WORLD ENERGY COUNCIL
INDIA

NATIONAL ENERGY TRILEMMA INDEX 2024

MARCH 2025

About Us

WEC India (formerly known as World Energy Council – Indian Member Committee) is a country member of the World Energy Council (WEC), a global and inclusive body (estd.1923) to promote sustainable supply and use of energy. WEC engagements cover wide-ranging aspects of the global energy sector. WEC India is one of the earliest country members of the World Energy Council, having joined the Council in 1924.

WEC India functions under the patronage of the Ministry of Power and with the support of Ministries in the energy sector and leading organisations in the sector. Leading energy sector organisations, associations, Institutions, government bodies, and regulators in the country are its members.

Reconstituted in May 1999 by the Ministry of Power, has the Hon'ble Union Minister of Power as the Patron, Secretary (Ministry of Power) as the Chairman, and CMD of NTPC as Secretary General. WEC India functions under the patronage of the Ministry of Power and with the support of Ministries of Coal, New and Renewable Energy, Petroleum and Natural Gas, External Affairs, and the Department of Atomic Energy. The body is registered as a non-profit organization under the Societies Registration Act 1860. As envisioned during reconstitution, to truly represent the sector, the governance structure and membership are representative of the energy sector in India.

WEC India has strived to continuously realign its engagements with changes in the energy sector, now the energy transition, and the long-term goal of Net Zero.

The vision "to be the foremost energy think-tank and voice of the sector" takes cognizance of the potential and unique positioning of the body. The strategic review exercise on WEC India carried out by a high-powered Committee in 2015-16 re-emphasized the need and relevance of the body, and the recommendations of the Committee, as approved by the Ministry of Power, guide the work programs of WEC India. Policy Research& Analysis remains the key mandate of WEC India.

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ABBREVIATIONS

Abbreviation	Full Form
ABR	Average Billing Rate
ACS	Average Cost of Supply
AQI	Air Quality Index
ARR	Average Revenue Realized
AT&C Loss	Aggregate Technical and Commercial loss
BESS	Battery Energy Storage System
CNG	Compressed Natural Gas
COP	Conference of Parties
Cr.	Crores
DISCOM	Distribution Company (Electricity)
DPIIT	Department for Promotion of Industry and Internal Trade
EMCI	Energy Mix Concentration Index
EV	Electric Vehicle
FDI	Foreign Direct Investment
gCO_2	Grams of Carbon Dioxide
GDP	Gross Domestic Product
GSDP	Gross State Domestic Product
GENCO	Generation Company (Electricity)
GW	Giga Watt
HH	Households
HHI	Herfindahl-Hirschman Index
INR	Indian Rupees
KPI	Key Performance Indicator
kWh	Kilo-Watt Hour
LED	Light Emitting Diode
LGBR	Load Generation Balance Report

Abbreviation	Full Form
LPG	Liquefied Petroleum Gas
MOSPI	Ministry of Statistics and Programme Implementation
MPI	Multidimensional Poverty Index
MSMEs	Micro Small and Medium Enterprises
NDC	Nationally Determined Contributions
NETI	National Energy Trilemma Index
NITI Aayog	National Institution for Transforming India Aayog
NZ	Net Zero
PAT	Profit After Tax
PLI	Production Linked Incentive
PNG	Piped Natural Gas
PPAC	Petroleum Planning & Analysis Cell
RE	Renewable Energy
SDA	State Development Authority
SDG	Sustainable Development Goals
SEEI	State Energy Efficiency Index
TMT	Thousand Metric Tonnes
UT	Union Territory
VGF	Viability Gap Funding
WEC	World Energy Council
w.r.t	With respect to

EXECUTIVE SUMMARY

In recent years, India has achieved a significant milestone in the areas of energy access and renewable capacity expansion by surpassing 200 GW in renewable energy capacity, reflecting its steadfast commitment to sustainable energy expansion. At the 29th United Nations Climate Change Conference (COP29) in Baku, Azerbaijan, India advocated for tripling climate finance to developing nations, emphasising the necessity of accessible green funding to combat climate change effectively.

India is well-positioned to effectively balance its climate change targets with meeting the growing energy demands of its expanding economy. To propel its clean energy revolution, India is concentrating on renewable energy and green hydrogen. By 2030, the target is to install 500 GW of renewable energy capacity.

Achieving these goals nationally requires significant contributions and commitments from the Indian States and Union Territories (UTs). In this context, an outcome-based framework was developed, i.e., "National Energy Trilemma Index" in 2020, to evaluate states' progress in the energy sector.

The framework adopted in this report draws from the World Energy Council's Energy Trilemma Index, which has been annually published since 2010. The World Energy Council's definition of the Index is based on three core dimensions, including Energy Security, Energy Equity, and Environmental Sustainability of Energy Systems, with an additional aspect of Country Context. India was ranked 74th in the World Energy Trilemma Index 2024.

In the National Energy Trilemma Index, the performance of States and Union Territories (UTs) across these dimensions: Energy Security, Energy Equity, and Environmental Sustainability is measured. Balancing these three goals constitutes a 'Trilemma' and balanced systems enable prosperity and competitiveness. Additionally, the States/UTs are scored on the dimension of state context, which evaluates States/UTs on their governance, logistics, ability to deliver on investments, and innovation parameters.

Each dimension in the National Energy Trilemma Index is an aggregation of various indicators, which in turn are an aggregation of several sub-indicators. The dimensions are broken down into a total of 11 indicators and 41 sub-indicators, on which the performance of each state and UT is scored. The set of indicators selected provides a deeper understanding of an issue or dimension and helps develop a clear picture of the whole system, including its interlinkages and trade-offs.

The performance of 28 States and 8 UTs has been showcased in this report. Out of the States, Kerala, Gujarat, Karnataka, Tamil Nadu, and Himachal Pradesh have scored the highest, while among UTs, Delhi, Chandigarh, and Andaman & Nicobar have secured the highest cumulative scores over dimensions.

This index can be a useful tool for states/ UTs to benchmark their progress relative to their performance compared to their peers and identify priority areas and gaps for their policy decisions.

1. INTRODUCTION

The energy sector remains a crucial driver for the nation's advancement. India, one of the fastest-growing major economies, is at a pivotal point in its energy transition. Energy security, affordability, decarbonisation, sustainability, and decentralisation are key parameters that will determine how India's energy sector evolves with time.

India's energy security is a key pillar of its economic and environmental framework, with a focused drive towards renewable energy and self-reliance. The nation's capacity for non-fossil fuel energy has recently reached an impressive milestone, exceeding 200 GW.

India is on track to achieve its Nationally Determined Contributions (NDCs) targets. India has shown a proactive and all-encompassing attitude in tackling climate change. India represented the Global South's concerns at COP-29 and emphasised the need for developing countries to have easy access to climate finance.

India is taking efforts to balance between combating climate change and fulfilling the growing energy demands of its rapidly expanding economy. The Union Budget 2025-26 marks a significant step forward in India's long-term energy transition, with initiatives in nuclear energy.

Power markets in India are changing to facilitate the integration of renewable energy. The Government of India is making various efforts, such as the PLI Scheme for batteries, VGF funding to promote BESS, National Green Hydrogen Mission. India is also making efforts to make power transmission dependable, secure, and cost-effective.

In 2020, the World Energy Council India drafted its 1st edition of the "National Energy Trilemma Index" to assess advancements in the energy sector.

The National Energy Trilemma Index assesses the performance of States and UTs across three core dimensions, with an additional State context that supports all three dimensions:

Energy Security: Reflects capacity to meet current and future energy demand reliably, withstand and bounce back swiftly from system shocks with minimal disruption to supplies.

Energy Equity: Reflects the ability to provide universal access to affordable, fairly priced, and abundant energy for domestic and commercial use.

Environmental Sustainability: Reflects the transition of a State/UT's energy system towards mitigating and avoiding potential environmental harm and climate change impacts.

State Context: Reflects the ability to assess State/ UTs investments, regulation & governance, stability of institutions & innovation parameters.

Each state or UT's performance is graded based on these four dimensions, which are further subdivided into eleven indicators and forty-one sub-indicators.

According to the evaluations, the following States/UTs rank highest on the National Energy Trilemma Index in terms of overall performance:

Table 1: Top performers on National Energy Trilemma Index 2024

Top 5 PERFORMERS

States/ UTs with the highest overall scores

Rank	Score 2024	State	Key Performing Dimensions
1	65.08	Kerala	Energy Equity, Environmental Sustainability
2	62.71	Gujarat	Energy Equity, Energy Security
3	61.33	Karnataka	Energy Equity, Energy Security
4	58.70	Tamil Nadu	Energy Equity, Energy Security
5	57.95	Himachal Pradesh	Energy Equity, Energy Security

Rank	Score 2024	Union Territory	Key Performing Dimensions
1	61.88	Delhi	Energy Equity, Energy Security
2	59.58	Chandigarh	Energy Security, Environmental Sustainability
3	49.44	Andaman & Nicobar	Energy Equity, Environmental Sustainability

Note: Key Performing Dimensions are based on Energy Security, Energy Equity, and Environmental Sustainability dimensions.

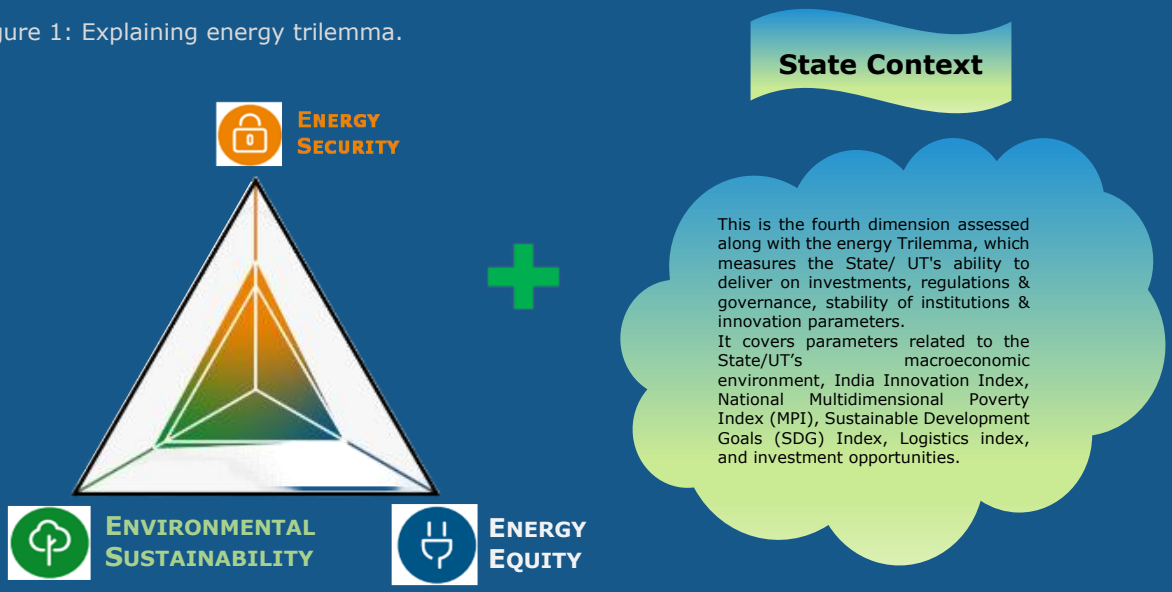
2. National Energy Trilemma Index Methodology

2.1 What is Energy Trilemma

The framework adopted in this report draws on the World Energy Council's Energy Trilemma Index, which has been annually published since 2010, and the World Economic Forum's Energy Transition Index, which has been published Energy Transition Index.

The World Energy Trilemma Index's definition of energy trilemma is based on three core dimensions: Energy Security, Energy Equity, and Environmental Sustainability of Energy Systems. Balancing these three dimensions constitutes a 'Trilemma', and balanced systems enable prosperity and competitiveness. A fourth dimension – State context is also added to the study.

Figure 1: Explaining energy trilemma.



Energy Security

Measures:

Ability to meet current and future energy demand. Withstand and respond to system shocks

Covers:

- Diversity and management energy sources
- Reliability and resilience of energy infrastructure

Energy Equity

Measures:

Ability to provide access to reliable, affordable and abundant energy for domestic/ commercial use

Covers:

- Access to electricity and clean fuels
- Affordability of energy
- Performance of utilities

Environmental Sustainability

Measures:

Ability to mitigate and avoid environmental degradation and climate change impacts

Covers:

- Energy Efficiency
- Distribution, decarbonization and air quality

2.2 INDICATORS AND WEIGHTAGES

Each dimension in the National Energy Trilemma Index (NETI) is an aggregation of various indicators, which in turn are the aggregation of several sub-indicators, as follows:

Table 2: Number of indicators and sub-indicators

Dimension	Energy Security	Energy Equity	Environmental Sustainability	State Context	=	4 Dimensions
Indicators	2	3	3	3	=	11 indicators
Sub-indicators	12	11	9	9	=	41 sub-indicators

The selected indicators offer a comprehensive understanding of each dimension, highlighting interlinkages and trade-offs within the energy system. Each indicator category is composed of a set of carefully selected sub-indicators that are highly relevant to the Energy Trilemma, and which meet the following criteria:

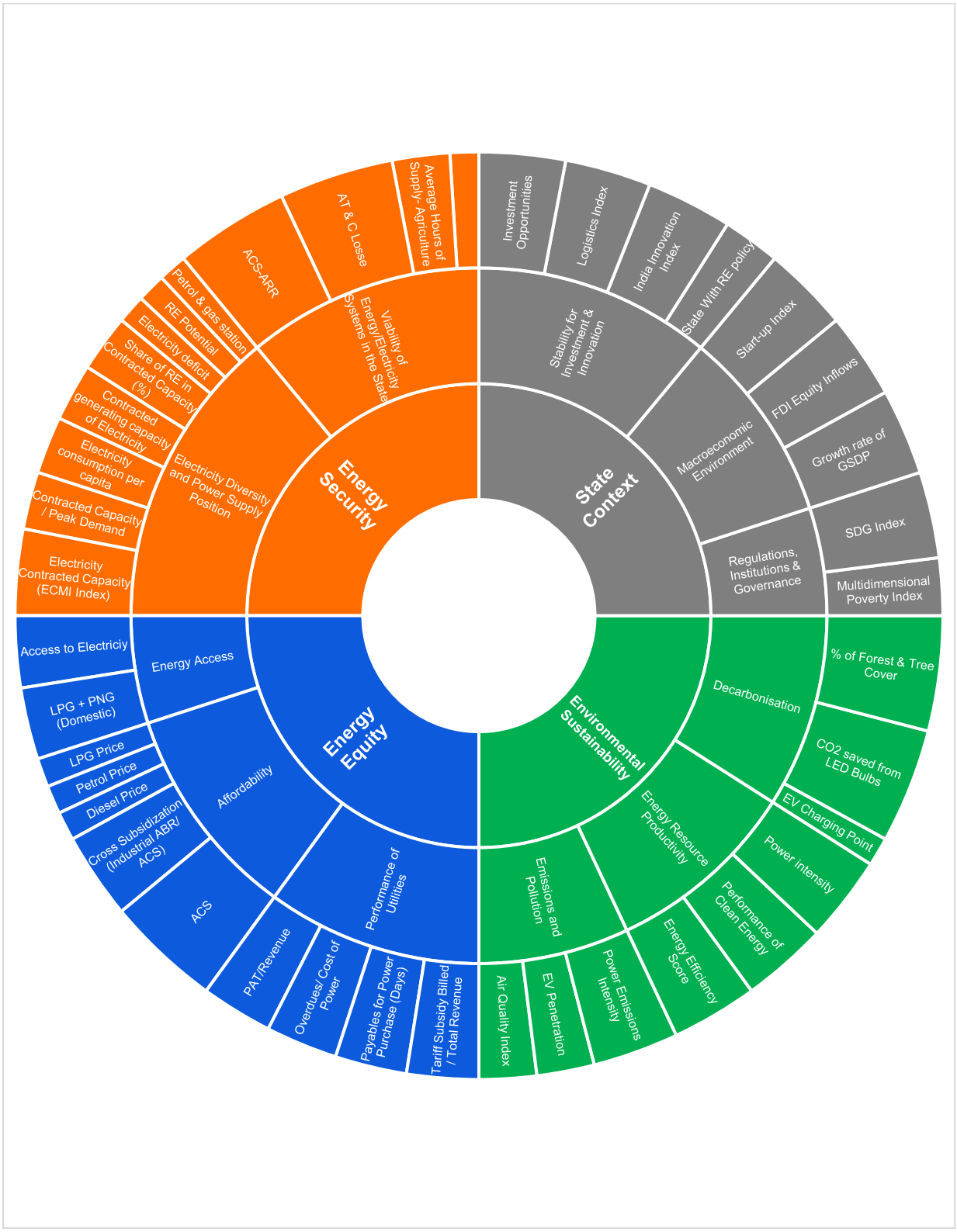
Coverage	Sub-indicators should be critical to the Index's methodology and should cover majority of relevant States/UTs.
Comparability	Data for sub-indicator scores can be derived from unique and comprehensive sources, preferably a single source per sub-indicator as far as practical, to ensure comparability between States/UTs.
Relevance	Sub-indicators should provide insight into State's/UT's situations in the context of the dimension/ indicator.
Distinctiveness	Each sub-indicator should focus on a different aspect of the issue being explored and avoids overlaps or redundancy with other sub-indicators.
Robustness	Sub-indicator data are available from reputable sources with the most current information available at sufficient coverage.
Balance	Sub-indicators within each dimension (and dimensions across the Index) exhibit coverage of different issues.

Each of the core dimensions (Energy Security, Energy Equity, and Environmental Sustainability) and the fourth dimension State Context have been given equal priority and weightage (25% each).

The sub-indicators selected for this report are widely used as a tool for communicating energy issues to policymakers, stakeholders, and the public. Each sub-indicators are assigned a weightage, for the aggregation of a State's/UT's scores.

In the following sub-burst diagram, the innermost circle depicts the four dimensions assessed in this report, the middle circle depicts various indicators under each dimension, and the outermost circle depicts the sub-indicators under each indicator. The width of each cell indicates its weightage.

Figure 2: Sunburst chart of dimensions, indicators and sub-indicators



List of indicators and sub-indicators, under each dimension, used in National Energy Trilemma Index 2024 are as follows:

Table 3: List of all indicators and sub-indicators

Energy Security – 25%

Indicator	Sub - Indicator	Weightage (%)
Electricity Diversity and Power Supply Position	1. Electricity Contracted Capacity (EMCI Index)	3.00
	2. Share of RE in Contracted Capacity (%)	2.00
	3. Contracted generating capacity of Electricity (Growth Rate in %)	2.00
	4. Electricity consumption per capita (in kWh)	2.00
	5. Electricity not supplied (Deficit) in %	1.00
	6. Contracted Capacity / Peak Demand	2.00
	7. Number of petrol & gas station / Area of State	1.00
	8. RE Potential (estimated in GW)	1.00
Viability of Energy/Electricity Systems in the State	9. AT & C Losses (in %)	4.00
	10. ACS-ARR (Cash Adjusted Gap)	4.00
	11. Average Hours of Supply- Agriculture (Mins/day)	2.00
	12. Availability of Oil & Gas pipeline in state	1.00

Energy Equity – 25%

Indicators	Sub - Indicators	Weightage (%)
Energy Access	1. Access to Electricity %	2.50
	2. LPG + PNG (Domestic) Connections against number of HHs (%)	2.50
Affordability	3. ACS	4.00
	4. LPG Price (Rs. for 14.2 kg Cylinder) -Domestic Non-Subsidised / Per Capita income (1000)	1.00
	5. Petrol Price in (Rs/litre) / Per capita income (1000)	1.00
	6. Diesel Price in (Rs/litre) / Per Capita income (1000)	1.00
	7. Cross Subsidisation (Industrial ABR/ ACS)	3.00
Performance of Utilities	8. PAT/Revenue	2.50
	9. Overdue/ Cost of Power	2.50
	10. Payables for Power Purchase (Days)	2.50
	11. Tariff Subsidy Billed / Total Revenue	2.50

Environmental Sustainability – 25%

Indicators	Sub – Indicators	Weightage (%)
Energy Resource Productivity	1. Energy Efficiency Score	3.00
	2. Performance of Clean Energy (Contracted Capacity/Potential) in %	3.00
	3. Power intensity (kWh/GDP in 1000 INR)	3.00
Decarbonisation	4. Number of EV Charging Stations	1.00
	5. CO_2 saved from LED Bulbs per 1000 population (in tonnes)	4.00
	6. % of Forest & Tree Cover (Forest Cover w.r.t total area)	4.00
Emissions and Pollution	7. Power Emissions Intensity (gco_2_per_kWh)	3.00
	8. Air Quality Index	2.00
	9. EV Penetration over diesel and petrol vehicles (%)	2.00

State Context – 25%

Indicators	Sub - Indicators	Weightage (%)
Macroeconomic Environment	1. Growth rate of GSDP	3.00
	2. FDI Equity Inflows (INR Cr.)	3.00
	3. Start-up Index	3.00
Regulations, Institutions & Governance	4. Multidimensional Poverty Index	2.00
	5. SDG Index	3.00
Stability for Investment & Innovation	6. India Innovation Index	3.00
	7. Logistics Index	3.00
	8. State With RE policy	2.00
	9. Investment Opportunities (in USD Billion)	3.00

Certain sub-indicators have been updated, replaced, and renamed from the previous edition of this report (National Energy Trilemma Index 2023) to improve our sub-indicators for comparing states on better grounds, as follows:

Table 4: Changes made in sub-indicators from the 3rd edition

Sl.	Sub-indicator (2023 edition)	Sub-indicator Renamed (2024 edition)	Rationale for change
1.	Diversity of Electricity Installed Capacity (ECMI Index)	Diversity of Electricity Contracted Capacity (ECMI Index)	Nomenclature Change to align with sub-indicator parameter
2.	Share of RE in total installed capacity (%)	Share of RE in Contracted Capacity (%)	Nomenclature Change to align with sub-indicator parameter
3.	Energy not supplied (Deficit) in %	Electricity not supplied (Deficit) in %	Nomenclature Change to align with sub-indicator parameter
4.	Installed Capacity/ Peak Demand	Contracted Capacity/ Peak Demand	Nomenclature Change to align with sub-indicator parameter
5.	ACS-ARR Gap (in Rs./unit)	ACS-ARR (Cash Adjusted Gap)	Nomenclature Change to align with sub-indicator parameter
6.	Performance of Clean Energy (Capacity/Potential) in %	Performance of Clean Energy (Contracted Capacity/Potential) in %	Nomenclature Change to align with sub-indicator parameter

Sl.	Sub-indicator (2023 edition)	Sub-indicator Replaced (2024 edition)	Rationale for change
1.	Installed generating capacity of Electricity (Growth Rate in %)	Contracted generating capacity of Electricity (Growth Rate in %)	For accounting of previous trends results, the last 5-year CAGR has been taken.
2.	-	Number of petrol & gas station / Area of State	This parameter shows the state/UTs with self-reliance on the security of petrol and gas within the state/UTs.
3.	-	RE Potential (estimated in GW)	This reflects the state/UT's potential for growth in RE and installed capacity, so they contribute to the rapid capacity expansion and national net-zero goal of 2070.
4.	LPG Price (Rs. for 14.2 kg Cylinder) - Non-Subsidised	LPG Price (Rs. for 14.2 kg Cylinder) -Domestic Non-Subsidised / Per Capita income (1000)	To show the affordability of LPG domestic cylinders by taking income level into account.
5.	Petrol Prices in Rs/litre	Petrol Price in (Rs/litre) / Per capita income (1000)	This shows the affordability of petrol by taking income level into account.
6.	Diesel Prices in Rs/litre	Diesel Price in (Rs/litre) / Per Capita income (1000)	This shows the affordability of diesel by taking income level into account.

Sl.	Sub-indicator (2023 edition)	Sub-indicator Replaced (2024 edition)	Rationale for change
7.	Energy intensity (kgoe/GDP in 1000 INR)-Data	Power intensity (kWh/GDP in 1000 INR)-Data	Power domain specialised due to unavailability of data for energy intensity.
8.	-	Number of EV Charging Stations	This reflects that states/UTs proactively working on energy transition in the transport sector.
9.	% of Forest Cover (Forest Cover wrt total area)	% of Forest & Tree Cover (Forest Cover w.r.t total area)	Tree cover data included.
10.	Emission Intensity (kgCO2eq/ GSDP in 1000 INR)	Power Emissions Intensity (gco_2_per_kWh)	Power domain specialised due to unavailability of data for energy emission intensity.
11.	EV Penetration in %	EV Penetration over diesel and petrol vehicles (%)	To show the comparison with ICE vehicle penetration.
12.	Good Governance Index (Score)	-	Omitted this parameter because the government has stopped publishing the report.
13.	-	State With RE policy	This reflects that states/UTs are actively taking policy steps towards India's goal of achieving NZ.

2.3 Methodology for scoring of States and UTs

All States/ UTs are scored on each sub-indicator, as per the following methodology:

STEP 1 - Data collection, verification and validation

- Collection of publicly available information from the reports/ websites/ data portals of Ministries, Government Nodal Agencies, Regulatory Commissions, and Energy Development agencies.

STEP 2 – Data re-scaling and normalisation

- **Data Re-scaling:** The data of various States/ UTs are compared amongst each other using a normalisation approach (as discussed in the next para). To allow for normalisation, all data points are first converted into a positive scale by adding the absolute value of the most negative data for a sub-indicator, to all its data points.

- **Data normalisation:** Normalisation is a scaling technique in which values (rescaled, if required) are converted into a range between 0 and 1. As each sub-indicator may have different measurement units, normalisation is done to make data from various sub-indicators comparable. Otherwise, a variable that has relatively less variance but is measured on a larger scale as compared to other variables may appear to have much greater variation than it actually does. The formula used for normalisation is as follows:

$$X' = \frac{X - X_{min}}{X_{max} - X_{min}}$$

Where,

X' is the normalised data

X is the data of State/UT that is to be normalised

X_{max} and X_{min} are the maximum and the minimum values of the sub-indicator, across States/ UTs, respectively

The normalisation technique works as follows:

- When the value of X is the minimum value in the column, the numerator will be 0, and hence X' will be 0
- On the other hand, when the value of X is the maximum value in the column, the numerator is equal to the denominator and thus the value of X' will be 1
- If the value of X is between the minimum and the maximum value, then the value of X' will be between 0 and 1

The data of States and UTs are evaluated separately i.e. data of a State is compared against other States only while Data of a UTs is compared against other UTs only.

- **Adjustment for inverse indicators:** For some of the parameters, a lower score indicates a better performance. For instance, AT&C loss, Average Cost of Supply, etc. For such parameters, the normalized scores are inverted by subtracting them from 1.

STEP 3 – Scoring and ranking

- **Calculation of sub-indicator scores:** Normalised and adjusted data of each State/UT is multiplied by their corresponding weightage, to calculate score of each State/UT on each sub-indicator.

- **Aggregation of dimension and indicator scores:** For each State/UT, the scores obtained for individual sub-indicators for each state/UT are aggregated into scores, first for each indicator and then across each dimension.

- **Ranking:** The ranking of states is determined by sorting the scores from highest to lowest – highest score getting rank 1, second highest score getting rank 2 and so on. States and UTs are ranked separately.

Electricity Contracted Capacity

The sub-indicator of 'Electricity Contracted Capacity' for a State/ UT is measured using Energy Mix Concentration Index (EMCI). EMCI is derived from Herfindahl–Hirschman index (HHI) which is commonly applied to measure market concentration analysis. The formula used for EMCI Index is as follows:

$$= \left(\left(\left(\frac{-a}{x+y}\right) * LN\left(\frac{a}{x+y}\right)\right) + \left(\left(\frac{-b}{x+y}\right) * LN\left(\frac{b}{x+y}\right)\right) + \left(\left(\frac{-c}{x+y}\right) * LN\left(\frac{c}{x+y}\right)\right) + \left(\left(\frac{-d}{x+y}\right) * LN\left(\frac{d}{x+y}\right)\right) + \cdots + n\right) \Big/ LN(n)$$

Where, *a, b, c, d* represents the share of the electricity from different sources, 'n' represents the no. of electricity sources and 'x+y' is the total installed capacity. Smaller values of the index indicate less diversification, with 0 being the least diversified and 1 being the highest diversified.

3. Energy Trilemma Index Results

3.1 Overall Scores, Ranking, And Category

Scores/ Ranks/ Category obtained by State/UTs on National Energy Trilemma Index 2024 are as follows:

Table 5: Overall scores, ranks, and categories obtained by States/ UTs

State	Score 2024	Rank	Category
Kerala	65.08	1	A
Gujarat	62.71	2	A
Karnataka	61.33	3	A
Tamil Nadu	58.70	4	A
Himachal Pradesh	57.95	5	A
Andhra Pradesh	57.60	6	A
Haryana	57.12	7	A
Uttarakhand	57.10	8	A
Maharashtra	57.07	9	A
Goa	57.06	10	A
Punjab	55.48	11	B
Telangana	54.15	12	B
Sikkim	53.64	13	B
Odisha	52.43	14	B
Assam	52.00	15	B
Arunachal Pradesh	51.61	16	B
Mizoram	51.27	17	B
Rajasthan	50.86	18	B
Tripura	48.36	19	B
Uttar Pradesh	48.13	20	B
West Bengal	46.67	21	B
Manipur	45.93	22	B
Madhya Pradesh	45.17	23	B
Chhattisgarh	42.35	24	C
Meghalaya	42.11	25	C
Nagaland	41.77	26	C
Jharkhand	31.78	27	C
Bihar	30.57	28	C
Union Territories	**Score 2024**	**Rank**	**Category**
Delhi	61.88	1	A
Chandigarh	59.58	2	A
Andaman & Nicobar	49.44	3	B
Puducherry	47.31	4	B
Jammu & Kashmir	45.06	5	B
DNH-DD	42.32	6	C
Ladakh	39.37	7	C
Lakshadweep	37.05	8	C

Note: Category - A (57 and above), Category - B (45-57), Category - C (less than 45)

PERFORMANCE OF NORTHEAST REGION OF INDIA

The Northeast region of India is ranked separately in NETI 2024 due to its unique characteristics and challenges. The region's mountainous and forested terrain creates logistical and infrastructure difficulties, while frequent natural disasters like landslides, earthquakes, and heavy monsoons impact development differently, compared to other Indian states. Connectivity issues, both physical and digital, further exacerbate economic challenges. The Northeast region of India holds immense potential in the energy sector. They are blessed with abundant renewable energy resources with about 129 GW of RE potential, particularly in solar and small hydro, which can play a significant role in sustainable development.

By recognizing and addressing these unique aspects, the region can achieve balanced and sustainable growth, contributing to the nation's overall development.

The Northeast region of Indian state’s overall scores, ranks, and categories are as follows:

Table 6: Overall scores, ranks, and categories obtained by northeast region of Indian state’s

State	Score 2024	Rank	Category
Sikkim	53.64	1	B
Assam	52.00	2	B
Arunachal Pradesh	51.61	3	B
Mizoram	51.27	4	B
Tripura	48.36	5	B
Manipur	45.93	6	B
Meghalaya	42.11	7	C
Nagaland	41.77	8	C

Note: Category - A (57 and above), Category - B (45-57), Category - C (less than 45)

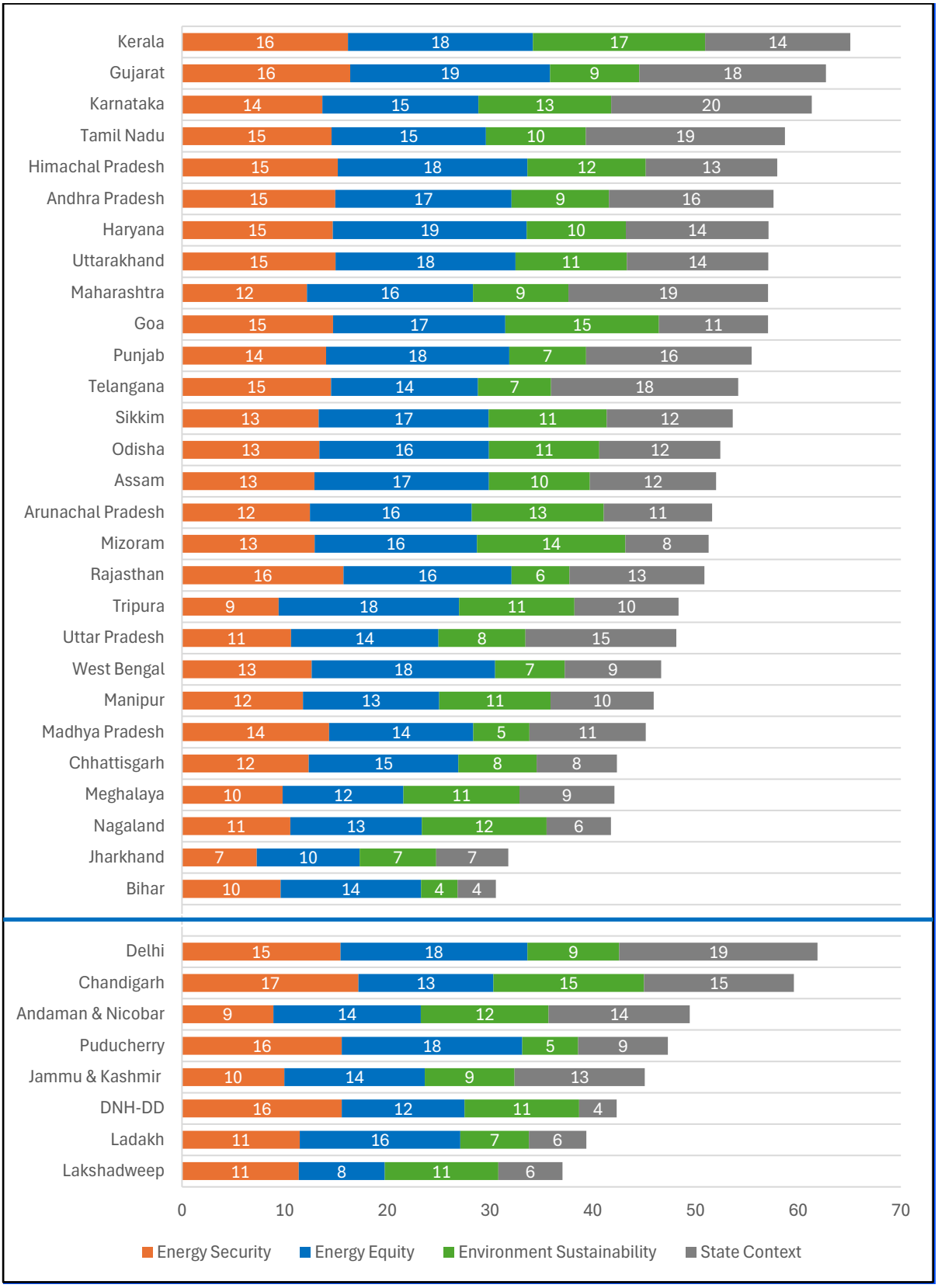
Sikkim leads Northeast India with its high share of renewable energy, strong hydroelectric utilization, and minimal electricity deficit. Assam follows closely, benefiting from a diverse energy mix, strong infrastructure, and economic growth despite higher electricity losses. Arunachal Pradesh ranks third, leveraging small hydro and solar energy, but struggles with weak infrastructure and high AT&C losses. Mizoram shows promise in small hydro and solar power, excelling in affordability but facing challenges in transmission infrastructure.

Tripura stands out for EV adoption but faces connectivity issues and power purchase delays. Manipur has improved electrification yet struggles with power availability and affordability. Meghalaya boasts strong forest cover and low emissions but lags in clean energy performance and efficiency. Nagaland faces severe energy access and infrastructure challenges, requiring major policy interventions.

Sikkim and Assam lead Northeast India in energy security and infrastructure, while Arunachal Pradesh and Mizoram show potential. Tripura, Manipur, Meghalaya, and Nagaland need policy-driven improvements to enhance their energy landscape.

