

NATIONAL ENERGY TRILEMMA INDEX 2022



FOREWORD FROM HON'BLE MINISTER OF POWER AND NEW & RENEWABLE ENERGY/ PATRON, WEC INDIA



R K Singh

Hon'ble Minister of Power and New & Renewable Energy/ Patron, WEC India

Energy underlies all economic development and citizen wellbeing, which compels us to work towards energy security in an inclusive and environmentally sustainable manner. For a large and diverse country such as ours, state level implementation is key to the success of our endeavors in this direction.

State level Steering Committees on energy transition are working on multiple tracks to meet state-specific goals on sustainable development in the most energy-efficient way. Tracking progress on energy system performance at state & UT level will go a long way in delivering the updated NDCs, progressing on Long-Term Low Emission Development Strategy and promoting mindful and deliberate utilization under the LiFE Mission.

"The National Energy Trilemma Index 2022" brought out by World Energy Council India (WEC India), ranking Indian States and UTs on the three energy related dimensions of Energy Security, Energy Equity and Environmental Sustainability and the fourth dimension of State context is a well-timed initiative. The National Energy Trilemma framework will be a useful tool for States and UTs to track their progress holistically as well as at granular level.

Raj Kumar Singh

MESSAGE FROM CHAIRMAN



Alok Kumar

**Secretary, Ministry of Power
and Chairman, WEC India**

In the past decade, India has achieved significant strides in renewable generation capacity addition and universal electrification, with focus now shifted towards ensuring resource adequacy and improving quality of power supply. Also, India's recently updated Nationally Determined Contribution (NDC) further seeks to enhance its contribution towards climate change. Consumers and society also have a significant role to play towards environment sustainability, as called upon by the Hon'ble Prime Minister of India under the movement of Lifestyle for Environment (LiFE) during the 26th United Nations Climate Change Conference of the Parties (COP26).

To meet these multitude of objectives, collective and coordinated efforts are required by all stakeholders. States & UTs are required to develop energy policy pathway that befits their situation and priorities, to meet their growing energy needs with low-carbon, sustainable and inclusive models.

The "National Energy Trilemma Index", prepared by WEC India, assesses the performance of the States and UTs across dimensions of Energy Security, Energy Equity, Environmental Sustainability and State Context. The objective of this Index is to track progress on energy systems performance, develop healthy competition and encourage cross learning among States and UTs.

I hope this Index will help policy makers and stakeholders at the State and UT level in identifying their priority areas and formulate strategies to improve holistically across these dimensions.

Alok Kumar

MESSAGE FROM SECRETARY GENERAL



Gurdeep Singh

**Chairman and Managing
Director, NTPC Ltd. and
Secretary General, WEC India**

Throughout the world and in India, the energy sector is going through an unprecedented transition. India, as one of the fastest growing large economies in the world, is emerging as an epicentre of this grand energy transition. Committed to environmental sustainability, India has one of the largest renewable energy expansion programs.

India's commitment to reduce its emission intensity by increasing the share of non-fossil fuel-based energy resources is a major promise in the global fight against climate change. India is pursuing low carbon pathways which are suitable for its national commitments based on resource endowment and just transition.

States & UTs play an important role in meeting country's targets. With this view, WEC India embarked on a journey in 2020 to develop a States' Energy Index, a first ever systematic exercise, for tracking the progress on energy related performance across States and UTs in India. The vision behind developing the National Energy Trilemma Index is to propel States & UTs towards undertaking multi-pronged interventions and to drive efforts towards the achievement of Net Zero targets.

The Index presents the findings and highlights the issues and enablers at the State and UT level which eventually will encourage the States & UTs to accelerate the energy transition process and help the country achieve energy independence and meet its climate commitments and targets on time.

Gurdeep Singh

ABOUT US

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Deloitte is one of the world's largest and most diversified professional services organizations worldwide. Deloitte's Energy Practice provides global professional services to the largest and most influential Energy companies in the world.

Deloitte Touché Tohmatsu India LLP (Deloitte India) is a Deloitte member firm in India. Deloitte India's Energy, Resources, and Industrial specialists provide comprehensive, integrated solutions to all segments of the power, oil & gas, and mining sectors.

WEC India (formerly known as World Energy Council-Indian Member Committee) is member of World Energy Council (WEC), a global and inclusive body for thought leadership and tangible engagement in the pursuit of sustainable supply and use of energy.

WEC India functions under the patronage of Ministry of Power and with the support of Ministries and leading organizations in energy sector of the country.

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2	Gujarat	40
3	Karnataka	42
4	Goa	44
5	Himachal Pradesh	46
6	Uttarakhand	48
7	Maharashtra	50
8	Haryana	52
9	Tamil Nadu	54
10	Telangana	56
11	Mizoram	58
12	Sikkim	60
13	Punjab	62
14	Odisha	64
15	Andhra Pradesh	66
16	West Bengal	68
17	Assam	70
18	Tripura	72
19	Manipur	74
20	Uttar Pradesh	76
21	Rajasthan	78
22	Madhya Pradesh	80
23	Chhattisgarh	82
24	Arunachal Pradesh	84
25	Meghalaya	86
26	Bihar	88
27	Nagaland	90
28	Jharkhand	92
UTs		
1	Delhi	94
2	Chandigarh	96
3	DNH-DD	98
4	Puducherry	100
5	Andaman & Nicobar	102
6	Lakshadweep	104
7	Jammu & Kashmir	106
8	Ladakh	108

ABBREVIATIONS

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
DISCOM	Distribution Company (Electricity)
DoARPG	Department of Administrative Reforms and Public Grievances
DPIIT	Department for Promotion of Industry and Internal Trade
EMCI	Energy Mix Concentration Index
EV	Electric Vehicle
GENCO	Generation Company (Electricity)
HH	Households
LGBR	Load Generation Balance Report
LPG	Liquified Petroleum Gas
MOSPI	Ministry of Statistics and Programme Implementation
NITI Aayog	National Institution for Transforming India Aayog
PAT	Profit After Tax
PNG	Piped Natural Gas
PPAC	Petroleum Planning & Analysis Cell
RE	Renewable Energy
SDA	State Development Authority
SDG	Sustainable Development Goals
SAPCC	State Action Plans on Climate Change
TMT	Thousand Metric Tonnes

EXECUTIVE SUMMARY

India has witnessed an unprecedented transition in the energy sector, primarily due to significant penetration of renewables as well as achieving universal electrification. India is now in a unique position to meet its growing energy needs with low-carbon and inclusive models to meet its sustainable development goals. However, such energy transition targets cannot be achieved without significant contributions and commitments from the Indian States and Union Territories (UTs). India follows a federal structure, which requires coordinated actions from all States and UTs, towards India's climate commitment goals.

In this context, an outcome-based framework was developed i.e., "National Energy Trilemma Index" in 2020 to evaluate states' progress on energy sector.

The framework adopted in this report draws from the World Energy Council's Energy Trilemma Index, which is annually published since 2010. The World Energy Council's definition of the Index is based on three core dimensions covering Energy Security, Energy Equity and Environmental Sustainability of Energy Systems, with an additional aspect of Country Context. India is ranked 63rd among 127 countries in the World Energy Trilemma Index 2022, steadily improving its position from 75 in 2021 86 in 2020 and 109 in 2019

In this report, the National Energy Trilemma Index, measures performance of States and Union Territories (UTs) across the core energy related dimensions of: Energy Security, Energy Equity and Environmental Sustainability. Balancing these three goals constitutes a 'Trilemma' and balanced systems enable prosperity and competitiveness. Additionally, the States/UTs are also scored on the dimension of state context, which measures 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 aggregation of several sub-indicators. The dimensions are broken down into a total of 11 indicators and 38 sub-indicators, on which performance of each state/UT is scored. The set of indicators selected provide a deeper understanding of an issue or dimension and helps develop a clear picture of the whole system, including its inter-linkages and trade-offs.

Performance of 28 State and 8 UTs has been showcased in this report. Southern and Western States have maintained better scores in both first and second editions of National Energy Trilemma Index, while North-Eastern states have shown significant improvement in scores from the first edition. Out of States, Kerala, Gujarat, Karnataka, Goa and Himachal Pradesh have scored highest, while among UTs Delhi and Chandigarh have secured highest cumulative scores on all dimensions.

A detailed analysis of State/ UT performance across various dimensions, indicators and sub-indicators are provided in this report. This index can be a useful tool for States/ UTs to benchmark their progress as relative performance compared to their peers and identify priority areas and gaps for their policy decisions.

1. INTRODUCTION

India's clean energy transition is rapidly underway towards becoming Net-Zero by 2070. Recent years were decisive in India's energy transition journey with one of the largest renewable energy expansion programs in the world. The country's renewable energy installations have crossed the 100 GW milestone to reach 110.12 GW¹ (excluding large hydro) as of March 2022. Going forward, collective and coordinated actions are required to achieve climate change targets from various stakeholders. As also called upon by the Hon'ble Prime Minister of India during the 26th United Nations Climate Change Conference of the Parties (COP26), the movement of 'Lifestyle for Environment' (LiFE) aims to utilize the power of collective action and nudge individuals across the world to undertake simple climate-friendly actions in their daily lives.

India has shown strong economic recovery in a post COVID world, with several organizations rating India as one of the fastest growing among major global economies. India plans to increase capital spending and investments in manufacturing sector, to support its 'Make in India' initiatives. Also, India will soon be the most populous country in the world - and will be home to one of the youngest populations in the world, fueling increase in domestic consumption. Expanding economy, population, urbanization and industrialization, is set to increase India's energy consumption in the coming decades. India has an opportunity to meet this growing energy needs with low-carbon and inclusive models to realize its Sustainable Development Goals (SDGs).

The renewable energy sector received further impetus with submission of India's updated Nationally Declared Contribution (NDC) post UNFCCC's COP 26 held at Glasgow. India now aims to reduce Emissions Intensity of its GDP by 45% by 2030, from 2005 level and achieve about 50% cumulative electric power installed capacity from non-fossil fuel-based energy resources by 2030.

However, such energy transition targets cannot be achieved without significant contributions and commitments from the Indian States and Union Territories (UTs). India's follows a federal structure, which requires coordinated actions from all States and UTs, towards India's climate commitment goals. Further, variations across States/UTs in energy use patterns, generation potential, demography, economic aspects such as paying capacity, calls for state specific strategies towards energy transition.

In this context, an outcome-based framework was developed i.e., "National Energy Trilemma Index" in 2020 to evaluate States' and UTs' progress on energy sector. The Index can be a useful tool for States/ UTs to benchmark their progress as relative performance compared to their peers and identify priority areas and data gaps.

The National Energy Trilemma Index assesses performance of States and UTs across three core dimensions:

- i. **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.
- ii. **Energy Equity:** Reflects ability to provide universal access to affordable, fairly priced and abundant energy for domestic and commercial use.
- iii. **Environmental Sustainability:** Reflects the transition of a State/UT's energy system towards mitigating and avoiding potential environmental harm and climate change impacts.

¹ CEA Report, Executive Summary on Power Sector, Mar 2022

Additionally, the States/UTs are also scored on the **dimension** of 'State Context', which measures States/UTs on their governance, logistics, ability to deliver on investments and innovation parameters. These 4 dimensions are further broken down into 11 indicators and 38 sub-indicators, on which performance of each State/ UT is scored.

The National Energy Trilemma Index is a work in progress and continuous refinements will be made as additional quality data becomes available and data systems improve. This report measures performance of 28 States and 8 UTs on various dimensions, indicators and sub-indicators.

Based on the assessments, the top performing and top improver States/ UTs on the National Energy Trilemma Index are as follows:

Table 1: Top performers and improvers on National Energy Trilemma Index 2022



Top 5 PERFORMERS

States/ UTs with highest overall scores

Rank	Score 2022	State
1	67.37	Kerala
2	66.54	Gujarat
3	65.65	Karnataka
4	63.62	Goa
5	63.13	Himachal Pradesh



Top 5 IMPROVERS

States/ UTs with highest improvement

Score 2022	Score 2020	Change	State
57.97	33.60	24.37	Sikkim
58.13	36.80	21.33	Mizoram
51.64	32.80	18.84	Tripura
53.77	38.30	15.47	West Bengal
40.27	25.20	15.07	Nagaland

Rank	Score 2022	Union Territory
1	65.82	Delhi
2	63.95	Chandigarh
3	57.16	DNH-DD
4	55.03	Puducherry
5	45.68	Andaman & Nicobar

Score 2022	Score 2020	Change	UT
44.60	25.30	19.30	Lakshadweep
45.68	29.80	15.88	Andaman & Nic.
55.03	49.00	6.03	Puducherry
37.97	35.10	2.87	Jammu & Kash.
65.82	64.60	1.22	Delhi

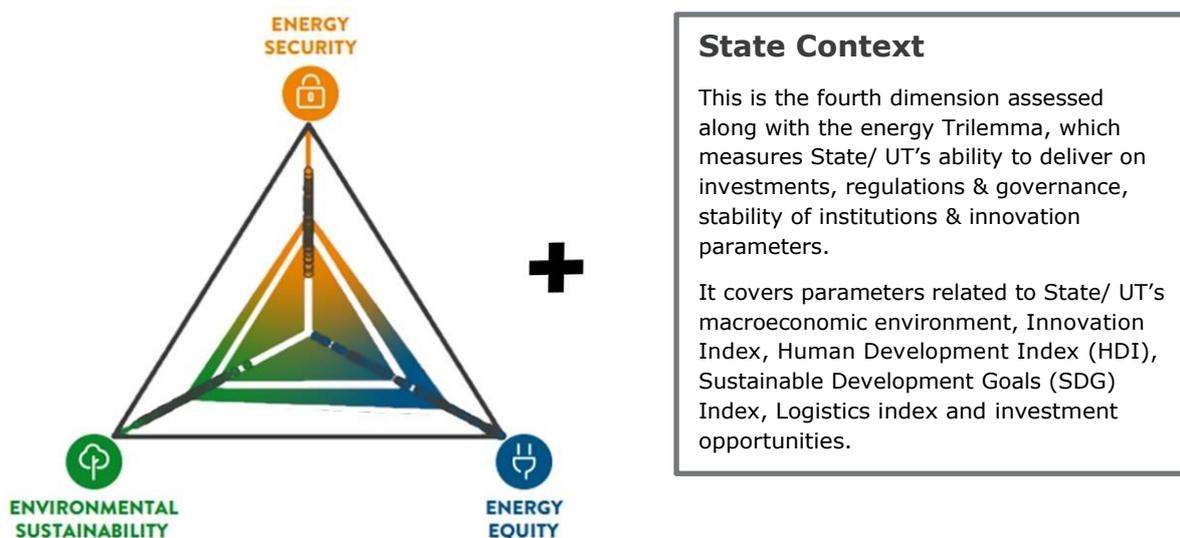
2. NATIONAL ENERGY TRILEMMA INDEX METHODOLOGY

2.1 WHAT IS ENERGY TRILEMMA

The framework adopted in this report draws on the World Energy Council’s Energy Trilemma Index, which is annually published since 2010 and World Economic Forum’s Energy Transition Index which has published 10 editions of Energy Transition Index.

The World Energy Council’s definition of energy sustainability is based on three core dimensions: Energy Security, Energy Equity, and Environmental Sustainability of Energy Systems. Balancing these three goals constitutes a ‘Trilemma’ and balanced systems enable prosperity and competitiveness.

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 of 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 is an aggregation of various indicators, which in turn are 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	9	+	11	+	9	+	9	=	38 sub-indicators

The set of indicators selected provide a deeper understanding of an issue or dimension and helps develop a clear picture of the whole system, including its inter-linkages and trade-offs. 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:

1. **Coverage:** sub-indicators should be critical to the Index's methodology and should cover majority of relevant States/UTs.
2. **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.
3. **Relevance:** Sub-indicators should provide insight into State's/UT's situations in the context of the dimension/ indicator.
4. **Distinctiveness:** Each sub-indicator should focus on a different aspect of the issue being explored and avoids overlaps or redundancy with other sub-indicators.
5. **Robustness:** Sub-indicator data are available from reputable sources with the most current information available at sufficient coverage.
6. **Balance:** Sub-indicators within each dimension (and dimensions across the Index) exhibit coverage of different issues.

The sub-indicators selected for this report are widely used for communicating energy issues to policy makers and the public.

Each sub indicators are assigned a weightage, for the aggregation of a State's/UT's scores. Each of the core dimensions i.e., Energy Security, Energy Equity, Environmental Sustainability and State Context has been given equal priority and weightages. Assignment of equal weightages to variables in composite indices has been debated from the perspective of robustness and interpretation of the aggregate scores. However, due to the lack of empirical evidence on the relative importance of variables within and across dimensions for all the states for which the Index provides coverage, the dimensions have been weighted equally. Moreover, within each dimension, higher weightages are given to those indicators and sub-indicators which are more relevant to existing issues being faced in the sector.

