Parliamentary Questions

(January 2024 to March 2025)

Question Number: S43

Sent Date: 24th January 2024

Sub: Rajya Sabha admitted Starred/ Unstarred Question Dy. No. S43 for answer on 06.02.2204 reg. National Cooking Programme.

Q (a) whether the Ministry proposes to launch a National Cooking Programme;

Q (b) if so, the details thereof?

A (a & b) Energy Efficiency Services Limited, (EESL), a joint venture of Public Sector Undertaking under Ministry of Power, launched its ground-breaking National Efficient Cooking Programme (NECP), unveiled by the Union Minister for Power and New & Renewable Energy Shri R. K. Singh, at an event held in New Delhi, November 2, 2023. These initiatives are aimed at revolutionizing cooking practices in India. EESL targets to distribute 20 Lakh energy-efficient induction cook stoves nationwide under NECP.

Q (c) the extent to which the cost of cooking food for the poor families of the country would get reduced through e-cooking; and.

A (c) The NECP is targeting all income group of citizens and promoting Induction/electric cooking aligning with Go-electric campaign of GoI. Due to Higher efficiency of induction cooktop annual monetary savings of approx. INR 3-4K is envisaged in-comparison to LPG based cooking.

Question Number: S568

Sent Date: 29th January 2024

Sub: Provisionally admitted question for the Rajya Sabha Dy. No S568- Amrut Scheme due for 05/02/2024, Which Pertains to Amrut Scheme.

(a) whether the government has taken any steps under the AMRUT scheme to improve energy efficiency and to reduce carbon footprint in cities;

(b) if yes, the details thereof;

(c) If not, the reasons thereof?

Ministry of Power (MOP)/ Housing & Urban Affairs (HUA) may please respond.

As far as EESL is concerned, it has carried out Investment Grade Energy Audits (IGEA) of Municipal Pumps under Municipal Energy Efficiency Program (MEEP) in 23 states & UTs. As per the agreement signed with the states for IGEA Audits, implementation of energy efficiency intervention in the Municipal Pumps was to be carried out after approval of IGEA Report by the concerned State Level Technical Committee (SLTC) and subsequent agreement of the State for carrying out the recommended implementation through EESL.

Only West Bengal agreed after SLTC approval and the Installation of MEEP is ongoing in the state. At present around 89 energy efficient Pumps have been installed and 200 pumps have been supplied to various municipalities of West Bengal for installation.

Additional Information:

EESL has also installed more than 62 lakhs LED Street Lights in Amrut Cities under Street Light National Program (SLNP).

Question Number: U637

Sent Date: 12th July 2024

Sub: Rajya Sabha DY U643 to be answered on 22.07.2024 reg Affordable and stable electricity tariffs consumers in Goa

Q (b) Initiatives undertaken by the Ministry to promote energy efficiency and conservation among consumers in Goa, including any subsidy or incentive programs for energy-efficient appliances?

Q (h) Availability and accessibility of renewable energy options for consumers in Goa, such as rooftop solar panels, and support provided for their adoption?

EESL Response (b) & (h): - MoP may reply.

However, additional information pertaining to EESL is as under: -

b) To encourage domestic consumers to use LED Bulbs to save energy, the government of Goa decided to give 3 nos. of LED Bulbs to each registered consumer of the Electricity Department free of cost under the scheme of "JYOTIRMAYA GOA". EESL had distributed 8,04,735 nos. of 9W LED bulbs to about 2,68,245 nos. of domestic consumers.

Further, as part of its energy efficiency programmes across the country, EESL has implemented the Building Energy Efficiency Programme (BEEP) for Central and State government buildings, has deployed Electric Vehicles in the government departments, have implemented UJALA Programme and Street Light National Programme in the state of Goa.

h) In the state of Goa, EESL has been nominated as an implementation partner under PM Surya Ghar Yojana to implement Solar rooftops for domestic and government buildings. In this regard, EESL has initiated the process for procurement for solar modules and inverters.

Question Number: 729

Sent Date: 15th July 2024

विषय: अति आवश्यक: संसद तारांकित प्रश्न डायरी संख्या 729 का उत्तर दिनांक 25.07.2024 को दिए जाने के संबंध में

प्रश्न (क) स्ट्रीट लाइटिंग नेशनल प्रोग्रामिंग (एसएलएनपी) का विवरण और मुख्य विशेषताएं क्या हैं ?

ईईएसएल उत्तर (क) स्ट्रीट लाइट राष्ट्रीय कार्यक्रम (एसएलएनपी) का विवरण और मुख्य विशेषताएं अनुलग्नक-1 के संलग्न नोट में दी गई हैं।

प्रश्न (ख) क्या सरकार के पास एस.एल.एन.पी. के अंतर्गत बिहार में पारंपरिक स्ट्रीट लाइटों को एलईडी लाइटों से बदलने का कोई प्रस्ताव है ?

ईईएसएल उत्तर (ख) एनर्जी एफिशिएंसी सर्विसेज लिमिटेड (ईईएसएल) ने पारंपरिक स्ट्रीट लाइटों को एलईडी लाइटों से बदलने के लिए बिहार राज्य में स्ट्रीट लाइट नेशनल प्रोग्राम **(एसएलएनपी) को लागू किया है ।**

प्रश्न (ग) यदि हां, तो तत्संबंधी ब्यौरा क्या है तथा इस दिशा में अब तक क्या कार्य किया गया है ? और

ईईएसएल उत्तर (ग) अभी तक एनर्जी एफिशिएंसी सर्विसेज लिमिटेड (ईईएसएल) ने बिहार राज्य में 116 शहरी स्थानीय निकायों (यूएलबी) में कुल 5,44,190 एलईडी स्ट्रीट लाइटें स्थापित की हैं ।

प्रश्न (घ) पिछले तीन वर्षों और वर्तमान वर्ष के दौरान एस.एल.एन.पी. के अंतर्गत बिहार राज्य में कुल कितनी धनराशि आवंटित और उपयोग की गई ?

ईईएसएल उत्तर (घ) भारत सरकार ने एसएलएनपी कार्यक्रम के लिए किसी भी तरह का बजट आवंटित नहीं किया है क्योंकि यह कार्यक्रम ईईएसएल द्वारा स्व-वित्तपोषण मोड में कार्यान्वित किया जा रहा है । ईईएसएल ने इक्विटी-ऋण के माध्यम से अपने स्वयं के धन का निवेश करके बिहार में एसएलएनपी के कार्यान्वयन के लिए लगभग 210 करोड़ रुपये का निवेश किया है। हालाँकि, बिहार यूएलबी से ईईएसएल को 144 करोड़ रुपये का बकाया भुगतान लंबित है ।

Question Number: 953

Sent Date: 18th July 2024

Sub: MOST URGENT - Fw: LoK Sabha Starred Diary No. 953 for answer on 25-07-2024 regarding.

Q (a) Whether the Government is going to launch any scheme for distribution of low power consuming fans and electric stoves in the country;

EESL Response (a) MoP may please respond.

However, as far as EESL is concerned, the then Hon'ble Union Minister for Power and New & Renewable Energy) had launched two Programmes of Energy Efficiency Services Limited (EESL) i.e. the National Efficient Cooking Programme (NECP) and Energy Efficient Fans Programme (EEFP) that aim at increasing uptake of Induction Cookstoves and Energy Efficient Ceiling Fans on 2nd November 2023.

Q (b) if so, the details of distributing fans and electric stoves companies under this scheme, Union/state-wise; and

EESL Response (b) MoP may please respond.

Energy Efficiency Services Limited (EESL) purchases energy efficient equipment including fans and Induction cookstoves at scale through a transparent bidding process and approaches States/Utilities/Originations for business to Business (B2B) sales and directly to general public for Business-to-Customer (B2C) sales through its e-commerce portal https://eeslmart.in

So far EESL has deployed 23.59 lakh energy efficient fans in the country. Now EESL, under the Energy Efficient Fans Programme (EEFP) aims to deploy 20,00,000 nos. of energy efficient fans across the country in the current financial year (FY 2024-25).

Further, so far EESL has deployed 2000 nos. of induction cookstoves in the country out of an order of 4000 nos. in the last 9 months. Now EESL, under the National Efficient Cooking Programme (NECP) aims to deploy 1,00,000 nos. of induction cookstoves across the country in the current financial year (FY 2024-25).

Q (c) the details of the cooking cost of poor families reduced through e-cooking?

EESL Response (c) The Annual cost benefit of using e-cooking as compared to use of LPG for cooking, is illustrated in the below Table No – 1

Tabel No-1

Sr. No.	**Particulars**	**LPG Cylinder (Subsidized)**	**Induction Cookstoves (E-Cooking)**
1	Annual Cost of Cooking (INR)	6400	5357
2	**Annual Saving per Consumer using e-cooking as compared to LPG for cooking (INR)**	**1043**	

Assumptions: -

1. Total Numbers of LPG cylinders required annually exclusively for cooking by a consumer – 8 Nos.
2. Number of Electricity Units required annually for same amount of Cooking using Induction Cookstove – 974 Units
3. Cost per standard LPG cylinder (INR) – 800 per refill.
4. Cost per unit of electricity (INR) to consumer – 5.5 per KWh.

Question Number: 3135

Sent Date: 22nd July 2024

Sub: LoK Sabha Starred Question Dy. No. 3135 to be answered on 01-08-2024 regarding UJALA Scheme and its impact on Energy Savings.

(a) The aims and objectives of launching the Ujala Scheme?

UJALA (Unnat Jyoti by Affordable LED for All) was launched on 5th January 2015. The aim and objectives of the UJALA programme are as follows:

- To provide energy-efficient LED bulbs to domestic consumers at an affordable price
- To increase the demand for LED lights by aggregating requirements across the country and providing economies of scale to manufacturers through regular bulk procurement, helping them reduce the cost of LED bulbs not only for the UJALA program but also for the retail segment.
- To promote the use of the most efficient lighting technology at affordable rates to domestic consumers, which benefits them by way of reduced energy bills while at the same time improving their quality of life through better illumination.
- To enhance consumer awareness of the financial and environmental benefits of using energy-efficient appliances, thus creating a market for them.

(b) What are the details of the number of LED bulbs distributed by the government under the said scheme to save electricity?

As on date, EESL has distributed over 36.87 crore LED bulbs across India. The state-wise details of these bulbs are attached in Annexure A.

(c) The impact of the scheme on energy savings and consumer electricity bills?

The scheme has resulted in estimated energy savings of 48.42 billion kWh annually, leading to estimated annual monetary savings of INR 19,337 crore in consumers' electricity bills.

Question Number: 506

Sent Date: 20th July 2024

Sub: URGENT: Request for inputs for Lok Sabha Unstarred Question No. 506 for answer on 25.07.2024 –reg

Question (a) whether the Convergence Energy Services Limited (CESL) has been mandated by the Niti Aayog and Ministry of Road Transport and Highways to deploy 50,000 electric vehicles under a National Electric Bus Program (NEBP) and if so, the details thereof;

EESL's Response:

i. Ministry of Heavy Industries (MHI) vide Gazette notification dated 11th June 2021 nominated EESL to aggregate demand for E-Buses under FAME-II, in 9 major cities having population of over 4 million (Mumbai, Delhi, Bangalore, Hyderabad, Ahmedabad, Chennai, Kolkata, Surat, and Pune).

ii. CESL, a 100% owned subsidiary of EESL, implements the EV programs.

iii. CESL floated the Grand Challenge (GC) tender and aggregated demand of 5,450 nos of eBuses from five cities.

iv. Following the success of Grand Challenge (GC), CESL was requested by NITI Aayog and MoRTH to scale up the GCC model for targeted deployment of 50,000 nos of electric buses across the country. CESL was nominated as the Program Manager for aggregating the demand for ensuring deployment of 50,000 e-Buses and extend the program to the rest of the cities in India.

v. Accordingly, CESL as a Project Manager, aggregated the demand under National Electric Bus Program (NEBP) and floated the tenders.

Letters from NITI Aayog and MoRTH are attached for ready reference.

Question (b) the details of distribution of Electric buses in the country, State-wise;

EESL's Response:

MoRTH may please reply as various States / UTs / Cities / Authorities have also floated various eBus tenders on their own for procuring the e-buses under CAPEX/OPEX models apart from the tendering done by the CESL.

As far as CESL is concerned details of the e-Buses tendered are as under:

i. Grand Challenge (GC) tender:

a) CESL vide its Grand Challenge Document floated an EoI seeking interest from nine '4 million plus' cities (Delhi, Kolkata, Bengaluru, Hyderabad, Surat, Ahmedabad, Chennai, Mumbai and Pune) in September 2021 under FAME India II scheme. A total e-buses demand of 5,450 was received from five of the

above cities (Delhi, Kolkata, Bengaluru, Hyderabad and Surat) under Gross Cost Contract(GCC) model under Grand Challenge (GC) tender.

ii. NEBP – 1 tender:

a) CESL concluded the first tender under NEBP by aggregating a total demand of 6,465 no's of e-buses across 6 Indian states/cities/ State Transport Undertakings (Delhi, Haryana, Telangana,

Surat, Arunachal Pradesh, Kerala) on a GCC or wet lease model without the benefit of FAME subsidy.

iii. NEBP – 2 tender:

a. Following the successful conclusion of NEBP's first phase of a non-subsidized tender, a second tender (NEBP-2) was also issued for supply of 4,675 e-buses on a dry lease model by CESL. Under the dry lease model, the e-bus is owned and maintained by the Operator for a per km fees throughout the contract period and the drivers for the e-Buses are provided by the State Transport Undertakings (STUs). OEMs have not shown interest and did not participate in this tender.

iv. PM-eBus Sewa Scheme:

a) The Government of India has recently approved "PM-eBus Sewa" scheme for augmenting city bus operations; 10,000 e-Buses will be deployed on PPP model in 169 cities. The administrative Ministry for this scheme is Ministry of Housing and Urban Affairs (MoHUA). CESL has been nominated as the Central tendering agency under PM-eBus Sewa Scheme.

b) Under Phase – 1 of this tender, CESL floated the tender for 3,825 nos of e-Buses

c) Under Phase – 2 of this tender, CESL floated the tender with 3,332 nos of e-Buses (some quantity of buses was re-tendered from PM-eBus Sewa Phase -1 tender) and the tender is currently live.

State wise details of the e-Buses tendered by CESL is attached as Annexure A to this email.

Question (c) whether the Union Government has allocated any financial assistance to Tamil Nadu State Transport Corporation and if so, the details thereof and the financial assistance provided during the last five years?

EESL's Response:

MoRTH may please reply.

As far as CESL is concerned, it is only the Bid processing agency and administers the Bids as per the guidelines of the Schemes formulated by the Ministry of Housing and Urban Affairs (MoHUA) / Ministry of Heavy Industries (MHI). Therefore, the issue of the financial assistance lies within the domain of the concerned Ministry.

Question Number: 3360

Sent Date: 23rd July 2024

Sub: Lok Sabha unstarred question bearing diary number 3360 for an answer on August 1, 2024, regarding the SLNP scheme of EESL

(a) whether the Government proposes to implement the Street Lighting National Programme (SLNP) in the country, particularly in Tamil Nadu and if so, the details thereof;

Response (a): The Hon'ble Prime Minister launched the Street Lighting National Programme (SLNP) on January 5, 2015, to replace conventional street lights with smart and energy-efficient LED streetlights across India. EESL has installed about 1.31 Cr of LED streetlights across 29 states and UTs under SLNP, and the program is still ongoing in the country.

SLNP is a voluntary program. EESL enters into agreements with ULBs (and, in most cases, a tripartite agreement involving the concerned state/UT governments) who express their consent and willingness to implement the program in their jurisdiction. As EESL has not received consent from Tamil Nadu to implement SLNP, thereby the program has not yet been implemented in the state. EESL is implementing the SLNP project in self-financing mode.

(b) the details of total street lights that have already been replaced in the country with LED bulbs and the estimated quantity of energy saved as a result thereof;

Response(b): As of June 2024, EESL has installed 1,31,10,745 LED Street Lights in the country (State wise break up is enclosed at Annexure-A), which has resulted in estimated energy savings of about 8,806 Million Units (MU) per year.

(c) whether there is any proposal to replace street lights in all the States under the SLNP;

Response (c): EESL has installed about 1.31 Cr LED streetlights nationwide across 29 states & UTs.

(d) if so, the details thereof and the time by which these are likely to be replaced;

Response (d): State-wise details of LED street light installation under SLNP are furnished in Annexure-A.

(e) whether the Government has demanded utilization certificates of funds from the concerned authorities and if so, the details thereof; and

(f) whether any actual target for fund utilisation has been fixed for the said purpose and if so, the details thereof and the achievements made thereon, State/UT-wise, and

Response (e) & (f): MoP may reply.

As far as SLNP is concerned, it is not a government-funded program/scheme and hence no funds have been allocated/received by EESL for the implementation of SLNP. EESL funds this program through equity and debt arrangements.

(g) whether the Government also provides funds to Gram Panchayats for street lighting in villages and, if so, the details thereof during the last three years and the current year, State/UT-wise.

Response (g): MoP may reply.

As far as SLNP is concerned, it is not a government-funded program/scheme and hence no funds have been allocated/received by EESL to implement SLNP. EESL funds this program through equity and debt arrangements.

Additional Information: EESL has installed ~29 lacs LED Street Lights under SLNP in more than 13,000 Gram Panchayats (GPs) in the states of Jharkhand, Andhra Pradesh and Telangana.

Question Number: 1556

Sent Date: 26th July 2024

Sub: Lok Sabha unstarred question bearing diary number 1556 for an answer on July 31, 2024, regarding the AJAY scheme of EESL

A. whether the Government is implementing solar street light project that provides off-grid electricity in most of the remote villages and tribal areas and if so, the details thereof;

Response: MNRE had has awarded the AJAY Project for installing off-grid solar streetlights in rural areas to M/s Energy Efficiency Services Ltd (EESL), a joint venture company of PSUs under the Ministry of Power. The project was in two phases, namely AJAY Phase-I and AJAY Phase-II. In AJAY-I, EESL has installed 1,35,393 Off-grid Solar Street Lights, and in AJAY-II, EESL has installed 1,37,247 Off-grid Solar Street Lights.

B. the list of number of villages and most backward tribal areas covered fully or partially with solar streetlights throughout the country including Tamil Nadu under off-grid programme till now;

Response: The programme was partially funded by the MPLAD fund, and hence, the solar streetlights were installed in the parliamentary constituency of the Hon'ble MPs giving consent for program implementation. Therefore, the record of installation is also maintained constituency-wise. The constituency-wise implementation details for AJAY phase-1 and phase-2 are enclosed in **Annexures 1 and 2,** respectively. This list also includes the 2,000 number of solar streetlights installed in Ramanathpuram Parliamentary Constituency of Tamil Nadu. No separate record is being maintained for installation in tribal and most backward areas.

C. the details of Central Financial Assistance (CFA) provided to the States Especially Tamil Nadu for solar off-grid applications including solar streetlights during the last three years and the current year;

Response: MNRE may please respond.

As far as EESL is concerned, AJAY-1 was implemented in five states, while AJAY-2 was implemented in 21 states, including Tamil Nadu. The CFA fund received by EESL under AJAY-1 & AJAY-2 is as under:

CFA Fund Received under AJAY-1						
S. No.	**State**	**CFA fund received (INR)**				
		FY 24-25	**FY 23-24**	**FY 22-23**	**FY 21-22**	**Before FY 21-22**
1	Uttar Pradesh	NIL	NIL	NIL	NIL	₹ 1,13,93,93,817.75
2	Bihar	NIL	NIL	NIL	NIL	₹ 42,86,24,532.75
3	Assam	NIL	NIL	NIL	NIL	₹ 9,53,85,180.75

4	Jharkhand	NIL	NIL	NIL	NIL	₹ 15,09,05,973.75
5	Odisha	NIL	NIL	NIL	NIL	₹ 12,50,93,675.25
Total						**₹ 1,93,94,03,180.25**

CFA Fund Received under AJAY-2						
S. No.	**State**	**CFA fund received (INR)**				
		FY 24-25	**FY 23-24**	**FY 22-23**	**FY 21-22**	**Before FY 21-22**
1	Andhra Pradesh	NIL	NIL	NIL	NIL	₹ 9,35,83,875.00
2	Assam	NIL	NIL	NIL	NIL	₹ 11,05,14,048.75
3	Bihar	NIL	NIL	NIL	NIL	₹ 40,44,86,523.00
4	Chhattisgarh	NIL	NIL	NIL	NIL	₹ 4,25,21,109.75
5	Gujarat	NIL	NIL	NIL	NIL	₹ 5,10,45,750.00
6	Himachal Pradesh	NIL	NIL	NIL	NIL	₹ 1,36,12,200.00
7	Lakshadweep	NIL	NIL	NIL	NIL	₹ 3,40,30,500.00
8	Jammu and Kashmir	NIL	NIL	NIL	NIL	₹ 10,20,91,500.00
9	Jharkhand	NIL	NIL	NIL	NIL	₹ 5,95,53,375.00
10	Karnataka	NIL	NIL	NIL	NIL	₹ 5,10,45,750.00
11	Madhya Pradesh	NIL	NIL	NIL	NIL	₹ 10,16,66,118.75
12	Manipur	NIL	NIL	NIL	NIL	₹ 2,55,22,875.00
13	Odisha	NIL	NIL	NIL	NIL	₹ 7,65,68,625.00
14	Punjab	NIL	NIL	NIL	NIL	₹ 1,70,15,250.00
15	Rajasthan	NIL	NIL	NIL	NIL	₹ 3,84,88,495.50
16	**Tamil Nadu**	NIL	NIL	NIL	NIL	**₹ 3,40,30,500.00**
17	Telangana	NIL	NIL	NIL	NIL	₹ 85,07,625.00
18	Tripura	NIL	NIL	NIL	NIL	₹ 6,80,61,000.00
19	Uttar Pradesh	NIL	NIL	NIL	NIL	₹ 69,89,69,454.75
20	Uttarakhand	NIL	NIL	NIL	NIL	₹ 14,27,23,917.00
21	West Bengal	NIL	NIL	NIL	NIL	₹ 16,12,53,524.25
Total						**₹ 2,33,52,92,016.75**

D. whether the Government proposes to support LED-based solar streetlights in order to bring in more efficiency and Lithium Ferro Phosphate battery in order to provide long maintenance free service and if so, the details thereof;

Response: MNRE may please respond.

Regarding the use of Lithium Ferro Phosphate batteries, we would like to inform that EESL has installed LED-based solar street lights with Lithium Ferro Phosphate ($LiFePO_4$) batteries in the Solar Street Light System.

E. whether the Government is implementing the programme on information and public awareness to generate awareness in the public for utilisation of renewable energy sources and if so, the details thereof?

Response: MNRE may please respond.

As far as EESL is concerned, it has implemented a programme to generate public awareness and promote utilising renewable energy sources through AJAY-I & AJAY-II Projects. Significant steps taken to increase public awareness about renewable energy sources are listed below:

I. **Awareness through Workshops and Seminars:**
- **Community Workshops:** Organized workshops and seminars at the community level to educate citizens on incorporating renewable energy solutions into their daily lives. These events often included demonstrations and practical sessions (a few Photographs are attached for reference as **Annexure 3**).
- **Industry Seminars:** Hosted seminars and conferences with industry stakeholders to discuss the latest renewable energy technologies and policy developments. Implementing partners of the AJAY Project are educated to make the public aware of Off-grid Solar Street Lights.

II. **Partnerships with Private Sector:**
- **Engagement with the Private Sector:** Encouraged the private sector, which has implemented the AJAY Project, to participate in public awareness initiatives and adopt renewable energy practices within their operations.

III. **Digital Platforms:**
- **Online Portals and Apps:** The General public who are beneficiaries of the AJAY Project are made aware of the Online Complaint Handling System (CHS), i.e. how they can raise complaints about the non-functioning of Solar Street Lights and how feedback will be provided to complainant after rectification of the complaint.

IV. **Demonstration Projects:**
- **Pilot Projects:** Implementing pilot projects in select regions to showcase renewable energy solutions' practical benefits and effectiveness. These projects serve as real-world examples and encourage wider adoption.
- **Service Centres:** The public is utilised in operating local service centres, which enhances capacity building and employment at the community level.