The overall performance of the States/ UTs in ascending order of the Rankings, with dimension-wise scores on National Energy Trilemma Index 4th edition (2024) is as follows:

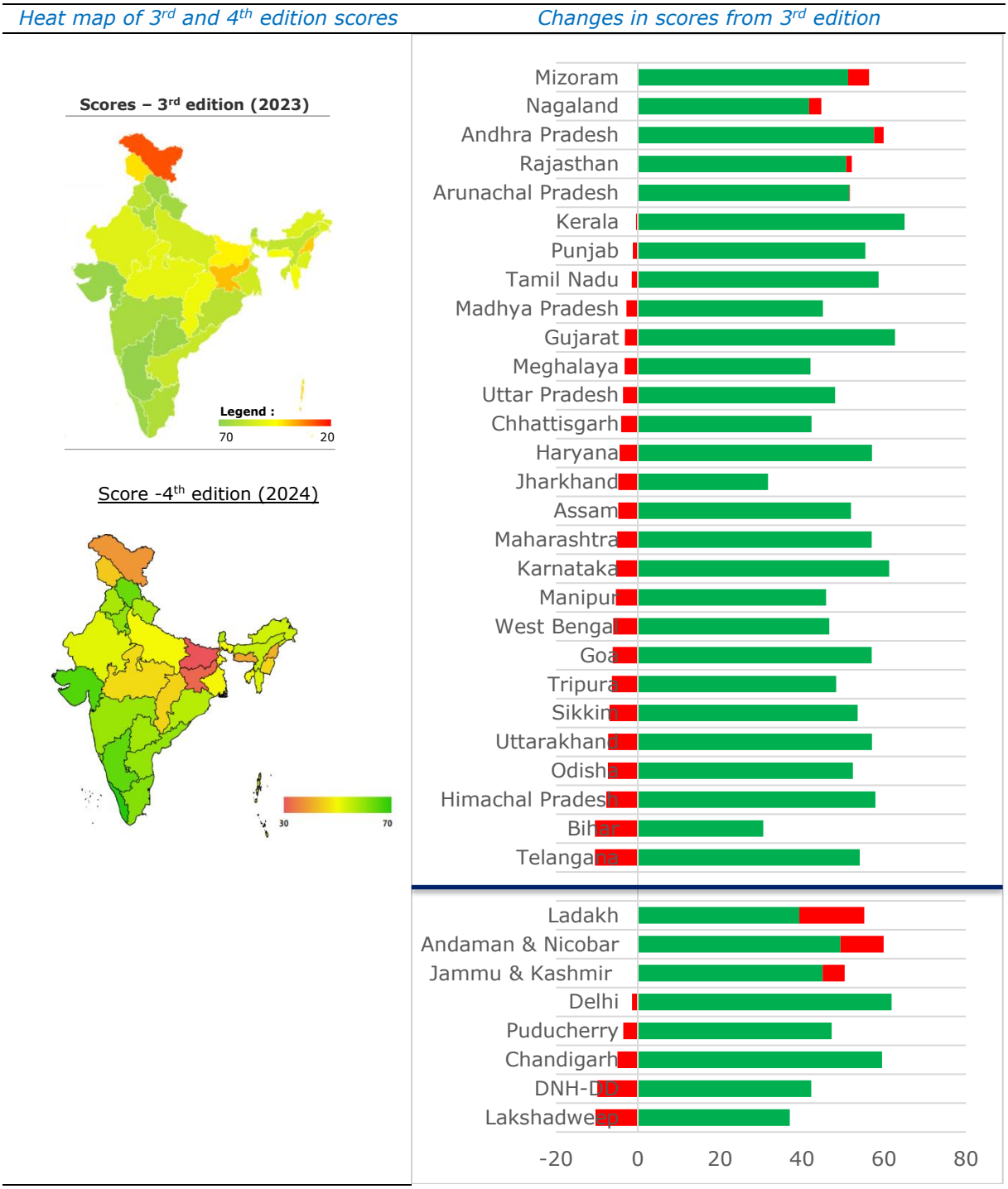
Figure 3: Overall scores dimensions-wise obtained by States/ UTs



Comparison with previous editions of the National Energy Trilemma Index

Heat maps are shown to compare the state-wise scores of the NETI from the previous 3rd edition to the 4th edition (2024). It is observed that some states have maintained better scores over others in the 4th edition of the NETI. Further, the bar graph shows the change in state-wise scores of NETI from the 3rd edition (2023) to the 4th edition (2024).

Figure 4: Comparison with previous editions of the National Energy Trilemma Index



The following table presents a snapshot of key contributors to the scores of top 5 states on NETI 4th edition (2024) scores:

Table 7: Snapshot of top 5 States

State	Kerala Rank: 1 | Score: 65.08	Gujarat Rank: 2 | Score: 62.71	Karnataka Rank: 3 | Score: 61.33	Tamil Nadu Rank: 4 | Score: 58.70	Himachal Pradesh Rank: 5 | Score: 57.95
Energy Security	Rank: 2 | Score: 16.16 • **EMCI:** Highest in India • **AT&C loss (7.05 %)** is less than the National Average • **Elec. supply to all sectors:** 24 hrs	Rank: 1 | Score: 16.37 • **Installed Capacity:** Growing with 10.17 % • **RE potential:** 221 GW • **Electricity Consumption Per Capita:** 2393 kWh	Rank: 13 | Score: 13.66 • **RE share:** 66.89% • **RE potential:** 206 GW • **Contracted Capacity/Peak demand:** 1.99	Rank: 9 | Score: 14.56 • **AT&C Loss:** 10.31% • **No. of petrol & gas/Area station:** 6% • **Contracted Capacity / Peak demand:** 2.19	Rank: 4 | Score: 15.18 • **AT&C Loss:** 13.33% • **RE share:** 96.22% • **Elec. supply to agriculture:** 24 hrs
Energy Equity	Rank: 4 | Score:18.01 • **Cross Subsidisation:** 0.99 • **High tariff subsidy:** 21% of total revenue • **ACS: High** (Rs.6.57/ Unit)	Rank: 1 | Score: 19.47 • **Payables days for power purchase:** 0 days • **Overdues/Cost of power:** 0.01	Rank: 18 | Score: 15.20 • **LPG price per capita (1000):** very low (4.33) • **Diesel price per capita (1000):** 0.46 • **EV Penetration:**10.93%	Rank: 19 | Score:15.04 • **LPG price per capita:** low – 4.55 • **Diesel & petrol price per capita:** low 0.51 and 0.56 • **Cross Subsidisation:** 0.89	Rank: 3 | Score:18.46 • **Overdues/Cost of power:** 9% • **Payables for power purchase:** 34 days • **LPG+PNG Connection:** 124.84%
Environmental Sustainability	Rank: 1 | Score: 16.77 • **Energy Efficiency Score:** Highest in the country • **Air Quality –** 52.77 • **EV Penetration(%):** 12	Rank:19 | Score:8.69 • **Forest cover:** Low – 7.61% • **EV Penetration:** 4.3% • **Forest cover:** 11.03%	Rank: 4 | Score:12.93 • **Energy efficiency Score:** Highest 86.25 • **EV charging:** 2nd highest - 1608	Rank: 15 | Score: 9.73 • **AQI and EV Charging:** High • **RE Capacity/ potential:** High **-** 19.16%	Rank: 7 | Score:11.53 • **CO2 saved from LED Bulbs per 1000 population:** High **-** 120.87 tonnes • **Power Emission intensity:** Low
State Context	Rank: 9 | Score: 14.14 • **Startup Index:** Highest in the country • **SDG Index:** 79 • **MPI:** very low	Rank: 5 | Score: 18.18 • **Startup Index and FDI equity inflow:** High in the country • **Logistic Index:** 90	Rank: 1 | Score:19.54 • **Startup Index and innovation Score:** High • **FDI equity inflow:** 3rd – 54426.5 USD billion Cr.	Rank: 3 | Score: 19.37 • **Startup Index:** High • **Investment opportunity & Logistics index: -** High	Rank: 13 | Score: 12.78 • **Startup Index:** High • **MPI:** low • **SDG Index:** 77

3.2 Performance across dimensions

Energy Security

The Energy Security dimension highlights the importance of strong energy policies to make the most of energy resources while diversifying and decarbonising energy systems. It assesses the extent to which a State/ UT's energy supply (especially electricity) is secure, accessible, and diversified.

Table 8: Top performers in Energy Security dimension

Top 5 PERFORMERS

States with the highest overall scores

Rank	State	Key Performing Sub-indicators
1	Gujarat	Contracted generating capacity RE Potential
2	Kerala	Electricity contracted capacity (ECMI Index) AT & C Losses
3	Rajasthan	RE Potential Contracted generating capacity
4	Himachal Pradesh	Share of RE in Contracted capacity Average hours of supply – Agriculture
5	Uttarakhand	Availability of Oil & Gas pipeline Electricity contracted capacity (ECMI Index)

Top 3 PERFORMERS

UTs with the highest overall scores

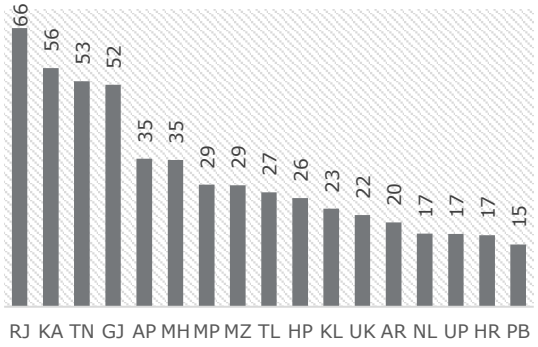
Rank	UT	Key Performing Sub-indicators
1	Chandigarh	Average Hours of supply – Agriculture Share of RE in Contracted capacity
2	Puducherry	Electricity contracted capacity (ECMI Index) Number of petrol & gas station/ Area
3	DNH-DD	AT&C Losses ACS-ARR

Electricity Diversity and Power Supply Position

Parameters in Electricity Diversity and Power Supply Position play a pivotal role in showcasing the State/ UT's transition towards renewable energy targets, in 2030. This indicator has 8 sub-indicators focusing on growth in electricity generation contracted capacity, Renewable share in installed capacity, and energy deficit in state.

RE rich states (excluding Hydro) like Rajasthan, Karnataka, Tamil Nadu, Gujarat, Andhra Pradesh, and Maharashtra have more than 30% share of Renewable Energy in their total contracted capacity.

Figure 5: RE share in contracted capacity (%)

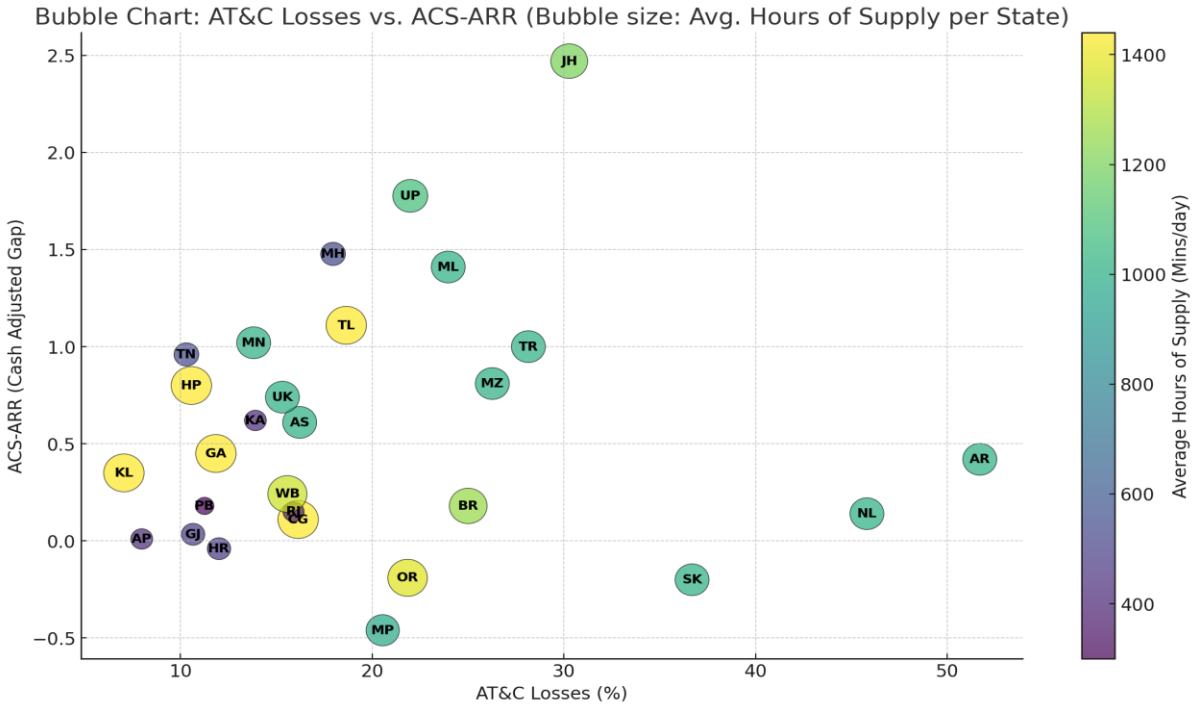


Source: CEA Installed allocation capacity report (Dec-24)

Viability of Energy/ Electricity Systems

The indicator 'Viability of Energy/ Electricity Systems' looks at 4 sub-indicators showing the performance of DISCOMs in the State/ UT on parameters of AT&C Losses, ACS-ARR Gap, Availability of Oil & Gas pipeline in the state, and average hours of supply to agricultural consumers.

Figure 6: Bubble chart, comparing AT&C losses, ACS-ARR Gap, and Average Supply hours (Agricultural)



The graph of AT&C Losses vs ACS-ARR gap shows that many States such as Arunachal Pradesh, Jharkhand, Tripura, and Bihar have high AT&C losses.

Scores of all the States on the various indicators along with their respective rankings, for the Energy Security dimension, are as follows:

Table 9: Scores and ranks obtained by States on Energy Security dimension

State	Electricity Diversity and Power Supply Position	Viability of Energy/ Electricity Systems in the State	Dimension Score	Rank 2024
Gujarat	8.05	8.32	16.37	1
Kerala	7.27	8.89	16.16	2
Rajasthan	8.20	7.53	15.73	3
Himachal Pradesh	6.22	8.96	15.18	4
Uttarakhand	6.88	8.08	14.96	5
Andhra Pradesh	6.44	8.49	14.93	6
Goa	5.70	9.00	14.70	7
Haryana	6.38	8.30	14.68	8
Tamil Nadu	7.37	7.19	14.56	9
Telangana	6.53	7.98	14.51	10
Madhya Pradesh	5.34	8.98	14.32	11
Punjab	6.29	7.75	14.04	12
Karnataka	6.54	7.12	13.66	13
Odisha	4.98	8.41	13.39	14
Sikkim	6.52	6.79	13.31	15
Mizoram	6.77	6.14	12.91	16
Assam	4.92	7.97	12.89	17
West Bengal	3.24	9.40	12.64	18
Arunachal Pradesh	8.20	4.27	12.47	19
Chhattisgarh	3.94	8.41	12.35	20
Maharashtra	6.38	5.80	12.18	21
Manipur	4.98	6.80	11.78	22
Uttar Pradesh	4.63	5.98	10.61	23
Nagaland	5.45	5.09	10.54	24
Meghalaya	4.49	5.32	9.81	25
Bihar	2.40	7.20	9.60	26
Tripura	3.05	6.37	9.42	27
Jharkhand	2.65	4.64	7.29	28

Scores of all the UTs on the various indicators along with their respective rankings, for the Energy Security dimension, are as follows:

Table 10: Scores and ranks obtained by UTs on the Energy Security dimension.

Union Territory	Electricity Diversity and Power Supply Position	Viability of Energy/ Electricity Systems in the State	Dimension Score	Rank 2024
Chandigarh	7.32	9.86	17.18	1
Puducherry	5.98	9.59	15.57	2
DNH-DD	5.11	10.46	15.57	3
Delhi	4.81	10.62	15.43	4
Ladakh	5.87	5.61	11.48	5
Lakshadweep	7.22	4.14	11.37	6
Jammu & Kashmir	6.23	3.74	9.97	7
Andaman & Nicobar	2.92	5.97	8.90	8

Energy Equity

The Energy Equity dimension measures the ability of States/ UTs to provide people with access to energy at affordable prices – including the role of subsidies (direct and indirect) on affordability. Further sub-indicators related to the financial performance of power utilities in the State/ UT are also assessed in this dimension.

Table 11: Top performers on the Energy Equity dimension

Top 5 PERFORMERS

States with the highest overall scores

Rank	State	Key Performing Indicators
1	Gujarat	Payables for Power purchase Overdues/ Cost of power
2	Haryana	Petrol price/ Per capita income LPG + PNG connections against no. of HHs
3	Himachal Pradesh	Payables for Power purchase Overdues/ Cost of power
4	Kerala	Tariff subsidy billed/ Total revenue Cross subsidisation
5	West Bengal	Tariff subsidy billed/ Total revenue PAT/ Revenue

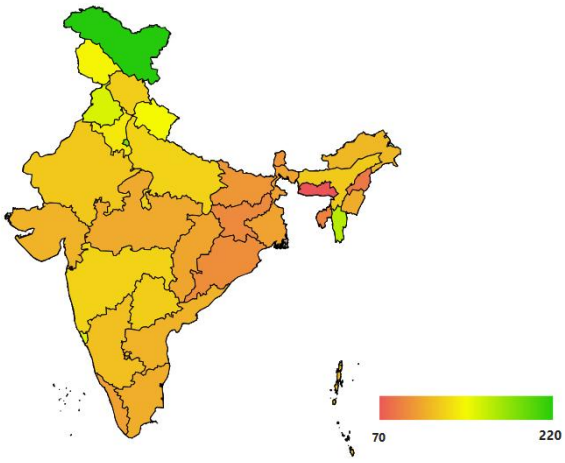
Top 3 PERFORMERS

UTs with the highest overall scores

Rank	Reason	Key Performing Indicators
1	Delhi	Payables for Power purchase LPG + PNG Connections
2	Puducherry	Tariff subsidy billed/ Total revenue Overdues/ Cost of power
3	Ladakh	LPG + PNG connections against no. of HHs PAT/ Revenue

Energy Access

Figure 7: LPG and PNG connections as % of Households



Parameters in Energy Access are important for the consumers as it focus on the ease of access to amenities like electricity and gas. This indicator is based on sub-indicators, including the percentage of households with access to electricity, LPG, and PNG.

With 100% access to electricity in most of the states, scores/ranks are majorly dependent on percentage of LPG+PNG connections against number of households.

Source: PPAC ready reckoner, June 2024

Affordability

The indicator 'Affordability' has five sub-indicators majorly highlighting the per capita (in 1000) cost of electricity and fuels (LPG, Petrol, and Diesel) that a consumer is required to pay.

The following graph depicts the Average Cost of Power Supply (ACS) across States, with the level of cross-subsidy in electricity tariff i.e. Average Billing Rate (ABR) for industrial consumers divided by the cost of supplying them (ACS). Even after mandates under Tariff Policy 2016 and Electricity Act 2003 to reduce cross-subsidies, many states continue to have a high level of cross-subsidies, indicating excess burden on industrial consumers.

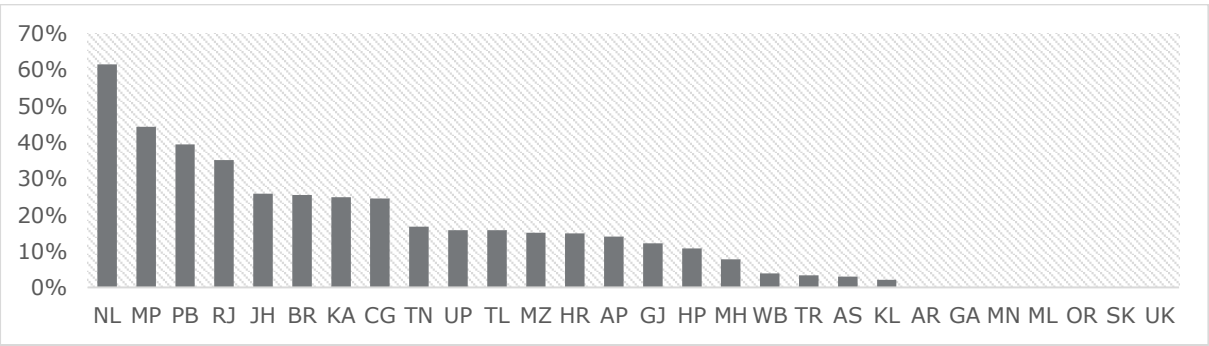
Figure 8: State wise Average Cost of Power and Cross Subsidy

Source: PFC report on performance of power utilities, FY2022-23

Performance of power utilities

Parameters in the performance of power utilities are important for the DISCOMs. It has four sub-indicators majorly highlighting that power DISCOMs are the primary and major source of cash inflow into the power sector. Losses due to poor operational performance and dependence on Government subsidies are key risks to DISCOM revenues. In most of the states, a significant portion of DISCOM revenue is funded by Government subsidies. Further significant delays occur in receiving this subsidy amount from the Government, which is evident from high outstanding subsidy amount to be received by DISCOMs.

Figure 9: Subsidy Dependence: Tariff subsidy billed as % Total Revenue of DISCOMs



Source: PFC report on performance of power utilities, FY2022-23

Delays in receiving subsidies from Government in turn hamper's ability of DISCOMs to pay power generators on time, leading to overdue for power purchases. This leads to an overall cashflow issue for the entire power sector.

Outstanding Government subsidies and accumulating losses may lead to chronic indebtedness for DISCOMs. Hence the financial performance of DISCOMs, is of great importance to overall power sector.

Scores of all the States on the various indicators along with their respective rankings, for Energy Equity dimension are as follows:

Table 12: Scores and ranks obtained by States on Energy Equity dimension

State	Energy Access	Affordability	Performance of Utilities	Dimension Score	Rank 2024
Gujarat	3.61	6.80	9.06	19.47	1
Haryana	4.23	6.36	8.30	18.89	2
Himachal Pradesh	3.92	6.45	8.09	18.46	3
Kerala	3.37	6.48	8.16	18.01	4
West Bengal	3.52	6.19	8.15	17.86	5
Punjab	4.69	6.33	6.80	17.82	6
Tripura	3.02	6.37	8.16	17.55	7
Uttarakhand	4.56	6.88	6.07	17.51	8
Andhra Pradesh	3.60	5.47	8.10	17.17	9
Assam	3.86	4.71	8.43	17.00	10
Goa	5.02	9.54	2.23	16.79	11
Sikkim	3.55	7.58	5.43	16.56	12
Odisha	3.25	6.59	6.65	16.49	13
Rajasthan	3.84	5.60	6.92	16.36	14
Maharashtra	3.98	4.35	7.82	16.15	15
Mizoram	5.29	4.60	5.93	15.82	16
Arunachal Pradesh	3.84	7.20	4.71	15.75	17
Karnataka	3.75	5.16	6.29	15.20	18
Tamil Nadu	3.56	5.03	6.45	15.04	19
Chhattisgarh	0.93	6.67	6.97	14.57	20
Uttar Pradesh	3.97	4.10	6.29	14.36	21
Telangana	4.01	5.58	4.72	14.31	22
Madhya Pradesh	3.48	5.45	5.11	14.04	23
Bihar	3.28	3.09	7.31	13.68	24
Manipur	3.62	4.35	5.30	13.27	25
Nagaland	3.00	5.08	4.73	12.81	26
Meghalaya	2.56	5.82	3.38	11.76	27
Jharkhand	3.21	5.26	1.55	10.02	28

Scores of all the UTs on the various indicators along with their respective rankings, for Energy Equity dimension is as follows:

Table 13: Scores and ranks obtained by UTs on Energy Equity dimension

Union Territory	Energy Access	Affordability	Performance of Utilities	Dimension Score	Rank 2024
Delhi	4.45	6.54	7.22	18.20	1
Puducherry	3.40	6.55	7.62	17.57	2
Ladakh	5.99	6.96	2.69	15.63	3
Andaman & Nicobar	3.40	5.75	5.22	14.36	4
Jammu & Kashmir	3.86	5.04	4.78	13.68	5
Chandigarh	3.26	8.00	1.87	13.14	6
DNH-DD	3.28	5.79	2.88	11.95	7
Lakshadweep	3.31	5.07	0.00	8.39	8

Environmental Sustainability

The Environmental Sustainability dimension assesses the efforts being undertaken by States/UTs to decarbonise and diversify energy systems. It assesses transition of a State/ UT's energy system towards mitigating and avoiding potential environmental harm and climate change impacts. The dimension focuses on productivity and efficiency of generation, transmission, and distribution, decarbonisation, and air quality.

Table 14: Top performers on Environmental Sustainability dimension

Top 5 PERFORMERS

States with the highest overall scores

Rank	State	Key Performing Indicators
1	Kerala	Energy Efficiency Score Air Quality Index
2	Goa	EV Penetration CO2 saved from LED bulbs/ 1000 population
3	Mizoram	% Forest & Tree cover Air Quality Index
4	Karnataka	Energy Efficiency Score No. of EV charging stations
5	Arunachal Pradesh	% Forest & Tree cover Power Emissions Intensity

Top 3 PERFORMERS

UTs with the highest overall scores

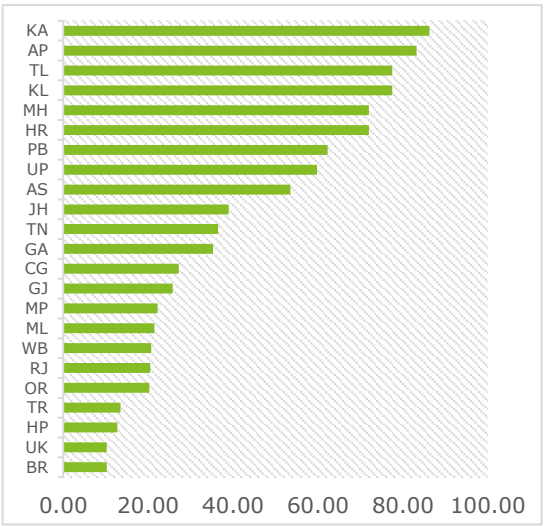
Rank	Reason	Key Performing Indicators
1	Chandigarh	Energy Efficiency score EV Penetration
2	Andaman & Nicobar	Power Intensity Energy Efficiency score
3	DNH-DD	Performance of clean energy Air Quality Index

Energy Resource Productivity

The energy resource productivity indicator depends upon three sub-indicators which reflect the country's transition towards NZ by tracking emission.

Energy efficiency enables the same quality of service while reducing energy demand, which can then be met by RE. It falls upon each State/UT to take the green recovery path best suited to and aligned with the State/ UT's own socio-economic development goals. Transition towards energy system that mitigate and avoid potential environmental harm is the need of the hour. Accordingly in this dimension,

Figure 10: Energy Efficiency Score (BEE)



Source: BEE, State Energy Efficiency Index 2023

sub-indicators focusing on energy Efficiency, clean energy, and power intensity of the state are included.

Karnataka, Andhra Pradesh, and Telangana are the top states on the indicator of Energy Resource Productivity, owing to their better Energy Efficiency scores, lower energy intensity and higher renewable installed capacity as % of their total renewable potential.

Decarbonisation

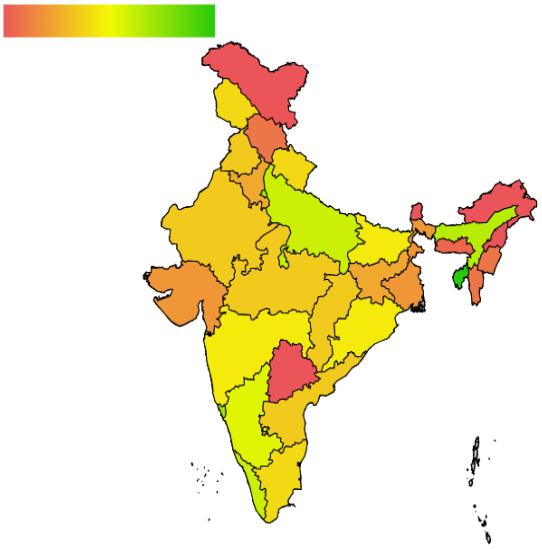
In line with the central government's mission to reach NZ emissions by 2070, Decarbonisation will be consequential for the planet's fight against climate change. India stands at a critical juncture, where it has a tremendous opportunity to choose developmental pathways that rely on lower-emissions technologies.

The decarbonisation indicator is assessed based on sub-indicators including the efforts made towards CO_2 saved from LED Bulbs under Government of India's Ujala scheme and the percentage of forest and tree cover with respect to total area of the State.

In states smaller/ hilly states like Mizoram, Goa perform better on this indicator owing to their high forest and tree cover. States of Himachal Pradesh, Odisha, Goa, Gujarat and Haryana have ranked in top 5 on the sub-indicator for CO_2 saved from LED bulbs.

Emission and Pollution

Figure 11: EV Penetration over petrol & Diesel Vehicle – Heat map



The Emission and Pollution indicator is based on three sub-indicators that evaluate the performance of States/UTs in addressing emissions and maintaining clean air quality.

The heat map shows a comparitive assessment of State wise EV penetration over petrol and diesel vehicles on a geographical map.

The transport sector is a major contributor to carbon emissions in India and therefore Electric Vehicle (EV) penetration is of utmost importance to help India reduce its emissions. Accordingly, apart from assessing the output-based sub-indicators for Power Intensity and Air Quality Index (AQI), is also assessed.

Scores of all the states on the various indicators along with their respective rankings, for environmental sustainability dimension is as follows:

Table 15: Scores and ranks obtained by States on Environmental Sustainability dimension

State	Energy Resource Productivity	Decarbonisation	Emissions and Pollution	Dimension Score	Rank 2024
Kerala	6.45	4.45	5.87	16.77	1
Goa	3.08	5.58	6.28	14.94	2
Mizoram	3.04	5.91	5.50	14.45	3
Karnataka	6.03	2.65	4.25	12.93	4
Arunachal Pradesh	2.96	4.82	5.06	12.84	5
Nagaland	2.69	5.12	4.33	12.14	6
Himachal Pradesh	1.65	5.18	4.70	11.53	7
Sikkim	3.38	2.92	5.19	11.49	8
Meghalaya	2.58	3.93	4.79	11.30	9
Tripura	3.23	4.07	3.95	11.25	10
Manipur	2.63	3.61	4.61	10.85	11
Uttarakhand	2.26	3.74	4.84	10.84	12
Odisha	2.88	5.81	2.07	10.76	13
Assam	4.50	2.28	3.04	9.82	14
Tamil Nadu	4.64	1.45	3.64	9.73	15
Haryana	6.45	2.02	1.18	9.65	16
Andhra Pradesh	4.41	2.40	2.67	9.48	17
Maharashtra	4.94	1.80	2.56	9.30	18
Gujarat	3.38	2.60	2.71	8.69	19
Uttar Pradesh	4.78	1.92	1.78	8.48	20
Chhattisgarh	2.30	3.21	2.11	7.62	21
Punjab	4.71	0.46	2.31	7.48	22
Jharkhand	3.88	2.60	0.96	7.44	23
Telangana	4.09	1.27	1.76	7.12	24
West Bengal	3.57	1.28	1.93	6.78	25
Rajasthan	1.78	1.23	2.63	5.64	26
Madhya Pradesh	1.47	2.01	1.99	5.47	27
Bihar	1.89	0.73	0.93	3.55	28

Scores of all the UTs on the various indicators along with their respective rankings, for environmental sustainability dimension is as follows:

Table 16: Scores and ranks obtained by UTs on Environmental Sustainability dimension

Union Territory	Energy Resource Productivity	Decarbonisation	Emissions and Pollution	Dimension Score	Rank 2024
Chandigarh	6.15	2.02	6.49	14.66	1
Andaman & Nicobar	4.73	4.94	2.76	12.43	2
DNH-DD	3.66	1.85	5.65	11.15	3
Lakshadweep	0.22	10.60	0.24	11.06	4
Delhi	3.70	2.21	3.04	8.95	5
Jammu & Kashmir	2.09	1.34	5.30	8.73	6
Ladakh	0.65	1.03	5.01	6.68	7
Puducherry	1.14	0.45	3.84	5.44	8

State Context

State Context focuses on elements that enable States/ UTs to develop supplementary indices and implement energy policy effectively and achieve energy goals. The dimension describes the underlying macroeconomic and governance conditions, reports on the strength and stability of the economy, State/ UT's attractiveness to investors and capacity for innovation. It assesses state's ability to deliver on investments, regulations & governance, stability of institutions & innovation parameters.

Table 17: Top performers on State Context

Top 5 PERFORMERS

States with the highest overall scores

Rank	State	Key Performing Indicators
1	Karnataka	Start-up Index Innovation score
2	Maharashtra	FDI Equity Inflows Investment opportunities
3	Tamil Nadu	Start-up Index Investment opportunities
4	Telangana	Logistics Index Innovation score
5	Gujarat	Start-up Index FDI Equity Inflows

Top 3 PERFORMERS

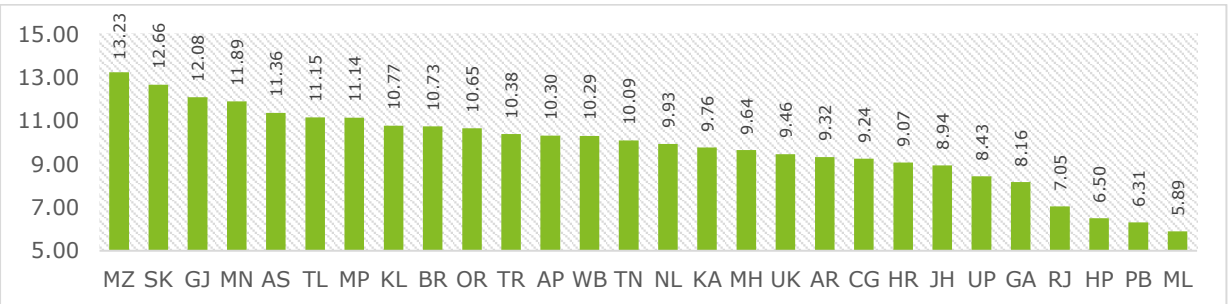
UTs with the highest overall scores

Rank	Reason	Key Performing Indicators
1	Delhi	FDI Equity Inflows Investment opportunities
2	Chandigarh	SDG Index Logistics Index
3	Andaman & Nicobar	Start-up Index Multidimensional Poverty Index

Macroeconomic Environment

Macroeconomic environment, measured through sub-indicators like GSDP growth rate, and FDI inflows, provides an overall understanding of the economy in the state. The following chart compares States/ UTs wise GSDP growth rates (at current prices, 5-year CAGR) figures:

Figure 12: GSDP Growth Rate (Current Prices, 5 Year CAGR)



Source: Figures for FY2021-22 (for FY2020-21, where FY2021-22 not available) as per RBI, Handbook of Statistics for Indian States

Regulations, Institutions & Governance

Adequate regulations and governance, through strong and independent institutions, are necessary for proper functioning of economies and societies. They are essential to create a suitable environment to support economic growth. To measure this indicator, sub-indicators such as performance on the Multidimensional Poverty Index and progress toward Sustainable Development Goals (SDGs) are considered.

Table 18: Top States on MPI and SDG Sub-indicators

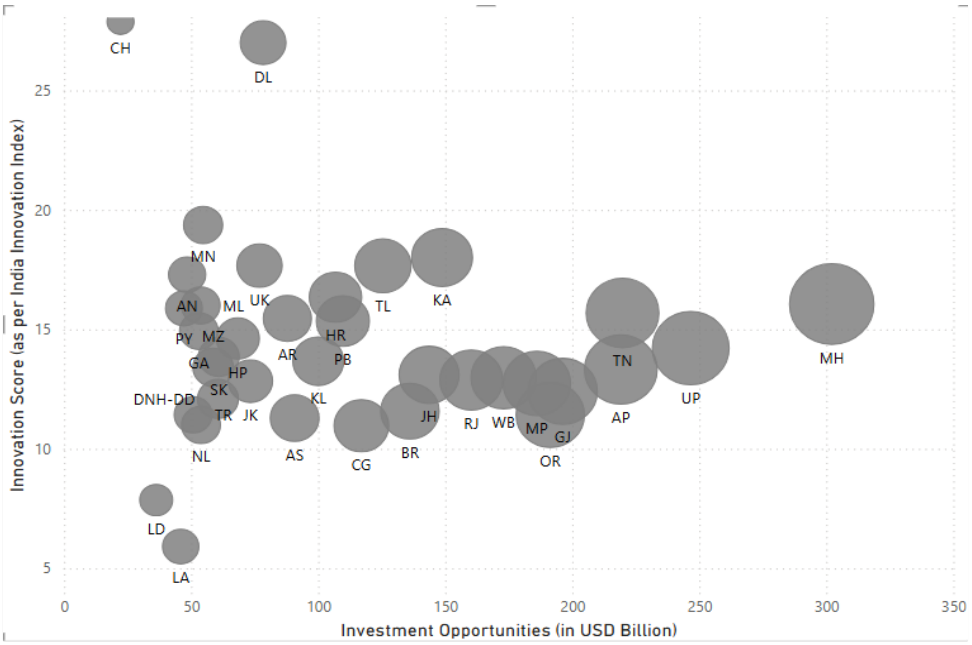
Multidimensional Poverty Index (MPI)	Sustainable Development Goals (SDG) Index
Top 5 States 1. Goa 2. Sikkim 3. Kerala 4. Tamil Nadu 5. Mizoram	**Top 5 States** 1. Uttarakhand 2. Kerala 3. Goa 4. Tamil Nadu 5. Sikkim
Source: NITI Aayog	*Source: NITI Aayog*

Stability for Investment & Innovation

India being the 5th largest economy in the world, is opening new corridors of innovation and related investments. Over the last decade, the Government has been encouraging firms to come up with innovations in product manufacturing and services. The Government has also announced Production Linked Incentive (PLI) schemes in 14 sectors including automobiles, pharma, electronics, food products etc. to promote manufacturing activity.

