GOVERNMENT OF INDIA
MINISTRY OF POWER

LOK SABHA
UNSTARRED QUESTION NO.4537
ANSWERED ON 27.03.2025

RURAL ELECTRIFICATION IN ASSAM

4537. SHRI AMARSING TISSO:

Will the Minister of POWER
be pleased to state:

(a) the status of rural electrification in Assam, particularly in Karbi Anglong and Dima Hasao districts including the details of the number of villages yet to be electrified;

(b) the steps taken by the Government to improve the reliability of power supply in remote and tribal areas of Assam;

(c) whether the Government has taken any initiatives to promote renewable energy integration into the State's power grid, and if so, the details thereof;

(d) the details of the funds allocated and utilized for power infrastructure development in Assam during the last five years and the current year; and

(e) whether there are any plans to set up new hydroelectric or solar power projects in Assam, particularly in tribal and hilly areas and if so, the details thereof?

A N S W E R

THE MINISTER OF STATE IN THE MINISTRY OF POWER

(SHRI SHRIPAD NAIK)

(a) & (b) : Government of India has been supplementing the efforts of the States through schemes like Deen Dayal Upadhyaya Gram Jyoti Yojana (DDUGJY), Integrated Power Development Scheme (IPDS), Pradhan Mantri Sahaj Bijli Har Ghar Yojana (SAUBHAGYA) and Revamped Distribution Sector Scheme (RDSS), to help them achieve the objective of providing quality and reliable supply of power to all households including remote and tribal areas of Assam.

As reported by the States/UTs, all the inhabited un-electrified census villages in the country were electrified by 28th April, 2018. A total of 2,732 villages were electrified for State of Assam. Under DDUGJY and thereafter under SAUBHAGYA, as reported by all States/UTs, electrification of all willing un-electrified households was completed. A total of 23,26,656 households were electrified for State of Assam. Both the schemes stand closed as on 31.03.2022.

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Government of India launched the scheme of Revamped Distribution Sector Scheme (RDSS) in July 2021 to improve the quality and reliability of supply of power through operationally efficient and financially viable distribution sector. Under the scheme, projects have been sanctioned for loss reduction infrastructure and smart metering works. For the State of Assam, projects worth Rs. 3,394 Cr and Rs. 4,050 Cr have been sanctioned for loss reduction infrastructure and smart metering works respectively. Execution of these works would help improve quality of supply of power across the State of Assam.

Government of India is supporting the States for grid electrification of households left-out during SAUBHAGYA, under the ongoing scheme of Revamped Distribution Sector Scheme (RDSS), launched in July, 2021. In addition, all households belonging to Particularly Vulnerable Tribal Group (PVTG) identified under PM-JANMAN (Pradhan Mantri Janjati Adivasi Nyaya Maha Abhiyan) and households belonging to Scheduled Tribes identified under DA-JGUA (Dharti Aaba Janjatiya Gram Utkarsh Abhiyan) are being sanctioned for on-grid electricity connection under RDSS as per the scheme guidelines. So far, works for electrification of 10.19 lakh households have been sanctioned amounting to Rs. 4,643 Cr. under RDSS. The infrastructure works sanctioned for the State of Assam also include works for electrification of 1.27 lakh households.

The details of works sanctioned and executed for the district of Karbi Anglong and Dima Hasao are placed at Annexure-I.

Further, Government of Assam has informed that it has taken up several steps to improve the reliability of power supply like construction of new sub-stations and High Tension (HT) lines and replacement of old and bare conductors with insulated cables under RDSS and Externally Aided Project (EAP) namely *'Assam Distribution System Enhancement and Loss Reduction'* project.

(c) : A robust national grid has been established to facilitate the transfer of power from power surplus regions to power deficit regions. The inter-regional transmission capacity has been increased from 75,050 MW during 2016-17 to 1,18,740 MW as on 31.12.2024. The capacity of National Grid is being expanded on a continuous basis commensurate with the growth in electricity generation and electricity demand. The primary challenges in integrating renewable energy into the grid are intermittency in Renewable Energy (RE) generation, non-availability of adequate flexible resources, etc.

The Government has taken various measures to facilitate the integration of RE resources into the National Grid to ensure reliability and stability as under:

(i) Construction of Intra-State and Inter-State transmission systems for evacuation of Renewable power.

(ii) Transmission plan for integration of more than 500 GW RE capacity by 2030 has been prepared.

