |                       | 1,200         |                       |
| Rashish Chauhan  | 27,420       |                       | -             |                       |
| Shyam Sunder Goyal   | 200          | 27,620                | 2,500         | 1,21,328              |
| <b>III. Other Deposits (Security Deposits)</b>                 |              |                       |               |                       |
| Balmer Lawrie & Company Limited (Travel Agent)                 | 2,00,000     |                       | 2,00,000      |                       |
| Bureau of Indian Standards (BIS - Membership Security Deposit) | 10,000       |                       | 10,000        |                       |
| India Habitat Centre (Membership Security Deposit)             | 1,50,000     |                       | 1,50,000      |                       |
| Deposit with MTNL (PRI Connection)                             | 21,000       |                       | 21,000        |                       |
| Deposit with Petrol-Pump (Luxmi Super Services)                | 10,000       |                       | 10,000        |                       |
| Deposit with NDMC (Go-Electric launch event)                   | 1,09,600     |                       | -             |                       |
| Security Deposit (Reliance Jio - 6 Nos. of Dongle)             | 6,000        | 5,06,600              | 6,000         | 3,97,000              |
| <b>IV. Income Accrued</b>                                      |              |                       |               |                       |
| On Investments/Fixed Deposit Receipts                          |              |                       |               |                       |
| i. BEE   | 4,55,52,036  |                       | 5,33,85,417   |                       |
| ii. NMEEE  | 1,63,26,205  |                       | 2,06,54,886   |                       |
| iii. S&L   | 9,60,95,746  | 15,79,73,987          | 15,69,39,650  | 23,09,79,953          |
| <b>V. Other Receivables</b>                                    |              |                       |               |                       |
| <b>BEE</b>   |              |                       |               |                       |
| Confederation of India Industry                                | 55,000       |                       | -             |                       |
| Milind B. Deore  | 10,500       |                       | 10,500        |                       |
| POSOCO   | 1,00,540     |                       | 1,00,540      |                       |
| Senior Post Master   | 354          |                       | 354           |                       |
| TUV SUD  | 6,000        | 1,72,394              | 6,000         | 1,17,394              |
| <b>Standard &amp; Labeling (S&amp;L)</b>                       |              |                       |               |                       |
| Bank of Baroda (Bill Desk)                                     |              |                       |               |                       |
| Future Retail Ltd.   | 500          |                       | 500           |                       |
| Johnson Electrical Appliances                                  | 1,000        |                       | 1,000         |                       |
| La Gajjar Machineries Pvt. Ltd.                                | 59,470       |                       | 59,470        |                       |
| Oswal Pumps Pvt. Ltd.  | 2,000        |                       | 2,000         |                       |
| Rajeshwari Engineering Works                                   | 18,200       |                       | 18,200        |                       |
| Videocon Industries Ltd.                                       | 2,000        |                       | 2,000         |                       |
| Weather Makers   | 510          | 83,680                | 510           | 83,680                |
| <b>VI. Prepaid Expenses</b>                                    |              |                       |               |                       |
| Prepaid Expenses (Airconditioner)                              | 2,57,894     |                       | 3,79,154      |                       |
| Prepaid Expenses (Computer)                                    | 1,40,225     |                       | 13,861        |                       |
| Prepaid Expenses (Maintenance - Aquagaurd Pure)                | -            |                       | 1,166         |                       |
| Prepaid Expenses (Web Hosting Charges)                         | 6,745        |                       | 19,241        |                       |
| Prepaid Expenses (Staff Car Insurance)                         | 10,883       |                       | 11,589        |                       |
| Prepaid Expenses (Subscription - Swamy News)                   | 1,003        | 4,16,750              | 643           | 4,25,654              |
| <b>Total (11B)</b>   |              | <b>17,50,38,809</b>   |               | <b>23,48,51,881</b>   |
| <b>Total (11A +11B)</b>  |              | <b>1,90,87,30,804</b> |               | <b>2,31,93,41,441</b> |

## FORM OF FINANCIAL STATEMENTS (NON-PROFIT ORGANISATIONS)

Name of Entity **BUREAU OF ENERGY EFFICIENCY**

### SCHEDULES FORMING PART OF INCOME & EXPENDITURE FOR THE YEAR ENDED 31<sup>ST</sup> MARCH, 2021

#### SCHEDULE 12 & 13

(Amount - ₹)

| SCHEDULE 12 - INCOME FROM SALES/SERVICES     | Current Year | Previous Year |
|--|--------------|---------------|
| <b>1) Income from Sales</b>                  |              |               |
| a) Sale of Finished Goods                    | -            | -             |
| b) Sale of Raw Material                      | -            | -             |
| c) Sale of Scraps                            | -            | -             |
| <b>2) Income from Services</b>               |              |               |
| a) Labour and Processing Charges             | -            | -             |
| b) Professional/Consultancy Services         | -            | -             |
| c) Agency Commission and Brokerage           | -            | -             |
| d) Maintenance Services (Equipment/Property) | -            | -             |
| e) Others                                    | -            | -             |
| <b>Total</b>                                 | -            | -             |

(Amount - ₹)

| SCHEDULE 13 - GRANTS/SUBSIDIES            | Current Year | Previous Year |
|---|--------------|---------------|
| (Irrevocable Grants & Subsidies Received) |              |               |
| 1. Central Government                     | -            | -             |
| 2. State Government(s)                    | -            | -             |
| 3. Government Agencies                    | -            | -             |
| 4. Institutions/Welfare Bodies            | -            | -             |
| 5. International Organisations            | -            | -             |
| <b>Total</b>                              | -            | -             |



