

Additional Proactive Disclosure 2: Questions asked in the parliament and their responses given

Note to citizens: Windows users please use the Control + F functionality to search through the document or Command + F in case of Macintosh users.

Question 1: LSQ 2910: Parliamentary Questions through letter number 7/13/2020-EC dated September 10, 2020 from Ministry of Power

- a) The names and lists of Agricultural Irrigation Submersible Pumpset manufacture in the country with a 5- star rating;
- b) whether the list prepared is up to date and in line with the current market conditions and if so, the details thereof;
- c) whether the Government through Bureau of Energy Efficiency, proposes to issue fresh advisory to States on the procurement of Agricultural Irrigation Submersible Pump sets with 2- star or 3- star rating and if so, the details thereof;
- d) whether the achievement of 5- star rating of pump sets by manufacturers in India is considered only aspirational and if so, the details thereof; and
- e) the measures taken to protect India manufactures of pump sets, especially the southern States of the country?

Answer (a) to (e): Bureau of Energy Efficiency (BEE) May please reply.

Energy Efficiency Services Limited (EESL), A JV of PSUs under MoP, GoI is implementing the Agricultural Demand Side Management (AgDSM) programme to promote the energy efficient agricultural pump sets. EESL has started the AgDSM programme for replacement of old pumps with BEE 5 Star rated Energy efficient pump sets from the southern state of Andhra Pradesh. As on date total 74,178 no. of pump sets have been installed by EESL (Andhra Pradesh- 72,070 and Uttar Pradesh- 2,108). EESL has also completed pilot projects for Energy efficient pump sets in the state of Karnataka, Maharashtra and Rajasthan.

Question 2: LSQ 10962: Lok Sabha Provisionally admitted Unstarred Question Diary number 10962 for 18.03.2021 regarding Go Electric Campaign

- a) Whether the Government has recently launched a GO Electric Campaign to help reduce the import bill;
- b) if so, the details thereof;
- c) Whether this initiative will help the country in securing a cleaner and a greener future; and
- d) if so, the details thereof?

Answer (a) to (d): Ministry of Power (MoP)/ Bureau of Energy Efficiency (BEE) may please reply. EESL/CESL has converted 1,514 number of e-vehicles and they have collectively run over 4 Cr e-kms in the last 2 years resulting in savings of around 2.7 M litres of petrol/diesel.

Question 3: Lok Sabha admitted PQ. No. 4978 for 25.03.2021 on "Distribution of LED Bulbs"-reg.

(a): the salient features of Unnat Jyoti by Affordable LEDs for All (UJALA) and LED Street Lighting National Programme (SLNP).

Answer (a): About UJALA: UJALA (Unnat Jyoti by Affordable LEDs for All) was launched on 5th January, 2015 by Hon'ble Prime Minister. The programme was started as an attempt to provide energy efficient LED bulbs to consumers at an affordable price. The programme has been successful in bringing down the retail price of the LED bulbs from Rs 300-350 per LED bulb in the year 2014 to Rs 70-Rs 80 per bulb in a short span of 3 years. As on date 36.72 Crore LED bulbs have been distributed under UJALA programme. The salient features of the of the UJALA programme are as follows:

Distribution of 36.72 (as on 16.03.2021) Crore LED bulbs resulted in energy saving of 47,691 million units of electricity per annum, peak demand reduction of 9,548 MW and 38.62 million tonnes of CO₂ emission reduction annually

- Promote the use of the most efficient lighting technology at affordable rates to domestic consumers which benefits them by way of reduced energy bill and improve their livelihood
- Enhance consumer awareness on the financial and environmental benefits of using energy efficient Increase the demand of LED lights by aggregating requirements across the country and provide an impetus to domestic lighting industry
- Provided economies of scale to manufacturers through regular bulk procurement, which helped the manufacturers to reduce the cost of LED bulbs for retail segment as well.
- Encouraged Make in India – domestic manufacturing of LED bulbs increased from about 100,000 per month to 40 million per month

❖ **About SLNP**

Street Lighting National Programme (SLNP) may be the world's largest streetlight replacement programme. Hon'ble Prime Minister, on 5th January, 2015 launched Street Lighting National Programme (SLNP) to replace conventional street lights with smart and energy efficient LED street lights across India. EESL replaces the conventional street lights with LEDs at its own costs (without any need for municipalities to invest) and the consequent reduction in energy and maintenance cost of the municipality is used to repay EESL over a period of time. The contracts that EESL enters into with municipalities are typically of 7 years duration where it not only guarantees a minimum energy saving (of-typically 50%) but also provides free replacements and maintenance of lights at no additional cost to the municipality.

Objectives of SLNP

- Mitigate climate change by implementing energy efficient LED based street lighting
- Reduce energy consumption in lighting which helps DISCOMs to manage peak demand
- Provide a sustainable service model that obviates the need for upfront capital investment as well as additional revenue expenditure to pay for procurement of LED lights
- Enhance municipal services at no upfront capital cost of municipalities

Progress and impact

Till date, EESL has installed over **1.15 crore** LED street lights in ULBs and Gram Panchayats across India. This has resulted in estimated energy savings of **7.75 billion kWh per year** with avoided peak demand of about **1,300 MW**, GHG emission reduction of **5.33 million t CO2** per year and estimated annual monetary savings of **INR 5,523 crore** in electricity bills of municipalities.

(b): Whether the said programmes have been implemented in all States/UTs of the country and if so, the details thereof along with the status of implementation of these programmes;

Answer (b): For UJALA: Yes, the said programme is being implemented in all States/UT across the country. The details are as follows:

Sl. No.	State/UT	Nos. of LED bulb distributed (as on 16.03.2021)
1	Andaman & Nicobar	4,00,000
2	Andhra Pradesh	2,20,39,295
3	Arunachal Pradesh	4,99,498
4	Assam	71,77,088

5	Bihar	1,95,84,663
6	Chandigarh	5,54,283
7	Chhattisgarh	1,07,96,468
8	Dadra & Nagar Haveli	1,63,808
9	Daman & Diu	1,42,623
10	Delhi	1,33,12,424
11	Goa	10,05,890
12	Gujarat	4,14,10,794
13	Haryana	1,56,03,808
14	Himachal Pradesh	85,90,695
15	Jammu & Kashmir	84,86,579
16	Jharkhand	1,36,45,874
17	Karnataka	2,40,16,337
18	Kerala	1,54,20,307
19	Lakshadweep	2,00,000
20	Ladakh	2,30,630
21	Madhya Pradesh	1,75,71,087
22	Maharashtra	2,19,71,431
23	Manipur	2,99,934
24	Meghalaya	4,33,789
25	Mizoram	6,15,293
26	Nagaland	10,99,038
27	Odisha	5,22,70,570
28	Puducherry	6,09,251
29	Punjab	30,10,852
30	Rajasthan	1,71,29,445
31	Sikkim	1,64,000
32	Tamil Nadu	43,57,459
33	Telangana	21,88,948
34	Tripura	10,54,437
35	Uttar Pradesh	2,62,52,469
36	Uttarakhand	56,63,159
37	West Bengal	92,29,228
Total		36,72,01,454

For SLNP: The SLNP programme is being implemented across the 29 States/UTs. The state-wise installation details are as below.

SLNP Installation details		
Sl. No.	State/UT	No. of LED Street Lights installed (As on 16.03.2021)
1	Andhra Pradesh	28,91,996
2	Telangana	12,55,935
3	Tamil Nadu	7,376
4	Port Blair- A&N	14,995

5	Maharashtra	9,29,092
6	Kerala	2,10,213
7	Karnataka	12,310
8	Goa	2,07,110
9	Lakshadweep	1,000
10	West Bengal	83,929
11	Jharkhand	5,16,043
12	Bihar	4,87,977
13	Rajasthan	10,53,366
14	Gujarat	8,88,808
15	Uttar Pradesh	11,85,070
16	Uttarakhand	61,097
17	Chhattisgarh	3,70,885
18	Odisha	3,39,476
19	Madhya Pradesh	1,29,939
20	Delhi	3,46,504
21	Jammu & Kashmir	1,40,676
22	Himachal Pradesh	59,772
23	Punjab	1,08,576
24	Chandigarh	45,794
25	Haryana	81,483
26	Sikkim	868
27	Tripura	76,376
28	Assam	28,073
29	Puducherry	450
Total		1,15,35,189

(c): The number of LED bulbs that have been distributed under the said programmes during the last three years and the current year, state/UT wise;

Answer (c): The number of LED bulbs distributed during last three years and current year is tabulated below:

Sl. No.	State/UT	2017-18	2018-19	2019-20	2020- Date	Till
1	Andaman & Nicobar	-	13,100	-	-	
2	Andhra Pradesh	4,19,220	1,90,702	9,400	1,04,512	
3	Arunachal Pradesh	3,54,083	3,23,056	12,540	548	
4	Assam	5,45,501	49,49,693	97,065	13,577	
5	Bihar	53,33,779	14,13,998	2,00,885	1,51,176	
6	Chandigarh	3,77,889	1,05,458	12,291	-	
7	Chhattisgarh	26,81,120	9,78,099	1,32,162	2,92,978	
8	Dadra Nagar Haveli	33,244	41,033	25,816	2,633	
9	Daman & Diu	79,590	38,232	15,555	492	
10	Delhi	15,67,129	4,48,335	2,50,461	1,500	

Sl. No.	State/UT	2017-18	2018-19	2019-20	2020- Date	Till
11	Goa	122	300	-	-	
12	Gujarat	69,25,412	13,06,879	3,72,804	1,86,080	
13	Haryana	44,60,754	8,41,999	81,780	17,568	
14	Himachal Pradesh	4,98,944	3,40,028	2,30,508	1,23,207	
15	Jammu & Kashmir and Ladakh	8,41,618	2,55,342	9,191	394	
16	Jharkhand	26,11,616	13,79,828	1,37,413	3,67,663	
17	Karnataka	41,87,351	27,48,857	12,10,006	5,63,407	
18	Kerala	50,07,910	3,24,627	1,35,423	29,103	
19	Madhya Pradesh	45,86,808	13,37,493	5,01,185	54,565	
20	Maharashtra	12,26,375	2,59,605	22,687	11,638	
21	Manipur	1,27,008	2,87,438	25,000	-	
22	Meghalaya	1,41,386	2,23,143	-	-	
23	Mizoram	1,42,636	92,920	25	15	
24	Nagaland	201	2,51,615	47,777	-	
25	Odisha	30,79,358	3,23,31,875	70,15,357	8,24,678	
26	Puducherry	-	24,696	-	-	
27	Punjab	9,37,353	3,83,861	1,18,516	15,73,333	
28	Rajasthan	19,19,037	14,58,025	3,33,270	73,701	
29	Sikkim	50,871	40,657	-	1,000	
30	Tamil Nadu	18,56,008	18,44,325	4,19,661	1,33,137	
31	Telangana	8,87,697	2,76,849	7,128	12,143	
32	Tripura	2,62,197	2,90,635	9,046	15,605	
33	Uttar Pradesh	82,86,306	19,69,366	3,12,089	1,73,661	
34	Uttrakhand	10,48,482	6,29,772	2,29,701	60,262	
35	West Bengal	55,66,595	7,98,226	53,652	120	
36	Lakshadweep	2,00,000	-	-	-	
Total		6,62,43,600	5,82,00,067	1,20,28,394	47,88,696	

(d): whether the Government has taken any steps to encourage manufacturers and distributors of LED Bulbs and if so, the details thereof?

Answer (d): Ministry of Power may please reply.

Question 4: Lok Sabha Admitted PQ. No. 4994 for 25.03.2021 on "Street Lighting National Programme " –reg.

(a): Whether the Government is implementing Street Light National Programme (SLNP) in some States;

(b): - If so, the details thereof, state-wise;

Answer (a) & (b): Yes, Sir. Energy Efficiency Services Limited (EESL) a JV of PSU under MoP, GoI has initiated and implementing Street Lighting National Programme (SLNP) in 23 States and 6 Union Territories.

The State/UT-wise, implementation details are as follows: -

Sl. No.	State/UT	No. of LED Street Lights installed (As on 16.03.2021)
1	Andhra Pradesh	28,91,996
2	Telangana	12,55,935
3	Tamil Nadu	7,376
4	Port Blair (A&N)	14,995
5	Maharashtra	9,29,092
6	Kerala	2,10,213
7	Karnataka	12,310
8	Goa	2,07,110
9	Lakshadweep	1,000
10	West Bengal	83,929
11	Jharkhand	5,16,043
12	Bihar	4,87,977
13	Rajasthan	10,53,366
14	Gujarat	8,88,808
15	Uttar Pradesh	11,85,070
16	Uttarakhand	61,097
17	Chhattisgarh	3,70,885
18	Odisha	3,39,476
19	Madhya Pradesh	1,29,939
20	Delhi	3,46,504
21	Jammu & Kashmir	1,40,676
22	Himachal Pradesh	59,772
23	Punjab	1,08,576
24	Chandigarh	45,794
25	Haryana	81,483
26	Sikkim	868
27	Tripura	76,376
28	Assam	28,073
29	Puducherry	450
Total		1,15,35,189

(c): - The Total Street Lights that have already been replaced in the country with the LED Bulbs and the estimated quantity of energy saved as a result thereof;

Answer (c): - EESL has replaced so far **1,15,35,189** conventional street lights with LED street lights. This leads to an estimated energy savings of **7.75 billion units** per year.

