Demand for Grants 2026-27 Analysis

Power and New & Renewable Energy

Highlights

- Coal-based plants account for 43% of installed capacity and generate 71% of electricity. Solar and wind generate 13% of electricity with a 37% share in installed capacity. Their intermittent nature means that increasing their share in generation needs to be carefully sequenced to maintain grid stability.
- In 2024-25, 58% of targeted transmission lines were added. The sector remains import-dependent for critical materials used in transmission infrastructure.
- Distribution utilities continue to incur losses, although losses have come down in recent years. Losses are due to factors such as underpricing of tariffs and higher technical and commercial losses.

Key announcements in Budget Speech 2026-27

- **Custom duty exemptions:** The central government will exempt basic customs duty on capital goods used in cells of battery energy storage. Also, duty exemptions for nuclear power project imports is extended till 2035.
- **Restructuring of PFC and RFC:** Power Finance Corporation (PFC) and Rural Electrification Corporation (REC) will be restructured in accordance with the Viksit Bharat vision for Non-Banking Financial Corporations.
- **Dedicated rare-earth corridors:** The central government will establish rare-earth corridors to promote mining, processing, research, and manufacturing.
- **Carbon Capture Utilisation and Storage:** An outlay of Rs 20,000 crore is proposed for the Carbon Capture Utilisation and Storage (CCUS) technologies over the next five years.

Power is under the concurrent list of the Constitution.[1] Both the central and state government implement programmes and schemes on the subject. The Ministry of Power is responsible for policy formulation and implementation for the electricity sector at the central level.[2] The Ministry of New and Renewable Energy (MNRE) works towards promotion and development of renewable sources such as solar and wind.[3]

These Ministries also administer several public sector undertakings. As of December 2025, 23% of the generation capacity is owned by the central PSUs such as NTPC and NHPC.[4] Another 22% is owned by the state government-owned entities.[4] In 2024-25, 93% share of the distribution by both revenue earned and volume of energy sold was undertaken by state government-owned entities.[5] This note analyses budgetary allocation and expenditure trends of the two ministries and discusses key issues.

Overview of Finances

Ministry of Power: In 2026-27, the Ministry of Power has been allocated Rs 29,997 crore, an increase of 39% over the revised estimate of 2025-26.[6] About 1% of this allocation is towards capital expenditure.[6] 60% of the total expenditure has been allocated towards the Revamped Distribution Sector Scheme (RDSS).[6] This scheme was launched in 2021 to provide support to distribution companies for improving financial and operational performance.[7] A key component of RDSS is the assistance for installation of prepaid smart meters. Other key heads of allocation are: (i) assistance to central public sector undertakings for power projects (25% of the allocation), (ii) transfers to Power System Development Fund (PSDF) (4%), which is utilised for creating transmission systems, and (iii) viability gap funding for development of battery energy storage system (3%).[6]

Ministry of New and Renewable Energy: In 2026-27, the Ministry of New and Renewable Energy (MNRE) has been allocated Rs 32,915 crore, an increase of 30% from the revised estimate of 2025-26.[8] The increase is driven by higher allocations towards PM Surya Ghar Muft Bijli Yojana (an increase of Rs 5,000 crore).[8] The scheme was approved in February 2024.[9] It provides financial assistance to households for installing rooftop solar.[9]

Table 1: Allocations towards Ministries of Power and New & Renewable Energy (in Rs crore)

Head	2024-25 Actuals	2025-26 RE	2026-27 BE	% change (25-26 RE to 26-27 BE)
Power	**19,714**	**21,588**	**29,997**	**39%**
of which				
RDSS	12,974	15,671	18,000	15%
Assistance to PSUs	2,980	2,732	7,401	171%
Power System Development Fund	1191	1100	1103	0%
MNRE	**18,627**	**25,301**	**32,915**	**30%**
of which				
PM Surya Ghar	7,818	17,000	22,000	29%
Solar Power (Grid)	6,583	1,000	1,775	78%
PM KUSUM	2,560	5,000	5,000	0%
Wind Power (Grid)	800	500	500	0%
Green Hydrogen	301	300	600	100%

Note: BE: Budget Estimates; RE: Revised Estimates.
Sources: Demand No. 71 and 79, Expenditure Budget, Union Budget 2026-27; PRS.

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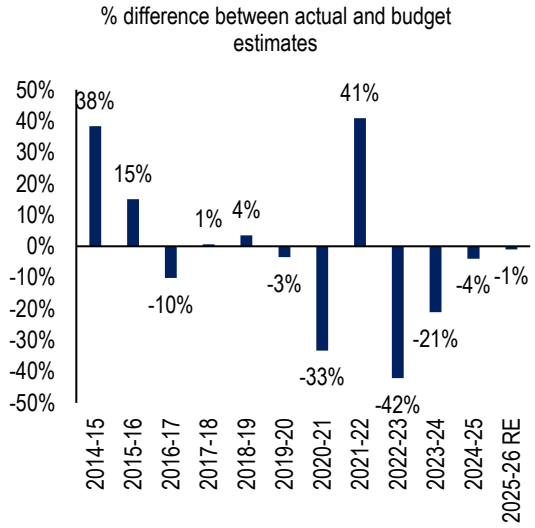
Trends in fund utilisation over the years

Ministry of Power: The fund utilisation by the Ministry of Power has seen wide fluctuations over the last decade (see Figure 1). In 2022-23, the actual expenditure by the Ministry was 42% lower than budgeted. This was mainly driven by lower fund utilisation under RDSS (64%). In the previous year (2021-22), the actual expenditure was 41% higher than the budget expenditure. This was due to higher expenditure on multiple schemes such as Integrated Power Development Scheme (IPDS), Deen Dayal Upadhyaya Gram Jyoti Yojana (DDUGY), and programmes including those on strengthening of power systems. In 2025-26, as per revised estimates, the overall expenditure by the Ministry of Power is 1% lower than budgeted.

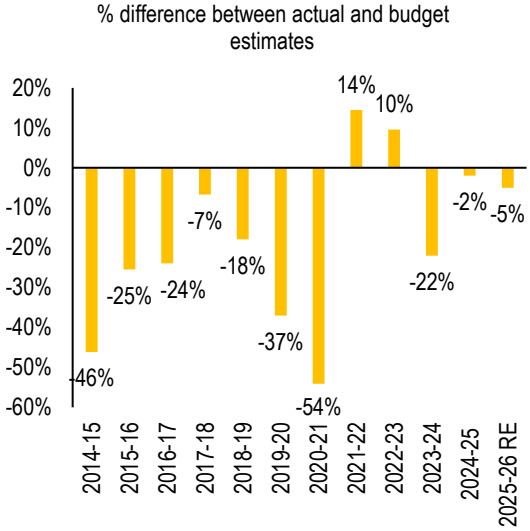
Figure 1: Fund utilisation by Power Ministry



Note: For 2025-26, revised estimate taken as actuals.
Source: Demands for Grants of Ministry of Power for various years; PRS.

Ministry of New and Renewable Energy: Over the last decade, actual expenditure by MNRE has generally been lower than the budget estimate, except in 2021-22 and 2022-23. In 2023-24, the overall expenditure by MNRE was 22% lower than budgeted. For the subsequent year, 2024-25, underutilisation decreased (2%). In 2025-26, as per the revised estimates, spending by the Ministry is estimated to be 5% lower than budgeted. Expenditure under PM-KUSUM is expected to be 92% higher than budgeted in 2025-26. Expenditure under PM Surya Ghar is estimated to be 15% lower than the budget estimate. PM-KUSUM provides for solarisation of agricultural pumps and feeders (see next page for more discussion on these schemes).[10]

Figure 2: Fund utilisation by MNRE



Note: For 2025-26, revised estimate taken as actuals.
Source: Demands for Grants of MNRE for various years; PRS.