This indicator depends upon four sub-indicators which reflect how India is growing with efforts of all states/UTs. The bubble chart shows innovation score and investment opportunity in the state/UTs.

Figure 13: Bubble chart comparing governance scores, investment opportunity and innovation scores



Scores of all the States on the various indicators along with their respective rankings, for State Context dimension is as follows:

Table 19: Scores and ranks obtained by States on State Context dimension

Union Territory	Macroeconomic Environment	Regulations, Institutions & Governance	Stability for Investment & Innovation	Dimension Score	Rank 2024
Karnataka	6.77	4.09	8.68	19.54	1
Maharashtra	7.33	3.79	8.32	19.44	2
Tamil Nadu	5.89	4.78	8.70	19.37	3
Telangana	5.64	4.12	8.45	18.21	4
Gujarat	7.22	3.71	7.25	18.18	5
Punjab	4.51	4.36	7.27	16.14	6
Andhra Pradesh	4.14	4.03	7.85	16.02	7
Uttar Pradesh	4.09	2.09	8.50	14.68	8
Kerala	4.09	5.00	5.05	14.14	9
Haryana	2.63	3.68	7.59	13.90	10
Uttarakhand	2.81	4.62	6.36	13.79	11
Rajasthan	5.07	2.57	5.49	13.13	12
Himachal Pradesh	4.77	4.50	3.51	12.78	13
Assam	4.67	2.03	5.59	12.29	14
Sikkim	2.90	4.87	4.51	12.28	15
Odisha	5.42	2.43	3.94	11.79	16
Madhya Pradesh	3.34	2.25	5.75	11.34	17
Goa	1.81	5.10	3.72	10.63	18
Arunachal Pradesh	4.33	2.49	3.73	10.55	19
Tripura	3.75	3.23	3.16	10.14	20
Manipur	3.17	3.73	3.13	10.03	21
West Bengal	1.82	3.26	4.31	9.39	22
Meghalaya	4.12	1.19	3.93	9.24	23
Mizoram	3.08	3.99	1.02	8.09	24
Chhattisgarh	2.52	2.50	2.79	7.81	25
Jharkhand	1.96	1.08	3.99	7.03	26
Nagaland	2.63	2.06	1.59	6.28	27
Bihar	2.50	0.00	1.24	3.74	28

Scores of all the UTs on the various indicators along with their respective rankings, for State Context dimension, are as follows:

Table 20: Scores and ranks obtained by UTs on State Context dimension

Union Territory	Macroeconomic Environment	Regulations, Institutions & Governance	Stability for Investment & Innovation	Dimension Score	Rank 2024
Delhi	5.78	2.64	10.88	19.30	1
Chandigarh	3.18	4.72	6.70	14.60	2
Andaman & Nicobar	5.95	3.09	4.71	13.75	3
Jammu & Kashmir	3.22	3.48	5.98	12.68	4
Puducherry	0.07	4.36	4.30	8.73	5
Lakshadweep	0.00	2.91	3.33	6.24	6
Ladakh	0.08	1.60	3.91	5.58	7
DNH-DD	0.00	0.29	3.36	3.66	8

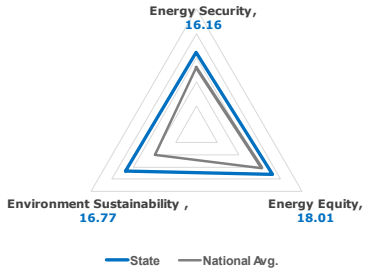
4. State and UT wise profiles

Kerala

1
Rank

65.08
Overall Score

Dimension	Score	Rank
Energy Security	16.16	2
Energy Equity	18.01	4
Environmental Sustainability	16.77	1
State Context	14.14	9



Note – Dimension wise scores are out of 25

No.	Indicator	Value	Score	Rank
	ENERGY SECURITY			
A.	**Electricity Diversity and Power Supply Position**			
A.1	Diversity of Electricity Contracted Capacity (EMCI Index)	0.83	3.00	1
A.2	Share of RE in Contracted Capacity (%)	49.61	0.94	12
A.3	Contracted generating capacity of Electricity (Growth Rate in %)	6.40	0.96	6
A.4	Electricity consumption per capita (in kWh)	882	0.00	18
A.5	Electricity not supplied (Deficit) in %	0.00	1.00	9
A.6	Contracted Capacity / Peak Demand	1.43	0.23	16
A.7	Number of petrol & gas station / Area of State	0.08	0.77	3
A.8	RE Potential (estimated in GW)	12.63	0.03	18
B.	**Viability of Energy/Electricity Systems in the State**			
B.1	AT & C Losses (in %)	7.05	4.00	1
B.2	ACS-ARR (Cash Adjusted Gap)	0.35	2.89	15
B.3	Average Hours of Supply- Agriculture (Mins/day)	1440	2.00	3
B.4	Availability of Oil & Gas pipeline in state	0.00	0.00	18
	ENERGY EQUITY			
A.	**Energy Access**			
A.1	Access to Electricity %	100	2.50	13
A.2	LPG + PNG (Domestic) Connections against number of HHs (%)	104.58	0.87	21
B.	**Affordability**			
B.1	ACS	6.57	2.00	14
B.2	LPG Price (Rs. for 14.2 kg Cylinder) - Non-Subsidised / Per Capita income (1000)	5.01	0.91	10
B.3	Petrol Price in (Rs/litre) / Per capita income (1000)	0.66	0.88	12
B.4	Diesel Price in (Rs/litre) / Per Capita income (1000)	0.60	0.88	12
B.5	Cross Subsidistion (Industrial ABR/ ACS)	0.99	1.50	10
C.	**Performance of Utilities**			
C.1	PAT/Revenue	-0.05	1.77	14
C.2	Overdues/ Cost of Power	0.26	1.95	15
C.3	Payables for Power Purchase (Days)	96	1.95	12
C.4	Tariff Subsidy Billed / Total Revenue	0.02	2.50	2
	ENVIRONMENTAL SUSTAINABILITY			
A.	**Energy Resource Productivity**			
A.1	Energy Efficiency Score	77.50	2.67	4
A.2	Performance of Clean Energy (Contracted Capacity/Potential) in %	16.31	1.44	5
A.3	Power intensity (kWh/GDP in 1000 INR)-Data	4.17	2.33	9

No.	Indicator	Value	Score	Rank
B. Decarbonisation				
B.1	Number of EV Charging Stations	627	0.26	14
B.2	CO2 saved from LED Bulbs per 1000 population (in tonnes)	45.08	1.36	9
B.3	% of Forest & Tree Cover (Forest Cover w.r.t total area)	64.26	2.83	8
C. Emissions and Pollution				
C.1	Power Emissions Intensity (gco2_per_kWh)	28.92	2.98	9
C.2	Air Quality Index	52.77	1.68	4
C.3	EV Penetration over diesel and petrol vehicles (%)	12.22	1.22	4
STATE CONTEXT				
A. Macroeconomic Environment				
A.1	Growth rate of GSDP	2.76	1.05	27
A.2	FDI Equity Inflows (INR Cr.)	1633.42	0.04	9
A.3	State Rating on Start-up Index	100	3.00	1
B. Regulations, Institutions & Governance				
B.1	Multidimensional Poverty Index (Score)	0.00	2.00	3
B.2	SDG Index (Score)	79	3.00	2
C. Stability for Investment & Innovation				
C.1	Innovation Score (as per India Innovation Index)	13.67	0.96	15
C.2	Logistics Index (Index Scores)	80	1.50	15
C.3	State With RE policy	1	2.00	8
C.4	Investment Opportunities (in USD Billion)	100.03	0.59	17

Kerala, situated on the southwestern coast of India, focuses on renewable energy, like solar, and is working to reduce its dependence on conventional energy sources. Kerala is dedicated to sustainability, striving to achieve carbon neutrality by 2050 and fulfill 100% of its energy needs through renewable sources by 2040.

Kerala ranks in Category A, placing it among the top 10 best-performing states in NETI 2024. Kerala is among the top 5 overall performers, demonstrating strong leadership across various sectors. It is also among the top 5 performers for energy security, energy equity, and environmental sustainability and holds the 1st position in the Energy Sustainability ranking. The state continues to make progress in energy security, Energy Equity, Environmental Sustainability, and the overall state context.

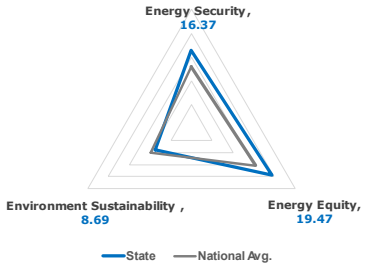
In energy security Viability of Energy/ Electricity Systems in the State outperformed Electricity Diversity and Power Supply Position. In energy equity Performance of Utilities was among the highest scorers and in environmental sustainability, Energy Resource Productivity, Decarbonisation, and Emissions and Pollution scored almost uniform score. Kerala recently surpassed 1,000 MW of solar and wind energy generation capacity which makes it more energy secure.

Gujarat

2
Rank

62.71
Overall Score

Dimension	Score	Rank
Energy Security	16.37	1
Energy Equity	19.47	1
Environmental Sustainability	8.69	19
State Context	18.18	5



Note – Dimension wise scores are out of 25

No.	Indicator	Value	Score	Rank
ENERGY SECURITY				
A.	**Electricity Diversity and Power Supply Position**			
A.1	Diversity of Electricity Contracted Capacity (EMCI Index)	0.60	1.97	9
A.2	Share of RE in Contracted Capacity (%)	53.62	1.03	10
A.3	Contracted generating capacity of Electricity (Growth Rate in %)	10.17	1.29	3
A.4	Electricity consumption per capita (in kWh)	2393	1.00	4
A.5	Electricity not supplied (Deficit) in %	0.00	1.00	9
A.6	Contracted Capacity / Peak Demand	2.27	0.55	5
A.7	Number of petrol & gas station / Area of State	0.04	0.34	12
A.8	RE Potential (estimated in GW)	220.51	0.51	3
B.	**Viability of Energy/Electricity Systems in the State**			
B.1	AT & C Losses (in %)	10.66	3.68	6
B.2	ACS-ARR (Cash Adjusted Gap)	0.03	3.33	6
B.3	Average Hours of Supply- Agriculture (Mins/day)	480	0.32	23
B.4	Availability of Oil & Gas pipeline in state	1.00	1.00	5
ENERGY EQUITY				
A.	**Energy Access**			
A.1	Access to Electricity %	100	2.50	13
A.2	LPG + PNG (Domestic) Connections against number of HHs (%)	113.22	1.11	14
B.	**Affordability**			
B.1	ACS	5.57	3.00	6
B.2	LPG Price (Rs. for 14.2 kg Cylinder) - Non-Subsidised / Per Capita income (1000)	4.55	0.93	6
B.3	Petrol Price in (Rs/litre) / Per capita income (1000)	0.52	0.93	6
B.4	Diesel Price in (Rs/litre) / Per Capita income (1000)	0.50	0.92	8
B.5	Cross Subsidization (Industrial ABR/ ACS)	1.33	0.98	23
C.	**Performance of Utilities**			
C.1	PAT/Revenue	0.01	2.01	9
C.2	Overdues/ Cost of Power	0.01	2.48	5
C.3	Payables for Power Purchase (Days)	0	2.50	1
C.4	Tariff Subsidy Billed / Total Revenue	0.12	2.08	7
ENVIRONMENTAL SUSTAINABILITY				
A.	**Energy Resource Productivity**			
A.1	Energy Efficiency Score	25.75	0.72	14
A.2	Performance of Clean Energy (Contracted Capacity/Potential) in %	13.41	1.18	6
A.3	Power intensity (kWh/GDP in 1000 INR)-Data	7.06	1.48	18

No.	Indicator	Value	Score	Rank
B. Decarbonisation				
B.1	Number of EV Charging Stations	1201	0.50	6
B.2	CO2 saved from LED Bulbs per 1000 population (in tonnes)	59.84	1.88	4
B.3	% of Forest & Tree Cover (Forest Cover w.r.t total area)	11.03	0.22	23
C. Emissions and Pollution				
C.1	Power Emissions Intensity (gco2_per_kWh)	492.12	1.22	14
C.2	Air Quality Index	93.00	1.07	18
C.3	EV Penetration over diesel and petrol vehicles (%)	4.30	0.42	20
STATE CONTEXT				
A. Macroeconomic Environment				
A.1	Growth rate of GSDP	6.17	2.77	5
A.2	FDI Equity Inflows (INR Cr.)	60599.51	1.45	2
A.3	State Rating on Start-up Index	100	3.00	1
B. Regulations, Institutions & Governance				
B.1	Multidimensional Poverty Index (Score)	0.05	1.39	16
B.2	SDG Index (Score)	74	2.32	10
C. Stability for Investment & Innovation				
C.1	Innovation Score (as per India Innovation Index)	12.41	0.51	22
C.2	Logistics Index (Index Scores)	90	3.00	3
C.3	State With RE policy	1	2.00	8
C.4	Investment Opportunities (in USD Billion)	196.28	1.74	5

Gujarat, located on the western coast of India, is a key economic hub, known for its thriving industrial and manufacturing sectors. Gujarat is classified under Category A, representing the top 10 performing states in NETI 2024, maintaining a solid position in the sector, and continues to be among the top five overall performing states, indicating potential for further growth.

It ranked 1st in energy security, with both the indicators - Electricity Diversity and Power Supply Position, and the Viability of Energy/Electricity Systems in the state achieving competent scores. The state has heavily invested in renewable energy, with Gujarat being home to India's largest solar parks. Also, Gujarat Power Corporation Limited commissioned Asia's largest "Gujarat Solar Park". The Government of Gujarat has launched the Renewable Energy Policy-2023 to boost the development of renewable energy projects utilizing Wind, Solar, and Wind-Solar Hybrid technologies.

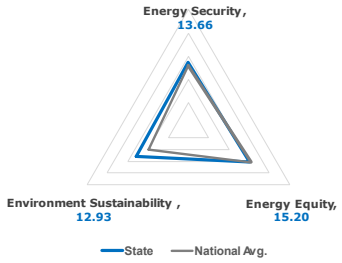
In energy equity, Gujarat is the leading state with Performance of Utilities scoring nearly half of the total dimension score. Gujarat remained in the top 5 positions in the state context as well, with Macroeconomic Environment and Stability for Investment & Innovation marked more than three-fourths of the total dimension score. Environmental sustainability of one of the core elements where Gujarat has room for improvement.

Karnataka

3
Rank

61.33
Overall Score

Dimension	Score	Rank
Energy Security	13.66	13
Energy Equity	15.2	18
Environmental Sustainability	12.93	4
State Context	19.54	1



Note – Dimension wise scores are out of 25

No.	Indicator	Value	Score	Rank
	ENERGY SECURITY			
A.	**Electricity Diversity and Power Supply Position**			
A.1	Diversity of Electricity Contracted Capacity (EMCI Index)	0.55	1.73	12
A.2	Share of RE in Contracted Capacity (%)	66.89	1.33	8
A.3	Contracted generating capacity of Electricity (Growth Rate in %)	2.50	0.62	18
A.4	Electricity consumption per capita (in kWh)	1425	1.00	14
A.5	Electricity not supplied (Deficit) in %	1.10	0.87	24
A.6	Contracted Capacity / Peak Demand	1.99	0.44	9
A.7	Number of petrol & gas station / Area of State	0.04	0.35	11
A.8	RE Potential (estimated in GW)	205.65	0.48	4
B.	**Viability of Energy/Electricity Systems in the State**			
B.1	AT & C Losses (in %)	13.91	3.39	10
B.2	ACS-ARR (Cash Adjusted Gap)	0.62	2.53	17
B.3	Average Hours of Supply- Agriculture (Mins/day)	420	0.21	25
B.4	Availability of Oil & Gas pipeline in state	1.00	1.00	5
	ENERGY EQUITY			
A.	**Energy Access**			
A.1	Access to Electricity %	100	2.50	13
A.2	LPG + PNG (Domestic) Connections against number of HHs (%)	118.62	1.25	12
B.	**Affordability**			
B.1	ACS	8.11	1.00	23
B.2	LPG Price (Rs. for 14.2 kg Cylinder) - Non-Subsidised / Per Capita income (1000)	4.33	0.94	4
B.3	Petrol Price in (Rs/litre) / Per capita income (1000)	0.54	0.93	8
B.4	Diesel Price in (Rs/litre) / Per Capita income (1000)	0.46	0.94	4
B.5	Cross Subsidistion (Industrial ABR/ ACS)	1.20	1.18	21
C.	**Performance of Utilities**			
C.1	PAT/Revenue	-0.06	1.76	16
C.2	Overdues/ Cost of Power	0.48	1.49	23
C.3	Payables for Power Purchase (Days)	174	1.50	19
C.4	Tariff Subsidy Billed / Total Revenue	0.25	1.54	16
	ENVIRONMENTAL SUSTAINABILITY			
A.	**Energy Resource Productivity**			
A.1	Energy Efficiency Score	86.25	3.00	1
A.2	Performance of Clean Energy (Contracted Capacity/Potential) in %	9.40	0.82	7
A.3	Power intensity (kWh/GDP in 1000 INR)-Data	4.62	2.20	11

No.	Indicator	Value	Score	Rank
B. Decarbonisation				
B.1	Number of EV Charging Stations	1608	0.67	2
B.2	CO2 saved from LED Bulbs per 1000 population (in tonnes)	37.34	1.09	11
B.3	% of Forest & Tree Cover (Forest Cover w.r.t total area)	24.52	0.88	17
C. Emissions and Pollution				
C.1	Power Emissions Intensity (gco2_per_kWh)	394.41	1.60	11
C.2	Air Quality Index	59.88	1.57	8
C.3	EV Penetration over diesel and petrol vehicles (%)	10.93	1.09	6
STATE CONTEXT				
A. Macroeconomic Environment				
A.1	Growth rate of GSDP	5.57	2.47	8
A.2	FDI Equity Inflows (INR Cr.)	54426.52	1.31	3
A.3	State Rating on Start-up Index	100	3.00	1
B. Regulations, Institutions & Governance				
B.1	Multidimensional Poverty Index (Score)	0.03	1.63	11
B.2	SDG Index (Score)	75	2.45	8
C. Stability for Investment & Innovation				
C.1	Innovation Score (as per India Innovation Index)	18.01	2.51	2
C.2	Logistics Index (Index Scores)	90	3.00	3
C.3	State With RE policy	1	2.00	8
C.4	Investment Opportunities (in USD Billion)	148.77	1.17	10

Karnataka is one state which has been continuously performing well in National Energy Trilemma Index with significant strides. Karnataka stands in Category A in overall NETI scores in 2024. Surprisingly, it does not find a spot among the top 10 performers among the states in both Energy security and Energy equity dimensions respectively. The state should cope up a lot across these dimensions in future. In Environmental sustainability dimension it grabs 4th position.

In the State context dimensions, it tops the list, which makes Karnataka compensate for those core Energy indices. Karnataka being the 3rd successful state with the Macroeconomic environment indicator. It also stands 2nd in the Stability for Investment & Innovation indicator. Karnataka comes first in the Start-up index metric.

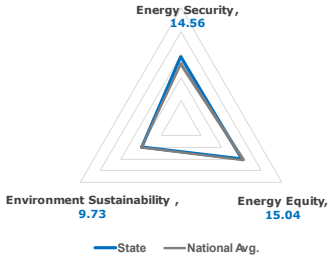
The state has been working rigorously towards ensuring Energy equity and access to reliable and affordable energy, reducing greenhouse gas emissions and promoting renewable energy. Karnataka also ranks first in India in Energy efficiency. It has initiatives like promoting green hydrogen production, increasing renewable energy capacity, and implementing various green growth programs. These efforts collectively could contribute to a more secure, equitable, sustainable energy future for Karnataka.

Tamil Nadu

4
Rank

58.7
Overall Score

Dimension	Score	Rank
Energy Security	14.56	9
Energy Equity	15.04	19
Environmental Sustainability	9.73	15
State Context	19.37	3



Note – Dimension wise scores are out of 25

No.	Indicator	Value	Score	Rank
	ENERGY SECURITY			
A.	**Electricity Diversity and Power Supply Position**			
A.1	Diversity of Electricity Contracted Capacity (EMCI Index)	0.63	2.10	8
A.2	Share of RE in Contracted Capacity (%)	58.27	1.14	9
A.3	Contracted generating capacity of Electricity (Growth Rate in %)	4.85	0.82	10
A.4	Electricity consumption per capita (in kWh)	1763	1.00	9
A.5	Electricity not supplied (Deficit) in %	0.00	1.00	9
A.6	Contracted Capacity / Peak Demand	2.19	0.52	6
A.7	Number of petrol & gas station / Area of State	0.06	0.58	4
A.8	RE Potential (estimated in GW)	117.37	0.27	7
B.	**Viability of Energy/Electricity Systems in the State**			
B.1	AT & C Losses (in %)	10.31	3.71	4
B.2	ACS-ARR (Cash Adjusted Gap)	0.96	2.06	21
B.3	Average Hours of Supply- Agriculture (Mins/day)	540	0.42	21
B.4	Availability of Oil & Gas pipeline in state	1.00	1.00	5
	ENERGY EQUITY			
A.	**Energy Access**			
A.1	Access to Electricity %	100	2.50	13
A.2	LPG + PNG (Domestic) Connections against number of HHs (%)	111.44	1.06	17
B.	**Affordability**			
B.1	ACS	8.87	1.00	26
B.2	LPG Price (Rs. for 14.2 kg Cylinder) - Non-Subsidised / Per Capita income (1000)	4.55	0.93	7
B.3	Petrol Price in (Rs/litre) / Per capita income (1000)	0.56	0.92	9
B.4	Diesel Price in (Rs/litre) / Per Capita income (1000)	0.51	0.92	9
B.5	Cross Subsidisation (Industrial ABR/ ACS)	0.89	1.65	6
C.	**Performance of Utilities**			
C.1	PAT/Revenue	-0.11	1.54	18
C.2	Overdues/ Cost of Power	0.47	1.51	22
C.3	Payables for Power Purchase (Days)	171	1.51	17
C.4	Tariff Subsidy Billed / Total Revenue	0.17	1.89	13
	ENVIRONMENTAL SUSTAINABILITY			
A.	**Energy Resource Productivity**			
A.1	Energy Efficiency Score	36.50	1.13	12
A.2	Performance of Clean Energy (Contracted Capacity/Potential) in %	19.16	1.70	3
A.3	Power intensity (kWh/GDP in 1000 INR)-Data	5.93	1.81	15

No.	Indicator	Value	Score	Rank
B. Decarbonisation				
B.1	Number of EV Charging Stations	1363	0.57	5
B.2	CO2 saved from LED Bulbs per 1000 population (in tonnes)	5.94	0.00	28
B.3	% of Forest & Tree Cover (Forest Cover w.r.t total area)	24.47	0.88	18
C. Emissions and Pollution				
C.1	Power Emissions Intensity (gco2_per_kWh)	493.19	1.22	15
C.2	Air Quality Index	55.40	1.64	5
C.3	EV Penetration over diesel and petrol vehicles (%)	7.91	0.78	11
STATE CONTEXT				
A. Macroeconomic Environment				
A.1	Growth rate of GSDP	5.46	2.41	11
A.2	FDI Equity Inflows (INR Cr.)	20156.81	0.48	5
A.3	State Rating on Start-up Index	100	3.00	1
B. Regulations, Institutions & Governance				
B.1	Multidimensional Poverty Index (Score)	0.01	1.91	4
B.2	SDG Index (Score)	78	2.86	4
C. Stability for Investment & Innovation				
C.1	Innovation Score (as per India Innovation Index)	15.69	1.69	9
C.2	Logistics Index (Index Scores)	90	3.00	3
C.3	State With RE policy	1	2.00	8
C.4	Investment Opportunities (in USD Billion)	219.79	2.02	3

Tamil Nadu one among the pioneers in wind energy, has been categorized into the Category A. Electricity diversity and Power supply position is a KPI in Tamil Nadu's Energy security dimension. Tamil Nadu has been proactive in implementing energy related policies and initiatives. Tamil Nadu Electricity Regulatory Commission regulations (TNERC), 2024 focus on forecasting, scheduling, and deviation settlement for wind and solar generation, aiming to enhance grid stability and energy security.

The state has performed moderately across Energy Equity dimension leveraging 3/5 of the dimension's score. Decarbonisation is one area, where the state is analysed to be underperforming in the Environmental sustainability dimension. In state context Tamil Nadu has considerably improved. It is the 3rd most performing state in the dimension, coming next only to Karnataka and Maharashtra. It is also among the top 5 improvers overall in the dimensions. Stability for Investment & Innovation is one area where it glitters, as it has always been a good territory for investors and newcomers.

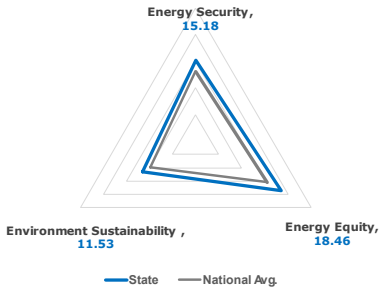
Tamil Nadu state environment policy outlines strategies to conserve, nurture, and renew environmental resources, integrate environmental well-being into developmental programs, and tackle climate change impacts. Green Energy Corridor-II Initiative aims to enhance the state's renewable energy transmission capacity by March 2026, integrating approximately 20 GW of renewable energy into the grid.

Himachal Pradesh

5
Rank

57.95
Overall Score

Dimension	Score	Rank
Energy Security	15.18	4
Energy Equity	18.46	3
Environmental Sustainability	11.53	7
State Context	12.78	13



Note – Dimension wise scores are out of 25

No.	Indicator	Value	Score	Rank
	ENERGY SECURITY			
A.	**Electricity Diversity and Power Supply Position**			
A.1	Diversity of Electricity Contracted Capacity (EMCI Index)	0.38	0.96	23
A.2	Share of RE in Contracted Capacity (%)	96.22	2.00	2
A.3	Contracted generating capacity of Electricity (Growth Rate in %)	2.31	0.60	19
A.4	Electricity consumption per capita (in kWh)	1799	1.00	8
A.5	Electricity not supplied (Deficit) in %	0.30	0.96	18
A.6	Contracted Capacity / Peak Demand	2.11	0.49	7
A.7	Number of petrol & gas station / Area of State	0.01	0.12	23
A.8	RE Potential (estimated in GW)	55.91	0.13	10
B.	**Viability of Energy/Electricity Systems in the State**			
B.1	AT & C Losses (in %)	10.57	3.68	5
B.2	ACS-ARR (Cash Adjusted Gap)	0.80	2.28	20
B.3	Average Hours of Supply- Agriculture (Mins/day)	1440	2.00	3
B.4	Availability of Oil & Gas pipeline in state	1.00	1.00	5
	ENERGY EQUITY			
A.	**Energy Access**			
A.1	Access to Electricity %	100	2.50	13
A.2	LPG + PNG (Domestic) Connections against number of HHs (%)	124.84	1.42	9
B.	**Affordability**			
B.1	ACS	6.55	2.00	13
B.2	LPG Price (Rs. for 14.2 kg Cylinder) - Non-Subsidised / Per Capita income (1000)	5.26	0.90	11
B.3	Petrol Price in (Rs/litre) / Per capita income (1000)	0.59	0.91	10
B.4	Diesel Price in (Rs/litre) / Per Capita income (1000)	0.54	0.90	10
B.5	Cross Subsidisation (Industrial ABR/ ACS)	1.04	1.42	13
C.	**Performance of Utilities**			
C.1	PAT/Revenue	-0.16	1.34	23
C.2	Overdues/ Cost of Power	0.09	2.30	6
C.3	Payables for Power Purchase (Days)	34	2.30	2
C.4	Tariff Subsidy Billed / Total Revenue	0.11	2.13	6
	ENVIRONMENTAL SUSTAINABILITY			
A.	**Energy Resource Productivity**			
A.1	Energy Efficiency Score	12.75	0.24	21
A.2	Performance of Clean Energy (Contracted Capacity/Potential) in %	3.12	0.26	17
A.3	Power intensity (kWh/GDP in 1000 INR)-Data	8.13	1.16	21

No.	Indicator	Value	Score	Rank
B. Decarbonisation				
B.1	Number of EV Charging Stations	131	0.05	20
B.2	CO2 saved from LED Bulbs per 1000 population (in tonnes)	120.87	4.00	1
B.3	% of Forest & Tree Cover (Forest Cover w.r.t total area)	29.52	1.13	15
C. Emissions and Pollution				
C.1	Power Emissions Intensity (gco2_per_kWh)	24.05	3.00	8
C.2	Air Quality Index	60.42	1.56	9
C.3	EV Penetration over diesel and petrol vehicles (%)	1.61	0.14	23
STATE CONTEXT				
A. Macroeconomic Environment				
A.1	Growth rate of GSDP	4.17	1.76	19
A.2	FDI Equity Inflows (INR Cr.)	456.89	0.01	14
A.3	State Rating on Start-up Index	100	3.00	1
B. Regulations, Institutions & Governance				
B.1	Multidimensional Poverty Index (Score)	0.02	1.77	6
B.2	SDG Index (Score)	77	2.73	6
C. Stability for Investment & Innovation				
C.1	Innovation Score (as per India Innovation Index)	14.62	1.30	12
C.2	Logistics Index (Index Scores)	70	0.00	19
C.3	State With RE policy	1	2.00	8
C.4	Investment Opportunities (in USD Billion)	68.37	0.21	21

Himachal Pradesh, a mountainous state in northern India, is endowed with abundant natural resources. Himachal Pradesh is one of India's leading states in hydropower generation. Himachal Pradesh has achieved electrification, with almost 100% of households having access to electricity. The state has implemented micro-hydropower projects and solar energy systems to provide clean energy.

Himachal Pradesh has been one of the consistent performers in NETI over the years. It is amongst the Category A. Himachal Pradesh is the 4th Energy secure state performing competitively across both indicators in the dimension. The state has harnessed around 5000 MW of RE potential, contributing significantly to its energy security. They fulfill 96 % of their electricity demand through RE sources. The state has moderate solar energy potential, particularly in the lower Himalayan regions.

When it comes to Energy equity, Himachal Pradesh stands 3rd in the dimension without even topping any of its indicators. The reason being competent and consistent performance in all the Energy equity indicators like Energy access, Affordability and Performance of utilities. The state is also exploring solar and wind energy projects to diversify its renewable energy portfolio. The state has set a target of achieving 500 MW of solar energy capacity by 2025.

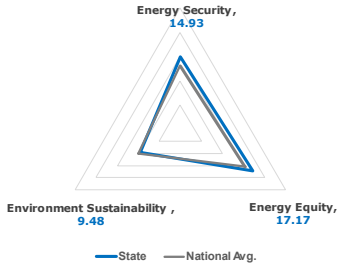
In terms of Environmental sustainability, Himachal appears to be slightly behind. Its share in Decarbonisation and Emissions and Pollution is appreciable. Himachal Pradesh is exploring waste-to-energy projects to manage municipal solid waste and generate clean energy. The state's efforts in this direction might serve as a model for other mountainous regions in India.

Andhra Pradesh

6
Rank

57.60
Overall Score

Dimension	Score	Rank
Energy Security	14.93	6
Energy Equity	17.17	9
Environmental Sustainability	9.48	17
State Context	16.02	7



Note – Dimension wise scores are out of 25

No.	Indicator	Value	Score	Rank
	ENERGY SECURITY			
A.	**Electricity Diversity and Power Supply Position**			
A.1	Diversity of Electricity Contracted Capacity (EMCI Index)	0.64	2.13	7
A.2	Share of RE in Contracted Capacity (%)	40.91	0.75	15
A.3	Contracted generating capacity of Electricity (Growth Rate in %)	2.05	0.58	20
A.4	Electricity consumption per capita (in kWh)	1634	1.00	11
A.5	Electricity not supplied (Deficit) in %	0.10	0.99	14
A.6	Contracted Capacity / Peak Demand	2.10	0.48	8
A.7	Number of petrol & gas station / Area of State	0.03	0.27	14
A.8	RE Potential (estimated in GW)	167.06	0.39	5
B.	**Viability of Energy/Electricity Systems in the State**			
B.1	AT & C Losses (in %)	7.98	3.92	2
B.2	ACS-ARR (Cash Adjusted Gap)	0.01	3.36	5
B.3	Average Hours of Supply- Agriculture (Mins/day)	420	0.21	25
B.4	Availability of Oil & Gas pipeline in state	1.00	1.00	5
	ENERGY EQUITY			
A.	**Energy Access**			
A.1	Access to Electricity %	100	2.50	13
A.2	LPG + PNG (Domestic) Connections against number of HHs (%)	112.96	1.10	15
B.	**Affordability**			
B.1	ACS	7.39	2.00	19
B.2	LPG Price (Rs. for 14.2 kg Cylinder) - Non-Subsidised / Per Capita income (1000)	6.15	0.87	13
B.3	Petrol Price in (Rs/litre) / Per capita income (1000)	0.81	0.84	15
B.4	Diesel Price in (Rs/litre) / Per Capita income (1000)	0.72	0.84	15
B.5	Cross Subsidisation (Industrial ABR/ ACS)	1.16	1.23	20
C.	**Performance of Utilities**			
C.1	PAT/Revenue	0.03	2.08	5
C.2	Overdues/ Cost of Power	0.23	2.01	13
C.3	Payables for Power Purchase (Days)	85	2.01	9
C.4	Tariff Subsidy Billed / Total Revenue	0.14	2.00	9
	ENVIRONMENTAL SUSTAINABILITY			
A.	**Energy Resource Productivity**			
A.1	Energy Efficiency Score	83.25	2.89	2
A.2	Performance of Clean Energy (Contracted Capacity/Potential) in %	5.82	0.50	15
A.3	Power intensity (kWh/GDP in 1000 INR)-Data	8.61	1.01	22

No.	Indicator	Value	Score	Rank
B. Decarbonisation				
B.1	Number of EV Charging Stations	846	0.35	9
B.2	CO2 saved from LED Bulbs per 1000 population (in tonnes)	43.38	1.30	10
B.3	% of Forest & Tree Cover (Forest Cover w.r.t total area)	21.74	0.74	21
C. Emissions and Pollution				
C.1	Power Emissions Intensity (gco2_per_kWh)	654.80	0.61	17
C.2	Air Quality Index	71.67	1.39	10
C.3	EV Penetration over diesel and petrol vehicles (%)	6.85	0.67	15
STATE CONTEXT				
A. Macroeconomic Environment				
A.1	Growth rate of GSDP	5.55	2.45	9
A.2	FDI Equity Inflows (INR Cr.)	759.75	0.02	12
A.3	State Rating on Start-up Index	69	1.67	16
B. Regulations, Institutions & Governance				
B.1	Multidimensional Poverty Index (Score)	0.03	1.71	9
B.2	SDG Index (Score)	74	2.32	10
C. Stability for Investment & Innovation				
C.1	Innovation Score (as per India Innovation Index)	13.32	0.84	17
C.2	Logistics Index (Index Scores)	90	3.00	3
C.3	State With RE policy	1	2.00	8
C.4	Investment Opportunities (in USD Billion)	219.12	2.01	4

Andhra Pradesh, located on the southeastern coast of India, is strategically positioned with a long coastline that facilitates significant maritime trade. The state's energy sector is focused on balancing the growing demand for power with an increasing shift towards renewable energy sources, particularly solar and wind.

Andhra Pradesh is classified as a Category A state in NETI 2024, ranking among the top 10 highest-performing states. Andhra Pradesh has made significant progress in energy security and state context, while also striving to enhance equity and environmental sustainability.

The Viability of Energy/ Electricity Systems in the State is the highest-scored KPI in energy security dimension. The government is making remarkable improvements in the state's energy security. Andhra Pradesh is home to some of the largest solar parks in the country, including the Kurnool Ultra Mega Solar Park, which has a capacity of 1,000 MW. The state is also expanding its thermal and hydropower generation to meet growing demand.

