2720. DR. ARVIND KUMAR SHARMA:

Will the Minister of POWER be pleased to state:

(a) whether achievements have been made by Energy Efficiency Services Limited (EESL) in increasing energy efficiency of the country’s economy during the last three years and the current year;

(b) if so, the details thereof; and

(c) if not, the reasons therefor?

ANSWER

THE MINISTER OF POWER AND NEW & RENEWABLE ENERGY

(SHRI R.K. SINGH)

(a) to (c): Energy efficiency measures and clean energy programmes undertaken by Energy Efficiency Services Limited (EESL), a joint venture company of Public Sector Undertakings (PSUs) under the Ministry of Power, have resulted in electricity savings, reduction of CO₂ emissions and monetary savings on account of energy saved. The Programme-wise achievements of EESL during the last 3 financial years and the current year are given at Annexure.

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ANNEXURE

ANNEXURE REFERRED TO IN REPLY TO PARTS (a) TO (c) OF UNSTARRED QUESTION NO. 2720 ANSWERED IN THE LOK SABHA ON 17.03.2022

1. Unnat Jyoti by Affordable LEDs for ALL (UJALA):
   - During the last 3 Financial years (FY19, FY20, FY21), EESL has distributed about 7.4 crore LED bulbs across India. In the current financial year, EESL has distributed 7.54 lakh LED bulbs.
   - In total, 36.79 crore LED bulbs have been distributed by EESL. This has resulted in an estimated energy savings of over 48 billion kWh per year which avoided peak demand of about 9,769 MW, GHG emission reduction of over 39 million t CO₂ per year and estimated annual monetary savings of about INR 19,300 crore in electricity bills of consumers.
   - In addition, EESL has distributed 72.17 Lakh LED tube lights and 23.59 Lakh Energy Efficient fans under UJALA program till date.

2. Gram UJALA:
   Under this programme, Incandescent Lamps (ICL) bulbs are replaced by efficient LED bulbs that consume 88% less electricity. The bulbs are being offered at Rs 10/bulb and rest of the cost is proposed to be recovered from Carbon Financing. Over 80.54 lakh LED bulbs have been distributed under Gram Ujala. This has resulted in an estimated energy savings of 1.15 billion kWh per year which avoided peak demand of about 317 MW, GHG emission reduction of 1.06 million t CO₂ per year and estimated annual monetary savings of INR 400 crore in electricity bills of consumers. 1 million LED Bulbs were distributed in a single day on National Energy Conservation Day, 14th December, 2021.

3. Street Lighting National Programme (SLNP):
   - During the last 3 Financial years (FY19, FY20, FY21), EESL has installed over 62.2 lakh LED street lights in Urban Local Bodies (ULBs) and Gram Panchayats across India. In the current financial year, EESL has installed 7.94 lakh LED street lights.
   - In total, EESL has installed about 1.23 crore LED street lights across India. This has resulted in an estimated energy savings of 8.33 billion kWh per year with avoided peak demand of about 1,387 MW, GHG emission reduction of 5.73 million t CO₂ per year and estimated annual monetary savings of INR 5,828 crore in electricity bills of municipalities.

4. Smart Meter Programme:
   EESL with its JV IntelliSmart is currently doing Implementation of Smart Metering Program to significantly improve the billing and collection efficiencies of Distribution Companies (DISCOMs). Smart Meters will be the foundation for smart grid programme which will be crucial to meet challenges of the newly evolving energy mix and the target of providing uninterrupted 24x7 power supply to every Indian. EESL launched the smart meter program in 2017.
During the last 3 Financial Years, EESL has installed 16.5 lakh smart meters. In the current Financial year, EESL has installed 7.49 lakh smart meters.

5. Electric Vehicles:

During the last three financial years, 1,389 Electric cars have been deployed on road to 185 clients comprising various Government departments, both at Central and State level, PSUs, shared mobility operator etc. pan India. In the current financial year, 311 Electric cars which have been deployed on road by CESL (a wholly owned subsidiary of EESL).

CESL has installed 256 PCS during the last three years comprising Bharat Standard DC001 (15kW), High Capacity Fast DC Combo Chargers 142kW (CCS2.0+ CHAdeMO + AC Type II), Standalone CCS2 (50kW) and Bharat Standard AC001 (10kW). In the current financial year, EESL/CESL has installed 150 Public Electric Vehicle Charging Stations (PCS).

6. Decentralized Solar Power Plant Programme:

Project-wise progress: Progress of EESL/CESL’s decentralised solar project is indicated below:

<table>
<thead>
<tr>
<th>FY</th>
<th>Capacity Commissioned (MWp)</th>
<th>Plants Commissioned (Nos.)</th>
<th>Remarks</th>
</tr>
</thead>
<tbody>
<tr>
<td>2018-19</td>
<td>13.97</td>
<td>16</td>
<td>Solar plant size ranging from 0.3 MW to 10 MW at a single location</td>
</tr>
<tr>
<td>2019-20</td>
<td>50.12</td>
<td>57</td>
<td></td>
</tr>
<tr>
<td>2020-21</td>
<td>66.68</td>
<td>50</td>
<td></td>
</tr>
<tr>
<td>2021-22</td>
<td>53</td>
<td>17</td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>183.77 MWp</td>
<td>140</td>
<td></td>
</tr>
</tbody>
</table>


- During the last 3 Financial years (FY19, FY20, FY21), EESL has completed retrofitting work in 7,739 buildings by replacing old appliances with Energy efficient appliances like LED bulbs/lights, Tube lights, Fans & Air Conditioners. In the current financial year, EESL has completed retrofitting work in 1,122 buildings.

- Energy Audits show energy saving potential to the tune of up to 30% in these buildings.

8. Agricultural Demand Side Management (AgDSM):

- During the last 3 Financial years (FY19, FY20, FY21), about 58,000 energy efficient pumps have been installed. In the current financial year, total 2,459 pumps have been installed by EESL.

- This has resulted in an estimated energy savings of 206 million kWh per year with avoided peak demand of about 38 MW, GHG emission reduction of 0.15 million t CO2 per year and estimated annual monetary savings of INR 103 crore in electricity bills of consumers.

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