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 their 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 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. Diversity of Electricity Installed Capacity (EMCI)	2.00
	2. Share of RE in total installed capacity (%)	2.00
	3. Installed generating capacity (Growth Rate in %)	2.00
	4. Electricity consumption per capita (in kWh)	2.00
	5. Energy not supplied (Deficit) in %	2.00
	6. Installed Capacity/ Peak Demand	2.00
Viability of Energy/ Electricity Systems in State	7. AT&C Losses (in %)	5.00
	8. ACS-ARR Gap (in Rs./unit)	4.00
	9. Average Hours of Supply in Agriculture (Mins/day)	4.00

 Energy Equity – 25%		
Indicators	Sub - Indicators	Weightage (%)
Energy Access	1. Access to Electricity %	2.50
	2. LPG + PNG Connections against number of HHs %	2.50
Affordability	3. Average Cost of Supply (ACS)	4.00
	4. Non-Subsidized LPG Price (Rs/14.2 kg Cylinder)	1.00
	5. Petrol Prices in Rs/litre	1.00
	6. Diesel Prices in Rs./litre	1.00
	7. Cross Subsidization (Industrial ABR/ACS)	3.00
Performance of Utilities	8. PAT / Revenue	2.50
	9. Overdues/ Cost of Power	2.50
	10. Payables of 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 (Capacity/Potential)-%	3.00
	3. Energy intensity (kgoe/GDP in 1000 INR)-Data	3.00
Decarbonization	4. Notification of SAPCC	3.00
	5. CO2 reduced from LED Bulbs/1000 population(tonnes)	3.00
	6. % of Forest Cover (Forest Cover wrt total area)	3.00
Emissions and Pollution	7. Emission Intensity (kgCO ₂ eq/ GSDP in 1000 INR)	3.00
	8. Air Quality Index ²	2.00
	9. EV Penetration in %	2.00


State Context – 25%

Indicators	Sub - Indicators	Weightage (%)
Macroeconomic Environment	1. Growth rate of GSDP	3.00
	2. FDI Equity Inflows (in USD Million)	3.00
	3. States' Ranking: Start up Index*	3.00
Regulations, Institutions & Governance	4. Human Development Index (Score)	2.00
	5. Good Governance Index (Score)	3.00
	6. SDG Index (Score)	3.00
Stability for Investment & Innovation	7. Innovation Score as per India Innovation Index	3.00
	8. Logistics Index (Index Scores)	3.00
	9. Investment Opportunities (in USD Billion)	2.00

*Scores are awarded as follows - 100= Best performer; 80= Top Performer; 60= Leaders; 40=Aspiring Leaders; 20=Emerging States; 10= Beginners

Certain sub-indicators have been updated from the previous edition of this report (National Energy Trilemma Index 2020) on account of data availability or some new sub-indicators have been added in this edition of the report which further help in showcasing a more comprehensive assessment of the State/ UT across dimensions. Details of these updates made are as follows:

² (as on 27.07.21)

Table 4: Changes made in sub-indicators from 2020 edition

Sl.	Sub-indicator 2020 edition	Sub-indicator 2022 edition	Rationale for change
1.	RE potential (estimated in GWP)	Installed Capacity/ Peak Demand	RE Potential covered under sub-indicator 'Performance of Clean Energy (Capacity/ Potential)' Replaced with 'Installed Capacity/ Peak Demand' as resource adequacy key concern for sector.
2.	Load shedding hours/ outages - Industries	Deleted	Data not available for several State/ UTs
3.	LPG coverage (%)	Deleted	Covered under another sub-indicator
4.	NA	Cross Subsidization	Key concern for sector
5.	Net-worth of State Utilities (Rs. Crores)	Deleted	Data not available for several State/ UTs
6.	Total Borrowings of State Utilities (Rs. Crores)	Deleted	Data not available for several State/ UTs
7.	NA	Payables for Power Purchase (Days)	Key concern for sector
8.	NA	Tariff Subsidy Billed/ Total Revenue	Key concern for sector
9.	PM 2.5 mean annual exposure	Deleted	Covered under sub-indicator 'AQI'
10.	PM 10 mean annual exposure	Deleted	Covered under sub-indicator 'AQI'
11.	NA	Emission Intensity (kgCO ₂ eq/ GSDP in 1000 INR)	Key concern for the sector
12.	Ease of Doing Business Index	FDI Equity Inflows (in USD Million)	Data not available for EODB - Business Reforms Action Plan (BRAP) not revised after 2020. FDI inflows in the State reflects attractiveness of State.
13.	Industry, infrastructure & innovation	Deleted	Covered under sub-indicator 'Innovation and Logistics index'
14.	NA	Investment Opportunities (in USD Billion)	Reflects potential of State's Economy

2.3 Methodology for scoring of States and UTs

All States/ UTs are scored on each sub-indicator, as per 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 normalization

- **Data Re-scaling:** The data of various States/ UTs are compared amongst each other using a normalization approach (as discussed in the next para). To allow for normalization, 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 normalization:** Normalization 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, normalization 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 normalization is as follows:

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

Where,

X' is the normalized data

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

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

The normalization 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:** Normalized 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.

Diversity of Electricity Installed Capacity

The sub-indicator of 'Diversity of Electricity Installed 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:

$$= \left(\left(\frac{-d}{c+h} \right) * LN \left(\frac{d}{c+h} \right) \right) + \left(\left(\frac{-e}{c+h} \right) * LN \left(\frac{e}{c+h} \right) \right) + \left(\left(\frac{-f}{c+h} \right) * LN \left(\frac{f}{c+h} \right) \right) + \left(\left(\frac{-g}{c+h} \right) * LN \left(\frac{g}{c+h} \right) \right) \right) / LN(n)$$

Where, *d, e, f, g* represents the share of the electricity from different sources, 'n' represents the no. of electricity sources and "c+ h" 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 AND RANKINGS

Scores and ranks obtained by State/UTs on National Energy Trilemma Index are as follows:

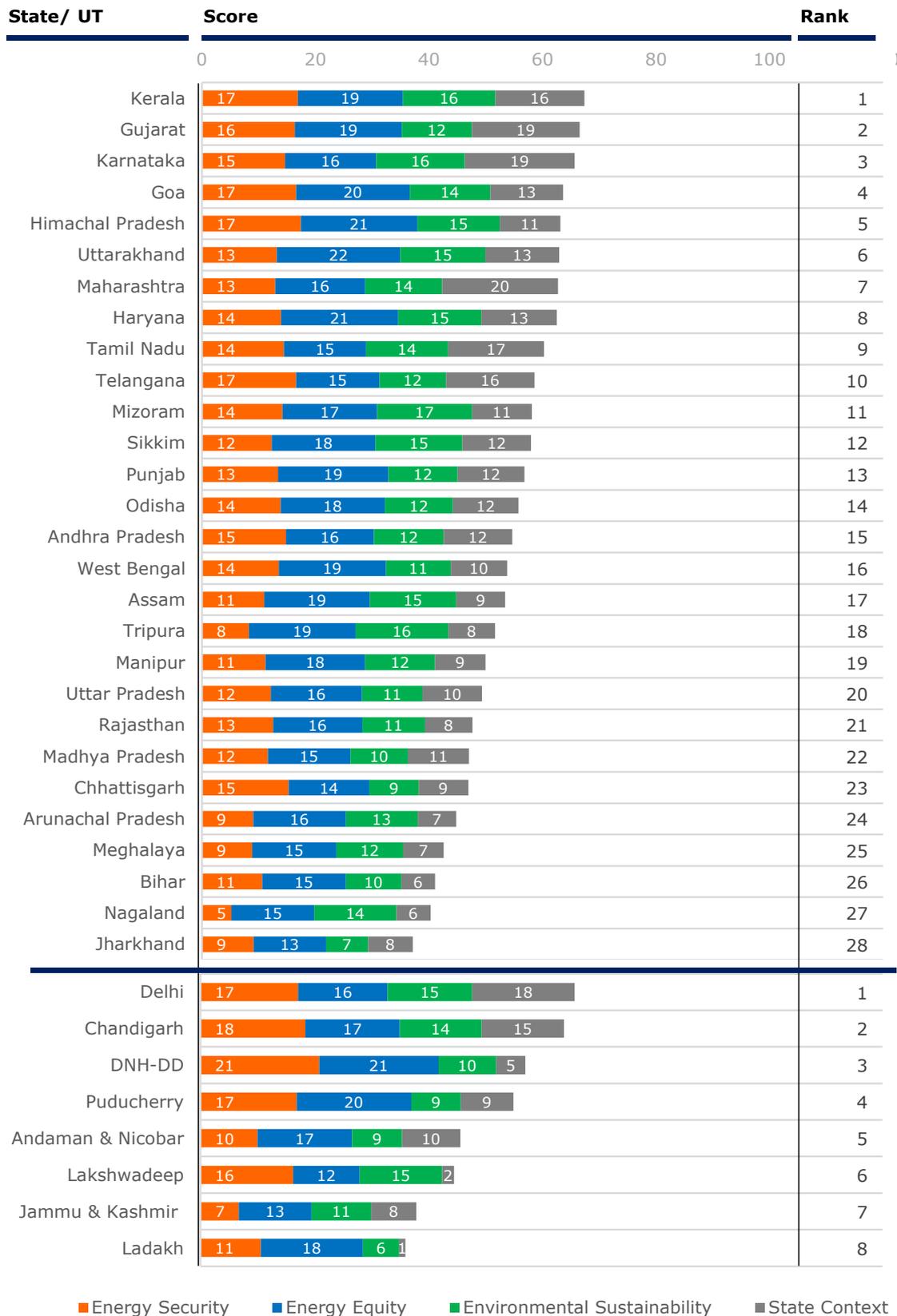
Table 5: Overall scores and ranks obtained by States/ UTs

State	Score 2022	Rank 2022	Score 2020	Rank 2020
Kerala	67.37	1	61.60	6
Gujarat	66.54	2	67.60	1
Karnataka	65.65	3	66.90	3
Goa	63.62	4	58.30	10
Himachal Pradesh	63.13	5	67.30	2
Uttarakhand	62.95	6	56.70	11
Maharashtra	62.72	7	66.90	3
Haryana	62.52	8	61.10	8
Tamil Nadu	60.25	9	62.30	5
Telangana	58.57	10	61.40	7
Mizoram	58.13	11	36.80	23
Sikkim	57.97	12	33.60	24
Punjab	56.82	13	58.50	9
Odisha	55.76	14	46.10	15
Andhra Pradesh	54.66	15	55.80	12
West Bengal	53.77	16	38.30	22
Assam	53.42	17	41.80	19
Tripura	51.64	18	32.80	25
Manipur	49.96	19	39.40	21
Uttar Pradesh	49.34	20	47.90	14
Rajasthan	47.66	21	41.50	20
Madhya Pradesh	47.04	22	54.30	13
Chhattisgarh	46.91	23	43.40	17
Arunachal Pradesh	44.77	24	30.40	26
Meghalaya	42.58	25	28.50	27
Bihar	41.05	26	46.10	16
Nagaland	40.27	27	25.20	28
Jharkhand	37.13	28	43.40	18
Union Territories	Score 2022	Rank 2022	Score 2020	Rank 2020
Delhi	65.82	1	64.60	2
Chandigarh	63.95	2	66.60	1
DNH-DD	57.16	3	NA	NA
Puducherry	55.03	4	49.00	3
Andaman & Nicobar	45.68	5	29.80	5
Lakshadweep	44.60	6	25.30	6
Jammu & Kashmir	37.97	7	35.10	4
Ladakh	36.01	8	NA	NA

* In 2020, UT Score and Rank of Jammu and Kashmir includes Ladakh; DNH and DD were segregated utilities in 2020

The overall performance of the States/ UTs in ascending order of the Rankings, with dimension-wise scores on National Energy Trilemma Index 2nd edition (2022) is as follows:

Figure 3: Overall scores and ranks obtained by States/ UTs



It is observed that most of the States have lower scores on the dimensions of Energy Security and Environmental Sustainability. This indicates that none of the States, scores good on all of the indicators/ sub-indicators together, under these dimensions. For instance, in case of Kerala the maximum score on the dimension of Energy Security is just 16.73 (out of 25). On the other hand, most of the States have better scores on the dimension of Energy Equity.

A completely inverse trend is observed in UTs, where most UTs have scored better on dimensions of Energy Security and Energy Equity but scored lower on dimension of Environmental Sustainability.

Comparison with National Energy Trilemma Index, 1st edition (2020)

Heat-maps are shown to compare the state wise scores of National Energy Trilemma Index from 1st edition (2020) to 2nd edition (2022). Following observations can be made from these heat maps:

- Southern and Western states have maintained better scores in both 1st and 2nd editions of National Energy Trilemma Index.
- North-eastern states have shown improvement in scores from the 1st edition.

Figure 4: Heatmap of 1st vs 2nd edition scores

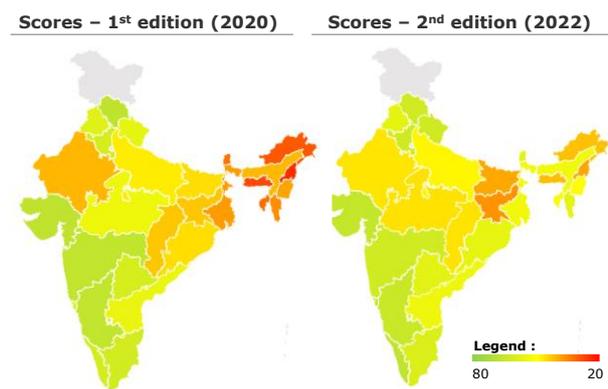
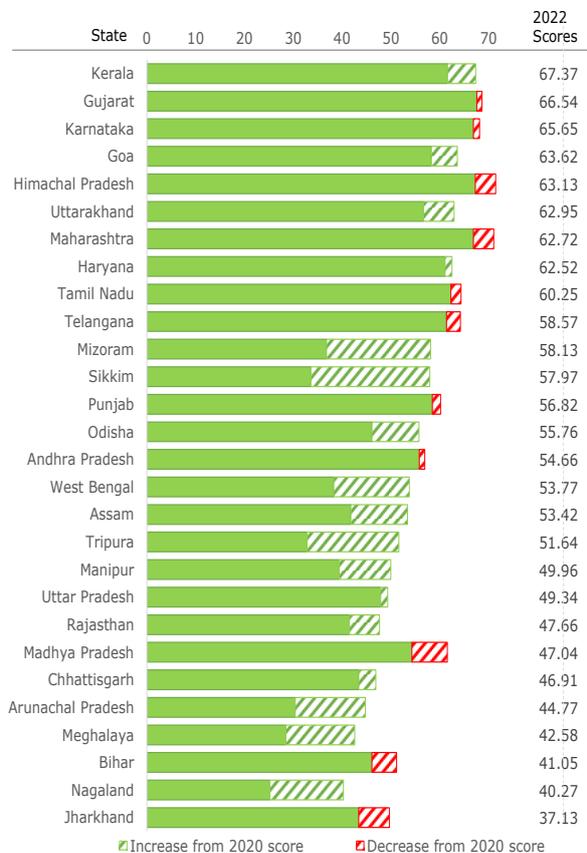


Figure 5: Changes in scores from 1st edition (2020)



Further, the bar-graph, shows the change in state wise scores of National Energy Trilemma Index from 1st edition (2020) to 2nd edition (2022). The top scorers include majorly the south-western belt of states. The states have been sorted in descending order of their scores in 2nd edition (2022). Following observations are made from the graph:

- With minor decrease in scores in a few states, the overall scores of most of the states have improved.
- Significant improvement is observed in north-eastern states of the country; however, they still rank lower as compares to many other states in the country

The following table presents a snapshot of key contributors to the scores of top 5 states on National Energy Trilemma Index 2nd edition (2022) scores:

Table 6: Snapshot of top 5 States

State	Kerala Rank:1 Score: 67.37	Gujarat Rank:2 Score: 66.54	Karnataka Rank:3 Score: 65.65	Goa Rank:4 Score: 65.33	Himachal Pradesh Rank:5 Score: 63.13
Energy Security	Rank:2 Score: 16.90 <ul style="list-style-type: none"> • Diversity of Electricity Installed Capacity: Highest diversity; Hydro share (31%) • AT&C Loss: 14.47% 	Rank:5 Score: 16.40 <ul style="list-style-type: none"> • RE Share: 39.3% in installed capacity • AT&C Loss: 11.95% • Elec. Consumption: 2,388 kwh per capita 	Rank:8 Score: 14.65 <ul style="list-style-type: none"> • RE Share: Highest in the country (52%) 	Rank:3 Score: 16.61 <ul style="list-style-type: none"> • Generation capacity: High growth rate • AT&C Loss: 13.99% 	Rank:1 Score: 17.44 <ul style="list-style-type: none"> • AT&C Loss: 11.68% • ACS-ARR Gap: Rs. (0.02) per unit • Elec. supply to agriculture: 24 hrs
Energy Equity	Rank:10 Score: 18.50 <ul style="list-style-type: none"> • Payables for power purchase: 69 days • No Tariff subsidy in electricity supply 	Rank:8 Score: 18.80 <ul style="list-style-type: none"> • Payables days for power purchase: 2% 	Rank:17 Score: 16.04 <ul style="list-style-type: none"> • ACS: High – Rs. 6.59/ unit • Subsidy: subsidy forms 28% of revenue 	Rank:4 Score: 19.99 <ul style="list-style-type: none"> • ACS: Low - Rs. 4.77/ unit • Overdues/Cost of power: Low – 1% 	Rank:3 Score: 20.52 <ul style="list-style-type: none"> • LPG + PNG connections against no. of HHs: High – 1.23x
Environmental Sustainability	Rank:3 Score: 16.27 <ul style="list-style-type: none"> • Energy Efficiency: high score by BEE 	Rank:15 Score: 12.36 <ul style="list-style-type: none"> • Forest cover: Low – 7.61% • Energy Intensity: higher than other States 	Rank:4 Score: 15.59 <ul style="list-style-type: none"> • Energy Efficiency Score: Highest in the country • RE Capacity/potential: High 	Rank:12 Score: 14.20 <ul style="list-style-type: none"> • Energy Efficiency: low score - 13.50 • RE Capacity/potential: Low 	Rank:9 Score: 14.50 <ul style="list-style-type: none"> • CO2 saved from LED Bulbs per 1000 population: High – 123.90 tonnes
State Context	Rank:5 Score: 15.70 <ul style="list-style-type: none"> • SDG Index: highest score in country • HDI score: 0.78 	Rank: 3 Score: 18.98 <ul style="list-style-type: none"> • Good governance Index: Highest in country 	Rank: 2 Score: 19.37 <ul style="list-style-type: none"> • FDI Equity inflows: 2nd highest after MH • Innovation Index: Highest in the country 	Rank: 9 Score: 12.82 <ul style="list-style-type: none"> • Good Governance Index: High score - 5.35 • HDI: Highest in the country (0.81) 	Rank: 15 Score:10.67 <ul style="list-style-type: none"> • Growth rate of GSDP: 6.50% • Logistic Index: Low – 2.75

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 decarbonizing energy systems. It assesses the extent to which a State/ UT's energy supply (especially electricity) is secure, accessible and diversified.

Table 7: Top performers and improvers on Energy Security dimension



Top 5 PERFORMERS

States/ UTs with highest overall scores

Rank	State
1	Himachal Pradesh
2	Kerala
3	Goa
4	Telangana
5	Gujarat



Top 5 IMPROVERS

States/ UTs with highest improvement

Score 2022	Score 2020	Change	State
13.55	3.30	10.25	West Bengal
14.18	4.00	10.18	Mizoram
13.84	4.50	9.34	Odisha
12.30	4.10	8.20	Sikkim
10.98	2.90	8.08	Assam

Rank	Union Territory
1	DNH-DD
2	Chandigarh
3	Delhi
4	Puducherry
5	Lakshadweep

Score 2022	Score 2020	Change	UT
16.27	4.50	11.77	Lakshadweep
9.99	2.80	7.19	Andaman & Nic.
18.42	12.40	6.02	Chandigarh
16.89	13.00	3.89	Puducherry
17.17	14.20	2.97	Delhi

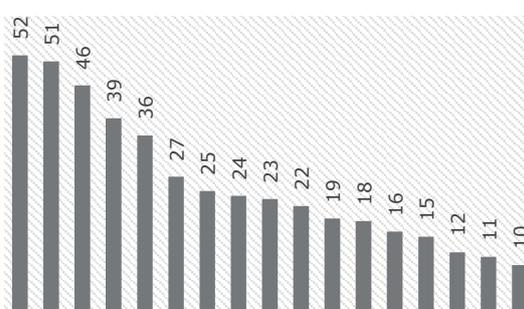
Note - Dimension wise scores are out of 25

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, 2030. This indicator has 7 sub-indicators focusing on growth in electricity generation installed capacity, Renewable share in installed capacity and energy deficit in state.

RE rich states like Karnataka, Rajasthan, Tamil Nadu, Gujarat and Andhra Pradesh, have more than 30% share of Renewable Energy in their total installed capacity.

Figure 6: RE share in installed capacity (%)



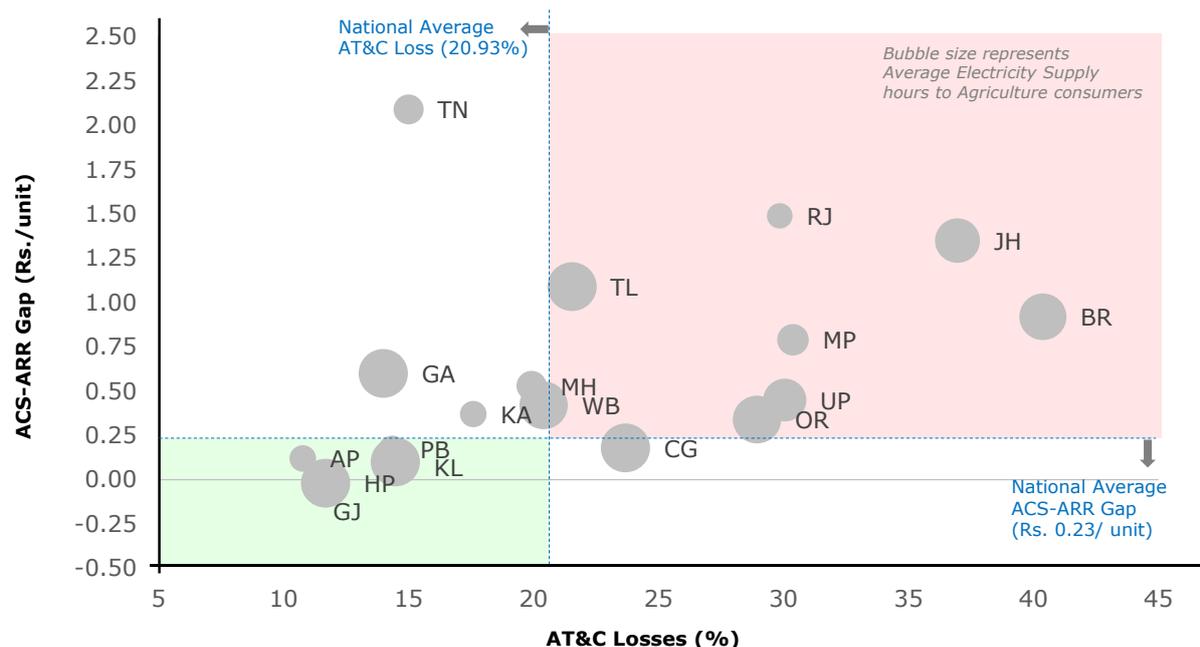
Source: CEA executive summary report (Mar-22)

Viability of Energy/ Electricity Systems

The Central and State Governments have launched several schemes and initiatives in the past decade aimed at improving the operations and financial health of DISCOMs. Despite these steps, their success has been limited so far and therefore it is crucial to monitor the performance trends.

Accordingly, the indicator 'Viability of Energy/ Electricity Systems' looks at sub-indicators showing the performance of DISCOMs in the State/ UT on parameters of AT&C Losses, ACS-ARR Gap and average hours of supply to agricultural consumers. These parameters even hold major weightage in ongoing scheme of Government of India – Revamped Distribution Sector Scheme (RDSS).

Figure 7: Bubble chart, comparing AT&C losses, ACS-ARR Gap and Average Supply hours (Agricultural)



Source: AT&C losses and ACS-ARR gap as per PFC Report on performance of power utilities for FY2019-20; Data for Supply hours to Agricultural consumers as per CEA executive summary report Mar-22

The graph of AT&C Losses vs ACS-ARR gap shows that many States such as Rajasthan, Jharkhand and Bihar continue to have high losses both in energy and commercial terms.

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

Table 8: 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 2022
Himachal Pradesh	5.56	11.88	17.44	1.00
Kerala	5.42	11.48	16.90	2.00
Goa	5.05	11.56	16.61	3.00
Telangana	6.24	10.33	16.57	4.00
Gujarat	8.05	8.35	16.40	5.00
Chhattisgarh	4.95	10.35	15.30	6.00
Andhra Pradesh	6.60	8.19	14.79	7.00
Karnataka	7.57	7.08	14.65	8.00

State	Electricity Diversity and Power Supply Position	Viability of Energy/ Electricity Systems in the State	Dimension Score	Rank 2022
Tamil Nadu	7.51	6.94	14.45	9.00
Mizoram	5.53	8.65	14.18	10.00
Haryana	6.09	7.83	13.92	11.00
Odisha	4.43	9.41	13.84	12.00
West Bengal	2.85	10.70	13.55	13.00
Punjab	5.49	7.91	13.40	14.00
Uttarakhand	6.20	7.01	13.21	15.00
Maharashtra	5.74	7.18	12.92	16.00
Rajasthan	7.63	4.92	12.55	17.00
Sikkim	5.97	6.33	12.30	18.00
Uttar Pradesh	3.98	8.15	12.13	19.00
Madhya Pradesh	5.48	6.12	11.60	20.00
Manipur	4.77	6.43	11.20	21.00
Assam	4.15	6.83	10.98	22.00
Bihar	3.08	7.52	10.60	23.00
Jharkhand	1.50	7.62	9.12	24.00
Arunachal Pradesh	7.70	1.34	9.04	25.00
Meghalaya	4.43	4.40	8.83	26.00
Tripura	3.56	4.72	8.28	27.00
Nagaland	5.17	0.00	5.17	28.00

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

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

Union Territory	Electricity Diversity and Power Supply Position	Viability of Energy/ Electricity Systems in the State	Dimension Score	Rank 2022
DNH-DD	9.27	11.58	20.85	1.00
Chandigarh	5.17	13.25	18.42	2.00
Delhi	4.76	12.40	17.17	3.00
Puducherry	5.19	11.70	16.89	4.00
Lakshadweep	9.45	6.83	16.27	5.00
Ladakh	5.45	5.14	10.59	6.00
Andaman & Nicobar	6.10	3.89	9.99	7.00
Jammu & Kashmir	3.02	3.68	6.70	8.00

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 financial performance of power utilities in the State/ UT are also assessed in this dimension.

Table 10: Top performers and improvers on Energy Equity dimension



Top 5 PERFORMERS

States/ UTs with highest overall scores

Rank	State
1	Uttarakhand
2	Haryana
3	Himachal Pradesh
4	Goa
5	Punjab



Top 5 IMPROVERS

States/ UTs with highest improvement

Score 2022	Score 2020	Change	State
16.70	11.00	5.70	Mizoram
14.63	9.00	5.63	Nagaland
18.26	12.70	5.56	Sikkim
16.32	12.20	4.12	Arunachal Prad.
21.74	17.80	3.94	Uttarakhand

Rank	Union Territory
1	DNH-DD
2	Puducherry
3	Ladakh
4	Andaman & Nicobar
5	Chandigarh

Score 2022	Score 2020	Change	UT
11.73	4.10	7.63	Lakshadweep
20.19	19.10	1.09	Puducherry
16.69	16.30	0.39	Andaman & Nic.
12.84	12.50	0.34	Jammu & Kash.
-	-	-	-

Note – Dimension wise scores are out of 25

Energy Access

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

Figure 8: LPG and PNG connections as % of Households



Note: the figure is more than 100% in many states, as single household may have multiple LPG/ PNG connections; Source: PPAC ready reckoner, June 2022

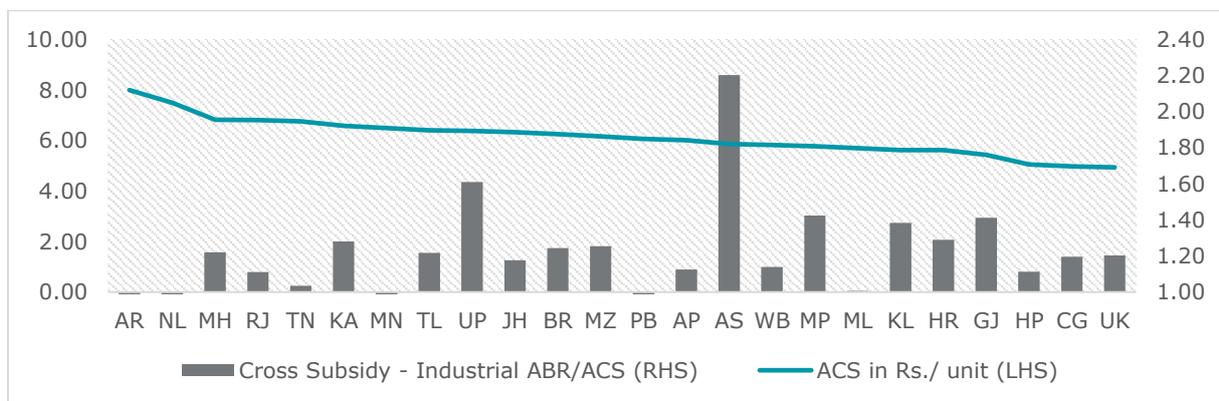
With 100 percent access to electricity in most of the states, score/ranks are majorly dependent on percentage of LPG+PNG Connections against number of Households.

Affordability

The indicator 'Affordability' has five sub-indicators majorly highlighting the 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 (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 high level of cross subsidies, indicating excess burden on Industrial consumers.

Figure 9: State wise Average Cost of Power and Cross Subsidy

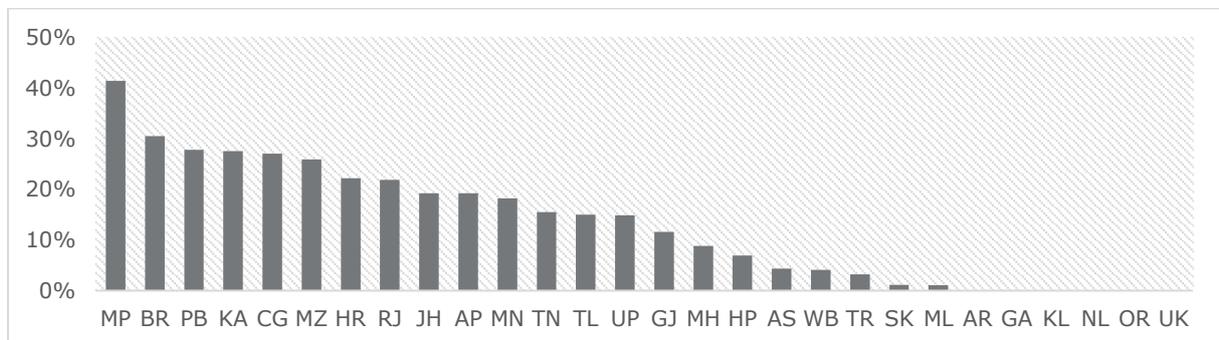


Source: PFC report on performance of power utilities, FY2019-20

Performance of power utilities

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, evident from high outstanding subsidy amount to be received by DISCOMs.