Key Schemes

Revamped Distribution Sector Scheme

The Revamped Distribution Sector Scheme (RDSS) was launched in 2021.[11] It aims to strengthen the distribution infrastructure and reduce the aggregate technical and commercial (AT&C) losses to pan-India level of 12-15%.[12] AT&C losses refer to the ratio of power for which the distribution company (discom) did not receive any payment to the total electricity procured by the discom.

A key part of RDSS is the provision of financial assistance to discoms for prepaid smart consumer and system metering.[12] This assistance is to be based on meeting a stipulated pre-qualifying criteria and achieving a basic minimum benchmark in reforms.[12] Most of the smart meters under RDSS are installed and maintained by private entities called Advanced Metering Infrastructure Service Providers (AMISPs) under long-term contracts with discoms.[13] Smart meters are being installed at consumer as well as system level.[12] However, there has been limited rollout of smart meters under the scheme. The scheme targeted to install 10 crore smart meters in its first phase.[7] As of January 8, 2025, 22 crore consumer meters have been sanctioned under RDSS.[13] Contracts have been awarded for 15 crore consumer meters and five crore consumer meters have been installed.[13] In six states, consumer meters have been sanctioned but deployment is yet to begin.[13] Further, in states such as Andhra Pradesh, Gujarat, and Tamil Nadu, not all installed meters are connected to the system.[14]

Table 2: Status of Smart metering across India (as of December, 2025)

Type	Sanctioned	Achievement	
		In number	In %
Consumer Meters	22 crore	5 crore	23%
Distribution Transformer Meters	53 lakh	13 lakh	25%
Feeder Meters	2 lakh	1.6 lakh	77%

Source: All India Smart Metering Status, Website of National Smart Grid Mission of Ministry of Power, as accessed on December 31, 2025; PRS.

One of the reasons for low number of installed smart meters may be their high costs. Under this scheme, central government provides a performance-linked grant to discoms for smart metering.[15] This grant is at the rate of 15% of the cost per smart meter (or 22.5% for special category states).[15] The grant is subject to a maximum of Rs 900 per smart meter (or Rs 1,350 for special category states).[15] However, the cost of smart meters in several states discovered during the bidding process ranges between Rs 7,000-Rs 16,000.[14] Discoms with financial issues may be unable to cover the remaining costs which may contribute to delays in installations. The recovery of smart meter costs from low-consumption and subsidised consumer categories may be also limited, as revenue from such consumers are low.

Delays have also been observed in implementation phases of smart metering. These include: (i) delays in issue of tenders and establishment of direct debit facilities and (ii) delays in field testing and approvals.[16] Smart meters can also facilitate large scale integration of renewable power and enable time of day tariffs.[17] However, states such as Gujarat and Tamil Nadu that have high variable renewable energy (such as solar and wind), have made limited progress in smart meter rollouts (see Table 6 in Annexure).[13,18]

PM KUSUM Scheme

The scheme aims to provide financial support for the installation of small solar power plants on barren agricultural land, and solarisation of agriculture pumps.[19] It seeks to achieve a solar capacity of 35 GW.[19] Originally, this capacity was to be added by 2022.[3] The target has been revised to 2025-2026.[20] The Standing Committee on Estimates (2025) observed delays in capacity additions.[21] Some of the reasons for poor adoption include: (i) limited availability of low-cost finance, (ii) absence of central financial assistance for small solar plants, and (iii) lack of subsidy for solar pumps with capacities above 7.5 horsepower.[21] Higher capacity pumps are used in regions with low groundwater.[21]

Table 3: Sanctioned vs Installed under the PM-KUSUM Scheme (as of February 2026)

Parameter	Sanctioned	Installed	
		In unit	In %
Grid-connected decentralised solar power plants	10,000 MW	765 MW	8%
Stand-alone solar pumps	13 lakh	10 lakh	76%
Grid-connected solar pumps	55,392	12,311	22%

Source: Achievement Dashboard, National Portal PM-KUSUM, as accessed on February 9, 2026; PRS.

PM Surya Ghar Scheme

PM-Surya Ghar Muft Bijli Yojana was approved in February 2024 with the aim of installing rooftop solar in one crore households by 2026-27.[9,22] Under this scheme, financial assistance is provided in the form of central financial assistance (CFA) and a collateral free loan. As of December 9, 2025, rooftop solar systems have been installed in 24 lakh households (24% of the target met).[22]

Key reasons for slow progress under the scheme include: (i) high rejection rate of loan applications particularly due to unclear house ownership status, (ii) limited consumer awareness about the scheme, and (iii) inadequate availability of empanelled vendors responsible for facilitating approvals and installations.[21,23] Further, the scheme has made it mandatory to install solar modules manufactured in the country to avail financial support.[21] However, Standing Committee on Estimates (2025) noted that domestic manufacturing capacity is insufficient.[21]

National Green Hydrogen Mission

The Mission aims to build domestic capabilities to produce green hydrogen and reduce dependence on fossil fuels.[24] Green Hydrogen is hydrogen produced using renewable energy, such as solar power.[25] The Mission seeks to provide a scalable fuel alternative for sectors such as steel.[24,25] It targets annual production of five million metric tonnes (MMT) of green hydrogen by 2030.[25] As of December 16, 2025, 18 companies have been awarded a cumulative production capacity of 0.86 million tonnes per annum.[26]

There are certain issues with development of green hydrogen. First, producing green hydrogen requires fresh water.[24] More than 35% of the global green and blue hydrogen (blue hydrogen is produced using fossil fuels) production capacity (in operation and planned) is located in highly-water stressed regions.[27] India is estimated to have 99% of its hydrogen capacity in extremely water-stressed areas by 2040.[27] While sea water can also be used, it requires development of processing infrastructure.[24]

Production of green hydrogen is also an expensive process.[24] The price of grey hydrogen (fossil fuels are used to produce grey hydrogen) in 2025 ranges between USD 1.5 to 3 per kg compared to USD 3 to 6 per kg for green hydrogen.[28] High costs are partly due to components such as electrolysers used in the production of green hydrogen.[29] The cost of the electrolysers has increased in the last few years due to higher prices of input materials and slower deployment of the technology.[29,30] Although technology advancements, and falling solar and wind prices is expected to bring down the prices.[29,31]

Hydrogen (including green hydrogen) also has a low volumetric energy density.[32] This means that storing and transporting hydrogen requires larger tanks or additional compression or liquefaction compared to other fuels. The costs of hydrogen distribution and storage can increase the production cost by three times when developed and utilised for individual projects in industries.[28] Thus, hydrogen storage for various applications remains a challenge.[33]

Issues for Consideration

Generation capacity

In India, various sources of energy are used to generate power.[34] These include fossil fuels (such as coal and natural gas), nuclear energy, and renewable sources (such as solar and wind).[34] The energy sector is heavily reliant on non-renewable thermal sources (such as coal and natural gas), which together account for largest share of the country's electricity generation capacity.[34] Coal accounted for about 43% of total installed capacity as of December, 2025.[4] The share of coal during 2024-25 in total electricity generation was about 71%.[35,36] Renewable sources (solar, wind, and hydro) accounted for 22% of total electricity generation.[35]

As per its climate change related commitments, India also aims to achieve: (i) 500 GW of installed electricity capacity from non-fossil fuel sources by 2030 and (ii) 50% of its energy requirements from renewable energy by 2030.[37] The Central Electricity Authority (CEA) (2023) projected that much of the renewable energy capacity will come from solar and wind.[39] 44% of the total generation is expected to be met from these two sources by 2031-32.[39] To meet these targets, installed capacity as well as related storage capacity needs to be increased.