These efforts aim to increase public knowledge and encourage the adoption of renewable energy sources, thereby contributing to a more sustainable and environmentally friendly energy landscape.

Question Number: 1829/3135

Sent Date: 26th July 2024

Sub: Lok Sabha starred question bearing diary number 1829 or an answer on August 1, 2024, regarding the UJALA scheme

(a) The aims and objectives of launching the Ujala Scheme?

UJALA (Unnat Jyoti by Affordable LED for All) was launched on 5th January 2015. The aim and objectives of the UJALA programme are as follows:

- To provide energy-efficient LED bulbs to domestic consumers at an affordable price
- To increase the demand for LED lights by aggregating requirements across the country and providing economies of scale to manufacturers through regular bulk procurement, helping them reduce the cost of LED bulbs not only for the UJALA program but also for the retail segment.
- To promote the use of the most efficient lighting technology at affordable rates to domestic consumers, which benefits them by way of reduced energy bills while at the same time improving their quality of life through better illumination.
- To enhance consumer awareness of the financial and environmental benefits of using energy-efficient appliances, thus creating a market for them.

(b) What are the details of the number of LED bulbs distributed by the government under the said scheme to save electricity?

As on date, EESL has distributed over 36.87 crore LED bulbs across India. The state-wise details of these bulbs are attached in Annexure A.

(c) The impact of the scheme on energy savings and consumer electricity bills?

The scheme has resulted in estimated energy savings of 48.42 billion kWh annually, leading to estimated annual monetary savings of INR 19,337 crore in consumers' electricity bills.

Question Number: U1524

Sent Date: 1st Aug 2024

Sub: Rajya Sabha Un Starred Question Dy. No. U1524 to be answered on 12.08.2024 reg.

Question (a) whether the Ministry proposes to launch a National Cooking Programme;
Question (b) if so, the details thereof?

Answer: Points (a & b) MoP may please respond.

However, as far as EESL is concerned, the then Hon'ble Union Minister for Power and New & Renewable Energy) has launched the National Efficient Cooking Programme (NECP) that aims at increasing the uptake of Induction Cookstoves on 2nd November 2023. This initiative aims to revolutionise the cooking practices in India through reduced indoor pollution, improved kitchen safety and long-term savings on cooking costs by switching to induction cook stoves. So far EESL has deployed 2000 numbers of induction cookstoves in the country out of an order of 4000 nos. in the last nine months. Now, EESL, under the National Efficient Cooking Programme (NECP), aims to deploy 1,00,000 nos. of induction cookstoves across the country in the current financial year (FY 2024-25).

Question (c) whether e-cooking would reduce the cost of cooking for the poor of the country?

Answer: Point(c): The NECP targets citizens of all income groups and promotes Induction/electric cooking, aligning with GoI's Go-electric campaign.

The Annual cost benefit of using e-cooking, as compared to the use of LPG for cooking, is illustrated in the table below:

Sr. No.	**Particulars**	**LPG Cylinder (Subsidized)**	**Induction Cookstoves (E-Cooking)**
1	Annual Cost of Cooking (INR)	6400	5357
2	**Annual Saving per Consumer using e-cooking as compared to LPG for cooking (INR)**	**1043**	

Assumptions:

1. Total Number of LPG cylinders required annually exclusively for cooking by a consumer – 8 Nos.
2. Number of Electricity Units required annually for the same amount of Cooking using Induction Cookstove – 974 Units.
3. Cost per standard LPG cylinder (INR) – 800 per refill.
4. Cost per unit of electricity (INR) to the consumer – 5.5 per kWh.

Question Number: U3303

Sent Date: 1st Aug 2024

Sub: Rajay Unstarred Question Dy. No. U3303 to be answered on 12.08.2024 regarding.

(a) Whether the Government has implemented the Gram Ujala Scheme and, if so, the details thereof;

Answer: Gram UJALA program was launched by the then Hon'ble Minister of Power, New and Renewable Energy in Bihar at Arrah District on 19th March 2021 and in Uttar Pradesh at Varanasi District on 24th March 2021. The Gram UJALA scheme was implemented by CESL (a wholly owned subsidiary of EESL) in 5 States (Uttar Pradesh, Bihar, Andhra Pradesh, Karnataka and Telangana) of the country as a pilot initiative. The details of LED bulb distribution in the mentioned states are as follows:

Sr. No.	State	LED bulbs Distributed
1.	Uttar Pradesh	46,34,219
2.	Bihar	37,62,058
3.	Andhra Pradesh	5,59,030
4.	Telangana	5,67,380
5.	Karnataka	4,77,335
Total		**1,00,00,022**

Under this scheme, LED bulb of 7W and 12W were distributed in exchange of 60W and 100W incandescent bulb to the rural consumers. As the cost of LED bulbs was still the principal barrier to their adoption by the rural segment, the program was designed to further reduce the price barrier and make LED bulbs affordable even for rural consumers. In addition, the energy savings garnered will reduce households' electricity bills and promote sustainable development in rural areas.

(b) the names of districts identified in Tamil Nadu to include in the first phase of this scheme;

Answer: The Gram UJALA scheme by CESL has not been implemented in the state of Tamil Nadu.

(c) the steps taken by the Government to create awareness among the beneficiaries about the said scheme;

Answer: Under the Gram UJALA program, during the distribution of LED bulbs, distribution agencies carried out local-level awareness campaigns using banners, mass media campaigns, door-to-door campaigns, etc., about the benefits of using LED bulbs and the details of the Gram UJALA scheme.

(d) the time by which the said scheme is likely to be implemented by the Government?

Answer: MoP may please reply.

However, the distribution under the Gram UJALA scheme has been completed, and currently, no further distribution activity is underway by CESL.

Question Number: 3414

Sent Date: 1st Aug 2024

Sub: Rajay Sabha Unstarred Question Dy. No. 3414 to be answered on 12.08.2024 reg.

a. Whether the government has carried out any survey / research / study into energy efficiency mechanisms utilized by state government in the last four years; if so details thereof and if not, reasons therefore;

b. Whether the government has considered introducing any incentives to state governments to increase their energy efficiency; if so details regarding the same;

c. Details regarding the funding allocated and utilized in order to increase energy efficiency of states over the last four years in a state wise manner, especially in Maharashtra;

Response to queries (a), (b), and (c): The query does not pertain to EESL. The Ministry of Power may please respond.

Question Number: 2171

Sent Date: 1st Aug 2024

Sub: Rajya Sabha Unstarred Question Dy. No. 2171 to be answered on 12.08.2024 regarding.

a. Whether Bharat Sarkar has taken any steps to ensure simpler validation and verification process of carbon credits to quickly scale-up ecologically sustainable practices;

b. if yes, details of such initiatives proposed by Bharat Sarkar in this regard;

c. the future projection of the carbon trading market in the next five years;

Response to queries (a), (b), and (c): The query does not pertain to EESL. The Ministry of Power may please respond.

Question Number: 4030

Sent Date: 1st Aug 2024

Sub: Urgent | Lok Sabha Starred Question diary number 4043

a) The total number of Public Charging Stations (PCS) for Electric Vehicles (EVs) set up in the country till now;

Response to query (a): The Ministry of Power may please respond.

However, as far as EESL/ CESL is concerned, 455 public EV chargers have been installed across India to date.

b) The State/UT-wise details thereof;

Response to query (b): The Ministry of Power may please respond.

However, the details of Public EV Chargers installed across India by EESL/ CESL are mentioned below:

State Total Public EV Chargers (No's)
Delhi 163
Maharashtra 102
Uttar Pradesh 66
Tamil Nadu 59
West Bengal 24
Kerala 18
Gujarat 12
Chhattisgarh 4
Goa 3
Haryana 2
Karnataka 1
Jharkhand 1
Grand Total 455

c) The details of measures being taken by the Government in this regard to ensure greater adoption of EVs in the country;

d) The details of measures being taken to promote private investment for setting up of Charging Stations in the country;

Response to query (c) and (d): The query does not pertain to EESL. The Ministry of Power may please respond.

e) The proposed measures to be taken in this regard thereof?

Response to query (e): The Ministry of Power may please respond.

However, as far as CESL is concerned, it is developing an implementation model for 'Charging as a Service' (Asset-lite model), as detailed below:

CESL will aggregate land parcels from different ULBs, Central/State Govt organisations, and PSUs to set up charging infrastructure on a Build, Own, Operate, and Maintain (BOOM) basis for a period of 10 years.

Such land parcels shall be provided by Government entities to CESL on a revenue-sharing basis in line with the model revenue-sharing agreement approved by the Ministry of Power, Government of India, vide their revised consolidated guidelines & standards for charging infrastructure for electric vehicles dated January 14, 2022.

Subsequently, CESL, with the help of its empanelled private Charge Point Operators, shall procure, supply, install, commission, operate and maintain electric vehicle charging stations and/or battery swapping stations for a period of 10 years.

This way, demand aggregation shall scale the opportunities, reduce the unit charges for charging, and facilitate the setting up of charging stations at multiple places across India.

Question Number: 6050

Sent Date: 1st Aug 2024

Sub: Urgent | Lok Sabha Starred Question diary number 6050

(a) The action taken by the Government to set up charging stations for electric cars;
(b) The numbers of charging stations that have been set up across the country; and

Reply for (a) and (b): Energy Efficiency Services Limited (EESL) through its subsidiary Convergence Energy Services Limited (CESL) is developing Electric Vehicle Charging Infrastructure and has signed Memorandum of Understanding (MoU) with multiple Government/Public land-owning agencies for locational assessment study and setting up of Public Charging Stations (PCS) in their jurisdiction location.

EESL/CESL is developing PCS on a revenue share model wherein the vacant space is being provided by Government/Public land-owning agencies and installation is being done by EESL. Beside this EESL is also installing charging stations at the premises of state and central Government offices basis their requirement.

Till date, 455 nos. of Public EV Chargers have been installed across India by EESL/CESL and details are mentioned below.

State	**Total Public EV Chargers (No's)**
Delhi	163
Maharashtra	102
Uttar Pradesh	66
Tamil Nadu	59
West Bengal	24
Kerala	18
Gujarat	12
Chhattisgarh	4
Goa	3
Haryana	2
Karnataka	1
Jharkhand	1
Grand Total	**455**

(c) The target fixed for the next five years?

Reply for (c): EESL/CESL is planning to establish 2000 Public EV Chargers in the next five years on **'Charging as a Service' (Asset-lite model).**

CESL is developing a implementation model for 'Charging as a Service' (Asset-lite model):

Availability of electric vehicle charging infrastructure is emerging as one of the major challenges in accelerating adoption of e-mobility in India.

In order to address this issue, CESL is now planning to aggregate the land parcels from different ULBs, Central/State Govt organizations/PSUs etc., to setup charging infrastructure on Build Own, Operate and Maintain (BOOM) basis for a period of 10 years. Such land parcels shall be provided by Government/Public land-owning agencies to CESL on a revenue sharing basis in line with the model revenue sharing agreement approved by Ministry of Power, Government of India vide their revised consolidated guidelines & standards for charging infrastructure for electric vehicles dated 14th January, 2022. Subsequently, CESL, with the help of its empanelled private Charge Point Operators (CPOs), shall procure, supply, install, commission, operate and maintain electric vehicle charging stations and/or battery swapping stations for a period of 10 years.

The demand aggregation shall scale the demand, reduce the unit charges for charging and facilitate setting up of charging stations at multiple places across India.

Question Number: 1553

Sent Date: 1st Aug 2024

Sub: Rajya Sabha Starred question bearing diary number 1553 to be answered on August 12, 2024, regarding cleaner energy

(a) What are the initiatives being taken by the Ministry for encouraging the adoption of cleaner and more efficient energy solutions?

(b) Has the Ministry devised any scheme for providing incentives for energy transition technologies?

(c) What are the steps that have been taken to push for a significant investment in transmission and distribution infrastructure for improving the efficiency and reliability of power delivery?

Response to queries (a), (b), and (c): The query does not pertain to EESL. The Ministry of Power may please respond.

Question Number: 6050

Sent Date: 2nd Aug 2024

Sub: Lok Sabha Starred question bearing diary number 6050 for an answer on July 31, 2024, regarding Charging Stations for Electric Cars

(a)the action taken by the Government to set up charging stations for electric cars;

(b)the number of charging stations that have been set up across the country; and

Response to (a) and (b): The Ministry of Power may please respond.

However, as far as EESL/ CESL are concerned, 455 public EV chargers have been installed across India to date **and details are mentioned below:**

State	Total Public EV Chargers (No's)
Delhi	**163**
Maharashtra	**102**
Uttar Pradesh	**66**
Tamil Nadu	**59**
West Bengal	**24**
Kerala	**18**
Gujarat	**12**
Chhattisgarh	**4**
Goa	**3**
Haryana	**2**
Karnataka	**1**
Jharkhand	**1**
Grand Total	**455**

(c)the target fixed for the next five years?

Response to (c): The Ministry of Power may reply.

Question Number: 1749

Sent Date: 5th Aug 2024

Sub: Rajya Sabha Unstarred Question No. 1749 for answer on 06.08.2024 reg. Solar Cooker on Subsidized rate

Questions:

a) whether Government is running any scheme to provide energy for daily consumption from solar energy based sources, if so, the details thereof; and

(b) whether Government proposes to provide solar cooker at subsidized rates by which the public can use more and more clean energy/solar energy, if so, the details thereof and if not, the reasons therefor?

Answer: Points (a & b) Inputs of EESL may be considered as "NIL".

Question Number: 1553

Sent Date: 5th Aug 2024

Sub: Rajya Sabha Starred Question No. 2384 bearing Dy No. S1553 to be answered on August 12, 2024, regarding cleaner energy

Q (a) What are the initiatives being taken by the Ministry for encouraging the adoption of cleaner and more efficient energy solutions?

EESL Response (a) The Ministry of Power may please respond.

However, the details of the key initiatives/Programmes taken up by Energy Efficiency Service Limited (E.E.S.L.) for encouraging the adoption of cleaner and more efficient energy solutions are attached as Flag-A.

Q (b) Has the Ministry devised any scheme for providing incentives for energy transition technologies?

Q (c) What are the steps that have been taken to push for a significant investment in transmission and distribution infrastructure for improving the efficiency and reliability of power delivery?

EESL Response to queries (b) and (c): The Ministry of Power may please respond.

Question Number: U2385

Sent Date: 6th Aug 2024

Sub: MOST URGENT: Rajya Sabha Admit No. U2385 Implementation of Gram Ujala Scheme dated for 12.08.2024 – reg

(a) Whether the Government has implemented the Gram Ujala Scheme and, if so, the details thereof;

Answer: Gram UJALA program was launched by the then Hon'ble Minister of Power, New and Renewable Energy in Bihar at Arrah District on 19th March 2021 and in Uttar Pradesh at Varanasi District on 24th March 2021. The Gram UJALA scheme was implemented by CESL (a wholly owned subsidiary of EESL) in 5 States (Uttar Pradesh, Bihar, Andhra Pradesh, Karnataka and Telangana) of the country as a pilot initiative. The details of LED bulb distribution in the mentioned states are as follows:

Sr. No.	State	LED bulbs Distributed
1.	Uttar Pradesh	46,34,219
2.	Bihar	37,62,058
3.	Andhra Pradesh	5,59,030
4.	Telangana	5,67,380
5.	Karnataka	4,77,335
Total		**1,00,00,022**

Under this scheme, LED bulb of 7W and 12W were distributed in exchange of 60W and 100W incandescent bulb to the rural consumers. As the cost of LED bulbs was still the principal barrier to their adoption by the rural segment, the program was designed to further reduce the price barrier and make LED bulbs affordable even for rural consumers. In addition, the energy savings garnered will reduce households' electricity bills and promote sustainable development in rural areas.

(b) the names of districts identified in Tamil Nadu to include in the first phase of this scheme;
Answer: The Gram UJALA scheme by CESL has not been implemented in the state of Tamil Nadu.

(c) the steps taken by the Government to create awareness among the beneficiaries about the said scheme;
Answer: Under the Gram UJALA program, during the distribution of LED bulbs, distribution agencies carried out local-level awareness campaigns using banners, mass media campaigns, door-to-door campaigns, etc., about the benefits of using LED bulbs and the details of the Gram UJALA scheme.

(d) the time by which the said scheme is likely to be implemented by the Government?
Answer: MoP may please reply.

However, the distribution under the Gram UJALA scheme has been completed, and currently, no further distribution activity is underway by CESL.

Question Number: 273

Sent Date:14th Nov 2024

Sub: Rajya Sabha Unstarred Question Dy. No. 273 reg. SLNP Programme

a) The details of the Street Lighting National Program (SLNP) and its main features;

Response: Launched in 2015 by Hon'ble Prime Minister Shri Narendra Modi as the "Prakash Path" initiative, SLNP aims to reduce energy consumption and costs in public lighting through widespread adoption of LED street lighting across India.EESL as the implementing agency for SLNP, has installed over 13.1 million LED streetlights across urban and rural areas, resulting in an annual saving of approximately 8.8 billion kWh and reduced peak demand by 1,468 MW and saving over ₹6,178 crores for municipalities and gram panchayats annually. The program has also helped in reducing approximately 6 million tons of CO_2 emissions each year, aligning with India's commitment to mitigating climate change. The state-wise details of streetlights installed is furnished as annexure 1.

SLNP has also transformed the lighting market by reducing LED prices by 75% since its inception making them affordable for the ULBs leading to their widespread adoption even outside SLNP. EESL adopted ESCO model that relieves municipalities from upfront investment burdens. EESL makes the upfront investment and recoups it through monthly / quarterly annuities paid by the municipalities during the project duration, typically of 5/7 years, through the deemed savings accrued to them on account of reduction in energy and maintenance cost. Under SLNP, EESL also handles the maintenance of LED streetlights, ensuring over 95% uptime, which enhances public safety and reliable municipal services without burdening municipal budgets.

EESL has invested ₹3,744 crores for SLNP projects across the country.

However, EESL is facing major challenges on account of outstanding payments of ₹3,389 crores from various ULBs and Gram Panchayats with aging dues over three years. States with particularly high outstanding dues include Andhra Pradesh with ₹765 crores, Rajasthan with ₹607 crores, Uttar Pradesh with ₹476 crores, Maharashtra with ₹410 crores, Telangana with ₹323 crores, Bihar with ₹175 crores, Gujarat with ₹144 crores, and Jharkhand also with ₹144 crores. EESL is finding it difficult to service foreign loans, pay vendors, and fund further energy efficiency projects thus adversely impacting the broader objectives of India's energy transition efforts.

b) Whether the government have any proposal to replace traditional streetlights with LED lights under SLNP in Rajasthan, if so, the details thereof; and

Response: SLNP programme has already been implemented in Rajasthan. As on 7th November 2024, 10,73,238 number of streetlights have been replaced with LED streetlights by EESL under SLNP in the State of Rajasthan.

c) the work done so far in this direction, the amount of funds allocated to Rajasthan under SLNP during the last 3 years and the current year and the amount utilized therefrom?

Response: Ministry of Power may please reply.

However, as far as EESL is concerned, the government of India has not allotted any budget for the SLNP program. The programme is being implemented by EESL through its own funds (debt and equity).

Question Number: 1083

Sent Date:19th Nov 2024

Sub: FW: Lok Sabha Starred/Unstarred Question Dy. No. 1083 regarding Objectives of Ujala Scheme for answer on 28.11.2024.

a) The details of the main objectives of the UJALA Scheme and the manner in which it contributes to energy efficiency and sustainable development in the country;

Response to query (a): The UJALA scheme was inaugurated on January 5, 2015. The aim and objectives of the UJALA programme are as follows:

• To provide energy-efficient LED bulbs to domestic consumers at an affordable price.

• To increase the demand for LED lights by aggregating requirements across the country and providing economies of scale to manufacturers through regular bulk procurement, helping them reduce the cost of LED bulbs for the UJALA program and the retail segment.

• To promote the use of the most efficient lighting technology at affordable rates to domestic consumers, which benefits them by way of reduced energy bills while at the same time improving their quality of life through better illumination.

• To enhance consumer awareness of the financial and environmental benefits of using energy-efficient appliances, thus creating a market for them.

The manner in which it contributes to energy efficiency and sustainable development:

UJALA programme involves distributing LED bulbs across different states in India. To date, EESL has distributed 36.87 crore LEDs across the country, leading to about 4800 crore kWh (units) of energy saved per year, Rs. 19,153 crore monetary savings per year, avoided peak demand of 9,586 MW and reduced 3.9 crore tonnes of CO2 emissions per year.

Further, LED bulbs contribute to energy efficiency and sustainable development by significantly reducing energy consumption in lighting. They have a longer lifespan, reducing the need for frequent replacements. LEDs also have a lower carbon footprint since they consume less electricity, leading to fewer emissions. Additionally, they contain no toxic materials, such as mercury, found in CFLs, making them safer for disposal and reducing environmental pollution. Overall, LEDs provide a sustainable, energy-efficient lighting solution that supports environmental goals.

b) The total number of LED bulbs distributed under the said Scheme so far in the State of Maharashtra and the overall energy savings achieved;

Response to query (b): The total number of LED bulbs distributed in the State of Maharashtra under the UJALA scheme is 2.2 crore, and overall energy savings achieved in the State is about 286 crore kWh (units).

c) The manner in which the Government ensure the quality and durability of the LED bulbs distributed under the UJALA Scheme and is there a mechanism for addressing complaints from consumers;

Response to query (c): EESL procurements conform to BIS specification IS 16102 for LED Bulbs to ensure that the quality and durability of LED bulbs are not compromised. To ensure the quality of the LED Bulbs, EESL retains a certain percentage of the contract value as a Bank Guarantee for the entire warranty period. In addition to the above, EESL follows the following approaches to ensure that the quality of LED bulbs is not compromised. The same is as under:

(1) Bidding Stage: The prospective bidders are required to provide, along with their bid documents, the following test reports from National Accreditation Board of Laboratories (NABL) accredited labs. They are:

(i) LM-79 test reports that ensure that all technical specifications of EESL are met

(ii) LM-80 test reports for LED chip that ensures that LED chips are of high quality and their lumens do not depreciate over time

(iii) Photo-biological test that ensures that the light quality is maintained and there is no health hazard

(2) Pre-dispatch: Before the dispatch of a lot from the manufacturing facility, the lot is tested at the manufacturer's facilities, which is called Pre-Dispatch Inspection. During the pre-dispatch inspection, an authorised third party tests major parameters, and clearance for dispatch is given only when the test parameters are within an acceptable range.

Further, there are multiple mechanisms for addressing consumer complaints, which are live in the form of the following avenues:

- Toll-free numbers for complaints: 08366670840, 08363520500 (7:00 AM to 11:00 PM) · Email: helpline@eesl.co.in
- Registration of complaints through the complaint handling system: https://support.eeslindia.org/
- Consumers can also raise the complaint through the mobile application available on Android and iOS named EESL Sampark
- Further, consumers can also lodge complaints through the Government of India's CPGRAMS portal with the following web link: https://pgportal.gov.in/

d) The manner in which the said scheme affected electricity consumption patterns in households and details of the reduction in average household energy bills;

Response to query (d): With the UJALA scheme, it is estimated that the total annual reduction in consumers' electricity bills is Rs. 19,153 Cr (@price of Rs 4/unit). As the program has led to replacing traditional incandescent bulbs and CFLs with energy-efficient LED bulbs in households, it significantly reduces lighting-related electricity consumption by nearly 75%. Lighting, which previously accounted for around 26% of

residential electricity use, also saw a marked decline in energy demand due to the adoption of LEDs.

Further, as per an independent study by TERI, the switch to LED bulbs significantly reduced household electricity bills, wherein the annual savings for a household averaged between ₹1,300–₹1,818. In addition to the monetary savings, it is also pertinent to mention the enhanced affordability of buying an LED bulb over the years, wherein its price decreased from ₹400 in 2014 to ₹70 by 2018, making them accessible to lower-income households.

e) The total financial outlay for the said scheme and how is it funded by the Government?

Response to query (e): The Ministry of Power may please reply.