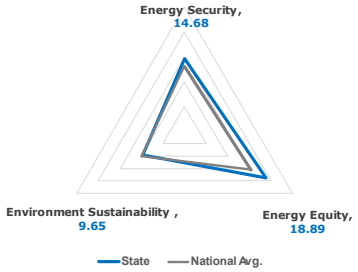
In Energy equity dimensions Andhra Pradesh is among the top ten performers relative to other states. The performance of Utilities is the key performance indicator. In addition to grid-based electrification, the state has been a frontrunner in deploying off-grid solar solutions to provide electricity to remote areas. Andhra Pradesh has implemented several government schemes, such as the Saubhagya, and provided last-mile connectivity and free electricity connections to poor households. Environmental sustainability indicators demonstrate only moderate performance. State context dimensions show ample progress, especially in Stability for Investment & Innovation.

Haryana

7
Rank

57.12
Overall Score

Dimension	Score	Rank
Energy Security	14.68	8
Energy Equity	18.89	2
Environmental Sustainability	9.65	16
State Context	13.9	10



Note – Dimension wise scores are out of 25

No.	Indicator	Value	Score	Rank
ENERGY SECURITY				
A. Electricity Diversity and Power Supply Position				
A.1	Diversity of Electricity Contracted Capacity (EMCI Index)	0.55	1.72	13
A.2	Share of RE in Contracted Capacity (%)	33.44	0.58	20
A.3	Contracted generating capacity of Electricity (Growth Rate in %)	3.71	0.72	13
A.4	Electricity consumption per capita (in kWh)	2360	1.00	6
A.5	Electricity not supplied (Deficit) in %	0.60	0.93	20
A.6	Contracted Capacity / Peak Demand	1.07	0.09	22
A.7	Number of petrol & gas station / Area of State	0.10	1.00	1
A.8	RE Potential (estimated in GW)	6.98	0.01	26
B. Viability of Energy/Electricity Systems in the State				
B.1	AT & C Losses (in %)	12.01	3.56	8
B.2	ACS-ARR (Cash Adjusted Gap)	-0.04	3.43	4
B.3	Average Hours of Supply- Agriculture (Mins/day)	480	0.32	23
B.4	Availability of Oil & Gas pipeline in state	1.00	1.00	5
ENERGY EQUITY				
A. Energy Access				
A.1	Access to Electricity %	100	2.50	13
A.2	LPG + PNG (Domestic) Connections against number of HHs (%)	136.34	1.73	5
B. Affordability				
B.1	ACS	6.78	2.00	17
B.2	LPG Price (Rs. for 14.2 kg Cylinder) - Non-Subsidised / Per Capita income (1000)	4.42	0.93	5
B.3	Petrol Price in (Rs/litre) / Per capita income (1000)	0.51	0.93	3
B.4	Diesel Price in (Rs/litre) / Per Capita income (1000)	0.48	0.93	6
B.5	Cross Subsidisation (Industrial ABR/ ACS)	1.05	1.41	15
C. Performance of Utilities				
C.1	PAT/Revenue	0.02	2.06	8
C.2	Overdues/ Cost of Power	0.17	2.14	12
C.3	Payables for Power Purchase (Days)	62	2.14	8
C.4	Tariff Subsidy Billed / Total Revenue	0.15	1.96	11
ENVIRONMENTAL SUSTAINABILITY				
A. Energy Resource Productivity				
A.1	Energy Efficiency Score	72.00	2.46	5
A.2	Performance of Clean Energy (Contracted Capacity/Potential) in %	33.74	3.00	1

No.	Indicator	Value	Score	Rank
A.3	Power intensity (kWh/GDP in 1000 INR)-Data	8.71	0.99	23
B. Decarbonisation				
B.1	Number of EV Charging Stations	792	0.33	11
B.2	CO2 saved from LED Bulbs per 1000 population (in tonnes)	53.33	1.65	6
B.3	% of Forest & Tree Cover (Forest Cover w.r.t total area)	7.48	0.04	27
C. Emissions and Pollution				
C.1	Power Emissions Intensity (gco2_per_kWh)	769.88	0.17	24
C.2	Air Quality Index	131.50	0.49	24
C.3	EV Penetration over diesel and petrol vehicles (%)	5.31	0.52	17
STATE CONTEXT				
A. Macroeconomic Environment				
A.1	Growth rate of GSDP	3.53	1.44	25
A.2	FDI Equity Inflows (INR Cr.)	15797.21	0.38	6
A.3	State Rating on Start-up Index	49	0.81	22
B. Regulations, Institutions & Governance				
B.1	Multidimensional Poverty Index (Score)	0.03	1.63	11
B.2	SDG Index (Score)	72	2.05	15
C. Stability for Investment & Innovation				
C.1	Innovation Score (as per India Innovation Index)	16.35	1.92	5
C.2	Logistics Index (Index Scores)	90	3.00	3
C.3	State With RE policy	1	2.00	8
C.4	Investment Opportunities (in USD Billion)	106.82	0.67	16

Haryana, located in northern India, plays a pivotal role in the country's agricultural and industrial sectors. Haryana falls under Category A, which belongs to the top 10 performing states in NETI 2024. The state secured 2nd place in energy equity, reflecting its strong commitment to ensuring fair access to energy for all. Performance of Utilities scored the highest, with the dimension score climbing higher than the top UTs in the country. Almost all of Haryana’s households (nearly 100%) are connected to the electricity grid.

In addition to this achievement, there have been notable improvements in the state context, driven by enhanced policies and initiatives. Haryana’s Solar Policy 2023 aims to install a cumulative 6000MW of solar capacity in Haryana by 2030, promoting sustainable energy and reducing dependency on conventional power sources.

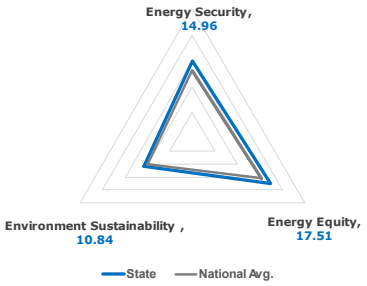
However, Haryana's energy security and environmental sustainability have remained average, with steady scope for improvement. The viability of Energy/ Electricity Systems in the State scored reasonably among the energy security. Energy Resource Productivity has performed better in environmental sustainability.

Uttarakhand

8
Rank

57.10
Overall Score

Dimension	Score	Rank
Energy Security	14.96	5
Energy Equity	17.51	8
Environmental Sustainability	10.84	12
State Context	13.79	11



Note – Dimension wise scores are out of 25

No.	Indicator	Value	Score	Rank
	ENERGY SECURITY			
A.	**Electricity Diversity and Power Supply Position**			
A.1	Diversity of Electricity Contracted Capacity (EMCI Index)	0.66	2.28	5
A.2	Share of RE in Contracted Capacity (%)	69.57	1.43	5
A.3	Contracted generating capacity of Electricity (Growth Rate in %)	5.19	0.87	8
A.4	Electricity consumption per capita (in kWh)	1536	1.00	12
A.5	Electricity not supplied (Deficit) in %	0.80	0.93	22
A.6	Contracted Capacity / Peak Demand	1.70	0.34	11
A.7	Number of petrol & gas station / Area of State	0.02	0.15	19
A.8	RE Potential (estimated in GW)	32.30	0.08	12
B.	**Viability of Energy/Electricity Systems in the State**			
B.1	AT & C Losses (in %)	15.32	3.34	11
B.2	ACS-ARR (Cash Adjusted Gap)	0.74	2.42	18
B.3	Average Hours of Supply- Agriculture (Mins/day)	1015	1.29	14
B.4	Availability of Oil & Gas pipeline in state	1.00	1.03	3
	ENERGY EQUITY			
A.	**Energy Access**			
A.1	Access to Electricity %	100	2.56	7
A.2	LPG + PNG (Domestic) Connections against number of HHs (%)	144.42	1.99	4
B.	**Affordability**			
B.1	ACS	6.06	3.00	7
B.2	LPG Price (Rs. for 14.2 kg Cylinder) - Non-Subsidised / Per Capita income (1000)	5.16	0.93	8
B.3	Petrol Price in (Rs/litre) / Per capita income (1000)	0.59	0.93	4
B.4	Diesel Price in (Rs/litre) / Per Capita income (1000)	0.55	0.92	7
B.5	Cross Subsidisation (Industrial ABR/ ACS)	1.11	1.36	18
C.	**Performance of Utilities**			
C.1	PAT/Revenue	-0.14	1.48	21
C.2	Overdues/ Cost of Power	0.12	2.30	7
C.3	Payables for Power Purchase (Days)	45	2.30	3
C.4	Tariff Subsidy Billed / Total Revenue	NA	NA	NA
	ENVIRONMENTAL SUSTAINABILITY			
A.	**Energy Resource Productivity**			
A.1	Energy Efficiency Score	10.25	0.14	22
A.2	Performance of Clean Energy (Contracted Capacity/Potential) in %	5.15	0.46	16
A.3	Power intensity (kWh/GDP in 1000 INR)-Data	6.58	1.66	16

No.	Indicator	Value	Score	Rank
B. Decarbonisation				
B.1	Number of EV Charging Stations	188	0.08	19
B.2	CO2 saved from LED Bulbs per 1000 population (in tonnes)	50.48	1.59	8
B.3	% of Forest & Tree Cover (Forest Cover w.r.t total area)	47.74	2.07	10
C. Emissions and Pollution				
C.1	Power Emissions Intensity (gco2_per_kWh)	57.63	2.95	10
C.2	Air Quality Index	93.00	1.10	17
C.3	EV Penetration over diesel and petrol vehicles (%)	7.83	0.79	10
STATE CONTEXT				
A. Macroeconomic Environment				
A.1	Growth rate of GSDP	2.78	1.09	26
A.2	FDI Equity Inflows (INR Cr.)	494.88	0.01	13
A.3	State Rating on Start-up Index	69	1.71	14
B. Regulations, Institutions & Governance				
B.1	Multidimensional Poverty Index (Score)	0.04	1.54	14
B.2	SDG Index (Score)	79	3.08	1
C. Stability for Investment & Innovation				
C.1	Innovation Score (as per India Innovation Index)	17.67	2.45	3
C.2	Logistics Index (Index Scores)	80	1.538462	13
C.3	State With RE policy	1	2.05	4
C.4	Investment Opportunities (in USD Billion)	76.90	0.32	20

Uttarakhand, situated in the northern part of India, is nestled in the Himalayan region and has a tourism-driven economy. The state's energy sector is focused on leveraging its abundant natural resources, particularly hydropower, to meet growing demand.

Uttarakhand falls under Category A, which belongs to the top 10 performing states in NETI 2024. In energy security, Uttarakhand remained among the top five states, with the Viability of Energy/ Electricity Systems in the State just 2 points away from the top dimension score. The state is making continuous efforts to enhance these areas. The Uttarakhand government released the Uttarakhand Solar Policy aims to be implemented for the financial period 2023-2028. Under this policy, the state aims to achieve a total solar energy target of 2,500 MW.

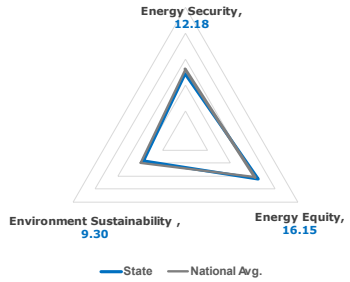
Uttarakhand maintained its position as one of the top ten states in energy equity. Affordability and Performance of Utilities secured almost equal scores. In affordability, the average cost of supply showed the highest score among all. In Environmental Sustainability dimensions Uttarakhand shows moderate performance in all three indicators, Energy Resource Productivity, Decarbonisation, and Emissions and Pollution, and ranked 12th in environmental sustainability. State context is in the 11th rank, where it requires significant improvement.

Maharashtra

9
Rank

57.07
Overall Score

Dimension	Score	Rank
Energy Security	12.18	21
Energy Equity	16.15	15
Environmental Sustainability	9.3	18
State Context	19.44	2



Note – Dimension wise scores are out of 25

No.	Indicator	Value	Score	Rank
	ENERGY SECURITY			
A.	**Electricity Diversity and Power Supply Position**			
A.1	Diversity of Electricity Contracted Capacity (EMCI Index)	0.60	1.93	10
A.2	Share of RE in Contracted Capacity (%)	41.08	0.75	13
A.3	Contracted generating capacity of Electricity (Growth Rate in %)	2.99	0.66	15
A.4	Electricity consumption per capita (in kWh)	1676	1.00	10
A.5	Electricity not supplied (Deficit) in %	0.10	0.99	14
A.6	Contracted Capacity / Peak Demand	1.63	0.30	13
A.7	Number of petrol & gas station / Area of State	0.03	0.29	13
A.8	RE Potential (estimated in GW)	248.67	0.58	2
B.	**Viability of Energy/Electricity Systems in the State**			
B.1	AT & C Losses (in %)	17.96	3.02	16
B.2	ACS-ARR (Cash Adjusted Gap)	1.48	1.35	26
B.3	Average Hours of Supply- Agriculture (Mins/day)	540	0.42	21
B.4	Availability of Oil & Gas pipeline in state	1.00	1.00	5
	ENERGY EQUITY			
A.	**Energy Access**			
A.1	Access to Electricity %	100	2.50	13
A.2	LPG + PNG (Domestic) Connections against number of HHs (%)	127.14	1.48	6
B.	**Affordability**			
B.1	ACS	9.70	0.00	27
B.2	LPG Price (Rs. for 14.2 kg Cylinder) - Non-Subsidised / Per Capita income (1000)	4.90	0.92	9
B.3	Petrol Price in (Rs/litre) / Per capita income (1000)	0.64	0.89	11
B.4	Diesel Price in (Rs/litre) / Per Capita income (1000)	0.56	0.90	11
B.5	Cross Subsidisation (Industrial ABR/ ACS)	0.90	1.64	7
C.	**Performance of Utilities**			
C.1	PAT/Revenue	-0.04	1.81	12
C.2	Overdues/ Cost of Power	0.28	1.90	18
C.3	Payables for Power Purchase (Days)	113	1.85	14
C.4	Tariff Subsidy Billed / Total Revenue	0.08	2.26	5
	ENVIRONMENTAL SUSTAINABILITY			
A.	**Energy Resource Productivity**			
A.1	Energy Efficiency Score	72.00	2.46	5
A.2	Performance of Clean Energy (Contracted Capacity/Potential) in %	7.16	0.62	11
A.3	Power intensity (kWh/GDP in 1000 INR)-Data	5.81	1.85	14

No.	Indicator	Value	Score	Rank
B. Decarbonisation				
B.1	Number of EV Charging Stations	1566	0.66	3
B.2	CO2 saved from LED Bulbs per 1000 population (in tonnes)	18.08	0.42	21
B.3	% of Forest & Tree Cover (Forest Cover w.r.t total area)	21.25	0.72	22
C. Emissions and Pollution				
C.1	Power Emissions Intensity (gco2_per_kWh)	658.97	0.59	18
C.2	Air Quality Index	96.15	1.02	19
C.3	EV Penetration over diesel and petrol vehicles (%)	9.48	0.94	7
STATE CONTEXT				
A. Macroeconomic Environment				
A.1	Growth rate of GSDP	4.26	1.80	16
A.2	FDI Equity Inflows (INR Cr.)	125100.76	3.00	1
A.3	State Rating on Start-up Index	89	2.53	10
B. Regulations, Institutions & Governance				
B.1	Multidimensional Poverty Index (Score)	0.03	1.61	13
B.2	SDG Index (Score)	73	2.18	12
C. Stability for Investment & Innovation				
C.1	Innovation Score (as per India Innovation Index)	16.06	1.82	7
C.2	Logistics Index (Index Scores)	80	1.50	15
C.3	State With RE policy	1	2.00	8
C.4	Investment Opportunities (in USD Billion)	302.13	3.00	1

Maharashtra, located on the western coast of India, is one of the country's largest energy consumers, with a diverse energy mix that includes both conventional and renewable energy sources. As per NETI 2024, Maharashtra is part of Category A, which signifies it is one of the top 10 performing states.

Maharashtra continued to be one of the top 5 performers in the State Context, showcasing its consistent leadership. Maharashtra remains in the front-runner category in the State Energy Efficiency Index (SEEI) 2023. The state has 1566 EV charging stations, ranking 3rd, showing Maharashtra's leadership in promoting electric mobility. Maharashtra recorded ₹125,100.76 crore in FDI equity inflows, ranking 1st, reflecting its attractiveness for energy and industrial investments.

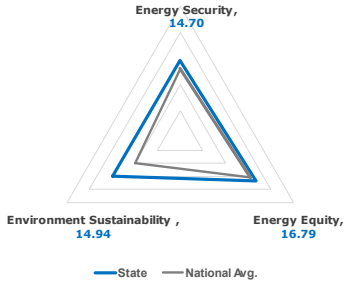
Maharashtra is a leader in renewable energy potential, investment opportunities, and energy access. However, Maharashtra needs improvement in energy security and sustainability, where it is ranked among the bottom ten. The performance of Utilities is the top-scored key performance indicator in energy equity, where its total dimension score is 3 points less than the highest performer.

Goa

10
Rank

57.06
Overall Score

Dimension	Score	Rank
Energy Security	14.7	7
Energy Equity	16.79	11
Environmental Sustainability	14.94	2
State Context	10.63	18



Note – Dimension-wise scores are out of 25

No.	Indicator	Value	Score	Rank
	ENERGY SECURITY			
A.	**Electricity Diversity and Power Supply Position**			
A.1	Diversity of Electricity Contracted Capacity (EMCI Index)	0.44	1.32	20
A.2	Share of RE in Contracted Capacity (%)	8.59	0.01	27
A.3	Contracted generating capacity of Electricity (Growth Rate in %)	2.78	0.69	14
A.4	Electricity consumption per capita (in kWh)	3360	2.00	1
A.5	Electricity not supplied (Deficit) in %	0.00	1.08	2
A.6	Contracted Capacity / Peak Demand	0.85	0.00	28
A.7	Number of petrol & gas station / Area of State	0.04	0.43	7
A.8	RE Potential (estimated in GW)	0.93	0.00	28
B.	**Viability of Energy/Electricity Systems in the State**			
B.1	AT & C Losses (in %)	11.85	3.86	3
B.2	ACS-ARR (Cash Adjusted Gap)	0.45	2.98	13
B.3	Average Hours of Supply- Agriculture (Mins/day)	1440	2.16	1
B.4	Availability of Oil & Gas pipeline in state	0.00	0.00	18
	ENERGY EQUITY			
A.	**Energy Access**			
A.1	Access to Electricity %	100	2.70	2
A.2	LPG + PNG (Domestic) Connections against number of HHs (%)	151.64	2.31	2
B.	**Affordability**			
B.1	ACS	5.85	3.00	5
B.2	LPG Price (Rs. for 14.2 kg Cylinder) - Non-Subsidised / Per Capita income (1000)	2.77	1.08	1
B.3	Petrol Price in (Rs/litre) / Per capita income (1000)	0.32	1.08	1
B.4	Diesel Price in (Rs/litre) / Per Capita income (1000)	0.30	1.08	2
B.5	Cross Subsidisation (Industrial ABR/ ACS)	0.00	3.24	1
C.	**Performance of Utilities**			
C.1	PAT/Revenue	0.02	2.23	2
C.2	Overdues/ Cost of Power	NA	NA	NA
C.3	Payables for Power Purchase (Days)	NA	NA	NA
C.4	Tariff Subsidy Billed / Total Revenue	NA	NA	NA
	ENVIRONMENTAL SUSTAINABILITY			
A.	**Energy Resource Productivity**			
A.1	Energy Efficiency Score	35.25	1.17	11
A.2	Performance of Clean Energy (Contracted Capacity/Potential) in %	5.85	0.55	14
A.3	Power intensity (kWh/GDP in 1000 INR)-Data	7.79	1.36	19

No.	Indicator	Value	Score	Rank
B. Decarbonisation				
B.1	Number of EV Charging Stations	71	0.03	21
B.2	CO2 saved from LED Bulbs per 1000 population (in tonnes)	66.67	2.29	3
B.3	% of Forest & Tree Cover (Forest Cover w.r.t total area)	68.17	3.27	7
C. Emissions and Pollution				
C.1	Power Emissions Intensity (gco2_per_kWh)	46.74	3.15	4
C.2	Air Quality Index	66.50	1.59	6
C.3	EV Penetration over diesel and petrol vehicles (%)	14.25	1.54	2
STATE CONTEXT				
A. Macroeconomic Environment				
A.1	Growth rate of GSDP	0.67	0.00	28
A.2	FDI Equity Inflows (INR Cr.)	290.39	0.01	16
A.3	State Rating on Start-up Index	69	1.81	13
B. Regulations, Institutions & Governance				
B.1	Multidimensional Poverty Index (Score)	0.00	2.15	1
B.2	SDG Index (Score)	77	2.95	3
C. Stability for Investment & Innovation				
C.1	Innovation Score (as per India Innovation Index)	14.93	1.53	11
C.2	Logistics Index (Index Scores)	70	0.00	19
C.3	State With RE policy	1	2.16	1
C.4	Investment Opportunities (in USD Billion)	53.03	0.03	27

Goa, India's smallest state by area, is known for its tourism, mining, and industrial activities. Despite its small size, Goa has a relatively high per capita energy consumption due to its developed economy and urbanised population. Goa has achieved almost 100% of households having access to electricity. Goa has T&D loss of around 10%-12%, which is lower than the national average.

Goa stays comfortably in Category A, in this energy trilemma indexing. Goa is the 7th most energy secure state as per the study. The Viability of Energy/ Electricity Systems indicator in the State is the second highest of all, only next to West Bengal. Goa is exploring solar energy, particularly rooftop solar installations, to diversify its energy mix. Goa's installed power generation capacity seems insufficient to meet its peak demand. The state's small size and high population density limit the potential for large-scale renewable energy projects. The state has a few small hydropower plants and diesel-based power plants that add to its Energy Security.

Goa secures 11th in Energy Equity dimension with Affordability being its key indicator, in which it stands 1st overall excluding UTs. Energy access is also one of the key indicators in which it holds 2nd place after Mizoram. The high cost of electricity and fossil fuels poses challenges for its Energy Equity. Goa has set a target of achieving 100% of renewable energy by 2050.

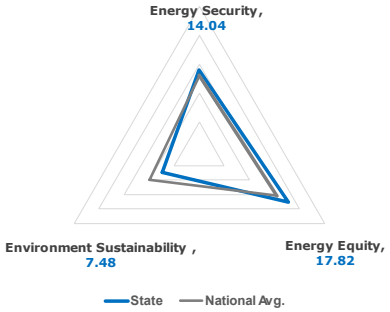
It is the 2nd Environmentally sustainable state in the nation, performing 1st in Emissions and Pollution indicators and 3rd in Decarbonisation indicators. State context is one dimension in which Goa has huge scope to catch up, to perform better especially in Macroeconomic Environment. The state can leverage its small size and developed infrastructure to promote electric vehicles and reduce emissions from the transport sector. The state government has introduced stricter regulations for mining activities to minimize environmental degradation. The state is also promoting afforestation and conservation of natural ecosystems to enhance carbon sequestration.

Punjab

11
Rank

55.48
Overall Score

Dimension	Score	Rank
Energy Security	14.04	12
Energy Equity	17.82	6
Environmental Sustainability	7.48	22
State Context	16.14	6



Note – Dimension-wise scores are out of 25

No.	Indicator	Value	Score	Rank
	ENERGY SECURITY			
A.	**Electricity Diversity and Power Supply Position**			
A.1	Diversity of Electricity Contracted Capacity (EMCI Index)	0.55	1.71	14
A.2	Share of RE in Contracted Capacity (%)	41.04	0.75	14
A.3	Contracted generating capacity of Electricity (Growth Rate in %)	0.45	0.44	24
A.4	Electricity consumption per capita (in kWh)	2574	1.00	2
A.5	Electricity not supplied (Deficit) in %	0.00	1.00	9
A.6	Contracted Capacity / Peak Demand	0.95	0.04	26
A.7	Number of petrol & gas station / Area of State	0.09	0.86	2
A.8	RE Potential (estimated in GW)	8.55	0.02	23
B.	**Viability of Energy/Electricity Systems in the State**			
B.1	AT & C Losses (in %)	11.26	3.62	7
B.2	ACS-ARR (Cash Adjusted Gap)	0.18	3.13	11
B.3	Average Hours of Supply- Agriculture (Mins/day)	300	0.00	28
B.4	Availability of Oil & Gas pipeline in state	1.00	1.00	5
	ENERGY EQUITY			
A.	**Energy Access**			
A.1	Access to Electricity %	100	2.50	13
A.2	LPG + PNG (Domestic) Connections against number of HHs (%)	153.65	2.19	3
B.	**Affordability**			
B.1	ACS	6.37	2.00	11
B.2	LPG Price (Rs. for 14.2 kg Cylinder) - Non-Subsidised / Per Capita income (1000)	6.40	0.86	14
B.3	Petrol Price in (Rs/litre) / Per capita income (1000)	0.74	0.86	13
B.4	Diesel Price in (Rs/litre) / Per Capita income (1000)	0.66	0.86	13
B.5	Cross Subsidisation (Industrial ABR/ ACS)	1.11	1.31	19
C.	**Performance of Utilities**			
C.1	PAT/Revenue	-0.12	1.51	19
C.2	Overdues/ Cost of Power	0.15	2.18	10
C.3	Payables for Power Purchase (Days)	55	2.18	6
C.4	Tariff Subsidy Billed / Total Revenue	0.39	0.93	19
	ENVIRONMENTAL SUSTAINABILITY			
A.	**Energy Resource Productivity**			
A.1	Energy Efficiency Score	62.25	2.10	7
A.2	Performance of Clean Energy (Contracted Capacity/Potential) in %	29.38	2.61	2
A.3	Power intensity (kWh/GDP in 1000 INR)-Data	12.02	0.00	28

No.	Indicator	Value	Score	Rank
B. Decarbonisation				
B.1	Number of EV Charging Stations	752	0.31	12
B.2	CO2 saved from LED Bulbs per 1000 population (in tonnes)	10.22	0.15	24
B.3	% of Forest & Tree Cover (Forest Cover w.r.t total area)	6.59	0.00	28
C. Emissions and Pollution				
C.1	Power Emissions Intensity (gco2_per_kWh)	685.13	0.49	20
C.2	Air Quality Index	90.60	1.11	16
C.3	EV Penetration over diesel and petrol vehicles (%)	7.24	0.71	13
STATE CONTEXT				
A. Macroeconomic Environment				
A.1	Growth rate of GSDP	4.55	1.95	15
A.2	FDI Equity Inflows (INR Cr.)	1490.24	0.04	11
A.3	State Rating on Start-up Index	89	2.53	10
B. Regulations, Institutions & Governance				
B.1	Multidimensional Poverty Index (Score)	0.02	1.77	6
B.2	SDG Index (Score)	76	2.59	7
C. Stability for Investment & Innovation				
C.1	Innovation Score (as per India Innovation Index)	15.35	1.56	10
C.2	Logistics Index (Index Scores)	90	3.00	3
C.3	State With RE policy	1	2.00	8
C.4	Investment Opportunities (in USD Billion)	109.71	0.70	15

Punjab, located in the northwestern part of India, is a vital agricultural state. Punjab is recognized as a Category B state in NETI 2024, indicating its status as one of the top performers in Category B states, just below the Category A states.

Punjab's energy security remains moderate with the Viability of Energy/ Electricity Systems in the State as the key performance indicator. Punjab is on a path of achieving 100% RE power by 2040, with solar power contributing significantly to this goal. Additionally, the state government is committed to Increasing the penetration of energy efficiency to save 20% of energy by 2040 through various energy efficiency measures in large-scale industries and MSMEs.

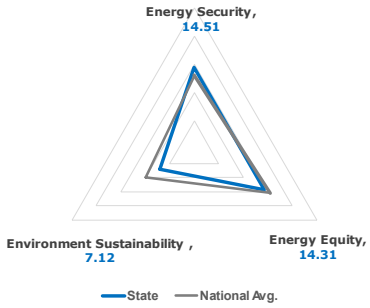
When it comes to energy equity, Punjab is in the 6th rank where the indicators Affordability and Performance of Utilities scored uniform scores. In Environment Sustainability Energy Resource Productivity is the key performance indicator and Decarbonisation requires considerable improvement. In the state context, Punjab remained among the top 10 performers, stability for Investment & Innovation is the key performance indicator.

Telangana

12
Rank

54.15
Overall Score

Dimension	Score	Rank
Energy Security	14.51	10
Energy Equity	14.31	22
Environmental Sustainability	7.12	24
State Context	18.21	4



Note – Dimension-wise scores are out of 25

No.	Indicator	Value	Score	Rank
	ENERGY SECURITY			
A.	**Electricity Diversity and Power Supply Position**			
A.1	Diversity of Electricity Contracted Capacity (EMCI Index)	0.58	1.91	11
A.2	Share of RE in Contracted Capacity (%)	39.60	0.73	16
A.3	Contracted generating capacity of Electricity (Growth Rate in %)	4.33	0.79	11
A.4	Electricity consumption per capita (in kWh)	2349	1.00	5
A.5	Electricity not supplied (Deficit) in %	0.00	1.02	6
A.6	Contracted Capacity / Peak Demand	1.23	0.15	19
A.7	Number of petrol & gas station / Area of State	0.04	0.38	9
A.8	RE Potential (estimated in GW)	78.33	0.18	8
B.	**Viability of Energy/Electricity Systems in the State**			
B.1	AT & C Losses (in %)	18.65	3.02	17
B.2	ACS-ARR (Cash Adjusted Gap)	1.11	1.89	24
B.3	Average Hours of Supply- Agriculture (Mins/day)	1440	2.04	2
B.4	Availability of Oil & Gas pipeline in state	1.00	1.02	4
	ENERGY EQUITY			
A.	**Energy Access**			
A.1	Access to Electricity %	100	2.55	12
A.2	LPG + PNG (Domestic) Connections against number of HHs (%)	125.26	1.46	8
B.	**Affordability**			
B.1	ACS	7.82	1.00	20
B.2	LPG Price (Rs. for 14.2 kg Cylinder) - Non-Subsidised / Per Capita income (1000)	4.65	0.94	3
B.3	Petrol Price in (Rs/litre) / Per capita income (1000)	0.58	0.93	7
B.4	Diesel Price in (Rs/litre) / Per Capita income (1000)	0.52	0.93	5
B.5	Cross Subsidisation (Industrial ABR/ ACS)	1.10	1.36	17
C.	**Performance of Utilities**			
C.1	PAT/Revenue	-0.22	1.15	27
C.2	Overdues/ Cost of Power	0.81	0.81	26
C.3	Payables for Power Purchase (Days)	296	0.81	22
C.4	Tariff Subsidy Billed / Total Revenue	0.16	1.96	10
	ENVIRONMENTAL SUSTAINABILITY			
A.	**Energy Resource Productivity**			
A.1	Energy Efficiency Score	77.50	2.73	3
A.2	Performance of Clean Energy (Contracted Capacity/Potential) in %	6.86	0.61	12
A.3	Power intensity (kWh/GDP in 1000 INR)-Data	9.54	0.75	25

No.	Indicator	Value	Score	Rank
B. Decarbonisation				
B.1	Number of EV Charging Stations	996	0.42	8
B.2	CO2 saved from LED Bulbs per 1000 population (in tonnes)	7.88	0.07	27
B.3	% of Forest & Tree Cover (Forest Cover w.r.t total area)	22.03	0.77	20
C. Emissions and Pollution				
C.1	Power Emissions Intensity (gco2_per_kWh)	679.88	0.52	19
C.2	Air Quality Index	83.75	1.23	15
C.3	EV Penetration over diesel and petrol vehicles (%)	NA	NA	NA
STATE CONTEXT				
A. Macroeconomic Environment				
A.1	Growth rate of GSDP	5.44	2.45	10
A.2	FDI Equity Inflows (INR Cr.)	25094.34	0.61	4
A.3	State Rating on Start-up Index	89	2.58	9
B. Regulations, Institutions & Governance				
B.1	Multidimensional Poverty Index (Score)	0.02	1.76	8
B.2	SDG Index (Score)	74	2.37	9
C. Stability for Investment & Innovation				
C.1	Innovation Score (as per India Innovation Index)	17.66	2.44	4
C.2	Logistics Index (Index Scores)	90	3.061224	2
C.3	State With RE policy	1	2.04	7
C.4	Investment Opportunities (in USD Billion)	125.48	0.91	13

Telangana is in Category B of the NETI 2024. As per the rankings, Telangana is the 10th Energy Secure state overall, Viability of Energy/Electricity Systems in the state is a key area where Telangana has performed well. In Energy Equity dimensions Telangana has leverage only less than half of the overall score in the dimension. Telangana Renewable Energy Development Corporation (TGREDCO), promotes renewable energy and energy conservation activities ensuring equitable access to clean energy.

In the Environmental sustainability dimension, Telangana could find a spot only among the last few spots. This clearly implies that the state needs performance improvement in the Sustainability domain. Emissions, Pollution and Decarbonisation indicators need some thoughtful consideration for the overall performance to pick up.

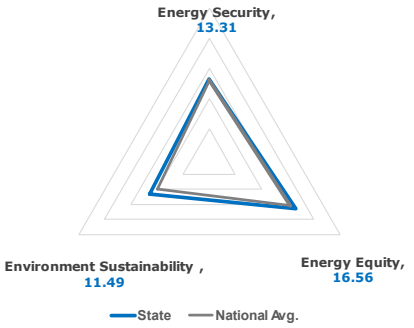
In the State context it is well ahead of 24 states, with Stability for Investment & Innovation indicators being its core area of performance. It stands 5th in the Macroeconomic environment and 4th in Stability for Investment & Innovation indicator overall. With ambitious goals to align with India's Net-zero emissions target by 2070, the state has a clear way to march forward.

Sikkim

13
Rank

53.64
Overall Score

Dimension	Score	Rank
Energy Security	13.31	15
Energy Equity	16.56	12
Environmental Sustainability	11.49	8
State Context	12.28	15



Note – Dimension wise scores are out of 25

No.	Indicator	Value	Score	Rank
	ENERGY SECURITY			
A.	**Electricity Diversity and Power Supply Position**			
A.1	Diversity of Electricity Contracted Capacity (EMCI Index)	0.31	0.70	25
A.2	Share of RE in Contracted Capacity (%)	90.09	2.02	1
A.3	Contracted generating capacity of Electricity (Growth Rate in %)	-4.60	0.00	28
A.4	Electricity consumption per capita (in kWh)	954	0.00	17
A.5	Electricity not supplied (Deficit) in %	0.00	1.09	1
A.6	Contracted Capacity / Peak Demand	6.03	2.17	1
A.7	Number of petrol & gas station / Area of State	0.01	0.08	26
A.8	RE Potential (estimated in GW)	11.26	0.03	19
B.	**Viability of Energy/Electricity Systems in the State**			
B.1	AT & C Losses (in %)	36.69	1.46	26
B.2	ACS-ARR (Cash Adjusted Gap)	-0.20	3.96	2
B.3	Average Hours of Supply- Agriculture (Mins/day)	1015	1.36	11
B.4	Availability of Oil & Gas pipeline in state	0.00	0.00	18
	ENERGY EQUITY			
A.	**Energy Access**			
A.1	Access to Electricity %	100	2.72	1
A.2	LPG + PNG (Domestic) Connections against number of HHs (%)	100.53	0.83	22
B.	**Affordability**			
B.1	ACS	4.25	4.00	1
B.2	LPG Price (Rs. for 14.2 kg Cylinder) - Non-Subsidised / Per Capita income (1000)	3.27	1.07	2
B.3	Petrol Price in (Rs/litre) / Per capita income (1000)	0.34	1.08	2
B.4	Diesel Price in (Rs/litre) / Per Capita income (1000)	0.30	1.09	1
B.5	Cross Subsidisation (Industrial ABR/ ACS)	1.98	0.00	28
C.	**Performance of Utilities**			
C.1	PAT/Revenue	0.14	2.72	1
C.2	Overdues/ Cost of Power	0.00	2.72	1
C.3	Payables for Power Purchase (Days)	NA	NA	NA
C.4	Tariff Subsidy Billed / Total Revenue	NA	NA	NA
	ENVIRONMENTAL SUSTAINABILITY			
A.	**Energy Resource Productivity**			
A.1	Energy Efficiency Score	7.00	0.02	27
A.2	Performance of Clean Energy (Contracted Capacity/Potential) in %	1.20	0.10	23
A.3	Power intensity (kWh/GDP in 1000 INR)-Data	1.94	3.26	1

No.	Indicator	Value	Score	Rank
B. Decarbonisation				
B.1	Number of EV Charging Stations	12	0.00	28
B.2	CO2 saved from LED Bulbs per 1000 population (in tonnes)	24.68	0.71	17
B.3	% of Forest & Tree Cover (Forest Cover w.r.t total area)	48.01	2.21	9
C. Emissions and Pollution				
C.1	Power Emissions Intensity (gco2_per_kWh)	24.00	3.26	1
C.2	Air Quality Index	46.00	1.93	2
C.3	EV Penetration over diesel and petrol vehicles (%)	0.19	0.00	27
STATE CONTEXT				
A. Macroeconomic Environment				
A.1	Growth rate of GSDP	5.98	2.90	3
A.2	FDI Equity Inflows (INR Cr.)	NA	NA	NA
A.3	State Rating on Start-up Index	30	0.00	24
B. Regulations, Institutions & Governance				
B.1	Multidimensional Poverty Index (Score)	0.01	2.05	2
B.2	SDG Index (Score)	76	2.82	5
C. Stability for Investment & Innovation				
C.1	Innovation Score (as per India Innovation Index)	13.85	1.12	14
C.2	Logistics Index (Index Scores)	90	3.26087	1
C.3	State With RE policy	0	0.00	22
C.4	Investment Opportunities (in USD Billion)	60.88	0.13	22

Sikkim, a state in the northeastern region of India, is a small yet significant state with plentiful natural resources. The state's energy sector is heavily reliant on hydroelectric power, capitalizing on its mountainous terrain and river systems.