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(iii) Setting up of Regional Energy Management Centers (REMCs) for better forecasting of renewable power and to assist grid operators to manage variability and intermittency of renewable power.

(iv) Innovative products like Solar-Wind Hybrid Projects, RE projects with energy storage systems and supply of RE power balanced with power from non-RE sources launched to reduce intermittency.

(v) Implementation of Green Term Ahead Market (GTAM) and Green Day Ahead Market (GDAM) for sale of renewable energy.

(vi) Waiver of Inter-State Transmission Charges on transmission of electricity generated from RE sources such as Solar, Wind, and Hydro.

(vii) Flexibility in generation and Scheduling of Thermal/Hydro Power Stations through bundling with Renewable Energy and Storage Power. Flexibilization of thermal generation is mandated to address the variability of RE generation.

(viii) Central Financial Assistance (CFA) is being provided to the States for setting up Transmission infrastructure for RE integration within their State under the Green Energy Corridor Scheme.

(ix) CEA (Technical Standards for Connectivity to the Grid) Regulations lay down the minimum technical requirements for the RE generating plants to ensure the safe, secure and reliable operation of the grid. The compliances to the said regulations by RE plants are verified jointly by Central Transmission Utility (CTUIL) and Grid-India / Regional Load Despatch Centres (RLDCs) before granting connectivity/interconnection to the national grid. Robust compliances verification is done before interconnection of any new plant to the grid.

(x) Indian Electricity Grid Code mandates that RE plants participate in the primary and secondary frequency control in case of contingencies. Hybrid RE power plants, Energy Storage Systems such as BESS (Battery Energy Storage System) and PSP (Pump Storage Project) are being promoted for mitigating variability in RE generation and provide adequate frequency support to the grid.

The measures taken by the State of Assam for renewable integration and for promotion of Renewable Energy projects in the State is placed at Annexure-II.

(d) : The details of the Central grant released /utilized during the last five years and the current year in the State of Assam for power infrastructure development is enclosed at Annexure-III.

(e) : As on 28th February, 2025, a cumulative capacity of 578.45 MW Renewable Energy which includes 192.34 MW Solar, 350 MW Large Hydro, 34.11 MW Small Hydro and 2MW Bio-Power has been installed in the state of Assam. Presently, Assam Power Generation Corporation Limited (APGCL) is setting up a Lower Kopili (120 MW) hydroelectric power in Dima Hasao District of Assam. The projects planned in Assam as reported by the State is placed at Annexure-IV.

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ANNEXURE-I

ANNEXURE REFERRED IN REPLY TO PARTS (a) & (b) OF UNSTARRED QUESTION NO. 4537 ANSWERED IN THE LOK SABHA ON 27.03.2025

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Details of works executed under erstwhile scheme of DDUGJY, SAUBHAGYA and sanctioned under RDSS

1. **A total of 650 and 256 villages were electrified under DDUGJY in the districts of Karbi Anglong and Dima Hasao respectively.**

2. **Detail of works undertaken under DDUGJY in the two districts is as below:**

Sl. No.	Items	Units	Karbi Anglong	Dima Hasao
1	Sub-stations (including augmentation)	Nos.	05	01
2	Distribution Transformers	Nos.	2601	332
3	11 kV lines	CKMs	5877.64	816.11
4	LT lines	CKMs	4817.48	471.35
5	33 kV & 66 kV lines	CKMs	48.8	0.8
6	Consumer Energy Meters	Nos.	00	00
7	Distribution Transformers Meters	Nos.	567	300
8	11 kV Feeder Meters	Nos.	13	15

3. **Projects worth Rs 126.46 Cr and Rs. 46.97 Cr have been sanctioned for loss reduction infrastructure works under RDSS for the district of Karbi Anglong and Dima Hasao respectively. The sanctioned works include cabling works, High Voltage Distribution System (HVDS) feeder bifurcation, reconductoring of 11/22kV lines and 33/66kV lines.**

4. **A total 9,011 and 2,604 households were sanctioned under RDSS for the districts of Karbi Anglong and Dima Hasao, respectively.**

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ANNEXURE-II

ANNEXURE REFERRED IN REPLY TO PART (c) OF UNSTARRED QUESTION NO. 4537 ANSWERED IN THE LOK SABHA ON 27.03.2025

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Measures taken in the State of Assam for renewable integration and for promotion of Renewable Energy projects in the State