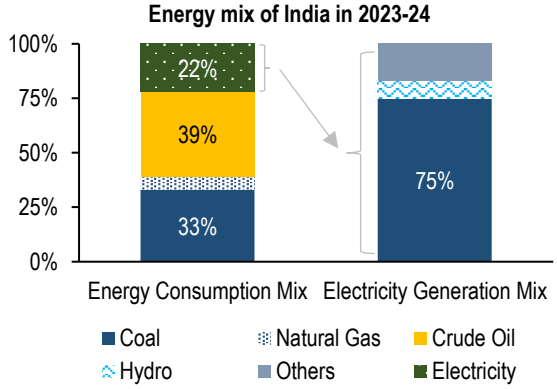
Demand is projected to grow from the all-India peak electricity demand of 250 GW in 2024-25 to 366 GW in 2031-32.[38,39] CEA estimates that in order to meet the estimated electricity demand by 2031-32, coal and lignite based installed capacity would also need to be increased to support the base load requirements.[40] The following sections discusses certain issues related to different sources of power.

Table 4: All-India installed capacity and electricity generation

Source	Generation (in BU)		Installed Capacity (in GW)			
	2024-25		December 2025		March 2032 Projected	
		In %		In %		In %
Solar	144	8%	136	26%	365	42%
Coal and Lignite	1,332	73%	226	44%	260	30%
Wind	83	5%	55	11%	122	14%
Large Hydro (>25 MW)	149	8%	51	10%	62	7%
Gas	31	2%	20	4%	25	3%
Nuclear	57	3%	9	2%	20	2%
Biomass	16	1%	12	2%	16	2%
Small Hydro (<=25 MW)	12	1%	5	1%	5	1%
Diesel	0.4	0%	1	0%	-	-
Total	**1,824**		**515**	-	**875**	-

Source: Monthly Renewable Energy Generation Report (March 2025), Central Electricity Authority (CEA); Installed Capacity Report for November 2025, CEA; National Electricity Plan, Vol I, March 2023, CEA; PRS.

Figure 3: 75% of electricity generation in 2023-24 was from coal



Source: India Energy Statistics 2025, MoSPI; India Climate and Energy Dashboard, Niti Ayog; PRS.

Thermal power

Declining coal power plant utilisation

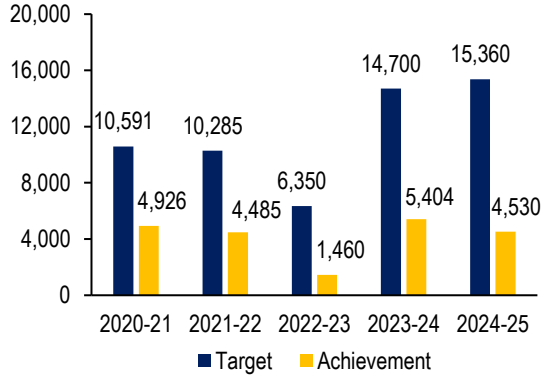
In 2009-10, plant load factor (PLF) for coal and lignite plants was 84%, which has come down to 69% in 2024-25.[41,42] PLF is a measure of the output of a power plant compared to the maximum output it could produce. The decrease in PLF may be due to: (i) availability of surplus capacity in certain regions, (ii) low demand for power, (iii) demand being met from other sources such as renewables, and (iv) unavailability of fuel. Poorer capacity utilisation may increase the unit cost of electricity generation from these plants and may also present the challenge of financial viability for them. CEA has projected that PLF of coal-based power plants will be around 58-59% till 2031-32.[39]

Thermal power capacity addition targets missed

The central government has proposed to set up additional 80 GW of coal based thermal power capacity between 2024-25 and 2031-32 to meet projected demand.[40] However, the capacity additions for thermal power between 2021-22 to 2024-25 have been below target (see Figure 4). Key reasons for shortfall include: (i) frequent litigations related to land compensation, and (ii) non-performance of sub-contractors at site and re-tendering of some Balance of Plant (BoP).[43] BoP refers to all auxiliary systems and equipment, apart from the core components such as boiler, required for the operation of a power plant.

As of 2025, the total thermal capacity on hold or unlikely to be commissioned is about 21 GW.[44] The vast majority belongs to the private sector.[44] Delays in projects may lead to cost overruns. There are multiple reasons for these delays or dropouts. These include: (i) withdrawal of Power Purchase Agreements (PPAs) by discoms due to land-related issues at associated mines which increased costs and electricity prices, and (ii) delays by Engineering, Procurement, and Construction (EPC) contractors.[44]

Figure 4: Thermal capacity additions missed in the past five years (in MW)



Source: Thermal Broad Status Report 2025, CEA; PRS.

Nuclear Energy

The central government launched the Nuclear Energy Mission in February 2025.[45] It aims to achieve 100 GW of nuclear power capacity by 2047 through deployment of new nuclear reactors.[45] As of November 2025, India operates 24 nuclear reactors with the total installed capacity of 8.8 GW.[46] It's share in the total electricity generation has remained stable at around 2-3% between 2014-15 to 2024-25.[46,47] In December 2025, parliament passed a Bill to enable private participation in nuclear power plant operation and handling of nuclear fuel.[46] Some challenges associated with nuclear energy industry include limited uranium reserves, high upfront capital costs, longer lead times, and safety concerns in transportation, storage and disposal of used fuels.[48,49]

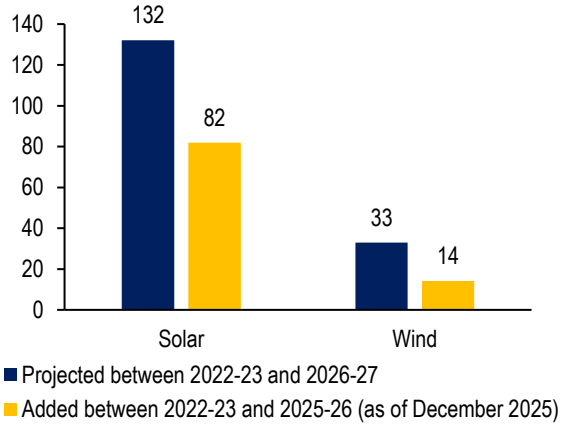
Renewable energy

Fossil fuels such as coal are the major source of power used in the country.[34] Coal has a 43% share in the total installed power generation capacity.[4] For 2024-25, the share of coal in generation was 71%.[36,50] In comparison, solar and wind, the two major sources of renewable energy, had a share of 37% in total installed capacity.[4] However, in 2024-25, they contributed only 13% of the total electricity generation.[35,50] This may be because solar energy can be generated only during sunny days and wind energy generation is intermittent based on wind conditions such as wind speed.

As of December 2025, installed capacity of solar and wind stood at 136 GW and 55 GW, respectively.[51] In December 2025, the Ministry noted that another 69 GW of solar and 30 GW of wind capacity is under implementation.[52] A further 35 GW of solar and 1.8 GW of wind capacity has been tendered.[52]

The Economic Survey (2025-26) observed that higher share of renewable energy may pose challenges to grid stability and increase cost of maintaining dispatchable thermal capacity.[53]

Figure 5: Capacity Addition since 2022-23: Projected vs Actual (in GW)



Source: Installed Capacity Report, Central Electricity Authority; National Electricity Plan, Central Electrical Authority; PRS.