Sikkim is classified under Category B, ranking among the top 10 performers in Category B states in NETI 2024. In energy security, Sikkim scored the 15th rank, where the dimension score is very close to the highest score. Electricity Diversity and Power Supply Position and Viability of Energy/ Electricity Systems in the State secured uniform scores. In Sikkim, energy security is primarily associated with its significant hydropower potential.

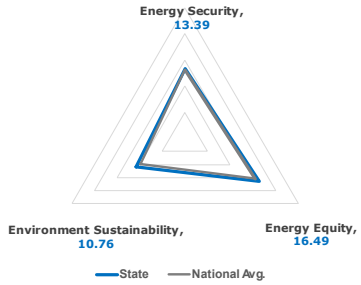
In energy equity, Sikkim secured 12th rank, with Affordability remaining the key performance indicator. In environmental Sustainability, Sikkim is in the top 10 performers. Emissions and Pollution performed moderately in Environmental Sustainability. In the state context, the overall dimension score is quite moderate. Regulations, Institutions & Governance and Stability for Investment & Innovation perform uniformly.

Odisha

14
Rank

52.43
Overall Score

Dimension	Score	Rank
Energy Security	13.39	14
Energy Equity	16.49	13
Environmental Sustainability	10.76	13
State Context	11.79	16



Note – Dimension-wise scores are out of 25

No.	Indicator	Value	Score	Rank
ENERGY SECURITY				
A.	**Electricity Diversity and Power Supply Position**			
A.1	Diversity of Electricity Contracted Capacity (EMCI Index)	0.44	1.27	21
A.2	Share of RE in Contracted Capacity (%)	35.57	0.64	19
A.3	Contracted generating capacity of Electricity (Growth Rate in %)	-2.07	0.23	26
A.4	Electricity consumption per capita (in kWh)	2419	1.00	3
A.5	Electricity not supplied (Deficit) in %	0.10	1.01	8
A.6	Contracted Capacity / Peak Demand	1.29	0.17	18
A.7	Number of petrol & gas station / Area of State	0.02	0.15	20
A.8	RE Potential (estimated in GW)	41.32	0.10	11
B.	**Viability of Energy/Electricity Systems in the State**			
B.1	AT & C Losses (in %)	21.85	2.74	19
B.2	ACS-ARR (Cash Adjusted Gap)	-0.19	3.72	3
B.3	Average Hours of Supply- Agriculture (Mins/day)	1380	1.94	6
B.4	Availability of Oil & Gas pipeline in state	0.00	0.00	18
ENERGY EQUITY				
A.	**Energy Access**			
A.1	Access to Electricity %	100	2.56	7
A.2	LPG + PNG (Domestic) Connections against number of HHs (%)	97.03	0.69	24
B.	**Affordability**			
B.1	ACS	4.90	4.00	2
B.2	LPG Price (Rs. for 14.2 kg Cylinder) - Non-Subsidised / Per Capita income (1000)	8.43	0.80	16
B.3	Petrol Price in (Rs/litre) / Per capita income (1000)	1.03	0.78	16
B.4	Diesel Price in (Rs/litre) / Per Capita income (1000)	0.94	0.77	17
B.5	Cross Subsidisation (Industrial ABR/ ACS)	1.57	0.63	27
C.	**Performance of Utilities**			
C.1	PAT/Revenue	0.02	2.08	6
C.2	Overdues/ Cost of Power	0.13	2.28	8
C.3	Payables for Power Purchase (Days)	47	2.29	4
C.4	Tariff Subsidy Billed / Total Revenue	NA	NA	NA
ENVIRONMENTAL SUSTAINABILITY				
A.	**Energy Resource Productivity**			
A.1	Energy Efficiency Score	20.25	0.53	18
A.2	Performance of Clean Energy (Contracted Capacity/Potential) in %	2.05	0.17	19
A.3	Power intensity (kWh/GDP in 1000 INR)-Data	4.89	2.18	12

No.	Indicator	Value	Score	Rank
B. Decarbonisation				
B.1	Number of EV Charging Stations	619	0.26	13
B.2	CO2 saved from LED Bulbs per 1000 population (in tonnes)	117.65	3.99	2
B.3	% of Forest & Tree Cover (Forest Cover w.r.t total area)	37.63	1.56	13
C. Emissions and Pollution				
C.1	Power Emissions Intensity (gco2_per_kWh)	739.71	0.29	22
C.2	Air Quality Index	108.89	0.85	22
C.3	EV Penetration over diesel and petrol vehicles (%)	9.06	0.92	9
STATE CONTEXT				
A. Macroeconomic Environment				
A.1	Growth rate of GSDP	6.14	2.82	4
A.2	FDI Equity Inflows (INR Cr.)	72.60	0.00	19
A.3	State Rating on Start-up Index	89	2.59	7
B. Regulations, Institutions & Governance				
B.1	Multidimensional Poverty Index (Score)	0.07	1.17	21
B.2	SDG Index (Score)	66	1.26	22
C. Stability for Investment & Innovation				
C.1	Innovation Score (as per India Innovation Index)	11.42	0.16	24
C.2	Logistics Index (Index Scores)	70	0.00	19
C.3	State With RE policy	1	2.05	4
C.4	Investment Opportunities (in USD Billion)	191.35	1.72	6

Odisha is in Category B of NETI 2024. In Energy Security, Odisha is among the top 14 performers. Viability of Energy/ Electricity Systems is one of the KPI which makes Odisha comparatively Energy Secure. In Energy equity dimensions, Odisha is positioned 13th across the country which is expected to pick up in future. Odisha's Renewable Energy Policy aims to harness the state's renewable energy potential and accelerate the investment in RE sector.

Decarbonisation, an indicator in Environmental sustainability, is well inside the state's radar in which it secures 2nd place compared with other states. Energy resource productivity, Emissions and Pollution are indicators in which it can shine to improve the overall performance.

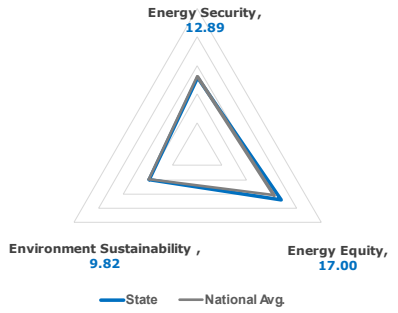
Macroeconomic environment is one of Odisha's KPI in the State context, in which it scores 6th position across states. Stability for Investment & Innovation is another indicator in which it performs moderately. Green Odisha Initiative aims to create 10 lakh new jobs and attract INR 3.5 lakh crore in investments by 2030. It focuses on sectors like energy transition and circular economy. This will help provide job opportunities related to Energy equity and boost the state's economy.

Assam

15
Rank

52.00
Overall Score

Dimension	Score	Rank
Energy Security	12.89	17
Energy Equity	17.00	10
Environmental Sustainability	9.82	14
State Context	12.29	14



Note – Dimension-wise scores are out of 25

No.	Indicator	Value	Score	Rank
	ENERGY SECURITY			
A.	**Electricity Diversity and Power Supply Position**			
A.1	Diversity of Electricity Contracted Capacity (EMCI Index)	0.65	2.19	6
A.2	Share of RE in Contracted Capacity (%)	30.00	0.50	21
A.3	Contracted generating capacity of Electricity (Growth Rate in %)	7.22	1.03	5
A.4	Electricity consumption per capita (in kWh)	398	0.00	26
A.5	Electricity not supplied (Deficit) in %	0.90	0.89	23
A.6	Contracted Capacity / Peak Demand	1.03	0.07	24
A.7	Number of petrol & gas station / Area of State	0.02	0.17	18
A.8	RE Potential (estimated in GW)	15.39	0.03	17
B.	**Viability of Energy/Electricity Systems in the State**			
B.1	AT & C Losses (in %)	16.22	3.18	15
B.2	ACS-ARR (Cash Adjusted Gap)	0.61	2.54	16
B.3	Average Hours of Supply- Agriculture (Mins/day)	1015	1.25	18
B.4	Availability of Oil & Gas pipeline in state	1.00	1.00	5
	ENERGY EQUITY			
A.	**Energy Access**			
A.1	Access to Electricity %	100	2.50	13
A.2	LPG + PNG (Domestic) Connections against number of HHs (%)	122.72	1.36	10
B.	**Affordability**			
B.1	ACS	8.05	1.00	22
B.2	LPG Price (Rs. for 14.2 kg Cylinder) - Non-Subsidised / Per Capita income (1000)	10.59	0.69	22
B.3	Petrol Price in (Rs/litre) / Per capita income (1000)	1.20	0.70	20
B.4	Diesel Price in (Rs/litre) / Per Capita income (1000)	1.10	0.69	22
B.5	Cross Subsidisation (Industrial ABR/ ACS)	1.04	1.42	14
C.	**Performance of Utilities**			
C.1	PAT/Revenue	-0.08	1.65	17
C.2	Overdues/ Cost of Power	0.16	2.16	11
C.3	Payables for Power Purchase (Days)	59	2.16	7
C.4	Tariff Subsidy Billed / Total Revenue	0.03	2.46	3
	ENVIRONMENTAL SUSTAINABILITY			
A.	**Energy Resource Productivity**			
A.1	Energy Efficiency Score	53.50	1.77	9
A.2	Performance of Clean Energy (Contracted Capacity/Potential) in %	1.50	0.12	21
A.3	Power intensity (kWh/GDP in 1000 INR)-Data	3.23	2.62	6

No.	Indicator	Value	Score	Rank
B. Decarbonisation				
B.1	Number of EV Charging Stations	432	0.18	17
B.2	CO2 saved from LED Bulbs per 1000 population (in tonnes)	20.87	0.52	20
B.3	% of Forest & Tree Cover (Forest Cover w.r.t total area)	38.78	1.58	12
C. Emissions and Pollution				
C.1	Power Emissions Intensity (gco2_per_kWh)	586.55	0.87	16
C.2	Air Quality Index	103.75	0.91	21
C.3	EV Penetration over diesel and petrol vehicles (%)	12.68	1.27	3
STATE CONTEXT				
A. Macroeconomic Environment				
A.1	Growth rate of GSDP	6.64	3.00	2
A.2	FDI Equity Inflows (INR Cr.)	1.92	0.00	20
A.3	State Rating on Start-up Index	69	1.67	16
B. Regulations, Institutions & Governance				
B.1	Multidimensional Poverty Index (Score)	0.09	0.94	23
B.2	SDG Index (Score)	65	1.09	24
C. Stability for Investment & Innovation				
C.1	Innovation Score (as per India Innovation Index)	11.29	0.11	26
C.2	Logistics Index (Index Scores)	90	3.00	3
C.3	State With RE policy	1	2.00	8
C.4	Investment Opportunities (in USD Billion)	90.74	0.48	18

Assam, a state in northeastern India, is endowed with significant natural resources, including oil, natural gas, and renewable energy potential falls in Category B of the NETI 2024. Assam is one of India's oldest oil-producing states, with oil exploration dating back to the 19th century.

Assam stands 17th in the Energy security dimension among the states. Assam has significant hydropower potential, particularly in the Brahmaputra and its tributaries. The state performs well in the Viability of Energy/ Electricity Systems in the State indicator. Assam has limited wind energy potential due to its low wind speeds, but small-scale projects are being explored. Its geothermal potential could also be harnessed for power generation in the future.

Assam's Energy Equity dimension seems to be competent among all 4 dimensions. Assam could leverage the least from Environmental sustainability but gets into the top 10 Category B states. The state's agricultural and forest residues offer substantial biomass energy potential, which can be utilised for power generation and biogas production.

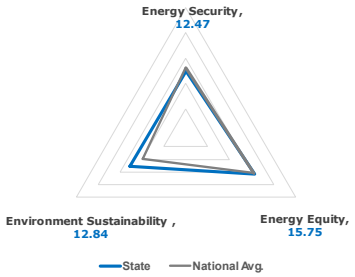
In the State context dimension, Assam has secured 14th position. Considering its rich energy resources, Assam is yet to fully utilise its potential due to technological, financial, and infrastructural constraints. Assam aims to achieve a capacity addition target of 11,700 MW Renewable Power Projects by 2029-30. The state is also exploring opportunities in green hydrogen and energy storage technologies. Schemes like Saubhagya have significantly improved rural electrification in Assam. The state is gradually adopting electric vehicles to reduce dependence on fossil fuels.

Arunachal Pradesh

16
Rank

51.61
Overall Score

Dimension	Score	Rank
Energy Security	12.47	19
Energy Equity	15.75	17
Environmental Sustainability	12.84	5
State Context	10.55	19



Note – Dimension-wise scores are out of 25

No.	Indicator	Value	Score	Rank
	ENERGY SECURITY			
A.	**Electricity Diversity and Power Supply Position**			
A.1	Diversity of Electricity Contracted Capacity (EMCI Index)	0.46	1.38	19
A.2	Share of RE in Contracted Capacity (%)	89.30	1.94	3
A.3	Contracted generating capacity of Electricity (Growth Rate in %)	18.38	2.11	1
A.4	Electricity consumption per capita (in kWh)	651	0.00	22
A.5	Electricity not supplied (Deficit) in %	0.00	1.05	4
A.6	Contracted Capacity / Peak Demand	4.21	1.37	2
A.7	Number of petrol & gas station / Area of State	0.00	0.00	28
A.8	RE Potential (estimated in GW)	61.37	0.15	9
B.	**Viability of Energy/Electricity Systems in the State**			
B.1	AT & C Losses (in %)	51.70	0.00	28
B.2	ACS-ARR (Cash Adjusted Gap)	0.42	2.95	14
B.3	Average Hours of Supply- Agriculture (Mins/day)	1015	1.32	13
B.4	Availability of Oil & Gas pipeline in state	0.00	0.00	18
	ENERGY EQUITY			
A.	**Energy Access**			
A.1	Access to Electricity %	100	2.63	4
A.2	LPG + PNG (Domestic) Connections against number of HHs (%)	114.86	1.21	13
B.	**Affordability**			
B.1	ACS	6.68	2.00	12
B.2	LPG Price (Rs. for 14.2 kg Cylinder) - Non-Subsidised / Per Capita income (1000)	8.44	0.82	15
B.3	Petrol Price in (Rs/litre) / Per capita income (1000)	0.88	0.85	14
B.4	Diesel Price in (Rs/litre) / Per Capita income (1000)	0.78	0.85	14
B.5	Cross Subsidisation (Industrial ABR/ ACS)	0.51	2.34	2
C.	**Performance of Utilities**			
C.1	PAT/Revenue	0.00	2.08	7
C.2	Overdues/ Cost of Power	0.00	2.63	3
C.3	Payables for Power Purchase (Days)	NA	NA	NA
C.4	Tariff Subsidy Billed / Total Revenue	NA	NA	NA
	ENVIRONMENTAL SUSTAINABILITY			
A.	**Energy Resource Productivity**			
A.1	Energy Efficiency Score	8.50	0.08	24
A.2	Performance of Clean Energy (Contracted Capacity/Potential) in %	1.42	0.12	22
A.3	Power intensity (kWh/GDP in 1000 INR)-Data	3.18	2.77	4

No.	Indicator	Value	Score	Rank
B. Decarbonisation				
B.1	Number of EV Charging Stations	50	0.02	25
B.2	CO2 saved from LED Bulbs per 1000 population (in tonnes)	33.19	1.00	14
B.3	% of Forest & Tree Cover (Forest Cover w.r.t total area)	80.11	3.80	2
C. Emissions and Pollution				
C.1	Power Emissions Intensity (gco2_per_kWh)	24.01	3.16	3
C.2	Air Quality Index	45.00	1.89	3
C.3	EV Penetration over diesel and petrol vehicles (%)	0.33	0.01	25
STATE CONTEXT				
A. Macroeconomic Environment				
A.1	Growth rate of GSDP	3.83	1.67	21
A.2	FDI Equity Inflows (INR Cr.)	0.00	0.00	24
A.3	State Rating on Start-up Index	89	2.66	6
B. Regulations, Institutions & Governance				
B.1	Multidimensional Poverty Index (Score)	0.06	1.35	17
B.2	SDG Index (Score)	65	1.15	23
C. Stability for Investment & Innovation				
C.1	Innovation Score (as per India Innovation Index)	15.46	1.69	8
C.2	Logistics Index (Index Scores)	80	1.578947	12
C.3	State With RE policy	0	0.00	22
C.4	Investment Opportunities (in USD Billion)	87.88	0.47	19

Arunachal Pradesh, located in the northeastern part of India, is known for its vast potential in renewable energy, particularly hydroelectric power. Arunachal Pradesh is often referred to as the "Future powerhouse of India" due to its immense hydroelectric potential. Arunachal Pradesh is in the Category B of the National Energy Trilemma Index. It is also among the overall top 10 performer in Category B.

The state stands 19th in both Energy Security and 17th in Energy Equity dimensions. Despite that, Arunachal Pradesh stands 1st along with Rajasthan among all the territories in Electricity Diversity and Power Supply Position indicator. It holds 3rd position in the Affordability indicator among the states. The state's commitment to sustainable development and minimizing environmental impact is also crucial in achieving the energy and sustainability-related goals.

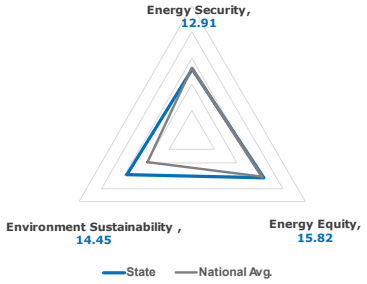
Arunachal Pradesh stands 5th in the Environmental Sustainability dimensions among the states in NETI 2024. The state has scope for improvement Regulations, Institutions & Governance indicators within the State context dimension. The Arunachal Pradesh Energy Development Agency is actively promoting renewable energy programs and is poised to become a significant contributor to India's energy landscape.

Mizoram

17
Rank

51.27
Overall Score

Dimension	Score	Rank
Energy Security	12.91	16
Energy Equity	15.82	16
Environmental Sustainability	14.45	3
State Context	8.09	24



Note – Dimension-wise scores are out of 25

No.	Indicator	Value	Score	Rank
	ENERGY SECURITY			
A.	**Electricity Diversity and Power Supply Position**			
A.1	Diversity of Electricity Contracted Capacity (EMCI Index)	0.68	2.42	3
A.2	Share of RE in Contracted Capacity (%)	65.51	1.38	7
A.3	Contracted generating capacity of Electricity (Growth Rate in %)	5.04	0.89	7
A.4	Electricity consumption per capita (in kWh)	564	0.00	23
A.5	Electricity not supplied (Deficit) in %	0.00	1.06	3
A.6	Contracted Capacity / Peak Demand	1.64	0.32	12
A.7	Number of petrol & gas station / Area of State	0.05	0.52	5
A.8	RE Potential (estimated in GW)	11.19	0.03	20
B.	**Viability of Energy/Electricity Systems in the State**			
B.1	AT & C Losses (in %)	26.27	2.41	22
B.2	ACS-ARR (Cash Adjusted Gap)	0.81	2.40	19
B.3	Average Hours of Supply- Agriculture (Mins/day)	1015	1.33	12
B.4	Availability of Oil & Gas pipeline in state	0.00	0.00	18
	ENERGY EQUITY			
A.	**Energy Access**			
A.1	Access to Electricity %	100	2.65	3
A.2	LPG + PNG (Domestic) Connections against number of HHs (%)	165.06	2.65	1
B.	**Affordability**			
B.1	ACS	9.71	0.00	28
B.2	LPG Price (Rs. for 14.2 kg Cylinder) - Non-Subsidised / Per Capita income (1000)	6.82	0.89	12
B.3	Petrol Price in (Rs/litre) / Per capita income (1000)	0.67	0.93	5
B.4	Diesel Price in (Rs/litre) / Per Capita income (1000)	0.57	0.94	3
B.5	Cross Subsidisation (Industrial ABR/ ACS)	0.83	1.83	4
C.	**Performance of Utilities**			
C.1	PAT/Revenue	-0.21	1.22	26
C.2	Overdues/ Cost of Power	0.00	2.65	2
C.3	Payables for Power Purchase (Days)	NA	NA	NA
C.4	Tariff Subsidy Billed / Total Revenue	0.15	2.07	8
	ENVIRONMENTAL SUSTAINABILITY			
A.	**Energy Resource Productivity**			
A.1	Energy Efficiency Score	7.50	0.04	26
A.2	Performance of Clean Energy (Contracted Capacity/Potential) in %	0.82	0.06	26
A.3	Power intensity (kWh/GDP in 1000 INR)-Data	2.69	2.94	2

No.	Indicator	Value	Score	Rank
B. Decarbonisation				
B.1	Number of EV Charging Stations	14	0.00	27
B.2	CO2 saved from LED Bulbs per 1000 population (in tonnes)	51.58	1.68	5
B.3	% of Forest & Tree Cover (Forest Cover w.r.t total area)	88.03	4.23	1
C. Emissions and Pollution				
C.1	Power Emissions Intensity (gco2_per_kWh)	25.22	3.17	2
C.2	Air Quality Index	31.13	2.12	1
C.3	EV Penetration over diesel and petrol vehicles (%)	2.16	0.21	21
STATE CONTEXT				
A. Macroeconomic Environment				
A.1	Growth rate of GSDP	6.45	3.08	1
A.2	FDI Equity Inflows (INR Cr.)	NA	NA	NA
A.3	State Rating on Start-up Index	30	0.00	24
B. Regulations, Institutions & Governance				
B.1	Multidimensional Poverty Index (Score)	0.02	1.82	5
B.2	SDG Index (Score)	72	2.16	13
C. Stability for Investment & Innovation				
C.1	Innovation Score (as per India Innovation Index)	13.41	0.92	16
C.2	Logistics Index (Index Scores)	70	0.00	19
C.3	State With RE policy	0	0.00	22
C.4	Investment Opportunities (in USD Billion)	58.64	0.10	23

Mizoram, located in the north-eastern part of India, is primarily reliant on hydropower for its energy generation. It also offers ideal conditions for solar energy with its favourable climate and significant solar irradiance. Mizoram is recognized as a Category B state in NETI 2024, indicating its status as one of the 10 performers in Category B states.

In energy security, Mizoram ranks on 16th position. The key performance indicators are the electricity diversity and power supply position and the viability of energy/electricity systems in the state. Mizoram energy equity is the top 10 performers in Category B states, it is due to the consistent performance of all three indicators viz, Energy Access, Affordability, and Performance of Utilities. With securing 1st position in energy access dimensions.

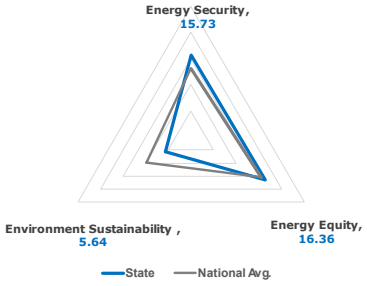
Environmental sustainability achieved 3rd rank, where the Decarbonisation and Emissions and Pollution indicators performed well. However, the state context and its policy interventions require good improvement.

Rajasthan

18
Rank

50.86
Overall Score

Dimension	Score	Rank
Energy Security	15.73	3
Energy Equity	16.36	14
Environmental Sustainability	5.64	26
State Context	13.13	12



Note – Dimension wise scores are out of 25

No.	Indicator	Value	Score	Rank
ENERGY SECURITY				
A.	**Electricity Diversity and Power Supply Position**			
A.1	Diversity of Electricity Contracted Capacity (EMCI Index)	0.50	1.52	17
A.2	Share of RE in Contracted Capacity (%)	69.56	1.40	6
A.3	Contracted generating capacity of Electricity (Growth Rate in %)	14.91	1.70	2
A.4	Electricity consumption per capita (in kWh)	1501	1.00	13
A.5	Electricity not supplied (Deficit) in %	0.60	0.93	20
A.6	Contracted Capacity / Peak Demand	2.68	0.71	3
A.7	Number of petrol & gas station / Area of State	0.02	0.19	17
A.8	RE Potential (estimated in GW)	428.32	1.00	1
B.	**Viability of Energy/Electricity Systems in the State**			
B.1	AT & C Losses (in %)	15.90	3.21	13
B.2	ACS-ARR (Cash Adjusted Gap)	0.15	3.17	9
B.3	Average Hours of Supply- Agriculture (Mins/day)	390	0.16	27
B.4	Availability of Oil & Gas pipeline in state	1.00	1.00	5
ENERGY EQUITY				
A.	**Energy Access**			
A.1	Access to Electricity %	100	2.50	13
A.2	LPG + PNG (Domestic) Connections against number of HHs (%)	121.79	1.34	11
B.	**Affordability**			
B.1	ACS	6.59	2.00	15
B.2	LPG Price (Rs. for 14.2 kg Cylinder) - Non-Subsidised / Per Capita income (1000)	8.88	0.76	17
B.3	Petrol Price in (Rs/litre) / Per capita income (1000)	1.15	0.72	19
B.4	Diesel Price in (Rs/litre) / Per Capita income (1000)	0.99	0.73	18
B.5	Cross Subsidisation (Industrial ABR/ ACS)	1.24	1.11	22
C.	**Performance of Utilities**			
C.1	PAT/Revenue	-0.04	1.83	11
C.2	Overdues/ Cost of Power	0.24	1.99	14
C.3	Payables for Power Purchase (Days)	88	1.99	10
C.4	Tariff Subsidy Billed / Total Revenue	0.35	1.11	18
ENVIRONMENTAL SUSTAINABILITY				
A.	**Energy Resource Productivity**			
A.1	Energy Efficiency Score	20.50	0.53	19
A.2	Performance of Clean Energy (Contracted Capacity/Potential) in %	7.44	0.65	10
A.3	Power intensity (kWh/GDP in 1000 INR)-Data	9.99	0.60	26

No.	Indicator	Value	Score	Rank
B. Decarbonisation				
B.1	Number of EV Charging Stations	1423	0.60	4
B.2	CO2 saved from LED Bulbs per 1000 population (in tonnes)	22.11	0.56	18
B.3	% of Forest & Tree Cover (Forest Cover w.r.t total area)	8.00	0.07	26
C. Emissions and Pollution				
C.1	Power Emissions Intensity (gco2_per_kWh)	437.99	1.43	12
C.2	Air Quality Index	131.62	0.49	25
C.3	EV Penetration over diesel and petrol vehicles (%)	7.17	0.71	14
STATE CONTEXT				
A. Macroeconomic Environment				
A.1	Growth rate of GSDP	5.61	2.48	7
A.2	FDI Equity Inflows (INR Cr.)	2194.74	0.05	8
A.3	State Rating on Start-up Index	89	2.53	10
B. Regulations, Institutions & Governance				
B.1	Multidimensional Poverty Index (Score)	0.07	1.20	20
B.2	SDG Index (Score)	67	1.36	18
C. Stability for Investment & Innovation				
C.1	Innovation Score (as per India Innovation Index)	12.88	0.68	20
C.2	Logistics Index (Index Scores)	80	1.50	15
C.3	State With RE policy	1	2.00	8
C.4	Investment Opportunities (in USD Billion)	160.27	1.31	9

The overall score of Rajasthan has made it get into the Category B of NETI 2024. Rajasthan has easily entered the top 3 Energy secure states across the nation and is also the reflection of the groundwork done in the state. It shares the top spot in Electricity Diversity and Power Supply Position, indicator with Arunachal Pradesh. The state performs moderately well in the Affordability and Energy access indicator when it comes to Energy equity. With several below mentioned policies already in place, there is huge potential for improvement. Rajasthan's integrated clean energy policy 2024 aims to promote renewable energy sources. It also includes provisions for energy storage systems like pumped storage hydro projects and battery energy storage systems.

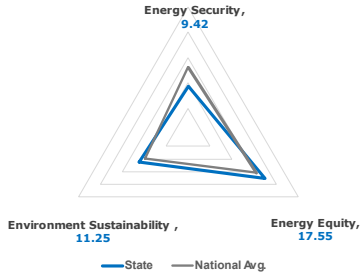
Rajasthan could manage only among the last 3 spots in the Environmental sustainability dimensions. But Rajasthan is doing well in the State context dimensions with a score par average in Stability for Investment & Innovation indicator. Rajasthan Electric Vehicle Policy encourages the adoption of electric vehicles by providing incentives and infrastructure support. Rajasthan Investment Promotion Scheme 2024 offers financial incentives to attract investments in various sectors, including RE, which can help create job opportunities and promote the performance of energy dimensions and indicators.

Tripura

19
Rank

48.36
Overall Score

Dimension	Score	Rank
Energy Security	9.42	27
Energy Equity	17.55	7
Environmental Sustainability	11.25	10
State Context	10.14	20



Note – Dimension-wise scores are out of 25

No.	Indicator	Value	Score	Rank
	ENERGY SECURITY			
A.	**Electricity Diversity and Power Supply Position**			
A.1	Diversity of Electricity Contracted Capacity (EMCI Index)	0.43	1.17	22
A.2	Share of RE in Contracted Capacity (%)	16.30	0.19	24
A.3	Contracted generating capacity of Electricity (Growth Rate in %)	-3.03	0.14	27
A.4	Electricity consumption per capita (in kWh)	444	0.00	25
A.5	Electricity not supplied (Deficit) in %	0.00	1.00	9
A.6	Contracted Capacity / Peak Demand	1.79	0.36	10
A.7	Number of petrol & gas station / Area of State	0.01	0.12	22
A.8	RE Potential (estimated in GW)	2.16	0.00	27
B.	**Viability of Energy/Electricity Systems in the State**			
B.1	AT & C Losses (in %)	28.15	2.11	24
B.2	ACS-ARR (Cash Adjusted Gap)	1.00	2.01	23
B.3	Average Hours of Supply- Agriculture (Mins/day)	1015	1.25	18
B.4	Availability of Oil & Gas pipeline in state	1.00	1.00	5
	ENERGY EQUITY			
A.	**Energy Access**			
A.1	Access to Electricity %	100	2.50	13
A.2	LPG + PNG (Domestic) Connections against number of HHs (%)	91.55	0.52	26
B.	**Affordability**			
B.1	ACS	6.25	3.00	10
B.2	LPG Price (Rs. for 14.2 kg Cylinder) - Non-Subsidised / Per Capita income (1000)	9.82	0.72	19
B.3	Petrol Price in (Rs/litre) / Per capita income (1000)	0.99	0.77	17
B.4	Diesel Price in (Rs/litre) / Per Capita income (1000)	0.88	0.77	16
B.5	Cross Subsidisation (Industrial ABR/ ACS)	0.94	1.57	9
C.	**Performance of Utilities**			
C.1	PAT/Revenue	-0.17	1.34	24
C.2	Overdues/ Cost of Power	0.15	2.19	9
C.3	Payables for Power Purchase (Days)	54	2.19	5
C.4	Tariff Subsidy Billed / Total Revenue	0.03	2.45	4
	ENVIRONMENTAL SUSTAINABILITY			
A.	**Energy Resource Productivity**			
A.1	Energy Efficiency Score	13.50	0.26	20
A.2	Performance of Clean Energy (Contracted Capacity/Potential) in %	1.72	0.14	20
A.3	Power intensity (kWh/GDP in 1000 INR)-Data	2.51	2.83	3

No.	Indicator	Value	Score	Rank
B. Decarbonisation				
B.1	Number of EV Charging Stations	55	0.02	23
B.2	CO2 saved from LED Bulbs per 1000 population (in tonnes)	26.39	0.71	16
B.3	% of Forest & Tree Cover (Forest Cover w.r.t total area)	74.69	3.34	6
C. Emissions and Pollution				
C.1	Power Emissions Intensity (gco2_per_kWh)	489.50	1.23	13
C.2	Air Quality Index	117.00	0.71	23
C.3	EV Penetration over diesel and petrol vehicles (%)	19.93	2.00	1
STATE CONTEXT				
A. Macroeconomic Environment				
A.1	Growth rate of GSDP	4.80	2.08	13
A.2	FDI Equity Inflows (INR Cr.)	1.58	0.00	21
A.3	State Rating on Start-up Index	69	1.67	16
B. Regulations, Institutions & Governance				
B.1	Multidimensional Poverty Index (Score)	0.06	1.32	18
B.2	SDG Index (Score)	71	1.91	16
C. Stability for Investment & Innovation				
C.1	Innovation Score (as per India Innovation Index)	11.43	0.16	25
C.2	Logistics Index (Index Scores)	90	3.00	3
C.3	State With RE policy	0	0.00	22
C.4	Investment Opportunities (in USD Billion)	50.78	0.00	28

Tripura, located in the north-eastern part of India, is one of the smallest states in the country, with a growing population and an emerging economy. In NETI 2024, Tripura falls within Category B, positioning it among the 10 performing states in Categorey B states.

In energy security, Tripura remains in the bottom two. However, the Viability of Energy/ Electricity Systems in the State has performed moderately. But Electricity Diversity and Power Supply Position required ample reforms.

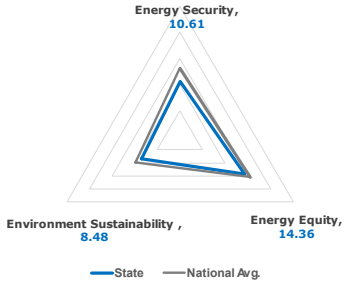
Energy equity in Tripura, unlike security, has performed extremely well. It ranked 7th with Performance of Utilities as the Key performance indicator. Environmental sustainability also belongs among the top ten states, with Energy Resource Productivity, Decarbonisation, and Emissions and Pollution showing uniform scores. The state context of Tripura needs improvement as its rank has gone down when compared to its other performance.

Uttar Pradesh

20
Rank

48.13
Overall Score

Dimension	Score	Rank
Energy Security	10.61	23
Energy Equity	14.36	21
Environmental Sustainability	8.48	20
State Context	14.68	8



Note – Dimension wise scores are out of 25

No.	Indicator	Value	Score	Rank
	ENERGY SECURITY			
A.	**Electricity Diversity and Power Supply Position**			
A.1	Diversity of Electricity Contracted Capacity (EMCI Index)	0.49	1.44	18
A.2	Share of RE in Contracted Capacity (%)	27.50	0.44	22
A.3	Contracted generating capacity of Electricity (Growth Rate in %)	4.93	0.83	9
A.4	Electricity consumption per capita (in kWh)	723	0.00	21
A.5	Electricity not supplied (Deficit) in %	0.30	0.96	18
A.6	Contracted Capacity / Peak Demand	1.15	0.12	21
A.7	Number of petrol & gas station / Area of State	0.05	0.51	6
A.8	RE Potential (estimated in GW)	32.03	0.07	13
B.	**Viability of Energy/Electricity Systems in the State**			
B.1	AT & C Losses (in %)	21.99	2.66	20
B.2	ACS-ARR (Cash Adjusted Gap)	1.78	0.95	27
B.3	Average Hours of Supply- Agriculture (Mins/day)	1080	1.37	10
B.4	Availability of Oil & Gas pipeline in state	1.00	1.00	5
	ENERGY EQUITY			
A.	**Energy Access**			
A.1	Access to Electricity %	100	2.50	13
A.2	LPG + PNG (Domestic) Connections against number of HHs (%)	126.78	1.47	7
B.	**Affordability**			
B.1	ACS	8.02	1.00	21
B.2	LPG Price (Rs. for 14.2 kg Cylinder) - Non-Subsidised / Per Capita income (1000)	16.52	0.46	27
B.3	Petrol Price in (Rs/litre) / Per capita income (1000)	1.86	0.48	27
B.4	Diesel Price in (Rs/litre) / Per Capita income (1000)	1.73	0.44	27
B.5	Cross Subsidisation (Industrial ABR/ ACS)	1.00	1.49	12
C.	**Performance of Utilities**			
C.1	PAT/Revenue	-0.17	1.34	25
C.2	Overdues/ Cost of Power	0.46	1.52	21
C.3	Payables for Power Purchase (Days)	172	1.51	18
C.4	Tariff Subsidy Billed / Total Revenue	0.16	1.92	12
	ENVIRONMENTAL SUSTAINABILITY			
A.	**Energy Resource Productivity**			
A.1	Energy Efficiency Score	59.75	2.00	8
A.2	Performance of Clean Energy (Contracted Capacity/Potential) in %	17.98	1.59	4
A.3	Power intensity (kWh/GDP in 1000 INR)-Data	8.04	1.18	20

No.	Indicator	Value	Score	Rank
B. Decarbonisation				
B.1	Number of EV Charging Stations	2380	1.00	1
B.2	CO2 saved from LED Bulbs per 1000 population (in tonnes)	27.70	0.76	15
B.3	% of Forest & Tree Cover (Forest Cover w.r.t total area)	9.96	0.17	25
C. Emissions and Pollution				
C.1	Power Emissions Intensity (gco2_per_kWh)	764.86	0.19	23
C.2	Air Quality Index	135.40	0.44	27
C.3	EV Penetration over diesel and petrol vehicles (%)	11.62	1.16	5
STATE CONTEXT				
A. Macroeconomic Environment				
A.1	Growth rate of GSDP	5.34	2.35	12
A.2	FDI Equity Inflows (INR Cr.)	2762.15	0.07	7
A.3	State Rating on Start-up Index	69	1.67	16
B. Regulations, Institutions & Governance				
B.1	Multidimensional Poverty Index (Score)	0.10	0.72	25
B.2	SDG Index (Score)	67	1.36	18
C. Stability for Investment & Innovation				
C.1	Innovation Score (as per India Innovation Index)	14.22	1.16	13
C.2	Logistics Index (Index Scores)	90	3.00	3
C.3	State With RE policy	1	2.00	8
C.4	Investment Opportunities (in USD Billion)	246.63	2.34	2

Uttar Pradesh has placed itself in the Category B of the current study. The state has performed moderately in Viability of Energy/ Electricity Systems indicator. It has taken 23rd place in Energy Security. Uttar Pradesh could hold a position only beyond the top 20 in Energy Equity. The performance is moderate across the indicators. Uttar Pradesh is developing all 17 municipal civic bodies as solar cities. This initiative aims to provide affordable and sustainable power to urban areas.