**FORM OF FINANCIAL STATEMENTS (NON-PROFIT ORGANISATIONS)**  
Name of Entity **BUREAU OF ENERGY EFFICIENCY**

**SCHEDULES FORMING PART OF INCOME & EXPENDITURE FOR THE YEAR ENDED 31<sup>ST</sup> MARCH, 2021**

**SCHEDULE 14 & 15**

Amount - ₹)

| <b>SCHEDULE 14 - FEES/SUBSCRIPTION</b>                                    | <b>Current Year</b> | <b>Previous Year</b> |
|---|---------------------|----------------------|
| 1. Entrance Fees  | -                   | -                    |
| 2. Annual Fees (National Level Certification Examination-2019/20th Exam.) | -                   | 4,29,07,476          |
| Annual Fees (National Level Certification Examination-2020/21th Exam.)    | 2,61,45,423         | -                    |
| 3. Energy Auditor Accreditation Fees                                      | 39,000              | 1,25,000             |
| <b>Total</b>  | <b>2,61,84,423</b>  | <b>4,30,32,476</b>   |

(Amount - ₹)

| <b>SCHEDULE 15 - INCOME FROM INVESTMENTS</b>                            | <b>Investment from Earmarked Fund</b> |                      | <b>Investment - Others</b> |                      |
|---|---------------------------------------|----------------------|----------------------------|----------------------|
|   | <b>Current Year</b>                   | <b>Previous Year</b> | <b>Current Year</b>        | <b>Previous Year</b> |
| (Income on Invest. From Earmarked/Endowment Funds transferred to Funds) |                                       |                      |                            |                      |
| 1. Interest   |                                       |                      |                            |                      |
| a) On Govt. Securities  | -                                     | -                    | -                          | -                    |
| b) Other Bonds (NTPC - Corpus Fund)                                     | 4,24,00,000                           | 4,24,00,001          | -                          | -                    |
| c) FDR (Bank of Baroda & Indian Overseas Bank - Corpus Fund - NMEEE)    | 2,69,25,134                           | 2,74,21,772          | -                          | -                    |
| 2. Dividends  |                                       |                      |                            |                      |
| a) On Shares  | -                                     | -                    | -                          | -                    |
| b) On Mutual Fund Securities  | -                                     | -                    | -                          | -                    |
| 3. Rents  | -                                     | -                    | -                          | -                    |
| 4. Others   | -                                     | -                    | -                          | -                    |
| <b>Total</b>  | <b>6,93,25,134</b>                    | <b>6,98,21,773</b>   | <b>-</b>                   | <b>-</b>             |
| <b>TRANSFERRED TO EARMARKED/ENDOWMENT FUNDS</b>                         | <b>-</b>                              | <b>-</b>             |                            |                      |

**FORM OF FINANCIAL STATEMENTS (NON-PROFIT ORGANISATIONS)**  
Name of Entity **BUREAU OF ENERGY EFFICIENCY**

**SCHEDULES FORMING PART OF INCOME & EXPENDITURE FOR THE YEAR ENDED 31<sup>st</sup> MARCH, 2021**

**SCHEDULE 16 & 17**

**(Amount - ₹)**

| <b>SCHEDULE 16 - INCOME FROM ROYALTY, PUBLICATION ETC.</b> | <b>Current Year</b> | <b>Previous Year</b> |
|--|---------------------|----------------------|
| a) Income from Royalty                                     | -                   | -                    |
| b) Income from Publications                                | -                   | -                    |
| <b>Total</b>   | -                   | -                    |

**(Amount - ₹)**

| <b>SCHEDULE 17 - INTEREST EARNED</b>                    | <b>Current Year</b> | <b>Previous Year</b> |
|---|---------------------|----------------------|
| 1. On Term Deposits:                                    |                     |                      |
| a) <u>With Scheduled Banks</u>                          |                     |                      |
| Interest Income - Bank of Baroda                        | 4,86,13,624         | 5,86,02,657          |
| Interest Income - Bank of Baroda (Examination - A/c)    | 18,84,605           | 5,04,98,229          |
| b) With Non-Scheduled Banks                             | -                   | -                    |
| c) With Institutions                                    | -                   | -                    |
| d) Others   | -                   | -                    |
| 2. On Saving Accounts:                                  |                     |                      |
| a) <u>With Scheduled Banks</u>                          |                     |                      |
| Interest Received - IOB Bank, Chennai                   | 6,707               | 2777                 |
| Interest Received - IOB Bank, Delhi                     | 35,328              | 15,791               |
| Interest Received - Bank of Baroda, Delhi               | 1,03,686            | 1,24,101             |
| Interest Received - Bank of Baroda, Delhi (Examination) | 5,969               | 1,51,690             |
| b) With Non-Scheduled Banks                             | -                   | -                    |
| c) Post Office Savings Accounts                         | -                   | -                    |
| d) Others   | 68,322              | -                    |
| 3. On Loans:  |                     |                      |
| a) Employees/Staff                                      | -                   | -                    |
| b) Others   | -                   | -                    |
| 4. Interest on Debtors and Other Receivables            | -                   | -                    |
| 5. Interest on Gratuity Fund                            | -                   | -                    |
| <b>Total</b>  | <b>5,07,18,241</b>  | <b>6,04,54,146</b>   |



**FORM OF FINANCIAL STATEMENTS (NON-PROFIT ORGANISATIONS)**  
Name of Entity **BUREAU OF ENERGY EFFICIENCY**

**SCHEDULES FORMING PART OF INCOME & EXPENDITURE FOR THE YEAR ENDED 31<sup>ST</sup> MARCH, 2021**

**SCHEDULE 18, 19 & 20**

(Amount - ₹)

| <b>SCHEDULE 18 - OTHER INCOME</b>                          | <b>Current Year</b> | <b>Previous Year</b> |
|--|---------------------|----------------------|
| 1. Profit on Sale/disposal of Assets:                      |                     |                      |
| a) Owned assets  | -                   | -                    |
| b) Assets acquired out of grants, or received free of cost | -                   | 50                   |
| 2. Miscellaneous Receipts                                  | 9,58,447            | 10,26,533            |
| 3. Others (Sundry balances write back)                     | -                   | -                    |
| <b>Total</b>   | <b>9,58,447</b>     | <b>10,26,583</b>     |