Pending sale agreements for solar

The Renewable Energy Implementing Agencies (REIAs) such as SECI signs PPAs with power developers to procure renewable energy.[54] It then signs a Power Sale Agreement (PSA) with power purchasers such as discoms.[54] As of September 2025, about 44 GW of solar capacity that was awarded through bids by REIAs remains without signed PSA.[55] Delays in the signing of PSA may slow down the use of solar capacity awarded. Key reasons for unsigned PSA include: (i) limited procurement of renewable power despite Renewable Purchase Obligation (RPO) (RPO mandates discoms to procure a certain percentage of electricity from renewables), (ii) steep increase in the renewable

energy bids by REIAs since 2023-24, and (iii) state discom's expectation for decrease in renewable energy tariffs in future bids.[23]

Import dependence in components of solar panels

As of June 2025, the total solar panel manufacturing capacity in India stood at 91 GW.[23] Domestic manufacturing of components used in solar panels manufacturing such as polysilicon, ingots, and wafers remains limited.[23] In the case of polysilicon, which is a critical component in development of solar panels, the Standing Committee on Energy (2025) noted that the country has no manufacturing capability.[23] In the absence of adequate domestic production of these components, there is heavy dependence on imports from countries such as China.[56,57] Some of the reasons for lack of domestic capacities include the capital-incentive nature of production and lack of skilled manpower to manufacture components such as polysilicon.[58]

Availability of critical minerals

Critical minerals such as lithium, copper, and silver are used in the manufacturing of materials such as solar panels and energy storage systems.[53] For example, solar panels with a power capacity of 1 GW require approximately 19 tons of silver.[53] Wind turbines of 1 GW capacity require 2,866 tons of copper.[53] India imports a large amount of minerals such as copper and silver.[59] The Economic Survey 2025-26 observed that prices of metals such as copper is becoming highly price-volatile due to mine outages in multiple countries amidst the growing demand.[53] Further, affordability of materials using these minerals can be adversely impacted due to increased mineral prices and absence of parallel financial support and capacity building.[53]

The central government notified a National Critical Mineral Mission in June 2025.[60] It aims to strengthen India's critical mineral supply chain by ensuring availability domestically and from abroad. Under the Mission, the government seeks to launch 1,200 exploration projects and auction over 100 mineral blocks to increase domestic supply.[61] As of December 3, 2025, the central government auctioned 34 blocks of critical minerals.[62] The total exploration projects under Geological Survey of India were 230 in 2025-26 across the country (up to December 3, 2025).[62]

Slower wind capacity growth

India had set a target of achieving installed capacity of 60 GW of wind power by 2022.[63] CEA has projected the addition of another 33 GW of wind power between 2022-23 and 2026-27.[39] As of December 2025, the wind capacity stood at 55 GW.[4] The Standing Committee on Energy (2022) had noted the following as key reasons for slow capacity addition in wind: (i) the shift in tariff system from feed-in-tariff (guaranteed above market price for producers) to tariff determination by competitive bidding, and (ii) aggressive bidding by some developers, who decrease prices to unsustainable levels and eventually back out of the project.[64]

Out of the total estimated potential more than 95% of commercially exploitable wind resources are concentrated in seven states.[39] CEA (2023) observed that the land resources required for large scale production of onshore wind projects are gradually becoming a major constraint.[39] Offshore wind power is seen as an alternative in such a scenario.[39] Absence of any obstruction in the sea offers better quality of wind power and its conversion to electrical energy.[39] Offshore wind turbines are much larger in size (in range of 5 to 10 MW per turbine) as against 2-3 MW of an onshore wind turbine.[39] However, the cost per MW for offshore turbines are also higher because of requirement of stronger structures and foundations to operate in a marine enviroment.[39] In 2024, the central government launched a viability gap funding scheme for offshore wind energy projects.[65] The scheme aims to reduce the cost of power from offshore wind projects through financial assistance.[65]

Insufficient storage capacity for renewables

The variability and uncertainty in generation from solar and wind may lead to a mismatch between demand and supply. Higher integration of Variable Renewable Energy (VRE) in grid leads to challenges such as variable grid voltage.[66] To maintain grid stability, power is curtailed (reduction of electricity generated below the maximum potential of a generator).[67] Storage systems can be used to bring down the variability of renewable energy generation and reduce power curtailments.[68] Battery Energy Storage Systems (BESS) and pump storage are expected to be two primary options for storage in India.[39] BESS can store excess solar energy during the day and use that for peak demand during non-solar hours. In pump storage, water is pumped and stored upstream, which can later be used to run turbines to produce energy.

As of June 2025, the total storage capacity was about 5 to 5.5 GW.[23] CEA has projected that about 16 GW of storage capacity will be required in 2026-27.[39] The Forum of Regulators (2025) noted that issues such as power curtailment are likely to intensify with higher renewable penetration in the absence of sufficient storage.[67] One of the key reasons for slow development of storage systems in India is its high costs particularly for certain technologies such as BESS.[23] Although, higher costs are expected to reduce. By 2030, solar energy with battery storage is expected to be competitive with existing coal capacity driven by factors such as the decline in prices of batteries and solar panels.[69]

In September 2023, the Cabinet approved a viability gap funding scheme for battery energy storage systems.[16] Under the scheme, financial support is provided for the development of BESS approved during 2023-26.[70] It seeks to develop 4,000 GWh of storage capacity by 2030-31.[71] However, the fund utilisation under this scheme has remained low in recent years, with zero expenditure in 2024-25.[16] Under the scheme, fund disbursement occurs in five tranches. These are tied to a project milestone such as 10% upon financial closure of the project.[70] In 2024-25, none of the projects could achieve financial closure leading to zero funds being disbursed.[16] As of February 2026, 10 GW of BESS capacity is under construction, and another 20 GW under tendering.[72]

As of February 2026, Pumped Storage Plant (PSP) projects of 12 GW capacity are also under construction.[72] Further, about 7 GW of PSPs are concurred but yet to be taken up for construction.[72] Forum of Regulators (2025) noted certain issues in pumped storage such as delays in grant of clearances, uncertainty in tariffs, limited number of civil contractors, and exclusion of off-stream pumped storage projects from White category classification.[67] White category includes non-polluting industries (such as solar power) and has simplified approval process.[67]

Inadequate investments in renewables

Renewable energy projects are capital intensive and require significant upfront investment.[73] India's cost of capital for grid-scale renewable energy is one of the lowest among developing economies, however, it is 80% higher than in advanced economies.[74] International Energy Agency (2025) observed that higher financing costs affect the financial viability of projects, leading to higher energy prices.[74] The Economic Survey (2025-26) noted India's reliance on international climate finance as one of the reasons for the high cost of capital.[53] The Survey stated that global capital does not flow at scale to developing countries due to structural features of the international financial system and risk perceptions, resulting in high costs.[53]

Financing in renewable energy infrastructure in India in the form of debt and equity.[75] These come from sources such as banks, private Non-Banking Financial Companies (NBFCs), bond markets, and international lenders.[75] MNRE noted that although the investment in the sector has increased, higher mobilisation of renewable energy finance is needed to meet national targets, particularly in certain segments.[76] These segments include energy storage, green hydrogen, and offshore wind.[76]

It is estimated that Rs 30.5 lakh crore of financing is required from 2023-24 till 2029-30 to achieve 500 GW of non-fossil fuel-based power capacity (an average of Rs 4.4 lakh crore per year).[76] The investment in 2024-25 was only about 2.68 lakh crore.[76] Some reasons affecting financing include: (i) limited availability of reliable and standardised data for investors to assess risk, (ii) lack of domestic off-takers for emerging energy segments such as green hydrogen, and (iii) higher financing costs due to technological and market uncertainities.[23,77]