It holds 20th spot in Environmental sustainability dimensions. It has a large scope for improvement in Decarbonisations and Emissions & Pollution indicators. Still, Uttar Pradesh is committed to reducing carbon emissions and promoting sustainable development. Uttar Pradesh has introduced a Green Hydrogen policy aimed at promoting the use of green hydrogen as a clean industrial fuel.

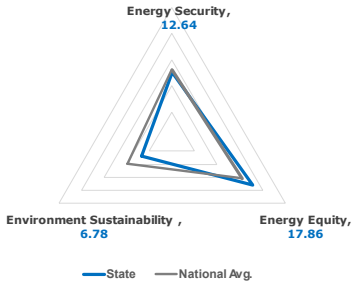
State context is the only dimensions where the state got into the top ten positions. Stability for Investment & Innovation has been its KPI, which stands 3rd in the indicator. Buyers of electric vehicles in Uttar Pradesh can avail a subsidy of up to 100% on the purchase price. The state government also offers benefits like exemption from road tax and registration fees for electric vehicle buyers. The state is integrating smart grids with urban planning principles to create energy-efficient cities.

West Bengal

21
Rank

46.67
Overall Score

Dimension	Score	Rank
Energy Security	12.64	18
Energy Equity	17.86	5
Environmental Sustainability	6.78	25
State Context	9.39	22



Note – Dimension-wise scores are out of 25

No.	Indicator	Value	Score	Rank
	ENERGY SECURITY			
A.	**Electricity Diversity and Power Supply Position**			
A.1	Diversity of Electricity Contracted Capacity (EMCI Index)	0.34	0.83	24
A.2	Share of RE in Contracted Capacity (%)	19.73	0.27	23
A.3	Contracted generating capacity of Electricity (Growth Rate in %)	-0.34	0.38	25
A.4	Electricity consumption per capita (in kWh)	819	0.00	19
A.5	Electricity not supplied (Deficit) in %	0.10	1.02	7
A.6	Contracted Capacity / Peak Demand	0.94	0.04	27
A.7	Number of petrol & gas station / Area of State	0.04	0.36	10
A.8	RE Potential (estimated in GW)	10.48	0.02	22
B.	**Viability of Energy/Electricity Systems in the State**			
B.1	AT & C Losses (in %)	15.58	3.34	12
B.2	ACS-ARR (Cash Adjusted Gap)	0.24	3.14	10
B.3	Average Hours of Supply- Agriculture (Mins/day)	1350	1.90	7
B.4	Availability of Oil & Gas pipeline in state	1.00	1.03	1
	ENERGY EQUITY			
A.	**Energy Access**			
A.1	Access to Electricity %	100	2.58	5
A.2	LPG + PNG (Domestic) Connections against number of HHs (%)	106.03	0.94	19
B.	**Affordability**			
B.1	ACS	6.28	3.00	9
B.2	LPG Price (Rs. for 14.2 kg Cylinder) - Non-Subsidised / Per Capita income (1000)	10.41	0.72	20
B.3	Petrol Price in (Rs/litre) / Per capita income (1000)	1.31	0.69	23
B.4	Diesel Price in (Rs/litre) / Per Capita income (1000)	1.14	0.69	21
B.5	Cross Subsidisation (Industrial ABR/ ACS)	1.02	1.50	11
C.	**Performance of Utilities**			
C.1	PAT/Revenue	0.02	2.12	4
C.2	Overdues/ Cost of Power	0.35	1.81	20
C.3	Payables for Power Purchase (Days)	143	1.73	16
C.4	Tariff Subsidy Billed / Total Revenue	0.04	2.50	1
	ENVIRONMENTAL SUSTAINABILITY			
A.	**Energy Resource Productivity**			
A.1	Energy Efficiency Score	20.75	0.55	17
A.2	Performance of Clean Energy (Contracted Capacity/Potential) in %	7.83	0.71	8
A.3	Power intensity (kWh/GDP in 1000 INR)-Data	4.48	2.31	10

No.	Indicator	Value	Score	Rank
B. Decarbonisation				
B.1	Number of EV Charging Stations	820	0.35	10
B.2	CO2 saved from LED Bulbs per 1000 population (in tonnes)	9.80	0.14	25
B.3	% of Forest & Tree Cover (Forest Cover w.r.t total area)	22.28	0.79	19
C. Emissions and Pollution				
C.1	Power Emissions Intensity (gco2_per_kWh)	782.95	0.13	25
C.2	Air Quality Index	76.72	1.36	12
C.3	EV Penetration over diesel and petrol vehicles (%)	4.45	0.44	19
STATE CONTEXT				
A. Macroeconomic Environment				
A.1	Growth rate of GSDP	4.12	1.79	18
A.2	FDI Equity Inflows (INR Cr.)	1501.33	0.04	10
A.3	State Rating on Start-up Index	NA	NA	NA
B. Regulations, Institutions & Governance				
B.1	Multidimensional Poverty Index (Score)	0.05	1.44	15
B.2	SDG Index (Score)	70	1.83	17
C. Stability for Investment & Innovation				
C.1	Innovation Score (as per India Innovation Index)	12.98	0.74	19
C.2	Logistics Index (Index Scores)	70	0.00	19
C.3	State With RE policy	1	2.06	2
C.4	Investment Opportunities (in USD Billion)	173.00	1.50	8

West Bengal, located in eastern India, is an important state with a diverse economy, including agriculture, services, and a growing urban sector. West Bengal falls under Category B in NETI 2024, ranking below the top performers.

West Bengal is in the bottom ten in energy security; however, the total dimension rank is 4 points away from the highest rank. 90% of the score came from the Viability of Energy/ Electricity Systems in the State indicator. Electricity Diversity and Power Supply positions need vital reforms in West Bengal.

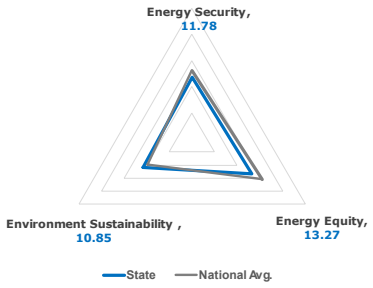
In Energy equity, West Bengal has taken a leap, where it is a top 5 performers state. Even if it didn't top in any indicator, the final score remains very close to the top-ranking state. Under the "Green Energy for All" initiative, the state has been promoting decentralized solar power solutions.
Environmental sustainability and state context have seen a downfall with the rank falling in the bottom 10 among all states. All 3 indicators need adequate improvement.

Manipur

22
Rank

45.93
Overall Score

Dimension	Score	Rank
Energy Security	11.78	22
Energy Equity	13.27	25
Environmental Sustainability	10.85	11
State Context	10.03	21



Note – Dimension-wise scores are out of 25

No.	Indicator	Value	Score	Rank
	ENERGY SECURITY			
A.	**Electricity Diversity and Power Supply Position**			
A.1	Diversity of Electricity Contracted Capacity (EMCI Index)	0.76	2.76	2
A.2	Share of RE in Contracted Capacity (%)	39.27	0.73	18
A.3	Contracted generating capacity of Electricity (Growth Rate in %)	0.84	0.49	22
A.4	Electricity consumption per capita (in kWh)	354	0.00	27
A.5	Electricity not supplied (Deficit) in %	1.60	0.83	25
A.6	Contracted Capacity / Peak Demand	1.05	0.08	23
A.7	Number of petrol & gas station / Area of State	0.01	0.07	27
A.8	RE Potential (estimated in GW)	11.41	0.03	21
B.	**Viability of Energy/Electricity Systems in the State**			
B.1	AT & C Losses (in %)	13.82	3.48	9
B.2	ACS-ARR (Cash Adjusted Gap)	1.02	2.03	22
B.3	Average Hours of Supply- Agriculture (Mins/day)	1015	1.29	14
B.4	Availability of Oil & Gas pipeline in state	0.00	0.00	18
	ENERGY EQUITY			
A.	**Energy Access**			
A.1	Access to Electricity %	100	2.56	7
A.2	LPG + PNG (Domestic) Connections against number of HHs (%)	110.50	1.06	16
B.	**Affordability**			
B.1	ACS	8.26	1.00	25
B.2	LPG Price (Rs. for 14.2 kg Cylinder) - Non-Subsidised / Per Capita income (1000)	15.85	0.49	26
B.3	Petrol Price in (Rs/litre) / Per capita income (1000)	1.65	0.56	26
B.4	Diesel Price in (Rs/litre) / Per Capita income (1000)	1.42	0.58	24
B.5	Cross Subsidisation (Industrial ABR/ ACS)	0.93	1.63	8
C.	**Performance of Utilities**			
C.1	PAT/Revenue	-0.16	1.40	22
C.2	Overdues/ Cost of Power	0.28	1.95	16
C.3	Payables for Power Purchase (Days)	104	1.95	11
C.4	Tariff Subsidy Billed / Total Revenue	NA	NA	NA
	ENVIRONMENTAL SUSTAINABILITY			
A.	**Energy Resource Productivity**			
A.1	Energy Efficiency Score	6.50	0.00	28
A.2	Performance of Clean Energy (Contracted Capacity/Potential) in %	0.18	0.00	28
A.3	Power intensity (kWh/GDP in 1000 INR)-Data	3.41	2.63	5

No.	Indicator	Value	Score	Rank
B. Decarbonisation				
B.1	Number of EV Charging Stations	57	0.02	22
B.2	CO2 saved from LED Bulbs per 1000 population (in tonnes)	9.66	0.13	26
B.3	% of Forest & Tree Cover (Forest Cover w.r.t total area)	75.22	3.46	5
C. Emissions and Pollution				
C.1	Power Emissions Intensity (gco2_per_kWh)	24.32	3.08	7
C.2	Air Quality Index	75.00	1.38	11
C.3	EV Penetration over diesel and petrol vehicles (%)	1.68	0.15	22
STATE CONTEXT				
A. Macroeconomic Environment				
A.1	Growth rate of GSDP	3.49	1.45	24
A.2	FDI Equity Inflows (INR Cr.)	0.00	0.00	25
A.3	State Rating on Start-up Index	69	1.71	14
B. Regulations, Institutions & Governance				
B.1	Multidimensional Poverty Index (Score)	0.03	1.64	10
B.2	SDG Index (Score)	72	2.10	14
C. Stability for Investment & Innovation				
C.1	Innovation Score (as per India Innovation Index)	19.37	3.08	1
C.2	Logistics Index (Index Scores)	70	0.00	19
C.3	State With RE policy	0	0.00	22
C.4	Investment Opportunities (in USD Billion)	54.72	0.05	24

Manipur has managed to get into Category B of NETI 2024 as it stands 22nd and 25th in Energy Security and Energy Equity dimensions respectively. Environmental Sustainability is one dimension in which the state has improved and positioned itself in 11th spot. Manipur Renewable Energy Development Agency (MANIREDA), was established to promote the use of renewable energy. The agency aims to ensure energy security by generating grid-grade power through renewable sources.

Manipur is also among the top 11 performers in the environmental sustainability dimension. The Hydro Power Policy focuses on enhancing the state's overall generation capacity, primarily through hydropower projects. It encourages the participation of independent power producers and private developers. The state has implemented various solar power projects, including solar water pumps and solar rooftop systems, to make RE accessible to all sections of society.

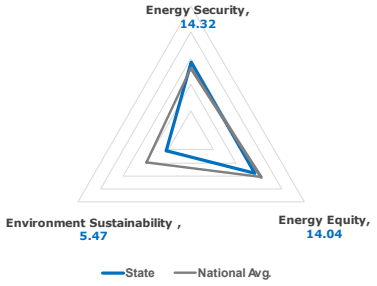
In the State context, Manipur is in the 21st position performing moderately across indicators. The Forest Department aims to conserve natural resources, increase forest cover, and promote ecotourism. Efforts are made to involve local communities in forest management and planning. Manipur has been proactive in implementing policies to address the key Energy and Environmental indices. The outcomes of such policies are expected to reflect their performance in future.

Madhya Pradesh

23
Rank

45.17
Overall Score

Dimension	Score	Rank
Energy Security	14.32	11
Energy Equity	14.04	23
Environmental Sustainability	5.47	27
State Context	11.34	17



Note – Dimension-wise scores are out of 25

No.	Indicator	Value	Score	Rank
ENERGY SECURITY				
A.	**Electricity Diversity and Power Supply Position**			
A.1	Diversity of Electricity Contracted Capacity (EMCI Index)	0.54	1.69	15
A.2	Share of RE in Contracted Capacity (%)	40.23	0.73	17
A.3	Contracted generating capacity of Electricity (Growth Rate in %)	2.67	0.63	17
A.4	Electricity consumption per capita (in kWh)	1230	1.00	15
A.5	Electricity not supplied (Deficit) in %	0.20	0.98	16
A.6	Contracted Capacity / Peak Demand	1.51	0.26	15
A.7	Number of petrol & gas station / Area of State	0.02	0.19	16
A.8	RE Potential (estimated in GW)	123.24	0.29	6
B.	**Viability of Energy/Electricity Systems in the State**			
B.1	AT & C Losses (in %)	20.55	2.79	18
B.2	ACS-ARR (Cash Adjusted Gap)	-0.46	4.00	1
B.3	Average Hours of Supply- Agriculture (Mins/day)	976	1.19	20
B.4	Availability of Oil & Gas pipeline in state	1.00	1.00	5
ENERGY EQUITY				
A.	**Energy Access**			
A.1	Access to Electricity %	100	2.50	13
A.2	LPG + PNG (Domestic) Connections against number of HHs (%)	108.57	0.98	18
B.	**Affordability**			
B.1	ACS	5.98	3.00	8
B.2	LPG Price (Rs. for 14.2 kg Cylinder) - Non-Subsidised / Per Capita income (1000)	12.17	0.63	24
B.3	Petrol Price in (Rs/litre) / Per capita income (1000)	1.60	0.57	25
B.4	Diesel Price in (Rs/litre) / Per Capita income (1000)	1.38	0.58	26
B.5	Cross Subsidisation (Industrial ABR/ ACS)	1.35	0.94	24
C.	**Performance of Utilities**			
C.1	PAT/Revenue	-0.05	1.77	13
C.2	Overdues/ Cost of Power	0.57	1.31	24
C.3	Payables for Power Purchase (Days)	207	1.30	20
C.4	Tariff Subsidy Billed / Total Revenue	0.44	0.72	20
ENVIRONMENTAL SUSTAINABILITY				
A.	**Energy Resource Productivity**			
A.1	Energy Efficiency Score	22.25	0.59	15
A.2	Performance of Clean Energy (Contracted Capacity/Potential) in %	6.71	0.58	13
A.3	Power intensity (kWh/GDP in 1000 INR)-Data	11.05	0.29	27

No.	Indicator	Value	Score	Rank
B. Decarbonisation				
B.1	Number of EV Charging Stations	1055	0.44	7
B.2	CO2 saved from LED Bulbs per 1000 population (in tonnes)	20.96	0.52	19
B.3	% of Forest & Tree Cover (Forest Cover w.r.t total area)	27.81	1.04	16
C. Emissions and Pollution				
C.1	Power Emissions Intensity (gco2_per_kWh)	729.91	0.32	21
C.2	Air Quality Index	97.59	1.00	20
C.3	EV Penetration over diesel and petrol vehicles (%)	6.71	0.66	16
STATE CONTEXT				
A. Macroeconomic Environment				
A.1	Growth rate of GSDP	3.98	1.67	22
A.2	FDI Equity Inflows (INR Cr.)	195.26	0.00	17
A.3	State Rating on Start-up Index	69	1.67	16
B. Regulations, Institutions & Governance				
B.1	Multidimensional Poverty Index (Score)	0.09	0.89	24
B.2	SDG Index (Score)	67	1.36	18
C. Stability for Investment & Innovation				
C.1	Innovation Score (as per India Innovation Index)	12.74	0.63	21
C.2	Logistics Index (Index Scores)	80	1.50	15
C.3	State With RE policy	1	2.00	8
C.4	Investment Opportunities (in USD Billion)	186.06	1.61	7

Madhya Pradesh sneaks into Category B of NETI 2024. In terms of Energy Security, Madhya Pradesh has improved significantly and is among the top 11 performers in that dimension, with Viability of Energy/ Electricity Systems being its KPI, securing 3rd spot in the indicator.

The state can improve a lot in Energy equity dimension, as it positions itself only in the 23rd position. In terms of Environmental sustainability, Madhya Pradesh places itself only among the final two states having a huge scope for improvement in the years to come. Net-Metered RE application policy encourages the use of renewable energy sources, particularly solar energy, by allowing consumers to generate their own electricity and feed excess back into the grid. In the State context dimensions, it holds 17th spot. There are several dimensions in which the state could catch up.

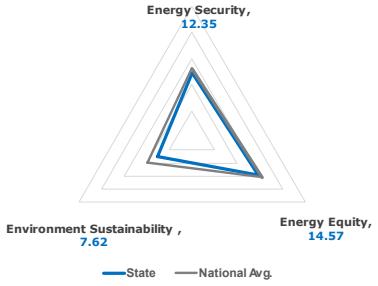
Decentralized RE Systems Policy promotes the development of small-scale renewable energy projects, such as rooftop solar panels, to enhance energy security and reduce dependence on fossil fuels. The state's Renewable Energy Policy focuses on establishing Madhya Pradesh as a renewable energy hub, facilitating large-scale adoption of renewable energy and energy equity.

Chhattisgarh

24
Rank

42.35
Overall Score

Dimension	Score	Rank
Energy Security	12.35	20
Energy Equity	14.57	20
Environmental Sustainability	7.62	21
State Context	7.81	25



Note – Dimension-wise scores are out of 25

No.	Indicator	Value	Score	Rank
	ENERGY SECURITY			
A.	**Electricity Diversity and Power Supply Position**			
A.1	Diversity of Electricity Contracted Capacity (EMCI Index)	0.26	0.41	27
A.2	Share of RE in Contracted Capacity (%)	13.45	0.12	26
A.3	Contracted generating capacity of Electricity (Growth Rate in %)	0.49	0.44	23
A.4	Electricity consumption per capita (in kWh)	2117	1	7
A.5	Electricity not supplied (Deficit) in %	0.20	0.98	16
A.6	Contracted Capacity / Peak Demand	2.45	0.62	4
A.7	Number of petrol & gas station / Area of State	0.02	0.14	21
A.8	RE Potential (estimated in GW)	23.78	0.05	14
B.	**Viability of Energy/Electricity Systems in the State**			
B.1	AT & C Losses (in %)	16.14	3.19	14
B.2	ACS-ARR (Cash Adjusted Gap)	0.11	3.22	8
B.3	Average Hours of Supply- Agriculture (Mins/day)	1440	2.00	3
B.4	Availability of Oil & Gas pipeline in state	0.00	0.00	18
	ENERGY EQUITY			
A.	**Energy Access**			
A.1	Access to Electricity %	100	0.00	28
A.2	LPG + PNG (Domestic) Connections against number of HHs (%)	106.68	0.93	20
B.	**Affordability**			
B.1	ACS	5.46	3	4
B.2	LPG Price (Rs. for 14.2 kg Cylinder) - Non-Subsidised / Per Capita income (1000)	9.49	0.73	18
B.3	Petrol Price in (Rs/litre) / Per capita income (1000)	1.09	0.74	18
B.4	Diesel Price in (Rs/litre) / Per Capita income (1000)	1.01	0.72	19
B.5	Cross Subsidisation (Industrial ABR/ ACS)	1.08	1.36	16
C.	**Performance of Utilities**			
C.1	PAT/Revenue	-0.06	1.76	15
C.2	Overdues/ Cost of Power	0.32	1.83	19
C.3	Payables for Power Purchase (Days)	116	1.83	15
C.4	Tariff Subsidy Billed / Total Revenue	0.25	1.56	14
	ENVIRONMENTAL SUSTAINABILITY			
A.	**Energy Resource Productivity**			
A.1	Energy Efficiency Score	27.25	0.78	13
A.2	Performance of Clean Energy (Contracted Capacity/Potential) in %	7.51	0.66	9
A.3	Power intensity (kWh/GDP in 1000 INR)-Data	9.10	0.87	24

No.	Indicator	Value	Score	Rank
B. Decarbonisation				
B.1	Number of EV Charging Stations	463	0.19	16
B.2	CO2 saved from LED Bulbs per 1000 population (in tonnes)	37.05	1.08	12
B.3	% of Forest & Tree Cover (Forest Cover w.r.t total area)	46.12	1.94	11
C. Emissions and Pollution				
C.1	Power Emissions Intensity (gco2_per_kWh)	806.01	0.03	26
C.2	Air Quality Index	74.44	1.35	13
C.3	EV Penetration over diesel and petrol vehicles (%)	7.33	0.72	12
STATE CONTEXT				
A. Macroeconomic Environment				
A.1	Growth rate of GSDP	5.65	2.50	6
A.2	FDI Equity Inflows (INR Cr.)	419.25	0.01	15
A.3	State Rating on Start-up Index	30	0.00	24
B. Regulations, Institutions & Governance				
B.1	Multidimensional Poverty Index (Score)	0.07	1.14	22
B.2	SDG Index (Score)	67	1.36	18
C. Stability for Investment & Innovation				
C.1	Innovation Score (as per India Innovation Index)	10.97	0.00	28
C.2	Logistics Index (Index Scores)	70	0.00	19
C.3	State With RE policy	1	2.00	8
C.4	Investment Opportunities (in USD Billion)	117.00	0.79	14

Chhattisgarh, situated in central India, is rich in coal resources, making it a critical player in India's coal-based energy production. Chhattisgarh is classified as a Category C state in NETI 2024, indicating the need for substantial improvement as it ranks among the bottom 10 states.

Chhattisgarh is in the bottom 10 in energy security; however, its dimension score is just 4 points away from the top score. The major portion of the dimension score comes from the Viability of Energy/ Electricity Systems in the State.

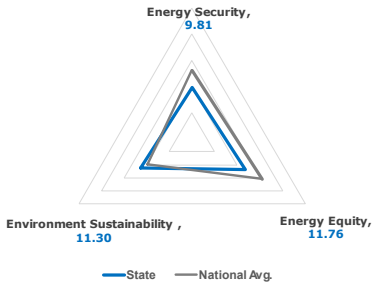
The state is secured 20th position in energy equity dimension. Affordability and Performance of Utilities are the KPIs, where Energy Access requires significant improvement. The government is implementing programs to enhance energy access in tribal areas, which constitute about 30% of the state's population. In the Environmental Sustainability and state context dimensions, the rank resembles the overall rank, where it comes under the bottom ten states. All three indicators require advancement since the dimension score is less than half of the highest scores.

Meghalaya

25
Rank

42.11
Overall Score

Dimension	Score	Rank
Energy Security	9.81	25
Energy Equity	11.76	27
Environmental Sustainability	11.30	9
State Context	9.24	23



Note – Dimension-wise scores are out of 25

No.	Indicator	Value	Score	Rank
ENERGY SECURITY				
A.	**Electricity Diversity and Power Supply Position**			
A.1	Diversity of Electricity Contracted Capacity (EMCI Index)	0.53	1.68	16
A.2	Share of RE in Contracted Capacity (%)	75.25	1.56	4
A.3	Contracted generating capacity of Electricity (Growth Rate in %)	1.63	0.56	21
A.4	Electricity consumption per capita (in kWh)	730	0.00	20
A.5	Electricity not supplied (Deficit) in %	8.30	0.00	28
A.6	Contracted Capacity / Peak Demand	1.61	0.30	14
A.7	Number of petrol & gas station / Area of State	0.01	0.11	24
A.8	RE Potential (estimated in GW)	8.24	0.02	24
B.	**Viability of Energy/Electricity Systems in the State**			
B.1	AT & C Losses (in %)	23.97	2.55	21
B.2	ACS-ARR (Cash Adjusted Gap)	1.41	1.48	25
B.3	Average Hours of Supply- Agriculture (Mins/day)	1015	1.29	14
B.4	Availability of Oil & Gas pipeline in state	0.00	0.00	18
ENERGY EQUITY				
A.	**Energy Access**			
A.1	Access to Electricity %	100	2.56	7
A.2	LPG + PNG (Domestic) Connections against number of HHs (%)	72.09	0.00	28
B.	**Affordability**			
B.1	ACS	5.56	3.00	3
B.2	LPG Price (Rs. for 14.2 kg Cylinder) - Non-Subsidised / Per Capita income (1000)	11.68	0.66	23
B.3	Petrol Price in (Rs/litre) / Per capita income (1000)	1.29	0.69	22
B.4	Diesel Price in (Rs/litre) / Per Capita income (1000)	1.17	0.68	23
B.5	Cross Subsidisation (Industrial ABR/ ACS)	1.55	0.67	26
C.	**Performance of Utilities**			
C.1	PAT/Revenue	-0.14	1.49	20
C.2	Overdues/ Cost of Power	0.75	0.95	25
C.3	Payables for Power Purchase (Days)	273	0.95	21
C.4	Tariff Subsidy Billed / Total Revenue	NA	NA	NA
ENVIRONMENTAL SUSTAINABILITY				
A.	**Energy Resource Productivity**			
A.1	Energy Efficiency Score	21.50	0.58	16
A.2	Performance of Clean Energy (Contracted Capacity/Potential) in %	1.18	0.09	25
A.3	Power intensity (kWh/GDP in 1000 INR)-Data	5.77	1.91	13

No.	Indicator	Value	Score	Rank
B. Decarbonisation				
B.1	Number of EV Charging Stations	52	0.02	24
B.2	CO2 saved from LED Bulbs per 1000 population (in tonnes)	13.44	0.27	23
B.3	% of Forest & Tree Cover (Forest Cover w.r.t total area)	78.86	3.64	3
C. Emissions and Pollution				
C.1	Power Emissions Intensity (gco2_per_kWh)	24.00	3.08	6
C.2	Air Quality Index	61.29	1.59	7
C.3	EV Penetration over diesel and petrol vehicles (%)	1.45	0.13	24
STATE CONTEXT				
A. Macroeconomic Environment				
A.1	Growth rate of GSDP	3.63	1.53	23
A.2	FDI Equity Inflows (INR Cr.)	0.02	0.00	23
A.3	State Rating on Start-up Index	89	2.59	7
B. Regulations, Institutions & Governance				
B.1	Multidimensional Poverty Index (Score)	0.13	0.35	27
B.2	SDG Index (Score)	63	0.84	25
C. Stability for Investment & Innovation				
C.1	Innovation Score (as per India Innovation Index)	16.00	1.84	6
C.2	Logistics Index (Index Scores)	70	0.00	19
C.3	State With RE policy	1	2.05	4
C.4	Investment Opportunities (in USD Billion)	53.75	0.04	26

Meghalaya is in Category C of the NETI 2024. The state is among the last pool of Energy secure states, needing lot of upscaling in electricity diversity and power supply position. Energy equity dimension also looks bitter, with only around 2/5 of its scoring potential being leveraged in the dimension. Electricity diversity, Energy access are areas which are clearly pulling down the state's current energy trilemma status.

Meghalaya's SDG Initiatives has formed an SDG Cell and developed a digitized dashboard for monitoring progress on SDG indicators to coordinate and implement SDGs, including organizing capacity-building programs and preparing progress reports. In state context, newer Regulations and Stability for Investment & Innovation are indicators that must be addressed in the upcoming years.

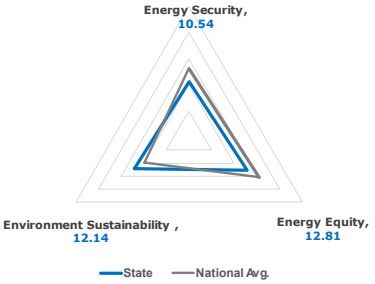
Meghalaya's policies State Organic and Natural farming policy 2023 promotes organic and natural farming methods that are free from chemicals and pesticides that aim to ensure long-term soil health and reduce environmental pollution. It also pushes the state into the top 10 performers in the Environmental sustainability dimension. With Invest Meghalaya, the state is also investing in RE sources like solar, wind, and biomass to diversify its energy mix and promote sustainability.

Nagaland

26
Rank

41.77
Overall Score

Dimension	Score	Rank
Energy Security	10.54	24
Energy Equity	12.81	26
Environmental Sustainability	12.14	6
State Context	6.28	27



Note – Dimension-wise scores are out of 25

No.	Indicator	Value	Score	Rank
	ENERGY SECURITY			
A.	**Electricity Diversity and Power Supply Position**			
A.1	Diversity of Electricity Contracted Capacity (EMCI Index)	0.68	2.37	4
A.2	Share of RE in Contracted Capacity (%)	49.07	0.95	11
A.3	Contracted generating capacity of Electricity (Growth Rate in %)	4.13	0.78	12
A.4	Electricity consumption per capita (in kWh)	445	0.00	24
A.5	Electricity not supplied (Deficit) in %	0.00	1.03	5
A.6	Contracted Capacity / Peak Demand	1.20	0.14	20
A.7	Number of petrol & gas station / Area of State	0.01	0.10	25
A.8	RE Potential (estimated in GW)	7.85	0.02	25
B.	**Viability of Energy/Electricity Systems in the State**			
B.1	AT & C Losses (in %)	45.81	0.54	27
B.2	ACS-ARR (Cash Adjusted Gap)	0.14	3.26	7
B.3	Average Hours of Supply- Agriculture (Mins/day)	1015	1.29	14
B.4	Availability of Oil & Gas pipeline in state	0.00	0.00	18
	ENERGY EQUITY			
A.	**Energy Access**			
A.1	Access to Electricity %	100	2.56	7
A.2	LPG + PNG (Domestic) Connections against number of HHs (%)	87.74	0.43	27
B.	**Affordability**			
B.1	ACS	8.22	1.00	24
B.2	LPG Price (Rs. for 14.2 kg Cylinder) - Non-Subsidised / Per Capita income (1000)	10.75	0.70	21
B.3	Petrol Price in (Rs/litre) / Per capita income (1000)	1.27	0.69	21
B.4	Diesel Price in (Rs/litre) / Per Capita income (1000)	1.12	0.70	20
B.5	Cross Subsidisation (Industrial ABR/ ACS)	0.78	1.86	3
C.	**Performance of Utilities**			
C.1	PAT/Revenue	0.04	2.17	3
C.2	Overdues/ Cost of Power	0.00	2.56	4
C.3	Payables for Power Purchase (Days)	NA	NA	NA
C.4	Tariff Subsidy Billed / Total Revenue	0.62	0.00	21
	ENVIRONMENTAL SUSTAINABILITY			
A.	**Energy Resource Productivity**			
A.1	Energy Efficiency Score	8.50	0.08	25
A.2	Performance of Clean Energy (Contracted Capacity/Potential) in %	0.48	0.03	27
A.3	Power intensity (kWh/GDP in 1000 INR)-Data	3.54	2.59	7

No.	Indicator	Value	Score	Rank
B. Decarbonisation				
B.1	Number of EV Charging Stations	37	0.01	26
B.2	CO2 saved from LED Bulbs per 1000 population (in tonnes)	51.06	1.61	7
B.3	% of Forest & Tree Cover (Forest Cover w.r.t total area)	76.10	3.50	4
C. Emissions and Pollution				
C.1	Power Emissions Intensity (gco2_per_kWh)	23.99	3.08	5
C.2	Air Quality Index	83.00	1.25	14
C.3	EV Penetration over diesel and petrol vehicles (%)	0.24	0.00	26
STATE CONTEXT				
A. Macroeconomic Environment				
A.1	Growth rate of GSDP	4.16	1.80	17
A.2	FDI Equity Inflows (INR Cr.)	0.00	0.00	26
A.3	State Rating on Start-up Index	49	0.84	21
B. Regulations, Institutions & Governance				
B.1	Multidimensional Poverty Index (Score)	0.07	1.22	19
B.2	SDG Index (Score)	63	0.84	25
C. Stability for Investment & Innovation				
C.1	Innovation Score (as per India Innovation Index)	11.00	0.01	27
C.2	Logistics Index (Index Scores)	80	1.538462	13
C.3	State With RE policy	0	0.00	22
C.4	Investment Opportunities (in USD Billion)	53.87	0.04	25

Nagaland is into the Category C of NETI 2024. In terms of Energy Security dimension, it has shown concrete change, making it the top improvement in the dimension. The state has been developing hydro power projects up to 10 MW to meet its energy demands.

In Energy equity the state has a larger scope for improvement, as it has managed a spot only among the last three. Efforts are also being made to electrify institutions, particularly in rural and remote areas. Nagaland is promoting decentralized renewable energy systems to ensure reliable energy access in schools and hospitals.

Environmental sustainability is one dimension in which Nagaland has a better performance index compared to the other energy dimensions. It stands 6th overall in the dimension. Decarbonisation is one of the indicators in which the state performs well across the states.

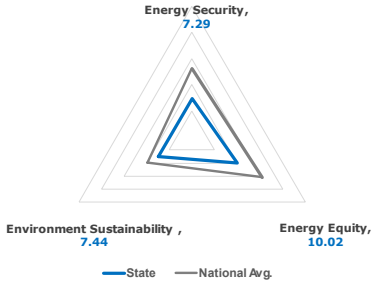
State context dimension, which includes Stability for Innovation & investment indicator, is another dimension in which Nagaland can improve a lot. The State Forest and Environment policy focuses on forest conservation, biodiversity protection, and sustainable land use which measures wildlife conservation, forest fire control, and promoting ecotourism. Nagaland has a comprehensive plan to conserve its rich biodiversity, addressing threats and promoting sustainable use of biological resources. The goal is to enhance energy security by supplementing rural energy needs and strengthening the grid system as well.