Figure 10: Subsidy Dependence: Tariff subsidy billed as % Total Revenue of DISCOMs



Source: PFC report on performance of power utilities, FY2019-20

Delay in receiving subsidies from Government in turn hampers ability of DISCOMs to pay power generators on time, leading to overdues for power purchase. This leads to an overall cashflow issues 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 is as follows:

Table 11: Scores and ranks obtained by States on Energy Equity dimension

State	Energy Access	Affordability	Performance of Utilities	Dimension Score	Rank 2022
Uttarakhand	4.41	7.54	9.79	21.74	1
Haryana	4.97	6.89	8.81	20.67	2
Himachal Pradesh	4.31	7.43	8.78	20.52	3
Goa	5.13	7.50	7.36	19.99	4
Punjab	4.92	6.71	7.84	19.47	5
West Bengal	3.87	5.84	9.15	18.86	6
Tripura	3.51	6.11	9.19	18.81	7
Gujarat	3.59	6.14	9.07	18.80	8
Assam	3.89	4.89	9.80	18.58	9
Kerala	4.06	5.24	9.20	18.50	10
Odisha	3.30	6.52	8.59	18.41	11
Sikkim	4.58	6.57	7.11	18.26	12
Manipur	4.00	5.82	7.76	17.58	13
Mizoram	4.62	6.04	6.04	16.70	14
Arunachal Pradesh	3.73	5.98	6.61	16.32	15
Uttar Pradesh	3.99	4.88	7.21	16.08	16
Karnataka	4.04	5.25	6.75	16.04	17
Maharashtra	4.05	4.07	7.71	15.83	18
Rajasthan	4.00	4.62	7.06	15.68	19
Andhra Pradesh	3.92	4.82	6.77	15.51	20
Meghalaya	2.60	7.17	5.12	14.89	21
Bihar	3.24	4.43	7.09	14.76	22
Telangana	4.40	4.34	5.95	14.69	23
Nagaland	3.26	6.17	5.20	14.63	24
Madhya Pradesh	3.49	5.25	5.83	14.57	25
Tamil Nadu	3.79	5.01	5.70	14.50	26
Chhattisgarh	0.70	6.21	7.31	14.22	27
Jharkhand	3.37	5.36	4.01	12.74	28

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

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

Union Territory	Energy Access	Affordability	Performance of Utilities	Dimension Score	Rank 2022
DNH-DD	3.27	8.07	9.68	21.02	1
Puducherry	3.06	8.02	9.12	20.19	2
Ladakh	7.46	7.76	2.76	17.98	3
Andaman & Nicobar	4.05	6.64	6.00	16.69	4
Chandigarh	3.14	6.05	7.43	16.63	5
Delhi	4.49	4.69	6.56	15.74	6
Jammu & Kashmir	4.14	6.48	2.21	12.84	7
Lakshadweep	3.94	3.85	3.94	11.73	8

Environmental Sustainability

The Environmental Sustainability dimension assesses the efforts being undertaken by States/UTs to decarbonize 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, decarbonization, and air quality.

Table 13: Top performers and improvers on Environmental Sustainability dimension



Top 5 PERFORMERS

States/ UTs with highest overall scores

Rank	State
1	Mizoram
2	Tripura
3	Kerala
4	Karnataka
5	Sikkim



Top 5 IMPROVERS

States/ UTs with highest improvement

Score 2022	Score 2020	Change	State
14.20	6.30	7.90	Goa
16.31	9.80	6.51	Tripura
15.33	9.40	5.93	Sikkim
11.74	6.90	4.84	Meghalaya
14.45	10.40	4.05	Nagaland

Rank	Union Territory
1	Delhi
2	Lakshadweep
3	Chandigarh
4	Jammu & Kashmir
5	DNH-DD

Score 2022	Score 2020	Change	UT
10.50	5.30	5.20	Jammu & Kash.
8.70	5.10	3.60	Puducherry
8.80	5.60	3.20	Andaman & Nic.
14.86	12.40	2.46	Delhi
14.38	12.60	1.78	Chandigarh

Note – Dimension wise scores are out of 25

Energy Resource Productivity

Energy efficiency enables the same quality of service while reducing energy demand, which can then be met by renewable energy. It falls upon each States/UTs to take the sustainable path best suited to and aligned with the State’s/ 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, sub-indicators focusing on energy efficiency, clean energy and energy intensity are included.

Karnataka, Haryana and Rajasthan are the top states on the indicator of Energy Resource Productivity, owing to their better Energy Efficiency Scores (as per BEE State Energy Efficiency Index 2020), lower energy intensity and higher renewable installed capacity as % of their total Renewable potential.

Figure 11: Energy Efficiency Score (BEE)



Source: BEE, State Energy Efficiency Index 2020

Decarbonization

In line with the central governments mission to reach net-zero emission by 2070. Decarbonization 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.

Decarbonization indicator is assessed based on sub-indicators including the efforts made towards notification of States Action Plan towards climate change initiatives, CO₂ reduced from LED Bulbs under Government of India’s Ujala scheme and percentage of forest cover with respect to total area of the State.

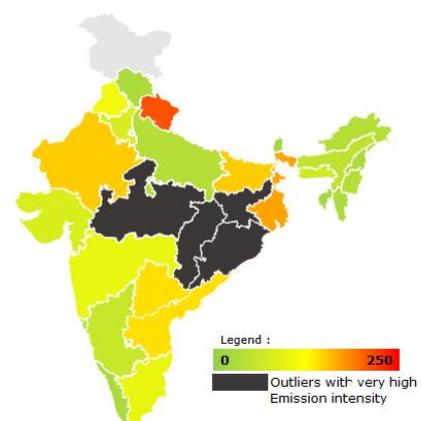
North-Eastern states and smaller/ hilly states like Himachal Pradesh, Goa perform better on this indicator owing to their high forest cover. States of Himachal Pradesh, Odisha, Goa, Gujarat and Haryana have ranked in top 5 on the sub-indicator for CO₂ saved from LED bulbs in Ujala scheme.

Emission and Pollution

Both for India and the world, it is imperative to keep working towards our climate commitments as per the Paris Agreement, considering how climate change can have a detrimental impact on human health and wellbeing. It is encouraging to note that, so far, India is on track to meet its updated Nationally Determined Contribution (NDC) targets to reduce Emissions Intensity of its GDP by 45% by 2030 (from 2005 level) and achieve about 50% cumulative electric power installed capacity from non-fossil fuel-based energy resources by 2030.

Emission intensity is the volume of emissions per unit of GDP. The heat map shows a comparative assessment of State wise Emission Intensity on a geographical map.

Figure 12: Emission Intensity – heat map



Source: State Energy & Climate Index, NITI Aayog

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 Emission Intensity and Air Quality Index (AQI), state wise EV penetration is also assessed as part of this indicator. As per a Press Information Bureau (PIB) report in July 2022, States/ UTs with more than 1% EV penetration include Delhi, Tripura, DNH-DD and Assam.

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

Table 14: Scores and ranks obtained by States on Environmental Sustainability dimension

State	Energy Resource Productivity	Decarbonization	Emissions and Pollution	Dimension Score	Rank 2022
Mizoram	3.21	8.02	5.48	16.71	1
Tripura	3.52	6.48	6.31	16.31	2
Kerala	5.25	5.97	5.05	16.27	3
Karnataka	6.05	4.50	5.04	15.59	4
Sikkim	3.77	5.93	5.63	15.33	5
Assam	3.69	4.88	6.67	15.24	6
Uttarakhand	3.83	6.02	5.13	14.98	7
Haryana	6.36	4.74	3.56	14.66	8
Himachal Pradesh	3.00	6.89	4.61	14.50	9
Nagaland	2.60	7.32	4.53	14.45	10
Tamil Nadu	6.00	3.72	4.71	14.43	11
Goa	2.18	6.90	5.12	14.20	12
Maharashtra	5.13	3.89	4.57	13.59	13
Arunachal Pradesh	2.25	7.21	3.19	12.65	14
Gujarat	3.63	4.62	4.11	12.36	15
Manipur	2.15	6.26	3.86	12.27	16
Manipur	2.15	6.26	3.86	12.27	16
Punjab	6.01	3.28	2.86	12.15	18
Odisha	2.06	7.00	2.91	11.97	19
Telangana	4.12	3.80	3.83	11.75	20
Meghalaya	0.81	6.23	4.70	11.74	21
West Bengal	3.47	3.89	4.08	11.44	22
Rajasthan	3.93	3.56	3.56	11.05	23
Uttar Pradesh	3.91	3.34	3.42	10.67	24
Madhya Pradesh	2.82	4.37	2.93	10.12	25
Bihar	2.26	3.52	4.00	9.78	26
Chhattisgarh	1.33	5.29	2.04	8.66	27
Jharkhand	1.56	4.18	1.68	7.42	28

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

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

Union Territory	Energy Resource Productivity	Decarbonization	Emissions and Pollution	Dimension Score	Rank 2022
Delhi	6.04	3.82	5.00	14.86	1
Lakshadweep	0.33	14.17	0.00	14.50	2
Chandigarh	6.21	3.95	4.23	14.38	3
Jammu & Kashmir	1.96	5.01	3.53	10.50	4
DNH-DD	0.77	5.53	3.85	10.15	5
Andaman & Nicobar	1.11	7.64	0.05	8.80	6
Puducherry	2.44	3.56	2.70	8.70	7
Ladakh	0.00	5.33	1.06	6.39	8

State Context

State Context focuses on elements that enable states to develop 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 16: Top performers and improvers on State Context dimension



Top 5 PERFORMERS

States/ UTs with highest overall scores

Rank	State
1	Maharashtra
2	Karnataka
3	Gujarat
4	Tamil Nadu
5	Kerala



Top 5 IMPROVERS

States/ UTs with highest improvement

Score 2022	Score 2020	Change	State
20.38	13.3	7.08	Maharashtra
19.37	13.3	6.07	Karnataka
10.54	4.5	6.04	Mizoram
12.08	7.4	4.68	Sikkim
8.91	5.3	3.61	Manipur

Rank	Union Territory
1	Delhi
2	Chandigarh
3	Andaman & Nicobar
4	Puducherry
5	Jammu & Kashmir

Score 2022	Score 2020	Change	UT
10.20	5.1	5.10	Andaman & Nic.
18.06	16.3	1.76	Delhi
7.93	7.3	0.63	J&K
-	-	-	-
-	-	-	-

Note – Dimension wise scores are out of 25

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



Source: Figures for FY2020-21 (for FY2019-20, where FY2020-21 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 including performance on Human Development Index, Good Governance Index along with performance over Sustainable Development Goals are used.

Table 17: Top States on HDI, Governance and SDG sub-indicators

Human Development Index (HDI)	Good Governance Index	Sustainable Development Goals (SDG) Index, Score
Top 5 States	Top 5 States	Top 5 States
1. Goa	1. Gujarat	1. Kerala
2. Sikkim	2. Haryana	2. Himachal Pradesh & Tamil Nadu
3. Kerala	3. Maharashtra	3. -*
4. Mizoram	4. Goa	4. Sikkim
5. Uttarakhand	5. Kerala	5. Uttarakhand

Source: MOSPI

Source: DoARPG

Source: NITI Aayog’ *2nd position shared by Himachal Pradesh and Tamil Nadu

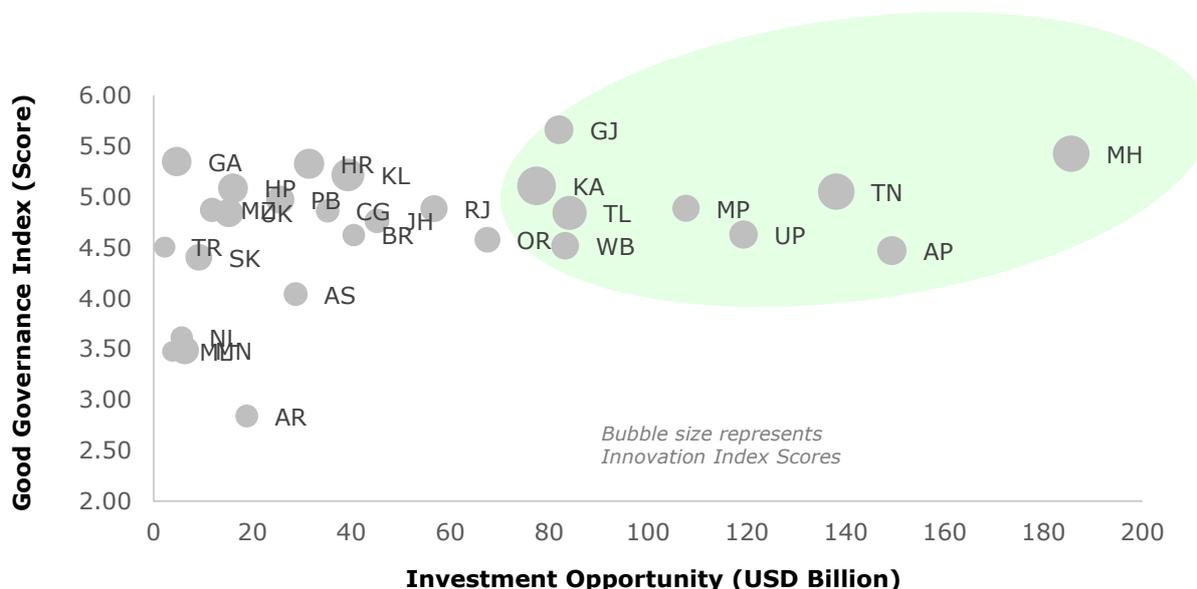
Stability for Investment & Innovation

India being the 5th largest economy in the world, is opening new corridors of innovation and related investments. It has climbed two spots to 46 in the Global Innovation Index (GII) 2021 prepared by the World Intellectual Property Organization (WIPO). The country's rank has been consistently rising in the last few years (from 81 in 2015, it has moved to 46 in 2021). 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.

Post COVID, State Governments are also making efforts to attract investments into their States, to establish manufacturing units and aid towards economic growth. This indicator accordingly assesses the inflows of Foreign Direct Investment (FDI), and its entrepreneurial activity that can lead independently or in combination to the presence of innovation.

The States towards top right corner of the following graph, highlighted in green, have showcased better governance scores with higher potential for investments.

Figure 14: Bubble chart comparing governance scores, investment opportunity and innovation scores



Source: Good Governance Index Score as per DoARPG; Investment Opportunity as per Invest India Portal (July 2022); Innovation Index Score as per NITI Aayog

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

Table 18: Scores and ranks obtained by States on State Context dimension

State	Macroeconomic Environment	Regulations, Institutions & Governance	Stability for Investment & Innovation	Dimension Score	Rank 2022
Maharashtra	6.78	6.66	6.94	20.38	1
Karnataka	7.19	6.24	5.94	19.37	2
Gujarat	7.61	6.37	5.00	18.98	3
Tamil Nadu	3.70	6.69	6.48	16.87	4
Kerala	4.29	7.28	4.13	15.70	5
Telangana	4.76	5.67	5.13	15.56	6
Haryana	1.87	6.55	4.85	13.27	7
Uttarakhand	3.09	6.63	3.30	13.02	8
Goa	2.50	7.46	2.86	12.82	9
Andhra Pradesh	1.88	5.21	5.00	12.09	10
Sikkim	3.16	6.64	2.28	12.08	11
Punjab	1.77	5.94	4.09	11.80	12

State	Macroeconomic Environment	Regulations, Institutions & Governance	Stability for Investment & Innovation	Dimension Score	Rank 2022
Odisha	4.21	3.79	3.54	11.54	13
Madhya Pradesh	2.99	4.07	3.69	10.75	14
Himachal Pradesh	1.01	6.90	2.76	10.67	15
Mizoram	3.31	6.39	0.84	10.54	16
Uttar Pradesh	2.61	3.27	4.58	10.46	17
West Bengal	1.93	4.18	3.81	9.92	18
Manipur	3.44	3.56	1.91	8.91	19
Chhattisgarh	2.12	3.94	2.67	8.73	20
Assam	3.89	2.83	1.90	8.62	21
Rajasthan	1.31	3.90	3.17	8.38	22
Tripura	2.69	4.56	0.99	8.24	23
Jharkhand	1.53	3.25	3.07	7.85	24
Meghalaya	3.13	3.04	0.95	7.12	25
Arunachal Pradesh	3.17	2.28	1.31	6.76	26
Nagaland	2.57	3.20	0.25	6.02	27
Bihar	1.99	1.90	2.02	5.91	28

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

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

Union Territory	Macroeconomic Environment	Regulations, Institutions & Governance	Stability for Investment & Innovation	Dimension Score	Rank 2022
Delhi	4.00	6.06	8.00	18.06	1
Chandigarh	2.95	7.19	4.38	14.52	2
Andaman & Nic.	5.85	3.47	0.88	10.20	3
Puducherry	3.32	4.67	1.26	9.25	4
Jammu & Kashmir	3.79	2.39	1.75	7.93	5
DNH-DD	1.34	2.34	1.47	5.15	6
Lakshadweep	0.00	2.10	0.00	2.10	7
Ladakh	0.00	1.05	0.00	1.05	8

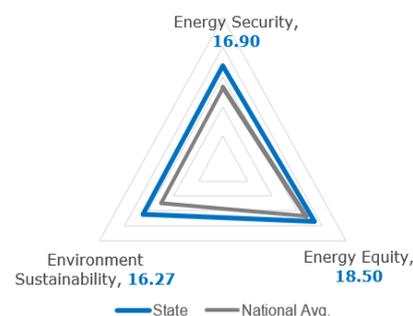
4. State and UT Rank Wise Profiles

Kerala

1
Rank

67.37
Overall Score

Dimension	Score	Rank
Energy Security	16.90	2
Energy Equity	18.50	10
Environmental Sustainability	16.27	3
State Context	15.70	5