Hydropower below potential

Hydropower can support grid flexibility by helping manage the variations in electricity generation from renewable energy sources such as solar and wind.[67] They have higher storage capabilities and can rapidly increase or decrease output, with ramp rates of 80–100% of power output per minute (compared to 1-2% for a coal-fired plant).[67] Higher ramp rate signify that they can move from near-zero to full output within a short time.[67] As per the CEA study, the exploitable large hydro potential in the country is about 133 GW.[67] As of December 2025, only 51 GW of large hydro plants (>25 MW) are installed.[4] About 13 GW of hydropower projects are under construction and 4 GW of projects are under various stages of planning.[72] These are targeted to be completed by 2031-32.[72] The untapped potential may be due to reasons involving adverse geological conditions or difficult terrain.[67] Other issues that cause delay in hydro power development include issues around resettlement of local communities and uncertainty regarding tariff determination.[67]

Further, hydropower projects are typically required to provide free power to the home state.[67] However, in some cases, states have changed the terms of the agreements midway for various reasons, impacting the financial stability of the hydro projects.[67] Additionally, the waiver of the Inter-State Transmission System (ISTS) charges for hydro and related pumped storage projects is limited to projects commissioned by June 30, 2025.[67] While similar cut-off dates apply to solar and wind projects, they have a significantly shorter construction timelines unlike hydro and pumped storage projects which have much longer gestation periods.[67,78]

Low compliance with RPO

Certain entities such as discoms are mandated to procure a specific percentage of electricity from renewable sources. This is referred to as renewable purchase obligations. The Ministry of Power specified the RPO trajectory for different obligated entities. This has now been replaced by a minimum Renewable Energy Consumption obligation (RCO) for the entities.[79] As per the notification issued by the Ministry of Power, the minimum share of renewable energy consumption for entities such as discoms is set at about 36% for 2026-27 rising to 43% in 2029-30.[79]

In 2022-23, the RPO compliance across states varied from 7% in Puducherry to 88% in Sikkim (see Table 10 in the annexure).[80] Only 15 states met their RPO obligation. The Union Ministry of Power (2022) had observed that discoms perceive renewable energy to be expensive and having additional costs towards integration.[81] Discoms can also fulfil their RPO obligations by purchasing Renewable Energy Certificates (RECs).[82] The government circulated a draft Electricity (Amendment) Bill, 2025 for comments. This Bill introduces a penalty for non-compliance with the obligations.

Geothermal Energy in India

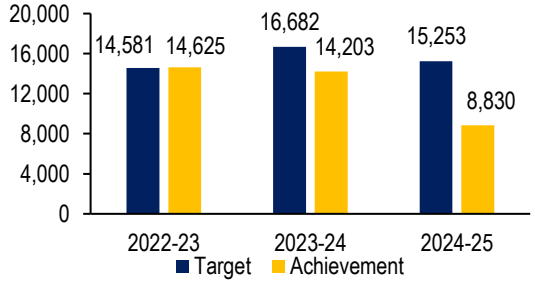
The central government notified a National Policy on Geothermal Energy on September 15, 2025.[83] It aims to promote the exploration, development, and deployment of geothermal resources in the country.[84] According to the Geological Survey of India (2022), India's estimated theoretical geothermal resource potential is around 11 GW.[83] However, despite this assessed potential, participation in geothermal energy development remains limited, with most activities in pilot project stage.[84] This is due to reasons including high upfront costs, risks associated with exploration, and limited domestic technical capabilities.[85]

Transmission

Addition of transmission lines

Transmission systems require augmentation to support the integration of new generation capacity and rising demand.[87] CEA projects that India will need to add 1,23,577 circuit kilometre (ckm) of transmission lines between 2022-23 and 2026-27 (an average of 24,715 ckm per year).[87] In 2024-25, achievement on addition of transmission lines (220 kV and above) was below target (Figure 6). In case of transmission projects, the Standing Committee on Energy (2024) noted the following key reasons for delay: (i) issues with right-of-way permissions, (ii) delay in land acquisition, (iii) contractual disputes, and (iv) unexpected route diversions to protect endangered species and coal mining areas.[43] Further, poor availability of required steel quality and limited number of High Voltage Direct Current (HDVC) systems has led to delayed supply.[16]

Figure 6: Transmission lines (of 220 kV and above): Target vs Achievement (in ckm)



Source: Executive Summary Report (of various years), Central Electrical Authority; PRS.

Under the Green Energy Corridor (GEC), the central government funds laying of transmission lines to evacuate power from Renewable Energy (RE) projects.[86] It has multiple phases.[86] The Phase-I of GEC is under implementation in eight states.[86] It aims to facilitate grid integration and power evacuation of 24 GW of RE in RE-rich states such as Gujarat, Rajasthan, and Tamil Nadu.[86] The Phase-I (Intra-state) of GEC faced delays in some states such as Andhra Pradesh, Himachal Pradesh and Gujarat.[86] The delay was due to issues related to land acquisition, right-of-way, and forest clearances.[86]

Import dependence for equipment

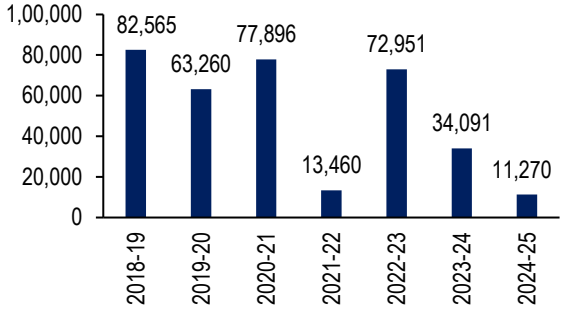
Transmission is carried out primarily by central and state-owned companies and largely remains a government-controlled activity.[87] Key materials and equipment used for transmission infrastructure include Cold Rolled Grain Oriented (CRGO) Steel and HDVC systems.[23] CRGO steel is used in transformers and reactors and HVDC based transmission lines and transformers are required for transmission of power over long distances.[23] India has been lagging in manufacturing of these materials and equipment due to the need for large capital, advanced technology, and adequate testing infrastructure.[23] The central government has launched a Production-Linked Incentive Scheme for Speciality Steel including CRGO in 2021.[88] The scheme aims to bring an investment of about Rs 40,000 crore and add 25 million tonnes of manufacturing capacity of speciality steel.[88] As of October 2025, the PLI scheme has attracted investments of about Rs 23,022 crore and 2.3 million tonnes of speciality steel production.[89]

Distribution

In most states, electricity distribution is carried out by a single company, typically a state government-owned entity that serves all consumers in a given area.[5] Private sector discoms supply electricity in a few places such as Delhi and Mumbai.[5] A persistent challenge for the electricity sector has been the poor financial performance of discoms.[5,90] In seven years between 2018-19 and 2024-25, cumulative losses of distribution utilities were Rs. 3.6 lakh crore.[91]

In 2024-25, on average, discoms spent Rs 7.10 per unit to earn Rs 7.04 (based on actual subsidy received and excluding regulatory income which are receivable in future), resulting in revenue gap of six paise per unit.[5] In 2023-24, this gap was 20 paise per unit.[5] In the past, discoms have required government support to be bailed out from losses.[90] For instance, in 2015, under UDAY scheme, state governments had to take over 75% of the debt of their discoms worth Rs 2.3 lakh crore.[92] Persistent financial problems result in payments delays and non-payment to generators impact their fuel suppliers, i.e., coal companies.