(d): Whether there is any proposal to replace street lights in all the States under the SLNP;

(e): If so, the details thereof; and

(f): The time by which it is likely to be replaced?

Answer (d) to (f): - Street Lighting National Programme is voluntary in nature and based on a sustainable business model, where the cost of efficient lighting is repaid by ULBs/municipalities from savings in electricity bill over a period

of time. EESL has given proposals to all States/UTs and as and when the State/UT administration approves the same and agreements are signed with the respective ULBs, the replacement of street lights is taken up.

Question 5: Lok Sabha provisionally admitted Starred/ Unstarred Q. Dy. No. 12453 for answer on 25.03.2021 regarding Programmes related to Distribution of LED Bulbs.

(a): the salient features of Unnat Jyoti by Affordable LEDs for All (UJALA) and LED Street Lighting National Programme (SLNP) along with the status of its implementation.

Answer (a): About UJALA: UJALA (Unnat Jyoti by Affordable LEDs for All) was launched on 5th January, 2015 by Hon'ble Prime Minister. The programme was started as an attempt to provide energy efficient LED bulbs to consumers at an affordable price. The programme has been successful in bringing down the retail price of the LED bulbs from Rs 300-350 per LED bulb in the year 2014 to Rs 70-Rs 80 per bulb in a short span of 3 years. As on date 36.72 Crore LED bulbs have been distributed under UJALA programme. The salient features of the of the UJALA programme are as follows:

- Distribution of 36.72 (as on 16.03.2021) Crore LED bulbs resulted in energy saving of 47,691 million units of electricity per annum, peak demand reduction of 9,548 MW and 38.62 million tonnes of CO₂ emission reduction annually
- Promote the use of the most efficient lighting technology at affordable rates to domestic consumers which benefits them by way of reduced energy bill and improve their livelihood
- Enhance consumer awareness on the financial and environmental benefits of using energy efficient Increase the demand of LED lights by aggregating requirements across the country and provide an impetus to domestic lighting industry
- Provided economies of scale to manufacturers through regular bulk procurement, which helped the manufacturers to reduce the cost of LED bulbs for retail segment as well.
- Encouraged Make in India – domestic manufacturing of LED bulbs increased from about 100,000 per month to 40 million per month

❖ **About SLNP**

Street Lighting National Programme (SLNP) may be the world's largest streetlight replacement programme. Hon'ble Prime Minister, on 5th January, 2015 launched Street Lighting National Programme (SLNP) to replace conventional street lights with smart and energy efficient LED street lights across India. EESL replaces the conventional street lights with LEDs at its own costs (without any need for municipalities to invest) and the consequent reduction in energy and maintenance cost of the municipality is used to repay EESL over a period of time. The contracts that EESL enters into with municipalities are typically of 7 years duration where it not only guarantees a minimum energy saving (of-typically 50%) but also provides free replacements and maintenance of lights at no additional cost to the municipality.

Objectives of SLNP

- Mitigate climate change by implementing energy efficient LED based street lighting
- Reduce energy consumption in lighting which helps DISCOMs to manage peak demand
- Provide a sustainable service model that obviates the need for upfront capital investment as well as additional revenue expenditure to pay for procurement of LED lights
- Enhance municipal services at no upfront capital cost of municipalities

Progress and impact

Till date, EESL has installed over **1.15 crore** LED street lights in ULBs and Gram Panchayats across India. This has resulted in estimated energy savings of **7.75 billion kWh per year** with avoided peak demand of about **1,300 MW**, GHG emission reduction of **5.33 million t CO2** per year and estimated annual monetary savings of **INR 5,523 crore** in electricity bills of municipalities.

(b): Whether the said programmes have been implemented in all States/UTs of the country

(c): If so, the details thereof;

Answer (b) & (c):

For UJALA: Yes, the said programme is being implemented in all States/UT across the country. The details are as follows:

Sl. No.	State/UT	Nos. of LED bulb distributed (as on 16.03.2021)
1	Andaman & Nicobar	4,00,000
2	Andhra Pradesh	2,20,39,295
3	Arunachal Pradesh	4,99,498
4	Assam	71,77,088
5	Bihar	1,95,84,663
6	Chandigarh	5,54,283
7	Chhattisgarh	1,07,96,468
8	Dadra & Nagar Haveli	1,63,808
9	Daman & Diu	1,42,623
10	Delhi	1,33,12,424
11	Goa	10,05,890
12	Gujarat	4,14,10,794
13	Haryana	1,56,03,808
14	Himachal Pradesh	85,90,695
15	Jammu & Kashmir	84,86,579
16	Jharkhand	1,36,45,874
17	Karnataka	2,40,16,337
18	Kerala	1,54,20,307
19	Lakshadweep	2,00,000
20	Ladakh	2,30,630
21	Madhya Pradesh	1,75,71,087
22	Maharashtra	2,19,71,431
23	Manipur	2,99,934
24	Meghalaya	4,33,789
25	Mizoram	6,15,293
26	Nagaland	10,99,038
27	Odisha	5,22,70,570
28	Puducherry	6,09,251
29	Punjab	30,10,852
30	Rajasthan	1,71,29,445

31	Sikkim	1,64,000
32	Tamil Nadu	43,57,459
33	Telangana	21,88,948
34	Tripura	10,54,437
35	Uttar Pradesh	2,62,52,469
36	Uttarakhand	56,63,159
37	West Bengal	92,29,228
Total		36,72,01,454

For SLNP: The SLNP programme is being implemented across the 29 States/UTs. The state-wise installation details are as below.

SLNP Installation details		
Sl. No.	State/UT	No. of LED Street Lights installed (As on 16.03.2021)
1	Andhra Pradesh	28,91,996
2	Telangana	12,55,935
3	Tamil Nadu	7,376
4	Port Blair- A&N (UT)	14,995
5	Maharashtra	9,29,092
6	Kerala	2,10,213
7	Karnataka	12,310
8	Goa	2,07,110
9	Lakshadweep (UT)	1,000
10	West Bengal	83,929
11	Jharkhand	5,16,043
12	Bihar	4,87,977
13	Rajasthan	10,53,366
14	Gujarat	8,88,808
15	Uttar Pradesh	11,85,070
16	Uttarakhand	61,097
17	Chhattisgarh	3,70,885
18	Odisha	3,39,476
19	Madhya Pradesh	1,29,939
20	Delhi (UT)	3,46,504
21	Jammu & Kashmir (UT)	1,40,676
22	Himachal Pradesh	59,772
23	Punjab	1,08,576
24	Chandigarh (UT)	45,794
25	Haryana	81,483
26	Sikkim	868
27	Tripura	76,376
28	Assam	28,073
29	Puducherry (UT)	450
Total		1,15,35,189

(d): The number of LED bulbs that have been distributed under the said programmes during the last three years and the current year, state/UT wise;

Answer (d): The number of LED bulbs distributed during last three years and current year is tabulated below:

Sl. No.	State/UT	2017-18	2018-19	2019-20	2020- Date	Till
1	Andaman & Nicobar	-	13,100	-	-	
2	Andhra Pradesh	4,19,220	1,90,702	9,400	1,04,512	
3	Arunachal Pradesh	3,54,083	3,23,056	12,540	548	
4	Assam	5,45,501	49,49,693	97,065	13,577	
5	Bihar	53,33,779	14,13,998	2,00,885	1,51,176	
6	Chandigarh	3,77,889	1,05,458	12,291	-	
7	Chhattisgarh	26,81,120	9,78,099	1,32,162	2,92,978	
8	Dadra Nagar Haveli	33,244	41,033	25,816	2,633	
9	Daman & Diu	79,590	38,232	15,555	492	
10	Delhi	15,67,129	4,48,335	2,50,461	1,500	
11	Goa	122	300	-	-	
12	Gujarat	69,25,412	13,06,879	3,72,804	1,86,080	
13	Haryana	44,60,754	8,41,999	81,780	17,568	
14	Himachal Pradesh	4,98,944	3,40,028	2,30,508	1,23,207	
15	Jammu & Kashmir and Ladakh	8,41,618	2,55,342	9,191	394	
16	Jharkhand	26,11,616	13,79,828	1,37,413	3,67,663	
17	Karnataka	41,87,351	27,48,857	12,10,006	5,63,407	
18	Kerala	50,07,910	3,24,627	1,35,423	29,103	
19	Madhya Pradesh	45,86,808	13,37,493	5,01,185	54,565	
20	Maharashtra	12,26,375	2,59,605	22,687	11,638	
21	Manipur	1,27,008	2,87,438	25,000	-	
22	Meghalaya	1,41,386	2,23,143	-	-	
23	Mizoram	1,42,636	92,920	25	15	
24	Nagaland	201	2,51,615	47,777	-	
25	Odisha	30,79,358	3,23,31,875	70,15,357	8,24,678	
26	Puducherry	-	24,696	-	-	
27	Punjab	9,37,353	3,83,861	1,18,516	15,73,333	
28	Rajasthan	19,19,037	14,58,025	3,33,270	73,701	
29	Sikkim	50,871	40,657	-	1,000	
30	Tamil Nadu	18,56,008	18,44,325	4,19,661	1,33,137	
31	Telangana	8,87,697	2,76,849	7,128	12,143	

Sl. No.	State/UT	2017-18	2018-19	2019-20	2020- Date	Till
32	Tripura	2,62,197	2,90,635	9,046	15,605	
33	Uttar Pradesh	82,86,306	19,69,366	3,12,089	1,73,661	
34	Uttrakhand	10,48,482	6,29,772	2,29,701	60,262	
35	West Bengal	55,66,595	7,98,226	53,652	120	
36	Lakshadweep	2,00,000	-	-	-	
Total		6,62,43,600	5,82,00,067	1,20,28,394	47,88,696	

(e): whether the Government has taken any steps to encourage manufacturers and distributors of LED Bulbs; and
(f): if so, the details thereof?

Answer (e) & (f): Ministry of Power may please reply.

Question 6: Lok Sabha provisionally admitted Starred/ Unstarred Q. Dy. No. 12741 for answer on 25.03.2021 regarding Conservation of Electricity.

(a): the schemes/programmes being implemented by the Government for saving/conserving electricity in the country;

Answer (a): Ministry of Power may please reply.

However, Energy Efficiency Services Limited (EESL) a JV of PSU under MoP, GoI is implementing following schemes for saving/conserving electricity in the country:

1. Unnat Jyoti by Affordable LEDs for All (UJALA):

UJALA (Unnat Jyoti by Affordable LEDs for All) was launched on 5th January, 2015 by Hon'ble Prime Minister. The programme was started as an attempt to provide energy efficient LED bulbs to consumers at an affordable price. The programme has been successful in bringing down the retail price of the LED bulbs from Rs 300-350 per LED bulb in the year 2014 to Rs 70-Rs 80 per bulb in a short span of 3 years. As on date 36.72 Crore LED bulbs have been distributed under UJALA programme. The salient features of the of the UJALA programme are as follows:

- Distribution of 36.72 (as on 16.03.2021) Crore LED bulbs resulted in energy saving of 47,691 million units of electricity per annum, peak demand reduction of 9,548 MW and 38.62 million tonnes of CO₂ emission reduction annually
- Promote the use of the most efficient lighting technology at affordable rates to domestic consumers which benefits them by way of reduced energy bill and improve their livelihood
- Enhance consumer awareness on the financial and environmental benefits of using energy efficient Increase the demand of LED lights by aggregating requirements across the country and provide an impetus to domestic lighting industry
- Provided economies of scale to manufacturers through regular bulk procurement, which helped the manufacturers to reduce the cost of LED bulbs for retail segment as well.
- Encouraged Make in India – domestic manufacturing of LED bulbs increased from about 100,000 per month to 40 million per month

2. Street Lighting National Programme (SLNP):

Street Lighting National Programme (SLNP) may be the world's largest streetlight replacement programme. Hon'ble Prime Minister, on 5th January, 2015 launched Street Lighting National Programme (SLNP) to replace conventional street lights with smart and energy efficient LED street lights across India. EESL replaces the conventional street lights with LEDs at its own costs (without any need for municipalities to invest) and the consequent reduction in energy and maintenance cost of the municipality is used to repay EESL over a period of time. The contracts that EESL enters into with municipalities are typically of 7 years duration where it not only guarantees a minimum energy saving (of-typically 50%) but also provides free replacements and maintenance of lights at no additional cost to the municipality.

Till date, EESL has installed over **1.15 crore** LED street lights in ULBs and Gram Panchayats across India. This has resulted in estimated energy savings of **7.75 billion kWh per year** with avoided peak demand of about **1,300 MW**, GHG emission reduction of **5.33 million t CO₂** per year and estimated annual monetary savings of **INR 5,523 crore** in electricity bills of municipalities.