Note – Dimension wise scores are out of 25

No.	Indicator	Value	Score	Rank
1. ENERGY SECURITY				
A. Electricity Diversity and Power Supply Position				
A.1	Diversity of Electricity Installed Capacity (EMCI)	0.83	2.00	1
A.2	Share of RE in total installed capacity (%)	11.26	0.33	16
A.3	Installed generating capacity (Growth Rate in %)	3.57	0.43	17
A.4	Electricity consumption per capita (in kWh)	825.65	0.48	19
A.5	Energy not supplied (Deficit) in %	0.00	2.00	8
A.6	Installed Capacity (MW)/ Peak Demand (MW)	1.29	0.18	18
B. Viability of Energy/Electricity Systems in the State				
B.1	AT & C Losses (in %)	14.47	4.56	6
B.2	ACS-ARR Gap (in Rs. /unit)	0.10	2.92	10
B.3	Average Hours of Supply in Agriculture (Mins/day)	1,440.00	4.00	3
2. ENERGY EQUITY				
A. Energy Access				
A.1	Access to Electricity %	100	2.50	18
A.2	LPG + PNG Connections against number of HHS %	1.13	1.56	9
B. Affordability				
B.1	ACS (Rs. /Unit)	5.63	2.50	11
B.2	Non-Subsidized LPG Price (Rs/14.2 kg Cylinder)	1012	0.94	6
B.3	Petrol Prices in Rs. /Litre	107.71	0.22	23
B.4	Diesel Prices in Rs. /Litre	96.52	0.18	25
B.5	Cross Subsidization (Industrial ABR/ ACS)	1.38	1.40	22
C. Performance of Utilities				
C.1	PAT/ Revenue (%)	-0.02	2.30	13
C.2	Overdues/ Cost of Power (%)	0.08	2.19	15
C.3	Payables for Power Purchase (Days)	69.00	2.21	6
C.4	Tariff Subsidy Billed/ Total Revenue (%)	0.00	2.50	7
3. ENVIRONMENTAL SUSTAINABILITY				
A. Energy Resource Productivity				
A.1	Energy Efficiency Score	53	2.21	6
A.2	Performance of Clean Energy (Capacity/Potential) (%)	6.61	0.79	11
A.3	Energy intensity (kgoe/GDP in 1000 INR)	1.40	2.25	6
B. Decarbonization				
B.1	Notification of SAPCC (1=Yes, 0=No)	1	3.00	18
B.2	CO2 reduced from LED Bulbs/1000 population (tonnes)	45.55	1.08	9
B.3	% of Forest Cover (Forest Cover wrt total area)	54.70	1.89	8
C. Emissions and Pollution				
C.1	Emission Intensity (kgCO2eq/ GSDP in 1000 INR)	0.00	2.96	11
C.2	Air Quality Index (on 27.07.21)	38.11	1.82	3
C.3	EV Penetration (%)	0.19	0.27	17

4. STATE CONTEXT				
A. Macroeconomic Environment				
A.1	Growth rate of GSDP	10.77	1.99	8
A.2	FDI Equity Inflows (in USD Million)	617.45	0.05	12
A.3	States' Ranking: Start up Index*	80.00	2.25	5
B. Regulations, Institutions & Governance				
B.1	Human Development Index	0.78	1.76	3
B.2	Good Governance Index	5.22	2.53	5
B.3	SDG Index	75	3.00	1
C. Stability for Investment & Innovation				
C.1	Innovation Score as per India Innovation Index	30.58	1.82	5
C.2	Industry, Infrastructure & Innovation Index	3.06	1.90	15
C.3	Investment Opportunities (in USD Billion)	39.30	0.40	14

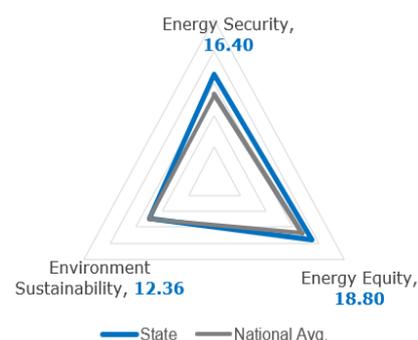
*100= Best performer; 80= Top Performer; 60= Leaders; 40=Aspiring Leaders; 20=Emerging States; 10= Beginners

Gujarat

2
Rank

66.54
Overall Score

Dimension	Score	Rank
Energy Security	16.40	5
Energy Equity	18.80	8
Environmental Sustainability	12.36	15
State Context	18.98	3



Note – Dimension wise scores are out of 25

No.	Indicator	Value	Score	Rank
1. ENERGY SECURITY				
A. Electricity Diversity and Power Supply Position				
A.1	Diversity of Electricity Installed Capacity (EMCI)	0.65	1.48	9
A.2	Share of RE in total installed capacity (%)	39.30	1.48	4
A.3	Installed generating capacity (Growth Rate in %)	6.56	0.67	7
A.4	Electricity consumption per capita (in kWh)	2387.94	1.99	3
A.5	Energy not supplied (Deficit) in %	0.30	1.88	15
A.6	Installed Capacity (MW)/ Peak Demand (MW)	2.17	0.55	6
B. Viability of Energy/Electricity Systems in the State				
B.1	AT & C Losses (in %)	11.95	4.86	3
B.2	ACS-ARR Gap (in Rs./unit)	-0.05	3.00	5
B.3	Average Hours of Supply in Agriculture (Mins/day)	518.00	0.49	14
2. ENERGY EQUITY				
A. Energy Access				
A.1	Access to Electricity %	100	2.50	18
A.2	LPG + PNG Connections against number of HHS %	0.93	1.09	19
B. Affordability				
B.1	ACS (Rs. /Unit)	5.43	2.71	9
B.2	Non-Subsidized LPG Price (Rs/14.2 kg Cylinder)	1028.5	0.84	12
B.3	Petrol Prices in Rs. /Litre	96.63	0.82	9
B.4	Diesel Prices in Rs. /Litre	92.38	0.42	16
B.5	Cross Subsidization (Industrial ABR/ ACS)	1.41	1.35	24
C. Performance of Utilities				
C.1	PAT/ Revenue (%)	0.02	2.33	10
C.2	Overdues/ Cost of Power (%)	0.02	2.44	7
C.3	Payables for Power Purchase (Days)	0.00	2.50	2
C.4	Tariff Subsidy Billed/ Total Revenue (%)	0.12	1.80	14
3. ENVIRONMENTAL SUSTAINABILITY				
A. Energy Resource Productivity				
A.1	Energy Efficiency Score	34	1.33	10
A.2	Performance of Clean Energy (Capacity/Potential)(%)	9.20	1.11	7
A.3	Energy intensity (kgoe/GDP in 1000 INR)	2.10	1.20	18
B. Decarbonization				
B.1	Notification of SAPCC (1=Yes, 0=No)	1	3.00	18
B.2	CO2 reduced from LED Bulbs/1000 population (tonnes)	61.72	1.47	4
B.3	% of Forest Cover (Forest Cover wrt total area)	7.61	0.15	24
C. Emissions and Pollution				
C.1	Emission Intensity (kgCO2eq/ GSDP in 1000 INR)	0.01	2.76	15
C.2	Air Quality Index (on 27.07.21)	96.68	1.04	19
C.3	EV Penetration (%)	0.22	0.30	16

4. STATE CONTEXT				
A. Macroeconomic Environment				
A.1	Growth rate of GSDP	12.08	2.53	4
A.2	FDI Equity Inflows (in USD Million)	27187.09	2.08	3
A.3	States' Ranking: Start up Index*	100.00	3.00	2
B. Regulations, Institutions & Governance				
B.1	Human Development Index	0.70	1.15	14
B.2	Good Governance Index	5.66	3.00	1
B.3	SDG Index	69	2.22	12
C. Stability for Investment & Innovation				
C.1	Innovation Score as per India Innovation Index	23.63	1.13	11
C.2	Industry, Infrastructure & Innovation Index	3.66	3.00	2
C.3	Investment Opportunities (in USD Billion)	81.98	0.87	8

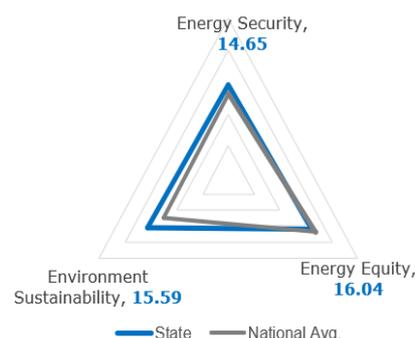
*100= Best performer; 80= Top Performer; 60= Leaders; 40=Aspiring Leaders; 20=Emerging States; 10= Beginners

Karnataka

3
Rank

65.65
Overall Score

Dimension	Score	Rank
Energy Security	14.65	8
Energy Equity	16.04	17
Environmental Sustainability	15.59	4
State Context	19.37	2



Note – Dimension wise scores are out of 25

No.	Indicator	Value	Score	Rank
1. ENERGY SECURITY				
A. Electricity Diversity and Power Supply Position				
A.1	Diversity of Electricity Installed Capacity (EMCI)	0.57	1.25	13
A.2	Share of RE in total installed capacity (%)	52.01	2.00	1
A.3	Installed generating capacity (Growth Rate in %)	7.48	0.75	6
A.4	Electricity consumption per capita (in kWh)	1468.06	1.10	12
A.5	Energy not supplied (Deficit) in %	0.00	2.00	8
A.6	Installed Capacity (MW)/ Peak Demand (MW)	1.98	0.47	10
B. Viability of Energy/Electricity Systems in the State				
B.1	AT & C Losses (in %)	17.59	4.19	10
B.2	ACS-ARR Gap (in Rs./unit)	0.37	2.78	15
B.3	Average Hours of Supply in Agriculture (Mins/day)	420.00	0.11	17
2. ENERGY EQUITY				
A. Energy Access				
A.1	Access to Electricity %	100	2.50	18
A.2	LPG + PNG Connections against number of HHS %	1.12	1.54	11
B. Affordability				
B.1	ACS (Rs. /Unit)	6.59	1.49	23
B.2	Non-Subsidized LPG Price (Rs/14.2 kg Cylinder)	1005.5	0.98	3
B.3	Petrol Prices in Rs. /Litre	101.94	0.53	17
B.4	Diesel Prices in Rs. /Litre	87.89	0.68	9
B.5	Cross Subsidization (Industrial ABR/ ACS)	1.28	1.57	20
C. Performance of Utilities				
C.1	PAT/ Revenue (%)	-0.03	2.29	14
C.2	Overdues/ Cost of Power (%)	0.13	2.00	18
C.3	Payables for Power Purchase (Days)	212.00	1.62	17
C.4	Tariff Subsidy Billed/ Total Revenue (%)	0.28	0.84	26
3. ENVIRONMENTAL SUSTAINABILITY				
A. Energy Resource Productivity				
A.1	Energy Efficiency Score	70	3.00	1
A.2	Performance of Clean Energy (Capacity/Potential)(%)	10.32	1.25	6
A.3	Energy intensity (kgoe/GDP in 1000 INR)	1.70	1.80	12
B. Decarbonization				
B.1	Notification of SAPCC (1=Yes, 0=No)	1	3.00	18
B.2	CO2 reduced from LED Bulbs/1000 population (tonnes)	37.94	0.89	12
B.3	% of Forest Cover (Forest Cover wrt total area)	20.19	0.61	18
C. Emissions and Pollution				
C.1	Emission Intensity (kgCO2eq/ GSDP in 1000 INR)	0.01	2.84	14
C.2	Air Quality Index (on 27.07.21)	56.91	1.57	11
C.3	EV Penetration (%)	0.45	0.63	7

4. STATE CONTEXT				
A. Macroeconomic Environment				
A.1	Growth rate of GSDP	9.76	1.58	16
A.2	FDI Equity Inflows (in USD Million)	34031.41	2.61	2
A.3	States' Ranking: Start up Index*	100.00	3.00	2
B. Regulations, Institutions & Governance				
B.1	Human Development Index	0.71	1.22	13
B.2	Good Governance Index	5.11	2.41	6
B.3	SDG Index	72	2.61	8
C. Stability for Investment & Innovation				
C.1	Innovation Score as per India Innovation Index	42.50	3.00	1
C.2	Industry, Infrastructure & Innovation Index	3.18	2.12	9
C.3	Investment Opportunities (in USD Billion)	77.45	0.82	9

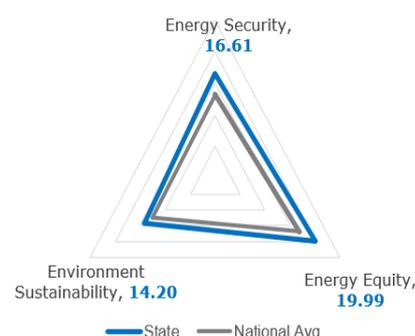
*100= Best performer; 80= Top Performer; 60= Leaders; 40=Aspiring Leaders; 20=Emerging States; 10= Beginners

Goa

4
Rank

63.62
Overall Score

Dimension	Score	Rank
Energy Security	16.61	3
Energy Equity	19.99	4
Environmental Sustainability	14.20	12
State Context	12.82	9



Note – Dimension wise scores are out of 25

No.	Indicator	Value	Score	Rank
1. ENERGY SECURITY				
A. Electricity Diversity and Power Supply Position				
A.1	Diversity of Electricity Installed Capacity (EMCI)	0.35	0.61	23
A.2	Share of RE in total installed capacity (%)	3.34	0.00	28
A.3	Installed generating capacity (Growth Rate in %)	2.39	0.34	21
A.4	Electricity consumption per capita (in kWh)	2396.04	2.05	1
A.5	Energy not supplied (Deficit) in %	0.10	2.01	7
A.6	Installed Capacity (MW)/ Peak Demand (MW)	0.94	0.03	27
B. Viability of Energy/Electricity Systems in the State				
B.1	AT & C Losses (in %)	13.99	4.74	4
B.2	ACS-ARR Gap (in Rs. /unit)	0.60	2.72	17
B.3	Average Hours of Supply in Agriculture (Mins/day)	1,440.00	4.10	1
2. ENERGY EQUITY				
A. Energy Access				
A.1	Access to Electricity %	100	2.56	13
A.2	LPG + PNG Connections against number of HHS %	1.52	2.56	1
B. Affordability				
B.1	ACS (Rs. /Unit)	4.77	3.50	2
B.2	Non-Subsidized LPG Price (Rs/14.2 kg Cylinder)	1017	0.93	8
B.3	Petrol Prices in Rs. /Litre	97.68	0.78	11
B.4	Diesel Prices in Rs. /Litre	90.23	0.56	15
B.5	Cross Subsidization (Industrial ABR/ ACS)	1.22	1.73	14
C. Performance of Utilities				
C.1	PAT/ Revenue (%)	-0.14	2.26	19
C.2	Overdues/ Cost of Power (%)	0.01	2.54	4
C.3	Payables for Power Purchase (Days)	NA	NA	NA
C.4	Tariff Subsidy Billed/ Total Revenue (%)	0.00	2.56	5
3. ENVIRONMENTAL SUSTAINABILITY				
A. Energy Resource Productivity				
A.1	Energy Efficiency Score	13.5	0.38	23
A.2	Performance of Clean Energy (Capacity/Potential) (%)	2.21	0.26	18
A.3	Energy intensity (kgoe/GDP in 1000 INR)	1.90	1.54	16
B. Decarbonization				
B.1	Notification of SAPCC (1=Yes, 0=No)	1	3.08	13
B.2	CO2 reduced from LED Bulbs/1000 population (tonnes)	67.53	1.66	3
B.3	% of Forest Cover (Forest Cover wrt total area)	60.62	2.17	7
C. Emissions and Pollution				
C.1	Emission Intensity (kgCO2eq/ GSDP in 1000 INR)	0.00	2.99	10
C.2	Air Quality Index (on 27.07.21)	57.41	1.60	8
C.3	EV Penetration (%)	0.36	0.52	10

4. STATE CONTEXT				
A. Macroeconomic Environment				
A.1	Growth rate of GSDP	8.16	0.95	24
A.2	FDI Equity Inflows (in USD Million)	118.39	0.01	19
A.3	States' Ranking: Start up Index*	60.00	1.54	11
B. Regulations, Institutions & Governance				
B.1	Human Development Index	0.81	2.05	1
B.2	Good Governance Index	5.35	2.73	4
B.3	SDG Index	72	2.68	6
C. Stability for Investment & Innovation				
C.1	Innovation Score as per India Innovation Index	24.92	1.29	7
C.2	Industry, Infrastructure & Innovation Index	2.84	1.54	18
C.3	Investment Opportunities (in USD Billion)	4.64	0.03	26