Figure 7: Discoms continue to make losses (in Rs crore)



Note: Losses above are based on actual subsidy received and excluding revenue grant under UDAY to offset losses, and any regulatory income (recoverable in future).
Source: Reports on Performance of Power Utilities, Power Finance Corporation; PRS.

If the entire amount of subsidy billed was received and discoms also recovered the entire amount of regulatory income in the same year, discoms would register a profit of Rs 2,701 crore in 2024-25.[5] However, this is mainly due to Rs 12,138 crore profit registered by the private sector discoms.[5] The state-owned discoms would still register losses of Rs 9,437 crore.[5]

A variation in distribution losses in recent years may also be due to factors such as variance in fuel prices and release of subsidies by state governments. In 2021-22, losses decreased due to higher subsidy payments.[93] Subsidy payment was 10% higher than subsidy billed in that year, likely due to payment of dues for previous years. In 2022-23, losses had increased due to a higher reliance on imported coal and higher price of imported coal amidst the record high global coal demand during that year.[94,95]

AT&C losses have come down, however, remain above target in some states

AT&C losses have come down from 22% in 2018-19 to 15% in 2024-25.[96] In 2024-25, on aggregate, distribution utilities billed 88% of the electricity they injected into the grid.[5] Of which, they collected 97% of the amount they billed.[5] AT&C losses vary significantly among states. These range between as low as 8% in Delhi (state sector) to as high as 23% in Madhya Pradesh, 28% in Jharkhand, and 49% in Nagaland in 2024-25.[5] These losses can be attributed to: (i) technical losses which include some unavoidable loss in energy transfer, (ii) inefficiencies in energy transfer due to sub-optimal condition of the network, and (iii) commercial losses such as theft or inadequate metering.

Draft Electricity (Amendment) Bill, 2025

The Draft Electricity (Amendment) Bill, 2025 was released by the Ministry of Power on October 8, 2025. It seeks to propose measures to promote competition and improve financial viability of distribution utilities. The Draft Bill allows network sharing among discoms operating in the same area. Currently, each discom supply and distribute electricity through their own networks. It requires tariffs to be cost-reflective and propose removal of cross-subsidies paid by manufacturing enterprises, railways, and metro railways within five years. Further, the Bill establishes an Electricity Council comprising of union and state power ministers. The Council will advise central and state governments on policy measures and coordinate implementation of sector reforms.

Underpricing of tariffs

Tariffs charged to consumers are regulated by State Electricity Regulatory Commissions (SERCs). Often, tariffs are designed on a multi-year basis. At times, they are designed such that the tariff is lower than the cost in initial years, and cost recovery is offloaded to upcoming years. These costs, recoverable in future, are termed as regulatory income. For instance, in 2024-25, Maharashtra state discoms booked a regulatory income of Rs 8,208 crore.[5] However, non-recovery of costs would add up as annual losses for discoms. In August 2025, the Supreme Court noted a disproportionate increase in regulatory assets.[97] It directed the distribution companies (discoms) to clear the existing regulatory assets within four years.[97] It also advised capping the regulatory asset at 3% of a discoms' revenue.[97]

Power procurement costs

Power procurement costs constitute about 70%-80% of the total costs of discoms.[98] Power procurement costs vary significantly across states, from as low as about Rs 3 per kWh in Sikkim, to as high as Rs 8.5 per kWh in Delhi.[5] In many states, a high percentage of power demand is tied up in long-term contracts.[99] Fixed costs will still have to be paid under these long-term contracts if the discom looks for alternative sources for procuring power.[99]

Delay in release of government subsidies

The state government may choose to provide subsidies to keep prices lower for certain categories of consumers. While determining the retail tariff, regulators make adjustments for the subsidy. However, states may not pay all the subsidies booked by discoms in the same financial year. For example, in 2024-25, discoms received 99% of the subsidy they billed.[5] Some state governments such as, Himachal Pradesh (57%), Punjab (82%), and Maharashtra (88%) released a relatively lower proportion of tariff subsidy in 2024-25.[5]

Annexure

Table 5: Installed capacity (in MW) across states as of December 2025

State/UT	Thermal				Renewables			Nuclear
	Coal	Lignite	Gas	Diesel	Large Hydro	Solar	Wind	
Andaman and Nicobar	-	-	-	93	-	32	-	-
Andhra Pradesh	13,890	-	1,739	37	3,290	6,389	4,398	-
Arunachal Pradesh	-	-	-	-	1,365	15	-	-
Assam	750	-	597	-	346	376	-	-
Bihar	10,170	-	-	-	-	435	-	-
Chandigarh	-	-	-	-	-	79	-	-
Chhattisgarh	24,093	-	-	-	120	1,690	-	-
Dadra & Nagar Haveli and Daman & Diu	-	-	-	-	-	129	-	-
Delhi	-	-	2,100	-	-	389	-	-
Goa	-	-	-	-	-	71	-	-
Gujarat	14,692	1,400	6,580	-	1,990	25,529	14,821	1,840
Haryana	5,330	-	432	-	-	2,513	-	-
Himachal Pradesh	-	-	-	-	11,421	346	-	-
Jammu & Kashmir	-	-	-	-	3,360	79	-	-
Jharkhand	7,030	-	-	-	210	236	-	-
Karnataka	9,480	-	370	25	3,689	10,679	8,414	880
Kerala	-	-	360	160	2,008	2,032	72	-
Ladakh	-	-	-	-	89	11	-	-
Lakshadweep	-	-	-	27	-	7	-	-
Madhya Pradesh	21,170	-	-	-	2,235	5,818	3,548	-
Maharashtra	23,316	-	2,819	-	3,047	18,061	5,822	1,400
Manipur	-	-	-	36	105	18	-	-
Meghalaya	-	-	-	-	322	4	-	-
Mizoram	-	-	-	-	60	32	-	-
Nagaland	-	-	-	-	75	3	-	-
Odisha	9,950	-	-	-	2,155	763	-	-
Puducherry	-	-	33	-	-	74	-	-
Punjab	5,680	-	-	-	1,096	1,555	-	-
Rajasthan	9,244	1,580	1,023	-	413	36,658	5,229	1,780
Sikkim	-	-	-	-	2,282	8	-	-
Tamil Nadu	10,523	3,640	845	212	2,203	11,665	12,075	2,440
Telangana	11,043	-	-	-	2,406	5,052	128	-
Tripura	-	-	1,068	-	-	35	-	-
Uttar Pradesh	30,015	-	1,493	-	502	3,823	-	440
Uttarakhand	-	-	664	-	4,785	838	-	-
West Bengal	13,235	-	-	-	1,341	321	-	-
All-India	**2,19,610**	**6,620**	**20,122**	**589**	**50,915**	**1,35,765**	**54,507**	**8,780**

Source: Installed Capacity Reports, National Power Portal; PRS.