3. Buildings Energy Efficiency Programme (BEEP):

Building Energy Efficiency Program (BEEP) was launched to implement energy efficiency measures in government buildings across India. Under this Program 10,451 Buildings have been retrofitted with energy efficient equipment like LED Lights, 5 Star rated Fans and super-efficient Air-condition.

Energy Efficiency measures have been implemented in approx. 7,000 railways stations/service buildings and approx. 66 Airports buildings under BEEP program. Similarly An umbrella agreement was signed with Maharashtra PWD for carrying out Energy Efficiency Measures in their approx. 5,000 buildings across the state of Maharashtra.

An agreement was signed for carrying out Energy Efficiency Measures in 594 district courts buildings across the state of AP and work has been completed.

An agreement was been signed with SDMC for implementing Energy Efficiency Measures in 400 Schools and work has been completed.

An agreement was been signed with Axis bank for implementing Energy Efficiency Measures in 1100 Branches and work has been completed.

Till date, EESL has completed LED lighting implementation in total 10,451 buildings including Railway stations and Airports. Work is under progress in 214 buildings across India as given below:

Due to above interventions we have derived energy saving as per following details for previous years.

S. No.	Year	Energy savings per year (KWH)
1	2018	22,40,21,105
2	2019	23,52,22,160
3	2020	24,69,83,268

4. Agricultural Demand Side Management (AgDSM):

EESL is implementing Agricultural Demand Side Management (AgDSM) Programme to distribute BEE 5-star energy efficient agricultural pumps to ensure a minimum of 30% reduction in energy consumption with smart control panels which can be remotely operated, to enhance the ease of operation of pumps by the farmers. AgDSM aims to replace 21 million inefficient electrified pump sets in India with highly efficient BEE 5-star rated pump sets to farmers and recover the cost by leveraging the reduction of State Government subsidy over a period of 5-10 years. The programme was launched on 7th April 2016 from Vijayawada in the state of Andhra Pradesh and the pilot projects has been completed in the states of Maharashtra, Karnataka and Rajasthan.

The AgDSM project for replacement of old pumps with BEE 5 Star rated pumps has started from Andhra Pradesh and as on date over 76,400 nos. pumps has been installed in the states of Andhra Pradesh and Uttar Pradesh. This has resulted in estimated energy savings of 197 million kWh per year with avoided peak demand of 36 MW and estimated GHG emission reduction of 1,46,608 t CO₂ per year.

(b): whether the said schemes/programmes have achieved the desired results in the country during each of the last three years and the current year;

(c): if so, the details thereof and if not, the reasons therefor;

Answer (b) & (c): Ministry of Power may please reply.

However, it may be noted that, no such target was assigned to EESL for these programmes. Implementation of these programmes, cumulatively resulted in estimated energy savings of **56 billion kWh per year** with avoided peak demand of about **11,000 MW**, GHG emission reduction of **44 million t CO₂** per year and estimated annual monetary savings of **INR 25,000 crore** in electricity bills of municipalities and domestic consumers.

(d): whether the Government has taken initiatives to promote use of energy efficient appliances/gadgets across the country;

Answer (d): Same as answer (a)

(e): if so, the details and the achievements made thereof; and (f) the other steps taken/being taken by the Government thereto?

(f): the other steps taken/being taken by the Government thereto?

Answer (e) & (f): Ministry of Power may please reply.

Question 7: Lok Sabha Provisionally admitted Starred/Unstarred Q. Dy. No. 2557 for answer on 17.09.2020 regarding Star Rating Technique.

- a) whether the "Star Rating" technique fulfils the objective of energy savings of high energy equipments and appliances:
- b) if so, the details thereof;
- c) whether energy appliances have been categorized or classified accordingly and if So, the details thereof;
- d) the details of the appliances and equipments which have been labelled with star or have been selected for star rating;
- e) whether any technological change in the appliances and equipments has also been approved: and
- f) if so, the details thereof?

Answer (a) to (f): The information pertaining to EESL may be treated as 'NIL'. Bureau of Energy Efficiency (BEE) May please reply.

Question 8: Lok Sabha Provisionally admitted Starred/Unstarred Q. Dy. No. 2910 for answer on 17.09.2020 regarding Bureau of Energy Efficiency.

- a) the names and lists of Agricultural Irrigation Submersible Pumpset manufactures in the country with a 5-star rating;

- b) whether the list prepared is up to date and in line with the current market conditions and if so, the details thereof;
- c) whether the Government through Bureau of Energy Efficiency, proposes to issue fresh advisory to States on the procurement of Agricultural Irrigation Submersible Pumpsets with 2- star or 3- star rating and if so, the details thereof;
- d) whether the achievement of 5- star rating of pumpsets by manufacturers in India is considered only aspirational and if so, the details thereof; and
- e) the measures taken to protect India manufactures of pumpsets, especially the southern States of the country?

Answer (a) to (e): Bureau of Energy Efficiency (BEE) May please reply.

Question 9: Lok Sabha Q. Dy. No. 4214 for answer on 12.02.2021 on "Vocal for Local"-reg

- (a) whether the Ministry is promoting the Prime Minister's call of 'Vocal for Local'
- (b) if so, the action taken by various departments to implement the same by increasing use of India-made goods; and
- (c) the details of the action taken by the various Departments to manufacture various items indigenously in the country?

Answer (a) to (c): Ministry of Power may please reply.

EESL in its tenders has asked the bidders to submit the declaration/undertaking of local content as per "Compliance of Minimum Local Content Requirement mentioned in Ministry of Commerce and Industry Trade's order No. P-45021/2/2017-PP(BE-II) dated 04.06.2020".

Question 10: Lok Sabha Question Unstarred Diary No. 14101. for answer on 25.03.2021 regarding " Smart Electric Meters.

- (a) Whether Government proposes to install the smart electric meters in Jhunjhunu district of Rajasthan;
- (b) if so, the details thereof and it is likely to be completed?

Answer (a) & (b): Ministry of Power may please reply.

However, Energy Efficiency Services Limited (EESL) a JV of PSU under MoP, Gol is implementing the Smart Meter Programme for replacement of conventional meters with Smart electricity meters for various DISCOMs. Rajasthan DISCOMs published a tender for installation of 2,93,004 Smart Meter in Ajmer Vidyut Vitran Nigam Limited (AVVNL) and Jodhpur Vidyut Vitran Nigam Limited (JdVVNL) circles. EESL had won this tender and has initiated installation of smart meters in AVVNL and JdVVNL with following bifurcation:

State	Utility	Total Meters to be installed
Rajasthan	AVVNL	1,90,822
	JdVVNL	1,02,182
Total		2,93,004

Jhunjhunu falls under the AVVNL circle, and under the above tender 39,340 Smart Meters are to be installed in the Jhunjhunu circle. Following is the breakup of towns falling under Jhunjhunu circle where Smart Meters are to be installed as per the above tender:

S. No.	Utility	Towns	Circle	Meters to be installed
1	AVVNL	Chirawa	Jhunjhunu	12,529
2	AVVNL	Khetri	Jhunjhunu	4,990
3	AVVNL	Pilani & Vidya Vihar	Jhunjhunu	10,998
4	AVVNL	Surajgarh	Jhunjhunu	4,740
5	AVVNL	Udaipurwati	Jhunjhunu	6,083
Total				39,340

The completion date for installation of Smart Meters in Jhunjhunu is 31st December 2021.

Question 11: Lok Sabha Starred Question No. 398 regarding promotion of electric vehicles.

(a) whether the Government has taken/proposes to take steps to promote manufacturing and usage of Electric and battery eco-friendly vehicles in the country and if so, the details thereof;

(b) whether any time limit has been or proposed to be fixed for converting all the vehicles in the country into electric and battery eco-friendly vehicles and if so, the details thereof;

Answer (a) & (b): Ministry of Power/ Department of Heavy Industry may please reply.

However, Energy Efficiency Services Limited (EESL) a JV of PSU under MoP, GoI through Convergence Energy Services Limited (CESL – 100% Owned subsidiary of EESL) is implementing National e-Mobility Programme with the objective to reduce dependence on oil imports & to provide an impetus for domestic electric vehicle manufacturers, charging infrastructure companies, fleet operators, service providers, etc. to gain efficiencies of scale and drive down costs, create local manufacturing facilities, grow technical competencies for the long-term growth of the electric vehicle (EV) industry in India and to enable Indian EV manufacturers to emerge as major global players.

Under this programme, EESL/CESL has completed the procurement process of 10,250 e-cars, including 250 long range EVs. Since the Launch of E-mobility program 1,514 e-cars have been deployed/under deployment at PAN India level to various government departments, Ministries at Central and State level, PSUs, shared mobility operators etc. These e-cars are being given on lease/outright purchase basis to replace the existing petrol and diesel vehicles taken on lease earlier. For charging these e-cars, 566 (AC & DC) Captive chargers have also been commissioned in their office premises.

EESL/CESL is also developing Electric Vehicle Charging Infrastructure and has signed MoUs with multiple stakeholders across municipalities, DISCOMs for locational assessment study and setting up of charging infrastructures in their jurisdiction location. As on date EESL/CESL has installed 255 nos. of EV chargers across India of which 141 nos. are operational and rest are in the process of pre-commissioning.

(c) whether the Government offices were directed to take action in this regard during 2018-2020;

(d) if so, the details thereof along with the number of vehicles for use in such Government offices which have been replaced during the said period; and

Answer (c) & (d): Ministry of Power/ Department of Heavy Industry may please reply.

EESL/CESL have deployed 1,131 number of e-vehicles in more than 150 Central & State Government departments, PSUs and State municipal bodies in 42 cities during the period 2018 to 2020. They have collectively run approx 4 Cr e-

kms in the last 2 years resulting in savings of around 2.7 M litres of petrol/diesel. State/UT wise details may be referred as below:

S. No.	State/UT	Cumulative deployment in 2018 - 2020
1	Haryana	23
2	Delhi	443
3	Uttar Pradesh	32
4	Uttarakhand	7
5	Rajasthan	2
6	Gujarat	39
7	Madhya Pradesh	31
8	Chhattisgarh	6
9	Maharashtra	14
10	Kerala	60
11	Telangana	2
12	Andhra Pradesh	312
13	Tamil Nadu & Puducherry	4
14	Andaman & Nicobar	70
15	Lakshadweep	6
16	Bihar	14
17	West Bengal	12
18	Jharkhand	51
19	North Eastern States	3
Total		1,131

(e): whether there is any proposal to provide incentives to the common people for purchasing electric or battery operated vehicles so as to check pollution in the cities and if so, the details thereof?

Answer (e): Ministry of Power/ Department of Heavy Industry may please reply.

Question 12: Lok Sabha Unstarred Q Dy. No. 8308 due for answer on 12.03.2021 on Emission Intensity Targets.

- (a) whether India is on track to meet its emission intensity and non-fossil electricity capacity targets as per the Paris Agreement 2015 and if so the details thereof;**
- (b) the details of assistance received from the Green Climate Fund to help India achieve the targets set under the Paris Agreement;**
- (c) whether the Government had announced enhanced voluntary commitments before the 26th session of the conference of parities to the UN climate change conference; and**
- (d) if so, the details thereof?**

Answer (a) to (d): Ministry of Environment, Forest and Climate Change (MoEFCC) /Ministry of Power (MoP) may please reply.

Question 13: Lok Sabha Provisionally admitted Unstarred Question Diary No. 10962 for 18.03.2021 regarding Go Electric Campaign.

- (a) Whether the Government has recently launched a GO Electric Campaign to help reduce the import bill;**
- (b) if so, the details thereof;**
- (c) Whether this initiative will help the country in securing a cleaner and a greener future; and**
- (d) if so, the details thereof?**

Answer (a) to (d): Ministry of Power (MoP)/ Bureau of Energy Efficiency (BEE) may please reply. EESL/CESL has converted 1,514 number of e-vehicles and they have collectively run over 4 Cr e-kms in the last 2 years resulting in savings of around 2.7 M litres of petrol/diesel.

Question 14: Lok Sabha Unstarred Question Dy No. 16227 for 01.04.2021 – reg.

- a): whether the Government proposes to establish e-vehicle charging facilities along with National Highways (NHs) under NHAI and if so, the details thereof;**

Answer (a) Ministry of Power/ Department of Heavy Industry (DHI) may please reply.

- (b) the details of NHs technology used in these chargers;**
- (c) whether the technology is common for all vehicles and if so, the details thereof;**

Answer (b) & (c): Ministry of Power/ Department of Heavy Industry (DHI) may please reply.

However, it may be noted that Ministry of Power (MoP) has issued the guidelines and standards for Charging Infrastructure for Electric Vehicles (EV) dated 01st October 2019. Guidelines provide details of charger type (Fast, Slow/Moderate), Charger Connectors (CCS, CHAdeMO, Type 2 AC, Bharat DC-001 and Bharat AC-001) and Charging vehicle type as well. **(Copy of the referred guideline is attached as Annexure 1).**

- (d) the cost of charging e-vehicles;**

Answer (d) The end EV tariff of EESL/CESL EV charging stations ranges from Rs 9.50 to Rs 26/kWh. It varies from state to state depending on the approved EV tariff by SERC, type of charging i.e. Slow or Fast and the associated development cost for setting up EV charging stations.