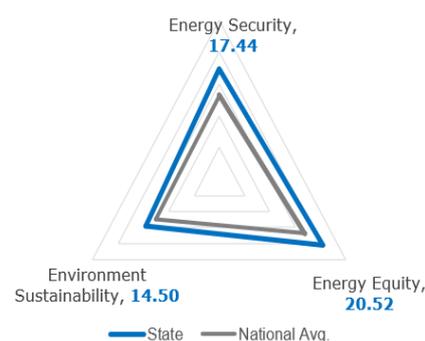
*100= Best performer; 80= Top Performer; 60= Leaders; 40=Aspiring Leaders; 20=Emerging States; 10= Beginners

Himachal Pradesh

5
Rank

63.13
Overall Score

Dimension	Score	Rank
Energy Security	17.44	1
Energy Equity	20.52	3
Environmental Sustainability	14.50	9
State Context	10.67	15



Note – Dimension wise scores are out of 25

No.	Indicator	Value	Score	Rank
1. ENERGY SECURITY				
A. Electricity Diversity and Power Supply Position				
A.1	Diversity of Electricity Installed Capacity (EMCI)	0.40	0.75	22
A.2	Share of RE in total installed capacity (%)	22.96	0.81	9
A.3	Installed generating capacity (Growth Rate in %)	3.09	0.39	18
A.4	Electricity consumption per capita (in kWh)	1527.20	1.16	11
A.5	Energy not supplied (Deficit) in %	0.30	1.88	15
A.6	Installed Capacity (MW)/ Peak Demand (MW)	2.23	0.58	5
B. Viability of Energy/Electricity Systems in the State				
B.1	AT & C Losses (in %)	11.68	4.89	2
B.2	ACS-ARR Gap (in Rs./unit)	-0.02	2.98	6
B.3	Average Hours of Supply in Agriculture (Mins/day)	1,440.00	4.00	3
2. ENERGY EQUITY				
A. Energy Access				
A.1	Access to Electricity %	100	2.50	18
A.2	LPG + PNG Connections against number of HHS %	1.23	1.81	6
B. Affordability				
B.1	ACS (Rs. /Unit)	5.05	3.11	7
B.2	Non-Subsidized LPG Price (Rs/14.2 kg Cylinder)	1047.5	0.72	18
B.3	Petrol Prices in Rs. /Litre	97.31	0.78	10
B.4	Diesel Prices in Rs. /Litre	83.16	0.95	4
B.5	Cross Subsidization (Industrial ABR/ ACS)	1.11	1.86	10
C. Performance of Utilities				
C.1	PAT/ Revenue (%)	0.00	2.31	11
C.2	Overdues/ Cost of Power (%)	0.05	2.32	11
C.3	Payables for Power Purchase (Days)	103.00	2.07	11
C.4	Tariff Subsidy Billed/ Total Revenue (%)	0.07	2.08	12
3. ENVIRONMENTAL SUSTAINABILITY				
A. Energy Resource Productivity				
A.1	Energy Efficiency Score	24.5	0.88	16
A.2	Performance of Clean Energy (Capacity/Potential)(%)	2.77	0.32	16
A.3	Energy intensity (kgoe/GDP in 1000 INR)	1.70	1.80	12
B. Decarbonization				
B.1	Notification of SAPCC (1=Yes, 0=No)	1	3.00	18
B.2	CO2 reduced from LED Bulbs/1000 population (tonnes)	123.90	3.00	1
B.3	% of Forest Cover (Forest Cover wrt total area)	27.73	0.89	15
C. Emissions and Pollution				
C.1	Emission Intensity (kgCO2eq/ GSDP in 1000 INR)	0.00	2.96	11
C.2	Air Quality Index (on 27.07.21)	56.45	1.58	10
C.3	EV Penetration (%)	0.06	0.08	20

4. STATE CONTEXT				
A. Macroeconomic Environment				
A.1	Growth rate of GSDP	6.50	0.25	26
A.2	FDI Equity Inflows (in USD Million)	160.82	0.01	16
A.3	States' Ranking: Start up Index*	40.00	0.75	19
B. Regulations, Institutions & Governance				
B.1	Human Development Index	0.76	1.65	6
B.2	Good Governance Index	5.08	2.39	8
B.3	SDG Index	74	2.87	2
C. Stability for Investment & Innovation				
C.1	Innovation Score as per India Innovation Index	25.06	1.28	8
C.2	Industry, Infrastructure & Innovation Index	2.75	1.34	20
C.3	Investment Opportunities (in USD Billion)	16.04	0.15	20

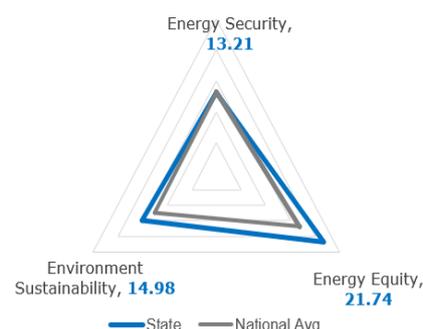
*100= Best performer; 80= Top Performer; 60= Leaders; 40=Aspiring Leaders; 20=Emerging States; 10= Beginners

Uttarakhand

6
Rank

62.95
Overall Score

Dimension	Score	Rank
Energy Security	13.21	15
Energy Equity	21.74	1
Environmental Sustainability	14.98	7
State Context	13.02	8



Note – Dimension wise scores are out of 25

No.	Indicator	Value	Score	Rank
1. ENERGY SECURITY				
A. Electricity Diversity and Power Supply Position				
A.1	Diversity of Electricity Installed Capacity (EMCI)	0.64	1.51	8
A.2	Share of RE in total installed capacity (%)	23.59	0.87	8
A.3	Installed generating capacity (Growth Rate in %)	3.58	0.45	15
A.4	Electricity consumption per capita (in kWh)	1527.90	1.21	8
A.5	Energy not supplied (Deficit) in %	0.60	1.83	17
A.6	Installed Capacity (MW)/ Peak Demand (MW)	1.60	0.32	12
B. Viability of Energy/Electricity Systems in the State				
B.1	AT & C Losses (in %)	20.35	4.02	12
B.2	ACS-ARR Gap (in Rs./unit)	0.21	2.98	7
B.3	Average Hours of Supply in Agriculture (Mins/day)	NA	NA	NA
2. ENERGY EQUITY				
A. Energy Access				
A.1	Access to Electricity %	100	2.60	8
A.2	LPG + PNG Connections against number of HHS %	1.20	1.81	7
B. Affordability				
B.1	ACS (Rs. /Unit)	4.94	3.36	5
B.2	Non-Subsidized LPG Price (Rs/14.2 kg Cylinder)	1022	0.92	9
B.3	Petrol Prices in Rs. /Litre	95.35	0.93	4
B.4	Diesel Prices in Rs. /Litre	90.34	0.56	14
B.5	Cross Subsidization (Industrial ABR/ ACS)	1.20	1.78	13
C. Performance of Utilities				
C.1	PAT/ Revenue (%)	-0.01	2.40	5
C.2	Overdues/ Cost of Power (%)	0.00	2.60	2
C.3	Payables for Power Purchase (Days)	97.00	2.18	7
C.4	Tariff Subsidy Billed/ Total Revenue (%)	0.00	2.60	4
3. ENVIRONMENTAL SUSTAINABILITY				
A. Energy Resource Productivity				
A.1	Energy Efficiency Score	26.5	1.02	15
A.2	Performance of Clean Energy (Capacity/Potential) (%)	5.02	0.62	14
A.3	Energy intensity (kgoe/GDP in 1000 INR)	1.50	2.19	7
B. Decarbonization				
B.1	Notification of SAPCC (1=Yes, 0=No)	1	3.13	8
B.2	CO2 reduced from LED Bulbs/1000 population (tonnes)	51.82	1.28	8
B.3	% of Forest Cover (Forest Cover wrt total area)	45.44	1.62	10
C. Emissions and Pollution				
C.1	Emission Intensity (kgCO2eq/ GSDP in 1000 INR)	0.00	3.04	7
C.2	Air Quality Index (on 27.07.21)	123.30	0.72	20
C.3	EV Penetration (%)	0.93	1.37	3

4. STATE CONTEXT				
A. Macroeconomic Environment				
A.1	Growth rate of GSDP	9.46	1.52	19
A.2	FDI Equity Inflows (in USD Million)	123.99	0.01	17
A.3	States' Ranking: Start up Index*	60.00	1.56	9
B. Regulations, Institutions & Governance				
B.1	Human Development Index	0.76	1.69	5
B.2	Good Governance Index	4.84	2.22	12
B.3	SDG Index	72	2.72	5
C. Stability for Investment & Innovation				
C.1	Innovation Score as per India Innovation Index	23.50	1.17	10
C.2	Industry, Infrastructure & Innovation Index	3.06	1.98	12
C.3	Investment Opportunities (in USD Billion)	15.21	0.15	21

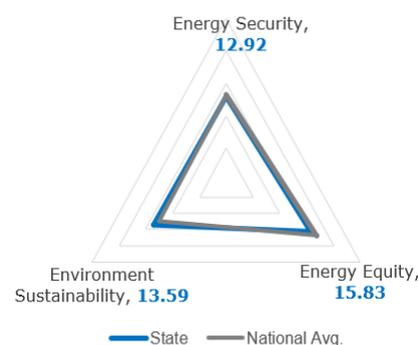
*100= Best performer; 80= Top Performer; 60= Leaders; 40=Aspiring Leaders; 20=Emerging States; 10= Beginners

Maharashtra

7
Rank

62.72
Overall Score

Dimension	Score	Rank
Energy Security	12.92	16
Energy Equity	15.83	18
Environmental Sustainability	13.59	13
State Context	20.38	1



Note – Dimension wise scores are out of 25

No.	Indicator	Value	Score	Rank
1. ENERGY SECURITY				
A. Electricity Diversity and Power Supply Position				
A.1	Diversity of Electricity Installed Capacity (EMCI)	0.58	1.27	12
A.2	Share of RE in total installed capacity (%)	24.53	0.87	7
A.3	Installed generating capacity (Growth Rate in %)	0.96	0.22	23
A.4	Electricity consumption per capita (in kWh)	1417.73	1.05	13
A.5	Energy not supplied (Deficit) in %	0.00	2.00	8
A.6	Installed Capacity (MW)/ Peak Demand (MW)	1.65	0.33	11
B. Viability of Energy/Electricity Systems in the State				
B.1	AT & C Losses (in %)	19.92	3.91	14
B.2	ACS-ARR Gap (in Rs. /unit)	0.53	2.69	18
B.3	Average Hours of Supply in Agriculture (Mins/day)	540.00	0.57	12
2. ENERGY EQUITY				
A. Energy Access				
A.1	Access to Electricity %	100	2.50	18
A.2	LPG + PNG Connections against number of HHS %	1.12	1.55	10
B. Affordability				
B.1	ACS (Rs. /Unit)	6.83	1.23	26
B.2	Non-Subsidized LPG Price (Rs/14.2 kg Cylinder)	1002.5	1.00	1
B.3	Petrol Prices in Rs. /Litre	111.35	0.03	27
B.4	Diesel Prices in Rs. /Litre	97.28	0.13	26
B.5	Cross Subsidization (Industrial ABR/ ACS)	1.22	1.68	18
C. Performance of Utilities				
C.1	PAT/ Revenue (%)	-0.06	2.27	17
C.2	Overdues/ Cost of Power (%)	0.29	1.40	23
C.3	Payables for Power Purchase (Days)	101.00	2.08	9
C.4	Tariff Subsidy Billed/ Total Revenue (%)	0.09	1.97	13
3. ENVIRONMENTAL SUSTAINABILITY				
A. Energy Resource Productivity				
A.1	Energy Efficiency Score	57.5	2.42	5
A.2	Performance of Clean Energy (Capacity/Potential) (%)	6.39	0.76	12
A.3	Energy intensity (kgoe/GDP in 1000 INR)	1.60	1.95	11
B. Decarbonization				
B.1	Notification of SAPCC (1=Yes, 0=No)	1	3.00	18
B.2	CO2 reduced from LED Bulbs/1000 population (tonnes)	18.44	0.41	19
B.3	% of Forest Cover (Forest Cover wrt total area)	16.51	0.48	22
C. Emissions and Pollution				
C.1	Emission Intensity (kgCO2eq/ GSDP in 1000 INR)	0.01	2.68	17
C.2	Air Quality Index (on 27.07.21)	72.76	1.36	12
C.3	EV Penetration (%)	0.37	0.53	9

4. STATE CONTEXT				
A. Macroeconomic Environment				
A.1	Growth rate of GSDP	9.64	1.53	18
A.2	FDI Equity Inflows (in USD Million)	39164.67	3.00	1
A.3	States' Ranking: Start up Index*	80.00	2.25	5
B. Regulations, Institutions & Governance				
B.1	Human Development Index	0.75	1.56	7
B.2	Good Governance Index	5.43	2.75	3
B.3	SDG Index	70	2.35	9
C. Stability for Investment & Innovation				
C.1	Innovation Score as per India Innovation Index	38.03	2.56	2
C.2	Industry, Infrastructure & Innovation Index	3.32	2.38	5
C.3	Investment Opportunities (in USD Billion)	185.61	2.00	1

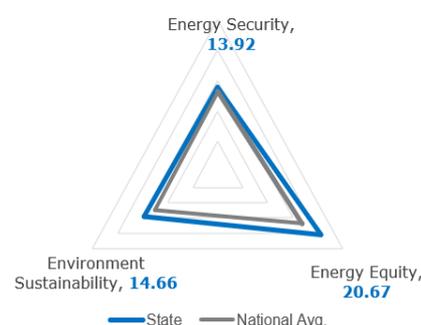
*100= Best performer; 80= Top Performer; 60= Leaders; 40=Aspiring Leaders; 20=Emerging States; 10= Beginners

Haryana

8
Rank

62.52
Overall Score

Dimension	Score	Rank
Energy Security	13.92	11
Energy Equity	20.67	2
Environmental Sustainability	14.66	8
State Context	13.27	7



Note – Dimension wise scores are out of 25

No.	Indicator	Value	Score	Rank
1. ENERGY SECURITY				
A. Electricity Diversity and Power Supply Position				
A.1	Diversity of Electricity Installed Capacity (EMCI)	0.51	1.18	15
A.2	Share of RE in total installed capacity (%)	9.56	0.28	17
A.3	Installed generating capacity (Growth Rate in %)	3.28	0.45	16
A.4	Electricity consumption per capita (in kWh)	2229.23	2.02	2
A.5	Energy not supplied (Deficit) in %	0.30	2.07	6
A.6	Installed Capacity (MW)/ Peak Demand (MW)	1.07	0.10	24
B. Viability of Energy/Electricity Systems in the State				
B.1	AT & C Losses (in %)	18.19	4.53	7
B.2	ACS-ARR Gap (in Rs./unit)	-0.06	3.30	2
B.3	Average Hours of Supply in Agriculture (Mins/day)	NA	NA	NA
2. ENERGY EQUITY				
A. Energy Access				
A.1	Access to Electricity %	100	2.75	3
A.2	LPG + PNG Connections against number of HHS %	1.32	2.22	3
B. Affordability				
B.1	ACS (Rs. /Unit)	5.62	2.76	8
B.2	Non-Subsidized LPG Price (Rs/14.2 kg Cylinder)	1020.5	0.98	4
B.3	Petrol Prices in Rs. /Litre	97.48	0.85	7
B.4	Diesel Prices in Rs. /Litre	90.31	0.59	12
B.5	Cross Subsidization (Industrial ABR/ ACS)	1.29	1.71	17
C. Performance of Utilities				
C.1	PAT/ Revenue (%)	0.02	2.56	2
C.2	Overdues/ Cost of Power (%)	0.07	2.44	6
C.3	Payables for Power Purchase (Days)	48.00	2.53	1
C.4	Tariff Subsidy Billed/ Total Revenue (%)	0.22	1.28	21
3. ENVIRONMENTAL SUSTAINABILITY				
A. Energy Resource Productivity				
A.1	Energy Efficiency Score	59.5	2.76	2
A.2	Performance of Clean Energy (Capacity/Potential)(%)	18.29	2.44	2
A.3	Energy intensity (kgoe/GDP in 1000 INR)	2.20	1.15	19
B. Decarbonization				
B.1	Notification of SAPCC (1=Yes, 0=No)	1	3.30	3
B.2	CO2 reduced from LED Bulbs/1000 population (tonnes)	55.01	1.44	5
B.3	% of Forest Cover (Forest Cover wrt total area)	3.63	0.00	28
C. Emissions and Pollution				
C.1	Emission Intensity (kgCO2eq/ GSDP in 1000 INR)	0.01	3.03	8
C.2	Air Quality Index (on 27.07.21)	NA	NA	NA
C.3	EV Penetration (%)	0.34	0.53	8

