

भारत सरकार Government of India विद्युत मंत्रालय Ministry of Power केन्द्रीय विद्युत प्राधिकरण Central Electricity Authority



इलेक्ट्रिक वाहन (ईवी) सार्वजनिक चार्जिंग स्टेशन (पीसीएस) मासिक विद्युत उपभोग रिपोर्ट

Electric Vehicles (EVs) Public Charging Stations (PCS) Monthly Power Consumption Report

अक्टूबर 2024 / October 2024 स्वच्छ ऊर्जा और ऊर्जा परिवर्तन प्रभाग Clean Energy and Energy Transition Division

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FOREWORD

India's insufficient petroleum reserves have led to heavy reliance on crude oil and natural gas imports, making it the third-largest oil importer globally, following the US and China. Approximately 82.8% of India's crude oil and 45.3% of its natural gas are imported. The consumption of petroleum products significantly contributes to air pollution, creating a pressing need to curb their usage and tackle the pollution issue. Moreover, the substantial size of crude oil imports burdens the Indian economy, necessitating a shift toward cleaner fuel alternatives and technologies to reduce dependence on petroleum products and safeguard the environment.

The Ministry of Power, with aim to accelerate the E-mobility transition in the country by accelerating development of Public Charging Infrastructure (PCS) for electric vehicles, has published revised consolidated guidelines titled "Guidelines for Installation and Operation of Electric Vehicle Charging Infrastructure-2024" dated 17.09.2024.

Further, after review of FAME-II and EMPS-2024, Ministry of Heavy Industries (MHI) formulated PM Electric Drive Revolution in Innovative Vehicle Enhancement (PM E-DRIVE) scheme with the approval of the Union Cabinet. The number of vehicles and the expenditure under EMPS-2024 (implemented for the period from 1st April 2024 to 30th September 2024) is subsumed under the number of vehicles and outlay of PM E-DRIVE Scheme. The PM E-DRIVE Scheme, with an outlay of ₹10,900 crore, shall be implemented from 1st October 2024 to 31st March 2026, for faster adoption of electric vehicles (EVs), setting up of charging infrastructure and development of EV manufacturing eco-system in the country.

In this regard, information on PCS are required for assessment of progress made in development of necessary charging infrastructure in meeting the various stated objectives like development of safe & reliable EV charging eco system, ensuring energy security & reduction of emission intensity etc., and to take further policy intervention. The data on energy consumption in these EV charging stations is also important for the purpose of load forecasting, distribution system planning and integrated resource planning in the country.

This report is based on the data/information submitted by various utilities. Information from other utilities is awaited to make this report more comprehensive.

State	UT wise-Electricity	-		0 0	i illula	केविप्रा टब्ब्व	
Clean Energy & Energy Transition Division, Central Electricity Authority							
Region		October, 2024			2024 to October, 2	024	
State/UT	Electricity Consumed in EV Charging Stations (excl. Heavy Duty) (in MU)	Electricity Consumed in Heavy Duty PCS only (in MU)	Total Electricity Consumed (in MU)	Electricity Consumed in EV Charging Stations (excl. Heavy Duty) (in MU)	Electricity Consumed in Heavy Duty PCS only (in MU)	Total Electricity Consumed (in MU)	
Northern							
Chandigarh	0.02	0.55	0.57	0.24	3.99	4.23	
Delhi	10.92	19.92	30.84	83.94	122.29	206.23	
Haryana	1.78	0.04	1.82	12.61	0.28	12.89	
Rajasthan	0.68	0.15	0.83	4.30	1.03	5.32	
Uttar Pradesh	0.02	0.00	0.02	0.14	0.00	0.14	
Himachal Pradesh	-	-	-	-	-	-	
UT of J&K and Ladakh	-	-	-	-	-	-	
Uttarakhand	-	-	-	-	-	-	
Western							
Gujarat	0.18	5.55	5.73	1.57	34.76	36.34	
Madhya Pradesh	0.05	0.26	0.31	0.35	1.81	2.15	
Maharashtra	2.78	14.91	17.69	15.18	92.95	108.13	
Chhattisgarh	-	-	-	-	-	-	
Dadra & Nagar							
Haveli and Daman & Diu	-	-	-	-	-	_	
Southern					1.5.15		
Andhra Pradesh	0.14	1.72	1.86	0.87	12.65	13.53	
Karnataka	0.38	0.31	0.69	3.61	2.09	5.71	
Kerala	1.21	0.00	1.21	7.71	0.00	7.71	
Tamil Naidu	1.34	*	1.34	8.77	*	8.77	
Telangana	0.42	1.95	2.37	2.89	6.60	9.49	
Puducherry	-	-	-	-	-	-	
Eastern	0.75	0.10	0.04	4.01	1.54	6.25	
Bihar	0.75	0.19	0.94	4.81	1.54	6.35	
Odisha	0.01	0.00	0.01	0.06	0.29	0.35	
West Bengal DVC	0.16	0.19	0.35	1.06	1.49	2.55	
DvC Jharkhand	-	-	-	-	-	-	
	-	-	-	-	-	-	
Sikkim	-	-	-	-	-	-	
North Eastern	0.52	0.91	1.43	3.20	6.39	9.58	
Assam Arunachal	0.32	0.91	1.43	3.20	0.39	9.30	
Pradesh	-	-	-	-	-	-	
Manipur	-	-	-	-	-	-	
Meghalaya	-	-	-	-	-	-	
Mizoram	-	-	-	-	-	-	
Nagaland	-	-	-	-	-	-	
Tripura	-	-	-	-	-	-	
Grand Total	21.36	46.64	68.00	151.30	288.16	439.46	