However, as far as EESL is concerned, the Government of India has not allotted any budget for the UJALA Scheme. EESL is implementing the programme through its own funds (debt and equity).

f) whether the Government plans for expanding the said scheme to include other energy-efficient products such as LED tube lights and fans and if so, the details thereof; and

Response to query (f): EESL is already distributing energy-efficient tube lights, and BEE 5-star rated energy-efficient BLDC fans are already being provided. So far, EESL has distributed 77 lakh LED tube lights and 24 lakh energy-efficient fans.

g) the details of other mechanisms adopted to track the success of the said scheme in terms of energy savings and consumer satisfaction?

Response to query (g): The mechanisms adopted for tracking the success of the scheme are evident through the fact that the details of EESL's UJALA scheme are already available in the public domain through a live dashboard (https://www.ujala.gov.in) relaying the state-wise details of LED bulb distribution, energy saved, peak demand avoided, annual cost savings and annual carbon emission reduction that exemplifies EESL's contribution towards sustainability and achieving our goals to combat the climate change.

Further, it is to bring it to notice that various third parties conduct impact assessment studies on EESL's UJALA programme in terms of tracking its success, energy savings and consumer satisfaction and one of recent studies by TERI shows the UJALA scheme has created a massive positive impact.

Question Number: 1339

Sent Date: 21st Nov 2024

Sub: Lok Sabha Starred Question Dy. No. 1339 reg. Guidelines for EV Charging Infrastructure for answer on 28.11.2024.

a). The details of the "Guidelines for Installation and Operation of Electric Vehicle Charging Infrastructure 2024" issued to support nationwide connected EV charging infrastructure.

Response: MoP may please reply.

b). The number of charging stations to be set up added in the coming years.

Response: MoP may please reply. However, inputs pertaining to CESL are as under:

CESL has signed MOU with different Govt authorities such as DDA (Delhi Development Authority), GEDA (Goa Energy Development Authority) and MCF (Municipal Corporation Faridabad). Under these MOU, CESL will likely setup around 100 EV Chargers in the near future.

c). The status of EV charging infrastructure in Rajasthan?

Response: MoP may please reply. However, so far as CESL is concerned, CESL has not signed any MoU/Agreement with any entity in Rajasthan to establish EV charging infrastructure in the state.

This has been issued with the approval of the competent authority.

Question Number: 1260

Sent Date: 22nd Nov 2024

Sub: Provisionally Admitted Starred Question in Rajya Sabha Dy No. 1260 regarding National Electric Bus Programme-Seeking Inputs -Reg

a) Whether it is a fact that the Convergence Energy Services Limited (CESL) has been mandated by the Niti Aayog and MoRTH to deploy 50,000 nos. of electric vehicles under NEBP.

Response to query (a):

1) NEBP was an initial program launched by CESL to promote electric bus adoption in India. The Government of India (GoI) has launched the PM-eBus Sewa and PM Electric Drive Revolution in Innovative Vehicle Enhancement (PM E-DRIVE) Scheme, under which GoI is providing financial assistance to states to increase the adoption of electric buses. Ministry of Heavy Industries (MHI) vide Gazette notification dated June 11, 2021, nominated Energy Efficiency Services Limited (EESL) to aggregate demand for E-Buses under FAME-II in 9 major cities having populations of over 4 million (Mumbai, Delhi, Bangalore, Hyderabad, Ahmedabad, Chennai, Kolkata, Surat, and Pune).

2) Accordingly, CESL floated the Grand Challenge (GC) tender and aggregated demand of 5,450 nos. of eBuses from five cities. Following the success of the Grand Challenge (GC), CESL has been advised by NITI Aayog and MoRTH (both correspondence attached for ready reference) to scale up the GCC model for the deployment of 50,000 nos of electric buses. CESL was nominated as the Program Manager for aggregating demand, ensuring the deployment of 50,000 e-buses, and extending the program to the rest of the cities in India. Accordingly, CESL, as a Project Manager, aggregated the demand under the National Electric Bus Program (NEBP) and floated the tenders.

3) The GoI approved the PM-eBus Sewa scheme on 16 August 2023. The scheme aims to augment urban bus operations by providing central assistance of ₹20,000 Crores to deploy 10,000 electric buses in 169 cities. The administrative Ministry for this scheme is the Ministry of Housing and Urban Affairs (MoHUA). CESL has been mandated to float the centralised tender under the scheme.

4) The Ministry of Heavy Industries (MHI) has approved the PM E-DRIVE Scheme vide Gazette Notification S.O. 4259 (E) dated 29th September 2024. Further, under this Scheme, MHI has allocated an outlay of ₹4,391 Crores for the rollout of 14,028 Electric Buses. Initially, nine cities with a population of more than 40 Lakhs, i.e., Ahmedabad, Bangalore, Chennai, Delhi, Hyderabad, Kolkata, Mumbai, Pune and Surat, will be targeted. CESL has been mandated to aggregate and float the centralised electric tender under the scheme. Correspondence from NITI Aayog [Annexure A (i and ii)] and MHI Gazette notification (Annexure B) are attached for ready reference.

(b) If so, the details thereof and the distribution of Electric buses in the country, state-wise;

Response to query (b): CESL is the bid processing agency and administers the bids as per the guidelines of the Schemes formulated by the Ministry of Housing and Urban Affairs (MoHUA)/ Ministry of Heavy Industries (MHI). Currently, CESL had floated the electric

bus tenders through Grand Challenge, NEBP, and PM-eBus Sewa Scheme. Details of the tenders:

1) Grand Challenge (GC) tender:

i. CESL, vide its Grand Challenge Document, floated an Expression of Interest (EOI) seeking interest from nine cities (with a population of 4 million plus population) in September 2021 under the FAME India II scheme. The same was communicated to all the nine cities. A total demand for e-buses of 5,450 was received from five cities (Delhi, Kolkata, Bengaluru, Hyderabad, and Surat) under the Gross Cost Contract (GCC) model.

2) National Electrical Bus Program (NEBP) – 1 tender:

i. CESL invited demand for e-buses through EoI in July 2022 from Public State Transport Undertakings (STU), Transport Corporations, Special Purpose Vehicle / Transport Authorities engaged in public transport operations.

ii. Accordingly, CESL concluded the first tender under NEBP by aggregating a total demand of 6,465 e-buses across 6 Indian states/cities/ State Transport Undertakings (Delhi, Haryana, Telangana, Surat, Arunachal Pradesh, Kerala) on a GCC or wet lease model without the benefit of the FAME subsidy.

3) PM-eBus Sewa Scheme:

i. The government of India has approved the PM-eBus Sewa scheme to augment city bus operations. The scheme's administrative Ministry is the Ministry of Housing and Urban Affairs (MoHUA), and 10,000 e-buses will be deployed on a public-private partnership (PPP) model in 169 cities. CESL has been mandated as the central tendering agency under the PM-eBus Sewa Scheme.

ii. Awards for 1310 nos. of buses under PM-eBus Sewa tender-1 have been placed.

iii. The bid for 4,588 buses for 13 states and 2 UTs is currently live.

iv. Under Phases 1 and 2, a demand for 6,518 electric buses was received. The Phase 2 tender for 4,588 electric buses is currently live.

4) PM E-DRIVE Scheme:

i. The scheme plans to roll out 14,028 electric buses. Nine cities with a population of more than 40 Lakhs, namely Ahmedabad, Bangalore, Chennai, Delhi, Hyderabad, Kolkata, Mumbai, Pune, and Surat, will be targeted initially. CESL has been mandated to aggregate and float the centralised electric tender under the scheme.

ii. CESL has issued the Expression of Interest (EoI) under the PM E-DRIVE Scheme on November 13, 2024, for aggregating the demand from the nine cities initially, i.e., Ahmedabad, Bangalore, Chennai, Delhi, Hyderabad, Kolkata, Mumbai, Pune and Surat.

(c) Whether the union government has allocated any financial assistance to the largest public operator, The Tamil Nadu State Transport Corporation, which operates 20,258 diesel buses and 18 million commuters every day;

Response to query (c): MoRTH may please reply. However, as far as EESL/ CESL is concerned, the response is as follows:

i. Under the FAME-II scheme of MHI (GoI), maximum demand incentives amounting to Rs. 55 lahks for standard buses, 45 lahks for midi buses and 34 lahks for mini buses were paid to Original Equipment Manufacturers (OEM) through cities/states. CESL aggregated demand from 9 cities (with 4 million plus population) under the Grand Challenge scheme, including Chennai (Tamil Nadu). However, no demand was received from Chennai (Tamil Nadu).

ii. The PM-eBus Sewa Scheme, MoHUA, GoI, shall provide Central Assistance for eBuses in Urban areas on a per-kilometre (km) basis for 10 years. Central Assistance of ₹20, ₹22 and ₹24/ km is provided for mini, midi and standard buses, respectively. Under the PM-eBus Sewa Scheme, 900 nos. of electric buses have been allocated to 11 cities of Tamil Nadu (Coimbatore, Madurai, Tiruchirappalli, Erode, Selam, Tiruppur, Ambattur, Avadi, Thoothukkudi, Tirunelveli and Vellore).

iii. PM E-DRIVE Scheme envisages an outlay of ₹4,391 crores for the rollout of 14,028 e-buses in India. CESL has issued the Expression of Interest (EoI) under the PM E-DRIVE Scheme for aggregating the electric buses initially from the nine cities (Mumbai, Delhi, Bangalore, Hyderabad, Ahmedabad, Chennai, Kolkata, Surat, and Pune) with 40+ Lakh population under the PM E-DRIVE Scheme for the deployment of Buses. Chennai, Tamil Nadu is also included in the Scheme. The grant for e-buses will be released to STUs by MHI as per the PM E-DRIVE scheme guidelines. EoI for aggregation of demand is currently live, and the last date of submission of demand by cities is 25th Dec 2024. The maximum incentive to be provided to the Original Equipment Manufacturers (OEMs)/operator through cities is Rs. 35 lahks for standard buses, 25 lahks for midi buses and 20 lahks for mini buses.

(d) If so the details thereof and financial assistance provided in the past 5 years?

Response to query (d): MoRTH, may please reply. However, as far as EESL/ CESL is concerned, the response is as follows:

i) CESL floated the Electric bus tenders through the Grand Challenge (GC) and the National Electric Bus Program (NEBP). Under the GC tender, Chennai did not submit any requirements for e-buses against the EOI floated by CESL. Under the NEBP, Tamil Nadu State also did not submit any requirements.

ii) Under the PM-eBus Sewa Scheme, 900 buses have been allocated to 11 cities in Tamil Nadu, but no demand has yet been received. Chennai is covered under the PM E-DRIVE Scheme for bus deployment.

iii) Moreover, CESL is the bid processing agency and administers the bids according to the guidelines of the schemes formulated by the concerned ministries. Therefore, the issue of financial assistance, based on the demand received by the respective city, lies within the domain of the concerned Ministry.

Question Number: 1434

Sent Date: 21st Nov 2024

Sub: Inputs on Provisionally Admitted Unstarred question Dy. No. 1434 for answer on 29.11.2024 regarding Industrial Parks and large scale commercial industries in Telangana

a) Whether any Industrial Parks and large scale commercial industries are being set up inTelangana to boost trade and mitigate unemployment;
b) If yes, details thereof;
c) Is there a report of Telangana Government's financial progress in terms ofcommerce/industry since 2023?

Mail Response: - Dear Sir,
W.r.t. the trailing email, this is for your kind information that the matter doesn't pertain to EESL, and thereby, the inputs from our end may be treated as NIL.

Question Number: 266

Sent Date: 22nd Nov 2024

Sub: Rajya Sabha Admitted Unstarred Question no. 266 in Rajya Sabha regarding National Electric Bus Programme-Seeking Inputs -Reg

1) NEBP was an initial program launched by CESL to promote electric bus adoption in India. The Government of India (GoI) has launched the PM-eBus Sewa and PM Electric Drive Revolution in Innovative Vehicle Enhancement (PM E-DRIVE) Scheme, under which GoI is providing financial assistance to states to increase the adoption of electric buses. Ministry of Heavy Industries (MHI) vide Gazette notification dated June 11, 2021, nominated Energy Efficiency Services Limited (EESL) to aggregate demand for E-Buses under FAME-II in 9 major cities having populations of over 4 million (Mumbai, Delhi, Bangalore, Hyderabad, Ahmedabad, Chennai, Kolkata, Surat, and Pune).

2) Accordingly, CESL floated the Grand Challenge (GC) tender and aggregated demand of 5,450 nos. of eBuses from five cities. Following the success of the Grand Challenge (GC), CESL has been advised by NITI Aayog and MoRTH (both correspondence attached for ready reference) to scale up the GCC model for the deployment of 50,000 nos of electric buses. CESL was nominated as the Program Manager for aggregating demand, ensuring the deployment of 50,000 e-buses, and extending the program to the rest of the cities in India. Accordingly, CESL, as a Project Manager, aggregated the demand under the National Electric Bus Program (NEBP) and floated the tenders.

3) The GoI approved the PM-eBus Sewa scheme on 16 August 2023. The scheme aims to augment urban bus operations by providing central assistance of ₹20,000 Crores to deploy 10,000 electric buses in 169 cities. The administrative Ministry for this scheme is the Ministry of Housing and Urban Affairs (MoHUA). CESL has been mandated to float the centralised tender under the scheme.

4) The Ministry of Heavy Industries (MHI) has approved the PM E-DRIVE Scheme vide Gazette Notification S.O. 4259 (E) dated 29th September 2024. Further, under this Scheme, MHI has allocated an outlay of ₹4,391 Crores for the rollout of 14,028 Electric Buses. Initially, nine cities with a population of more than 40 Lakhs, i.e., Ahmedabad, Bangalore, Chennai, Delhi, Hyderabad, Kolkata, Mumbai, Pune and Surat, will be targeted. CESL has been mandated to aggregate and float the centralised electric tender under the scheme. Correspondence from NITI Aayog [Annexure A (i and ii)] and MHI Gazette notification (Annexure B) are attached for ready reference.

(b) If so, the details thereof and the distribution of Electric buses in the country, state-wise;

Response to query (b): CESL is the bid processing agency and administers the bids as per the guidelines of the Schemes formulated by the Ministry of Housing and Urban Affairs (MoHUA)/ Ministry of Heavy Industries (MHI). Currently, CESL had floated the electric bus tenders through Grand Challenge, NEBP, and PM-eBus Sewa Scheme. Details of the tenders:

i. The government of India has approved the PM-eBus Sewa scheme to augment city bus operations. The scheme's administrative Ministry is the Ministry of Housing and Urban Affairs (MoHUA), and 10,000 e-buses will be deployed on a public-private partnership (PPP) model in 169 cities. CESL has been mandated as the central tendering agency under the PM-eBus Sewa Scheme.
1) Grand Challenge (GC) tender:

i. CESL, vide its Grand Challenge Document, floated an Expression of Interest (EOI) seeking interest from nine cities (with a population of 4 million plus population) in September 2021 under the FAME India II scheme. The same was communicated to all the nine cities. A total demand for e-buses of 5,450 was received from five cities (Delhi, Kolkata, Bengaluru, Hyderabad, and Surat) under the Gross Cost Contract (GCC) model.

2) National Electrical Bus Program (NEBP) – 1 tender:

i. CESL invited demand for e-buses through EoI in July 2022 from Public State Transport Undertakings (STU), Transport Corporations, Special Purpose Vehicle / Transport Authorities engaged in public transport operations.

ii. Accordingly, CESL concluded the first tender under NEBP by aggregating a total demand of 6,465 e-buses across 6 Indian states/cities/ State Transport Undertakings (Delhi, Haryana, Telangana, Surat, Arunachal Pradesh, Kerala) on a GCC or wet lease model without the benefit of the FAME subsidy.

3) PM-eBus Sewa Scheme:

ii. Awards for 1310 nos. of buses under PM-eBus Sewa tender-1 have been placed.

iii. The bid for 4,588 buses for 13 states and 2 UTs is currently live.

iv. Under Phases 1 and 2, a demand for 6,518 electric buses was received. The Phase 2 tender for 4,588 electric buses is currently live.

4) PM E-DRIVE Scheme:

i. The scheme plans to roll out 14,028 electric buses. Nine cities with a population of more than 40 Lakhs, namely Ahmedabad, Bangalore, Chennai, Delhi, Hyderabad, Kolkata, Mumbai, Pune, and Surat, will be targeted initially. CESL has been mandated to aggregate and float the centralised electric tender under the scheme.

ii. CESL has issued the Expression of Interest (EoI) under the PM E-DRIVE Scheme on November 13, 2024, for aggregating the demand from the nine cities initially, i.e., Ahmedabad, Bangalore, Chennai, Delhi, Hyderabad, Kolkata, Mumbai, Pune and Surat.

(c) Whether the union government has allocated any financial assistance to the largest public operator, The Tamil Nadu State Transport Corporation, which operates 20,258 diesel buses and 18 million commuters every day;

Response to query (c): MoRTH may please reply. However, as far as EESL/ CESL is concerned, the response is as follows:

i. Under the FAME-II scheme of MHI (GoI), maximum demand incentives amounting to Rs. 55 lahks for standard buses, 45 lahks for midi buses and 34 lahks for mini buses were paid to Original Equipment Manufacturers (OEM) through cities/states. CESL aggregated demand from 9 cities (with 4 million plus population) under the Grand Challenge scheme, including Chennai (Tamil Nadu). However, no demand was received from Chennai (Tamil Nadu).

ii. The PM-eBus Sewa Scheme, MoHUA, GoI, shall provide Central Assistance for eBuses in Urban areas on a per-kilometre (km) basis for 10 years. Central Assistance of ₹20, ₹22 and ₹24/ km is provided for mini, midi and standard buses, respectively. Under the PM-eBus Sewa Scheme, 900 nos. of electric buses have been allocated to 11 cities of Tamil Nadu (Coimbatore, Madurai, Tiruchirappalli, Erode, Selam, Tiruppur, Ambattur, Avadi, Thoothukkudi, Tirunelveli and Vellore).

iii. PM E-DRIVE Scheme envisages an outlay of ₹4,391 crores for the rollout of 14,028 e-buses in India. CESL has issued the Expression of Interest (EoI) under the PM E-DRIVE Scheme for aggregating the electric buses initially from the nine cities (Mumbai, Delhi, Bangalore, Hyderabad, Ahmedabad, Chennai, Kolkata, Surat, and Pune) with 40+ Lakh population under the PM E-DRIVE Scheme for the deployment of Buses. Chennai, Tamil Nadu is also included in the Scheme. The grant for e-buses will be released to STUs by MHI as per the PM E-DRIVE scheme guidelines. EoI for aggregation of demand is currently live, and the last date of submission of demand by cities is 25th Dec 2024. The maximum incentive to be provided to the Original Equipment Manufacturers (OEMs)/operator through cities is Rs. 35 lahks for standard buses, 25 lahks for midi buses and 20 lahks for mini buses.

(d) If so the details thereof and financial assistance provided in the past 5 years?

Response to query (d): MoRTH, may please reply. However, as far as EESL/ CESL is concerned, the response is as follows:

i) CESL floated the Electric bus tenders through the Grand Challenge (GC) and the National Electric Bus Program (NEBP). Under the GC tender, Chennai did not submit any requirements for e-buses against the EOI floated by CESL. Under the NEBP, Tamil Nadu State also did not submit any requirements.

ii) Under the PM-eBus Sewa Scheme, 900 buses have been allocated to 11 cities in Tamil Nadu, but no demand has yet been received. Chennai is covered under the PM E-DRIVE Scheme for bus deployment.

iii) Moreover, CESL is the bid processing agency and administers the bids according to the guidelines of the schemes formulated by the concerned ministries. Therefore, the issue of financial assistance, based on the demand received by the respective city, lies within the domain of the concerned Ministry.

Question Number: 1271

Sent Date: 25th Nov 2024

Sub: Rajya Sabha Unstarred Question Dy. No. 1271 reg. Street Lighting National Programme (SLNP).

a). The details and salient features of the Street Lighting National Program (SLNP);

Response: Launched in 2015 by Hon'ble Prime Minister Shri Narendra Modi as the "Prakash Path" initiative, SLNP aims to reduce energy consumption and costs in public lighting through widespread adoption of LED street lighting across India.

EESL as the implementing agency for SLNP, has installed over 13.1 million LED streetlights across urban and rural areas, resulting in an annual saving of approximately 8.8 billion kWh and reduced peak demand by 1,468 MW and saving over ₹6,178 crores for municipalities and gram panchayats annually. The program has also helped in reducing approximately 6 million tons of CO_2 emissions each year, aligning with India's commitment to mitigating climate change. The state-wise details of streetlights installed is furnished as Annexure-I.

SLNP has also transformed the lighting market by reducing LED prices by 75% since its inception making them affordable for the ULBs leading to their widespread adoption even outside SLNP.

EESL adopted ESCO model that relieves municipalities from upfront investment burdens. EESL makes the upfront investment and recoups it through monthly / quarterly annuities paid by the municipalities during the project duration, typically of 5/7 years, through the deemed savings accrued to them on account of reduction in energy and maintenance cost. Under SLNP, EESL also handles the maintenance of LED streetlights, ensuring over 95% uptime, which enhances public safety and reliable municipal services without burdening municipal budgets.

EESL has invested ₹3,744 crores for SLNP projects across the country.

However, EESL is facing major challenges on account of outstanding payments of ₹3,389 crores from various ULBs and Gram Panchayats with aging dues over three years. States with particularly high outstanding dues include Andhra Pradesh with ₹765 crores, Rajasthan with ₹607 crores, Uttar Pradesh with ₹476 crores, Maharashtra with ₹410 crores, Telangana with ₹323 crores, Bihar with ₹175 crores, Gujarat with ₹144 crores, and Jharkhand also with ₹144 crores.

EESL is finding it difficult to service foreign loans, pay vendors, and fund further energy efficiency projects thus adversely impacting the broader objectives of India's energy transition efforts.

b) Whether the government have any proposal to replace conventional streetlights with LED lights in Bihar under SLNP;

Response: SLNP programme has already been implemented in Bihar. As on 20th November 2024, 5,75,922 number of streetlights have been replaced with LED streetlights by EESL under SLNP in the State of Bihar.

c) If so, the details thereof along with work done so far in this regard; and

Response: The ULB wise details of SLNP programme Implementation done in the state of Bihar is attached as Annex-II.

d) the quantum of funds allocated and utilized under SLNP for Bihar during the last 3 years and the current year and the amount utilized therefrom?

Response: Ministry of Power may please reply.

However, as far as EESL is concerned, the government of India has not allotted any budget for the SLNP program. The program is being implemented by EESL through its own funds (debt and equity).

Question Number: 482

Sent Date: 25th Nov 2024

Sub: LSPQ No 482 for reply on 28-11-2024 regarding Objectives of UJALA Scheme

a) The details of the main objectives of the UJALA Scheme and the manner in which it contributes to energy efficiency and sustainable development in the country;

Response to query (a): The UJALA scheme was inaugurated on January 5, 2015. The aim and objectives of the UJALA programme are as follows:

• To provide energy-efficient LED bulbs to domestic consumers at an affordable price.

• To increase the demand for LED lights by aggregating requirements across the country and providing economies of scale to manufacturers through regular bulk procurement, helping them reduce the cost of LED bulbs for the UJALA program and the retail segment.

• To promote the use of the most efficient lighting technology at affordable rates to domestic consumers, which benefits them by way of reduced energy bills while at the same time improving their quality of life through better illumination.

• To enhance consumer awareness of the financial and environmental benefits of using energy-efficient appliances, thus creating a market for them.

The manner in which it contributes to energy efficiency and sustainable development:

UJALA programme involves distributing LED bulbs across different states in India. To date, EESL has distributed 36.87 crore LEDs across the country, leading to about 4800 crore kWh (units) of energy saved per year, Rs. 19,153 crore monetary savings per year, avoided peak demand of 9,586 MW and reduced 3.9 crore tonnes of CO2 emissions per year.