- (e) whether they are cost effective and if so, the details thereof;**

Answer (e) Electric Vehicles are cost effective as compared to the IC engine vehicles. However, as the capital/purchase cost of EVs are currently higher, overall cost benefits varies with tariff, monthly usage, vehicle life etc. Electric vehicles running cost comes around INR 1/km whereas for an IC engine vehicle average running cost comes around INR 6-7/km.

- (f) the details of the roll out plan for e-vehicle charging stations;**
- (g) the status of implementation of the said plan and the reasons for delay, if any?**

Answer (f) & (g): Ministry of Power/ Department of Heavy Industry (DHI) may please reply.

However, Energy Efficiency Services Limited (EESL) a JV of PSU under MoP, GoI through Convergence Energy Services Limited (CESL – 100% Owned subsidiary of EESL) is implementing Electric Vehicle Charging Infrastructure and has signed MoUs with multiple stakeholders across municipalities, DISCOMs for locational assessment study and setting

up of charging infrastructures in their jurisdiction location. As on date EESL/CESL has installed 255 nos. of EV chargers across India of which 141 nos. are operational and rest are in the process of pre-commissioning.

Question 15: Lok Sabha Question having Dy. No 1286 to be answered on 15.09.2020 regarding Charging Infrastructure.

- a) the number and details of the electric vehicle charging stations sanctioned by the Government under Phase-II of the FAME-India scheme, State-wise;
- b) the details of these stations likely to be connected to the solar powered grid to provide a green source of energy for electric vehicles and the plans of the Government to increase this number in future; and
- c) whether the Government is considering any subsidy under the FAME-II scheme in order to accelerate demand in the field and if not, the reasons therefor?

Answer (a) to (c): Department of Heavy Industry/Ministry of Power may please reply.

Energy Efficiency Services Limited (EESL), a JV of PSU under MoP, GoI is developing Electric Vehicle Charging Infrastructure and has signed MoUs with multiple stakeholders across municipalities, DISCOMs for locational assessment study and setting up of charging infrastructures in their jurisdiction location. The details of number of public chargers installed by EESL in India as on date are mentioned below:

S. No.	State/UT	Location	Type of Chargers	No. of Public Chargers installed
1.	Delhi	NDMC	DC-001, CCS/ChADEMO/ Type 2 AC	64
2.		SDMC		
3.	Tamil Nadu	CMRL Chennai	DC-001/AC-001	10
4.	Maharashtra	Maha Metro Nagpur	DC-001/AC-001	2
5.	Uttar Pradesh	Noida Authority	DC-001	9
6.	West Bengal	New Town Kolkata	DC-001/AC-001	12
Total nos. of Public Chargers Installed				97

Additionally, EESL has commissioned 488 (308 AC & 180 DC) captive chargers across all offices where EESL's EVs have been delivered.

Question 16: Lok Sabha provisionally admitted Starred/Unstarred Q. Dy. No. 12581 for answer on 25.03.2021 regarding Street Lighting National Programme.

(a): Whether the Government is implementing Street Light National Programme (SLNP) in some States;

(b): - If so, the details thereof, state-wise;

Answer (a) & (b): Yes, Sir. Energy Efficiency Services Limited (EESL) a JV of PSU under MoP, GoI has initiated and implementing Street Lighting National Programme (SLNP) in 23 States and 6 Union Territories. The State/UT-wise, implementation details are as follows:

Sl. No.	State/UT	No. of LED Street Lights installed (As on 16.03.2021)
1	Andhra Pradesh	28,91,996
2	Telangana	12,55,935
3	Tamil Nadu	7,376
4	Port Blair (A&N)	14,995
5	Maharashtra	9,29,092
6	Kerala	2,10,213
7	Karnataka	12,310
8	Goa	2,07,110
9	Lakshadweep	1,000
10	West Bengal	83,929
11	Jharkhand	5,16,043
12	Bihar	4,87,977
13	Rajasthan	10,53,366
14	Gujarat	8,88,808
15	Uttar Pradesh	11,85,070
16	Uttarakhand	61,097
17	Chhattisgarh	3,70,885
18	Odisha	3,39,476
19	Madhya Pradesh	1,29,939
20	Delhi	3,46,504
21	Jammu & Kashmir	1,40,676
22	Himachal Pradesh	59,772
23	Punjab	1,08,576
24	Chandigarh	45,794
25	Haryana	81,483
26	Sikkim	868
27	Tripura	76,376
28	Assam	28,073
29	Puducherry	450
Total		1,15,35,189

(c): - The Total Street Lights that have already been replaced in the country with the LED Bulbs and the estimated quantity of energy saved as a result thereof;

Answer (c): - EESL has replaced so far **1,15,35,189** conventional street lights with LED street lights. This leads to an estimated energy savings of **7.75 billion units** per year.

(d): Whether there is any proposal to replace street lights in all the States under the SLNP;

(e): If so, the details thereof; and

(f): The time by which it is likely to be replaced?

Answer (d) to (f): - Street Lighting National Programme is voluntary in nature and based on a sustainable business model, where the cost of efficient lighting is repaid by ULBs/municipalities from savings in electricity bill over a period of time. EESL has given proposals to all States/UTs and as and when the State/UT administration approves the same and agreements are signed with the respective ULBs, the replacement of street lights is taken up.

Question 17: Lok Sabha admitted Unstarred Q. No. 607 for answer on 04.02.2021 regarding Energy Efficiency under Building Codes.

- (a) whether India's building codes encourage the use of energy efficient equipments for housing and construction and if so, the details thereof;
- (b) the incentives provided to builders to use energy efficient equipments in buildings and if so, the details thereof;
- (c) whether the Government has held any awareness drives among builders to increase awareness about importance of energy efficiency and if so, the details thereof;
- (d) whether there exists a performance certification and rating system to evaluate energy efficiency of appliances and if so, the details thereof;
- (e) whether the Government has pursued inter-Ministerial collaboration to increase finance for builders that use energy efficient equipments; and
- (f) if so, the details thereof and if not, the reasons therefor?

Answer (a) to (f): Ministry of Power/BEE may please reply.

Building energy codes, building rating system and financing/incentives to builders does not pertain to EESL's scope and therefore no comment to offer.

However, EESL is implementing the Buildings Energy Efficiency Programme (BEEP) to retrofit energy efficient interventions such as LED based lights, Ceiling fans, Air-Conditioners in government buildings as well as in commercial buildings across India.

Till date, EESL has completed building energy efficiency projects in 10,423 buildings including Railway stations and Airports.

Question 18: Lok Sabha Unstarred Question Diary No. 2194 regarding "India Cooling Action Plan" to be answered on 05.02.2021.

- a) whether the Government is aware that one of the objectives of the India Cooling Action Plan were to fast track implementation of the building energy codes;
- b) if so, the details thereof;
- c) the details of energy codes and standards being considered under the said plan along with their expected cost and impact; and
- d) the time by which such new standards are likely to be implemented?

Answer (a) to (d): Ministry of Power/BEE may please reply.

Building energy codes and relevant standards does not pertain to EESL's scope and therefore no comment to offer.

Question 19: Parliament Question regarding Atal Jyoti Yojana.

- a) The details of the districts including under Atal Jyoti Yojana, State-wise;

Answer (a): Atal Jyoti Yojana (AJAY), a sub-scheme under off- grid and decentralized solar application scheme of MNRE, which is being implemented by Energy Efficiency Services Limited (EESL), A JV of PSUs under MoP, GoI. Under this

scheme, solar LED street lights are being installed in rural, semi-urban and urban areas which don't enjoy adequate coverage of power.

The Atal Jyoti Yojana (AJAY) scheme was launched in September, 2016. Initially the coverage of the scheme was in districts of 5 states (Uttar Pradesh, Assam, Bihar, Jharkhand and Odisha), where household Grid Power coverage was less than 50% as per 2011 census.

Considering the success of AJAY Phase-I, the coverage of the scheme has been extended to the districts of following states/UT in Phase-II:

- i. States of Uttar Pradesh, Bihar, Jharkhand, Odisha and Assam, which were covered in AJAY Phase-I of the scheme as there is additional demand in these states.
- ii. Hilly States/UT Himachal Pradesh, Jammu & Kashmir and Uttarakhand
- iii. North Eastern States including Sikkim
- iv. Andaman & Nicobar Islands and Lakshadweep
- v. Parliamentary constituency covering 48 aspirational districts of states other than those covered in (i) to (iv) above

(b) the details of funds spent in each district during the last three years under the said yojana, district-wise;

Answer (b): The district wise details are as per Annexure A

Annexure- A

AJAY-I			
S. No.	State	District	Estimated Fund Spent (in Crs.)
1	UP	Chandauli	2.43
2	UP	Varanasi	1.06
3	UP	Rae Bareli	2.93
4	UP	Fatehpur	3.11
5	UP	Pratapgarh	0.92
6	UP	Kanpur Nagar	1.68
7	UP	Lalitpur	1.37
8	UP	Jhansi	0.97
9	UP	Kaushambi	3.36
10	UP	Ambedkarnagar	2.09
11	UP	Faizabad	3.22
12	UP	Sitapur	1.68
13	UP	Kanpur	1.68
14	UP	Amethi	2.14
15	UP	Shahjhanpur	3.15
16	UP	Gautam Budh Nagar	2.12
17	UP	Bulandshehar	0.81
18	UP	Sant Kabir Nagar	0.58
19	UP	Gorakhpur	6.12
20	UP	Hapur	0.46
21	UP	Amroha	1.68
22	UP	Bijnor	0.66
23	UP	Moradabad	2.26
24	UP	Shamli	0.46
25	UP	Bijnor	3.15

AJAY-I

S. No.	State	District	Estimated Fund Spent (in Crs.)
26	UP	Siddharth Nagar	3.36
27	UP	Agra	1.26
28	UP	Etah	3.70
29	UP	Bareilly	0.58
30	UP	Badaun	0.38
31	UP	Kasganj	1.82
32	UP	Bulandshehar	3.21
33	UP	Sonbhadra	1.46
34	UP	Baghpat	2.02
35	UP	Meerut	2.67
36	UP	Farrukhabad	2.69
37	UP	Muzaffar Nagar	2.88
38	UP	Azamgarh	3.36
39	UP	Badaun	2.03
40	UP	Sambhal	0.84
41	UP	Ghaziabad	2.29
42	UP	Hapur	0.70
43	UP	Mahoba	0.89
44	UP	Banda	0.39
45	UP	Hamirpur	1.07
46	UP	Lucknow	2.94
47	UP	Unnao	3.36
48	UP	Lakhimpur Kheri	1.66
49	UP	Basti	3.15
50	UP	Jaunpur	4.55
51	UP	Kanpur	1.68
52	UP	Rampur	0.42
53	UP	Sambhal	0.43
54	UP	Sultanpur	2.52
55	UP	Deoria	3.51
56	UP	Ballia	2.08
57	UP	Ghazipur	1.28
58	UP	Saharanpur	0.84
59	UP	Bijnor	1.15
60	UP	Mathura	2.60
61	UP	Firozabad	2.52
62	UP	Allahabad	6.72
63	UP	Sitapur	3.36
64	UP	Khusinagar	1.19
65	JH	Jamshedpur	0.58
66	JH	Ranchi	0.18
67	JH	Godda	3.36
68	JH	Chatra	3.36
69	JH	Palamu	3.36
70	JH	Khunti	3.03
71	JH	Gumla	0.17
72	JH	Hazaribagh	2.97
73	JH	Ramgarh	0.26

AJAY-I

S. No.	State	District	Estimated Fund Spent (in Crs.)
74	JH	Bakaro	0.44
75	JH	Bakaro	0.00
76	BH	Samastipur	2.66
77	BH	Darbhanga	0.50
78	BH	Bhojpur	0.91
79	BH	Kaimur	1.68
80	BH	Rohtas	1.68
81	BH	Aurangabad	1.34
82	BH	Gaya	2.02
83	BH	Rohtas	1.32
84	BH	Aurangabad	1.58
85	BH	Nalanda	3.28
86	BH	Nawada	1.66
87	BH	Shekapur	0.55
88	BH	Jamui	1.41
89	BH	Munger	0.56
90	BH	Jehanabad	0.76
91	BH	Bettiya	1.98
92	BH	Motihari	1.38
93	BH	Purvi Champaran	3.63
94	BH	Muzaffarpur	3.36
95	BH	Sheohar	0.17
96	BH	Sitamarhi	0.30
97	BH	Patna Sahib	3.36
98	BH	Munger	0.45
99	BH	lakhisarai	0.88
100	BH	Patna	1.11
101	BH	Samastipur	2.69
102	BH	Khagaria	1.15
103	BH	Samastipur	0.78
104	BH	Saharsha	0.80
105	BH	Patna	2.69
106	BH	Bettiya	1.98
107	BH	Saran, Chapra	1.68
108	AS	Golpara	0.28
109	AS	Nagaon	3.36
110	AS	Karimganj	2.52
111	AS	Barpeta	0.73
112	AS	Dhemaji	1.01
113	AS	Kaliabor	0.36
114	AS	Dibrugarh	2.94
115	OD	Bargarh	3.36
116	OD	Kandhalmal	1.41
117	OD	Nayagarh	0.17
118	OD	Boudh	0.09
119	OD	Balasore	2.07
120	OD	Sambalpur	0.92
121	OD	Balangir	2.89