Table 6: Smart Metering Status as on Dec 31, 2025

State	Consumer Meters Sanctioned	Installed		Distribution Transformer Meters Sanctioned	Installed		Feeder Meters Sanctioned	Installed	
		In number	In %		In number	In %		In number	In %
Andaman and Nicobar	1,58,773	75,200	47%	1,148	0	0%	114	0	0%
Andhra Pradesh	56,10,846	21,58,269	38%	2,93,140	74,389	25%	17,358	8,192	47%
Arunachal Pradesh	2,87,446	47,941	17%	10,116	311	3%	688	263	38%
Assam	69,21,329	51,98,453	75%	94,547	70,265	74%	2,782	2,879	103%
Bihar	1,72,08,939	83,33,722	48%	2,50,726	1,82,145	73%	6,427	5,775	90%
Chandigarh	29,433	24,214	82%	-	-	-			
Chhattisgarh	59,62,115	32,32,660	54%	2,10,644	66,023	31%	6,720	5,936	88%
Delhi	2,60,000	2,60,000	100%	766	0	0%	2,755	0	0%
Goa	7,41,160	0	0%	8,369	0	0%	827	0	0%
Gujarat	1,65,10,860	34,66,500	21%	3,00,487	1,28,600	43%	-	-	-
Haryana	10,00,000	8,47,467	85%	-	-	-	-	-	-
Himachal Pradesh	29,52,685	8,53,786	29%	39,012	22,054	57%	1,951	1,603	82%
Jammu and Kashmir	21,34,095	11,19,117	52%	1,08,831	28,880	27%	2,608	1,428	55%
Jharkhand	18,64,065	10,43,862	56%	39,936	17,299	43%	2,508	2,073	83%
Kerala	1,32,90,166	1,67,882	1%	87,615	111	0%	6,025	2,904	48%
Ladakh	58,930	55,580	94%	1,931	1,850	96%	54	79	146%
Madhya Pradesh	1,34,44,401	33,64,112	25%	4,24,856	1,30,348	31%	29,708	24,097	81%
Maharashtra	2,35,64,747	80,88,791	34%	4,10,905	2,52,106	61%	29,214	30,709	105%
Manipur	1,54,400	31,962	21%	11,451	589	5%	357	220	62%
Meghalaya	4,60,000	0	0%	11,419	0	0%	1,324	0	0%
Mizoram	2,90,039	26,492	9%	2,300	393	17%	398	295	74%
Nagaland	3,17,210	30,522	10%	6,276	845	13%	392	105	27%
Odisha	4,500	4,500	100%	-	-	-	180	0	0%
Puducherry	4,03,767	5,647	1%	3,105	1	0%	12,563	0	0%
Punjab	1,12,32,507	19,06,036	17%	1,84,044	0	0%	27,128	25,349	93%
Rajasthan	1,49,00,527	25,13,774	17%	4,34,608	23,834	5%	633	471	74%
Sikkim	1,44,680	78,582	54%	3,229	1,469	45%	18,392	9,864	54%
Tamil Nadu	3,01,40,849	1,29,641	0%	4,73,720	1,220	0%	1,951	1,603	82%
Telangana	8,882	8,882	100%	-	-	-	-	-	-
Tripura	4,47,489	1,40,240	31%	14,908	5,494	25%	473	473	100%
Uttar Pradesh	3,09,78,280	71,70,682	23%	15,26,801	2,44,830	3%	20,874	25,362	122%
Uttarakhand	15,87,870	4,11,358	26%	59,212	7,441	74%	2,602	2,486	96%
West Bengal	2,12,08,759	5,55,586	3%	3,05,419	44,589	73%	11,874	9,357	79%
All-India	**22,42,79,749**	**5,13,51,460**	**23%**	**53,19,521**	**13,05,086**	**25%**	**2,08,880**	**1,61,523**	**77%**

Source: All India Smart Metering Status, Website of National Smart Grid Mission of Ministry of Power, as accessed on December 31, 2025; PRS

Table 7: PM Surya Ghar Muft Bijli Yojana Progress across states as on January 10, 2026

State/UT	Applications	Installations		Households covered
		In number	In %	
Andaman and Nicobar	654	183	28%	202
Andhra Pradesh	11,75,634	87,984	7%	90,864
Arunachal Pradesh	88	1	1%	1
Assam	4,84,444	75,177	16%	75,883
Bihar	55,543	14,500	26%	15,148
Chandigarh	1,510	1,001	66%	1,001
Chhattisgarh	1,21,687	23,404	19%	24,825
Dadra & Nagar Haveli and Damand & Diu	1,949	496	25%	496
Delhi	17,149	5,589	33%	9,471
Goa	2,687	1,461	54%	1,814
Gujarat	6,17,917	5,24,808	85%	7,57,016
Haryana	1,04,038	49,473	48%	56,562
Himachal Pradesh	10,719	6,234	58%	6,235
Jammu and Kashmir	90,917	19,459	21%	19,467
Jharkhand	7,886	1,512	19%	1,514
Karnataka	1,55,643	15,292	10%	24,168
Kerala	2,43,706	1,80,783	74%	1,85,462
Ladakh	1,725	1,278	74%	1,278
Lakshadweep	1,144	752	66%	752
Madhya Pradesh	1,39,368	85,955	62%	89,367
Maharashtra	5,89,328	4,03,698	69%	6,50,742
Manipur	1,478	729	49%	729
Meghalaya	1,933	35	2%	35
Mizoram	954	787	82%	789
Nagaland	548	132	24%	132
Odisha	1,61,517	29,396	18%	29,744
Puducherry	3,209	2,286	71%	2,286
Punjab	18,866	10,906	58%	11,016
Rajasthan	2,49,987	1,23,248	49%	1,27,175
Sikkim	261	26	10%	26
Tamil Nadu	65,809	52,224	79%	60,831
Telangana	72,956	26,041	36%	37,155
Tripura	7,871	1,945	25%	1,956
Uttar Pradesh	10,45,349	3,35,182	32%	3,38,861
Uttarakhand	95,316	60,027	63%	60,189
West Bengal	12,112	1,145	9%	1,208
All-India	**55,61,902**	**21,43,149**	**39%**	**26,84,400**

Source: State/UT-wise progress (PMSG: MBY), PMSG: MBY National Portal; PRS.

Table 8: Performance of distribution utilities in 2024-25

State/UT	AT&C Losses	ACS (Rs per unit)	As per subsidy billed		As per actual subsidy received and excluding regulatory income	
			ARR (Rs per unit)	ACS-ARR Gap (Rs per unit)	ARR (Rs per unit)	ACS-ARR Gap (Rs per unit)
State Sector	**15.4%**	**7.12**	**7.07**	**0.05**	**7.02**	**0.11**
Andaman & Nicobar Islands	24.1%	29.06	26.84	2.22	26.84	2.22
Andhra Pradesh	7.9%	8.11	8.13	-0.02	8.26	-0.15
Arunachal Pradesh	46.2%	6.28	6.28	-	6.28	-
Assam	15.4%	7.63	7.89	-0.26	7.89	-0.26
Bihar	15.5%	6.73	7.14	-0.41	7.14	-0.41
Chhattisgarh	14.3%	5.95	5.87	0.09	6.15	-0.19
Delhi	8.4%	10.43	11.29	-0.86	11.29	-0.86
Goa	10.4%	5.62	5.41	0.20	5.41	0.20
Gujarat	8.3%	6.02	6.42	-0.40	6.42	-0.40
Haryana	11.8%	6.23	6.23	0.01	6.13	0.10
Himachal Pradesh	19.4%	5.66	5.87	-0.22	5.43	0.23
Jharkhand	28.2%	7.01	5.94	1.07	6.06	0.95
Karnataka	11.9%	8.84	7.82	1.03	8.16	0.69
Kerala	6.6%	6.44	6.60	-0.17	6.60	-0.17
Ladakh	26.8%	6.87	7.76	0.89	7.76	-0.89
Madhya Pradesh	22.8%	5.87	5.62	0.25	5.91	-0.04
Maharashtra	17.7%	8.09	8.17	-0.07	7.53	0.56
Manipur	12.9%	6.97	7.02	-0.05	7.17	-0.20
Meghalaya	17.5%	8.56	8.43	0.13	8.43	0.13
Mizoram	32.3%	9.09	9.43	-0.34	9.43	-0.34
Nagaland	48.9%	7.46	7.96	-0.50	7.96	-0.50
Puducherry	14.7%	5.55	6.25	-0.70	6.19	-0.64
Punjab	19.2%	5.93	6.71	-0.78	6.23	-0.30
Rajasthan	15.2%	6.56	6.67	-0.11	6.61	-0.04
Sikkim	21.8%	5.73	5.40	0.33	5.40	0.33
Tamil Nadu	11.0%	8.60	8.78	-0.18	8.78	-0.19
Telangana	19.8%	7.37	7.09	0.27	7.09	0.27
Tripura	29.6%	7.66	6.25	1.40	6.25	1.40
Uttar Pradesh	19.5%	7.68	6.95	0.73	6.95	0.73
Uttarakhand	15.1%	6.06	6.03	0.04	6.00	0.06
West Bengal	17.2%	6.54	6.56	-0.02	6.57	-0.03
Private Sector	**10.1%**	**6.78**	**7.96**	**-1.18**	**7.43**	**-0.65**
Dadra & Nagar Haveli and Daman & Diu	-	-	-	-	-	-
Delhi	6.5%	7.17	9.69	-2.52	8.31	-1.13
Gujarat	3.6%	8.36	8.87	-0.50	8.78	-0.42
Maharashtra	5.0%	7.90	8.81	-0.91	9.95	-2.04
Odisha	17.8%	5.48	5.65	-0.16	5.30	0.18
Uttar Pradesh	8.5%	6.52	7.06	-0.54	6.67	-0.15
West Bengal	4.8%	5.04	5.08	-0.04	5.33	-0.30
All-India	**15.0%**	**7.10**	**7.13**	**-0.03**	**7.04**	**0.06**