Further, LED bulbs contribute to energy efficiency and sustainable development by significantly reducing energy consumption in lighting. They have a longer lifespan, reducing the need for frequent replacements. LEDs also have a lower carbon footprint since they consume less electricity, leading to fewer emissions. Additionally, they contain no toxic materials, such as mercury, found in CFLs, making them safer for disposal and reducing environmental pollution. Overall, LEDs provide a sustainable, energy-efficient lighting solution that supports environmental goals.

b) The total number of LED bulbs distributed under the said Scheme so far in the State of Maharashtra and the overall energy savings achieved;

Response to query (b): The total number of LED bulbs distributed in the State of Maharashtra under the UJALA scheme is 2.2 crore, and overall energy savings achieved in the State is about 286 crore kWh (units).

c) The manner in which the Government ensure the quality and durability of the LED bulbs distributed under the UJALA Scheme and is there a mechanism for addressing complaints from consumers;

Response to query (c): EESL procurements conform to BIS specification IS 16102 for LED Bulbs to ensure that the quality and durability of LED bulbs are not compromised. To ensure the quality of the LED Bulbs, EESL retains a certain percentage of the contract value as a Bank Guarantee for the entire warranty period. In addition to the above, EESL follows the following approaches to ensure that the quality of LED bulbs is not compromised. The same is as under:

(1) Bidding Stage: The prospective bidders are required to provide, along with their bid documents, the following test reports from National Accreditation Board of Laboratories (NABL) accredited labs. They are:

(i) LM-79 test reports that ensure that all technical specifications of EESL are met

(ii) LM-80 test reports for LED chip that ensures that LED chips are of high quality and their lumens do not depreciate over time

(iii) Photo-biological test that ensures that the light quality is maintained and there is no health hazard

(2) Pre-dispatch: Before the dispatch of a lot from the manufacturing facility, the lot is tested at the manufacturer's facilities, which is called Pre-Dispatch Inspection. During the pre-dispatch inspection, an authorised third party tests major parameters, and clearance for dispatch is given only when the test parameters are within an acceptable range.

Further, there are multiple mechanisms for addressing consumer complaints, which are live in the form of the following avenues:

- Toll-free numbers for complaints: 08366670840, 08363520500 (7:00 AM to 11:00 PM) · Email: helpline@eesl.co.in

- Registration of complaints through the complaint handling system: https://support.eeslindia.org/

- Consumers can also raise the complaint through the mobile application available on Android and iOS named EESL Sampark

- Further, consumers can also lodge complaints through the Government of India's CPGRAMS portal with the following web link: https://pgportal.gov.in/

d) The manner in which the said scheme affected electricity consumption patterns in households and details of the reduction in average household energy bills;

Response to query (d): With the UJALA scheme, it is estimated that the total annual reduction in consumers' electricity bills is Rs. 19,153 Cr (@price of Rs 4/unit). As the

program has led to replacing traditional incandescent bulbs and CFLs with energy-efficient LED bulbs in households, it significantly reduces lighting-related electricity consumption by nearly 75%. Lighting, which previously accounted for around 26% of residential electricity use, also saw a marked decline in energy demand due to the adoption of LEDs.

Further, as per an independent study by TERI, the switch to LED bulbs significantly reduced household electricity bills, wherein the annual savings for a household averaged between ₹1,300–₹1,818. In addition to the monetary savings, it is also pertinent to mention the enhanced affordability of buying an LED bulb over the years, wherein its price decreased from ₹400 in 2014 to ₹70 by 2018, making them accessible to lower-income households.

e) The total financial outlay for the said scheme and how is it funded by the Government?

Response to query (e): The Ministry of Power may please reply.

However, as far as EESL is concerned, the Government of India has not allotted any budget for the UJALA Scheme. EESL is implementing the programme through its own funds (debt and equity).

f) whether the Government plans for expanding the said scheme to include other energy-efficient products such as LED tube lights and fans and if so, the details thereof; and

Response to query (f): EESL is already distributing energy-efficient tube lights, and BEE 5-star rated energy-efficient BLDC fans are already being provided. So far, EESL has distributed 77 lakh LED tube lights and 24 lakh energy-efficient fans.

g) the details of other mechanisms adopted to track the success of the said scheme in terms of energy savings and consumer satisfaction?

Response to query (g): The mechanisms adopted for tracking the success of the scheme are evident through the fact that the details of EESL's UJALA scheme are already available in the public domain through a live dashboard (https://www.ujala.gov.in) relaying the state-wise details of LED bulb distribution, energy saved, peak demand avoided, annual cost savings and annual carbon emission reduction that exemplifies EESL's contribution towards sustainability and achieving our goals to combat the climate change.

Further, it is to bring it to notice that various third parties conduct impact assessment studies on EESL's UJALA programme in terms of tracking its success, energy savings and consumer satisfaction and one of recent studies by TERI shows the UJALA scheme has created a massive positive impact.

Annexure-1:

S. No.	States & UTs	No. of LEDs bulbs Distributed	Annual Energy Saving (in Crore Units)
1	Andaman Nicobar	400,000	5.2
2	Andhra Pradesh	2,20,40,227	286.2
3	Arunachal Pradesh	4,99,498	6.5
4	Assam	71,92,072	93.4
5	Bihar	1,96,08,609	254.7
6	Chandigarh #	5,54,283	7.2
7	Chhattisgarh	1,08,22,335	140.5
8	Dadra & Nagar Haveli	1,63,808	2.1
9	Daman & Diu	1,42,623	1.9
10	Delhi #	1,34,31273	174.4
11	Goa	10,05,890	13.1
12	Gujarat	4,14,48,713	538.3
13	Haryana	1,56,08,119	202.7
14	Himachal Pradesh	86,48,483	112.3
15	Jammu and Kashmir	84,86,579	110.2
16	Jharkhand	1,36,45,874	177.2
17	Karnataka	2,42,64,486	315.1
18	Kerala	1,54,29,919	200.4
19	Ladakh #	2,30,630	3.0
20	Lakshadweep	2,00,000	2.6
21	Madhya Pradesh	1,75,74,110	228.2
22	**Maharashtra**	**2,19,86,569**	**285.5**
23	Manipur	2,99,934	3.9
24	Meghalaya	4,33,789	5.6
25	Mizoram	6,15,332	8.0
26	Nagaland	10,99,038	14.3
27	Odisha #	5,22,70,570	678.8
28	Puducherry	6,09,251	7.9
29	Punjab	30,16,739	39.2
30	Rajasthan	1,73,21,034	224.9
31	Sikkim	1,64,000	2.1
32	Tamil Nadu	43,63,183	56.7
33	Telangana	28,75,082	37.3
34	Tripura	10,54,437	13.7
35	Uttar Pradesh	2,62,95,772	341.5
36	Uttarakhand	56,73,850	73.7
37	West Bengal #	92,29,228	119.9
Total		**36,87,05,340**	**4788.3**

Question Number: 2274

Sent Date: 26th Nov 2024

Sub: Provisionally admitted Lok Sabha Unstarred Qn. Dy no. 2274 titled "Air Pollution in Urban Centres" for reply on 02.12.2024-reg.

(a) Whether the Government has taken recent initiatives to address air pollution in urban centers specially in Delhi NCR area and the effectiveness of these measures in improving air quality;

Response – MoP / MoEFCC may please reply.

(b) Whether the Government is considering new policies to encourage electric vehicle adoption and reduce vehicular emissions;

Response: MoP / MoEFCC may please reply.

However as per the information available with CESL, the government has introduced the following initiatives / schemes to promote the adoption of electric vehicles and reduce vehicular emissions:

(a) PM e-Buses Sewa: Deployment of 10,000 electric buses across 169 cities in India.

(b) PM e-Drive Scheme: Provision of subsidies for electric two-wheelers, three-wheelers, e-ambulances, and e-trucks to accelerate the transition to sustainable transportation.

(c) the steps taken by the Commission for Air Quality Management (CAQM) to improve air quality in the National Capital Region and adjoining areas;

Response – MoP / MoEFCC may please reply.

(d) the goals set by the Commission and the present status thereof;

Response – MoP / MoEFCC may please reply.

(e) the current progress of the National Clean Air Programmer (NCAP) and its impact on air quality levels in major cities; and

Response – MoP / MoEFCC may please reply.

(f) the future targets and steps to strengthen environmental protection and mitigate climate change impacts across the country?

Response – MoP / MoEFCC may please reply.

Question Number: 793

Sent Date: 26th Nov 2024

Sub: Rajya Sabha Provisionally admitted Unstarred Question Dy No.793 to be answered on 02/12/2024 regarding "Street Lighting National Programme in Bihar and Tamil Nadu".

(a) the details and salient features of the Street Lighting National Programme (SLNP);

Response to query (a): Launched in 2015 by Hon'ble Prime Minister Shri Narendra Modi as the "Prakash Path" initiative, SLNP aims to reduce energy consumption and costs in public lighting through the widespread adoption of LED street lighting across India.

EESL, as the implementing agency for SLNP, has installed over 13.1 million LED streetlights across urban and rural areas, resulting in an annual saving of approximately 8.8 billion kWh and reduced peak demand by 1,468 MW and saving over ₹6,178 crore for municipalities and gram panchayats annually. The program has also helped reduce approximately 6 million tons of CO_2 emissions annually, aligning with India's commitment to mitigating climate change. The state-wise details of the streetlights installed are furnished as Annexure-1.

SLNP has also transformed the lighting market by reducing LED prices by 75% since its inception, making them affordable for ULBs and leading to widespread adoption even outside SLNP.

EESL adopted the ESCO model, which relieves municipalities of upfront investment burdens. EESL makes the upfront investment and recoups it through monthly/quarterly annuities paid by the municipalities during the project duration, typically of 5/7 years, through the deemed savings accrued to them on account of reduced energy and maintenance costs. Under SLNP, EESL also handles the maintenance of LED streetlights, ensuring over 95% uptime, which enhances public safety and reliable municipal services without burdening municipal budgets.

EESL has invested ₹3,744 crores for SLNP projects across the country.

However, EESL is facing significant challenges due to outstanding payments of ₹3,389 crores from various ULBs and Gram Panchayats with ageing dues over three years. States with exceptionally high outstanding dues include Andhra Pradesh with ₹765 crores, Rajasthan with ₹607 crores, Uttar Pradesh with ₹476 crores, Maharashtra with ₹410 crores, Telangana with ₹323 crores, Bihar with ₹175 crores, Gujarat with ₹144 crores, and Jharkhand also with ₹144 crores.

EESL is finding it challenging to service foreign loans, pay vendors, and fund further energy efficiency projects, which is adversely impacting the broader objectives of India's energy transition efforts.

(b) whether the Government has any proposal to replace conventional streetlights with LED lights in the States of Bihar and Tamil Nadu under SLNP;

Response to query (b): The SLNP programme has already been implemented in Bihar. As of November 20, 2024, a total number of 5,75,922 streetlights have been replaced with LED streetlights under SLNP in the State.

The SLNP programme has not yet been implemented in the State of Tamil Nadu by EESL. This is because SLNP is a voluntary program wherein EESL enters into agreements with ULBs (and, in most cases, a tripartite agreement involving the concerned state/ UT Governments) who express their consent and willingness to implement the program in their jurisdiction. As EESL has not received any consent from the State of Tamil Nadu to implement SLNP, thereby the program has not yet been implemented in the state.

(c) if so, the details thereof, along with work done so far in this regard;

Response to query (c): The ULB-wise details of the SLNP programme implementation in Bihar are attached in Annexure – 2.

(d) the quantum of funds allocated and utilised under SLNP for the States of Bihar and Tamil Nadu during the last three years and the current year?

Response to query (d): The Ministry of Power may please reply. However, as far as EESL is concerned, the Government of India has not allocated any budget for the SLNP program. EESL is implementing the program through its own funds (debt and equity).

Question Number: U2637

Sent Date: 28th Nov 2024

Sub: Rajya Sabha Provisional Starred/Unstarred Question Diary No. U2637 on 16.12.2024 regarding "Installation of Smart Meters" reg.

a) Whether the installation of smart meters is carried out under the Smart Meter National Programme (SMNP), if so, the number of households covered with smart meters, state-wise including district-wise, in Assam
Response to query (a): The Ministry of Power may please reply.

However, as far as EESL is concerned, it is implementing a Smart Meter Programme to replace conventional meters with smart electricity meters. This programme is being implemented on the BOOT model, where EESL is making the initial investment, and the states/ utilities pay back to EESL on a monthly rental basis. EESL has signed MoUs/ agreements for installing smart meters with the DISCOMs in Bihar, Haryana, Delhi, Rajasthan, Uttar Pradesh and UT of Andaman & Nicobar. As of November 28, 2024, EESL has installed over 40.78 lakh smart meters in above States/ UT under this programme. EESL is not implementing the smart meter's project in the State of Assam.

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

S. No. State/UT No. of Smart Meters Installed by EESL

1. Uttar Pradesh 12,04,049

2. Haryana 8,42,059

3. Bihar 17,67,951

4. Rajasthan 1,24,700

5. Andaman & Nicobar 74,961

6. Delhi 65,059

Total 40,78,779

b) Whether the Government is aware of the concerns of inflated electricity bills after the installation of smart meters across the country, if so, the steps taken by the Government in this regard;
Response to query (b): The Ministry of Power may please reply.

c) Whether the Government is aware that smart meters are installed forcibly, if so, whether the installation of smart meters is mandatory for households, if so, the details thereof?
Response to query (c): The Ministry of Power may please reply.

Question Number: S848

Sent Date: 27th Nov 2024

Sub: Rajya Sabha Starred/ Unstarred Question Dy. No. S848 reg. National Cooking Programme for answer on 09.12.204.

(a) whether the Ministry proposes to launch a National Cooking Programme;

Response to query (a): The Ministry of Power may please respond.
However, as far as EESL is concerned, the then Hon'ble Union Minister for Power and New and Renewable Energy launched the National Efficient Cooking Programme (NECP) by Energy Efficiency Services Limited (EESL) on November 2, 2023. The program aims at increasing the uptake of induction cookstoves.

(b) if so, the details thereof; and

Response to query (b): The National Efficient Cooking Programme (NECP) introduces induction-based cookstoves, offering a 25-30% cost advantage over traditional cooking methods, promising energy savings and cost-effective cooking solutions. By aggregating the demand for cleaner cooking technology like these cookstoves, EESL seeks to reduce the environmental impact of cooking methods, ensuring cleaner air and improved health for citizens. Energy Efficiency Services Limited (EESL) purchases energy-efficient induction cookstoves at a scale through a transparent bidding process and approaches States/ utilities/ originations for Business to Business (B2B) sales, and also approaches the public for direct Business-to-Customer (B2C) sales through its e-commerce portal https://eeslmart.in. So far, EESL has deployed 5,039 induction cookstoves in the country out of an order of 7,039 in the last 9 months. Now, EESL, under the National Efficient Cooking Programme (NECP), aims to deploy 1,00,000 nos. of induction cookstoves across the country in the current financial year (FY 2024-25).

(c) whether e-cooking would reduce the cost of cooking for the poor of the country?

Response to query (c): The Annual cost benefit of using e-cooking, as compared to the use of LPG for cooking, is illustrated below in table number – 1:

Tabel No-1
Sr. No. Particulars LPG Cylinder (Subsidized) Induction Cookstoves (E-Cooking)

1 Annual Cost of Cooking (INR) 6400 5357
2 Annual Saving per Consumer using e-cooking as compared to LPG for cooking (INR) 1043

Assumptions:
1. Total number of LPG cylinders required annually exclusively for cooking by a consumer – 8 Nos.
2. The number of electricity units required annually for the same amount of cooking using an induction cooker is 974 units.

3. Cost per standard LPG cylinder (INR) – 800 per refill.

Question Number: U3184, U1700, U557, S3858

Sent Date: 2nd Dec 2024

Sub: Rajya Sabha Parliament Questions for answer on 09.12.2024 -reg.

a) How many electric vehicle charging stations and other infrastructure were installed by the Union government in the last 4 years?

Response to query (a): The Ministry of Power may please reply.

However, EESL/ CESL has successfully deployed 455 public Electric Vehicle (EV) chargers across 12 states in India till date. The state-wise list of public EV chargers is mentioned below:

State	Total Chargers
Delhi	163
Maharashtra	102
Uttar Pradesh	66
Tamil Nadu	59
West Bengal	24
Kerala	18
Gujarat	12
Goa	3
Chhattisgarh	4
Haryana	2
Karnataka	1
Jharkhand	1
Grand Total	455

b) How much funds were allocated to state nodal agencies for the installation of infrastructure and promotion of the E-Vehicle?

Response to query (b): The Ministry of Power may please reply.

a) The details of the "Guidelines for installation and operation of EV charging infrastructure 2024" issued to support nationwide connected EV charging infrastructure

Response to query (a): The Ministry of Power may please reply.

bc The number of charging stations to be added in the coming years

Response to query (c): The Ministry of Power may please reply.

However, CESL has signed MOU with different Govt authorities such as DDA (Delhi Development Authority), GEDA (Goa Energy Development Authority) and MCF (Municipal Corporation Faridabad). Under these MOUs, CESL will likely set up around 100 EV Chargers in the near future.

Question Number: 7258, 7785

Sent Date: 2nd Dec 2024

Sub: Lok Sabha Starred/ Unstarred Parliament Questions for answer on 12.12.2024.

(a) whether the Government is standardising the charging infrastructure, vehicle charging and battery swapping for EVs across the country and if so, the details thereof;
Response to query (a): The Ministry of Power may please reply.

(b) the details of the Guidelines issued for "Installation and Operation of EV Charging Infrastructure -2024" to the support Nationwide connected EV Charging infrastructure;
Response to query (b): The Ministry of Power may please reply.

(c) the number of Charging Stations to be set up in the country during the coming years, State-wise; and
Response to query (c): The Ministry of Power may please reply.

However, CESL has signed MOU with different Govt authorities such as DDA (Delhi Development Authority), GEDA (Goa Energy Development Authority) and MCF (Municipal Corporation Faridabad). Under these MOUs, CESL will likely set up around 100 EV Chargers in the near future.

d) whether Government has any plan to include Private Sector for installation and operator of EV Charging Infrastructure and if so, the details thereof?
Response to query (d): The Ministry of Power may please reply.
However, as far as CESL is concerned, it has developed an innovative "asset-lite model" based on market conditions for establishing public EV charging and battery swapping stations (BSS) in India. Under this approach, CESL will aggregate demand for potential locations identified by government/public land-owning agencies or land-providing entities to establish a wide range of charging technologies based on market demand (slow, fast and BSS). As a part of the implementation, CESL shall undertake procurement of services of Charge Point Operators (CPOs), including those from the private sector, for Supply, Installation, Testing, Commissioning, Operation and Maintenance of EV Charging and Battery Swapping Stations (BSS) on Build-Own-Operate-Maintain (BOOM) model.
In this process, CESL shall enter into a revenue-sharing agreement with government/public land-owning agencies in line with the model revenue-sharing agreement approved by the Ministry of Power, Government of India, vide their guidelines for installation and operation of EV charging infrastructure- 2024, dated 17th September 2024. CESL shall undertake overall supervision and program management of the entire implementation process.

Question Number: 7627

Sent Date: 2nd Dec 2024

Sub: Lok Sabha Unstarred Question Dy. No. 7627 regarding LED Bulbs under UJALA for answer on 12.12.2024.

(a) The details of the number of LED bulbs distributed by the Government under the UJALA scheme across the country, State-wise.

Response to query (a): State/UT-wise details of LED bulb distribution by EESL are enclosed in Annexure – 1.

(b) Whether there is data available with regards to the same for Chikkaballapur Parliamentary Constituency and if so, the details thereof;

Response to query (b): 97.84 lakh LED bulbs were distributed in the following districts, which fall under Chikkaballapur parliamentary constituency:

i) Chikkaballapura district: 3,45,300

ii) Bengaluru Rural: 8,89,517

iii) Bengaluru Urban: 85,49,301

(c) whether cent per cent electrification of all households have been completed in Karnataka and if so, the details thereof, including district-wise data;

Response to query (c): The Ministry of Power may please reply.

(d) the details of the steps taken/ being taken by the Government to ensure that power remains accessible for farmers across the state of Karnataka. Complete details thereof; and

Response to query (d): The Ministry of Power may please reply.

(e) the details of comparison of power tariffs given to farmers across the country?

Response to query (e): The Ministry of Power may please reply.

Question Number: 7627

Sent Date: 3rd Dec 2024

Sub: Unstarred RSPQ No 1582 for answer on 9-12-2024 regarding Launch of National Cooking Programme

(a) whether the Ministry proposes to launch a National Cooking Programme;

Response to query (a): The Ministry of Power may please respond.
However, as far as EESL is concerned, the then Hon'ble Union Minister for Power and New and Renewable Energy launched the National Efficient Cooking Programme (NECP) by Energy Efficiency Services Limited (EESL) on November 2, 2023. The program aims at increasing the uptake of induction cook stoves.

(b) if so, the details thereof; and

Response to query (b): The National Efficient Cooking Programme (NECP) introduces induction-based cookstoves, offering a 25-30% cost advantage over traditional cooking methods, promising energy savings and cost-effective cooking solutions. By aggregating the demand for cleaner cooking technology like these cookstoves, EESL seeks to reduce the environmental impact of cooking methods, ensuring cleaner air and improved health for citizens. Energy Efficiency Services Limited (EESL) purchases energy-efficient induction cookstoves at a scale through a transparent bidding process and approaches States/ utilities/ originations for Business to Business (B2B) sales, and also approaches the public for direct Business-to-Customer (B2C) sales through its e-commerce portal https://eeslmart.in. So far, EESL has deployed 5,039 induction cookstoves in the country out of an order of 7,039 in the last 9 months. Now, EESL, under the National Efficient Cooking Programme (NECP), aims to deploy 1,00,000 nos. of induction cookstoves across the country in the current financial year (FY 2024-25).

(c) whether e-cooking would reduce the cost of cooking for the poor of the country?

Response to query (c): The Annual cost benefit of using e-cooking, as compared to the use of LPG for cooking, is illustrated below in table number – 1:
Tabel No-1
Sr. No. Particulars LPG Cylinder (Subsidized) Induction Cookstoves (E-Cooking)
1 Annual Cost of Cooking (INR) 6400 5357
2 Annual Saving per Consumer using e-cooking as compared to LPG for cooking (INR) 1043

Assumptions:
1. Total number of LPG cylinders required annually exclusively for cooking by a consumer – 8 Nos.
2. The number of electricity units required annually for the same amount of cooking using an induction cooker is 974 units.

3. Cost per standard LPG cylinder (INR) – 800 per refill.

4. Cost per unit of electricity (INR) to the consumer – 5.5 per kWh.

Question Number: 1590

Sent Date: 3rd Dec 2024

Sub: Rajya Sabha Admitted Question No. 1590 to be answered on 09.12.2024 on " Pending Power Projects".

(a) The details of Government, non- government and private companies engaged in the power sector of the country.

(b) The details of profit and loss of the power generation companies, company-wise; and

(c) Whether it is a fact that many power projects are pending at present, if so, the reasons therefore along with the State- wise details of approved and pending projects including those in the state of Himachal Pradesh?

Response to query (a), (b) and (c): MoP may please reply.

Question Number: 7593

Sent Date: 3rd Dec 2024

Sub: Transfer of the Provisionally Admitted Unstarred Lok Sabha Dy. No. 7593 dated 12/12/2024 reg. Energy Security Fund

(a) whether the Government plan to set up an Energy Security Fund to achieve self-sufficiency in the energy sector and if so, the details thereof along with the key objectives and timelines for this initiative and if not, the reasons therefor;

(b) whether any specific measures have the Government being undertaken to meet the growing energy demands in the country, particularly in light of increasing population and industrial growth, if so, the details thereof; and

(c) whether the targeted increase in the share of natural gas in India's energy mix by 2030, and how does the Ministry plan to achieve this target and if so, the details thereof?

Response to query (a), (b) and (c): MoP may please reply.

This issues with the approval of the Competent Authority.

(a) Whether the Government is formulating any scheme to create an energy conservation fund to become self-reliant in energy filed;

(b) if so, the details thereof;

(c) the measures taken by the government to meet the growing demand of energy in the country along with the state-wise details thereof: and

(d) the details of the targeted increase in the share of natural gas in energy sector by 2030?

Response to query (a), (b), (c) and (d): MoP may please reply.

Question Number: S848

Sent Date: 3rd Dec 2024

Sub: Rajya Sabha Starred/ Unstarred Question Dy. No. S848 reg. National Cooking Programme for answer on 09.12.204.

"(a) whether the Ministry proposes to launch a National Cooking Programme;

Response to query (a): The Ministry of Power may please respond.
However, as far as EESL is concerned, the then Hon'ble Union Minister for Power and New and Renewable Energy launched the National Efficient Cooking Programme (NECP) by Energy Efficiency Services Limited (EESL) on November 2, 2023. The program aims at increasing the uptake of induction cookstoves.