AJAY-I			
S. No.	State	District	Estimated Fund Spent (in Crs.)
122	OD	Subarnapur	0.47
123	OD	Mayurbhanj	3.28
Total			228

AJAY Phase-II				
S. No.	State	District	Estimated Fund Spent (in Crs.)	
1	Madhya Pradesh	Guna	1.69	
2	Madhya Pradesh	Vidisha	1.06	
3	Madhya Pradesh	Khandwa	1.59	
4	Odisha	Balangir	2.12	
5	Odisha	Bargarh	1.00	
6	Odisha	Jharsugada	1.12	
7	Odisha	Dhenkanal	1.59	
8	Odisha	Khordha	2.12	
9	Uttrakhand	Paudi Garhwal	4.24	
10	Uttrakhand	Nainital	2.12	
11	Uttrakhand	Udham Singh Nagar	2.12	
12	Uttrakhand	Almora	1.80	
13	Uttrakhand	Bageshwar	0.89	
14	Uttrakhand	Champawat	0.64	
15	Uttrakhand	Pithoragarh	0.91	
16	Uttrakhand	Tehri Garhwal	1.64	
17	Uttrakhand	Dehradun	1.61	
18	Uttrakhand	Uttarkashi	0.99	
19	Uttrakhand	Haridwar	2.03	
20	Uttar Pradesh	Prayagraj	4.24	
21	Uttar Pradesh	Azamgarh	1.06	
22	Uttar Pradesh	Gorakhpur	2.12	
23	Uttar Pradesh	Etah	1.26	
24	Uttar Pradesh	Kasganj	1.27	
25	Uttar Pradesh	Farukhabad	1.73	
26	Uttar Pradesh	Aliganj	0.39	
27	Uttar Pradesh	Alligarh	2.12	
28	Uttar Pradesh	Sant Kabir Nagar	1.70	
29	Uttar Pradesh	Sitapur	2.12	
30	Uttar Pradesh	Hardoi	1.47	
31	Uttar Pradesh	Jaunpur	1.04	
32	Uttar Pradesh	Varansi	0.55	
33	Uttar Pradesh	Hardoi	0.89	
34	Uttar Pradesh	Sitapur	0.35	
35	Uttar Pradesh	Bareilly	2.12	
36	Uttar Pradesh	Agra	2.22	
37	Uttar Pradesh	Kannauj		
38	Uttar Pradesh	Kanpur Dehat	1.80	
39	Uttar Pradesh	Auraiya		

AJAY Phase-II

S. No.	State	District	Estimated (in Crs.)	Fund	Spent
40	Uttar Pradesh	Shamli	0.53		
41	Uttar Pradesh	Kausambi	2.12		
42	Uttar Pradesh	Bareilly	0.64		
43	Uttar Pradesh	Kushinagar	2.12		
44	Uttar Pradesh	Meerut	1.70		
45	Uttar Pradesh	Moradabad	1.70		
46	Uttar Pradesh	Bijnor	0.42		
47	Uttar Pradesh	Lucknow	1.59		
48	Uttar Pradesh	Bulandshahr	2.12		
49	Uttar Pradesh	Sahjahanpur	2.12		
50	Uttar Pradesh	Sonbhadra	2.12		
51	Uttar Pradesh	Badaun	0.53		
52	Uttar Pradesh	Barabanki	2.12		
53	Uttar Pradesh	Saravasti	1.06		
54	Uttar Pradesh	Balrampur			
55	Uttar Pradesh	Chandauli	2.12		
56	Uttar Pradesh	Bahraich	2.12		
57	Uttar Pradesh	Bijnor	0.53		
58	Uttar Pradesh	Amethi	0.53		
59	Uttar Pradesh	Pratapgarh	1.59		
60	Uttar Pradesh	Mirzapur	2.12		
61	Uttar Pradesh	Ferozabad	2.12		
62	Uttar Pradesh	Ghazipur	1.06		
63	Uttar Pradesh	Mainpuri	1.70		
64	Uttar Pradesh	Etawah	0.42		
65	Uttar Pradesh	Mathura	1.59		
66	Uttar Pradesh	Ambedkarnagar	1.27		
67	Uttar Pradesh	Kanpur Nagar	1.83		
68	Uttar Pradesh	Amroha	0.93		
69	Uttar Pradesh	Bijnore	0.64		
70	Bihar	Vaishali	0.64		
71	Bihar	Bhojpur	2.12		
72	Bihar	Khagaria	1.48		
73	Bihar	Muzaffarpur	2.12		
74	Bihar	Buxar	1.50		
75	Bihar	Rohtas	0.31		
76	Bihar	Kaimur	0.31		
77	Bihar	Nalanda	1.06		
78	Bihar	Sitamarhi	2.18		
79	Bihar	Samastipur	1.06		
80	Bihar	Bhagalpur	0.59		
81	Bihar	Madubani	2.12		
82	Bihar	Purvi Champaran	2.12		
83	Bihar	Jamui	1.08		
84	Bihar	Sheikhpura	0.25		
85	Bihar	Munger	0.25		
86	Bihar	Rohtas	0.72		

AJAY Phase-II

S. No.	State	District	Estimated (in Crs.)	Fund	Spent
87	Bihar	Aurangabad	0.34		
88	Bihar	Rohtas	1.06		
89	Bihar	Kaimur	0.53		
90	Bihar	Supaul	1.31		
91	Bihar	Madhepura	0.28		
92	Bihar	Banka	1.91		
93	Bihar	Madhubani	1.47		
94	Bihar	Gopalganj	2.12		
95	Bihar	Katihar	2.12		
96	Bihar	Jehenabad			
97	Bihar	Gaya	1.40		
98	Bihar	Arwal			
99	Bihar	Vaishali	1.54		
100	Bihar	Darbhanga	2.77		
101	Bihar	Kishanganj	2.12		
102	Bihar	Nawada	1.14		
103	Jharkhand	Godda	2.12		
104	Jharkhand	Chatra	2.12		
105	Jharkhand	Dhanbad	0.79		
106	Jharkhand	Sahibganj	1.59		
107	Himachal Pradesh	Mandi	4.24		
108	Himachal Pradesh	Sirmour	1.06		
109	Rajasthan	Jalore/Sirohi/Jodhpur	1.35		
110	Gujarat	Dahod	4.24		
111	Gujarat	Narmada	2.12		
112	Assam	Kamrup Metropolitan			
113	Assam	Nalbari	1.06		
114	Assam	Golpara			
115	Assam	Kamrup			
116	Assam	Barpeta	2.12		
117	Assam	Golaghat			
118	Assam	Nagaon	0.26		
119	Assam	Karbi Anglong	2.12		
120	Assam	Charaideo	1.59		
121	Manipur	Inner Manipur	2.12		
122	Tripura	Dhalai	4.24		
123	Tripura	West Tripura	2.12		
124	Chhatisgarh	Kanker	1.42		
125	West Bengal	Malda	3.03		
126	West Bengal	Murshidabad	1.21		
127	West Bengal	Krishnanagar, Nadia	3.18		
128	West Bengal	Malda	4.07		
129	Jammu&Kashmir	Ladakh	0.64		
130	Jammu&Kashmir	Kathua	3.50		
131	Jammu&Kashmir	Jammu	2.44		
132	Lakshwadeep	Kavaratti	4.24		

AJAY Phase-II					
S. No.	State	District	Estimated (in Crs.)	Fund	Spent
133	Karnataka	Raichur	2.31		
134	Karnataka	Yadgir	1.65		
135	Andhra Pradesh	Vizianagaram/Vishakapatnam	8.59		
136	Punjab	Faridkot	2.12		
137	Tamil Nadu	Ramanathapuram	3.18		
Total (in Crs.)			218.0		

- (c) whether solar lights can be installed in Bhiwani, Mahendragarh and Dadri districts of Haryana under the said scheme;
- (d) if so, the details thereof along with the budget allocated for the said purpose; and
- (e) if not, the reasons therefor?

Answer (c) to (e): AJAY scheme doesn't cover Bhiwani, Mahendragarh and Dadri districts of Haryana and no budget has been allocated for the installation of solar lights in these districts.

Since, Atal Jyoti Yojana (AJAY) is the scheme of MNRE and the decision to include any other districts for installation of solar lights lies with the MNRE.

Question 20: Rajya Sabha admitted Unstarred Q. No. 3175 for answer on 23.03.2021 regarding Initiatives to conserve electricity.

- (a) the details of initiatives taken by Government to conserve electricity;
- (b) whether any mechanism exists to ensure efficiency in domestic, agricultural and commercial sectors of the country;
- (c) if so, the details thereof;
- (d) whether Government has conducted any energy audit during the last three years; and
- (e) if so, the details thereof along with the steps taken to ensure implementation of the mechanism developed to conserve electricity?

Answer (a) to (e): Ministry of Power may please reply.

However, Energy Efficiency Services Limited (EESL) a JV of PSU under MoP, GoI has initiated and implementing the following programs to conserve electricity:

1. Unnat Jyoti by Affordable LEDs for All (UJALA):

UJALA (Unnat Jyoti by Affordable LEDs for All) was launched on 5th January, 2015 by Hon'ble Prime Minister. The programme was started as an attempt to provide energy efficient LED bulbs to consumers at an affordable price. The programme has been successful in bringing down the retail price of the LED bulbs from Rs 300-350 per LED bulb in the year 2014 to Rs 70-Rs 80 per bulb in a short span of 3 years. As on date 36.72 Crore LED bulbs have been distributed under UJALA programme. The salient features of the of the UJALA programme are as follows:

- Distribution of 36.72 (as on 16.03.2021) Crore LED bulbs resulted in energy saving of 47,691 million units of electricity per annum, peak demand reduction of 9,548 MW and 38.62 million tonnes of CO₂ emission reduction annually

- Promote the use of the most efficient lighting technology at affordable rates to domestic consumers which benefits them by way of reduced energy bill and improve their livelihood
- Enhance consumer awareness on the financial and environmental benefits of using energy efficient Increase the demand of LED lights by aggregating requirements across the country and provide an impetus to domestic lighting industry
- Provided economies of scale to manufacturers through regular bulk procurement, which helped the manufacturers to reduce the cost of LED bulbs for retail segment as well.
- Encouraged Make in India – domestic manufacturing of LED bulbs increased from about 100,000 per month to 40 million per month

2. Street Lighting National Programme (SLNP)

Street Lighting National Programme (SLNP) may be the world's largest streetlight replacement programme. Hon'ble Prime Minister, on 5th January, 2015 launched Street Lighting National Programme (SLNP) to replace conventional street lights with smart and energy efficient LED street lights across India. EESL replaces the conventional street lights with LEDs at its own costs (without any need for municipalities to invest) and the consequent reduction in energy and maintenance cost of the municipality is used to repay EESL over a period of time. The contracts that EESL enters into with municipalities are typically of 7 years duration where it not only guarantees a minimum energy saving (of-typically 50%) but also provides free replacements and maintenance of lights at no additional cost to the municipality.

Till date, EESL has installed over **1.15 crore** LED street lights in ULBs and Gram Panchayats across India. This has resulted in estimated energy savings of **7.75 billion kWh per year** with avoided peak demand of about **1,300 MW**, GHG emission reduction of **5.33 million t CO2** per year and estimated annual monetary savings of **INR 5,523 crore** in electricity bills of municipalities.

3. Buildings Energy Efficiency Programme (BEEP):

Building Energy Efficiency Program (BEEP) was launched to implement energy efficiency measures in government buildings across India. Under this Program 10,451 Buildings have been retrofitted with energy efficient equipment like LED Lights, 5 Star rated Fans and super-efficient Air-condition.

Energy Efficiency measures have been implemented in approx. 7,000 railways stations/service buildings and approx. 66 Airports buildings under BEEP program. Similarly An umbrella agreement was signed with Maharashtra PWD for carrying out Energy Efficiency Measures in their approx. 5,000 buildings across the state of Maharashtra.

An agreement was signed for carrying out Energy Efficiency Measures in 594 district courts buildings across the state of AP and work has been completed.

An agreement was been signed with SDMC for implementing Energy Efficiency Measures in 400 Schools and work has been completed.

An agreement was been signed with Axis bank for implementing Energy Efficiency Measures in 1100 Branches and work has been completed.

Till date, EESL has completed LED lighting implementation in total 10,451 buildings including Railway stations and Airports. Work is under progress in 214 buildings across India as given below:

Due to above interventions we have derived energy saving as per following details for previous years.