Note: AT&C losses: Aggregate Technical and Commercial (AT&C) loss is the ratio of power for which the discom did not receive any payment to the total electricity procured by the utility. *ACS: Average Cost of Supply; ARR: Average Revenue Realised.
Source: Report on Performance of Power Utilities 2024-25, Power Finance Corporation; PRS.

Table 9: Profit/Loss of distribution utilities in 2024-25

State/UT	Profit/Loss on subsidy billed basis (Rs crore)	Profit/Loss with tariff subsidy received and excluding regulatory income (Rs crore)
State Sector	**-9,437**	**-17,732**
Andaman & Nicobar Islands	-91	-91
Andhra Pradesh	190	1,180
Arunachal Pradesh	-	--
Assam	308	308
Bihar	2,079	2,096
Chhattisgarh	-407	915
Delhi	170	170
Goa	-119	-119
Gujarat	3,310	3,310
Haryana	-46	-776
Himachal Pradesh	342	-365
Jharkhand	-1,928	-1,722
Karnataka	-8,869	-5,901
Kerala	574	574
Ladakh	26	26
Madhya Pradesh	-2,561	456
Maharashtra	1,292	-9,598
Manipur	5	26
Meghalaya	-36	-36
Mizoram	32	32
Nagaland	56	56
Puducherry	281	256
Punjab	6,216	2,415
Rajasthan	1,262	510
Sikkim	-37	-37
Tamil Nadu	2,073	2,144
Telangana	-2,462	-2,462
Tripura	-373	-373
Uttar Pradesh	-10,976	-10,796
Uttarakhand	-47	-94
West Bengal	120	167
Private Sector	**12,138**	**6,461**
Dadra & Nagar Haveli and Daman & Diu	-	-
Delhi	9,819	4,327
Gujarat	673	560
Maharashtra	1,031	2,317
Odisha	439	-791
Uttar Pradesh	171	11
West Bengal	4	38
All-India	**2,701**	**-11,270**

Source: Report on Performance of Power Utilities 2024-25, Power Finance Corporation; PRS

Table 10: Compliance with Renewable Purchase Obligation in 2022-23

State	Wind		Hydro		Others		Total	
	Target	Achievement	Target	Achievement	Target	Achievement	Target	Achievement
Andhra Pradesh	0.81%	3.30%	0.35%	0.00%	23.44%	25.10%	24.61%	28.50%
Arunachal Pradesh	0.81%	0.00%	0.35%	3.50%	23.44%	15.30%	24.61%	18.80%
Assam	0.81%	0.00%	0.35%	2.70%	23.44%	20.40%	24.61%	23.20%
Bihar	0.81%	0.10%	0.35%	0.10%	23.44%	15.90%	24.61%	16.00%
Chhattisgarh	0.81%	0.10%	0.35%	1.20%	23.44%	11.90%	24.61%	13.30%
Delhi	0.81%	0.00%	0.35%	0.60%	23.44%	23.80%	24.61%	24.40%
Goa	0.81%	0.80%	0.35%	0.40%	23.44%	16.10%	24.61%	17.30%
Gujarat	0.81%	3.50%	0.35%	0.20%	23.44%	16.50%	24.61%	20.30%
Haryana	0.81%	0.00%	0.35%	0.90%	23.44%	20.80%	24.61%	21.70%
Himachal Pradesh	0.81%	0.00%	0.35%	2.70%	23.44%	76.00%	24.61%	78.70%
Jammu & Kashmir & Ladakh UT	0.81%	0.00%	0.35%	0.00%	23.44%	56.90%	24.61%	56.90%
Jharkhand	0.81%	0.00%	0.35%	0.00%	23.44%	30.00%	24.61%	30.00%
Karnataka	0.81%	6.40%	0.35%	0.00%	23.44%	40.30%	24.61%	46.70%
Kerala	0.81%	0.00%	0.35%	0.00%	23.44%	36.30%	24.61%	36.30%
Madhya Pradesh	0.81%	0.10%	0.35%	0.00%	23.44%	22.30%	24.61%	22.40%
Maharashtra	0.81%	0.00%	0.35%	0.00%	23.44%	17.10%	24.61%	17.10%
Manipur	0.81%	0.00%	0.35%	0.20%	23.44%	33.80%	24.61%	34.00%
Meghalaya	0.81%	0.00%	0.35%	3.20%	23.44%	56.70%	24.61%	59.90%
Mizoram	0.81%	0.30%	0.35%	0.40%	23.44%	42.10%	24.61%	42.70%
Nagaland	0.81%	0.00%	0.35%	5.20%	23.44%	31.30%	24.61%	36.50%
Odisha	0.81%	0.10%	0.35%	0.10%	23.44%	25.30%	24.61%	25.40%
Puducherry	0.81%	0.00%	0.35%	0.00%	23.44%	6.60%	24.61%	6.60%
Punjab	0.81%	0.20%	0.35%	0.00%	23.44%	27.30%	24.61%	27.60%
Rajasthan	0.81%	0.00%	0.35%	0.00%	23.44%	18.30%	24.61%	18.30%
Sikkim	0.81%	0.00%	0.35%	3.70%	23.44%	84.70%	24.61%	88.40%
Tamil Nadu	0.81%	5.80%	0.35%	0.00%	23.44%	19.70%	24.61%	25.50%
Telangana	0.81%	0.00%	0.35%	0.00%	23.44%	20.20%	24.61%	20.20%
Tripura	0.81%	0.00%	0.35%	0.10%	23.44%	13.50%	24.61%	13.60%
Uttar Pradesh	0.81%	0.00%	0.35%	0.40%	23.44%	14.80%	24.61%	15.20%
Uttarakhand	0.81%	0.00%	0.35%	3.00%	23.44%	57.40%	24.61%	60.40%
West Bengal	0.81%	0.10%	0.35%	0.00%	23.44%	15.90%	24.61%	15.90%

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