

**GOVERNMENT OF INDIA
MINISTRY OF POWER**

**LOK SABHA
UNSTARRED QUESTION NO.2071
TO BE ANSWERED ON 04.07.2019**

STREET LIGHTING NATIONAL PROGRAMME

2071. SHRI B.B. PATIL:

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

- (a) whether the Government is implementing the Street Lighting National Programme (SLNP) to promote the use of LED lights in place of conventional street lights in the country and if so, the details of the scheme along with the number of street lights installed so far, State-wise;
- (b) whether SLNP is currently being implemented only in a few selected States and if so, the details thereof and the reasons therefor;
- (c) the total number of local bodies which have entered into contract with Energy Efficiency Services Ltd. (EESL) for replacement of street lights with LED lights under SLNP so far, State-wise;
- (d) whether the Government has made any study on the implementation of the project and if so, the details thereof; and
- (e) the steps being taken by the Government for effective implementation of SLNP?

A N S W E R

THE MINISTER OF STATE (INDEPENDENT CHARGE) FOR POWER, NEW & RENEWABLE ENERGY AND THE MINISTER OF STATE FOR SKILL DEVELOPMENT & ENTREPRENEURSHIP

(SHRI R.K. SINGH)

(a) to (c): Hon'ble Prime Minister, on 5th January, 2015 launched the Street Lighting National Programme (SLNP) to replace 1.34 crore conventional street lights with energy efficient LED street lights by March, 2019. SLNP is being implemented by Energy Efficiency Services Limited (EESL), a joint venture company of Public Sector Undertakings (PSUs) under the Ministry of Power. This programme is voluntary in nature and runs without any budgetary support from Government of India. The entire investment in supply, installation and maintenance of LED Street Lights is made by EESL. Payment to EESL is made by Urban Local Bodies (ULBs) from the resultant savings achieved in terms of reductions in electricity bills and maintenance cost, in respect of the street lights covered under the programme, over a period of seven years.

As on date, total 1,502 Urban Local Bodies (ULBs) have signed the implementation agreement with EESL for replacement of conventional street lights with LED street lights. Out of these ULBs, installation work has been completed in 859 ULBs. Till date, EESL has installed over 92 lakh LED street lights in 29 States/UTs. States/UTs wise details on implementation of SLNP are given at Annexure-I.

(d) : EESL has conducted the studies on the implementation of SLNP in the states of Himachal Pradesh and Rajasthan. The gist of findings emerging from these studies is at Annexure-II.

(e) : For effective implementation of SLNP as well as for expediting the implementation in remaining States/UTs, as the programme is voluntary in nature, the following steps have been taken by EESL/Government:

- (i) EESL has submitted proposals for replacement of Conventional street lights with LED street lights to remaining States/UTs.**
- (ii) Letters have been issued by Secretary (Power) to all the Chief Secretaries of all the States/UTs for implementation of SLNP Programme in their respective states.**
- (iii) Real time monitoring is done of performance of the installed Street Lights by Centralised Control and Monitoring System (CCMS).**

ANNEXURE-I

ANNEXURE REFERRED TO IN REPLY TO PARTS (a) TO (c) OF UNSTARRED QUESTION NO. 2071 TO BE ANSWERED IN THE LOK SABHA ON 04.07.2019.

States/ UTs wise details on implementation of SLNP

Sl. No.	States/UTs	Number of ULBs signed till date	No. of LED Street Lights installed till date
States			
1	Andhra Pradesh	108	27,64,981
2	Assam	3	23,651
3	Bihar	143	2,45,917
4	Chhattisgarh	168	3,54,427
5	Goa	14	2,06,790
6	Gujarat	148	8,83,497
7	Haryana	1	65,231
8	Himachal Pradesh	48	54,321
9	Jammu & Kashmir*	-	11,991
10	Jharkhand	43	98,889
11	Karnataka*	-	9,882
12	Kerala	4	70,807
13	Madhya Pradesh	2	81,870
14	Maharashtra	355	6,15,522
15	Odisha	109	3,19,410
16	Punjab	16	89,052
17	Rajasthan	191	10,21,192
18	Sikkim*	-	868
19	Tamil Nadu*	-	6,689
20	Telangana	76	8,56,676
21	Tripura	20	75,376
22	Uttar Pradesh	43	8,85,079
23	Uttarakhand	1	41,940
24	West Bengal	6	41,119
UTs			
25	Andaman & Nicobar	1	13,500
26	Chandigarh	1	42,103
27	Delhi	1	3,22,412
28	Lakshadweep*	-	1,000
29	Puducherry *	-	450
	Total	1,502	92,04,642

* In these States / UTs, only demonstration projects have been successfully completed.