S. No.	Year	Energy savings per year (KWH)
1	2018	22,40,21,105
2	2019	23,52,22,160
3	2020	24,69,83,268

4. Agricultural Demand Side Management (AgDSM):

EESL is implementing Agricultural Demand Side Management (AgDSM) Programme to distribute BEE 5-star energy efficient agricultural pumps to ensure a minimum of 30% reduction in energy consumption with smart control panels which can be remotely operated, to enhance the ease of operation of pumps by the farmers. AgDSM aims to replace 21 million inefficient electrified pump sets in India with highly efficient BEE 5-star rated pump sets to farmers and recover the cost by leveraging the reduction of State Government subsidy over a period of 5-10 years. The programme was launched on 7th April 2016 from Vijayawada in the state of Andhra Pradesh and the pilot projects has been completed in the states of Maharashtra, Karnataka and Rajasthan.

The AgDSM project for replacement of old pumps with BEE 5 Star rated pumps has started from Andhra Pradesh and as on date over 76,400 nos. pumps has been installed in the states of Andhra Pradesh and Uttar Pradesh. This has resulted in estimated energy savings of 197 million kWh per year with avoided peak demand of 36 MW and estimated GHG emission reduction of 1,46,608 t CO₂ per year.

Question 21: Rajya Sabha Provisionally admitted Question Diary No. U3759 for 16.03.2021 regarding Electric Vehicle Charging Station.

- a) Whether the Central Electricity Authority has created an online national database of public EV charging stations;**
- b) if so, the details thereof;**

Answer a) & b): Central Electricity Authority/Ministry of Power may please reply.

- c) the number of such charging stations currently in operation in the country;**

Answer c): Ministry of Power may please reply.

Energy Efficiency Services Limited (EESL) a JV of PSU under MoP, GoI through Convergence Energy Services Limited (CESL – 100% Owned subsidiary of EESL) has installed 246 nos. of EV chargers across India of which 141 nos. are operational and rest are in the process of pre-commissioning.

- d) whether EV charging stations are being operationalised along highways; and**
- e) if so, the details regarding the current density of charging stations on highways?**

Answer d) & e): Ministry of Power may please reply. As of now, EESL/CESL has not installed EV chargers on highways.

Question 22: Rajya Sabha provisionally admitted Unstarred Q. Dy. No. U4540 for answer on 23.03.2021 regarding Compliance with Energy Conservation Building Code norms.

- (a) whether Government maintains any record of the existing stock of buildings in the country which comply with the Energy Conservation Building Code (ECBC) for Residential Sector;**
- (b) if so, the number of such buildings as a percentage of the total existing stock of residential buildings;**
- (c) whether the housing stock built/ being under the Central Government's public housing schemes comply with the ECBC; and**
- (d) the number of users that have accessed the ECBC compliance tool available on the BEE website?**

Answer (a) to (d): Ministry of Power (MoP)/Bureau of Energy Efficiency (BEE) may please reply.

Question 23: Rajya Sabha provisionally admitted Unstarred Q. Dy. No. U4540 for answer on 23.03.2021 regarding Compliance with Energy Conservation Building Code norms.

- (a) whether Government maintains any record of the existing stock of buildings in the country which comply with the Energy Conservation Building Code (ECBC) for Residential Sector;
- (b) if so, the number of such buildings as a percentage of the total existing stock of residential buildings;
- (c) whether the housing stock built/ being under the Central Government's public housing schemes comply with the ECBC; and
- (d) the number of users that have accessed the ECBC compliance tool available on the BEE website?

Answer (a) to (d): Ministry of Power (MoP)/Bureau of Energy Efficiency (BEE) may please reply.

Question 24: Rajya Sabha Unstarred Question No. U 1732 due for answer on 09.03.2021 regarding "Star labeling programme" raised by Hon'ble MP Shri Partap Singh Bajwa.

- (a) details of number of appliances and products that have availed Star Label rating scheme for last three years, year-wise;
- (b) details of number of these appliances and products checked and tested by NABL accredited labs to ascertain energy efficiency standards for last three years, year-wise;
- (c) details of number of appliances and products actually checked and tested by NABL accredited labs to ascertain energy efficiency standards for last three years, year-wise; and
- (d) details of number of appliances and products that failed to adhere to energy efficiency standards in accordance with Star Label being availed by them for last three years, year-wise?

Answer (a) to (d): Ministry of Power (MoP)/Bureau of Energy Efficiency (BEE) may please reply.

Question 25: Rajya Sabha Starred/Unstarred Question Diary No. S1295 regarding "Implementation of Atal Jyoti Yojana in Chhattisgarh".

(a) The details of districts Chhattisgarh under Atal Jyoti Yojana

Answer (a): The allocation of solar LED street lights in districts of Chhattisgarh under Atal Jyoti Yojana (AJAY) scheme are as follows:

- Korba
- Mahasmand
- Bastar
- Bijapur
- Dantewada
- Kondagaon
- Naryanpur
- Sukma
- Kanker
- Rajnandgaon

(b) the details of funds spent under the scheme during last two years, district-wise; and

Answer (b): Under the AJAY scheme, DM sanction orders have been received from the district of Kanker, Kondagaon and Rajnandgaon only. Details of funds spent under the scheme during last two years (2019-20 & 2020-21 till date) is as follows:

S. No.	Constituency	District	Fund (in Cr.) Spent
1	Kanker	Kanker	1.3
		Kondagoan	
2	Rajnandgoan	Rajnandgoan	2.7

(c) whether Balrampur-Ramanujanj, Surajpur and Sarguja districts of Chhattisgarh have been included under the said schemes, if not, the reasons therefor?

Answer (c): Ministry of New and Renewable Energy (MNRE) may please reply.

Under the AJAY scheme, the solar LED streetlights have not been allocated in aforesaid districts of Chhattisgarh.

Question 26: Rajya Sabha Starred/Unstarred Question Dy. No. U4731 for answer on 25.03.2021 regarding "Cyber-attack in Maharashtra".

(a) whether it is a fact that as per some experts the major grid failure in commercial capital of India-Mumbai was a handiwork of Chinese cyber hackers;

(b) if so, whether cyber experts of the country has investigated in to the allegation and if so, the outcome of the probe; and

(c) whether the recent shutdown of National Stock Exchange was also the effect of Chinese malware attack?

Answer (a) to (c): Ministry of Power may please reply.

Question 27: Rajya Sabha Starred/Unstarred Question Diary No.—U1169 regarding "progress of Atal Jyoti Yojana"

a) the progress of Atal Jyoti Yojna (AJAY) during the last two years, the details thereof

b) the list of States that have been covered under the scheme during the last two years, the details thereof, State-wise; and

Answer (a) & (b): The Atal Jyoti Yojana (AJAY) scheme was launched in September 2016. In Phase-1 of the project over 1.3 lakh Solar LED street lights have been installed by Energy Efficiency Services Limited (EESL). Considering the success of AJAY Phase-I, the coverage of the scheme has been extended. The list of States that have been covered under the scheme during the last two years and details are as follows:

S. No.	State/UT (in AJAY-II)	DM Sanction Received	*Installed Quantity
1	Uttar Pradesh	42,691	28,967
2	Bihar	25,107	16733
3	Jharkhand	3,500	2917
4	Odisha	5,998	3315
5	Assam	7,005	4065
6	NE States	6,000	2633
7	Uttarakhand	9,898	7740
8	Madhya Pradesh	7,000	2969
9	West Bengal	10,000	6786
10	Gujarat	3,000	3000

S. No.	State/UT (in AJAY-II)	DM Sanction Received	*Installed Quantity
11	Rajasthan	2,350	262
12	Himachal Pradesh	2,500	500
13	Jammu & Kashmir	6,000	3854
14	Chhattisgarh	2,499	864
15	Andhra Pradesh	5,500	4815
16	Tamil Nadu	2,000	690
17	Punjab	1,000	690
18	Karnataka	3,000	2375
19	Telangana	500	80
20	Maharashtra	1,000	-
21	Lakshadweep	2,000	2000
Total		1,48,548	95,255

*Ground Data

(c): total expenditure in implementing the scheme during the last two years and the details thereof?

Answer (c): The total expenditure in implementing the scheme during the last two years is as follows:

S. No.	State/UT (in AJAY-II)	DM Sanction Received	#Expenditure (in Cr.)
1	Uttar Pradesh	42,691	57.4
2	Bihar	25,107	35.6
3	Jharkhand	3,500	5.8
4	Odisha	5,998	8.03
5	Assam	7,005	10.02
6	Manipur, Tripura	6,000	7.3
7	Uttarakhand	9,898	17.3
8	Madhya Pradesh	7,000	8.9
9	West Bengal	10,000	12.4
10	Gujarat	3,000	5.3
11	Rajasthan	2,350	1.1
12	Himachal Pradesh	2,500	4.4
13	Jammu & Kashmir	6,000	8.5
14	Chhattisgarh	2,499	3.9
15	Andhra Pradesh	5,500	9
16	Tamil Nadu	2,000	2.6
17	Punjab	1,000	1.7
18	Karnataka	3,000	4.2
19	Telangana	500	0.40
20	Maharashtra	1,000	-
21	Lakshadweep	2,000	3.5
Total		1,48,548	207.35

Estimated

Question 28: Rajya Sabha provisionally admitted Starred/Unstarred Q. Dy. No. U 130 for answer on 02.02.2021 regarding Wastage of electricity in domestic sector.

- whether Government is aware of the fact that a significant amount of electricity is wasted in the domestic sector due to leakages, faulty appliances and usage of energy inefficient electric devices etc. and, if so, the details of energy wasted in last three years, year-wise, State-wise;
- the details of power consumed in the domestic and industrial sector during the last three years along with the schemes under implementation for Demand Side Management (DSM) including saving and conservation of electricity; and

- c) whether Government has introduced any scheme to provide cash incentives to States saving energy and minimizing leakage/ theft and, if so, the details thereof?

Answer (a) to (c): Ministry of Power (MoP) may please reply.

Hon'ble Prime Minister launched National LED Programme on 5th January, 2015 which has two components (i) Unnat Jyoti by Affordable LEDs for All (UJALA) to provide LED bulbs to domestic consumers for replacement of conventional bulbs and (ii) Street Lighting National Programme (SLNP) to replace conventional street lights with energy efficient LED street lights. These Demand Side Management (DSM) programmes aims to reduce the energy consumption in the domestic appliances sector and municipal sector.

Energy Efficiency Services Ltd. (EESL), a JV of PSUs under MoP, GoI is the implementing agency of the programme. Till date, EESL has distributed over 36.69 crore LED bulbs, 72.08 lakh LED tube lights and 23.40 lakh energy efficient fans under UJALA and installed over 1.12 crore LED street lights under SLNP across the country. This has resulted in estimated energy savings of 55.70 billion kWh per year with avoided peak demand of 11,000 MW, estimated GHG emission reduction of 44 million t CO₂ per year and monetary savings of INR 24,500 crore per year.

Question 29: Rajya Sabha provisionally admitted Unstarred Question Diary No. U169 to be answered on 02.02.2021 regarding "Financial Assistance to Andhra Pradesh –Reg."

- a) the total amount of financial assistance sanctioned and released to the States of Andhra Pradesh and Telangana during the current financial year;
- b) a break-up of above assistance by scheme, COVID-19 related, for disaster management, under Atmnirbhar Bharat Package including Pradhan Mantri Garib Kalyan Yojana and special projects like Polavaram, etc.; and
- c) the details of funds sanctioned towards revenue deficit grants to Andhra Pradesh?

Answer (a) to (c): Ministry of Power (MoP) may please reply. Information pertaining to EESL may be treated as **NIL**.

Question 30: Rajya Sabha provisionally admitted Starred/Unstarred Q. Dy. No. U 71 for answer on 02.02.2021 regarding Promotion of LED bulbs.

- a) whether Government has issued any guidelines for the use of LED lights/bulbs which consume very less energy in comparison with commercial bulbs, if so, the main features thereof;
- b) whether Government has issued any guidelines to the State Governments to promote use of LED lights/bulbs and provide the same to consumers at the subsidized rate, if so, the details thereof;
- c) whether Government is providing any assistance to the LED bulbs manufacturing companies in the country under 'Make In India' initiation, if so, the details thereof; and
- d) the number of companies in the country which have set up such manufacturing plants, State/UT-wise?

Answer (a) to (d): Ministry of Power may please reply.

Inputs from EESL: Hon'ble Prime Minister on 5th January, 2015 launched Unnat Jyoti by Affordable LEDs for All (UJALA) scheme for distribution of LED bulbs to domestic consumers. Energy Efficiency Services Limited (EESL), a JV of PSUs under the Ministry of Power is the implementing agency of the scheme. Subsequently Secretary, Government of India issued an advisory note (D.O. letter - No. 13/1/2015-EC dated 14.01.2015) to all the Chief Secretaries of States and UTs (Copy attached herewith) to promote the adoption of LED based home lighting.

UJALA programme is voluntary in nature and runs without any budgetary allocation from Government of India. In fact, UJALA is based on a sustainable business model where the cost of efficient lighting is repaid by consumer from savings in energy over a period of time. The entire upfront investment is made by EESL. EESL aggregates demand across the country and procures LED bulbs through a transparent and competitive bidding process for further distribution to domestic consumers at lower rates compared to retail market.