(Amount - ₹)

| <b>SCHEDULE 19 - INCREASE/(DECREASE) IN STOCK OF FINISHED GOODS &amp; WORK IN PROGRESS</b> | <b>Current Year</b> | <b>Previous Year</b> |
|--|---------------------|----------------------|
| a) Closing stock   |                     |                      |
| - Finished Goods   | -                   | -                    |
| - Work-in-progress   | -                   | -                    |
| b) Less: Opening stock   |                     |                      |
| - Finished Goods   | -                   | -                    |
| - Work-in-progress   | -                   | -                    |
| <b>NET INCREASE/DECREASE [a-b]</b>   | <b>-</b>            | <b>-</b>             |

(Amount - ₹)

| <b>SCHEDULE 20 - ESTABLISHMENT EXPENSES</b>                                   | <b>Current Year</b> |                    | <b>Previous Year</b> |                    |
|---|---------------------|--------------------|----------------------|--------------------|
|   | <b>(I &amp; E)</b>  | <b>(R &amp; P)</b> | <b>(I &amp; E)</b>   | <b>(R &amp; P)</b> |
| a) Salaries and Wages   | 7,95,49,883         | 7,93,79,649        | 5,89,39,459          | 5,81,93,419        |
| b) Allowances and Bonus   | 33,36,805           | 33,36,805          | 29,48,172            | 30,76,300          |
| c) EPF Charges  | 90,88,391           | 99,65,582          | 87,97,084            | 87,19,459          |
| d) Others (Leave Salary)  | 3,59,478            | 3,59,478           | 3,54,397             | 3,54,397           |
| e) Others (Pension Contribution)  | 8,96,115            | 8,96,115           | 7,80,189             | 7,80,189           |
| f) Expenses on Employees' Retirement and Terminal Benefits (Gratuity)         | 14,53,049           | 14,53,049          | 37,28,541            | 37,28,541          |
| g) Expenses on Employees' Retirement and Terminal Benefits (Leave Encashment) | 18,53,162           | 18,53,162          | 7,22,585             | 7,22,585           |
| h) Staff Welfare Expenses   | 22,82,822           | 22,81,708          | 17,45,907            | 17,91,491          |
| <b>Total</b>  | <b>9,88,19,705</b>  | <b>9,95,25,548</b> | <b>7,80,16,334</b>   | <b>7,73,66,381</b> |

**FORM OF FINANCIAL STATEMENTS (NON-PROFIT ORGANISATIONS)**  
Name of Entity **BUREAU OF ENERGY EFFICIENCY**

**SCHEDULES FORMING PART OF INCOME & EXPENDITURE FOR THE YEAR ENDED 31<sup>ST</sup> MARCH, 2021**

**SCHEDULE 21**

(Amount - ₹)

| SCHEDULE 21 - OTHER ADMINISTRATIVE EXPENSES ETC.      | Current Year     |                  | Previous Year      |                    |
|---|------------------|------------------|--------------------|--------------------|
|   | (I & E)          | (R & P)          | (I & E)            | (R & P)            |
| a) Repairs and Maintenance                            | 10,85,271        | 11,45,080        | 1,16,77,351        | 1,20,45,114        |
| b) Vehicle Running and Maintenance                    | 9,68,805         | 12,15,527        | 10,88,375          | 8,03,458           |
| c) Postage, Telephone & Communication Charges         | 5,67,065         | 5,84,703         | 4,82,993           | 4,96,581           |
| d) Printing & Stationery                              | 7,28,328         | 7,32,028         | 14,35,526          | 14,44,046          |
| e) Travelling and Conveyance Expenses                 | 1,47,975         | 5,72,068         | 33,44,224          | 29,90,130          |
| f) Expenses on Workshop, Seminar & Training Programme | 2,23,364         | 2,18,806         | 9,26,196           | 9,75,454           |
| g) Auditor Remuneration                               | 6,86,400         | 6,06,000         | 2,90,880           | -                  |
| h) Legal & Professional Charges                       | 8,09,358         | 8,17,578         | 11,05,520          | 15,04,590          |
| l) Advertisement and Publicity                        | 2,16,053         | 1,51,830         | 55,045             | 55,045             |
| j) Contribution to IPEEC                              | -                | -                | -                  | -                  |
| k) Contribution to IEA (CEM)                          | 20,08,853        | -                | 6,18,849           | 2,30,449           |
| l) Office Maintenance                                 | 7,83,244         | 7,67,474         | 11,36,320          | 20,29,177          |
| m) Bank Charges                                       | 106              | 106              | 88                 | 88                 |
| <b>TOTAL (A)</b>                                      | <b>82,24,822</b> | <b>68,11,200</b> | <b>2,21,61,367</b> | <b>2,25,74,132</b> |