Jharkhand

27
Rank

31.78
Overall Score

Dimension	Score	Rank
Energy Security	7.29	28
Energy Equity	10.02	28
Environmental Sustainability	7.44	23
State Context	7.03	26



Note – Dimension-wise scores are out of 25

No.	Indicator	Value	Score	Rank
	ENERGY SECURITY			
A.	**Electricity Diversity and Power Supply Position**			
A.1	Diversity of Electricity Contracted Capacity (EMCI Index)	0.25	0.42	26
A.2	Share of RE in Contracted Capacity (%)	13.73	0.13	25
A.3	Contracted generating capacity of Electricity (Growth Rate in %)	2.55	0.64	16
A.4	Electricity consumption per capita (in kWh)	992	0.00	16
A.5	Electricity not supplied (Deficit) in %	4.00	0.53	27
A.6	Contracted Capacity / Peak Demand	1.38	0.21	17
A.7	Number of petrol & gas station / Area of State	0.02	0.22	15
A.8	RE Potential (estimated in GW)	18.87	0.04	15
B.	**Viability of Energy/Electricity Systems in the State**			
B.1	AT & C Losses (in %)	30.28	1.98	25
B.2	ACS-ARR (Cash Adjusted Gap)	2.47	0.00	28
B.3	Average Hours of Supply- Agriculture (Mins/day)	1200	1.63	9
B.4	Availability of Oil & Gas pipeline in state	1.00	1.03	1
	ENERGY EQUITY			
A.	**Energy Access**			
A.1	Access to Electricity %	100	2.58	5
A.2	LPG + PNG (Domestic) Connections against number of HHs (%)	94.75	0.63	25
B.	**Affordability**			
B.1	ACS	7.36	2.00	18
B.2	LPG Price (Rs. for 14.2 kg Cylinder) - Non-Subsidised / Per Capita income (1000)	13.23	0.60	25
B.3	Petrol Price in (Rs/litre) / Per capita income (1000)	1.50	0.62	24
B.4	Diesel Price in (Rs/litre) / Per Capita income (1000)	1.42	0.58	25
B.5	Cross Subsidisation (Industrial ABR/ ACS)	0.90	1.69	5
C.	**Performance of Utilities**			
C.1	PAT/Revenue	-0.52	0.00	28
C.2	Overdues/ Cost of Power	1.19	0.00	27
C.3	Payables for Power Purchase (Days)	433	0.00	23
C.4	Tariff Subsidy Billed / Total Revenue	0.26	1.55	15
	ENVIRONMENTAL SUSTAINABILITY			
A.	**Energy Resource Productivity**			
A.1	Energy Efficiency Score	39.00	1.26	10
A.2	Performance of Clean Energy (Contracted Capacity/Potential) in %	1.21	0.09	24
A.3	Power intensity (kWh/GDP in 1000 INR)-Data	3.79	2.52	8

No.	Indicator	Value	Score	Rank
B. Decarbonisation				
B.1	Number of EV Charging Stations	301	0.13	18
B.2	CO2 saved from LED Bulbs per 1000 population (in tonnes)	35.66	1.07	13
B.3	% of Forest & Tree Cover (Forest Cover w.r.t total area)	34.38	1.41	14
C. Emissions and Pollution				
C.1	Power Emissions Intensity (gco2_per_kWh)	814.58	0.00	27
C.2	Air Quality Index	134.00	0.47	26
C.3	EV Penetration over diesel and petrol vehicles (%)	4.88	0.49	18
STATE CONTEXT				
A. Macroeconomic Environment				
A.1	Growth rate of GSDP	4.45	1.96	14
A.2	FDI Equity Inflows (INR Cr.)	90.30	0.00	18
A.3	State Rating on Start-up Index	NA	NA	NA
B. Regulations, Institutions & Governance				
B.1	Multidimensional Poverty Index (Score)	0.13	0.38	26
B.2	SDG Index (Score)	62	0.70	27
C. Stability for Investment & Innovation				
C.1	Innovation Score (as per India Innovation Index)	13.10	0.78	18
C.2	Logistics Index (Index Scores)	70	0.00	19
C.3	State With RE policy	1	2.06	2
C.4	Investment Opportunities (in USD Billion)	143.65	1.14	11

Jharkhand, located in the eastern region of India, is rich in coal reserves, making it a significant contributor to India's thermal power generation. Jharkhand falls under Category C in NETI 2024, placing it among the states that require significant improvement.

In terms of energy security, Jharkhand remained the last of every state, where both the Electricity Diversity and Power Supply Position Viability of Energy/ Electricity Systems in the State requires significant progress. Jharkhand is one of the largest coal-producing states in India. To overcome energy security issues Jharkhand is exploring options for RE expansion. It has a favourable climate for solar energy generation, with vast expanses of land suitable for solar parks.

The energy equity dimension remains a challenge, with only about 1/3rd of its scoring potential coming from this indicator. Indicators such as Energy Access and Performance of Utilities are significantly hindering the state's overall energy performance. In Environment Sustainability, strengthening Decarbonisation and Emissions and Pollution will be vital for ensuring sustained progress in the years ahead.

Within the state context, addressing key performance indicators like Macroeconomic Environment and Regulations, Institutions & Governance will be crucial. Jharkhand's Solar Policy 2022 outlines an ambitious goal of achieving 4,000 MW of solar capacity by 2027, marking a pivotal step towards sustainable energy development in the state.

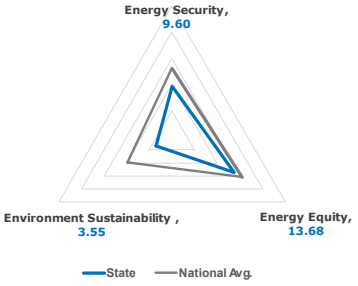
Jharkhand also benefits from an average solar radiation of 4.5 to 5.5 kWh/m², with over 300 sunny days each year. The Ministry of New and Renewable Energy has estimated the state's solar potential at 18.18 GW, the highest among its neighboring states. Coupled with significant opportunities for hydroelectric power generation and bioenergy, Jharkhand has the chance to shift away from fossil fuels and move towards a cleaner, greener future.

Bihar

28
Rank

30.57
Overall Score

Dimension	Score	Rank
Energy Security	9.60	26
Energy Equity	13.68	24
Environmental Sustainability	3.55	28
State Context	3.74	28



Note – Dimension-wise scores are out of 25

No.	Indicator	Value	Score	Rank
	ENERGY SECURITY			
A.	**Electricity Diversity and Power Supply Position**			
A.1	Diversity of Electricity Contracted Capacity (EMCI Index)	0.16	0.00	28
A.2	Share of RE in Contracted Capacity (%)	8.05	0.00	28
A.3	Contracted generating capacity of Electricity (Growth Rate in %)	8.08	1.10	4
A.4	Electricity consumption per capita (in kWh)	348	0.00	28
A.5	Electricity not supplied (Deficit) in %	1.50	0.82	26
A.6	Contracted Capacity / Peak Demand	0.98	0.05	25
A.7	Number of petrol & gas station / Area of State	0.04	0.39	8
A.8	RE Potential (estimated in GW)	17.19	0.04	16
B.	**Viability of Energy/Electricity Systems in the State**			
B.1	AT & C Losses (in %)	25.01	2.39	23
B.2	ACS-ARR (Cash Adjusted Gap)	0.18	3.13	11
B.3	Average Hours of Supply- Agriculture (Mins/day)	1260	1.68	8
B.4	Availability of Oil & Gas pipeline in state	0.00	0.00	18
	ENERGY EQUITY			
A.	**Energy Access**			
A.1	Access to Electricity %	100	2.50	13
A.2	LPG + PNG (Domestic) Connections against number of HHs (%)	100.94	0.78	23
B.	**Affordability**			
B.1	ACS	6.73	2.00	16
B.2	LPG Price (Rs. for 14.2 kg Cylinder) - Non-Subsidised / Per Capita income (1000)	28.00	0.00	28
B.3	Petrol Price in (Rs/litre) / Per capita income (1000)	3.27	0.00	28
B.4	Diesel Price in (Rs/litre) / Per Capita income (1000)	2.86	0.00	28
B.5	Cross Subsidisation (Industrial ABR/ ACS)	1.38	0.90	25
C.	**Performance of Utilities**			
C.1	PAT/Revenue	0.01	1.99	10
C.2	Overdues/ Cost of Power	0.28	1.90	17
C.3	Payables for Power Purchase (Days)	104	1.90	13
C.4	Tariff Subsidy Billed / Total Revenue	0.25	1.52	17
	ENVIRONMENTAL SUSTAINABILITY			
A.	**Energy Resource Productivity**			
A.1	Energy Efficiency Score	10.25	0.14	23
A.2	Performance of Clean Energy (Contracted Capacity/Potential) in %	3.09	0.26	18
A.3	Power intensity (kWh/GDP in 1000 INR)-Data	7.01	1.49	17

No.	Indicator	Value	Score	Rank
B. Decarbonisation				
B.1	Number of EV Charging Stations	465	0.19	15
B.2	CO2 saved from LED Bulbs per 1000 population (in tonnes)	15.91	0.35	22
B.3	% of Forest & Tree Cover (Forest Cover w.r.t total area)	10.52	0.19	24
C. Emissions and Pollution				
C.1	Power Emissions Intensity (gco2_per_kWh)	815.14	0.00	28
C.2	Air Quality Index	164.39	0.00	28
C.3	EV Penetration over diesel and petrol vehicles (%)	9.36	0.93	8
STATE CONTEXT				
A. Macroeconomic Environment				
A.1	Growth rate of GSDP	4.02	1.69	20
A.2	FDI Equity Inflows (INR Cr.)	1.32	0.00	22
A.3	State Rating on Start-up Index	49	0.81	22
B. Regulations, Institutions & Governance				
B.1	Multidimensional Poverty Index (Score)	0.16	0.00	28
B.2	SDG Index (Score)	57	0.00	28
C. Stability for Investment & Innovation				
C.1	Innovation Score (as per India Innovation Index)	11.58	0.22	23
C.2	Logistics Index (Index Scores)	70	0.00	19
C.3	State With RE policy	0	0.00	22
C.4	Investment Opportunities (in USD Billion)	136.12	1.02	12

Bihar, located in eastern India, falls under Category C in the NETI 2024 rankings, indicating a need for significant improvements in its energy performance to ascend the rankings.

Bihar remains among the bottom 10 states in energy security. A key performance indicator for this dimension is the viability of energy and electricity systems within the state, where 75% of the score comes from this indicator.

Bihar continues to face challenges in energy equity, remaining in the bottom 10 states. The performance of Utilities scored comparatively better among other indicators. Bihar ranks among the bottom 10 states in environmental sustainability dimensions as well. Energy Resource Productivity, Decarbonisation, and Emissions and Pollution require substantial progress. Bihar's overall state context dimensions score places it in the bottom 10, indicating systemic challenges in infrastructure, policy implementation, and socio-economic factors that impact its energy sector performance.

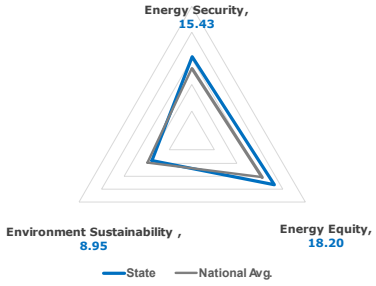
UTs Profile

Delhi

1
Rank

61.88
Overall Score

Dimension	Score	Rank
Energy Security	15.43	4
Energy Equity	18.20	1
Environmental Sustainability	8.95	5
State Context	19.30	1



Note – Dimension-wise scores are out of 25

No.	Indicator	Value	Score	Rank
ENERGY SECURITY				
A.	**Electricity Diversity and Power Supply Position**			
A.1	Diversity of Electricity Contracted Capacity (EMCI Index)	0.59	2.04	4
A.2	Share of RE in Contracted Capacity (%)	15.81	0.27	6
A.3	Contracted generating capacity of Electricity (Growth Rate in %)	-1.58	0.00	8
A.4	Electricity consumption per capita (in kWh)	1848	0	3
A.5	Electricity not supplied (Deficit) in %	0.00	1.00	5
A.6	Contracted Capacity / Peak Demand	0.94	0.38	5
A.7	Number of petrol & gas station / Area of State	0.60	0.87	2
A.8	RE Potential (estimated in GW)	2.05	0.02	2
B.	**Viability of Energy/Electricity Systems in the State**			
B.1	AT & C Losses (in %)	7.12	3.62	3
B.2	ACS-ARR (Cash Adjusted Gap)	-0.05	4.00	4
B.3	Average Hours of Supply- Agriculture (Mins/day)	1440	2.00	3
B.4	Availability of Oil & Gas pipeline in state	1.00	1.00	3
ENERGY EQUITY				
A.	**Energy Access**			
A.1	Access to Electricity %	100	2.50	8
A.2	LPG + PNG (Domestic) Connections against number of HHs (%)	185.10	1.95	2
B.	**Affordability**			
B.1	ACS	7.62	4	6
B.2	LPG Price (Rs. for 14.2 kg Cylinder) - Domestic Non-Subsidised / Per Capita income (1000)	2.93	1.00	2
B.3	Petrol Price in (Rs/litre) / Per capita income (1000)	0.35	1.00	2
B.4	Diesel Price in (Rs/litre) / Per Capita income (1000)	0.32	1.00	2
B.5	Cross Subsidisation (Industrial ABR/ ACS)	1.30	0.00	8
C.	**Performance of Utilities**			
C.1	PAT/Revenue	0.06	2.50	4
C.2	Overdues/ Cost of Power	0.70	0.00	4
C.3	Payables for Power Purchase (Days)	0	2.50	1
C.4	Tariff Subsidy Billed / Total Revenue	0.09	2.22	2
ENVIRONMENTAL SUSTAINABILITY				
A.	**Energy Resource Productivity**			
A.1	Energy Efficiency Score	10.75	1.01	3
A.2	Performance of Clean Energy (Contracted Capacity/Potential) in %	18.48	0.20	4
A.3	Power intensity (kWh/GDP in 1000 INR)-Data	4.89	2.48	3

No.	Indicator	Value	Score	Rank
B. Decarbonisation				
B.1	Number of EV Charging Stations	229	1.00	1
B.2	CO2 saved from LED Bulbs per 1000 population (in tonnes)	64.27	0.59	5
B.3	% of Forest & Tree Cover (Forest Cover w.r.t total area)	25.04	0.62	5
C. Emissions and Pollution				
C.1	Power Emissions Intensity (gco2_per_kWh)	421.04	1.50	5
C.2	Air Quality Index	205.00	0.00	7
C.3	EV Penetration over diesel and petrol vehicles (%)	13.63	1.54	2
STATE CONTEXT				
A. Macroeconomic Environment				
A.1	Growth rate of GSDP	3.53	2.78	3
A.2	FDI Equity Inflows (INR Cr.)	53980.05	3.00	1
A.3	State Rating on Start-up Index	30	0.00	2
B. Regulations, Institutions & Governance				
B.1	Multidimensional Poverty Index (Score)	0.01	1.39	5
B.2	SDG Index (Score)	70	1.25	5
C. Stability for Investment & Innovation				
C.1	Innovation Score (as per India Innovation Index)	27.00	2.88	2
C.2	Logistics Index (Index Scores)	90	3	2
C.3	State With RE policy	1	2.00	3
C.4	Investment Opportunities (in USD Billion)	78.32	3.00	1

Delhi, the capital of India, is one of the most energy-intensive regions in the country due to its high population density, rapid urbanization, and extensive industrial and commercial activities. Delhi leads from the front among Union territories and overall, it comes 3rd overall when compared with the states. The city's extreme weather conditions, with hot summers and cold winters, drive high electricity demand. Delhi, not a major industrial hub, has several MSME industries that rely on electricity and fossil fuels. Delhi having adopted CNG extensively for public transport to reduce pollution is one of the largest CNG-based public transport systems in the world.

The capital region is in 4th place in the Energy security dimension, with Viability of Energy/Electricity systems being its key performance index and it bags the top spot when compared across all territories. The city's installed power generation capacity is around 2584 MW including purchases from other states. The city receives ample sunlight for about 300 days a year, making solar energy rooftops a viable option.

Delhi stands top in Energy equity dimensions as well. Affordable energy and Performance of Utilities indicators are key areas of performance for Delhi. The Delhi EV Policy 2020 aims to make EVs account for 25% of all new vehicle registrations by 2024 offering subsidies, waivers on road tax, and registration fees for EV buyers and plans to fully electrify its public transport by reducing emissions.

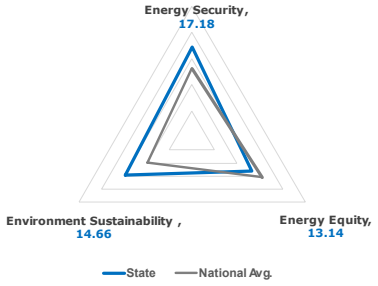
Delhi is committed to achieving the United Nations Sustainable Development Goals, particularly Affordable and Clean Energy, by ensuring universal access to reliable and modern energy services. Delhi ranks 5th in Environmental sustainability dimensions, with AQI in the metro city has always been a moot point and an obvious reason. In the last dimension, State/UT context, it holds the top notch again. Delhi tops in the State context dimension, with Stability for Investment & Innovation an obvious KPI for the territory, being the nation’s capital region.

Chandigarh

2
Rank

59.58
Overall Score

Dimension	Score	Rank
Energy Security	17.18	1
Energy Equity	13.14	6
Environmental Sustainability	14.66	1
State Context	14.60	2



Note – Dimension-wise scores are out of 25

No.	Indicator	Value	Score	Rank
ENERGY SECURITY				
A. Electricity Diversity and Power Supply Position				
A.1	Diversity of Electricity Contracted Capacity (EMCI Index)	0.68	2.80	2
A.2	Share of RE in Contracted Capacity (%)	72.48	2.20	2
A.3	Contracted generating capacity of Electricity (Growth Rate in %)	4.02	0.11	4
A.4	Electricity consumption per capita (in kWh)	1674	0	4
A.5	Electricity not supplied (Deficit) in %	0.00	1.12	3
A.6	Contracted Capacity / Peak Demand	0.60	0.07	7
A.7	Number of petrol & gas station / Area of State	0.51	0.81	3
A.8	RE Potential (estimated in GW)	0.00	0.00	8
B. Viability of Energy/Electricity Systems in the State				
B.1	AT & C Losses (in %)	13.31	3.29	4
B.2	ACS-ARR (Cash Adjusted Gap)	0.52	4.34	2
B.3	Average Hours of Supply- Agriculture (Mins/day)	1440	2.23	1
B.4	Availability of Oil & Gas pipeline in state	0.00	0.00	4
ENERGY EQUITY				
A. Energy Access				
A.1	Access to Electricity %	100	2.79	4
A.2	LPG + PNG (Domestic) Connections against number of HHs (%)	101.29	0.47	6
B. Affordability				
B.1	ACS	4.63	4	1
B.2	LPG Price (Rs. for 14.2 kg Cylinder) - Domestic Non-Subsidised / Per Capita income (1000)	3.33	1.07	1
B.3	Petrol Price in (Rs/litre) / Per capita income (1000)	0.39	1.07	1
B.4	Diesel Price in (Rs/litre) / Per Capita income (1000)	0.34	1.09	1
B.5	Cross Subsidisation (Industrial ABR/ ACS)	1.19	0.38	7
C. Performance of Utilities				
C.1	PAT/Revenue	-1.45	1.87	7
C.2	Overdues/ Cost of Power	NA	NA	NA
C.3	Payables for Power Purchase (Days)	NA	NA	NA
C.4	Tariff Subsidy Billed / Total Revenue	NA	NA	NA
ENVIRONMENTAL SUSTAINABILITY				
A. Energy Resource Productivity				
A.1	Energy Efficiency Score	24.50	3.35	1
A.2	Performance of Clean Energy (Contracted Capacity/Potential) in %	NA	NA	NA
A.3	Power intensity (kWh/GDP in 1000 INR)-Data	4.84	2.80	2

No.	Indicator	Value	Score	Rank
B. Decarbonisation				
B.1	Number of EV Charging Stations	16	0.07	4
B.2	CO2 saved from LED Bulbs per 1000 population (in tonnes)	46.64	0.38	6
B.3	% of Forest & Tree Cover (Forest Cover w.r.t total area)	40.51	1.57	4
C. Emissions and Pollution				
C.1	Power Emissions Intensity (gco2_per_kWh)	48.39	3.25	2
C.2	Air Quality Index	113.00	1.00	6
C.3	EV Penetration over diesel and petrol vehicles (%)	17.64	2.23	1
STATE CONTEXT				
A. Macroeconomic Environment				
A.1	Growth rate of GSDP	3.51	3.10	2
A.2	FDI Equity Inflows (INR Cr.)	256.28	0.09	2
A.3	State Rating on Start-up Index	30	0.00	2
B. Regulations, Institutions & Governance				
B.1	Multidimensional Poverty Index (Score)	0.02	1.37	6
B.2	SDG Index (Score)	77	3.35	1
C. Stability for Investment & Innovation				
C.1	Innovation Score (as per India Innovation Index)	27.88	3.35	1
C.2	Logistics Index (Index Scores)	90	3.351955	1
C.3	State With RE policy	0	0.00	4
C.4	Investment Opportunities (in USD Billion)	22.21	0.00	8

Chandigarh, the capital of Haryana and Punjab, is a well-planned city with a strong emphasis on solar power to meet growing demand. It ranked 2nd in the category of Union Territories.

It scored top ranks in energy security, and environmental sustainability, dimensions. In energy security, being the first rank among UTs, the overall score of Chandigarh surpassed the top-scored state. Both the indicators - Electricity Diversity and Power Supply Position and Viability of Energy/ Electricity Systems in the State performed exceptionally well, where both scored nearly uniform. Even though the energy equity rank has dropped, Affordability remains the KPI where 60% of the major contribution to the dimension score happened from this indicator, and Energy Access and Performance of Utilities need further advancement.

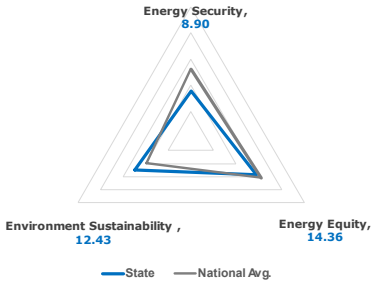
The environmental Sustainability dimension also remains first among all UTs, where Energy Resource Productivity and Emissions and Pollution secured uniform scores. Decarbonisation requires further progress. In the State context, Chandigarh is in the 2nd position with Stability for Investment & Innovation as the KPI.

Andaman & Nicobar

3
Rank

49.44
Overall Score

Dimension	Score	Rank
Energy Security	8.90	8
Energy Equity	14.36	4
Environmental Sustainability	12.43	2
State Context	13.75	3



Note – Dimension-wise scores are out of 25

No.	Indicator	Value	Score	Rank
	ENERGY SECURITY			
A.	**Electricity Diversity and Power Supply Position**			
A.1	Diversity of Electricity Contracted Capacity (EMCI Index)	0.30	0.46	7
A.2	Share of RE in Contracted Capacity (%)	27.50	0.66	4
A.3	Contracted generating capacity of Electricity (Growth Rate in %)	17.34	0.35	2
A.4	Electricity consumption per capita (in kWh)	932	0	8
A.5	Electricity not supplied (Deficit) in %	3.00	0.00	8
A.6	Contracted Capacity / Peak Demand	1.97	1.43	2
A.7	Number of petrol & gas station / Area of State	0.00	0.00	7
A.8	RE Potential (estimated in GW)	1.27	0.01	3
B.	**Viability of Energy/Electricity Systems in the State**			
B.1	AT & C Losses (in %)	19.81	2.37	6
B.2	ACS-ARR (Cash Adjusted Gap)	2.85	3.60	7
B.3	Average Hours of Supply- Agriculture (Mins/day)	1015	0.00	4
B.4	Availability of Oil & Gas pipeline in state	0.00	0.00	4
	ENERGY EQUITY			
A.	**Energy Access**			
A.1	Access to Electricity %	100	2.65	5
A.2	LPG + PNG (Domestic) Connections against number of HHs (%)	117.43	0.76	5
B.	**Affordability**			
B.1	ACS	34.24	0	8
B.2	LPG Price (Rs. for 14.2 kg Cylinder) - Domestic Non-Subsidised / Per Capita income (1000)	5.10	0.79	3
B.3	Petrol Price in (Rs/litre) / Per capita income (1000)	0.48	0.91	3
B.4	Diesel Price in (Rs/litre) / Per Capita income (1000)	0.45	0.87	3
B.5	Cross Subsidisation (Industrial ABR/ ACS)	0.32	3.17	2
C.	**Performance of Utilities**			
C.1	PAT/Revenue	-0.07	2.57	3
C.2	Overdues/ Cost of Power	0.00	2.65	1
C.3	Payables for Power Purchase (Days)	NA	NA	NA
C.4	Tariff Subsidy Billed / Total Revenue	0.81	0.00	3
	ENVIRONMENTAL SUSTAINABILITY			
A.	**Energy Resource Productivity**			
A.1	Energy Efficiency Score	13.75	1.53	2
A.2	Performance of Clean Energy (Contracted Capacity/Potential) in %	2.77	0.03	6
A.3	Power intensity (kWh/GDP in 1000 INR)-Data	3.64	3.17	1

No.	Indicator	Value	Score	Rank
B. Decarbonisation				
B.1	Number of EV Charging Stations	6	0.02	7
B.2	CO2 saved from LED Bulbs per 1000 population (in tonnes)	103.89	1.22	2
B.3	% of Forest & Tree Cover (Forest Cover w.r.t total area)	81.95	3.70	2
C. Emissions and Pollution				
C.1	Power Emissions Intensity (gco2_per_kWh)	629.70	0.76	7
C.2	Air Quality Index	22.00	1.89	2
C.3	EV Penetration over diesel and petrol vehicles (%)	1.09	0.12	7
STATE CONTEXT				
A. Macroeconomic Environment				
A.1	Growth rate of GSDP	3.35	2.78	4
A.2	FDI Equity Inflows (INR Cr.)	NA	NA	NA
A.3	State Rating on Start-up Index	49	3.17	1
B. Regulations, Institutions & Governance				
B.1	Multidimensional Poverty Index (Score)	0.01	1.76	3
B.2	SDG Index (Score)	70	1.32	4
C. Stability for Investment & Innovation				
C.1	Innovation Score (as per India Innovation Index)	17.29	1.64	3
C.2	Logistics Index (Index Scores)	80	1.587302	4
C.3	State With RE policy	0	0.00	4
C.4	Investment Opportunities (in USD Billion)	48.42	1.48	5

Andaman & Nicobar is a group of islands located in the Bay of Bengal with limited access to the central energy grid. The energy sector in these islands is heavily dependent on fossil fuels, with a growing focus on renewable energy sources, particularly solar power, to reduce dependency on imported fuel.

Andaman & Nicobar secured 3rd overall rank among the UTs. It is least performer UTs in energy security. Even though its score has improved, its rank dropped to the bottom last indicating that the Union territories in general are catching up momentum. And the overall dimension score is half of the top score. The Andaman and Nicobar Islands fulfil less than 30% of their energy needs using renewable sources, including small hydro and solar power plants in the Andaman region and the administration intends to improve the percentage.

In Energy equity, it is in the 4th position, and all the indicators performed moderately. The electricity consumers in UT already have 100 % access to electricity, the administration has predicted a significant increase in consumption soon.

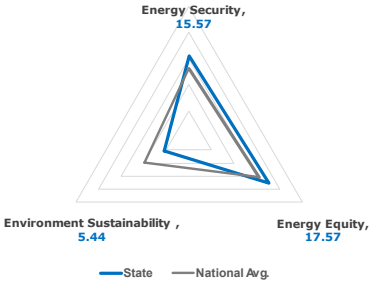
Environmental Sustainability dimension remained a top performer comparatively. The rank secured is 2nd, however, the score should improve. The three parameters perform uniformly in environmental sustainability. In the state context dimension it secured the 3rd rank with improvement in score. Macroeconomic Environment is the Key performance indicator.

Puducherry

4
Rank

47.31
Overall Score

Dimension	Score	Rank
Energy Security	15.57	2
Energy Equity	17.57	2
Environmental Sustainability	5.44	8
State Context	8.73	5



Note – Dimension-wise scores are out of 25

No.	Indicator	Value	Score	Rank
	ENERGY SECURITY			
A.	**Electricity Diversity and Power Supply Position**			
A.1	Diversity of Electricity Contracted Capacity (EMCI Index)	0.77	3.08	1
A.2	Share of RE in Contracted Capacity (%)	12.36	0.17	7
A.3	Contracted generating capacity of Electricity (Growth Rate in %)	2.84	0.08	5
A.4	Electricity consumption per capita (in kWh)	2145	0	2
A.5	Electricity not supplied (Deficit) in %	0.00	1.03	4
A.6	Contracted Capacity / Peak Demand	0.82	0.28	6
A.7	Number of petrol & gas station / Area of State	0.70	1.03	1
A.8	RE Potential (estimated in GW)	0.41	0.00	5
B.	**Viability of Energy/Electricity Systems in the State**			
B.1	AT & C Losses (in %)	17.49	2.56	5
B.2	ACS-ARR (Cash Adjusted Gap)	0.64	3.96	5
B.3	Average Hours of Supply- Agriculture (Mins/day)	1440	2.05	2
B.4	Availability of Oil & Gas pipeline in state	1.00	1.03	2
	ENERGY EQUITY			
A.	**Energy Access**			
A.1	Access to Electricity %	100	2.56	7
A.2	LPG + PNG (Domestic) Connections against number of HHs (%)	122.68	0.83	4
B.	**Affordability**			
B.1	ACS	6.15	4	5
B.2	LPG Price (Rs. for 14.2 kg Cylinder) - Domestic Non-Subsidised / Per Capita income (1000)	5.74	0.69	4
B.3	Petrol Price in (Rs/litre) / Per capita income (1000)	0.66	0.67	4
B.4	Diesel Price in (Rs/litre) / Per Capita income (1000)	0.59	0.65	4
B.5	Cross Subsidisation (Industrial ABR/ ACS)	1.07	0.71	6
C.	**Performance of Utilities**			
C.1	PAT/Revenue	-0.07	2.49	5
C.2	Overdues/ Cost of Power	0.00	2.56	3
C.3	Payables for Power Purchase (Days)	NA	NA	NA
C.4	Tariff Subsidy Billed / Total Revenue	0.00	2.56	1
	ENVIRONMENTAL SUSTAINABILITY			
A.	**Energy Resource Productivity**			
A.1	Energy Efficiency Score	10.50	1.00	4
A.2	Performance of Clean Energy (Contracted Capacity/Potential) in %	12.90	0.14	5
A.3	Power intensity (kWh/GDP in 1000 INR)-Data	10.96	0.00	5

No.	Indicator	Value	Score	Rank
B. Decarbonisation				
B.1	Number of EV Charging Stations	28	0.12	3
B.2	CO2 saved from LED Bulbs per 1000 population (in tonnes)	37.61	0.21	7
B.3	% of Forest & Tree Cover (Forest Cover w.r.t total area)	14.94	0.12	6
C. Emissions and Pollution				
C.1	Power Emissions Intensity (gco2_per_kWh)	465.07	1.37	6
C.2	Air Quality Index	45.00	1.60	3
C.3	EV Penetration over diesel and petrol vehicles (%)	7.59	0.87	4
STATE CONTEXT				
A. Macroeconomic Environment				
A.1	Growth rate of GSDP	0.42	0.00	5
A.2	FDI Equity Inflows (INR Cr.)	39.53	0.07	4
A.3	State Rating on Start-up Index	30	0.00	2
B. Regulations, Institutions & Governance				
B.1	Multidimensional Poverty Index (Score)	0.00	2.05	2
B.2	SDG Index (Score)	74	2.31	3
C. Stability for Investment & Innovation				
C.1	Innovation Score (as per India Innovation Index)	15.88	1.40	4
C.2	Logistics Index (Index Scores)	80	1.538462	5
C.3	State With RE policy	0	0.00	4
C.4	Investment Opportunities (in USD Billion)	47.15	1.37	6

Puducherry, a neighbor territory of Tamil Nadu, rich in tourism is in 4th position overall among UTs in the NETI 2024. In Energy security it stays 2nd in both Energy Security and Energy Equity. Puducherry has introduced a Green Budget that emphasizes sustainable development and environmental protection. The budget includes allocations for renewable energy projects and initiatives to enhance energy security. For some reason the territory takes the last spot in Environmental sustainability dimensions. Decarbonisation and Energy Resource Productivity are indicators which need immediate attention.

The territory has proposed a model procedure for project approval under the Renewable energy certificates mechanism, aiming to promote renewable energy investments. Such initiatives enhance the Stability for Investment & Innovation indicator. Macroeconomic Environment indicator is one in which Puducherry looks underperforming. Regulations, Institutions & Governance, is another indicator in which Puducherry performs well.

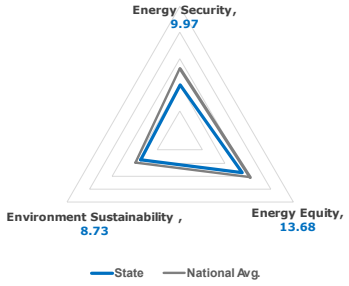
All the above-mentioned policies and initiatives are expected to reflect Puducherry's commitment to achieving energy security, promoting energy equity, and ensuring environmental sustainability to the next level.

Jammu & Kashmir

5
Rank

45.06
Overall Score

Dimension	Score	Rank
Energy Security	9.97	7
Energy Equity	13.68	5
Environmental Sustainability	8.73	6
State Context	12.68	4



Note – Dimension-wise scores are out of 25

No.	Indicator	Value	Score	Rank
	ENERGY SECURITY			
A.	**Electricity Diversity and Power Supply Position**			
A.1	Diversity of Electricity Contracted Capacity (EMCI Index)	0.55	1.91	5
A.2	Share of RE in Contracted Capacity (%)	73.55	2.11	3
A.3	Contracted generating capacity of Electricity (Growth Rate in %)	0.99	0.05	7
A.4	Electricity consumption per capita (in kWh)	1526	0	6
A.5	Electricity not supplied (Deficit) in %	1.50	0.53	7
A.6	Contracted Capacity / Peak Demand	0.94	0.41	4
A.7	Number of petrol & gas station / Area of State	0.02	0.02	6
A.8	RE Potential (estimated in GW)	125.81	1.05	1
B.	**Viability of Energy/Electricity Systems in the State**			
B.1	AT & C Losses (in %)	40.50	0.00	8
B.2	ACS-ARR (Cash Adjusted Gap)	2.11	3.74	6
B.3	Average Hours of Supply- Agriculture (Mins/day)	1015	0.00	4
B.4	Availability of Oil & Gas pipeline in state	0.00	0.00	4
	ENERGY EQUITY			
A.	**Energy Access**			
A.1	Access to Electricity %	100	2.63	6
A.2	LPG + PNG (Domestic) Connections against number of HHs (%)	142.49	1.23	3
B.	**Affordability**			
B.1	ACS	4.13	4	4
B.2	LPG Price (Rs. for 14.2 kg Cylinder) - Domestic Non-Subsidised / Per Capita income (1000)	11.62	0.00	5
B.3	Petrol Price in (Rs/litre) / Per capita income (1000)	1.26	0.00	5
B.4	Diesel Price in (Rs/litre) / Per Capita income (1000)	1.08	0.00	5
B.5	Cross Subsidisation (Industrial ABR/ ACS)	1.04	0.83	5
C.	**Performance of Utilities**			
C.1	PAT/Revenue	-0.78	2.15	6
C.2	Overdues/ Cost of Power	0.00	2.63	2
C.3	Payables for Power Purchase (Days)	NA	NA	NA
C.4	Tariff Subsidy Billed / Total Revenue	NA	NA	NA
	ENVIRONMENTAL SUSTAINABILITY			
A.	**Energy Resource Productivity**			
A.1	Energy Efficiency Score	6.50	0.42	5
A.2	Performance of Clean Energy (Contracted Capacity/Potential) in %	0.28	0.00	7
A.3	Power intensity (kWh/GDP in 1000 INR)-Data	7.09	1.67	4

No.	Indicator	Value	Score	Rank
B. Decarbonisation				
B.1	Number of EV Charging Stations	156	0.72	2
B.2	CO2 saved from LED Bulbs per 1000 population (in tonnes)	64.89	0.63	4
B.3	% of Forest & Tree Cover (Forest Cover w.r.t total area)	12.69	0.00	7
C. Emissions and Pollution				
C.1	Power Emissions Intensity (gco2_per_kWh)	24.00	3.16	3
C.2	Air Quality Index	84.00	1.24	5
C.3	EV Penetration over diesel and petrol vehicles (%)	7.62	0.90	3
STATE CONTEXT				
A. Macroeconomic Environment				
A.1	Growth rate of GSDP	3.77	3.16	1
A.2	FDI Equity Inflows (INR Cr.)	0.02	0.07	5
A.3	State Rating on Start-up Index	30	0.00	2
B. Regulations, Institutions & Governance				
B.1	Multidimensional Poverty Index (Score)	0.02	1.11	7
B.2	SDG Index (Score)	74	2.37	2
C. Stability for Investment & Innovation				
C.1	Innovation Score (as per India Innovation Index)	12.83	0.99	5
C.2	Logistics Index (Index Scores)	70	0	6
C.3	State With RE policy	1	2.11	2
C.4	Investment Opportunities (in USD Billion)	73.32	2.88	2

Jammu & Kashmir (J&K), a union territory in north most part of India, faces unique challenges due to its political instability, and underdeveloped infrastructure. Electricity tariffs in J&K are relatively low compared to other states, reflecting the region's reliance on hydropower having operational costs. Jammu & Kashmir has stayed 5th overall Union territory in the study.

In Energy security dimension, it has lost huge ground in the Viability of Energy/ Electricity Systems in the state indicator. Jammu & Kashmir has immense hydropower potential. Jammu & Kashmir, with AT & C losses of around 40%-45%, are significantly higher than the national average. The region faces challenges with grid connectivity and stability due to its difficult terrain and harsh weather conditions. It has performed moderately well in Energy Affordability and Performance of Utilities' indicators in the Energy Equity dimension.