1. **Under PM Surya Ghar: Muft Bijli Yojana, installation has been done in 8,748 Households in the State of Assam, out of which 5,003 Households have been released subsidy amount of Rs. 4.76 Cr.**

2. **A total of 201 MW of potential sites for Small Hydro Power (SHP) have been identified in the State of Assam, out of which 34.11 MW has been the total installed capacity as of 28.02.2025.**

3. **The cumulative number of Off-Grid Solar Photo Voltaic (SPV) applications installed/distributed as of 28.02.2025 is tabulated below:**

Solar Home Lights (in Nos.)	Solar Lanterns & Lamps (in Nos.)	Solar Street Lights (in Nos.)	Solar Power Packs (in kWp)
46,879	6,47,761	29,538	1,605

4. **The assessed Biomass Power Potential in the State of Assam is 321.89 MWe, out of which, 2 MW of Non-Bagasse Biomass Cogeneration capacity has been installed.**

5. **The State government has notified Assam Integrated Clean Energy Policy 2025 on 24th February 2025 including Green Hydrogen, with a target of 2,000 kTPA (kilo Tonnes Per Annum) in the next five years by harnessing the RE potential and creation of 10,000 jobs per annum for production of Green Hydrogen in the State. It also has a target of commissioning at least one green hydrogen valley to cater to the demand from fertilizer plants and refineries within the state.**

6. **Oil India Limited (OIL) commissioned "India's first 99.999% pure" Green Hydrogen plant in Assam. The pilot plant set up in central Assam's Jorhat has the capacity producing 10 kg of hydrogen per day.**

7. **SGEL Assam Renewable Energy Ltd, a joint venture between SJVN Green Energy Ltd and Assam Power Distribution Co. Ltd, has plan to develop a 25 MW green hydrogen plant within the state of Assam.**

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ANNEXURE-III

ANNEXURE REFERRED IN REPLY TO PART (d) OF UNSTARRED QUESTION NO. 4537 ANSWERED IN THE LOK SABHA ON 27.03.2025

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Details of Central funds utilized/ released for power infrastructure development in the State of Assam from Central sources during the last five years and the current year

(in Rs. Crore)

Project	2020-21	2021-22	2022-23	2023-24	2024-25*	Total
RDSS - Distribution Infrastructure Works	-	-	10.4	578.7	570.1	1,159.2
NERPSIP	182.6	265.5	131.9	91.9	40.6	712.5
DDUGJY	415.8	339.1	33.8	933.6	0.0	1,722.2
IPDS	118.5	20.5	0.0	13.8	0.0	152.7
SAUBHAGYA	86.4	60.2	26.7	0.0	0.0	173.2
Total	803.2	685.2	202.8	1,617.9	610.7	3,919.9

****Released/ Provisional Figures***

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ANNEXURE-IV

ANNEXURE REFERRED IN REPLY TO PART (e) OF UNSTARRED QUESTION NO. 4537 ANSWERED IN THE LOK SABHA ON 27.03.2025

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Projects proposed to be set up by the State of Assam

1. **As reported by the State of Assam, the Government of Assam is in the process of setting up a 1000 MWp Solar Project under Mukhya Mantri Sauro Shakti Prokolpo in Karbi Anglong district of Assam.**

2. **The Govt. of Assam has taken up the following projects for generation of solar power in the State of Assam:**

   - **Implementation of 1000 MWp (750 M W_{AC}) Solar Power Plant in the State under "Mukhya Mantri Sauro Shakti Prokolpo" with ADB funds.**

   - **Development of 1000 MW Renewable Power Projects by Joint Venture (JV) of APDCL and SJVN Green Energy Ltd.**

   - **Development of 1000 MW Renewable Power Projects JV of APDCL and NLC India Ltd.**

   - **Setting up of 250 MW Battery Energy Storage System (BESS) JV of APDCL and ONGC Tripura Power Company Ltd.**

   - **Procurement of 70 M W Solar power from Grid Connected Ground Mounted Solar PV Project to be developed under Build-Own-Operate (BOO) mode by SJVN.**

   - **Procurement of 50 M W Solar power from Grid Connected Ground Mounted Solar PV Project to be developed under Build-Own-Operate (BOO) mode by SJVN.**

   - **Procurement of 200 M W Solar power from Grid Connected Ground Mounted Solar PV Project to be developed under Build-Own-Operate (BOO) mode by SJVN.**

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