(Amount - ₹)

| SCHEDULE 21 - PRIOR PERIOD EXPENSES  | Current Year       |                    | Previous Year      |                    |
|--|--------------------|--------------------|--------------------|--------------------|
|  | (I & E)            | (R & P)            | (I & E)            | (R & P)            |
| a) Audit Fee   | 18,77,860          | 18,77,860          | -                  | -                  |
| b) Contribution to IEA (CEM)   | 39,73,794          | 19,64,942          | -                  | -                  |
| c) Office Maintenance  | 4,98,967           | 4,98,967           | 3,61,990           | 3,61,990           |
| d) Printing & Stationery   | 46,640             | 46,640             | -                  | -                  |
| e) Repairs and Maintenance   | 1,27,060           | 1,27,060           | 4,000              | 4,000              |
| f) Staff Welfare   | 66,140             | 66,140             | 8,970              | 8,970              |
| g) Subscription Expenses   | -                  | -                  | 30,525             | 30,525             |
| h) Telephone Expenses  | 58,785             | 58,785             | 23,235             | 23,235             |
| l) Travel Expenses   | 3,25,153           | 3,25,153           | -                  | -                  |
| j) Vehicle Running and Maintenance   | 25,826             | 25,826             | -                  | -                  |
| <b>TOTAL</b>   | <b>70,00,225</b>   | <b>49,91,373</b>   | <b>4,28,720</b>    | <b>4,28,720</b>    |
| Less: Expenditure claimed in previous year now corrected and transferred to fixed assets | 37,33,822          | -                  | -                  | -                  |
| <b>TOTAL B</b>   | <b>32,66,403</b>   | <b>49,91,373</b>   | <b>4,28,720</b>    | <b>4,28,720</b>    |
| <b>TOTAL (C) = (A+B)</b>   | <b>1,14,91,225</b> | <b>1,18,02,573</b> | <b>2,25,90,087</b> | <b>2,30,02,852</b> |

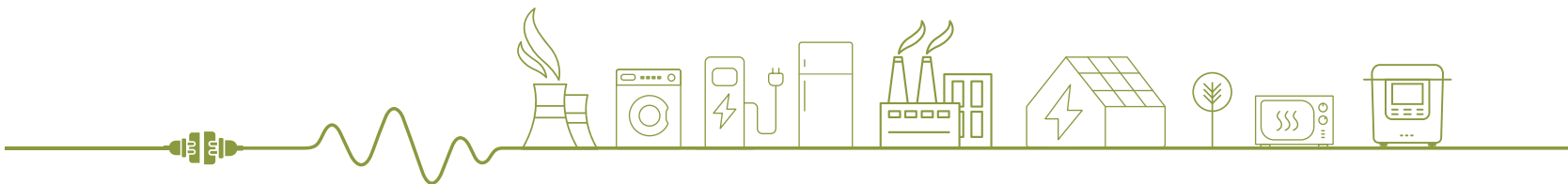


**FORM OF FINANCIAL STATEMENTS (NON-PROFIT ORGANISATIONS)**  
**Name of Entity BUREAU OF ENERGY EFFICIENCY**

**SCHEDULES FORMING PART OF INCOME & EXPENDITURE FOR THE YEAR ENDED 31<sup>ST</sup> MARCH, 2021**

(Amount - ₹)

| SCHEDULE 21 - OTHER ADMINISTRATIVE EXPENSES ETC.        | Current Year       |                       | Previous Year      |                       |
|---|--------------------|-----------------------|--------------------|-----------------------|
|   | (I & E)            | (R & P)               | (I & E)            | (R & P)               |
| <u>Project Expenditure - (BEE)</u>                      |                    |                       |                    |                       |
| National Level Certification Examination                | 56,48,019          | 67,64,859             | 4,03,67,435        | 3,14,68,225           |
| Energy Auditors Accreditation                           | 22,400             | 22,400                | 1,56,310           | 1,56,310              |
|   | <b>56,70,419</b>   | <b>67,87,259</b>      | <b>4,05,23,745</b> | <b>3,16,24,535</b>    |
| <u>Grants-in-Aid Projects (Ministry of Power)</u>       |                    |                       |                    |                       |
| <u>BEE</u>  |                    |                       |                    |                       |
| Energy Conservation Building Codes (ECBC)               | -                  | 17,14,98,878          | -                  | 9,39,02,536           |
| State Designated Agencies (SDA)                         | -                  | 30,43,87,852          | -                  | 43,95,18,312          |
| State Energy Conservation Fund (SECF)                   | -                  | 8,00,00,000           | -                  | 4,00,00,000           |
| Agriculture & Municipal Demand Side Management (Ag.DSM) | -                  | 5,03,84,735           | -                  | 5,19,46,602           |
| Municipal Demand Side Management (Mu.DSM)               | -                  | 15,229                | -                  | 4,03,24,624           |
| Small Medium Enterprises (SME)                          | -                  | 1,41,76,678           | -                  | 1,47,95,545           |
| Capacity Building of DISCOMS                            | -                  | 9,86,34,511           | -                  | 4,70,46,965           |
| <u>EC</u>   |                    |                       |                    |                       |
| Energy Conservation Awareness (Awareness Campaign)      | -                  | 12,46,06,231          | -                  | 11,31,34,137          |
| Nation Mission on Enhanced Energy Efficiency (NMEEE)    | -                  | 17,38,62,085          | -                  | 17,65,57,698          |
| Super Efficient Equipment Program (SEEP)                | -                  | -                     | -                  | 10,73,281             |
| <u>EAP</u>  |                    |                       |                    |                       |
| BEE-GEF-WB-Project                                      | -                  | 6,55,920              | -                  | 2,40,98,786           |
|   | -                  | <b>1,01,82,22,119</b> | -                  | <b>1,04,23,98,486</b> |
| <u>Project Expenditure - (OTHERS)</u>                   |                    |                       |                    |                       |
| UNIDO Project   | -                  | 65,72,287             | -                  | 2,96,74,730           |
| Standard & Labelling (S&L)                              | -                  | 6,63,14,709           | -                  | 39,37,43,804          |
|   | -                  | <b>7,28,86,996</b>    | -                  | <b>42,34,18,534</b>   |
| <b>TOTAL (D)</b>  | <b>56,70,419</b>   | <b>1,09,78,96,374</b> | <b>4,05,23,745</b> | <b>1,49,74,41,555</b> |
| <b>Total E = (C+D)</b>                                  | <b>1,71,61,644</b> | <b>1,10,96,98,947</b> | <b>6,31,13,832</b> | <b>1,52,04,44,407</b> |