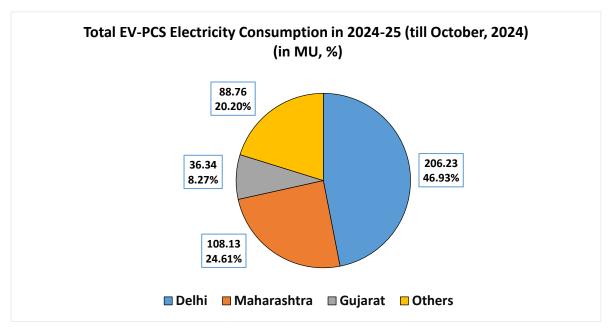
- : Data/Information not available/reported by DISCOM/Utility. <u>Note:</u> As per the data furnished by State DISCOMs/ Utilities. The electricity consumption in MU is rounded off to nearest hundredth place.

Clean Energy & Energy Transition Division, Central Electricity Authority							
October, 2024 April, 2024 to October, 20							
State-UT/DISCOM	Electricity Consumed in EV Charging Stations (excl. Heavy Duty) (in MU)	Electricity Consumed in Heavy Duty PCS only (in MU)	Total Electricity Consumed (in MU)	Electricity Consumed in EV Charging Stations (excl. Heavy Duty) (in MU)	Electricity Consumed in Heavy Duty PCS only (in MU)	Total Electricity Consumed (in MU)	
Chandigarh	0.02	0.55	0.57	0.24	3.99	4.23	
EWEDC	0.02	0.55	0.57	0.24	3.99	4.23	
Delhi	10.92	19.92	30.84	83.94	122.29	206.23	
BRPL	5.11	5.77	10.88	41.51	32.51	74.02	
BYPL	2.79	2.15	4.94	19.80	16.02	35.82	
NDMC	0.02	0.00	0.02	0.17	0.00	0.17	
Tata Power-DDL	3.00	12.00	15.00	22.45	73.76	96.21	
Haryana	1.78	0.04	1.82	12.61	0.28	12.89	
DHBVN	1.72	0.00	1.72	12.15	0.00	12.15	
UHBVN	0.06	0.04	0.10	0.46	0.28	0.74	
Rajasthan	0.68	0.15	0.83	4.30	1.03	5.32	
AVVNL	0.05	0.00	0.05	0.35	0.00	0.35	
JDVVNL	0.02	0.00	0.02	0.13	0.00	0.13	
JVVNL	0.61	0.15	0.76	3.82	1.03	4.85	
Uttar Pradesh	0.02	0.00	0.02	0.14	0.00	0.14	
Noida Power (NPCL)	0.02	0.00	0.02	0.14	0.00	0.14	
Himachal Pradesh	-	-	-	-	-		
-	-	-	-	-	-	-	
UT of J&K and Ladakh	-	-	-	-	-	-	
-	-	-	-	-	-		
Uttarakhand	-	-	-	-	-		
-	-	-	-	-	-		
Gujarat	0.18	5.55	5.73	1.57	34.76	36.34	
DGVCL	0.07	3.07	3.14	0.46	18.15	18.61	
PGVCL	0.03	0.76	0.79	0.29	4.49	4.78	
Torrent Power	0.05	1.73	1.78	0.33	12.08	12.4	
UGVCL	0.03	0.00	0.03	0.49	0.05	0.55	
Madhya Pradesh	0.05	0.26	0.31	0.35	1.81	2.15	
MPMKVVCL	0.05	0.26	0.31	0.35	1.81	2.1:	
Maharashtra	2.78	14.91	17.69	15.18	92.95	108.13	
AEML	1.46	1.79	3.25	2.79	3.08	5.80	
Brihan Mumbai (BEST)	0.22	1.96	2.18	3.83	19.21	23.04	