As on date, EESL has distributed over **36.69 crore** LED bulbs across India. This has resulted in estimated energy savings of **47.66** billion kWh per year with avoided peak demand of **9,542** MW and estimated GHG emission reduction of **38.60** million t CO₂ per year.

Question 31: Lok Sabha Diary No. 2849 for answer on 17th September 2020 regarding "Smart meters".

- a) whether the Government has issued advisories to the States to draw up a road map for switching over to smart meters in prepaid mode and if so, the details thereof;
- b) the response and achievement made by States in installing smart meters in this regard;
- c) whether the Government has sanctioned any financial package to the States for installing pre-paid or smart meters and if so, the details thereof;
- d) the funds released to Tamil Nadu especially in Tiruvannamalai and Kanchipuram District till date and the time by which the work is likely to be completed in these districts; and
- e) whether the Government has taken any steps to revive these utilities so as to ensure reliable power supplies and improving the financial health of generators?

Answer a) to e): Ministry of Power (MoP) may please reply.

Energy Efficiency Services Limited (EESL), a JV of PSU under MoP, GoI is implementing the Smart Meter National Programme (SMNP) for replacement of Conventional meters with Smart electricity meters. This programme is being implemented on BOOT model, where the initial investment is being done by EESL and the states/ utilities pays back to EESL on monthly rental basis.

So far, EESL has signed MoUs/Agreements for smart meters with the DISCOMs in the state of Andhra Pradesh, Bihar, Haryana, NDMC-Delhi, Rajasthan, Telangana and Uttar Pradesh. EESL has completed the procurement process of 1.5 crore smart meters. As on date, EESL has installed over 14.32 lakh smart meters across India under this programme.

These Smart meters are connected through a cloud based Advanced Metering Infrastructure applications monitoring real time energy consumption through Mobile App/ Web Portal which help to reduce commercial losses of utilities, enhance revenues and serve as an important tool in power sector reforms. EESL business model to roll out smart meters is revamping the current manual system of revenue collection which leads to low billing and poor collection efficiencies.

The State/UT wise details of smart meters installed by EESL is as per below table:

S. No.	State/UT	No. of Smart Meters Installed by EESL
1.	Uttar Pradesh	11,20,145
2.	Haryana	1,88,800
3.	Bihar	65,420
4.	NDMC (New Delhi)	58,474
Total		14,32,839

Question 32: Lok Sabha provisionally admitted Unstarred Q. Dy. No. 16290 for answer on 01.04.2021 regarding Research in the field of Energy Efficiency.

- (a) whether the Government is funding research in the field of energy efficiency;
- (b) if so, the details thereof;

(c) the quantum of funds allocated and recipients therefrom;

Answer (a) to (c): Ministry of Power may please reply.

**(d) whether any steps are being taken to enhance the energy efficiency of electric used in Government buildings;
and**

(e) if so, the details thereof;

Answer (d) & (e): Ministry of Power may please reply.

However, Energy Efficiency Services Limited (EESL) a JV of PSU under MoP, GoI is implementing Building Energy Efficiency Programme (BEEP) preferably through ESCO model. BEEP was launched in 2017 to implement energy efficiency measures in government buildings across India. As on date, 10,451 buildings have been completed and 214 buildings are in the implementation stage under BEEP. The details are mentioned below:

Sl.	Name of Ministry	Completed	Under Progress
1	<u>Ministry of Agriculture & Farmers Welfare</u>	7	0
2	<u>Ministry of Civil Aviation</u>	56	7
3	<u>Ministry of Coal</u>	1	0
4	<u>Ministry of Commerce and Industry</u>	4	2
5	<u>Ministry of Earth Sciences</u>	2	0
6	<u>Ministry of Environment, Forests and Climate Change</u>	2	2
7	<u>Ministry of Finance</u>	260	45
8	<u>Ministry of Food Processing Industries</u>	1	0
9	<u>Ministry of Health and Family Welfare</u>	3	0
10	<u>Ministry of Home Affairs</u>	1	0
11	<u>Ministry of Heavy Industries and Public Enterprises</u>	1	0
12	<u>Ministry of Housing and Urban Affairs</u>	64	10
13	<u>Ministry of Education</u>	593	0
14	<u>Ministry of Jal Shakti (Water)</u>	0	1
15	<u>Ministry of Labour and Employment</u>	3	0
16	<u>Ministry of Micro, Small and Medium Enterprises</u>	2	0
17	<u>Ministry of Mines</u>	2	0
18	<u>Ministry of Science and Technology</u>	3	0
19	<u>Ministry of Personnel, Public Grievances and Pensions</u>	2	0
20	<u>Ministry of Power</u>	8	1
21	<u>Ministry of Rural Development</u>	1	0
22	<u>Ministry of Road Transport and Highways</u>	1824	21
23	<u>Ministry of Railways</u>	7023	125
24	<u>Ministry of Shipping</u>	2	0
25	<u>Ministry of Skill Development and Entrepreneurship</u>	1	0
26	<u>Ministry of Animal Husbandry, Dairying And Fisheries</u>	1	0
27	<u>Ministry of Youth Affairs and Sports</u>	584	0
	Total	10,451	214

Above interventions are resulting in estimated annual electricity savings of 224 million kWh.

Question 33: Lok Sabha provisionally admitted Starred Unstarred Q. Dy. No. 11176 for answer on 18.03.2021 regarding Building Energy Efficiency Programme.

(a): the number of commercial buildings targeted under the Building Energy Efficiency Programme (BEEP) for completion by 2020 along with the details including achievement of targets so far, State-wise;

Answer (a): There is no such target given by Government of India for Building Energy Efficiency Program (BEEP). However, Energy Efficiency Services Limited (EESL) a JV of PSU under MoP, GoI is implementing Building Energy Efficiency Programme (BEEP) preferably through ESCO model. BEEP is being implemented mainly in Government/Public buildings across the country since 2017.

(b): the number of Government buildings under each Ministry targeted under BEEP;

Answer (b): Following ministries were targeted under BEEP:

Sl.	Name of Ministry	No. of buildings
1	<u>Ministry of Agriculture & Farmers Welfare</u>	15
2	<u>Ministry of Civil Aviation</u>	70
3	<u>Ministry of Coal</u>	8
4	<u>Ministry of Commerce and Industry</u>	9
5	<u>Ministry of Earth Sciences</u>	4
6	<u>Ministry of Environment, Forests and Climate Change</u>	8
7	<u>Ministry of Finance</u>	350
8	<u>Ministry of Food Processing Industries</u>	5
9	<u>Ministry of Health and Family Welfare</u>	5
10	<u>Ministry of Home Affairs</u>	7
11	<u>Ministry of Heavy Industries and Public Enterprises</u>	6
12	<u>Ministry of Housing and Urban Affairs</u>	80
13	<u>Ministry of Education</u>	670
14	<u>Ministry of Jal Shakti (Water)</u>	3
15	<u>Ministry of Labour and Employment</u>	10
16	<u>Ministry of Micro, Small and Medium Enterprises</u>	5
17	<u>Ministry of Mines</u>	8
18	<u>Ministry of Science and Technology</u>	6
19	<u>Ministry of Personnel, Public Grievances and Pensions</u>	5
20	<u>Ministry of Power</u>	15
21	Ministry of Rural Development	5
22	<u>Ministry of Road Transport and Highways</u>	1950
23	<u>Ministry of Railways</u>	7500
24	<u>Ministry of Shipping</u>	5
25	<u>Ministry of Skill Development and Entrepreneurship</u>	4
26	<u>Ministry of Animal Husbandry, Dairying And Fisheries</u>	3
27	<u>Ministry of Youth Affairs and Sports</u>	650
	Total	11,406

(c): the proposed timeline for the same and the status of achievement so far; and

Answer (c): As on date, 10,451 buildings have been completed and 214 buildings are in the implementation stage under BEEP. The details are mentioned below:

Sl.	Name of Ministry	Completed	Under Progress
1	<u>Ministry of Agriculture & Farmers Welfare</u>	7	0
2	<u>Ministry of Civil Aviation</u>	56	7
3	<u>Ministry of Coal</u>	1	0
4	<u>Ministry of Commerce and Industry</u>	4	2
5	<u>Ministry of Earth Sciences</u>	2	0
6	<u>Ministry of Environment, Forests and Climate Change</u>	2	2
7	<u>Ministry of Finance</u>	260	45
8	<u>Ministry of Food Processing Industries</u>	1	0
9	<u>Ministry of Health and Family Welfare</u>	3	0
10	<u>Ministry of Home Affairs</u>	1	0
11	<u>Ministry of Heavy Industries and Public Enterprises</u>	1	0
12	<u>Ministry of Housing and Urban Affairs</u>	64	10
13	<u>Ministry of Education</u>	593	0
14	<u>Ministry of Jal Shakti (Water)</u>	0	1
15	<u>Ministry of Labour and Employment</u>	3	0
16	<u>Ministry of Micro, Small and Medium Enterprises</u>	2	0
17	<u>Ministry of Mines</u>	2	0
18	<u>Ministry of Science and Technology</u>	3	0
19	<u>Ministry of Personnel, Public Grievances and Pensions</u>	2	0
20	<u>Ministry of Power</u>	8	1
21	<u>Ministry of Rural Development</u>	1	0
22	<u>Ministry of Road Transport and Highways</u>	1824	21
23	<u>Ministry of Railways</u>	7023	125
24	<u>Ministry of Shipping</u>	2	0
25	<u>Ministry of Skill Development and Entrepreneurship</u>	1	0
26	<u>Ministry of Animal Husbandry, Dairying And Fisheries</u>	1	0
27	<u>Ministry of Youth Affairs and Sports</u>	584	0
	Total	10451	214

It is planned to complete the activities in FY 2021-22.

(d) the energy savings from BEEP during the last three years and comparison with targets to be achieved by 2020, year-wise?

Answer (d): There was no such target to achieve under BEEP. However, EESL's BEEP has achieved the following energy savings in the last three years.

Sl.	Year	Energy savings per year (kWh)
1	2018	22,40,21,105
2	2019	23,52,22,160

3	2020	24,69,83,268
---	------	--------------

Question 34: Lok Sabha provisionally admitted Unstarred Q. Dy. No. 16079 for answer on 01.04.2021 regarding Star Labelling Technique for Energy Efficiency.

- (a) whether the "Star Rating" technique enables energy savings of high energy equipments and appliances and if so, the details thereof;
- (b) the details of estimated energy savings during the last three years and the current year;
- (c) the number of appliances and equipments that have availed Star Label rating during the said period;
- (d) the number of said appliances and equipments checked, tested ok and failed by NABL;
- (e) the details of accredited labs to ascertain energy efficiency standards during the said period; and
- (f) the steps being taken by the Government to improve the star labelling technique for energy efficiency?

Answer (a) to (f): Ministry of Power (MoP)/Bureau of Energy Efficiency (BEE) may please reply.

Question 35: Lok Sabha starred Q Dy. No. 8425 due for answer on 16.03.2021 on Charging Stations for Electric Vehicle-regarding.

- (a) the details and the number of charging stations set up so far for electric vehicles under Faster Adoption and manufacturing of Hybrid and Electric Vehicles (FAME) India scheme, State-wise;

Answer (a): Ministry of Power/ Department of Heavy Industry may please reply.

However, Energy Efficiency Services Limited (EESL) a JV of PSU under MoP, GoI through Convergence Energy Services Limited (CESL – 100% Owned subsidiary of EESL) is developing Electric Vehicle Charging Infrastructure and has signed MoUs with multiple stakeholders across municipalities, DISCOMs for locational assessment study and setting up of charging infrastructures in their jurisdiction location.

Below are the State/UT wise details of charging stations installed by EESL/CESL under FAME-II India scheme:

S. No.	State/UT	Charging station installed by EESL/CESL under FAME-II scheme (Nos.)
1.	Delhi	60
2.	West Bengal	18
3.	Tamil Nadu	20
4.	Maharashtra	12
5.	Noida (Uttar Pradesh)	58
Total		168

In total EESL/CESL has installed 246 nos. of EV chargers across India of which 141 nos. are operational and rest are in the process of pre-commissioning.

Question 36:

- (b) whether any scheme is being implemented to promote the launch of new electric vehicles;**
(c) if so, the details thereof; and

Answer (b) & (c): Ministry of Power/ Department of Heavy Industry may please reply.

EESL/CESL is implementing National e-Mobility Programme with the objective to reduce dependence on oil imports & to provide an impetus for domestic electric vehicle manufacturers, charging infrastructure companies, fleet operators, service providers, etc. to gain efficiencies of scale and drive down costs, create local manufacturing facilities, grow technical competencies for the long-term growth of the electric vehicle (EV) industry in India and to enable Indian EV manufacturers to emerge as major global players.

Under this programme, EESL/CESL has completed the procurement process of 10,250 e-cars, including 250 long range EVs. Since the Launch of E-mobility program 1,514 e-cars have been deployed/under deployment at PAN India level to various government departments, Ministries at Central and State level, PSUs, shared mobility operators etc. These e-cars are being given on lease/outright purchase basis to replace the existing petrol and diesel vehicles taken on lease earlier. For charging these e-cars, 566 (AC & DC) Captive chargers have also been commissioned in their office premises.