4. STATE CONTEXT				
A. Macroeconomic Environment				
A.1	Growth rate of GSDP	9.07	1.43	20
A.2	FDI Equity Inflows (in USD Million)	5222.42	0.44	5
A.3	States' Ranking: Start up Index*	NA	NA	NA
B. Regulations, Institutions & Governance				
B.1	Human Development Index	0.72	1.49	9
B.2	Good Governance Index	5.33	2.91	2
B.3	SDG Index	67	2.15	13
C. Stability for Investment & Innovation				
C.1	Innovation Score as per India Innovation Index	25.81	1.48	6
C.2	Industry, Infrastructure & Innovation Index	3.52	3.02	1
C.3	Investment Opportunities (in USD Billion)	31.41	0.35	16

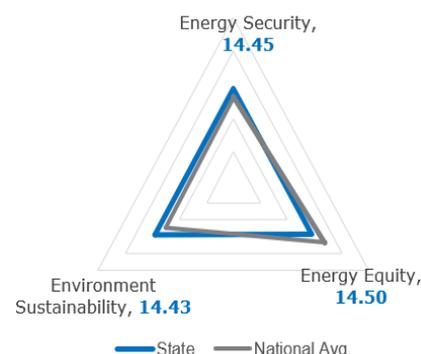
*100= Best performer; 80= Top Performer; 60= Leaders; 40=Aspiring Leaders; 20=Emerging States; 10= Beginners

Tamil Nadu

9
Rank

60.25
Overall Score

Dimension	Score	Rank
Energy Security	14.45	9
Energy Equity	14.50	26
Environmental Sustainability	14.43	11
State Context	16.87	4



Note – Dimension wise scores are out of 25

No.	Indicator	Value	Score	Rank
1. ENERGY SECURITY				
A. Electricity Diversity and Power Supply Position				
A.1	Diversity of Electricity Installed Capacity (EMCI)	0.67	1.55	5
A.2	Share of RE in total installed capacity (%)	45.96	1.75	3
A.3	Installed generating capacity (Growth Rate in %)	3.83	0.45	14
A.4	Electricity consumption per capita (in kWh)	1843.93	1.46	7
A.5	Energy not supplied (Deficit) in %	0.60	1.76	21
A.6	Installed Capacity (MW)/ Peak Demand (MW)	2.12	0.53	8
B. Viability of Energy/Electricity Systems in the State				
B.1	AT & C Losses (in %)	15.00	4.50	8
B.2	ACS-ARR Gap (in Rs./unit)	2.09	1.87	26
B.3	Average Hours of Supply in Agriculture (Mins/day)	540.00	0.57	12
2. ENERGY EQUITY				
A. Energy Access				
A.1	Access to Electricity %	100	2.50	18
A.2	LPG + PNG Connections against number of HHS %	1.01	1.29	18
B. Affordability				
B.1	ACS (Rs. /Unit)	6.76	1.31	24
B.2	Non-Subsidized LPG Price (Rs/14.2 kg Cylinder)	1018.5	0.90	10
B.3	Petrol Prices in Rs. /Litre	102.63	0.50	19
B.4	Diesel Prices in Rs. /Litre	94.24	0.31	21
B.5	Cross Subsidization (Industrial ABR/ ACS)	1.04	1.99	6
C. Performance of Utilities				
C.1	PAT/ Revenue (%)	-0.44	1.98	26
C.2	Overdues/ Cost of Power (%)	0.52	0.53	26
C.3	Payables for Power Purchase (Days)	207.00	1.64	16
C.4	Tariff Subsidy Billed/ Total Revenue (%)	0.16	1.56	17
3. ENVIRONMENTAL SUSTAINABILITY				
A. Energy Resource Productivity				
A.1	Energy Efficiency Score	51.5	2.14	7
A.2	Performance of Clean Energy (Capacity/Potential)(%)	18.21	2.21	3
A.3	Energy intensity (kgoe/GDP in 1000 INR)	1.80	1.65	15
B. Decarbonization				
B.1	Notification of SAPCC (1=Yes, 0=No)	1	3.00	18
B.2	CO2 reduced from LED Bulbs/1000 population (tonnes)	5.99	0.11	27
B.3	% of Forest Cover (Forest Cover wrt total area)	20.31	0.62	17
C. Emissions and Pollution				
C.1	Emission Intensity (kgCO2eq/ GSDP in 1000 INR)	0.01	2.68	17
C.2	Air Quality Index (on 27.07.21)	51.07	1.65	5
C.3	EV Penetration (%)	0.27	0.38	13

4. STATE CONTEXT				
A. Macroeconomic Environment				
A.1	Growth rate of GSDP	10.09	1.72	15
A.2	FDI Equity Inflows (in USD Million)	6332.69	0.49	4
A.3	States' Ranking: Start up Index*	60.00	1.50	13
B. Regulations, Institutions & Governance				
B.1	Human Development Index	0.74	1.47	10
B.2	Good Governance Index	5.05	2.35	9
B.3	SDG Index	74	2.87	2
C. Stability for Investment & Innovation				
C.1	Innovation Score as per India Innovation Index	37.91	2.55	3
C.2	Industry, Infrastructure & Innovation Index	3.36	2.45	4
C.3	Investment Opportunities (in USD Billion)	138.06	1.48	3

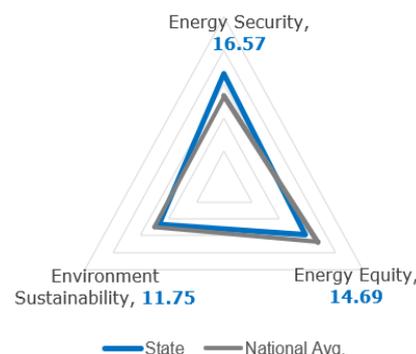
*100= Best performer; 80= Top Performer; 60= Leaders; 40=Aspiring Leaders; 20=Emerging States; 10= Beginners

Telangana

10
Rank

58.57
Overall Score

Dimension	Score	Rank
Energy Security	16.57	4
Energy Equity	14.69	23
Environmental Sustainability	11.75	20
State Context	15.56	6



Note – Dimension wise scores are out of 25

No.	Indicator	Value	Score	Rank
1. ENERGY SECURITY				
A. Electricity Diversity and Power Supply Position				
A.1	Diversity of Electricity Installed Capacity (EMCI)	0.62	1.40	10
A.2	Share of RE in total installed capacity (%)	27.45	1.01	6
A.3	Installed generating capacity (Growth Rate in %)	9.46	0.93	5
A.4	Electricity consumption per capita (in kWh)	2070.95	1.72	5
A.5	Energy not supplied (Deficit) in %	2.50	1.02	27
A.6	Installed Capacity (MW)/ Peak Demand (MW)	1.23	0.16	19
B. Viability of Energy/Electricity Systems in the State				
B.1	AT & C Losses (in %)	21.54	3.80	15
B.2	ACS-ARR Gap (in Rs./unit)	1.09	2.45	21
B.3	Average Hours of Supply in Agriculture (Mins/day)	1,440.00	4.08	2
2. ENERGY EQUITY				
A. Energy Access				
A.1	Access to Electricity %	100	2.55	14
A.2	LPG + PNG Connections against number of HHS %	1.23	1.85	5
B. Affordability				
B.1	ACS (Rs. /Unit)	6.41	1.71	20
B.2	Non-Subsidized LPG Price (Rs/14.2 kg Cylinder)	1055	0.69	19
B.3	Petrol Prices in Rs. /Litre	109.66	0.12	26
B.4	Diesel Prices in Rs. /Litre	97.82	0.11	27
B.5	Cross Subsidization (Industrial ABR/ ACS)	1.22	1.72	15
C. Performance of Utilities				
C.1	PAT/ Revenue (%)	-0.13	2.26	20
C.2	Overdues/ Cost of Power (%)	0.47	0.71	25
C.3	Payables for Power Purchase (Days)	282.00	1.35	21
C.4	Tariff Subsidy Billed/ Total Revenue (%)	0.15	1.63	15
3. ENVIRONMENTAL SUSTAINABILITY				
A. Energy Resource Productivity				
A.1	Energy Efficiency Score	28.5	1.09	14
A.2	Performance of Clean Energy (Capacity/Potential)(%)	10.94	1.35	5
A.3	Energy intensity (kgoe/GDP in 1000 INR)	1.80	1.68	14
B. Decarbonization				
B.1	Notification of SAPCC (1=Yes, 0=No)	1	3.06	14
B.2	CO2 reduced from LED Bulbs/1000 population (tonnes)	7.98	0.16	26
B.3	% of Forest Cover (Forest Cover wrt total area)	18.93	0.58	20
C. Emissions and Pollution				
C.1	Emission Intensity (kgCO2eq/ GSDP in 1000 INR)	0.01	2.57	19
C.2	Air Quality Index (on 27.07.21)	82.27	1.26	14
C.3	EV Penetration (%)	NA	NA	NA

4. STATE CONTEXT				
A. Macroeconomic Environment				
A.1	Growth rate of GSDP	11.15	2.19	6
A.2	FDI Equity Inflows (in USD Million)	3442.24	0.27	6
A.3	States' Ranking: Start up Index*	80.00	2.30	4
B. Regulations, Institutions & Governance				
B.1	Human Development Index	0.71	1.23	12
B.2	Good Governance Index	4.84	2.17	14
B.3	SDG Index	69	2.26	11
C. Stability for Investment & Innovation				
C.1	Innovation Score as per India Innovation Index	33.23	2.13	4
C.2	Industry, Infrastructure & Innovation Index	3.14	2.09	10
C.3	Investment Opportunities (in USD Billion)	84.13	0.91	6

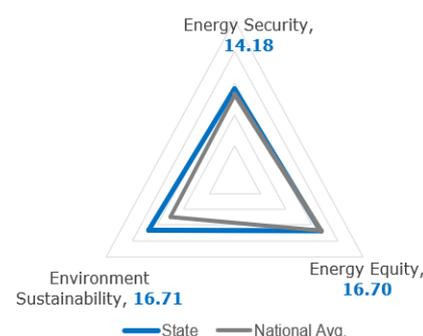
*100= Best performer; 80= Top Performer; 60= Leaders; 40=Aspiring Leaders; 20=Emerging States; 10= Beginners

Mizoram

11
Rank

58.13
Overall Score

Dimension	Score	Rank
Energy Security	14.18	10
Energy Equity	16.70	14
Environmental Sustainability	16.71	1
State Context	10.54	16



Note – Dimension wise scores are out of 25

No.	Indicator	Value	Score	Rank
1. ENERGY SECURITY				
A. Electricity Diversity and Power Supply Position				
A.1	Diversity of Electricity Installed Capacity (EMCI)	0.67	1.68	3
A.2	Share of RE in total installed capacity (%)	18.98	0.71	11
A.3	Installed generating capacity (Growth Rate in %)	11.30	1.17	3
A.4	Electricity consumption per capita (in kWh)	628.78	0.32	21
A.5	Energy not supplied (Deficit) in %	1.80	1.41	26
A.6	Installed Capacity (MW)/ Peak Demand (MW)	1.38	0.24	16
B. Viability of Energy/Electricity Systems in the State				
B.1	AT & C Losses (in %)	20.66	4.23	9
B.2	ACS-ARR Gap (in Rs./unit)	-1.94	4.42	1
B.3	Average Hours of Supply in Agriculture (Mins/day)	NA	NA	NA
2. ENERGY EQUITY				
A. Energy Access				
A.1	Access to Electricity %	100	2.76	2
A.2	LPG + PNG Connections against number of HHS %	1.18	1.86	4
B. Affordability				
B.1	ACS (Rs. /Unit)	6.17	2.13	15
B.2	Non-Subsidized LPG Price (Rs/14.2 kg Cylinder)	1155	0.06	26
B.3	Petrol Prices in Rs. /Litre	95.90	0.95	2
B.4	Diesel Prices in Rs. /Litre	82.28	1.10	1
B.5	Cross Subsidization (Industrial ABR/ ACS)	1.25	1.79	12
C. Performance of Utilities				
C.1	PAT/ Revenue (%)	0.24	2.76	1
C.2	Overdues/ Cost of Power (%)	0.12	2.25	14
C.3	Payables for Power Purchase (Days)	NA	NA	NA
C.4	Tariff Subsidy Billed/ Total Revenue (%)	0.26	1.03	23
3. ENVIRONMENTAL SUSTAINABILITY				
A. Energy Resource Productivity				
A.1	Energy Efficiency Score	9	0.18	25
A.2	Performance of Clean Energy (Capacity/Potential)(%)	0.48	0.04	26
A.3	Energy intensity (kgoe/GDP in 1000 INR)	1.10	2.98	2
B. Decarbonization				
B.1	Notification of SAPCC (1=Yes, 0=No)	1	3.31	2
B.2	CO2 reduced from LED Bulbs/1000 population (tonnes)	52.75	1.39	6
B.3	% of Forest Cover (Forest Cover wrt total area)	84.53	3.31	1
C. Emissions and Pollution				
C.1	Emission Intensity (kgCO2eq/ GSDP in 1000 INR)	0.00	3.27	2
C.2	Air Quality Index (on 27.07.21)	24.36	2.21	1
C.3	EV Penetration (%)	0.01	0.00	25

4. STATE CONTEXT				
A. Macroeconomic Environment				
A.1	Growth rate of GSDP	13.23	3.31	1
A.2	FDI Equity Inflows (in USD Million)	NA	NA	NA
A.3	States' Ranking: Start up Index*	20.00	0.00	22
B. Regulations, Institutions & Governance				
B.1	Human Development Index	0.75	1.70	4
B.2	Good Governance Index	4.87	2.39	7
B.3	SDG Index	68	2.31	10
C. Stability for Investment & Innovation				
C.1	Innovation Score as per India Innovation Index	16.93	0.52	20
C.2	Industry, Infrastructure & Innovation Index	2.12	0.20	27
C.3	Investment Opportunities (in USD Billion)	11.81	0.12	22

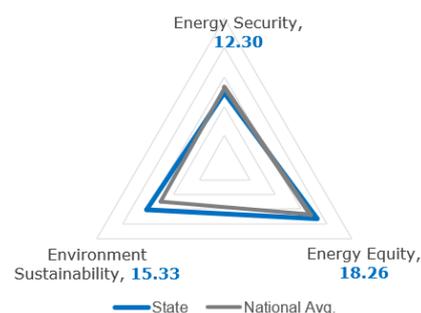
*100= Best performer; 80= Top Performer; 60= Leaders; 40=Aspiring Leaders; 20=Emerging States; 10= Beginners

Sikkim

12
Rank

57.97
Overall Score

Dimension	Score	Rank
Energy Security	12.30	18
Energy Equity	18.26	12
Environmental Sustainability	15.33	5
State Context	12.08	11



Note – Dimension wise scores are out of 25

No.	Indicator	Value	Score	Rank
1. ENERGY SECURITY				
A. Electricity Diversity and Power Supply Position				
A.1	Diversity of Electricity Installed Capacity (EMCI)	0.27	0.41	25
A.2	Share of RE in total installed capacity (%)	7.64	0.20	20
A.3	Installed generating capacity (Growth Rate in %)	-0.39	0.13	26
A.4	Electricity consumption per capita (in kWh)	928.89	0.66	16
A.5	Energy not supplied (Deficit) in %	0.00	2.29	1
A.6	Installed Capacity (MW)/ Peak Demand (MW)	5.59	2.29	1
B. Viability of Energy/Electricity Systems in the State				
B.1	AT & C Losses (in %)	28.88	3.26	18
B.2	ACS-ARR Gap (in Rs./unit)	0.54	3.07	4
B.3	Average Hours of Supply in Agriculture (Mins/day)	NA	NA	NA
2. ENERGY EQUITY				
A. Energy Access				
A.1	Access to Electricity %	100	2.86	1
A.2	LPG + PNG Connections against number of HHS %	1.10	1.72	8
B. Affordability				
B.1	ACS (Rs. /Unit)	4.21	4.57	1
B.2	Non-Subsidized LPG Price (Rs/14.2 kg Cylinder)	1155.5	0.06	27
B.3	Petrol Prices in Rs. /Litre	102.50	0.58	16
B.4	Diesel Prices in Rs. /Litre	89.70	0.65	11
B.5	Cross Subsidization (Industrial ABR/ ACS)	1.84	0.71	27
C. Performance of Utilities				
C.1	PAT/ Revenue (%)	-0.15	2.52	3
C.2	Overdues/ Cost of Power (%)	0.24	1.82	21
C.3	Payables for Power Purchase (Days)	NA	NA	NA
C.4	Tariff Subsidy Billed/ Total Revenue (%)	0.01	2.78	1
3. ENVIRONMENTAL SUSTAINABILITY				
A. Energy Resource Productivity				
A.1	Energy Efficiency Score	9.5	0.21	24
A.2	Performance of Clean Energy (Capacity/Potential)(%)	1.09	0.13	22
A.3	Energy intensity (kgoe/GDP in 1000 INR)	0.90	3.43	1
B. Decarbonization				
B.1	Notification of SAPCC (1=Yes, 0=No)	1	3.43	1
B.2	CO2 reduced from LED Bulbs/1000 population (tonnes)	25.26	0.66	14
B.3	% of Forest Cover (Forest Cover wrt total area)	47.08	1.84	9
C. Emissions and Pollution				
C.1	Emission Intensity (kgCO2eq/ GSDP in 1000 INR)	0.00	3.43	1
C.2	Air Quality Index (on 27.07.21)	31.75	2.17	2
C.3	EV Penetration (%)	0.02	0.02	21