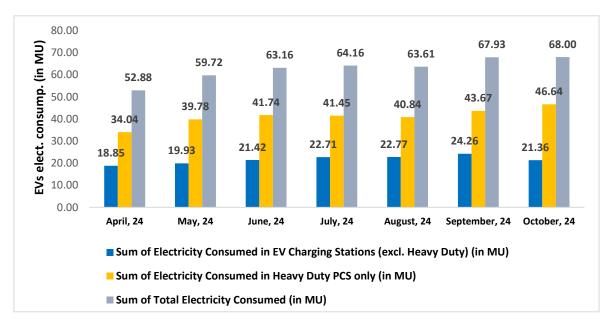
	Clean Energy & E	inergy Transition Div	ision, Central Elect	ricity Authority		F
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MSEDCL	1.09	11.16	12.26	8.56	70.67	79.23
Chhattisgarh	-	-	-	-	-	
-	-	-	-	-	-	
Dadra & Nagar Haveli and Daman & Diu	-	-	-	-	-	
-	-	-	-	-	-	12 5
Andhra Pradesh	0.14	1.72	1.86	0.87	12.65	13.5
APEPDCL	0.08	0.13	0.22	0.48	0.97	1.4
APSPDCL	0.06	1.58	1.64		11.68	12.0
Karnataka	0.38	0.31	0.69	3.61	2.09	5.7
BESCOM	0.26	0.00	0.26	3.08	0.00	3.0
CESC Mysore	0.03	0.24	0.26	0.20	1.58	1.7
GESCOM	0.01	0.00	0.01	0.04	0.00	0.0
HESCOM	0.01	0.00	0.01	0.12	0.00	0.1
MESCOM	0.06	0.08	0.14	0.18	0.52	0.6
KSEB	1.21	0.00	1.21	7.71	0.00	7.7
Tamil Naidu		0.00	1.21	7.71	0.00	7.7
TANGEDCO	1.34	*	1.34	8.77 8.77	*	8.7 8.7
Telangana	0.42	1.95	2.37	2.89	6.60	0.7 9.4
TGNPDCL	0.42	0.46	0.47	0.11	0.53	9.4 0.6
TGSPDCL	0.01	1.49	1.90	2.78	6.07	8.8
				2.78		0.0
Puducherry -	-	-	-	-	-	
Bihar	0.75	- 0.19	- 0.94	4.81	- 1.54	6.3
NBPDCL	0.12	0.00	0.12	0.66	0.00	0.6
SBPDCL	0.12	0.19	0.12	4.15	1.54	5.6
Odisha	0.03	0.19	0.83	0.06	0.29	0.3
TPCODL	0.01	0.00	0.01	0.06	0.29	0.3
West Bengal	0.01	0.00	0.01	1.06	1.49	2.5
CESC	0.16	0.19	0.35	1.06	1.49	2.5
DVC	-	-	-	-	-	
-		-				
Jharkhand	-	-	-			

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-	-	-	-	-	-	-
Sikkim	-	-	-	-	-	-
-	-	-	-	-	-	-
Assam	0.52	0.91	1.43	3.20	6.39	9.58
APDCL	0.52	0.91	1.43	3.20	6.39	9.58
Arunachal Pradesh	-	-	-	-	-	-
-	-	-	-	-	-	-
Manipur	-	-	-	-	-	-
-	-	-	-	-	-	-
Meghalaya	-	-	-	-	-	-
-	-	-	-	-	-	-
Mizoram	-	-	-	-	-	-
-	-	-	-	-	-	-
Nagaland	-	-	-	-	-	-
-	-	-	-	-	-	-
Tripura	-	-	-	-	-	
-	-	-	-	-	-	
Grand Total	21.36	46.64	68.00	151.30	288.16	439.46

* : Not available with TANGEDCO (TN). - : Data /Information not available/reported by DISCOM/Utility. <u>Note:</u> As per the data furnished by State DISCOMs/ Utilities. The electricity consumption in MU is rounded off to nearest hundredth place.



It can be seen from above graph that in 2024-25 till October month, Delhi has the maximum electric-vehicles electricity consumption (206.23 MU, 46.93%) followed by Maharashtra (108.13 MU, 24.61%) and Gujarat (36.34 MU, 8.27%).



The above graph shows the electricity consumption by EV charging stations along with Heavy-duty charging stations during the period from April 2024 to October 2024. Total electricity consumption in October 2024 was 68.00 MU whereas in April 2024, it was 52.88 MU.