## FORM OF FINANCIAL STATEMENTS (NON-PROFIT ORGANISATIONS)

Name of Entity **BUREAU OF ENERGY EFFICIENCY**

### SCHEDULES FORMING PART OF INCOME & EXPENDITURE FOR THE YEAR ENDED 31<sup>ST</sup> MARCH, 2021

#### SCHEDULE 22 & 23

(Amount - ₹)

| SCHEDULE 22 - EXPENDITURE ON GRANTS, SUBSIDIES ETC. | Current Year | Previous Year |
|---|--------------|---------------|
| a) Grants given to Institutions/Organisations       | -            | -             |
| b) Subsidies given to Institutions/Organisations    | -            | -             |
| <b>TOTAL</b>  | -            | -             |

(Amount - `)

| SCHEDULE 23 - INTEREST                     | Current Year | Previous Year |
|--|--------------|---------------|
| a) On fixed loans                          | -            | -             |
| b) On Other Loans (including Bank Charges) | -            | -             |
| c) Others                                  | -            | -             |
| <b>TOTAL</b>                               | -            | -             |



**FORM OF FINANCIAL STATEMENTS (NON-PROFIT ORGANISATION)**  
**Name of Entity BUREAU OF ENERGY EFFICIENCY**

**SCHEDULES FORMING PART OF THE ACCOUNTS**  
**FOR THE YEAR ENDED 31<sup>st</sup> MARCH, 2021**

**SCHEDULE 24 – SIGNIFICANT ACCOUNTING POLICIES**

**1) ACCOUNTING CONVENTION**

- a. The financial statements are prepared under the historical cost convention and on the accrual method of accounting, unless otherwise stated.
- b. In case of expenses on account of Salary and Allowances to the permanent employees are booked on cash basis.

**2) INVENTORIES**

Inventories are valued at Cost.

**3) INVESTMENTS**

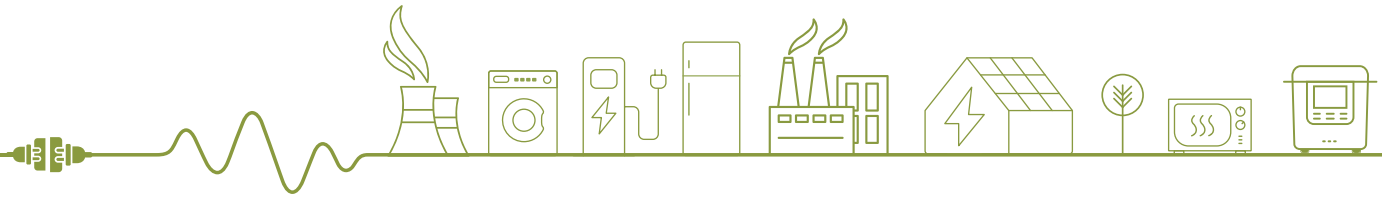
Investments are carried at cost.

**4) FIXED ASSETS**

- a. Fixed assets are stated at cost of acquisition inclusive of inward freight, duties and taxes and incidental and direct expenses in related to acquisition.
- b. Fixed Assets received by way of non-monetary grants (other than Corpus Fund) are capitalized at values stated, by corresponding credit to Capital Reserve.
- c. Fixed Assets representing Grant-in-Kind are reduced by an amount of depreciation provided during the year on such assets and a corresponding reduction in Capital Reserve created on account of Grant-in Kind is made.

**5) DEPRECIATION**

- a. Depreciation on Fixed assets is computed on written down value except on unserviceable items in accordance with the rate prescribed in the Income Tax Act, 1961.
- b. In respect of additions to/deductions from fixed assets during the year, depreciation is considered on pro-rata basis as under:-  
Assets acquired/put to use for up to 180 days = Depreciation for six months  
Assets acquired/put to use for more than 180 days = Depreciation for full year
- c. Assets costing Rs.5,000/- or less each are fully provided.



- d. Depreciation is segregated into Fixed Assets and Fixed Assets representing Grant-in-Kind.
- e. Depreciation has not been provided on unserviceable assets.

## 6) **ACCOUNTING FOR GRANTS AND REVENUE**

Grants and Revenue including labeling fee received under Standard & Labeling Scheme are accounted for on the receipt basis except interest income.

## 7) **GOVERNMENT and OTHER GRANTS/SUBSIDIES**

- a. Government grants of the nature of contribution towards capital cost of setting up projects are treated as Capital Reserve.
- b. Grant-in-Kind received in the form of Fixed Assets is shown under Capital Reserve net of depreciation provided on such assets.
- c. Government and Other grants/subsidy are accounted on realization basis and are shown as Income under Grants received from Central Government.
- d. Expenditure incurred under various Schemes against Grants received from Ministry of Power, Government of India is accounted for the year of release of Grant.

## 8) **FOREIGN CURRENCY TRANSACTIONS**

- a. Transactions denominated in foreign currency are accounted at the exchange rate prevailing at the date of transaction.
- b. Current assets, foreign currency loans and current liabilities are converted at the exchange rate prevailing as at the year-end and the resultant gain / loss is adjusted to cost under relevant Projects.

## 9) **LEASE**

Lease rentals are expensed with reference to lease terms.

## 10) **RETIREMENT BENEFITS**

- a. The Bureau has taken the Gratuity Policy with LIC of India for Liability towards gratuity payable on death/retirement of its employees.
- b. The Bureau has taken the Leave Encashment benefit Policy of LIC of India for Liability towards Leave Encashment benefit of its employees.
- c. As per rule called the "Bureau of Energy Efficiency (Terms and Conditions of Service of Employees) Rules, 2017," all retired employees are entitled for reimbursement of medical expenses (Indoor and Outdoor).