Jammu & Kashmir performs 6th in the Environmental sustainability dimension, Emissions and Pollution indicators are one of its KPIs as it stands 3rd among the UTs.

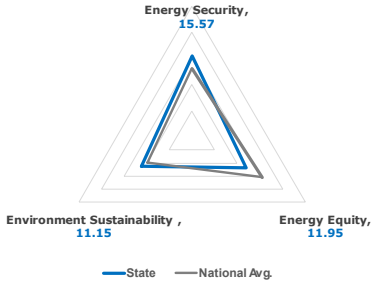
In the State context dimension, it has excelled to 4th position, maintaining a decent pace in Macroeconomics, Regulations and Investment-related indices. Energy security and Environmental sustainability seem to be areas of concern for Jammu & Kashmir. However, challenges related to environmental impacts, climate change, and financing need to be addressed to ensure long-term sustainability. With continued policy support, technological advancements, and public participation, the territory can achieve new sustainability and energy heights.

DNH-DD

6
Rank

42.32
Overall Score

Dimension	Score	Rank
Energy Security	15.57	3
Energy Equity	11.95	7
Environmental Sustainability	11.15	3
State Context	3.66	8



Note – Dimension-wise scores are out of 25

No.	Indicator	Value	Score	Rank
	ENERGY SECURITY			
A.	**Electricity Diversity and Power Supply Position**			
A.1	Diversity of Electricity Contracted Capacity (EMCI Index)	0.41	1.18	6
A.2	Share of RE in Contracted Capacity (%)	6.67	0.00	8
A.3	Contracted generating capacity of Electricity (Growth Rate in %)	9.28	0.22	3
A.4	Electricity consumption per capita (in kWh)	8870	2	1
A.5	Electricity not supplied (Deficit) in %	0.00	1.16	2
A.6	Contracted Capacity / Peak Demand	0.53	0.00	8
A.7	Number of petrol & gas station / Area of State	0.13	0.22	5
A.8	RE Potential (estimated in GW)	0.02	0.00	7
B.	**Viability of Energy/Electricity Systems in the State**			
B.1	AT & C Losses (in %)	3.58	4.65	1
B.2	ACS-ARR (Cash Adjusted Gap)	-0.02	4.64	1
B.3	Average Hours of Supply- Agriculture (Mins/day)	1015	0.00	4
B.4	Availability of Oil & Gas pipeline in state	1.00	1.16	1
	ENERGY EQUITY			
A.	**Energy Access**			
A.1	Access to Electricity %	100	2.91	3
A.2	LPG + PNG (Domestic) Connections against number of HHs (%)	95.53	0.37	7
B.	**Affordability**			
B.1	ACS	6.04	4	2
B.2	LPG Price (Rs. for 14.2 kg Cylinder) - Domestic Non-Subsidised / Per Capita income (1000)	NA	NA	NA
B.3	Petrol Price in (Rs/litre) / Per capita income (1000)	NA	NA	NA
B.4	Diesel Price in (Rs/litre) / Per Capita income (1000)	NA	NA	NA
B.5	Cross Subsidisation (Industrial ABR/ ACS)	0.89	1.44	4
C.	**Performance of Utilities**			
C.1	PAT/Revenue	0.02	2.88	1
C.2	Overdues/ Cost of Power	NA	NA	NA
C.3	Payables for Power Purchase (Days)	27	0.00	2
C.4	Tariff Subsidy Billed / Total Revenue	NA	NA	NA
	ENVIRONMENTAL SUSTAINABILITY			
A.	**Energy Resource Productivity**			
A.1	Energy Efficiency Score	4.75	0.17	7
A.2	Performance of Clean Energy (Contracted Capacity/Potential) in %	273.00	3.49	1
A.3	Power intensity (kWh/GDP in 1000 INR)-Data	NA	NA	NA

No.	Indicator	Value	Score	Rank
B. Decarbonisation				
B.1	Number of EV Charging Stations	8	0.04	6
B.2	CO2 saved from LED Bulbs per 1000 population (in tonnes)	22.88	0.00	8
B.3	% of Forest & Tree Cover (Forest Cover w.r.t total area)	43.60	1.81	3
C. Emissions and Pollution				
C.1	Power Emissions Intensity (gco2_per_kWh)	129.00	3.03	4
C.2	Air Quality Index	0.00	2.33	1
C.3	EV Penetration over diesel and petrol vehicles (%)	2.35	0.30	5
STATE CONTEXT				
A. Macroeconomic Environment				
A.1	Growth rate of GSDP	NA	NA	NA
A.2	FDI Equity Inflows (INR Cr.)	-1170.12	0.00	6
A.3	State Rating on Start-up Index	30	0.00	2
B. Regulations, Institutions & Governance				
B.1	Multidimensional Poverty Index (Score)	0.04	0.00	8
B.2	SDG Index (Score)	66	0.29	7
C. Stability for Investment & Innovation				
C.1	Innovation Score (as per India Innovation Index)	12.09	0.98	6
C.2	Logistics Index (Index Scores)	70	0	6
C.3	State With RE policy	0	0.00	4
C.4	Investment Opportunities (in USD Billion)	60.55	2.38	3

DND-DD ranked 6th position among the UTs, which is one of the bottom last UTs. DNH-DD secured the 3rd rank in energy security, primarily due to the Viability of Energy/Electricity Systems in the State, which significantly contributed to its ranking.

UT's performance in energy equity has declined sharply, placing it among the bottom two performers. This indicates that all the 3 indicators - Energy Access, Affordability, and Performance of Utilities remain significant challenges.

On a positive note, environmental sustainability is a key area of improvement for DNH-DD. However, despite this progress, the overall score in this dimension still requires further enhancement. This suggests that while initiatives such as increasing renewable energy adoption, reducing carbon emissions, and improving energy efficiency might be underway, they are not yet sufficient to achieve a high sustainability rating.

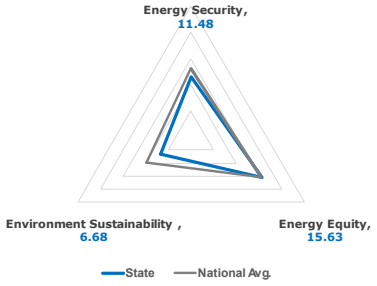
The state context dimensions including socio-economic and infrastructural factors have seen a decline. This implies that broader systemic challenges, such as policy implementation, financial viability, and administrative efficiency, are hindering the UT’s progress in the energy sector. Addressing these gaps will be crucial for improving its overall ranking and ensuring a balanced approach toward energy security, equity, and sustainability.

Ladakh

7
Rank

39.37
Overall Score

Dimension	Score	Rank
Energy Security	11.48	5
Energy Equity	15.63	3
Environmental Sustainability	6.68	7
State Context	5.58	7



Note – Dimension-wise scores are out of 25

No.	Indicator	Value	Score	Rank
	ENERGY SECURITY			
A.	**Electricity Diversity and Power Supply Position**			
A.1	Diversity of Electricity Contracted Capacity (EMCI Index)	0.55	2.17	3
A.2	Share of RE in Contracted Capacity (%)	73.55	2.40	1
A.3	Contracted generating capacity of Electricity (Growth Rate in %)	0.99	0.05	6
A.4	Electricity consumption per capita (in kWh)	1526	0	5
A.5	Electricity not supplied (Deficit) in %	1.50	0.60	6
A.6	Contracted Capacity / Peak Demand	0.94	0.46	3
A.7	Number of petrol & gas station / Area of State	0.00	0.00	8
A.8	RE Potential (estimated in GW)	1.07	0.01	4
B.	**Viability of Energy/Electricity Systems in the State**			
B.1	AT & C Losses (in %)	30.33	1.32	7
B.2	ACS-ARR (Cash Adjusted Gap)	1.99	4.29	3
B.3	Average Hours of Supply- Agriculture (Mins/day)	1015	0.00	4
B.4	Availability of Oil & Gas pipeline in state	0.00	0.00	4
	ENERGY EQUITY			
A.	**Energy Access**			
A.1	Access to Electricity %	100	2.99	2
A.2	LPG + PNG (Domestic) Connections against number of HHs (%)	215.52	2.99	1
B.	**Affordability**			
B.1	ACS	7.52	4	3
B.2	LPG Price (Rs. for 14.2 kg Cylinder) - Domestic Non-Subsidised / Per Capita income (1000)	NA	NA	NA
B.3	Petrol Price in (Rs/litre) / Per capita income (1000)	NA	NA	NA
B.4	Diesel Price in (Rs/litre) / Per Capita income (1000)	NA	NA	NA
B.5	Cross Subsidisation (Industrial ABR/ ACS)	0.56	2.71	3
C.	**Performance of Utilities**			
C.1	PAT/Revenue	-0.41	2.69	2
C.2	Overdues/ Cost of Power	NA	NA	NA
C.3	Payables for Power Purchase (Days)	NA	NA	NA
C.4	Tariff Subsidy Billed / Total Revenue	NA	NA	NA
	ENVIRONMENTAL SUSTAINABILITY			
A.	**Energy Resource Productivity**			
A.1	Energy Efficiency Score	5.25	0.26	6
A.2	Performance of Clean Energy (Contracted Capacity/Potential) in %	29.60	0.39	2
A.3	Power intensity (kWh/GDP in 1000 INR)-Data	NA	NA	NA

No.	Indicator	Value	Score	Rank
B. Decarbonisation				
B.1	Number of EV Charging Stations	12	0.06	5
B.2	CO2 saved from LED Bulbs per 1000 population (in tonnes)	80.07	0.97	3
B.3	% of Forest & Tree Cover (Forest Cover w.r.t total area)	12.69	0.00	7
C. Emissions and Pollution				
C.1	Power Emissions Intensity (gco2_per_kWh)	24.00	3.59	1
C.2	Air Quality Index	84.00	1.41	4
C.3	EV Penetration over diesel and petrol vehicles (%)	0.12	0.00	8
STATE CONTEXT				
A. Macroeconomic Environment				
A.1	Growth rate of GSDP	NA	NA	NA
A.2	FDI Equity Inflows (INR Cr.)	0.00	0.08	3
A.3	State Rating on Start-up Index	30	0.00	2
B. Regulations, Institutions & Governance				
B.1	Multidimensional Poverty Index (Score)	0.02	1.60	4
B.2	SDG Index (Score)	65	0.00	8
C. Stability for Investment & Innovation				
C.1	Innovation Score (as per India Innovation Index)	5.91	0.00	8
C.2	Logistics Index (Index Scores)	70	0	6
C.3	State With RE policy	1	2.40	1
C.4	Investment Opportunities (in USD Billion)	45.89	1.52	4

Ladakh, a union territory in northern India, is a high-altitude region characterized by extreme weather conditions, sparse population, and unique geographical challenges. Ladakh has significant untapped solar energy potential, which can enhance energy security and sustainability.

Ladakh, adjacent to Jammu & Kashmir has improved tremendously overall among the UTs. Viability of Energy/ Electricity Systems, sub-indicator seems to be a concern. Ladakh has also improved considerably in the Environmental Sustainability domain, which is comforting. The performance of utilities and the Macroeconomic environment is also instrumental in the territory's poor overall performance.

The Ladakh has improved significantly by almost doubling its performance in Energy security dimension and is also the top improver in the dimension. Ladakh has one of the highest solar irradiation levels in India including the 50 MW Solar Power Plant in Leh, making it ideal for solar energy generation and wind potential with high wind speed. Despite challenges, the region has the potential to generate about 8 GW of solar power, which can significantly enhance its Energy security.

Ladakh has made significant progress in ensuring Affordability standing next only to Chandigarh, among the UTs. Rural electrification, providing subsidized electricity to low-income households are also among its keys. The region has implemented micro-hydropower projects to afford energy to rural households.

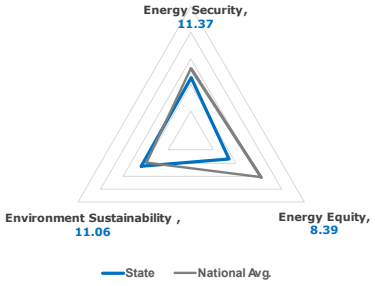
Environmental sustainability, which has more than doubled, focuses on minimising the environmental impact of energy production and consumption. It still has a huge scope to improve Energy Resource Productivity and Decarbonisation parameters. Ladakh has also implemented energy efficiency measures in government buildings.

Lakshadweep

8
Rank

37.05
Overall Score

Dimension	Score	Rank
Energy Security	11.37	6
Energy Equity	8.39	8
Environmental Sustainability	11.06	4
State Context	6.24	6



Note – Dimension-wise scores are out of 25

No.	Indicator	Value	Score	Rank
ENERGY SECURITY				
A.	**Electricity Diversity and Power Supply Position**			
A.1	Diversity of Electricity Contracted Capacity (EMCI Index)	0.22	0.00	8
A.2	Share of RE in Contracted Capacity (%)	15.63	0.35	5
A.3	Contracted generating capacity of Electricity (Growth Rate in %)	111.58	2.65	1
A.4	Electricity consumption per capita (in kWh)	960	0	7
A.5	Electricity not supplied (Deficit) in %	0.00	1.32	1
A.6	Contracted Capacity / Peak Demand	2.65	2.65	1
A.7	Number of petrol & gas station / Area of State	0.13	0.24	4
A.8	RE Potential (estimated in GW)	0.03	0.00	6
B.	**Viability of Energy/Electricity Systems in the State**			
B.1	AT & C Losses (in %)	11.63	4.14	2
B.2	ACS-ARR (Cash Adjusted Gap)	19.44	0.00	8
B.3	Average Hours of Supply- Agriculture (Mins/day)	1015	0.00	4
B.4	Availability of Oil & Gas pipeline in state	0.00	0.00	4
ENERGY EQUITY				
A.	**Energy Access**			
A.1	Access to Electricity %	100	3.31	1
A.2	LPG + PNG (Domestic) Connections against number of HHs (%)	78.13	0.00	8
B.	**Affordability**			
B.1	ACS	23.70	2	7
B.2	LPG Price (Rs. for 14.2 kg Cylinder) - Domestic Non-Subsidised / Per Capita income (1000)	NA	NA	NA
B.3	Petrol Price in (Rs/litre) / Per capita income (1000)	NA	NA	NA
B.4	Diesel Price in (Rs/litre) / Per Capita income (1000)	NA	NA	NA
B.5	Cross Subsidisation (Industrial ABR/ ACS)	0.50	3.22	1
C.	**Performance of Utilities**			
C.1	PAT/Revenue	-4.50	0.00	8
C.2	Overdues/ Cost of Power	NA	NA	NA
C.3	Payables for Power Purchase (Days)	NA	NA	NA
C.4	Tariff Subsidy Billed / Total Revenue	NA	NA	NA
ENVIRONMENTAL SUSTAINABILITY				
A.	**Energy Resource Productivity**			
A.1	Energy Efficiency Score	3.75	0.00	8
A.2	Performance of Clean Energy (Contracted Capacity/Potential) in %	15.53	0.22	3
A.3	Power intensity (kWh/GDP in 1000 INR)-Data	NA	NA	NA

No.	Indicator	Value	Score	Rank
B. Decarbonisation				
B.1	Number of EV Charging Stations	1	0.00	8
B.2	CO2 saved from LED Bulbs per 1000 population (in tonnes)	304.90	5.30	1
B.3	% of Forest & Tree Cover (Forest Cover w.r.t total area)	92.00	5.30	1
C. Emissions and Pollution				
C.1	Power Emissions Intensity (gco2_per_kWh)	818.84	0.00	8
C.2	Air Quality Index	NA	NA	NA
C.3	EV Penetration over diesel and petrol vehicles (%)	1.72	0.24	6
STATE CONTEXT				
A. Macroeconomic Environment				
A.1	Growth rate of GSDP	NA	NA	NA
A.2	FDI Equity Inflows (INR Cr.)	NA	NA	NA
A.3	State Rating on Start-up Index	NA	NA	NA
B. Regulations, Institutions & Governance				
B.1	Multidimensional Poverty Index (Score)	0.00	2.58	1
B.2	SDG Index (Score)	66	0.33	6
C. Stability for Investment & Innovation				
C.1	Innovation Score (as per India Innovation Index)	7.86	0.35	7
C.2	Logistics Index (Index Scores)	80	1.986755	3
C.3	State With RE policy	0	0.00	4
C.4	Investment Opportunities (in USD Billion)	36.25	0.99	7

Lakshadweep is an isolated group of islands on the southwestern coast of India, with limited access to the central energy grids. Among the Union Territories (UTs), Lakshadweep ranks at the bottom, with a significant drop in its overall score. This decline highlights persistent challenges in ensuring a reliable, affordable, and sustainable energy supply to its population.

Despite its low ranking, Lakshadweep has shown positive momentum in energy security, with notable improvements in key performance indicators (KPIs) such as Electricity Diversity and Power Supply Position. This suggests efforts are being made to diversify energy sources and enhance supply reliability. The islands of Lakshadweep receive abundant sunlight throughout the year except for a couple of days during monsoon which provides an ideal opportunity for the use of solar power in the islands.

All indicators under energy equity require substantial improvement, placing Lakshadweep among the weakest performers in this dimension. Lakshadweep performs relatively well in environmental sustainability, securing the 4th rank among UTs. The dimension's score is on an improving trend, primarily driven by the Decarbonisation indicator, which contributes 90% of the score. However, performance in Energy Resource Productivity and Emissions & Pollution is minuscule, highlighting the need for further advancements. The state context score also indicates room for improvement, reflecting broader socio-economic and infrastructural challenges that impact energy development.

Annexures

Data sources for indicators

Sl.	Indicators	Source	Year/ Period
1.	Electricity Contracted Capacity (EMCI Index)	CEA (EMCI)	Dec-24
2.	Share of RE in Contracted Capacity (%)	CEA (RE+Hydro)	Dec-24
3.	Contracted generating capacity of Electricity (Growth Rate in %)	CEA	5-year CAGR (Dec 19 - Dec 24)
4.	Number of petrol & gas stations / Area of State	PPAC	Sep-24
5.	Electricity consumption per capita (in kWh)	CEA	2022-23
6.	RE Potential (estimated in GW)	MoSPI	2024
7.	Electricity not supplied (Deficit) in %	CEA LGBR	2023-24
8.	AT & C Losses (in %)	PFC	2022-23
9.	ACS-ARR (Cash Adjusted Gap)	PFC	2022-23
10.	Availability of Oil & Gas pipelines in the state	PPAC	Sep-24
11.	Average Hours of Supply- Agriculture (Mins/day)	CEA	Mar-24
12.	Contracted Capacity / Peak Demand	CEA & CEA LGBR	Dec 2024 CEA, LGBR - 2023-24
13.	Access to Electricity %	Saubhagya FY19	Mar-19
14.	LPG + PNG (Domestic) Connections against number of HHs (%)	PPAC	Sep-24
15.	ACS	PFC	2022-23
16.	LPG Price (Rs. for 14.2 kg Cylinder) - Domestic Non-Subsidised / Per Capita income (1000)	PPAC	Sep-24
17.	Petrol Price in (Rs/liter) / Per capita income (1000)	PPAC	Sep-24
18.	Diesel Price in (Rs/liter) / Per Capita income (1000)	PPAC	Sep-24
19.	PAT/Revenue	PFC	2022-23
20.	Overdues/ Cost of Power	PFC	2022-23
21.	Cross Subsidization (Industrial ABR/ ACS)	PFC	2022-23
22.	Payables for Power Purchase (Days)	PFC	2022-23
23.	Tariff Subsidy Billed / Total Revenue	PFC	2022-23
24.	Energy Efficiency Score	BEE, State Energy Efficiency Index	2023

Sl.	Indicators	Source	Year/ Period
25.	Performance of Clean Energy (Contracted Capacity/Potential) in %	CEA & MOSPI	FY 2024
26.	Power intensity (kWh/GDP in 1000 INR)-Data	RBI, WEC-I Dashboard	2022-23
27.	Number of EV Charging Stations	PPAC	Sep-24
28.	CO2 saved from LED Bulbs per 1000 population (in tonnes)	CO2 reduction - Ujala dashboard; Projected Population - MoHFW	Dec-24
29.	% of Forest & Tree Cover (Forest Cover wrt total area)	Forest Survey of India	2023
30.	Power Emissions Intensity (gco2_per_kWh)	EMBER	2024
31.	Air Quality Index	CPCB	2023
32.	EV Penetration over diesel and petrol vehicles (%)	Vahan Portal	FY 2024-25
33.	Growth rate of GSDP	RBI	5-year CAGR (till FY23-24)
34.	FDI Equity Inflows (INR Cr.)	DPIIT	Mar-24
35.	State Rating on Start-up Index	Start-Up India, Ministry of Commerce	2022
36.	Multidimensional Poverty Index (Score)	NITI Aayog	2023
37.	SDG Index (Score)	NITI Aayog	2023-24
38.	Innovation Score (as per India Innovation Index)	NITI Aayog	2021
39.	Logistics Index (Index Scores)	LEADS Index, Ministry of Commerce	2023
40.	State With RE policy	State With RE policy	2024
41.	Investment Opportunities (in USD Billion)	India Investment Grid (IIG)	As on 09-Jan-2025

State/ UT codes

State	State Code
Andhra Pradesh	AP
Arunachal Pradesh	AR
Assam	AS
Bihar	BR
Chhattisgarh	CG
Goa	GA
Gujarat	GJ
Haryana	HR
Himachal Pradesh	HP
Jharkhand	JH
Karnataka	KA
Kerala	KL
Madhya Pradesh	MP
Maharashtra	MH
Manipur	MN
Meghalaya	ML
Mizoram	MZ
Nagaland	NL
Odisha	OR
Punjab	PB
Rajasthan	RJ
Sikkim	SK
Tamil Nadu	TN
Telangana	TL
Tripura	TR
Uttarakhand	UK
Uttar Pradesh	UP
West Bengal	WB
Andaman & Nicobar	AN
Chandigarh	CH
Dadar & Nagar Haveli and Daman & Diu	DNH-DD
Delhi	DL
Lakshadweep	LD
Puducherry	PY
Jammu & Kashmir	JK
Ladakh	LA

ANNEXURE B

DIMENSION: ENERGY SECURITY

Energy security measures the ability to meet current and future energy demand. It considers the following elements:

1. Electricity Diversity and Power Supply Position
2. Viability of Energy/Electricity Systems in the state

Indicators	Sub-Indicator	Source	Year	Description
Electricity Diversity and Power Supply Position	**Electricity Contracted Capacity (ECMI Index)**	CEA (ECMI)	Dec-24	Diversity of electricity supply supports greater security and independence. An over-reliance on one resource can make a system vulnerable to shocks in energy delivery. Sub-indicator used is Installed capacity by fuel type (GW). Calculated using the HHI index
	Share of RE in Contracted Capacity (%)	CEA (RE)	Dec-24	The Share of Renewable Energy in Contracted Capacity reflects the proportion of renewable energy (RE) in the total contracted power capacity. A higher share indicates a transition towards a cleaner, more sustainable energy mix, reducing reliance on fossil fuels and enhancing energy security.
	Contracted generating capacity of electricity	CEA	5-year CAGR (Dec 19 - Dec 24)	Percentage change in installed contracted capacity from 2019 to 2023 that reflects how State/UT's electricity diversifies.
	Electricity consumption per capita (in kWh)	CEA Dashboard	2022-23	Electricity consumption per capita measures the average kilowatt-hours (kWh) of electrical power consumed per person in a particular region. Calculated as the total electricity consumed in a state/ population of the state).
	Electricity not supplied (Deficit) in %	CEA LGBR	2023-24	It is the difference between the power/energy requirement of a state and the actual power/energy supplied in a state. Gives an idea of whether a state has surplus energy or needs additional power to meet its requirements.
	Contracted Capacity / Peak Demand	CEA LGBR	Dec 2024 CEA, LGBR - 2023-24	The Contracted Capacity / Peak Demand assesses the adequacy of power supply commitments in relation to peak electricity demand. A well-balanced ratio ensures grid reliability, reduces supply shortfalls, and enhances energy security.
	Number of petrol & gas station / Area of State	PPAC	Sep-24	The Number of petrol & gas stations / Area of State measures the accessibility and distribution of petrol and gas stations within a state. A well-distributed network ensures fuel availability, supports economic activity, and enhances energy security, especially in remote and high-demand areas.

Indicators	Sub-Indicator	Source	Year	Description
	RE Potential (estimated in GW)	MoSPI	2024	The Renewable Energy Potential evaluates the estimated capacity for renewable energy (RE) generation within a region. A high RE potential signifies opportunities for sustainable energy transition, reduced dependence on fossil fuels, and enhanced energy security.
Viability of Energy/Electricity Systems in the State	**AT & C Losses (in %)**	PFC	2022-23	It is the difference between energy input units into the system and the units for which the payment is collected. It is the actual measure of the overall efficiency of the distribution business as it measures both technical as well as commercial losses.
	ACS-ARR Gap (in Rs. /unit)	PFC	2022-23	The ACS-ARR Gap measures the difference between the Average Cost of Supply (ACS) and the Average Revenue Realized (ARR) per unit of electricity. This financial metric reflects the economic viability of power distribution utilities (DISCOMs) and their capacity to recover costs sustainably.
	Average Hours of Supply-Agriculture (Mins/day)	CEA	Mar-24	The Average Hours of Supply for Agriculture measures the daily duration of electricity supply available to the agricultural sector. A consistent and adequate power supply is essential for irrigation, mechanized farming, and overall agricultural productivity.
	Availability of Oil & Gas pipeline in state	PPAC	Sep-24	The Oil & Gas Pipeline Infrastructure measures the availability and extent of oil and gas pipelines within a state. A well-developed pipeline network ensures efficient fuel transportation, enhances energy security, and reduces dependence on more expensive and less efficient transportation modes.

DIMENSION: ENERGY EQUITY

Energy equity measures the ability to provide access to reliable and affordable energy for domestic and commercial use. It considers the following elements:

1. Energy Access
2. Affordability
3. Performance of Utilities

Indicators	Sub-Indicator	Source	Year	Description
Energy Access	**Access to Electricity %**	Saubhagya FY19	Mar-19	The Access to Electricity measures the percentage of the population with reliable access to electricity. Widespread electricity access is fundamental for economic development, social well-being, and improving the quality of life.
	LPG + PNG (Domestic) Connections against number of HHs (%)	PPAC	Sep-24	The LPG + PNG Connection measures the percentage of households with access to Liquefied Petroleum Gas (LPG) and Piped Natural Gas (PNG) connections. A high penetration rate indicates improved energy accessibility, reduced reliance on traditional biomass, and enhanced living standards.
Affordability	**ACS**	PFC	2022-23	The Average Cost of Supply (ACS) represents the per-unit cost incurred by power distribution companies (DISCOMs) to procure, transmit, and distribute electricity to consumers. It is a crucial financial metric that influences tariff setting, subsidy requirements, and overall financial sustainability of the power sector.
	LPG Price (Rs. for 14.2 kg Cylinder) - Domestic Non-Subsidised / Per Capita income (1000)	PPAC	Sep-24	The LPG measures the affordability of domestic non-subsidized Liquefied Petroleum Gas (LPG) by comparing its price per 14.2 kg cylinder to the per capita income of consumers. This indicator reflects the economic accessibility of clean cooking fuel for households within a States/Ut's.
	Petrol Price in (Rs/litre) / Per capita income (1000)	PPAC	Sep-24	The Petrol price assesses the economic burden of petrol prices on consumers by comparing the price per litre of petrol to the per capita income. This indicator provides insights into fuel affordability and its impact on household expenses, transportation costs, and economic mobility.
	Diesel Price in (Rs/litre) / Per Capita income (1000)	PPAC	Sep-24	The Diesel price measures the economic burden of diesel prices on consumers by comparing the price per litre of diesel to the per capita income. This indicator provides insights into fuel affordability and its impact on transportation, agriculture, and industrial operations.
	Cross Subsidization (Industrial ABR/ ACS)	PFC	2022-23	Cross-subsidization measures the extent to which industrial consumers cross-subsidize other consumer categories by comparing the Average Billing Rate (ABR) for industrial consumers with the Average Cost of Supply (ACS). This indicator highlights the financial burden on industries and the sustainability of electricity tariff structures.
Performance of Utilities	**PAT/Revenue**	PFC	2022-23	The Profitability measures the financial health of power utilities by evaluating the Profit After Tax (PAT) as a proportion of total revenue. It indicates the efficiency of cost management, revenue generation, and overall financial sustainability of power sector entities.

Indicators	Sub-Indicator	Source	Year	Description
	Overdues/ Cost of Power	PFC	2022-23	The Financial Stress assesses the financial health of power distribution companies (DISCOMs) by measuring the ratio of overdue payments to the total cost of power procurement. This indicator reflects the liquidity position of utilities and their ability to meet financial obligations.
	Payables for Power Purchase (Days)	PFC	2022-23	The Power Purchase Payables measures the average number of days a power distribution company (DISCOM) takes to clear its dues for power procurement. This indicator reflects the financial liquidity and operational efficiency of DISCOMs in meeting payment obligations to power generators.
	Tariff Subsidy Billed/ Total Revenue	PFC	2022-23	The Tariff Subsidy Dependence measures the share of revenue generated from government subsidies in the total revenue of a power distribution company (DISCOM). This indicator reflects the financial dependence of DISCOMs on subsidies to sustain operations and maintain affordable electricity tariffs.

DIMENSION: ENVIRONMENTAL SUSTAINABILITY

Environmental sustainability measures the ability to mitigate natural resource depletion and environmental degradation. It considers the following elements:

1. Energy resource productivity
2. Decarbonisation
3. Emissions and Pollution

Indicators	Sub-Indicator	Source	Year	Description
Energy Resource Productivity	**Energy Efficiency Score**	BEE, State Energy Efficiency Index	2023	The Energy Efficiency Score evaluates the effectiveness of demand-side management (DSM) and energy-saving initiatives across different consumer categories. It considers the implementation of energy-efficient technologies, adherence to energy conservation standards, and the overall reduction in energy consumption per unit of output. This indicator highlights the progress in optimizing energy use and the potential for reducing electricity demand through efficiency improvements.
	Performance of Clean Energy (Capacity/Potential) in %	CEA & MOSPI	FY 2024	This indicator assesses the extent to which the available renewable energy potential is being utilized by comparing the installed capacity of clean energy sources (such as solar, wind, waste to energy and biomass) with their estimated potential. A higher percentage reflects better utilization of renewable energy resources, contributing to energy security, sustainability, and reduced dependence on fossil fuels.
	Power intensity (kWh/GDP in 1000 INR)-Data	RBI, WEC-I Dashboard	2022-23	Power Intensity measures the amount of electricity consumed per unit of Gross Domestic Product (GDP), expressed in kilowatt-hours per unit of economic output. This indicator reflects the energy intensity of the economy, highlighting the efficiency of electricity use in driving economic growth. Lower power intensity indicates a more energy-efficient economy, while higher values suggest greater electricity dependence for economic activities.
Decarbonisation	**Number of EV Charging Stations**	PPAC	Sep-24	This indicator tracks the total number of Electric Vehicle (EV) charging stations deployed across regions to support the transition to electric mobility. It reflects the growth of EV infrastructure, enabling wider adoption of electric vehicles by ensuring convenient and accessible charging options. A higher number of charging stations indicates improved readiness for EV integration and reduced range anxiety among consumers.

Indicators	Sub-Indicator	Source	Year	Description
	CO2 saved from LED Bulbs per 1000 population (in tonnes)	CO2 reduction - Ujala dashboard; Projected Population - MoHFW	Dec-24	This indicator quantifies the reduction in carbon dioxide (CO_2) emissions achieved through the adoption of energy-efficient LED bulbs, calculated per 1000 population. It highlights the environmental benefits of replacing traditional incandescent or CFL bulbs with LEDs, which consume significantly less energy. A higher value indicates greater success in mitigating carbon emissions and promoting sustainable energy consumption.
	% of Forest & Tree Cover (Forest Cover w.r.t total area)	Forest Survey of India	2023	This indicator measures the proportion of a region's total geographical area covered by forests and trees, reflecting the effectiveness of afforestation, reforestation, and conservation efforts. A higher percentage indicates better preservation of biodiversity, enhanced carbon sequestration, and improved ecological balance, contributing to climate resilience and environmental sustainability.
Emissions and Pollution	**Power Emissions Intensity (gco2_per_kWh)**	EMBER	2024	Power Emissions Intensity measures the amount of carbon dioxide (CO_2) emitted per unit of electricity generated, expressed in grams of CO_2 per kilowatt-hour (gCO_2/kWh). This indicator reflects the environmental impact of power generation, with lower values indicating a cleaner energy mix and higher efficiency in reducing carbon emissions. A decline in emissions intensity suggests a shift toward renewable energy sources and improved emission control technologies.
	Air Quality Index	CPCB	2023	The Air Quality Index (AQI) provides a comprehensive measure of air pollution levels by aggregating data from key pollutants such as particulate matter ($PM_{2.5}$, PM_{10}), nitrogen dioxide (NO_2), sulphur dioxide (SO_2), carbon monoxide (CO), and ozone (O_3). Lower AQI values signify cleaner air and a healthier environment, while higher values indicate increased pollution and associated health risks.
	EV Penetration over diesel and petrol vehicles (%)	Vahan Portal	FY 2024-25	This indicator measures the percentage share of electric vehicles (EVs) in the overall vehicle population, comparing their adoption relative to conventional diesel and petrol vehicles. A higher percentage indicates a successful transition toward cleaner mobility solutions, reducing dependence on fossil fuels and contributing to lower greenhouse gas emissions and improved air quality.

DIMENSION: STATE CONTEXT

State context measures the ability of states to balance the three core dimensions of the energy trilemma. It considers the following elements:

1. Macroeconomic Environment
2. Regulations, Institutions & Governance
3. Stability for Investment & innovation

Indicators	Sub-Indicator	Source	Year	Description
Macroeconomic Environment	**Growth rate of GSDP**	RBI	5-year CAGR (till FY23-24) 5-year CAGR (till FY23-24)	Economic Growth measures the annual growth rate of Gross State Domestic Product (GSDP), reflecting the overall economic performance and expansion of a state's economy. It serves as a key indicator of industrial activity, infrastructure development, and investment potential.
	FDI Equity Inflows (INR Cr.)	DPIIT	Oct 2019 - Mar 2024	The FDI Equity Inflows measures the total Foreign Direct Investment (FDI) equity inflows (in INR Crore) into a state or sector, reflecting investor confidence, economic attractiveness, and the overall investment climate.
	States Rating on Start-up Index States Rating on Start-up Index	Start-Up India, Ministry of Commerce	2022	The Startup Ecosystem Strength Index measures a state's performance and support for startups based on its rating in the Startup India Index. This index reflects the state's ability to foster innovation, provide funding opportunities, and create an enabling business environment for startups
Regulations, Institutions & Governance	**Multidimensional Poverty Index (Score)**	NITI Aayog	2023	The Multidimensional Poverty Index (MPI) Score measures the level of poverty across multiple dimensions, beyond income levels. It assesses deprivations in health, education, and standard of living, providing a holistic understanding of poverty within a region.
	SDG Index (Score)	NITI Aayog	2023-24	The SDG Index Score evaluates a state's progress toward achieving the United Nations' Sustainable Development Goals (SDGs). It reflects the overall performance across 17 goals.
Stability for Investment & Innovation	**Innovation Score (as per India Innovation Index)**	NITI Aayog	2021	The index ranks the states based on their innovation capability, the challenges and opportunities that lie for states, and actions needed by policy makers to foster innovation.
	Logistics Index (Index Scores)	LEADS Index, Ministry of Commerce	2023	The State Logistics Performance Index is arrived at using a ranking methodology based on a series of meetings with stakeholders and online surveys in the key areas of logistics like infrastructure, services, timelines, traceability, competitiveness, security, operating environment, and efficiency of regulation. The LEADS establishes the baseline of performance in the logistics sector based on the perception of users and stakeholders at the State level. It assesses the status of logistics efficiency in each State.

Indicators	Sub-Indicator	Source	Year	Description
	State With RE policy	Different Ministries Site	2024	The presence of a Renewable Energy (RE) policy in a state signifies its commitment to clean energy transition, sustainability, and investment in renewable energy sources. A well-defined RE policy provides a framework for capacity addition, grid integration, incentives, and regulatory support for renewables like solar, wind, hydro, and bioenergy.
	Investment Opportunities (in USD Billion)	India Investment Grid (IIG)	As on 09-Jan-2025	The Investment Opportunities indicator reflects the potential for capital inflows into a state's energy and infrastructure sectors, highlighting avenues for domestic and foreign direct investment (FDI). It provides insights into growth prospects, policy environment, and ease of doing business, making it a crucial metric for investors and policymakers.