(b) if so, the details thereof; and

Response to query (b): The National Efficient Cooking Programme (NECP) introduces induction-based cookstoves, offering a 25-30% cost advantage over traditional cooking methods, promising energy savings and cost-effective cooking solutions. By aggregating the demand for cleaner cooking technology like these cookstoves, EESL seeks to reduce the environmental impact of cooking methods, ensuring cleaner air and improved health for citizens. Energy Efficiency Services Limited (EESL) purchases energy-efficient induction cookstoves at a scale through a transparent bidding process and approaches States/ utilities/ originations for Business to Business (B2B) sales, and also approaches the public for direct Business-to-Customer (B2C) sales through its e-commerce portal https://eeslmart.in. So far, EESL has deployed 5,039 induction cookstoves in the country out of an order of 7,039 in the last 9 months. Now, EESL, under the National Efficient Cooking Programme (NECP), aims to deploy 1,00,000 nos. of induction cookstoves across the country in the current financial year (FY 2024-25).

(c) whether e-cooking would reduce the cost of cooking for the poor of the country?
Response to query (c): The Annual cost benefit of using e-cooking, as compared to the use of LPG for cooking, is illustrated below in table number – 1:

Tabel No-1
Sr. No. Particulars LPG Cylinder (Subsidized) Induction Cookstoves (E-Cooking)
1 Annual Cost of Cooking (INR) 6400 5357
2 Annual Saving per Consumer using e-cooking as compared to LPG for cooking (INR) 1043
Assumptions:
1. Total number of LPG cylinders required annually exclusively for cooking by a consumer – 8 Nos.

2. The number of electricity units required annually for the same amount of cooking using an induction cooker is 974 units.

3. Cost per standard LPG cylinder (INR) – 800 per refill.

4. Cost per unit of electricity (INR) to the consumer – 5.5 per kWh."

Question Number: 7767

Sent Date: 6th Dec 2024

Sub: Lok Sabha Starred Question Dy. No. 7767 regarding Green House Gas Emission for answer on 12.12.2024.

a). whether the Government proposes to bring down the greenhouse gas emission and if so, the details of action taken thereon;

Response: MoP / MHI may please reply.

b). whether the Government analyzed the role of power sector in bring down the greenhouse gas emission and if so, the details thereof;

Response: MoP / MHI may please reply.

c). the details regarding the action taken by Union Government to reduce the emission of greenhouse gas;

Response: MoP / MHI may please reply.

d). whether the Government consider the role of electrical vehicles in this regard, if so, the details thereof;

Response: MoP / MHI may please reply.

e). whether the Union Government proposes to assist the Kerala State Electricity Board Limited (KSEB) for bring down the greenhouse gas emission and if so, the details thereof;

Response: MoP / MHI may please reply.

f). the details regarding the charging station developed by KSEBL in the country; and

Response: MoP / MHI may please reply.

However, so far as CESL/EESL is concerned, till date, 455 nos. of Public EV Chargers have been installed across India by EESL/CESL (Refer Annex-I), out of which 18 nos. of EV chargers have been installed in the state of Kerala.

g). whether the Government proposes to extent financial assistance to KSEB for installing the electric vehicle charging stations in Kerala and if so, the details thereof?

Response: MoP / MHI may please reply.

Question Number: S4823

Sent Date: 6th Dec 2024

Sub: Rajya Sabha provisionally admitted Parliament Starred/Unstarred Question Dy. No. S4823 regarding 'Power consumption trends and power mix in the country' due for answer on 16.12.2024- reg.

(a) The details of the daily electric power consumption in India, state-wise and trend during the last three years, including 2024

(b) The per capita power consumption and related trend in the last three years, including 2024

(c) The electric power mix of the country and trends in the last three years, including 2024

(d) The plan for the ministry to enhance power generation in view of the rising demands, details thereof

(e) Whether any study has been done to figure out the current requirement of electricity for EV charging and the increase in the coming years, details thereof

Response to query (a), (b), (c), (d) and (e): The Ministry of Power may please reply.

Question Number: 2461

Sent Date: 6th Dec 2024

Sub: लोक सभा अतारांकित प्रश्न संख्या 2461 जिसका उत्तर 10.12.2024 को सदन में दिया जाना Lok Sabha Unstarred Question No. 2461 to be answered in the House on 10.12.2024

(a) the key objectives and components of the New Electric Vehicle Policy 2024, including specific targets and timelines for Electric Vehicle (EV) adoption and infrastructure development;

(b) the data on the growth of electric vehicle registrations since the implementation of the policy, including a breakdown by vehicle type and region, year-wise;

(c) the impact of the New Electric Vehicle Policy on reducing carbon emissions and enhancing energy efficiency, supported by relevant statistics; and

(d) the measures taken by the Government to incentivise consumers and manufacturers under the policy, including details on subsidies, tax benefits, and other financial incentives?

Response to queries (a), (b), (c) and (d): The Ministry of Power may please reply.

Question Number: S371

Sent Date: 6th Dec 2024

Sub: Rajya Sabha Starred Question Dy. No. S371 reg. demand for electric vehicles (EVs) in Karnataka for answer on 16.12.2024.

a) Whether the Ministry has plans to support Karnataka's infrastructure for EV charging stations to reduce reliance on fossil fuels;

Response to query (a): The Ministry of Power may please reply.

However, as far as CESL is concerned, it has developed an innovative "asset-lite model" based on market conditions for establishing public EV charging and battery swapping stations (BSS) across India, including Karnataka. Under this approach, CESL will aggregate demand for potential locations identified by government/public land-owning agencies or land-providing entities to establish a wide range of charging technologies based on market demand (slow, fast and BSS). As a part of the implementation, CESL shall undertake procurement of services of Charge Point Operators (CPOs), including those from the private sector, for Supply, Installation, Testing, Commissioning, Operation and Maintenance of EV Charging and Battery Swapping Stations (BSS) on Build-Own-Operate-Maintain (BOOM) model.

In this process, CESL shall enter into a revenue-sharing agreement with government/public land-owning agencies in line with the model revenue-sharing agreement approved by the Ministry of Power, Government of India, vide their guidelines for installation and operation of EV charging infrastructure- 2024, dated 17th September 2024. CESL shall undertake overall supervision and program management of the entire implementation process.

CESL is developing Electric Vehicle Charging Infrastructure and has signed MoUs with multiple stakeholders across municipalities and DISCOMs for location assessment study and setting up of charging infrastructures in their jurisdiction location.

(b) If so, the target areas identified in Karnataka for the development of this infrastructure in 2024;

Response to query (b): The Ministry of Power may please reply.

(c) Whether subsidies or incentives will be provided for private entities in Karnataka to establish EV charging facilities

Response to query (c): The Ministry of Power may please reply.

Question Number: S4776

Sent Date: 10th Dec 2024

Sub: Rajya Sabha Starred/ Unstarred Question Dy. No. S4776 reg. Details on Electric Vehicle (EV) Charging Infrastrucutre Scheme for answer on 17.12.2024.

(A) Given the Ministry's initiatives to enhance electric vehicle (EV) adoption, has there been progress in implementing the scheme for expanding EV charging infrastructure as of December 2024; and if so, the details thereof, including:
Response: MoP may please reply.

(B) The specific objectives and targets of the EV charging infrastructure scheme;
Response: MoP may please reply.

(C) The number and locations of EV charging stations established under this scheme to date

Response: MoP may please reply.
However, EESL/CESL has successfully deployed 455 public Electric Vehicle (EV) chargers across 12 states in India. The state-wise list of public EV chargers is mentioned below:

State	Total Chargers
Delhi	163
Maharashtra	102
Uttar Pradesh	66
Tamil Nadu	59
West Bengal	24
Kerala	18
Gujarat	12
Goa	3
Chhattisgarh	4
Haryana	2
Karnataka	1
Jharkhand	1
Grand Total	**455**

(D) Measures taken to address challenges in the deployment and operation of EV charging infrastructure
Response: MoP may please reply.
Question Number: S5080

Sent Date: 6th Dec 2024

Sub: Rajya Sabha Provisionally Admitted Starred/Unstarred Question Dy. No. S 5080 for answer on 16.12.2024 regarding "Green Hydrogen"

(a) Whether the Government has made collaboration to establish Solar Hydrogen-based Microgrid to provide a stable power supply in off-grid Army locations

(b) If yes, the details thereof;

(c) Whether the microgrid system is set to replace existing diesel generators currently in use at off-grid Army locations; if yes, details thereof and

Response to queries (a), (b) and (c): Ministry of Power may please reply.

(d) The steps taken by the government to achieve 60GW of renewable energy capacity by 2032 and becoming a major player in green hydrogen technology and energy storage domain?

Response to query (d): The Ministry of Power may please reply.

However, as far as EESL is concerned, it has commissioned decentralised solar power plants in Maharashtra with a cumulative capacity of 196 MW.

Question Number: U2637

Sent Date: 10th Dec 2024

Sub: Rajya Sabha Provisional Starred/Unstarred Question Diary No. U2637 on 16.12.2024 regarding "Installation of Smart Meters" reg.

a) Whether the installation of smart meters is carried out under the Smart Meter National Programme (SMNP), if so, the number of households covered with smart meters, state-wise including district-wise, in Assam

Response to query (a): The Ministry of Power may please reply.

However, as far as EESL is concerned, it is implementing a Smart Meter Programme to replace conventional meters with smart electricity meters. This programme is being implemented on the BOOT model, where EESL is making the initial investment, and the states/ utilities pay back to EESL on a monthly rental basis. EESL has signed MoUs/ agreements for installing smart meters with the DISCOMs in Bihar, Haryana, Delhi, Rajasthan, Uttar Pradesh and UT of Andaman & Nicobar. As of November 28, 2024, EESL has installed over 40.78 lakh smart meters in above States/ UT under this programme. EESL is not implementing the smart meter's project in the State of Assam.

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

S. No. State/UT No. of Smart Meters Installed by EESL

1. Uttar Pradesh 12,04,049

2. Haryana 8,42,059

3. Bihar 17,67,951

4. Rajasthan 1,24,700

5. Andaman & Nicobar 74,961

6. Delhi 65,059

Total 40,78,779

b) Whether the Government is aware of the concerns of inflated electricity bills after the installation of smart meters across the country, if so, the steps taken by the Government in this regard;

Response to query (b): The Ministry of Power may please reply.

c) Whether the Government is aware that smart meters are installed forcibly, if so, whether the installation of smart meters is mandatory for households, if so, the details thereof?
Response to query (c): The Ministry of Power may please reply.
Question Number: S4886, U2576, U4990

Sent Date: 11th Dec 2024

Sub: Rajya Sabha provisionally admitted Starred/Unstarredb 03 Parliament Questions for answer on 16.12.2024.

(a) whether India is committed towards sustainable development and is aligned with its efforts to reduce greenhouse gas emissions;

(b) if so, the details thereof;

(c) whether the Central Government has proposed to join the International Energy Efficiency Hub;

(d) if so, the details thereof and the benefits India would accrue after joining the International Energy Efficiency Hub;

(e) the names of the countries which have joined the Hub so far;

(f) whether India would also contribute to global efforts to combat climate change by promoting energy-efficient technologies and practices; and

(g) if so, the details thereof?

EESL Response (a) to (e): MoP may please reply.

EESL Response (f) to (g): MoP may please reply. However, information pertaining to EESL Programmes promoting energy efficient technologies and practices is enclosed at Annexure – I.

Annexure - I

Energy Efficiency Services Limited (EESL), a JV of PSUs under MoP is implementing Energy Efficiency and Climate Change mitigation projects under National Mission for Enhanced Energy Efficiency (NMEEE). It has pioneered innovative business approaches to successfully roll-out large-scale programs that allow for incentive alignment across the value chain and rapidly drive transformative impact. The programmes of EESL have resulted in reduction of around 46.68 million tonnes of CO2 emissions per year.

The Details of major programme(s) are as follows:

Sr. No. Name of the Programme Brief Description Unit Qty. Achieved Reduction in Emissions of Greenhouse Gas (in million tCO2 per Year)

1 UJALA (Unnat Jyoti Affordable LEDs for All) Distribution of Energy Efficient appliances to consumers LED bulbs Nos. 36.87Cr. over 39.30 million tCO2 per year LED Tube Lights Nos. 72.19 Lacs EE Fans Nos. 23.59 Lacs

2 SLNP (Street Light National Programme) Installation of LED Street Light in ULBs/GPs replacing the existing conventional streetlights. Nos. 1.31 Cr. 6.08 million tCO2 per year

3 Gram UJALA Distribution of Energy Efficient LED Bulbs to consumers in rural areas across India. Nos. 1 Crore 1.3 million tCO2 per year

GRAND TOTAL 46.68 million tCO2 per year

In addition to the above, EESL is presently also implementing the following major programmes for promoting Energy efficient technologies and practices to aid India's effort to combat climate change:

1. National Motor Replacement Program (NMRP): NMRP is a first of its kind effort at a national scale through which EESL aims to create an ecosystem to accelerate the adoption for Higher Efficiency Motors Specifically IE3 and IE4 efficiency class.

2. National Efficient Cooking Programme (NECP): NECP is an ambitious initiative aimed at revolutionizing the cooking landscape by promoting electric cooking solutions i.e. Induction cooktops as viable alternatives to traditional cooking practices. This program seeks to significantly reduce the country's reliance on traditional cooking methods such as liquefied petroleum gas (LPG) and other polluting fuels that contribute to household air pollution, deforestation, various health issues, enhancing energy security and supporting India's low-carbon transition by increasing the use of renewable energy sources for cooking.

3. Energy Efficient Fan Programme (EEFP): EESL intends to enhance the market for energy efficient fans by deploying energy efficient 5-star Brushless Direct Current Motor (BLDC) ceiling Fans consuming only 28 Watts - 32 Watts against the conventional ceiling fans typically consuming 75 Watts – 80 Watts.

4. Super-Efficient AC Programme (SEAC): Under this programme, EESL is providing super-efficient ACs having superior specifications and efficiency than the available BEE-5 star rated ACs in Indian market at affordable price. The ACs can be purchased through an online portal EESLmart.in, on upfront and monthly EMI basis.

Question Number: 10721

Sent Date: 10th Dec 2024

Sub: Proivisionally admitted Lok Sabha unstarred question with adv. diary no. 10721 on "Funds allocated to Maharashtra" for answer on 19.12.2024 -reg.

(a) Whether the funds allotted to the States of Maharashtra and Bihar under various schemes of the Government during the period of 2019-2024 are higher as compared to the recent past;

(b) If so, the details of the allotment of funds thereof annually from 2019-2024;

(c) Whether the Government has approved any special projects in the Power sector for the States of Maharashtra and Bihar from 2019-2024;

(d) If so, the details thereof annually during the period 2019-2024?

Response to queries (a), (b), (c) and (d): The Ministry of Power may please reply.

Question Number: U2766

Sent Date: 9th Dec 2024

Sub: Response to Parliamentary Question U2766

(a) Whether the performance of the country with regard to energy conservation is satisfactory as compared to other countries of the world;

Response to query (a): The Ministry of Power may please reply.

(b) If so, the details thereof and if not reasons thereof;

Response to query (b): The Ministry of Power may please reply.

(c) The details of energy conservation programmes being implemented by the Government; and

Response to query (c): The Ministry Power may please reply.

As far as EESL/CESL is concerned, it is submitted that its various energy efficiency programs have been a key driver in achieving energy access at affordable prices, improved energy security, greater sustainability, and delinking emissions from economic growth. EESL is implementing the world's most extensive non-subsidized energy efficiency portfolio across sectors like lighting, buildings, e-mobility, EV charging infrastructure, smart metering, solar, industrial energy efficiency, and efficient agriculture pumping at scale, which has played a significant role in India's pursuit of its climate goals. The physical achievements under EESL's programmes across the country are as below:

Sr. No. Name of the Programme Brief Description Unit Qty. Achieved

1 UJALA (Unnat Jyoti Affordable LEDs for All) Distribution of Energy Efficient appliances to DISCOM consumers LED bulbs Nos. 36.87Cr. LED Tube Lights Nos. 72.19 Lacs EE Fans Nos. 23.59 Lacs

2 SLNP (Street Light National Programme) Installation of LED Street Light in ULBs/GPs Nos. 1.31 Cr.

Sr. No. Name of the Programme Brief Description Unit Qty. Achieved

3 SMP (Smart Meter Programme Installation of Smart Meters carried out in 6 States Nos. 40.90 Lacs

4 Decentralized Solar 0.5 to 10 MW of Solar Power Plants at multiple locations Cumulative MW 196

5 E-Mobility Deployment of 4W-EVs Nos. 1964

6 EV Charging Infrastructure Installation of Public Charging Stations (PCS) Nos. 455

7 Building Energy Efficiency Programme Retrofitting commercial buildings with energy efficient solutions Nos. of buildings 12,710

8 Agriculture Demand Side Management (AgDSM) Replacement of old inefficient agricultural pumps with BEE 5 Star rated pumps Nos. 83,107

9 Super-Efficient Air Conditioning Programme (SEAC) Selling of super-efficient ACs at affordable prices Nos. 3,146

10 Atal Jyoti Yojana (AJAY) Installation of Off- Grid and Decentralized Solar Street Lights under AJAY scheme of MNRE Nos. 2.72 Lacs

11 National Motor Replacement Program (NMRP) Deployment of IE3 motors in the industry Nos. 5,280

d) The extent to which success has been achieved in meeting the set targets?

Response to query (d): The Ministry of Power may please reply.

Question Number: U2917

Sent Date: 9th Dec 2024

Sub: Response to Parliamentary Question U2917

(a) Whether the Government has any data on the total amount of carbon credits entailed within its ambit since 2019 and if so, the details thereof;

Response to query (a): The Ministry of Power may please reply.

However, as far as CESL is concerned, it has 727,581 Verified Carbon Units (VCUs) issued and registered in its account against Gram UJALA program. Approximately 10 million VCUs are expected to be generated over the program's lifespan. CESL has also registered their Public E-Vehicle Charging projects in the international carbon registry and has plans to register their Public Buses and other e-mobility programs for carbon credits, expected to generate nearly 100,000 carbon credits per year.

(**b) Whether the Government has an adequate outreach mechanism of the entire procedure of availing carbon credits and if so, the details thereof;**

Response to query (b): The Ministry of Power may please reply.

(c) If so, the details thereof along with the incentives associated with various stakeholders and such initiatives; and

Response to query (c): The Ministry of Power may please reply.

(d) Whether the Government has any other mechanism for providing monetary incentives to private firms and individuals to become carbon neutral and if so, the details thereof?

Response to queries (d): The Ministry of Power may please reply.

Question Number: S254, S2836, S2872

Sent Date: 9th Dec 2024

Sub: Response to Parlimentary Questions S254, S2836 and S2872

(a) whether the Government is standardising the charging infrastructure, vehicle charging and battery swapping for EVs across the country and if so, the details thereof;

a) the details of the number of Electric Vehicle (EV) Charging Stations currently operational in the country;

Response to query (a): The Ministry of Power may please reply.

However, EESL/CESL has successfully deployed 455 public Electric Vehicle (EV) chargers across 12 states in India. The state-wise list of public EV chargers is mentioned below:

State	Total Chargers
Delhi	163
Maharashtra	102
Uttar Pradesh	66
Tamil Nadu	59
West Bengal	24
Kerala	18
Gujarat	12
Goa	3
Chhattisgarh	4
Haryana	2
Karnataka	1
Jharkhand	1
Grand Total	**455**

b) whether the Government has any plan to establish EV charging stations at a frequent distance and if so, the details thereof; and

Response to query (b): The Ministry of Power may please reply.

c) whether the Government has had any consultations with State Governments on the same; and

Response to query (c): The Ministry of Power may please reply.

d) if so, the details thereof?

Response to query (d): The Ministry of Power may please reply.

(a) The details of the number of LED bulbs distributed by the Government under the UJALA scheme across the country, State-wise.

Response to query (a): State/UT-wise details of LED bulb distribution by EESL are enclosed in Annexure – 1.

(b) Whether there is data available with regards to the same for Chikkaballapur Parliamentary Constituency and if so, the details thereof;

Response to query (b): 97.84 lakh LED bulbs were distributed in the following districts, which fall under Chikkaballapur parliamentary constituency:

i) Chikkaballapura district: 3,45,300

ii) Bengaluru Rural: 8,89,517

iii) Bengaluru Urban: 85,49,301

(c) whether cent per cent electrification of all households have been completed in Karnataka and if so, the details thereof, including district-wise data;

Response to query (c): The Ministry of Power may please reply.

(d) the details of the steps taken/ being taken by the Government to ensure that power remains accessible for farmers across the state of Karnataka. Complete details thereof; and

Response to query (d): The Ministry of Power may please reply.

(e) the details of comparison of power tariffs given to farmers across the country?

Response to query (e): The Ministry of Power may please reply.

Response to query (a): The Ministry of Power may please reply.

(b) the details of the Guidelines issued for "Installation and Operation of EV Charging Infrastructure -2024" to the support Nationwide connected EV Charging infrastructure;

Response to query (b): The Ministry of Power may please reply.

(c) the number of Charging Stations to be set up in the country during the coming years, State-wise; and

Response to query (c): The Ministry of Power may please reply.

However, CESL has signed MOU with different Govt authorities such as DDA (Delhi Development Authority), GEDA (Goa Energy Development Authority) and MCF (Municipal Corporation Faridabad). Under these MOUs, CESL will likely set up around 100 EV Chargers in the near future.

d) whether Government has any plan to include Private Sector for installation and operator of EV Charging Infrastructure and if so, the details thereof?

Response to query (d): The Ministry of Power may please reply.

However, as far as CESL is concerned, it has developed an innovative "asset-lite model" based on market conditions for establishing public EV charging and battery swapping stations (BSS) in India. Under this approach, CESL will aggregate demand for potential locations identified by government/public land-owning agencies or land-providing entities to establish a wide range of charging technologies based on market demand (slow, fast and BSS). As a part of the implementation, CESL shall undertake procurement of services of Charge Point Operators (CPOs), including those from the private sector, for Supply, Installation, Testing, Commissioning, Operation and Maintenance of EV Charging and Battery Swapping Stations (BSS) on Build-Own-Operate-Maintain (BOOM) model.

In this process, CESL shall enter into a revenue-sharing agreement with government/public land-owning agencies in line with the model revenue-sharing agreement approved by the Ministry of Power, Government of India, vide their guidelines for installation and operation of EV charging infrastructure- 2024, dated 17th September 2024. CESL shall undertake overall supervision and program management of the entire implementation process.

Question Number: 5209

Sent Date: 13th Dec 2024

Sub: Inputs for Rajya Sabha provisionally admitted Starred Question Diary No. 5209 regarding "Public awareness on Global Warming" for answer on 19.12.2024 - reg.

(a) The steps being taken to raise public awareness and education regarding the consequences of global warming:

(b) Whether Government can share information non policies and incentives for businesses to reduce their carbon footprint;

(c) The investments are being made in research and development to develop climate- resilient technologies and solutions;

(d) The international collaborations and partnerships are in place to address global warning on a global scale; and

(e) The manner in which Government is involving local communities and stakeholders in climate mitigation and adaptation efforts?

Response to queries (a), (b), (c), (d) and (e): - The Ministry of Power may please reply.

Question Number: 3942 (10561)

Sent Date: 13th Dec 2024

Sub: Lok Sabha Admitted Unstarred Q. No.3942 (Dy.No.10561) for answer on 19.12.2024 regarding "Investigation in NTPC Boiler Explosion Case"

(a) The number of persons found guilty in the investigation of NTPC boiler explosion case occurred in Unchahar of Raebareli on 01 November, 2017 along with the action taken against the guilty persons;

(b) The number of investigations conducted in Unchahar boiler explosion case;

(c) The details of the findings of the investigation and if so, by when and if not, the reasons therefor and the action taken against the guilty persons;

(d) Whether a person who was found guilty in the said case was terminated from service and provided a job in NTPCs joint venture company EESL after 2 months of termination and from where the person retired comfortably; and

(e) Whether the Government proposes to investigate the said incidence and take action against the guilty persons in this regard and if so, by when and if not, the reasons thereof?

