

GOVERNMENT OF INDIA
MINISTRY OF POWER
RAJYA SABHA
UNSTARRED QUESTION NO.2546
TO BE ANSWERED ON 10.08.2021

NATIONAL MISSION FOR ENHANCED ENERGY EFFICIENCY (NMEEE)

2546 SHRI JOHN BRITTAS:

Will the Minister of **POWER**
be pleased to state:

- (a) the current status of implementation of National Mission for Enhanced Energy Efficiency (NMEEE) and the various schemes under it including Perform Achieve and Trade (PAT) and Market Transformation for Energy Efficiency (MTEE);
- (b) whether PAT Cycles III, IV have achieved their targets, if so, the details thereof; and
- (c) the status of implementation of PAT Cycle VI?

A N S W E R

THE MINISTER OF POWER AND NEW & RENEWABLE ENERGY

(SHRI R.K. SINGH)

(a) : **National Mission for Enhanced Energy Efficiency (NMEEE)** consists of four initiatives to enhance energy efficiency in energy intensive industries which are as follows:

- (i) **Perform, Achieve and Trade (PAT)** scheme aims at reducing Specific Energy Consumption (SEC) i.e. energy use per unit of production for Designated Consumers (DCs) in energy intensive sectors, with an associated market mechanism to enhance the cost effectiveness through certification of excess energy saving which can be traded. The Sector-wise Designated Consumers (DCs) under PAT Scheme (Cycle –I to Cycle –VI) along with energy saving targets are given at **Annexure**.
- (ii) **Market Transformation for Energy Efficiency (MTEE)** aims for accelerating the shift to energy efficient appliances in designated sectors through incentives and innovative business models. Under MTEE the following programmes were introduced for the promotion of energy efficient products in the market:-

Bachat Lamp Yojna (BLY): The programme was developed for replacement of inefficient bulbs with Compact Fluorescent Lamps (CFLs). The details of number of bulbs replaced with CFL and energy saved are as follows:-

No. Of bulbs replaced with CFL	Energy saved
29 million	3.598 Billion Units / per year

Super-Efficient Equipment Program (SEEP): This programme was designed for market transformation of super-efficient appliances by providing financial stimulus innovatively at critical point/s of interventions.

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(iii) **Energy Efficiency Financing Platform (EEFP)** was launched to provide a platform to interact with Financial Institutions (FIs) and project developers for implementation of energy efficiency projects. Under this programme, Memorandum of Understandings (MoUs) have been signed by BEE to promote financing for energy efficiency projects. For capacity building of FIs, BEE signed MoU with Indian Banks' Association for the Training Programme on Energy Efficiency Financing.

(iv) **Framework for Energy Efficient Economic Development (FEEED)** was designed for development of fiscal instruments to promote energy efficiency. The objective was to provide the comfort to concerned stakeholders through implementation of Energy Efficiency schemes such as Partial Risk Sharing Facility (PRSF) 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. Each energy saving loan 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.

(b) : PAT Cycle-III commenced with effect from 1st April 2017 and got completed on 31st March, 2020. PAT Cycle -III sought to achieve an overall energy consumption reduction of 1.06 MTOE for which targets had been notified to 116 Designated Consumers (DCs) from six sectors viz. Thermal Power Plant, Cement, Aluminium, Pulp & Paper, Iron & Steel and Textile. Next step is verification of actual energy saving.

PAT Cycle-IV commenced with effect from 1st April 2018. A total of 106 DCs with an estimated energy consumption reduction target of 0.6998 million tonnes of oil equivalent were notified. 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). The assessment year of these DCs has been affected by the outbreak of the Pandemic due to COVID -19 and thus their assessment of performance has not commenced.

(c) : 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 targeted to achieve a total energy savings of 1.276 MTOE. These 135 DCs are under process of implementation of various energy efficiency measures to meet their notified targets.

ANNEXURE

ANNEXURE REFERRED TO IN REPLY TO PART (a) OF UNSTARRED QUESTION NO. 2546 TO BE ANSWERED IN THE RAJYA SABHA ON 10.08.2021

Sl. No.	Sectors	PAT Cycle -I			PAT Cycle -II			PAT Cycle -III		PAT Cycle -IV		PAT Cycle -V		PAT Cycle -VI		Total DCs (PAT Cycle-I to PAT Cycle -VI)
		Total No. of DCs	Energy Saving Target (MTOE)	Achievements (MTOE)	Total No. of DCs	Energy Saving Target (MTOE)	Achievements (MTOE)	Total No. of DCs	Energy Saving Target (MTOE)	Total No. of DCs	Energy Saving Target (MTOE)	Total No. of DCs	Energy Saving Target (MTOE)	Total No. of DCs	Energy Saving Target (MTOE)	
1	Aluminum	10	0.456	0.73	12	0.466	1.23	1	0.061			1	0.0739			14
2	Cement	85	0.815	1.48	111	1.117	1.56	14	0.096	1	0.004	12	0.087	37	0.062	175
3	Chlor- Alkali	22	0.054	0.09	24	0.102	0.13			2	0.003	2	0.0017			28
4	Fertilizer	29	0.478	0.78	37	0.447	0.38									37
5	Iron and Steel	67	1.486	2.1	71	2.283	2.85	29	0.457	35	0.1926	23	0.1687	5	0.031	163
6	Pulp and Paper	31	0.119	0.29	29	0.146	0.31	1	0.003	2	0.0098	8	0.0169	2	0.003	42
7	Textile	90	0.066	0.13	99	0.088	0.14	34	0.04	7	0.0204	16	0.0135	7	0.007	163
8	Thermal Power	144	3.211	3.06	154	3.134	3.44	37	0.402	17	0.237	17	0.15	-	-	225
9	Railways	-	-	-	22	0.077	0.2	-	-	-	-	-	-	-	-	22
10	Petroleum Refineries	-	-	-	18	1.098	1.43	-	-	-	-	-	-	20	1.169	20
11	DISCOMs	-	-	-	44	4.675	2.42	-	-	-	-	-	-			44
12	Commercial Buildings (Hotels)	-	-	-	-	-	-			37	0.0037	31	0.0013	64	0.004	132
13	Petrochemical	-	-	-	-	-	-			8	0.2293					8
	Total	478	6.686	8.67	621	13.633	14.08	116	1.06	109	0.6998	110	0.513	135	1.276	1073

MTOE: Million Tonne of Oil Equivalent