**FORM OF FINANCIAL STATEMENTS (NON-PROFIT ORGANISATION)**  
Name of Entity **BUREAU OF ENERGY EFFICIENCY**  
**SCHEDULES FORMING PART OF THE ACCOUNTS**  
**FOR THE YEAR ENDED 31<sup>st</sup> MARCH, 2021**

**SCHEDULE 25 – NOTES ON ACCOUNTS**

**1) CONTINGENT LIABILITIES**

NIL

**2) CURRENT ASSETS, LOANS AND ADVANCES**

In the opinion of the Management, the current assets, loans and advances have a value on realization in the ordinary course of transaction, equal at least to the aggregate amount shown in the Balance Sheet.

**3) TAXATION**

Section 49 of The Energy Conservation Act, 2001, Exemption from tax on Income provides – “Notwithstanding anything contained in the Income Tax Act, 1961 (43 of 1961) or any other enactment for the time being in force relating to the tax on Income, profit or gains –

(a) The Bureau;

(b) The existing Energy Management Centre from the date of its constitution to the date of establishment of the Bureau,

Shall not be liable to pay any income-tax or any tax in respect of their income, profits or gains derived”.

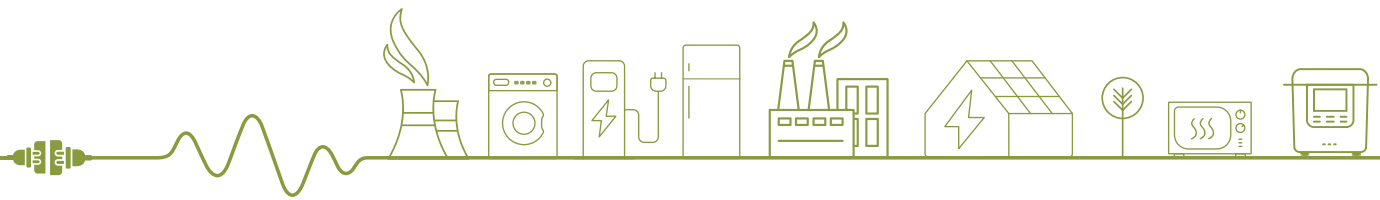
In accordance with the above, there is no taxable Income of the Bureau under Income Tax Act 1961 and, therefore no provision for Income Tax has been considered.

**4) FOREIGN CURRENCY TRANSACTIONS**

The Bureau has incurred the foreign currency expenditure on account of foreign travelling expenditure for projects.

**5) RETIREMENT BENEFITS**

The Bureau has booked expenditure of ₹14,53,049/- towards premium paid to LIC of India



on account of Gratuity and ₹18,53,162/- on account of Leave Encashment Benefits for regular employee of BEE and NMEEE. BEE maintains Gratuity/Leave encashment of its employees through LIC (a Government Body), LIC does the actuarial valuation for the employees of BEE and NMEEE. As per the certificates issued by the LIC, the actuarial value of the Gratuity fund and Group Leave Encashment Scheme as on 31/3/2021 are as follows:-

- i. Gratuity fund - ₹1,46,99,684/- (Previous year – ₹1,29,12,150/-)
  - ii. Group Leave Encashment Schemes - ₹1,19,95,412/- (Previous year – ₹1,02,25,670/-)
- 6) Bureau has earned interest income on sweep accounts with bank in respect of unutilized funds of various Government Schemes. Hence, Interest income calculated on the unutilized fund on the basis of monthly average balance has been credited to respective Schemes out of the Interest Income received and the same is being returned to Ministry of Power.
  - 7) Bureau has shown under Earmarked Fund (Schedule-I) ₹1,21,10,96,978/- (Previous year - ₹1,04,15,80,981/-) (Including interest earned during the year) under PRGFEE. The balance under VCFEE is ₹51,21,79,276/- (Previous year - ₹48,78,44,225/-) this Includes interest earned during the year. The same has been deposited with Bank of Baroda in Separate accounts and shown in (Schedule-9).
  - 8) During the year an amount of ₹76,82,64,137/- (Schedule-1) including interest (Previous year – ₹76,39,16,580/-) has been received by the Bureau through the implementation of Standard & Labeling Programme under clauses (a), (b) and (d) of Section 14 of the EC Act. Bureau considered the labeling fee under Standard & Labeling Programme (S&L) on receipt basis to maintain the uniformity.
  - 9) The Standard & Labelling Programme proposed for 12<sup>th</sup> Plan was approved during the financial year 2014-15. In the EFC Meeting, it was decided that all expenditure pertaining to the scheme to be borne out of income generated in the scheme i.e., “Energy Conservation Fund”. Accordingly, an amount of ₹6,76,25,017/- (Previous year – ₹39,74,41,650/-) was transferred from Energy Conservation Fund” (Shedule-1) to Schedule-3 to meet the expenditure of the Scheme during the year.

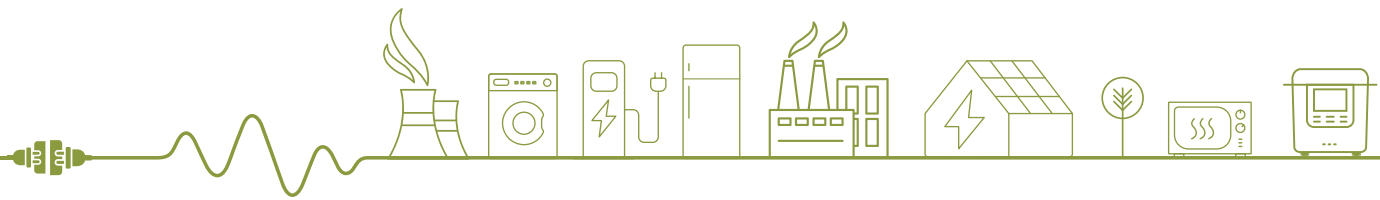


10) During the year 2017-18, under PAT Cycle-I, the Scheme of E-Certs (Energy Saving Certificates) trading has been introduced vide Central Electricity Regulatory Commission Notification No.L-1/97/2016 dated 27/5/2016. Under the Scheme, BEE acts as Administrator of the Scheme and POSOCO acts as Registry. POSOCO will collect all the fee and charges from eligible entities and will maintain all books of accounts for the same. POSOCO will share fee and charges in the ratio of 50:50 between the Registry and the Administrator.