Response to query (a), (b), (c), (d) and (e): The Ministry of Power and NTPC Limited may please reply.

Question Number: 8983

Sent Date: 13th Dec 2024

Sub: Seeking Input for Lok Sabha Starred Question D.No. 8983(revised 2) Decarbonize Existing Buildings

(a) The strategies proposed by the Government to decarbonize existing buildings, which contribute to 40% of global energy-related CO2 emissions, given diverse age, condition, and type;

(b) The plan proposed by the Government to address policy and regulatory barriers that hinder the adoption of sustainable practices for retrofitting older, energy-inefficient buildings;

(c) Whether the innovative financing models and public-private partnership initiatives are explored to support large-scale decarbonisation of existing buildings across urban areas;

(d) The measures taken/proposed to be taken by the Government to improve envelope efficiency and upgrade mechanical systems in older buildings to reduce fossil fuel consumption and enhance sustainability; and

(e) The mechanism adopted by the Government to ensure that cities achieve their carbon reduction goals, considering the ling-0 term presence of existing, unsustainable buildings in urban infrastructure?

Response to Quires (a), (b), (c), (d) and (e): The Ministry of Power may please reply.

Question Number: 4089

Sent Date: 16th Dec 2024

Sub: Lok sabha PQ for19-12-24 reg Installation of Smart Meters under SMNP

(a) The details of installation of smart meters in place of old conventional meters under Simple Network Management Protocol (SMNP) launched in 2014 with the target to achieve the same by 2025 across the country;

Response: The Ministry of Power may please reply.
However, as far as EESL is concerned, it is implementing a Smart Meter Programme to replace conventional meters with smart electricity meters. This programme is being implemented on the BOOT model, where EESL is making the initial investment, and the states/ utilities pay back to EESL on a monthly rental basis. EESL has signed MoUs/ agreements for installing smart meters with the DISCOMs in Bihar, Haryana, Delhi, Rajasthan, Uttar Pradesh and UT of Andaman & Nicobar. As of December 12, 2024, EESL has installed over 40.93 lakh smart meters in above States/ UT under this programme.

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

S. No. State/UT No. of Smart Meters Installed by EESL

1. Uttar Pradesh 12,04,049

2. Haryana 8,42,059

3. Bihar 17,82,254

4. Rajasthan 1,24,700

5. Andaman & Nicobar 74,961

6. Delhi 65,059

Total 40,93082

(b)whether any study/assessment has been conducted regarding implementation of the scheme and if so, the details thereof; and
Response: No such study has been conducted by EESL.

(c) whether the Government has received any complaints regarding non-installation of smart meters, electricity bills and recharge issues and if so, the details thereof along with the measures taken/being taken by the Government to address the said issues?
Response: MoP may please reply.

Question Number: S641

Sent Date: 24th Jan 2025

Sub: Rajya Sabha Parliamentary Question Dy. No. S641, regarding the Battery Swapping Stations.

(a) Whether the Ministry has any strategies to collaborate with the State Governments to strategically implement the guidelines of Battery Swapping Stations and to set-up them in urban and rural areas;

(b) if so, the details thereof; and

Response to queries (a) & (b): The Ministry of Power may please reply.

(c) The manner in which the Ministry visualise the role of Public-Private Partnership in expanding the Battery Swapping infrastructure?

Response to query (c): The Ministry of Power may please reply.

However, as far as CESL is concerned, it has developed an innovative "Market driven model" based on market conditions for establishing public EV charging and battery swapping stations (BSS) in India. Under this model, CESL will aggregate demand for potential locations identified by government/public land-owning agencies or land-providing entities to establish a wide range of charging technologies based on market demand (slow, fast and BSS). As a part of the implementation, CESL shall undertake procurement of services of Charge Point Operators (CPOs), including those from the private sector, for Supply, Installation, Testing, Commissioning, Operation and Maintenance of EV Charging and Battery Swapping Stations (BSS) on Build-Own-Operate-Maintain (BOOM) model.

In this process, CESL shall enter into a revenue-sharing agreement with government/public land-owning agencies in line with the model revenue-sharing agreement approved by the Ministry of Power, Government of India, vide their guidelines for installation and operation of EV charging infrastructure- 2024, dated 17th September 2024. CESL shall undertake overall supervision and program management of the entire implementation process.

Question Number: 1521

Sent Date: 24th Jan 2025

Sub: Lok Sabha Parliamentary 'Starred' Question Dy. No. 1521, regarding the implementation of EV Infrastructure.

(a) Whether the Government has formulated robust guidelines for battery swapping and charging infrastructure, if so, the details thereof;

Response to query (a): The Ministry of Power may please reply.

(b) The manner in which the Government is planning to address challenges such as standardization of battery technologies and interoperability, if so, the details thereof; and

Response to query (b): The Ministry of Power may please reply.

(c) The incentives or support that has been proposed for stakeholders to fast-track the implementation of EV infrastructure, if so, the details thereof?

Response to query (c): The Ministry of Power may please reply.

Question Number: S115, U155

Sent Date: 24th Jan 2025

Sub: Rajya Sabha Parliamentary Question Dy. No. S115 & U155, regarding the 2024 Battery Swapping Guidelines.

(i) Whether there are any strategies in place for the Ministry to collaborate with state Governments to implement these guidelines and ensure that battery-swapping stations are strategically located across urban and rural areas?

(ii) If Yes, details thereof?

Response to query (i) & (ii): The Ministry of Power may please reply.

(iii) How does the Ministry envision the role of public-private partnerships in expanding the battery-swapping infrastructure?

Response to query (iii): The Ministry of Power may please reply.

However, as far as CESL is concerned, it has developed an innovative "market driven model" for establishing public EV charging and battery swapping stations (BSS) in India. Under this model, CESL will aggregate demand for potential locations identified by government/public land-owning agencies or land-providing entities to establish a wide range of charging technologies based on market demand (slow, fast and BSS). As a part of the implementation, CESL shall undertake procurement of services of Charge Point Operators (CPOs), including those from the private sector, for Supply, Installation, Testing, Commissioning, Operation and Maintenance of EV Charging and Battery Swapping Stations (BSS) on Build-Own-Operate-Maintain (BOOM) model.

In this process, CESL shall enter into a revenue-sharing agreement with government/public land-owning agencies in line with the model revenue-sharing agreement approved by the Ministry of Power, Government of India, vide their guidelines for installation and operation of EV charging infrastructure- 2024, dated 17th September 2024. CESL shall undertake overall supervision and program management of the entire implementation process.

Question Number: U629

Sent Date: 24th Jan 2025

Sub: Rajya Sabha Parliamentary Question Dy. No. U629, regarding the Review of Urban Power Infrastructure.

(a) Whether the minister has reviewed the power sector development in Union Territories such as Lakshadweep and Andaman & Nicobar Islands, and

(b) If so, the details of the initiatives undertaken to ensure reliable power supply?

(c) If not, the reasons therefor?

Response to query (a), (b) & (c) : The Ministry of Power may please reply.

The queries don't pertain to EESL. The inputs from EESL may be considered as 'NIL'.

Question Number: U649

Sent Date: 27th Jan 2025

Sub: Rajya Sabha Parliamentary Question Dy. No. U649, regarding the Distribution of Low-Power consuming appliances.

(1). Whether the Government proposes to launch any scheme for distribution of low power consuming fans and electric stoves in the country;
(2). If so the details thereof;

Response to Point no (1) & (2): Energy Efficiency Services Limited, (EESL), a joint venture of Public Sector Undertaking under Ministry of Power, launched its ground-breaking National Efficient Cooking Programme (NECP) and Energy Efficient Fans Programme (EEEP), unveiled by the then Union Minister for Power and New & Renewable Energy Shri R. K. Singh, at an event held in New Delhi, November 2, 2023. These initiatives are aimed at revolutionizing cooking practices in India and emphasizing on the importance and urgency of energy efficient fans. As part of these programmes, EESL targets to distribute 1 crore efficient BLDC fans and 20 Lakh energy-efficient induction cook stoves nationwide.

(3). The details of such companies that distribute fans and electric stoves under this scheme, State/UT-wise;

Response to Point no (3): EESL does procurement in large scale by demand aggregation which leads to cost economics and affordability. EESL then distributes the appliances at affordable prices to the consumers. As far as EESL is concerned, it plans to execute phase wise distribution of BLDC fans through various distribution channel viz. EESL portal, GEM e-Marketplace, India Post, CSC etc. Companies shall also be hired for fan distribution through the tendering process, on need basis.

For distribution of energy-efficient induction cook stoves, EESL has partnered with Modern Energy Cooking Services (MECS) for the large-scale deployment of induction cooktops.

(4). further steps taken by the Govt. in this regard.

Response to Point no (4): The Ministry of Power may please reply.

Question Number: 615

Sent Date: 28th Jan 2025

Sub: इनपुट के लिए अनुरोध - लोक सभा अतारांकित प्रश्न डायरी नंबर 615 जिसका उत्तर 04.02.2025 को दिया जाना
Request for input - LS USQ D. No. 615 answered on 04.02.2025

(a) The number of electric vehicle (EV) manufacturers and charging stations approved in the country under the Faster Adoption and Manufacturing of Hybrid and Electric Vehicles (FAME II) scheme, State-wise since launch year-wise

(b) The total amount of financial assistance sanctioned and disbursed under the FAME II scheme, and the number of charging station installed, State-wise, especially in urban and rural regions of Tamil Nadu;

Response to queries (a) and (b): Ministry of Heavy Industries/ Ministry of Power may please reply.

However, EESL has installed 18 charging stations comprising 51 EV chargers in Chennai, with financial assistance of Rs.2.97 crore under the FAME-II scheme. These EV chargers are located at parking locations of Chennai Metro Rail Ltd.

(c) Whether the Government is taking steps to expand charging facilities in rural and semi-urban areas of Tamil Nadu, if so, the details thereof; and

(d) The specific actions proposed to be taken by the Governments to assist local manufacturers in meeting the growing demand for EVs and to ensure that Tamil Nadu benefits fully from the scheme?

Response to queries (c) and (d): Ministry of Heavy Industries/ Ministry of Power may please reply.

Question Number: 1195

Sent Date: 27th Jan 2025

Sub: Lok Sabha Starred Question Dy No. 1195 for answer on 06.02.2025 regarding "Battery Swapping Guidelines" -reg.

(a) Whether there are any strategies adopted by the Government to collaborate with State Governments in order to implement the 2024 Battery Swapping Guidelines and ensure that battery-swapping stations are strategically located across urban and rural areas:

(b) if so, the details thereof along with the existing number of such stations available and functioning in cities across the country; and

Response to Point (a) and (b): - The Ministry of Power may please reply.

(**c) The manner in which envisions of the Government on the role of public-private partnerships in expanding the battery-swapping infrastructure, the details thereof?**

Response to query (c): - The Ministry of Power may please reply.

However, as far as CESL, a 100% owned subsidiary of EESL is concerned, it has developed an innovative "Market driven model" based on market conditions for establishing public EV charging and battery swapping stations (BSS) in India. Under this model, CESL will aggregate demand for potential locations identified by government/public land-owning agencies or land-providing entities to establish a wide range of charging technologies based on market demand (slow, fast and BSS). As a part of the implementation, CESL shall undertake procurement of services of Charge Point Operators (CPOs), including those from the private sector, for Supply, Installation, Testing, Commissioning, Operation and Maintenance of EV Charging and Battery Swapping Stations (BSS) on Build-Own-Operate-Maintain (BOOM) model.

In this process, CESL shall enter into a revenue-sharing agreement with government/public land-owning agencies in line with the model revenue-sharing agreement approved by the Ministry of Power, Government of India, vide their guidelines for installation and operation of EV charging infrastructure- 2024, dated 17th September 2024. CESL shall undertake overall supervision and program management of the entire implementation process.

Question Number: 1496

Sent Date: 27th Jan 2025

Sub: Lok Sabha Starred Question Dy No. 1496 for answer on 06.02.2025 regarding "Battery Swapping Stations" -reg.

(a) The state-wise details of the battery swapping stations both in urban and rural areas in the country;

(b Whether the Government has any proposal to expand the same and the details thereof;

(c) whether the Government has any strategy to implement these guidelines and co-operate with the state governments so that the strategic establishment of battery swapping stations both in urban and rural areas can be ensured;

(d) if so, the details thereof;

Response to query (a), (b), (c) and (d): - The Ministry of Power may please reply.

(e) the manner in which the Government sees the role of public-private partnership in the expansion of battery swapping infrastructure;

Response to query (e): - The Ministry of Power may please reply.

However, as far as CESL is concerned, it has developed an innovative "Market driven model" based on market conditions for establishing public EV charging and battery swapping stations (BSS) in India. Under this model, CESL will aggregate demand for potential locations identified by government/public land-owning agencies or land-providing entities to establish a wide range of charging technologies based on market demand (slow, fast and BSS). As a part of the implementation, CESL shall undertake procurement of services of Charge Point Operators (CPOs), including those from the private sector, for Supply, Installation, Testing, Commissioning, Operation and Maintenance of EV Charging and Battery Swapping Stations (BSS) on Build-Own-Operate-Maintain (BOOM) model.
In this process, CESL shall enter into a revenue-sharing agreement with government/public land-owning agencies in line with the model revenue-sharing agreement approved by the Ministry of Power, Government of India, vide their guidelines for installation and operation of EV charging infrastructure- 2024, dated 17th September 2024. CESL shall undertake overall supervision and program management of the entire implementation process.

(f) whether the Government considers electricity to be an important factor in the lives of common people; and

(g) the suitable steps taken by the Government to provide round the clock electricity to the people by 2025?
Response to query (f) and (g): - The Ministry of Power may please reply.

Question Number: U567

Sent Date: 27th Jan 2025

Sub: Rajya Sabha Parliamentary Question Dy. No. U567, regarding the Technology to improve charging of electric vehicle.

(a) Whether the quantum of usage of electric vehicle by the consumers have considerably increased? If so, what is the present rate of increase?

(b) Is there any deadline that all two wheelers and four wheelers should be operated electrically? If so, the details thereof.

(c) Does the Government aware that availability of electric charging station is not adequate? If so, what is the action plan to increase more number of charging stations.

(d) Is there any action plan to introduce new technology in electrical re-charging at a faster pace.

Response to query (a), (b), (c) and (d): The Ministry of Power may please reply.

Question Number: S1406

Sent Date: 31st Jan 2025

Sub: Rajya Sabha Starred Question Dy. No. S1406 reg. Energy Conservation for answer on 10.02.2025 -reg.

(a) whether the performance of the country in the field of energy conservation is satisfactory as compared to other countries in the world;
(b) if so, the details thereof;
Response to Point (a) and (b): - The Ministry of Power may please reply.
(c) the details of energy conservation programmes being implemented by the Government; and
Response to Point (c): - The Ministry of Power may please reply.
However, as far as EESL is concerned, it is submitted that its various energy efficiency programs have resulted in improved energy saving leading to energy conservation. EESL is implementing the world's largest non-subsidized energy efficiency programs across sectors like lighting, buildings, e-mobility, EV charging infrastructure, smart metering, solar, industrial energy efficiency, and efficient agriculture pumping which has played a significant role in conservation of energy.

Since 2015, EESL programmes have been able to reduce the annual energy consumption by 58 billion units, CO2 emission by 47 million tons per annum and have helped the country avoid peak demand of approx. 12 GW showcasing their contribution towards energy conservation.

Brief description & physical achievements under EESL's programmes across the country are as below:

TABLE: -
Sr. No. Name of the Programme Brief Discription Unit Qty. Achieved
1. UJALA (Unnat Jyoti Affordable LEDs for All) ..... The Unnat Jyoti by Affordable ..... LED Bulbs Nos. ..... 36.87 Cr.
LEDs for All (UJALA) programme of LED Tube Light ..... 72.19 Lacs
EESL promotes the widespread adoption EE Fans Nos. ..... 23.59 Lacs
of energy-efficient LED bulbs and
appliances to DISCOM consumers,
making them accessible and affordable
to households, thereby reducing energy
consumption and electricity bills.

2. SLNP (Street Light National Programme) ..... Street Light National Programme (SLNP) is ..... Nos. ..... 1.31 Cr.
one of the world's largest streetlight
replacement programs, where conventional
streetlights have been replaced with
energy-efficient LED lights in
ULBs/GPs across India.

3. Building Energy Efficiency Programme ..... The Building Energy Efficiency Programme ----------Nos. ---------- 12.710
(BEEP) of EESL aims to enhance energy
efficiency in commercial and government

buildings by retrofitting energy-saving technologies such as LED lighting, energy-efficient appliances, and advanced cooling systems.

4. Agriculture Demand Side Management (AgDSM) ---- The Agricultural Demand Side Management ----------Nos. ---------- 83.107
(AgDSM) aims to improve energy efficiency in the agricultural sector by replacing inefficient agricultural pump sets with energy-efficient BEE 5 Star rated pumps, reducing energy consumption and enhancing irrigation efficiency.

5. Super-Efficent Air Conditioning Programme (SEAC)----- The Super-Efficient Air Conditioning (SEAC) ----------Nos. ---------- 3,146
programme of EESL promotes the deployment of energy-efficient air conditioners that consume significantly less power, contributing to energy conservation and reducing carbon emissions, through demand aggregation and bulk procurement.

(d) the extent of success achieved with regard to meet the set goals?
Response to Point (d): - The Ministry of Power may please reply.

However, as far is EESL is concerned, there hasn't been any target set by the Govt. for its various programmes. However, as far as Street Light National Programme (SLNP) is concerned, its objective was to convert conventional Street Lights with energy efficient LED Street Lights, targeting replacement of estimated 1.34 crores conventional Street Lights. Under SLNP, EESL has installed 1.31 Crore streetlights across the country.

Under Unnat Jyoti by Affordable LEDs for ALL (UJALA) scheme, LED bulbs, LED Tube lights and Energy efficient fans are being provided to domestic consumers for replacement of conventional and inefficient variant. Till date, over 36.87 crore LED bulbs, 72.19 lakh LED Tube lights and 23.59 lakh energy efficient fans have been distributed by EESL across India.

Question Number: U1763

Sent Date: 30th Jan 2025

Sub: Rajya Sabha Parliament Question Dy. No. U1763 reg. Energy Conservation Programmes for answer on 10.02.2025.

(i) How does the Ministry plan to sustain or surpass the current rate of energy efficiency improvement compared to global trends?

Response to query (i): The Ministry of Power may please reply.

(ii) What initiatives are being taken to increase the adoption of the Unnat Jyoti by Affordable LEDs for All (UJALA) scheme in rural and underserved areas?

(iii) What steps are being taken to increase public awareness and participation in energy?

Response to queries (ii) & (iii): Ministry of Power may please reply.

However, as far as the implementation of the UJALA/ Gram UJALA program by EESL/CESL is concerned, the following inputs may please be considered:

- UJALA has successfully transformed the domestic bulb market. In a short span, the price of LED Bulbs in the retail market has dropped significantly from Rs 300-350 to Rs 70-90 per bulb, increasing their affordability across income groups in both urban and rural areas.

- The UJALA scheme was one of the seven schemes selected for the Gram Swaraj Abhiyan, and EESL was the nodal agency for distributing LED bulbs in the identified villages using mobile awareness vans and kiosks. During the Gram Swaraj Abhiyan, the UJALA Yojana received several appreciations for distributing the bulbs in the difficult and remotest parts of the country.

- Furthermore, CESL, a wholly owned subsidiary of EESL, has distributed one crore LED bulbs as a pilot initiative under the Gram UJALA scheme, specifically targeting rural consumers in the states of Bihar, Uttar Pradesh, Andhra Pradesh, Karnataka, and Telangana. Under this scheme, rural consumers received 7W and 12W LED bulbs for ₹10 each in exchange for 60W and 100W incandescent bulbs. The Gram UJALA scheme was partially funded through carbon credits.

- Under the Ujala program/Gram UJALA program, during the distribution of LED bulbs, local-level awareness through print and electronic media was done about the benefits of the usage of LED bulbs.

Are there plans to introduce new technologies or programs to achieve energy savings in sectors not currently covered by existing initiatives?

(iv) If Yes, details thereof?

Response to queries (v) and (iv): The Ministry of Power may please reply.

Question Number: 1349

Sent Date: 30th Jan 2025

Sub: Parliament Question.N. 1349

(a) The details of streetlights installed in the districts: Tiruchirappalli and Pudukkottai during the last five years under the 'Street Lighting National Programme 'along with the details of the capital investment, year-wise and location-wise; and

(b) The details of the capital investment in this regard?

Response to queries (a) and (b): The Ministry of Power may please reply.

The SLNP programme has not yet been implemented in the State of Tamil Nadu as EESL has not received consent from the State of Tamil Nadu to implement the program.

Question Number: S1406

Sent Date: 31st Jan 2025

Sub: Rajya Sabha Starred Question Dy. No. S1406 reg. Energy Conservation for answer on 10.02.2025 -reg.

(a) whether the performance of the country in the field of energy conservation is satisfactory as compared to other countries in the world;

(b) if so, the details thereof;

Response to Point (a) and (b): - The Ministry of Power may please reply.

(c) the details of energy conservation programmes being implemented by the Government; and

Response to Point (c): - The Ministry of Power may please reply.

However, as far as EESL is concerned, it is submitted that its various energy efficiency programs have resulted in improved energy saving leading to energy conservation. EESL is implementing the world's largest non-subsidized energy efficiency programs across sectors like lighting, buildings, e-mobility, EV charging infrastructure, smart metering, solar, industrial energy efficiency, and efficient agriculture pumping which has played a significant role in conservation of energy.

Since 2015, EESL programmes have been able to reduce the annual energy consumption by 58 billion units, CO2 emission by 47 million tons per annum and have helped the country avoid peak demand of approx. 12 GW showcasing their contribution towards energy conservation.

Brief description & physical achievements under EESL's programmes across the country are as below:

Sr. No. Name of the Programme Brief Description Unit Qty. Achieved

1 UJALA (Unnat Jyoti Affordable LEDs for All) The Unnat Jyoti by Affordable LEDs for All (UJALA) programme of EESL promotes the widespread adoption of energy-efficient LED bulbs and appliances to DISCOM consumers, making them accessible and affordable to households, thereby reducing energy consumption and electricity bills. LED bulbs Nos. 36.87 Cr. LED Tube Lights Nos. 72.19 Lacs EE Fans Nos. 23.59 Lacs

2 SLNP (Street Light National Programme) Street Light National Programme (SLNP) is one of the world's largest streetlight replacement programs, where conventional streetlights have been replaced with energy-efficient LED lights in ULBs/GPs across India. Nos. 1.31 Cr.

3 Building Energy Efficiency Programme The Building Energy Efficiency Programme (BEEP) of EESL aims to enhance energy efficiency in commercial and government buildings by retrofitting energy-saving technologies such as LED lighting, energy-efficient appliances, and advanced cooling systems. Nos. 12,710

4 Agriculture Demand Side Management (AgDSM) The Agricultural Demand Side Management (AgDSM) aims to improve energy efficiency in the agricultural sector by replacing inefficient agricultural pump sets with energy-efficient BEE 5 Star rated pumps, reducing energy consumption and enhancing irrigation efficiency. Nos. 83,107

5 Super-Efficient Air Conditioning Programme (SEAC) The Super-Efficient Air Conditioning (SEAC) programme of EESL promotes the deployment of energy-efficient air conditioners that consume significantly less power, contributing to energy conservation and reducing carbon emissions, through demand aggregation and bulk procurement. Nos. 3,146

(d) the extent of success achieved with regard to meet the set goals?

Response to Point (d): - The Ministry of Power may please reply.

However, as far is EESL is concerned, there hasn't been any target set by the Govt. for its various programmes. However, as far as Street Light National Programme (SLNP) is concerned, its objective was to convert conventional Street Lights with energy efficient LED Street Lights, targeting replacement of estimated 1.34 crores conventional Street Lights. Under SLNP, EESL has installed 1.31 Crore streetlights across the country.

Under Unnat Jyoti by Affordable LEDs for ALL (UJALA) scheme, LED bulbs, LED Tube lights and Energy efficient fans are being provided to domestic consumers for replacement of conventional and inefficient variant. Till date, over 36.87 crore LED bulbs, 72.19 lakh LED Tube lights and 23.59 lakh energy efficient fans have been distributed by EESL across India.