ANNEXURE REFERRED TO IN REPLY TO PART (d) OF UNSTARRED QUESTION NO. 2071 TO BE ANSWERED IN THE LOK SABHA ON 04.07.2019.

The gist of the findings of the case studies on the implementation of LED street lights projects in Himachal Pradesh and Rajasthan are as follows:-

1. **Himachal Pradesh: The energy & monetary saving achieved through implementation of Street Light National Program in Himachal Pradesh as per survey conducted by EESL, on sample basis is as follows:**

Sl. No.	City	Total Inst. Lights	Monthly Energy Consumption with Conventional lights (in kWh)	Monthly Energy Consumption with LED (in kWh)	Monthly Energy Saving (in kWh)	% Saving	Monetary Saving Per Month (in INR)
1	Shimla	8516	358082	158199	199883	56%	9,89,419
2	Dharamshala	2910	120345	52495	67850	56%	3,35,859
3	Mandi	2189	80003	34917	45086	56%	2,23,174
4	Sundernagar	1821	62822	27023	35799	57%	1,77,205
5	Paonta Sahib	1948	114525	50654	63871	56%	3,16,159
6	Ghumarwin	608	22645	9911	12734	56%	63,033
7	Manali	798	40912	18876	22036	54%	1,09,079
Total		18790	799334	352075	447258	56%	22,13,928

(Average operating hours per day considered as 11; Monetary saving calculation is based on Deemed saving approach, considering unit rate of INR 4.95/kWh).

2. **Rajasthan:**

(i) **Jhalawar Street Light Project:- The energy saving achieved through implementation of Street Light National Program in Jhalawar as per survey conducted by EESL, on sample basis, is as follows:**

Total Inventory of Conventional Street Lights			
Sr. No.	Earlier Wattage of Lamp (W)	Quantity	Total kW
1	High Pressure Sodium Vapour - 400	36	16
2	High Pressure Sodium Vapour - 250	120	33
3	High Pressure Sodium Vapour - 150	140	23
4	High Pressure Sodium Vapour - 70	157	13
5	Fluorescent Tube Light - 40W	1624	78
6	Compact Fluorescent Lamp - 20W	372	7
Total kW			170
Total Inventory after Installation of LED Street Lights			
Sr. No.	Wattage of LED Light	Quantity	Total kW
1	190	36	7
2	120	120	14
3	72	140	10
4	40	157	6
5	18	1624	29
6	12	372	4
Total kW (New)			71

Estimates of energy saving potential	
Earlier Load (in kW)	170
New Load (in kW)	71
Reduction in Load after Installation (in kW)	99
Annual Energy Saving in kWh	395863
Annual Energy saving in MU's	0.396
% reduction in Load	58%

(Average operating hours per day considered as 11 and operating days considered as 365). Implementation of the LED street light project in Jhalawar has resulted in reduction of the street lighting load from 170 kW to 71kW.

(ii) **Mount Abu Street Light Project:** The energy saving achieved through implementation of Street Light National Program in Mount Abu as per survey conducted by EESL, on sample basis is as follows:

Total Inventory of Conventional Street Lights			
Sr. No.	Earlier Wattage of Lamp (W)	Quantity	Total kW
1	High Pressure Sodium Vapour – 400	106	42.4
2	High Pressure Sodium Vapour – 250	43	10.8
3	High Pressure Sodium Vapour – 150	492	73.8
4	High Pressure Sodium Vapour – 70	144	10.1
5	Fluorescent Tube Light – 40 W	508	20.3
6	Compact Fluorescent Lamp – 36 W	202	7.3
7	Compact Fluorescent Lamp – 72 W	6	0.432
8	Compact Fluorescent Lamp	3	0.045
9	Compact Fluorescent Lamp – 11 W	26	0.286
Total kW			165.4

Total Inventory after Installation of LED Street Lights			
Sr. No	Wattage of LED Light	Quantity	Total kW
1	120	76	9.12
2	70	669	46.83
3	15	737	11.055
Total kW(New)			67

Estimates of energy saving potential	
Earlier Load (in kW)	165.4
New Load (in kW)	67
Reduction in Load after Installation (in kW)	98.4
Annual Energy Saving in kWh	394996
Annual Energy saving in MU's	395
% reduction in Load	59%

(Average operating hours per day considered as 11 and operating days considered as 365). The implementation of LED street light project in Mount Abu has resulted in reduction of the street lighting load from 165.4 kW to 67 KW.