11) Check Testing Equipments amounting to ₹1,27,57,708/- (Previous Year ₹95,04,304/-) under Standard & Labeling Programme (S&L) have been shown as Current Assets, which are lying with third party (Test Labs) at different locations. These inventories are under the Standard & Labelling Programme and not for trade purpose. Product wise details of Check testing equipments as on 31/3/2021 are as follows:-

|                                |   |                        |
|--------------------------------|---|------------------------|
| i. Air conditioners            | - | ₹ 44,30,777/-          |
| ii. Ceiling Fan                | - | ₹ 19,420/-             |
| iii. Induction Cooktop         | - | ₹ 38,138/-             |
| iv. Induction Motors           | - | ₹ 3,58,682/-           |
| v. Pump Set                    | - | ₹ 11,34,274/-          |
| vi. Refrigerators              | - | ₹ 34,72,811/-          |
| vii. Television                | - | ₹ 20,26,620/-          |
| viii. Tubular Fluorescent Lamp | - | ₹ 2,05,867/-           |
| ix. Water Heaters              | - | ₹ 1,97,344/-           |
| x. Water Heaters               | - | ₹ 8,73,775/-           |
| <b>Total</b>                   | - | <b>₹ 1,27,57,708/-</b> |

12) No depreciation has been charged on un-serviceable items amounting ₹9,60,601/- at W.D.V (Previous Year - ₹95,993/- at W.D.V) which are included in the fixed assets.



13) Fixed assets of ₹37,33,822/- procured during financial year 2019-20 inadvertently booked under 'Repair and Maintenance' account head instead of 'Fixed Assets'. This rectification carried out during current financial year 2020-21, assets have been booked in respective heads and depreciation charged accordingly.

14) Bureau of Energy Efficiency (BEE) is jointly executing a GEF funded project (Financing Energy Efficiency at MSMEs) with SIDBI. The implementing agency for the project is World Bank. The project started in September, 2010 with project completion date as December 30, 2014. The project was restructured by World Bank in December, 2014. Under the scheme of restructuring, the project was extended for another 2 years i.e., upto December 30, 2016.

In November 2016, the project has been awarded an additional GEF grant of USD 5.19 million with a time extension till May 4, 2019. Allocation of budget for BEE under additional funding is USD 1.42 million.

An amount of Rs.13.34 crore has been spent by BEE till 31st March 2021. This includes an amount of Rs.0.09 crore spent during the financial year 2020-21.

15) Bid Processing fee and RTI fee etc. Rs.9,58,447/- (Previous year – Rs.10,26,533/- including RTI fee) has been shown as "Fees for Miscellaneous Services" under the Schedule-18 – Other Income.

16) In exercise of the powers conferred by clauses (n), (o) and (p) of sub-section (2) of section 13, clauses (d), (e) and (f) of sub-section (2) of section 58 and section 8 of EC Act, the Bureau of Energy Efficiency with the previous approval of the Central Government, is conducting examination to identify Energy Managers & Auditors from 2004 onwards. The examination fee collected and expenditure thereon, is as follows:

|                                   |   |   |                |
|-----------------------------------|---|---|----------------|
| Balance as on 1/4/2020            | - | ₹ | 31,23,74,615/- |
| Additions during the year         | - | ₹ | 2,61,45,423/-  |
| Less: Expenditure during the year | - | ₹ | 49,04,494/-    |
| Balance as on 31/3/2020           | - | ₹ | 33,36,15,544/- |

The above balance is included in "Excess of Income over Expenditure" under Schedule-1.



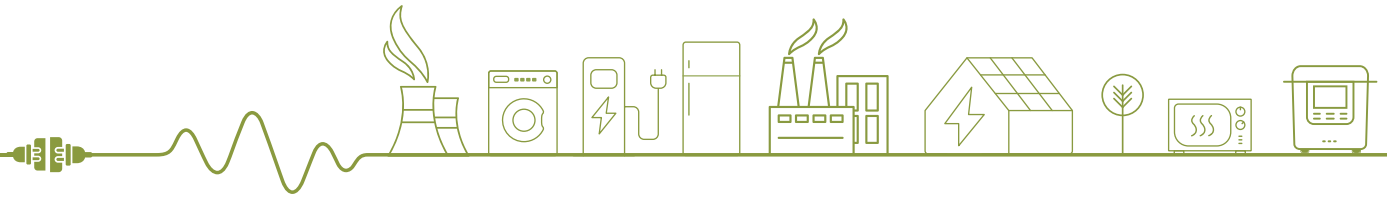
17) Provision for the pay & allowances for the month of March, 2021 has not been made in the accounts for regular employees of BEE and NMEEE, as the same is payable in the next year.

DA arrears for the month of January to March, 2021 have been withheld by the Government.

18) Corresponding figures for the previous year have been re-grouped/re-arranged, wherever necessary.

19) Schedules 1 to 25 are annexed to and form an integral part of the Balance Sheet as at 31<sup>st</sup> March, 2021 and the Income and Expenditure Account for the year ended on that date.