Question Number: U1492

Sent Date: 30th Jan 2025

Sub: Rajya Sabha provisionally admitted Unstarred Question Dy. No. U1492 reg. LED Bulbs under UJALA for answer on 10.02.2025.

(a) The details of the number of LED bulbs distributed by the Government under the UJALA scheme across the country, State-wise.

Response to query (a): To date, over 36.87 crore LED bulbs have been distributed by EESL across India.

State/UT-wise details of LED bulbs distributed by EESL are placed at Annexure – A.

(b) Whether 100% electrification of all households has been done in Karnataka and, if so, the details thereof, district-wise;

(c) the details of the steps taken/ being taken by the Government to ensure that power supply remains accessible for farmers regularly across the state of Karnataka. And

(d) the details of comparison of power tariffs given to farmers across the country?

Response to queries (b), (c) and (d): The Ministry of Power may please reply.

Annexure – A

S. No.	States & UTs	No. of LEDs bulbs Distributed
1	Andaman Nicobar	400,000
2	Andhra Pradesh	2,20,40,227
3	Arunachal Pradesh	4,99,498
4	Assam	71,92,072
5	Bihar	1,96,08,609
6	Chandigarh	5,54,283
7	Chhattisgarh	1,08,22,335
8	Dadra & Nagar Haveli	1,63,808
9	Daman & Diu	1,42,623
10	Delhi	1,34,31273
11	Goa	10,05,890
12	Gujarat	4,14,48,713
13	Haryana	1,56,08,119
14	Himachal Pradesh	86,48,483
15	Jammu and Kashmir	84,86,579
16	Jharkhand	1,36,45,874
17	Karnataka	2,42,64,486
18	Kerala	1,54,29,919
19	Ladakh	2,30,630
20	Lakshadweep	2,00,000
21	Madhya Pradesh	1,75,74,110

22	Maharashtra	2,19,86,569
23	Manipur	2,99,934
24	Meghalaya	4,33,789
25	Mizoram	6,15,332
26	Nagaland	10,99,038
27	Odisha	5,22,70,570
28	Puducherry	6,09,251
29	Punjab	30,16,739
30	Rajasthan	1,73,21,034
31	Sikkim	1,64,000
32	Tamil Nadu	43,63,183
33	Telangana	28,75,082
34	Tripura	10,54,437
35	Uttar Pradesh	2,62,95,772
36	Uttarakhand	56,73,850
37	West Bengal	92,29,228
Total		**36,87,05,340**

Question Number: S2508

Sent Date: 31st Jan 2025

Sub: Rajya Sabha - Parliamentary Question - S2508

a) Whether the government has done any study on sulphur dioxide pollution from EV battery production, if so, the details thereof;

b) What measures has the government taken towards building a clean supply chain for EV batteries and the details thereof;

c) Whether the government is investing in research on alternative chemistries that cause lesser pollution, if so, the details thereof.

Response to query (A), (B) and (C): The Ministry of Power may please reply.

Question Number: S782

Sent Date: 31st Jan 2025

Sub: Rajya Sabha provisionally admitted Unstarred / Starred Question Dy. No. S782 for reply on 10.02.2025 on "Power Exchange Market for Green Energy Transition"

(a) Whether the Power Exchange Market for the Green Energy Transition has been contemplated?

(b) If so, what will be the model of new Power Exchange Market that has been contemplated?

(c) When and how it will be introduced in the Green Energy Transition?

Response to Point (a), (b) & (c): - The Ministry of Power may please reply.

Information pertaining to EESL may be treated as 'NIL'.

Question Number: 4167

Sent Date: 3rd Feb 2025

Sub: Parliament Question- 4167

(a) whether the Government agrees with the view that utility data on electricity needs to be integrated with building or property IDs in order to establish energy usage benchmarks and track building-specific energy use and carbon emissions and, if so, the details thereof;

(b) the steps taken/ proposed to be taken by the Government in this regard; and

(c) if not, the reasons thereof?

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

Inputs of EESL may please be treated as NIL.

Question Number: 4031

Sent Date: 6th Feb 2025

Sub: Lok Sabha Unstarred Question Dy. No. 4031 reg. Promotion of Energy Efficient BLDC Ceiling Fan for answer on 13.02.202

(a). Whether in view of rapid urbanization and rising temperatures in the country energy efficient Brushless Direct Current (BLDC)ceiling fan are being promoted to meet country Nationally Determined Contribution (NDC) and manage Distribution Company (DISCOM) peak loads and if so, the details thereof and

Response to Point (a): - The Ministry may please reply.

However, as far as Energy Efficiency Services limited (EESL), is concerned, it has taken following initiatives for promotion of energy efficient BLDC fans:

• Under the Unnat Jyoti by affordable LED for all (UAJALA) programme, energy efficient BLDC ceiling fans have been sold by EESL across India.
• In order to further give boost to the adoption of energy efficient brushless direct current (BLDC) fans, EESL launched the National Energy Efficient Fan Programme (EEFP) on 2nd November 2023. The programme was launched by then, Hon'ble Minister of Power and New & Renewable Energy Shri R K Singh.
• EESL has been selling the BLDC fans across all the states and central government departments, through multiple channels like E-Commerce platform EESLMart.in, Affiliate Programme i.e. tieing up with various DISCOMs etc.
• Till date, EESL has sold more than 1 Lakh BLDC fans across India leading to their enhanced adoption.

(b). Whether in view of overall social benefits the Government considering introducing new and additional financial incentives especially for domestic and commercial consumers and mandate the DISCOMS for large-scale replacement of conventional fans and adoption of super-efficient fans in a time-bound manner and if so, the details thereof?

Response to Point (b): - The Ministry may please reply.

Question Number: 3655

Sent Date: 7th Feb2025

Sub: Lok Sabha provisionally admitted Unstarred Question Dy. No. 3655 reg. Ujala Scheme for answer on 13.02.2025.

(a) the way in which the Government is planning to maintain or exceed the current rate of improvement in
energy efficiency compared to global trends;
(b) the initiatives taken/being taken by the Government to increase the adoption of "Affordable LEDs for
All by Unnat Jyoti" (UJALA) scheme in rural and undeveloped areas;
(c) the steps taken/being taken by the Government to increase public awareness and participation towards
energy;

Response to Point (b) & (c): The Ministry of Power may please reply.
However, as far as the implementation of the UJALA/ Gram UJALA program by EESL/CESL is concerned, the following inputs may please be considered:

• UJALA has successfully transformed the domestic bulb market. In a short span, the price of LED Bulbs in the retail market has dropped significantly from Rs 300-350 to Rs 70-90 per bulb, increasing their affordability across income groups in both urban and rural areas.

• The UJALA scheme was one of the seven schemes selected for the Gram Swaraj Abhiyan, and EESL was the nodal agency for distributing LED bulbs in the identified villages using mobile awareness vans and kiosks. During the Gram Swaraj Abhiyan, the UJALA Yojana received several appreciations for distributing the bulbs in the difficult and remotest parts of the country.

• Furthermore, CESL, a wholly owned subsidiary of EESL, has distributed one crore LED bulbs as a pilot initiative under the Gram UJALA scheme, specifically targeting rural consumers in the states of Bihar, Uttar Pradesh, Andhra Pradesh, Karnataka, and Telangana. Under this scheme, rural consumers received 7W and 12W LED bulbs for ₹10 each in exchange for 60W and 100W incandescent bulbs. The Gram UJALA scheme was partially funded through carbon credits.

• Under the Ujala program/Gram UJALA program, during the distribution of LED bulbs, local-level awareness through print and electronic media was done about the benefits of the usage of LED bulbs.

(d) whether there is any proposal to introduce new technology or programmes to achieve energy savings
in areas not covered under current initiatives and if so, the details thereof; and
Response to point (d): The Ministry of Power may please reply.

(d) the status of implementation of energy conservation programme in Sidhi Parliamentary Constituency?

Response to Point (e): The Ministry of Power may please reply.
However, under the UJALA program, EESL has distributed 1,02,328 LED bulbs and 1,054 fans in the Sidhi parliamentary contingency in Madhya Pradesh.

Question Number: U1798

Sent Date: 28th Feb2025

Sub: Rajya Sabha Advance Question Diary No. U1798 to be answered on 10.03.2025.

a) Whether the Ministry has developed a framework to collaborate with state governments for the implementation of the 2024 Battery Swapping Guidelines and to ensure the establishment of battery-swapping stations in strategically identified urban and rural areas, if so, the details thereof;
Response to Point (a): The Ministry of Power may please reply.

b) Whether the Ministry is considering public-private-partnerships (PPPs) for the establishment and expansion of battery-swapping infrastructure, if so; the details thereof; and
Response to Point (b): The Ministry of Power may please reply.

However, as far as CESL is concerned, it has developed an innovative "market driven model" for establishing public EV charging and battery swapping stations (BSS) in India. Under this model, CESL will aggregate demand for potential locations identified by government/public land-owning agencies or land-providing entities to establish a wide range of charging technologies based on market demand (slow, fast and BSS). As a part of the implementation, CESL shall undertake procurement of services of Charge Point Operators (CPOs), including those from the private sector, for Supply, Installation, Testing, Commissioning, Operation and Maintenance of EV Charging and Battery Swapping Stations (BSS) on Build-Own-Operate-Maintain (BOOM) model.

In this process, CESL shall enter into a revenue-sharing agreement with government/public land-owning agencies in line with the model revenue-sharing agreement approved by the Ministry of Power, Government of India, vide their guidelines for installation and operation of EV charging infrastructure- 2024, dated 17th September 2024. CESL shall undertake overall supervision and program management of the entire implementation process.

c) Whether the Ministry has outlined specific milestones or deadlines for the nationwide rollout of battery-swapping stations, if so, the details of the targets and the expected impact on the adoption of electric vehicles in the country?
Response to Point (c): The Ministry of Power may please reply.

Question Number: 2398

Sent Date: 4th Mar2025

Sub: Rajya Sabha 02 Parliament Questions for answer on 10.03.2025 -reg. RSPQ 2398

The LED bulbs have been distributed under the Unnat Jyoti by Affordable LEDs for ALL (UJALA) scheme since 2019 and the corresponding energy savings achieved, State-wise;

Response to Point (a) : The total quantity of energy efficient and affordable LED bulbs distributed under Unnat Jyoti by Affordable LED for All (UJALA) scheme since 2019 is 8.94 Crores which have resulted in an estimated annual energy savings of 11.61 billion units (kWh). As on 25th Feb 2025. The state-wise details are enclosed as Annexure-A.

The details of the reduction in carbon emissions as a result of the UJALA since its inception, year-wise; the steps taken/being taken by the Government to increase public awareness and participation towards energy;

Response to Point (b) : The Ministry may please reply.

However, as far as EESL is concerned, the year-wise details of the reduction in carbon emissions as a result of the UJALA scheme since its inception are enclosed as Annexure-B.

The steps taken to ensure that LED bulbs under the scheme are affordable and accessible to weaker sections, rural and tribal households; and

Response to Point (c) : The Ministry of Power may please reply.
However, as far as the implementation of the UJALA/Gram UJALA program by EESL/CESL is concerned, the following inputs may please be considered:

UJALA has successfully transformed the domestic bulb market. In a short span, the price of LED Bulbs in the retail market has dropped significantly from Rs 300-350 to Rs 70-90 per bulb, increasing their affordability across income groups in both urban and rural areas.

The UJALA scheme was one of the seven schemes selected for the Gram Swaraj Abhiyan, and EESL was the nodal agency for distributing LED bulbs in the identified villages using mobile awareness vans and kiosks. During the Gram Swaraj Abhiyan, the UJALA Yojana received several appreciations for distributing the bulbs in the difficult and remotest parts of the country.

Furthermore, CESL, a wholly owned subsidiary of EESL, has distributed one crore LED bulbs as a pilot initiative under the Gram UJALA scheme, specifically targeting rural consumers in the states of Bihar, Uttar Pradesh, Andhra Pradesh, Karnataka, and Telangana. Under this scheme, rural consumers received 7W and 12W LED bulbs for ₹10 each in exchange for 60W and 100W incandescent bulbs. The Gram UJALA scheme was partially funded through carbon credits.

Under the Ujala program/Gram UJALA program, during the distribution of LED bulbs, local-level awareness through print and electronic media was done about the benefits of the usage of LED bulbs.

Whether the mechanisms are in place to evaluate and incorporate feedback from beneficiaries to improve the implementation of the UJALA scheme in the future, if so, the details thereof?

Response to point (d): The Ministry of Power may please reply.
However, as far as the implementation of the UJALA/Gram UJALA program by EESL/CESL is concerned, there are multiple mechanisms to incorporate feedback from beneficiaries to improve the implementation of the UJALA scheme in the future by addressing consumer complaints, as mentioned below :-
Toll-free numbers for complaints: 08366670840, 08363520500 (7:00 AM to 11:00 PM)
Email: helpline@eesl.co.in
Registration of complaints through the complaint handling system: https://support.eeslindia.org/
Consumers can also raise the complaint through the mobile application available on Android and iOS named EESL Sampark.
Further, consumers can also lodge complaints through the Government of India's CPGRAMS portal with the following web link: https://pgportal.gov.in/

Question Number: S3479

Sent Date: 3rd Mar 2025

Sub: Rajya Sabha Advance Question Diary No. S3479 to be answered on 10.03.2025.

(a) The main objectives of the UJALA Scheme, and how does it contribute to energy efficiency and sustainable development in India;

Response to query (a): The UJALA scheme, previously known as the Domestic Efficient Lighting Programme (DELP), was launched on January 5, 2015, by the Hon'ble Prime Minister. While the scheme has now achieved its objectives and is not in active implementation, its objectives included providing high-quality, energy-efficient LED bulbs to households at affordable prices, boosting demand by aggregating nationwide requirements and enabling bulk procurement to lower costs for both the program and retail market. The scheme aimed to make efficient lighting technology accessible to consumers, reducing energy bills while enhancing illumination quality. Additionally, it sought to raise awareness about the financial and environmental benefits of energy-efficient appliances, fostering a sustainable market for them.

The UJALA program facilitated the distribution of LED bulbs across various Indian states, with EESL having distributed 36.87 crore LEDs as of February 25, 2025. This has resulted in estimated annual energy savings of 48 billion kWh, avoided peak demand of 9,586 MW and a reduction of 39 million tons of CO_2 emissions. LEDs contribute to energy efficiency and sustainability by significantly lowering energy consumption, producing same luminosity as incandescent/ CFL lamps with much lesser power consumption, having a longer lifespan that reduces replacement frequency, thereby minimizing carbon emissions. Unlike CFLs, LEDs contain no toxic materials like mercury, making them safer for disposal and reducing environmental impact, thus supporting broader sustainability goals.

(b)The number of LED bulbs distributed under the UJALA Scheme so far in the State of Maharashtra and the overall energy savings achieved.

Response to Point (b): The total number of LED bulbs distributed in the State of Maharashtra under the UJALA scheme are 2.2 crore and overall energy savings achieved due to above is about 286 crore kWh (units).

(c) Manner in which the UJALA Scheme impact electricity consumption patterns in households, and the reduction in average household energy bills; and

Response to Point (c): Under the UJALA scheme, the estimated annual reduction in consumer electricity bills is ₹19,153 crores (at ₹4/unit). By replacing traditional incandescent bulbs and CFLs with energy-efficient LEDs, household lighting-related electricity consumption has decreased by nearly 75%. Further, an independent study by TERI carried out in the year 2024 found that switching to LEDs resulted in annual household savings of ₹1,300–₹1,818.

(d) Manner in which Government ensure the quality and durability of the LED bulbs distributed under the UJALA Scheme, whether there is a mechanism for addressing complaints from consumers?

Response to point (d): EESL ensures the quality and durability of LED bulbs under the UJALA scheme by adhering to procurements based on BIS standards and retaining a percentage of the contract value as a Bank Guarantee for the entire warranty period. At the time of the Ujala Scheme,

Quality assurance was enforced through multiple checks including test reports against technical compliances, LED chip durability and photo-biological tests. In addition, before dispatch, a third party pre-dispatch inspection was also carried out.

To cater to the consumer grievances, toll free numbers and contact emails were also provided.

Question Number: 6208

Sent Date: 3rd Mar 2025

Sub: Lok Sabha Unstarred Question Dy. No. 6208 reg. UJALA Scheme for answer on 13.03.2025.

(a) The main objectives of the UJALA Scheme, the manner in which it contributes to energy efficiency and sustainable development in the country;

Response to Point (a): The UJALA scheme, previously known as the Domestic Efficient Lighting Programme (DELP), was launched on January 5, 2015, by the Hon'ble Prime Minister. While the scheme has now achieved its objectives and is not in active implementation, its objectives included providing high-quality, energy-efficient LED bulbs to households at affordable prices, boosting demand by aggregating nationwide requirements and enabling bulk procurement to lower costs for both the program and retail market. The scheme aimed to make efficient lighting technology accessible to consumers, reducing energy bills while enhancing illumination quality. Additionally, it sought to raise awareness about the financial and environmental benefits of energy-efficient appliances, fostering a sustainable market for them.

The UJALA program facilitated the distribution of LED bulbs across various Indian states, with EESL having distributed 36.87 crore LEDs as of February 25, 2025. This has resulted in estimated annual energy savings of 48 billion kWh, avoided peak demand of 9,586 MW and a reduction of 39 million tons of CO_2 emissions. LEDs contribute to energy efficiency and sustainability by significantly lowering energy consumption, producing same luminosity as incandescent/ CFL lamps with much lesser power consumption, having a longer lifespan that reduces replacement frequency, thereby minimizing carbon emissions. Unlike CFLs, LEDs contain no toxic materials like mercury, making them safer for disposal and reducing environmental impact, thus supporting broader sustainability goals.

(b) The number of LED bulbs distributed under the UJALA Scheme so far in the State of Maharashtra and the overall energy savings achieved;

Response to Point (b): The total number of LED bulbs distributed in the State of Maharashtra under the UJALA scheme are 2.2 crore and the energy savings achieved are about 286 crore kWh (units).

(c) The manner in which the Government ensure the quality and durability of the LED bulbs distributed under the UAJALA scheme and whether a mechanism for addressing complaints from consumers;

Response to Point (c): EESL ensures the quality and durability of LED bulbs under the UJALA scheme by adhering to procurements based on BIS standards and retaining a percentage of the contract value as a Bank Guarantee for the entire warranty period. At the time of the Ujala Scheme, Quality assurance was enforced through multiple checks including test reports against technical compliances, LED chip durability and photo-biological tests. In addition, before dispatch, a third party pre-dispatch inspection was also carried out.

To cater to the consumer grievances, toll free numbers and contact emails were also provided.

(d) The manner in which the UJALA Scheme impacts electricity consumption patterns in households and the reduction in average household energy bills;

Response to point (d): Under the UJALA scheme, the estimated annual reduction in consumer electricity bills is ₹19,153 crores (at ₹4/unit). By replacing traditional incandescent bulbs and CFLs with energy-efficient LEDs, household lighting-related electricity consumption has decreased by nearly 75%. Further, an independent study by TERI carried out in the year 2024 found that switching to LEDs resulted in annual household savings of ₹1,300–₹1,818.

(e) The total financial outlay for the UJALA Scheme, and the manner in which it is funded by the Government;

Response to Point (e): The Ministry of Power may please reply.

However, as far as EESL is concerned, the Government of India has not allotted any budget for the UJALA Scheme. EESL is implementing the programme through its own funds (debt and equity).

(f) Whether the Government plans for expanding the UJALA Scheme to include other energy-efficient products, such as LED tube lights and fans and if so, the details thereof; and

Response to Point (f): EESL is already distributing energy-efficient tube lights and Energy-Efficient ceiling fans under the UJALA scheme. So far, EESL has distributed 72 lakh LED tube lights and 24 lakh Energy-Efficient Fans.

(g) The other mechanisms that are in place to track the success of the UJALA Scheme in terms of energy savings and consumer satisfaction?

Response to Point (e): The details of UJALA scheme are made available in the public domain through a dashboard (https://www.ujala.gov.in) showing the state-wise details of LED bulb distribution, avoided peak demand, annual cost savings and annual carbon emission reduction which shows the success of the scheme in terms of the energy saving.

Further, various third parties conduct impact assessment studies on EESL's UJALA programme in terms of tracking its success, energy savings and consumer satisfaction and one of recent studies by TERI shows the UJALA scheme has created a massive positive impact.

Question Number: 6137

Sent Date: 28th Mar 2025

Sub: Lok Sabha Unstarred Question Dy. No. 6137 reg. Adoption of UJALA Scheme for answer on 13.03.2025.

(a) The manner in which the Government plans to sustain the current rate of energy efficiency improvement compared to global trends?

Response to (a): The Ministry of Power may please reply.

(b) The details of the initiatives taken/ being taken by the Government to increase the adoption of the Unnat Jyoti by Affordable LEDs for All (UJALA) scheme in rural and underserved areas;

Response to (b): The Ministry of Power may please reply.
However, as far as the implementation of the UJALA/ Gram UJALA program by EESL/CESL is concerned, the following inputs may please be considered:

• UJALA has successfully transformed the domestic bulb market. In a short span, the price of LED Bulbs in the retail market has dropped significantly from Rs 300-350 to Rs 70-90 per bulb, increasing their affordability across income groups in both urban and rural areas.
• The UJALA scheme was one of the seven schemes selected for the Gram Swaraj Abhiyan, and EESL was the nodal agency for distributing LED bulbs in the identified villages using mobile awareness vans and kiosks. During the Gram Swaraj Abhiyan, the UJALA Yojana received several appreciations for distributing the bulbs in the difficult and remote parts of the country.
• Furthermore, CESL, a wholly owned subsidiary of EESL, has distributed one crore LED bulbs as a pilot initiative under the Gram UJALA scheme, specifically targeting rural consumers in the states of Bihar, Uttar Pradesh, Andhra Pradesh, Karnataka, and Telangana. Under this scheme, rural consumers received 7W and 12W LED bulbs for ₹10 each in exchange for 60W and 100W incandescent bulbs. The Gram UJALA scheme was partially funded through carbon credits.
• Under the Ujala program/Gram UJALA program, during the distribution of LED bulbs, local-level awareness through print and electronic media was done about the benefits of the usage of LED bulbs.

(c) The steps taken/ being taken by the Government to increase public awareness and participation in energy;

Response to (c): The Ministry of Power may please reply.
(d) Whether the Government proposes to introduce new technologies or programs to achieve energy savings in sectors not currently covered by existing schemes; and
(e) If so, details thereof?

Response to (d) and (e): The Ministry of Power may please reply.

Question Number: S1219, S1569

Sent Date: 28th Feb 2025

Sub: Rajya Sabha provisionally admitted Starred/ Unstarred Question No. S1219, S1569 reg. Battery Swapping Stations for answer on 10.03.2025.

(a) Whether the Ministry has any strategies to collaborate with State Governments to strategically implement the guidelines of Battery Swapping Stations and to set-up them in urban and rural areas;

(b) If so, the details thereof; and

Response to Point (a) and (b): The Ministry of Power may please reply.

(c) The manner in which the Ministry visualize the role of Public-Private Partnership in expanding the Battery Swapping infrastructure

Response to Point (c): The Ministry of Power may please reply.

However, as far as CESL is concerned, it has developed an innovative market-driven model for establishing public EV charging and battery swapping stations (BSS) in India. Under this model, CESL will aggregate demand for potential locations identified by government/public land-owning agencies or land-providing entities to establish a wide range of charging technologies based on market demand (slow, fast and BSS). As a part of the implementation, CESL shall undertake procurement of services of Charge Point Operators (CPOs), including those from the private sector, for Supply, Installation, Testing, Commissioning, Operation and Maintenance of EV Charging and Battery Swapping Stations (BSS) on Build-Own-Operate-Maintain (BOOM) model.

In this process, CESL shall enter into a revenue-sharing agreement with government/public land-owning agencies in line with the model revenue-sharing agreement approved by the Ministry of Power, Government of India, vide their guidelines for installation and operation of EV charging infrastructure- 2024, dated 17th September 2024. CESL shall undertake overall supervision and program management of the entire implementation process.