- (d) the details and the number of LED bulbs installed so far by the Government in view of environment safety, State-wise?**

Answer (d): Hon'ble Prime Minister, on 5th January, 2015 launched Unnat Jyoti by Affordable LEDs for All (UJALA) programme to provide LED bulbs to domestic consumers at an affordable price. As on date, EESL has distributed over 36.71 crore LED bulbs across India. This has resulted in estimated energy savings of 47.68 billion kWh per year with avoided peak demand of 9,547 MW and estimated GHG emission reduction of 38.62 million t CO₂ per year. The State/UT wise progress of the UJALA programme is enclosed as **Annexure-A**.

In addition, as on date **200.12** crore LEDs have been sold by the industry and EESL. It has benefitted more than **14** crore households and there has been enormous energy savings to the country as well as emission reductions. The savings are:

1. No. of LED bulbs sold: **200.12 Cr (i.e. 36.71 Cr by UJALA (EESL) and 163.41 Cr by industry)**
2. Capacity generation avoided: **26,000 MW**
3. Annual Energy Saving: **129867 mn kWh**
4. Annual CO₂ emission reduction: **106.5 million Tons CO₂**

Annexure-A

S. No.	State/UT	LED bulbs distributed by EESL till date
1.	Andaman & Nicobar	400000
2.	Andhra Pradesh	22039295
3.	Arunachal Pradesh	499498
4.	Assam	7177088
5.	Bihar	19584111
6.	Chandigarh	554283
7.	Chhattisgarh	10796203
8.	Dadra & Nagra Haveli	163808
9.	Daman & Diu	142623
10.	Delhi	13311280
11.	Goa	1005890
12.	Gujarat	41410794

13.	Haryana	15603698
14.	Himachal Pradesh	8590695
15.	Jammu & Kashmir	8486579
16.	Jharkhand	13645874
17.	Karnataka	24016284
18.	Kerala	15420180
19.	Lakshadweep	200000
20.	Ladakh	230630
21.	Madhya Pradesh	17571005
22.	Maharashtra	21971431
23.	Manipur	299934
24.	Meghalaya	433789
25.	Mizoram	615293
26.	Nagaland	1099038
27.	Odisha	52270570
28.	Puducherry	609251
29.	Punjab	3010852
30.	Rajasthan	17129445
31.	Sikkim	164000
32.	Tamil Nadu	4357389
33.	Telangana	2188948
34.	Tripura	1054437
35.	Uttar Pradesh	26252161
36.	Uttarakhand	5663052
37.	West Bengal	9229228
Total		36,71,98,636

Question 37: Lok Sabha starred Q Dy. No. 9884 due for answer on 18.03.2021 on Assistance to Renewable Energy Sector-regarding.

- (c) whether the Government has constituted any Committee on Energy;
- (d) if so, the details thereof; and
- (e) the steps taken by the Government to overcome the crisis of electricity in the country alongwith the details thereof?

Answer (c) to (e): Ministry of Power may please reply.

Question 38: Lok Sabha Unstarred Question Dy. No. 4869 to be answered on 11.02.2021 regarding "Electric Vehicle Charging Infrastructure" - reg.

- (a) whether the Government proposes to create and increase the electric vehicle charging infrastructure to promote electric vehicles across the country and if so, the details thereof along with the guidelines issued in this regard;
- (b) the details of incentives/subsidy/financial assistance given by the Government for setting up of charging stations;
- (c) the details of charging stations set up in Andhra Pradesh;
- (d) whether any license is required for setting up of charging station and if so, the details thereof;
- (e) the details of charging vehicle charging points to be set up in Andhra Pradesh; and
- (f) the time which it is likely to be completed?

Answer (a) to (f): Department of Heavy Industry/Ministry of Power may please reply.

Energy Efficiency Services Limited (EESL), a JV of PSU under MoP, GoI is developing Electric Vehicle Charging Infrastructure and has signed MoUs with multiple stakeholders across municipalities, DISCOMs for locational assessment study and setting up of charging infrastructures in their jurisdiction location. The details of number of public chargers installed by EESL in India as on date are mentioned below:

S. No.	State/UT	Location	Type of Chargers	No. of Public Chargers installed
1	Delhi	NDMC	DC-001, CCS/ChADEMO/ Type 2 AC	79
2	Delhi	SDMC	DC-001, CCS/ChADEMO/ Type 2 AC	35
3	Uttar Pradesh	Noida Authority	AC-001, DC-001, CCS/ChADEMO/ Type 2 AC	58
4	Kerala	ANERT	DC-001, CCS/ChADEMO/ Type 2 AC	7
5	Haryana	HAREDA	DC-001, CCS/ChADEMO/ Type 2 AC	2
6	Maharashtra	Maha Metro	AC-001, DC-001	2
7	Tamil Nadu	CMRL	AC-001, DC-001, CCS/ChADEMO/ Type 2 AC	20
8	West Bengal	NKDA	AC-001, DC-001	16
9	Goa	GEDA	CCS/ChADEMO/ Type 2 AC	1
10	Chhattisgarh	NRANVP	DC-001, CCS/ChADEMO/ Type 2 AC	4
Total				224

Additionally, EESL has commissioned 566 (369 AC & 197 DC) captive chargers across all offices where EESL's EVs have been delivered.

Question 39: Rajya Sabha Starred/Unstarred Diary No. S2328, S214. for answer on 09.03.2021 regarding "Installation of Smart Meters."

- (a) Whether Government is planning to install smart meters or converting existing meters into smart meter to reduce power theft in the country, if so, the details thereof;
- (b) The progress made in this regard;
- (c) Whether Government is consultation with the States proposes to prepare any plan to check power theft in the country; and
- (d) If so, the details of the proposed punitive actions against the guilty?

Answer (a) to (d): Ministry of Power may please reply.

However, Energy Efficiency Services Limited (EESL), a JV of PSU under MoP, GoI is implementing the Smart Meter Programme for replacement of conventional meters with Smart electricity meters. This programme is being implemented on BOOT model, where the initial investment is being done by EESL and the states/utilities pays back to EESL on monthly rental basis.

As on date, under Smart Meter Programme EESL has already installed 16,32,630 Smart meters across the country. Following is the state/UT wise break up of Smart Meter installation by EESL:

S. No.	State/UT	Smart Meters Installed by EESL
1	Haryana	247,862
2	Delhi	59,730
3	Uttar Pradesh	11,42,277
4	Bihar	1,39,327
5	Rajasthan	1,357
6	Andaman	42,077
Total		16,32,630

Question 40: Rajya Sabha provisionally admitted Starred/Unstarred Q. Dy. No. U4862 for answer on 30/09/2020 regarding bailout package to Discoms.

- the details of losses incurred by DISCOMS since last bailout package given by the Ministry, State DISCOM-wise and year -wise;
- whether it is a fact that the Ministry is going to give? 90,000 crores to DISCOMS to take care of their technical and commercial losses;
- the reasons that DISCOMS are incurring losses;
- the details of conditions put by the Ministry to avail the above? 90,000 crores financial help from Ministry; and
- the names of States that have installed prepaid smart meters?

Answer a) to e): Ministry of Power (MoP) may please reply.

Energy Efficiency Services Limited (EESL), a JV of PSU under MoP, GoI is implementing the Smart Meter National Programme (SMNP) for replacement of Conventional meters with Smart electricity meters. This programme is being implemented on BOOT model, where the initial investment is being done by EESL and the states/ utilities pays back to EESL on monthly rental basis.

So far, EESL has signed MoUs/Agreements for smart meters with the DISCOMs in the state of Andhra Pradesh, Bihar, Haryana, NDMC-Delhi, Rajasthan, Telangana and Uttar Pradesh. EESL has completed the procurement process of 1.5 crore smart meters. As on date, EESL has installed over 14.40 lakh smart meters across India under this programme. Smart meters installed by EESL has the functionality of switching to prepaid mode from Central Meter Data Management application. However, the decision lies with the respective DISCOMs.

These Smart meters are connected through a cloud based Advanced Metering Infrastructure applications monitoring real time energy consumption through Mobile App/ Web Portal which help to reduce AT&C losses of utilities, enhance revenues and serve as an important tool in power sector reforms. EESL business model to roll out smart meters is revamping the current manual system of revenue collection which leads to low billing and poor collection efficiencies.

The State/UT wise details of smart meters installed by EESL is as per below table:

S. No.	State/UT	No. of Smart Meters Installed by EESL
1.	Uttar Pradesh	11,20,145
2.	Haryana	1,93,669
3.	Bihar	68,128
4.	NDMC (New Delhi)	58,511
Total		14,40,453

Question 41: Rajya Sabha provisionally admitted Starred/Unstarred Q. Dy. No. U5029 for 30/9/2020 regarding roadmap for switching over to smart prepaid meters.

- a) whether it is a fact that the Ministry has completed road map for switching over to smart prepaid metering to reduce AT&C loss;
- b) if so, the details thereof;
- c) whether the Ministry will extend support for switching over to smart prepaid metering of all consumers; and
- d) if so, the details thereof?

Answer a) to d): Ministry of Power (MoP) may please reply.

Energy Efficiency Services Limited (EESL), a JV of PSU under MoP, GoI is implementing the Smart Meter National Programme (SMNP) for replacement of Conventional meters with Smart electricity meters. This programme is being implemented on BOOT model, where the initial investment is being done by EESL and the states/ utilities pays back to EESL on monthly rental basis.

So far, EESL has signed MoUs/Agreements for smart meters with the DISCOMs in the state of Andhra Pradesh, Bihar, Haryana, NDMC-Delhi, Rajasthan, Telangana and Uttar Pradesh. EESL has completed the procurement process of 1.5 crore smart meters. As on date, EESL has installed over 14.40 lakh smart meters across India under this programme.

These Smart meters are connected through a cloud based Advanced Metering Infrastructure applications monitoring real time energy consumption through Mobile App/ Web Portal which help to reduce AT&C losses of utilities, enhance revenues and serve as an important tool in power sector reforms. EESL business model to roll out smart meters is revamping the current manual system of revenue collection which leads to low billing and poor collection efficiencies. The State/UT wise details of smart meters installed by EESL is as per below table:

S. No.	State/UT	No. of Smart Meters Installed by EESL
1.	Uttar Pradesh	11,20,145
2.	Haryana	1,93,669
3.	Bihar	68,128
4.	NDMC (New Delhi)	58,511
Total		14,40,453

Question 42: Rajya Sabha Starred Question D. No. 2711 due for answer on 10.03.2021 regarding "Dependence on Oil imports.

- a) whether the Government is making any special schemes to reduce the country's import dependence on oil imports, if so, the details thereof

Answer (a): Ministry of Power (MoP)/ Ministry of Petroleum and Natural Gas (MoPNG) may please reply.

However, Energy Efficiency Services Limited (EESL) a JV of PSU under MoP, GoI through Convergence Energy Services Limited (CESL – 100% Owned subsidiary of EESL) is implementing National e-Mobility Programme to promote green transportation which can reduce the country's import dependence on oil imports.

Under this programme, EESL/CESL has completed the procurement process of 10,250 e-cars, including 250 long range EVs. Since the Launch of E-mobility program 1,514 e-cars have been deployed/under deployment for Government organizations. These e-cars are being given on lease/outright purchase basis to replace the existing petrol and diesel vehicles taken on lease earlier. For charging these e-cars, 566 (AC & DC) Captive chargers have also been commissioned in their office premises.

EESL/CESL is also developing Electric Vehicle Charging Infrastructure and has signed MoUs with multiple stakeholders across municipalities, DISCOMs for locational assessment study and setting up of charging infrastructures in their jurisdiction location. EESL/CESL has installed 246 nos. of EV chargers across India of which 141 nos. are operational and rest are in the process of pre-commissioning.

Question 43: Rajya Sabha Starred/Unstarred Question Dairy No. U5138, S214, S2328, S3014, S4311 for answer on 30.03.2021 regarding " Installation of Smart Meters.

- (a) Whether Government is planning to install smart meters or converting existing meters into smart meter to reduce power theft in the country,
- (b) if so, the details thereof;
- (c) The action taken in this regard;
- (d) Whether the Government in consultation with the States proposes to prepare any plan to check power theft in the country; and
- (e) If so, the details of the proposed punitive actions against the guilty?

Answer (a) to (e): Ministry of Power may please reply. However, EESL, a JV of PSU under MoP, Gol is implementing the Smart Meter Programme for replacement of conventional meters with Smart electricity meters. This programme is being implemented on BOOT model, where the initial investment is being done by EESL and the states/utilities pays back to EESL on monthly rental basis. As on date, under Smart Meter Programme EESL has already installed 16,43,858 Smart meters across the country. Following is the state/UT wise breakup of EESL Smart Meter installation:

S. No.	State/UT	Smart Meters installed by EESL
1	Haryana	2,49,894
2	Delhi	59,929
3	Uttar Pradesh	11,42,277
4	Bihar	1,43,082
5	Rajasthan	1,525
6	Andaman	4,7151
Total		16,43,858