## 4. Administration

- 4.1 Grievance Redressed
- 4.2 Right to Information Act
- 4.3 Welfare of SC/ST/OBC
- 4.4 Welfare of Minorities
- 4.5 Implementation of Official Language
- 4.6 Vigilance
- 4.7 Welfare of persons with Disabilities





#### 4.1 Grievance Redressed

Grievances are received in the Bureau of Energy Efficiency through Centralized Public Grievance Redress And Monitoring System (CPGRAM), an online web-enabled system over NICNET developed by NIC, in association with Directorate of Public Grievances (DPG) and Department of Administrative Reforms and Public Grievances (DARPG).

During 2020-21, in all 59 grievances were received in BEE from the CPGRAM portal and the same were disposed off within admissible time limit.

#### 4.2 Right to Information Act

During the year 2020-21, in all 184 application seeking information under RTI Act were received in BEE and all of these were replied to/transferred within the admissible time limit.

During the same period 15 appeals were also received by the Appellate Authorities, they were also disposed off within admissible time limit.

#### 4.3 Welfare of SC/ST/OBC

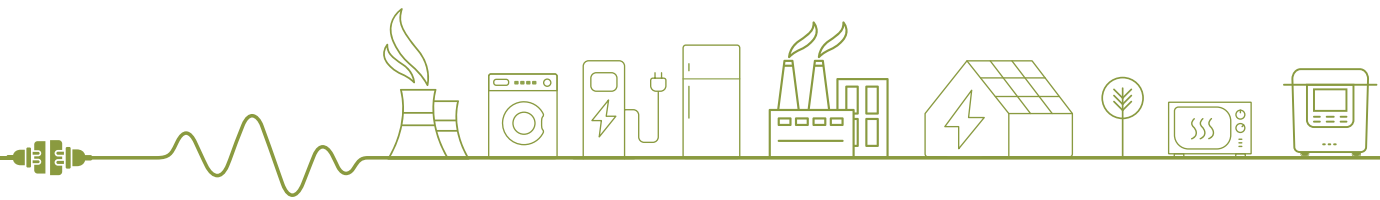
Representation of SC/ST/OBC in the Bureau of Energy Efficiency is indicated in proforma given below:-

| Group        | Total Employees as on 31.03.2021 | Representation |              |          |          |          |          |
|--------------|----------------------------------|----------------|--------------|----------|----------|----------|----------|
|              |                                  | SCs            | SC%          | STs      | ST%      | OBC      | OBC%     |
| A            | 14                               | 02             | 14.28%       | -        | -        | -        | -        |
| B            | 07                               | -              | -            | -        | -        | -        | -        |
| C            | 01                               | -              | -            | -        | -        | -        | -        |
| <b>Total</b> | <b>22</b>                        | <b>02</b>      | <b>9.09%</b> | <b>-</b> | <b>-</b> | <b>-</b> | <b>-</b> |

#### 4.4 Welfare of Minorities

Representation of Minorities in the Bureau of Energy Efficiency is indicated in proforma given below:-

| Group        | Total Employees as on 31.03.2021 | Representation of Minorities | Percentage of Minorities |
|--------------|----------------------------------|------------------------------|--------------------------|
| A            | 14                               | 01                           | 7.14%                    |
| B            | 07                               | -                            | -                        |
| C            | 01                               | -                            | -                        |
| <b>Total</b> | <b>22</b>                        | <b>01</b>                    | <b>4.54%</b>             |



#### 4.5 Implementation of Official Language

For the purpose of creating awareness towards progressive use of Hindi in official work, every year in the month of September, Hindi Pakhwara is observed in the Bureau of Energy Efficiency. During the year, various Hindi competitions and Hindi workshops etc. were organized to encourage and incentivize the officers/employees for doing their more and more official work in Hindi as per the rules under the Official Language Act.

Hindi Pakhwara was organized in BEE during 14-28 September 2020. During the Pakhwara, competitions namely, Essay competition, Hindi Poem Recitation and Slogan competition on energy efficiency were organized through online. Eight prizes viz. first prize, second prize, third prize and Five consolation prizes were given to the winners of the competitions.

Hindi workshops were organised during the year. Deep knowledge and experiences of the Expert Guest Speakers who not only shared their views and knowledge but also helped to solve the problems being faced by the participants in doing their day to day official work in Hindi as per the requirement of the Official Language Act. Participation in these workshops had helped enormously in increasing the use of Hindi in the official work. After participating in these workshops employees had started typing notes through Unicode in Hindi in the files. No. of letters sent to 'A' & 'B' regions in Hindi are increasing in each quarter. Besides this, Quarterly meetings to review the progressive use of Hindi were held regularly under the Chairmanship of Director General (BEE).

#### 4.6 Vigilance

During the year 2020-21, there were no major complaints received and no disciplinary case initiated.

#### 4.7 Welfare of Persons with Disabilities

Representation of physically Challenged Employees in the Bureau of Energy Efficiency is indicated in the format given below:-

| Group        | Total Employees as on 31.03.2021 | Physically Challenged Employees |    |           |           | Percentage of Physically Challenged employees |
|--------------|----------------------------------|---------------------------------|----|-----------|-----------|---|
|              |                                  | VH                              | HH | OH        | Total     |   |
| A            | 14                               | -                               |    | 01        | 01        | 7.14%   |
| B            | 07                               | -                               | -  | 01        | 01        | 14.28%  |
| C            | 01                               | -                               | -  | -         | -         | -   |
| <b>Total</b> | <b>22</b>                        | -                               | -  | <b>02</b> | <b>02</b> | <b>9.09%</b>                                  |







## **BUREAU OF ENERGY EFFICIENCY**

(Ministry of Power, Government of India)

4<sup>th</sup> Floor, Sewa Bhawan, R.K. Puram, New Delhi - 110 066 (INDIA)

Tel.: +91-11-26766700, Fax No.: +91-11-26178328/52

website: [www.beeindia.gov.in](http://www.beeindia.gov.in)