This issues with approval of Head (CP).(a) Whether the Ministry has any strategies to collaborate with State Governments to strategically implement the guidelines of Battery Swapping Stations and to set-up them in urban and rural areas;

(b) If so, the details thereof; and

Response to Point (a) and (b): The Ministry of Power may please reply.

(c) The manner in which the Ministry visualize the role of Public-Private Partnership in expanding the Battery Swapping infrastructure

Response to Point (c): The Ministry of Power may please reply.

However, as far as CESL is concerned, it has developed an innovative market-driven model for establishing public EV charging and battery swapping stations (BSS) in India. Under this model, CESL will aggregate demand for potential locations identified by government/public land-owning agencies or land-providing entities to establish a wide range of charging technologies based on market demand (slow, fast and BSS). As a part of the implementation, CESL shall undertake

procurement of services of Charge Point Operators (CPOs), including those from the private sector, for Supply, Installation, Testing, Commissioning, Operation and Maintenance of EV Charging and Battery Swapping Stations (BSS) on Build-Own-Operate-Maintain (BOOM) model.

In this process, CESL shall enter into a revenue-sharing agreement with government/public land-owning agencies in line with the model revenue-sharing agreement approved by the Ministry of Power, Government of India, vide their guidelines for installation and operation of EV charging infrastructure- 2024, dated 17th September 2024. CESL shall undertake overall supervision and program management of the entire implementation process.

Question Number: 6137

Sent Date: 28th Feb 2025

Sub: Lok Sabha Unstarred Question Dy. No. 6137 reg. Adoption of UJALA Scheme for answer on 13.03.2025.

(a) The manner in which the Government plans to sustain the current rate of energy efficiency improvement compared to global trends?

Response to (a): The Ministry of Power may please reply.

(b) The details of the initiatives taken/ being taken by the Government to increase the adoption of the Unnat Jyoti by Affordable LEDs for All (UJALA) scheme in rural and underserved areas;

Response to (b): The Ministry of Power may please reply.

However, as far as the implementation of the UJALA/ Gram UJALA program by EESL/CESL is concerned, the following inputs may please be considered:

· UJALA has successfully transformed the domestic bulb market. In a short span, the price of LED Bulbs in the retail market has dropped significantly from Rs 300-350 to Rs 70-90 per bulb, increasing their affordability across income groups in both urban and rural areas.

· The UJALA scheme was one of the seven schemes selected for the Gram Swaraj Abhiyan, and EESL was the nodal agency for distributing LED bulbs in the identified villages using mobile awareness vans and kiosks. During the Gram Swaraj Abhiyan, the UJALA Yojana received several appreciations for distributing the bulbs in the difficult and remote parts of the country.

· Furthermore, CESL, a wholly owned subsidiary of EESL, has distributed one crore LED bulbs as a pilot initiative under the Gram UJALA scheme, specifically targeting rural consumers in the states of Bihar, Uttar Pradesh, Andhra Pradesh, Karnataka, and Telangana. Under this scheme, rural consumers received 7W and 12W LED bulbs for ₹10 each in exchange for 60W and 100W incandescent bulbs. The Gram UJALA scheme was partially funded through carbon credits.

· Under the Ujala program/Gram UJALA program, during the distribution of LED bulbs, local-level awareness through print and electronic media was done about the benefits of the usage of LED bulbs.

(c) The steps taken/ being taken by the Government to increase public awareness and participation in energy;

Response to (c): The Ministry of Power may please reply.

(d) Whether the Government proposes to introduce new technologies or programs to achieve energy savings in sectors not currently covered by existing schemes; and

(e) If so, details thereof?

Response to (d) and (e): The Ministry of Power may please reply.

Question Number: U6208

Sent Date: 5th Mar 2025

Sub: Lok Sabha Questions for answer on 13.03.2025. U6208 (Revised 1)

a. **The main objectives of the UJALA Scheme along with the manner in which it contributes to energy efficiency and sustainable development in the country;**

Response to Point (a): The UJALA scheme, previously known as the Domestic Efficient Lighting Programme (DELP), was launched on January 5, 2015, by the Hon'ble Prime Minister. While the scheme has now achieved its objectives and is not in active implementation, its objectives included providing high-quality, energy-efficient LED bulbs to households at affordable prices, boosting demand by aggregating nationwide requirements and enabling bulk procurement to lower costs for both the program and retail market. The scheme aimed to make efficient lighting technology accessible to consumers, reducing energy bills while enhancing illumination quality. Additionally, it sought to raise awareness about the financial and environmental benefits of energy-efficient appliances, fostering a sustainable market for them.

The UJALA program facilitated the distribution of LED bulbs across various Indian states, with EESL having distributed 36.87 crore LEDs as of February 25, 2025. This has resulted in estimated annual energy savings of 48 billion kWh, avoided peak demand of 9,586 MW and a reduction of 39 million tons of CO_2 emissions. LEDs contribute to energy efficiency and sustainability by significantly lowering energy consumption, producing same luminosity as incandescent/ CFL lamps with much lesser power consumption, having a longer lifespan that reduces replacement frequency, thereby minimizing carbon emissions. Unlike CFLs, LEDs contain no toxic materials like mercury, making them safer for disposal and reducing environmental impact, thus supporting broader sustainability goals.

b. **The number of LED bulbs distributed under the UJALA Scheme so far in the State of Maharashtra and the overall energy savings achieved;**

Response to Point (b): The total number of LED bulbs distributed in the State of Maharashtra under the UJALA scheme are 2.2 crore and the annual energy savings achieved are about 286 crore kWh (units).

c. **The manner in which the Government ensure the quality and durability of the LED bulbs distributed under the UAJALA scheme and whether a mechanism for addressing complaints from consumers;**

Response to Point (c): EESL ensures the quality and durability of LED bulbs under the UJALA scheme by adhering to procurements based on BIS standards and retaining a percentage of the contract value as a Bank Guarantee for the entire warranty period. At the time of the Ujala Scheme, Quality assurance was enforced through multiple checks including test reports against technical compliances, LED chip durability and photo-biological tests. In addition, before dispatch, a third party pre-dispatch inspection was also carried out.

To cater to the consumer grievances, toll free numbers and contact emails were also provided.

d. **The manner in which the UJALA Scheme impacts electricity consumption patterns in households and the reduction in average household energy bills;**

Response to point (d): Under the UJALA scheme, the estimated annual reduction in consumer electricity bills is ₹19,153 crore (at ₹4/unit). By replacing traditional incandescent bulbs and

CFLs with energy-efficient LEDs, household lighting-related electricity consumption has decreased by nearly 75%. Further, an independent study by TERI carried out in the year 2024 found that switching to LEDs resulted in annual household savings of ₹1,300–₹1,818.

e. **The total financial outlay for the UJALA Scheme, and the manner in which it is funded by the Government;**

Response to Point (e): The Ministry of Power may please reply.

However, as far as EESL is concerned, the Government of India has not allotted any budget for the UJALA Scheme. EESL is implementing the programme through its own funds (debt and equity).

f. **Whether the Government plans for expanding the UJALA Scheme to include other energy-efficient products, such as LED tube lights and fans and if so, the details thereof; and**

Response to Point (f): EESL is already distributing energy-efficient tube lights and Energy-Efficient ceiling fans under the UJALA scheme. So far, EESL has distributed 72 lakh LED tube lights and 24 lakh Energy-Efficient Fans.

g. **The other mechanisms that are in place to track the success of the UJALA Scheme in terms of energy savings and consumer satisfaction?**

Response to Point (e): The details of UJALA scheme are made available in the public domain through a dashboard (https://www.ujala.gov.in) showing the state-wise details of LED bulb distribution, avoided peak demand, annual cost savings and annual carbon emission reduction which shows the success of the scheme in terms of the energy saving.

Further, various third parties conduct impact assessment studies on EESL's UJALA programme in terms of tracking its success, energy savings and consumer satisfaction and one of recent studies by TERI shows the UJALA scheme has created a massive positive impact.

Question Number: 6497

Sent Date: 6th Mar 2025

Sub: Lok Sabha provisionally admitted Unstarred Question Dy. No. 6497 regarding National Framework for Indian Carbon Market for answer on 13.03.2025.

(a) The specific timeline set to introduce the 'National Framework for Indian Carbon Market (ICM) and the steps taken by the Government to ensure that there are no delays in its rollout;
(b) The details of the sectors to be considered under the scheme and the number of sectors be covered in different phases of the scheme;
(c) The number of entities being covered under the scheme, State-wise; and
(d) The manner in which the framework incentivize participation from high-emission sectors and the mechanism are being developed to ensure compliance without disproportionately burdening on small and medium enterprises?

Response to queries (a), (b), (c) and (d): The Ministry of Power may please reply.

Question Number: 8645

Sent Date: 10th Mar 2025

Sub: Lok Sabha provisionally admitted Starred Question Dy. No. 8645 regarding Fraudulent Carbon Credit Transactions for answer on 20.03.2025.

(a) The specific measures proposed to be taken to prevent fraudulent carbon credit transactions in India's emerging carbon market framework;
(b) The details of the scheme proposed to be formulated by the Government to maintain economic development with the carbon reduction targets set for 2027 and 2030;
(c) The mechanism to be established to ensure compliance by the private sector with carbon reduction targets; and
(d) The plan of the Government to integrate lessons from international best practices discussed at Nature 2025 into India's climate policy framework?

Response to Point no. (a) (b) (c) & (d): The Ministry of Power may please reply.

Question Number: 1836

Sent Date: 10th Mar 2025

Sub: Rajya Sabha provisionally admitted Unstarred Question Dairy No. 1836 for answer on 17.03.2025 regarding

(a) The manner in which Government intends to maintain or improve the current rate of energy efficiency improvement compared to global trends;

Response to Point No. (a): The Ministry of Power may please reply.

(b) The steps being taken to increase the adoption of LEDs under "Ujjwala Yojana" in rural and deprived areas;
(c) The measures being taken to increase public awareness and energy participation;

Response to Point no (b) & (c): Ministry of Power may please reply.
However, as far as the implementation of the UJALA/ Gram UJALA program by EESL/CESL is concerned, the following inputs may please be considered:

• UJALA has successfully transformed the domestic bulb market. In a short span, the price of LED Bulbs in the retail market has dropped significantly from Rs 300-350 to Rs 70-90 per bulb, increasing their affordability across income groups in both urban and rural areas.
• The UJALA scheme was one of the seven schemes selected for the Gram Swaraj Abhiyan, and EESL was the nodal agency for distributing LED bulbs in the identified villages using mobile awareness vans and kiosks. During the Gram Swaraj Abhiyan, the UJALA Yojana received several appreciation for distributing the bulbs in the difficult and remotest parts of the country.
• Furthermore, CESL, a wholly owned subsidiary of EESL, has distributed one crore LED bulbs as a pilot initiative under the Gram UJALA scheme, specifically targeting rural consumers in the states of Bihar, Uttar Pradesh, Andhra Pradesh, Karnataka, and Telangana. Under this scheme, rural consumers received 7W and 12W LED bulbs for ₹10 each in exchange for 60W and 100W incandescent bulbs. The Gram UJALA scheme was partially funded through carbon credits.
• Under the Ujala program/Gram UJALA program, during the distribution of LED bulbs, local-level awareness through print and electronic media was done about the benefits of the usage of LED bulbs.

(d) The details of some specific actions taken in the State of Jharkhand; and
(e) If so, the details thereof?

Response to Point No. (d) & (e): The Ministry of Power may please reply.

However, as far as EESL is concerned following Programme have been implemented in Jharkhand:

PROGRAM Implementation Status in Jharkhand

UJALA LED Bulb Sold ---------- 1,36,45,874
UJALA LED Tube Light Sold ---------- 31,621
UJALA Energy Efficient Fans Sold ---------- 1,68,019

SLNP _____ 5,54,091 LED Street Lights Installed
AJAY_____ 14035 Total Lights Installed in Jharkhand

Question Number: 3828

Sent Date: 10th Mar 2025

Sub: Rajya Sabha provisionally admitted Unstarred Question Dairy No. 3828 for answer on 17.03.2025 regarding

a) The targets and timeline set under the Street Lighting National Programme;
Response to Point no (a): Street Light National Program (SLNP) is a voluntary program and under the program EESL had set an objective of converting an estimated number of 1.34 Crores existing conventional Street Lights across all ULBs (Urban Local Bodies) of the country with energy efficient LED Street Lights. For implementation of the program EESL has submitted the proposal to all States/UTs for implementation of SLNP and based on their approval EESL enters into agreement with ULBs or GPs (Gram Panchayats) and in most cases involving the concerned State/UT governments before taking up replacement of Street Lights.
Till date, EESL has installed over 1.31 crore LED Street Lights in ULBs and Gram Panchayats across India.

b) The number of conventional street lights replaced with LEDs, district-wise in Maharashtra;
Response to Point no (b): ULB wise number of conventional street lights replaced with LEDs in Maharashtra is enclosed at **Annexure - A**

c) Whether setting up new street lamp posts has also been considered as part of the Programme;
Response to Point no (c): Under the Street Lighting National Programme (SLNP), the primary focus is on replacing conventional streetlights with energy-efficient LED lights to reduce energy consumption and maintenance costs. However, setting up new street lamp posts is generally not a direct component of the programme.

d) If so, the methodology to identify areas where street lamps need to be installed, and the progress on the same; and
Response to Point no (d): Not applicable in view of reply to (c) above.

e) If not, the reasons therefor?

Response to Point (e): The SLNP primarily works with existing infrastructure by retrofitting or replacing traditional streetlights with LED-based lighting solutions. If new lamp posts are required, that typically falls under the jurisdiction of local municipal bodies, urban development authorities, or separate infrastructure projects.

Question Number: 8787

Sent Date: 13th Mar 2025

Sub: LoK Sabha Unstarred Question Dy. No. 8787 to be answered on 20.03.2025 regarding Street Lighting

a) The details along with the salient features of the Street Lighting National Programme (SLNP) implemented across various parts of the country;
Response to Point no (a): Launched in 2015 by Hon'ble Prime Minister Shri Narendra Modi as the "Prakash Path" initiative, SLNP aims to reduce energy consumption and costs in public lighting through the widespread adoption of LED street lighting across India.
EESL, as the implementing agency for SLNP, has installed over 13.1 million LED streetlights across urban and rural areas, resulting in an estimated annual saving of approximately 8.8 billion kWh and reduction in peak demand by 1,471 MW and saving of over ₹6,180 crores in energy bills for municipalities and gram panchayats annually. The program has also helped in reduction of approximately 6 million tons of CO_2 emissions annually, aligning with India's commitment to mitigating climate change.
b) The whether the Government proposes to replace conventional street lights all over with LED lights under SLNP all over Maharashtra, UT of Dadra and Nagar Haveli and Madhya Pradesh;
c) If so, the details thereof;
d) the details of works carried out so far in this direction; and
Response to Point no. (b) (c) and (d): The Street Lighting National Programme (SLNP) was initiated as a voluntary national initiative by the Government of India on January 5, 2015, to promote energy efficiency in public lighting. Under this voluntary programme, EESL typically enters into MoU/Agreements with States entities who express their consent and willingness to implement the program in their respective Urban Local Bodies/Municipal Corporations/Gram Panchayats.
The details of SLNP implementation in states of Maharashtra & Madhya Pradesh has been enclosed as Annexure – A & B respectively.
SLNP has not yet been implemented in the UT of Dadar and Nagar Haveli.

e) details of amount of funds allocated to Maharashtra, UT of Dadra and Nagar Haveli and Madhya Pradesh under SLNP during the last three years and the current year along with the amount of funds utilized out of the said funds??
Response to Point (e): The Ministry of Power may please reply.

However, as far as EESL is concerned, the Government of India has not allocated any budget for the SLNP program. EESL is implementing the program through its own funds (debt and equity).

Question Number: 9117

Sent Date: 11th Mar 2025

Sub: Seeking inputs for provisionally starred LS question Dy no. 9117 for 20.03.2025 regarding "Public Charging

(a) Whether the Government has issued any guidelines for establishing the ceiling cost for supply of electricity from public charging stations for electric vehicles;
(b) If so, the details thereof; and
(c) The key highlights of any monitoring or evaluation of such guidelines and the follow-up by the Government to further promote their adoption by the States?
Response to Point no. (a), (b) and (c): The Ministry of Power may please reply.

Question Number: U2104

Sent Date: 13th Mar 2025

Sub: Rajya Sabha provisionally admitted Unstarred Question Dairy No. U2104 for answer on 24.03.2025 regarding Energy Conservation Programmes.

i. How does the Ministry plan to sustain or surpass the current rate of energy efficiency improvement compared to global trends??

Response to Point (i): The Ministry of Power may please reply.

ii. What initiatives are being taken to increase the adoption of the Unnat Jyoti by Affordable LEDs for All (UJALA) scheme in rural and underserved areas?
iii. What steps are being taken to increase public awareness and participation in energy?
Response to Point (ii) & (iii): Ministry of Power may please reply.

However, as far as the implementation of the UJALA/ Gram UJALA program by EESL/CESL is concerned, the following inputs may please be considered:
• UJALA has successfully transformed the domestic bulb market. In a short span, the price of LED Bulbs in the retail market has dropped significantly from Rs 300-350 to Rs 70-90 per bulb, increasing their affordability across income groups in both urban and rural areas.

• The UJALA scheme was one of the seven schemes selected for the Gram Swaraj Abhiyan, and EESL was the nodal agency for distributing LED bulbs in the identified villages using mobile awareness vans and kiosks. During the Gram Swaraj Abhiyan, the UJALA Yojana received several appreciations for distributing the bulbs in the difficult and remotest parts of the country.

• Furthermore, CESL, a wholly owned subsidiary of EESL, has distributed one crore LED bulbs as a pilot initiative under the Gram UJALA scheme, specifically targeting rural consumers in the states of Bihar, Uttar Pradesh, Andhra Pradesh, Karnataka, and Telangana. Under this scheme, rural consumers received 7W and 12W LED bulbs for ₹10 each in exchange for 60W and 100W incandescent bulbs. The Gram UJALA scheme was partially funded through carbon credits.

• Under the Ujala program/Gram UJALA program, during the distribution of LED bulbs, local-level awareness through print and electronic media was done about the benefits of the usage of LED bulbs.

iv. Are there plans to introduce new technologies or programs to achieve energy savings in sectors not currently covered by existing initiatives?
v. If Yes, details thereof?
Response to Point (iv) & (v): The Ministry of Power may please reply.

Question Number: S3089

Sent Date: 19th Mar 2025

Sub: Rajya Sabha Provisionally admitted Unstarrred/Starred Question Dy. No. S3089 to be answered on 24.03.2025 regarding "Initiatives under UJALA Scheme".

i. What are the key achievements of the UJALA Programme since its launch in 2015, particularly
in terms of LED bulb, tube light, and energy-efficient fan distribution?

Response to Point (i): Since its launch in 2015, EESL has sold 36.87 crore LED bulbs, 72.2 lakh LED Tube lights and 23.6 lakh energy efficient fans under the UJALA program across India. The above has led to the following achievements:

(a) Significant reduction in appliance prices: Through bulk procurement, demand aggregation, and large-scale distribution, the program achieved upto 90% reduction in the cost of energy-efficient appliances sold under UJALA, making them highly affordable for consumers across all socio-economic segments.

(b) Market transformation and demand creation: UJALA revolutionized the LED lighting market, significantly boosting demand for LED products and making India a global leader in LED adoption.

(c) Developing domestic LED manufacturing ecosystem: The programme catalyzed the growth of a high-quality domestic LED lamp manufacturing industry, promoting local innovation and production.

(d) Enhanced saving on consumer's energy bills: Energy savings due to UJALA program is estimated to be 48.4 billion kWh per year leading to annual monetary savings of over Rs. 19,300 crores on electricity bills by the consumers.

(e) Climate Change Mitigation and Energy Security: The adoption of energy-efficient appliances sold under UJALA programme has resulted in reduction of carbon emissions by approximately 39 million tonnes of CO_2 per year.

Additionally, the program has played a pivotal role in reducing peak electricity demand by about 9.8 GW, leading to enhanced energy security.

(f) Increased awareness about Energy Efficiency: The program has played a major role in raising consumer awareness about the benefits of energy-efficient appliances, resulting in preference shift towards adoption of more energy-efficient products.

(g) Global recognition as a model programme : UJALA has emerged as a global success story, demonstrating how widespread adoption of energy-efficient and environmentally friendly products can be increased by making them widely accessible and affordable.

ii. How has the Programme contributed to energy savings, peak demand reduction, and greenhouse gas emission reductions across India?

Response to Point (ii): Till Date, 36.87 crore LED bulbs, 72.2 lakh LED Tube lights and 23.6 lakh energy efficient fans have been sold by EESL under the UJALA program, across India. This has resulted in cumulative estimated energy savings of 48.4 billion kWh per year, emission reduction of about 39.2 million tCO2 per year and avoided peak demand of 9.8 GW.

iii. What is the estimated financial impact of UJALA on consumer electricity bills, and how has it helped in reducing energy costs?

Response to Point (iii): Sale of 36.87 crore LED bulbs, 72.2 lakh LED Tube lights and 23.6 lakh energy efficient fans under the UJALA program has resulted in an estimated annual reduction in consumer electricity bills by approx. ₹19,335 crore (at ₹4/unit) leading to reduced energy costs for the consumers.

Question Number: 3437

Sent Date: 17th Mar 2025

Sub: LSPQ_3437_Public Charging Stations for EVs

(a) Whether the Government has issued any guidelines for establishing the ceiling cost for supply of electricity from public charging stations to the electric vehicles;
(b) if so, the details thereof; and
(c) the key highlights of any monitoring or evaluation of such guidelines and the follow-up by the Government to further promote their adoption by the States?

Response to Point (a) (b) & (c): The Ministry of Power may please reply.

Question Number: 3336

Sent Date: 17th Mar 2025

Sub: LSPQ_3336 Charging time for Electric Vehicles

(a) Whether the Government has issued any guidelines for establishing the ceiling cost for supply of electricity from public charging stations to the electric vehicles;
(b) if so, the details thereof; and
(c) the key highlights of any monitoring or evaluation of such guidelines and the follow-up by the Government to further promote their adoption by the States?
Response to Point (a) (b) & (c): The Ministry of Power may please reply.

Question Number: U2104

Sent Date: 17th Mar 2025

Sub: Rajya Sabha provisionally admitted Unstarred Question Dairy No. U2104 for answer on 24.03.2025 regarding Energy Conservation Programmes.

"i. How does the Ministry plan to sustain or surpass the current rate of energy efficiency improvement compared to global trends??

Response to Point (i): The Ministry of Power may please reply.

ii. What initiatives are being taken to increase the adoption of the Unnat Jyoti by Affordable LEDs for All (UJALA) scheme in rural and underserved areas?
iii. What steps are being taken to increase public awareness and participation in energy?

Response to Point (ii) & (iii): Ministry of Power may please reply.

However, as far as the implementation of the UJALA/ Gram UJALA program by EESL/CESL is concerned, the following inputs may please be considered:
• UJALA has successfully transformed the domestic bulb market. In a short span, the price of LED Bulbs in the retail market has dropped significantly from Rs 300-350 to Rs 70-90 per bulb, increasing their affordability across income groups in both urban and rural areas.

• The UJALA scheme was one of the seven schemes selected for the Gram Swaraj Abhiyan, and EESL was the nodal agency for distributing LED bulbs in the identified villages using mobile awareness vans and kiosks. During the Gram Swaraj Abhiyan, the UJALA Yojana received several appreciations for distributing the bulbs in the difficult and remotest parts of the country.

• Furthermore, CESL, a wholly owned subsidiary of EESL, has distributed one crore LED bulbs as a pilot initiative under the Gram UJALA scheme, specifically targeting rural consumers in the states of Bihar, Uttar Pradesh, Andhra Pradesh, Karnataka, and Telangana. Under this scheme, rural consumers received 7W and 12W LED bulbs for ₹10 each in exchange for 60W and 100W incandescent bulbs. The Gram UJALA scheme was partially funded through carbon credits.

• Under the Ujala program/Gram UJALA program, during the distribution of LED bulbs, local-level awareness through print and electronic media was done about the benefits of the usage of LED bulbs.

iv. Are there plans to introduce new technologies or programs to achieve energy savings in sectors not currently covered by existing initiatives?
v. If Yes, details thereof?

Response to Point (iv) & (v): The Ministry of Power may please reply.