4. STATE CONTEXT				
A. Macroeconomic Environment				
A.1	Growth rate of GSDP	12.66	3.16	2
A.2	FDI Equity Inflows (in USD Million)	NA	NA	NA
A.3	States' Ranking: Start up Index*	NA	NA	NA
B. Regulations, Institutions & Governance				
B.1	Human Development Index	0.76	1.91	2
B.2	Good Governance Index	4.40	1.90	18
B.3	SDG Index	71	2.83	4
C. Stability for Investment & Innovation				
C.1	Innovation Score as per India Innovation Index	20.28	0.92	16
C.2	Industry, Infrastructure & Innovation Index	2.63	1.28	21
C.3	Investment Opportunities (in USD Billion)	9.14	0.09	23

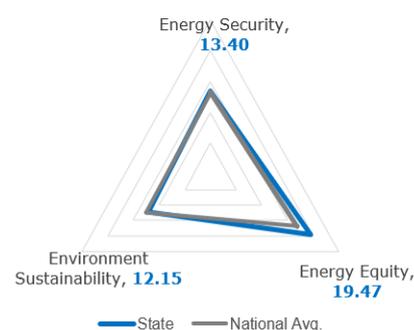
*100= Best performer; 80= Top Performer; 60= Leaders; 40=Aspiring Leaders; 20=Emerging States; 10= Beginners

Punjab

13
Rank

56.82
Overall Score

Dimension	Score	Rank
Energy Security	13.40	14
Energy Equity	19.47	5
Environmental Sustainability	12.15	18
State Context	11.80	12



Note – Dimension wise scores are out of 25

No.	Indicator	Value	Score	Rank
1. ENERGY SECURITY				
A. Electricity Diversity and Power Supply Position				
A.1	Diversity of Electricity Installed Capacity (EMCI)	0.56	1.23	14
A.2	Share of RE in total installed capacity (%)	12.18	0.37	15
A.3	Installed generating capacity (Growth Rate in %)	0.49	0.19	25
A.4	Electricity consumption per capita (in kWh)	2171.19	1.82	4
A.5	Energy not supplied (Deficit) in %	0.60	1.80	20
A.6	Installed Capacity (MW)/ Peak Demand (MW)	1.07	0.09	25
B. Viability of Energy/Electricity Systems in the State				
B.1	AT & C Losses (in %)	14.35	4.67	5
B.2	ACS-ARR Gap (in Rs./unit)	0.17	2.94	9
B.3	Average Hours of Supply in Agriculture (Mins/day)	466.00	0.30	15
2. ENERGY EQUITY				
A. Energy Access				
A.1	Access to Electricity %	100	2.55	14
A.2	LPG + PNG Connections against number of HHS %	1.44	2.37	2
B. Affordability				
B.1	ACS (Rs. /Unit)	6.07	2.08	17
B.2	Non-Subsidized LPG Price (Rs/14.2 kg Cylinder)	1032.5	0.83	14
B.3	Petrol Prices in Rs. /Litre	96.18	0.86	6
B.4	Diesel Prices in Rs. /Litre	86.55	0.77	7
B.5	Cross Subsidization (Industrial ABR/ ACS)	0.96	2.17	4
C. Performance of Utilities				
C.1	PAT/ Revenue (%)	-0.03	2.34	8
C.2	Overdues/ Cost of Power (%)	0.05	2.35	10
C.3	Payables for Power Purchase (Days)	57.00	2.31	5
C.4	Tariff Subsidy Billed/ Total Revenue (%)	0.28	0.84	25
3. ENVIRONMENTAL SUSTAINABILITY				
A. Energy Resource Productivity				
A.1	Energy Efficiency Score	58	2.49	4
A.2	Performance of Clean Energy (Capacity/Potential)(%)	24.61	3.06	1
A.3	Energy intensity (kgoe/GDP in 1000 INR)	2.60	0.46	24
B. Decarbonization				
B.1	Notification of SAPCC (1=Yes, 0=No)	1	3.06	14
B.2	CO2 reduced from LED Bulbs/1000 population (tonnes)	10.39	0.22	23
B.3	% of Forest Cover (Forest Cover wrt total area)	3.67	0.00	27
C. Emissions and Pollution				
C.1	Emission Intensity (kgCO2eq/ GSDP in 1000 INR)	0.01	2.69	16
C.2	Air Quality Index (on 27.07.21)	NA	NA	NA
C.3	EV Penetration (%)	0.12	0.16	19

4. STATE CONTEXT				
A. Macroeconomic Environment				
A.1	Growth rate of GSDP	6.31	0.18	27
A.2	FDI Equity Inflows (in USD Million)	868.24	0.07	10
A.3	States' Ranking: Start up Index*	60.00	1.53	12
B. Regulations, Institutions & Governance				
B.1	Human Development Index	0.74	1.50	8
B.2	Good Governance Index	4.97	2.31	10
B.3	SDG Index	68	2.13	14
C. Stability for Investment & Innovation				
C.1	Innovation Score as per India Innovation Index	22.54	1.05	14
C.2	Industry, Infrastructure & Innovation Index	3.51	2.78	3
C.3	Investment Opportunities (in USD Billion)	25.60	0.26	18

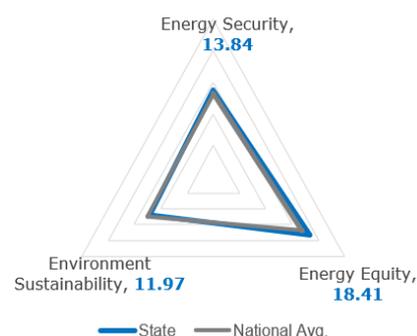
*100= Best performer; 80= Top Performer; 60= Leaders; 40=Aspiring Leaders; 20=Emerging States; 10= Beginners

Odisha

14
Rank

55.76
Overall Score

Dimension	Score	Rank
Energy Security	13.84	12
Energy Equity	18.41	11
Environmental Sustainability	11.97	19
State Context	11.54	13



Note – Dimension wise scores are out of 25

No.	Indicator	Value	Score	Rank
1. ENERGY SECURITY				
A. Electricity Diversity and Power Supply Position				
A.1	Diversity of Electricity Installed Capacity (EMCI)	0.43	0.83	20
A.2	Share of RE in total installed capacity (%)	7.90	0.19	21
A.3	Installed generating capacity (Growth Rate in %)	-1.77	0.00	28
A.4	Electricity consumption per capita (in kWh)	1559.34	1.19	9
A.5	Energy not supplied (Deficit) in %	0.00	2.00	8
A.6	Installed Capacity (MW)/ Peak Demand (MW)	1.38	0.22	17
B. Viability of Energy/Electricity Systems in the State				
B.1	AT & C Losses (in %)	28.94	2.85	19
B.2	ACS-ARR Gap (in Rs./unit)	0.34	2.79	14
B.3	Average Hours of Supply in Agriculture (Mins/day)	1,380.00	3.77	7
2. ENERGY EQUITY				
A. Energy Access				
A.1	Access to Electricity %	100	2.50	18
A.2	LPG + PNG Connections against number of HHS %	0.81	0.80	23
B. Affordability				
B.1	ACS (Rs. /Unit)	4.78	3.40	4
B.2	Non-Subsidized LPG Price (Rs/14.2 kg Cylinder)	1029	0.84	13
B.3	Petrol Prices in Rs. /Litre	103.19	0.47	20
B.4	Diesel Prices in Rs. /Litre	94.76	0.28	23
B.5	Cross Subsidization (Industrial ABR/ ACS)	1.30	1.54	21
C. Performance of Utilities				
C.1	PAT/ Revenue (%)	-0.07	2.26	18
C.2	Overdues/ Cost of Power (%)	0.03	2.38	9
C.3	Payables for Power Purchase (Days)	254.00	1.44	19
C.4	Tariff Subsidy Billed/ Total Revenue (%)	0.00	2.50	7
3. ENVIRONMENTAL SUSTAINABILITY				
A. Energy Resource Productivity				
A.1	Energy Efficiency Score	29.5	1.12	13
A.2	Performance of Clean Energy (Capacity/Potential)(%)	1.78	0.20	19
A.3	Energy intensity (kgoe/GDP in 1000 INR)	2.40	0.75	22
B. Decarbonization				
B.1	Notification of SAPCC (1=Yes, 0=No)	1	3.00	18
B.2	CO2 reduced from LED Bulbs/1000 population (tonnes)	119.57	2.89	2
B.3	% of Forest Cover (Forest Cover wrt total area)	33.50	1.11	13
C. Emissions and Pollution				
C.1	Emission Intensity (kgCO2eq/ GSDP in 1000 INR)	0.04	1.40	26
C.2	Air Quality Index (on 27.07.21)	86.00	1.18	15
C.3	EV Penetration (%)	0.24	0.33	15

4. STATE CONTEXT				
A. Macroeconomic Environment				
A.1	Growth rate of GSDP	10.65	1.95	10
A.2	FDI Equity Inflows (in USD Million)	128.13	0.01	18
A.3	States' Ranking: Start up Index*	80.00	2.25	5
B. Regulations, Institutions & Governance				
B.1	Human Development Index	0.65	0.77	22
B.2	Good Governance Index	4.58	1.85	20
B.3	SDG Index	61	1.17	20
C. Stability for Investment & Innovation				
C.1	Innovation Score as per India Innovation Index	18.94	0.67	19
C.2	Industry, Infrastructure & Innovation Index	3.20	2.16	7
C.3	Investment Opportunities (in USD Billion)	67.50	0.71	10

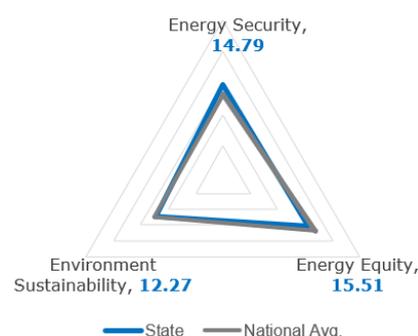
*100= Best performer; 80= Top Performer; 60= Leaders; 40=Aspiring Leaders; 20=Emerging States; 10= Beginners

Andhra Pradesh

15
Rank

54.66
Overall Score

Dimension	Score	Rank
Energy Security	14.79	7
Energy Equity	15.51	20
Environmental Sustainability	12.27	16
State Context	12.09	10



Note – Dimension wise scores are out of 25

No.	Indicator	Value	Score	Rank
1. ENERGY SECURITY				
A. Electricity Diversity and Power Supply Position				
A.1	Diversity of Electricity Installed Capacity (EMCI)	0.65	1.52	7
A.2	Share of RE in total installed capacity (%)	35.81	1.36	5
A.3	Installed generating capacity (Growth Rate in %)	2.90	0.39	20
A.4	Electricity consumption per capita (in kWh)	1506.55	1.16	10
A.5	Energy not supplied (Deficit) in %	1.10	1.59	23
A.6	Installed Capacity (MW)/ Peak Demand (MW)	2.21	0.58	4
B. Viability of Energy/Electricity Systems in the State				
B.1	AT & C Losses (in %)	10.77	5.10	1
B.2	ACS-ARR Gap (in Rs./unit)	0.12	2.97	8
B.3	Average Hours of Supply in Agriculture (Mins/day)	420.00	0.12	16
2. ENERGY EQUITY				
A. Energy Access				
A.1	Access to Electricity %	100	2.55	14
A.2	LPG + PNG Connections against number of HHS %	1.04	1.37	14
B. Affordability				
B.1	ACS (Rs. /Unit)	6.02	2.13	16
B.2	Non-Subsidized LPG Price (Rs/14.2 kg Cylinder)	1035.5	0.81	15
B.3	Petrol Prices in Rs. /Litre	111.87	0.00	28
B.4	Diesel Prices in Rs. /Litre	99.61	0.00	28
B.5	Cross Subsidization (Industrial ABR/ ACS)	1.12	1.88	7
C. Performance of Utilities				
C.1	PAT/ Revenue (%)	-0.01	2.35	7
C.2	Overdues/ Cost of Power (%)	0.35	1.21	24
C.3	Payables for Power Purchase (Days)	168.00	1.84	13
C.4	Tariff Subsidy Billed/ Total Revenue (%)	0.19	1.37	20
3. ENVIRONMENTAL SUSTAINABILITY				
A. Energy Resource Productivity				
A.1	Energy Efficiency Score	50.5	2.14	8
A.2	Performance of Clean Energy (Capacity/Potential)(%)	8.03	0.98	8
A.3	Energy intensity (kgoe/GDP in 1000 INR)	2.70	0.31	27
B. Decarbonization				
B.1	Notification of SAPCC (1=Yes, 0=No)	1	3.06	14
B.2	CO2 reduced from LED Bulbs/1000 population (tonnes)	43.77	1.05	10
B.3	% of Forest Cover (Forest Cover wrt total area)	18.28	0.55	21
C. Emissions and Pollution				
C.1	Emission Intensity (kgCO2eq/ GSDP in 1000 INR)	0.01	2.57	19
C.2	Air Quality Index (on 27.07.21)	57.22	1.60	9
C.3	EV Penetration (%)	NA	NA	NA

4. STATE CONTEXT				
A. Macroeconomic Environment				
A.1	Growth rate of GSDP	10.30	1.84	13
A.2	FDI Equity Inflows (in USD Million)	516.77	0.04	13
A.3	States' Ranking: Start up Index*	20.00	0.00	22
B. Regulations, Institutions & Governance				
B.1	Human Development Index	0.65	0.78	21
B.2	Good Governance Index	4.47	1.77	23
B.3	SDG Index	72	2.66	7
C. Stability for Investment & Innovation				
C.1	Innovation Score as per India Innovation Index	24.19	1.21	9
C.2	Industry, Infrastructure & Innovation Index	3.17	2.15	8
C.3	Investment Opportunities (in USD Billion)	149.34	1.64	2

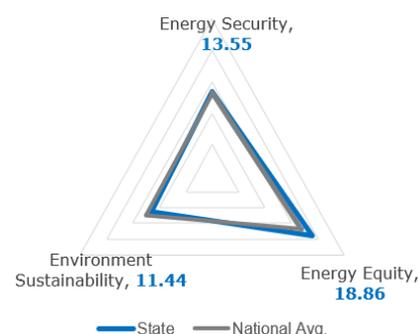
*100= Best performer; 80= Top Performer; 60= Leaders; 40=Aspiring Leaders; 20=Emerging States; 10= Beginners

West Bengal

16
Rank

53.77
Overall Score

Dimension	Score	Rank
Energy Security	13.55	13
Energy Equity	18.86	6
Environmental Sustainability	11.44	22
State Context	9.92	18



Note – Dimension wise scores are out of 25

No.	Indicator	Value	Score	Rank
1. ENERGY SECURITY				
A. Electricity Diversity and Power Supply Position				
A.1	Diversity of Electricity Installed Capacity (EMCI)	0.33	0.56	24
A.2	Share of RE in total installed capacity (%)	5.49	0.09	24
A.3	Installed generating capacity (Growth Rate in %)	0.60	0.20	24
A.4	Electricity consumption per capita (in kWh)	756.65	0.42	20
A.5	Energy not supplied (Deficit) in %	1.50	1.44	25
A.6	Installed Capacity (MW)/ Peak Demand (MW)	1.18	0.14	21
B. Viability of Energy/Electricity Systems in the State				
B.1	AT & C Losses (in %)	20.40	3.98	13
B.2	ACS-ARR Gap (in Rs./unit)	0.42	2.84	13
B.3	Average Hours of Supply in Agriculture (Mins/day)	1,380.00	3.89	6
2. ENERGY EQUITY				
A. Energy Access				
A.1	Access to Electricity %	100	2.58	12
A.2	LPG + PNG Connections against number of HHS %	1.00	1.29	16
B. Affordability				
B.1	ACS (Rs. /Unit)	5.82	2.37	13
B.2	Non-Subsidized LPG Price (Rs/14.2 kg Cylinder)	1029	0.86	11
B.3	Petrol Prices in Rs. /Litre	106.03	0.32	21
B.4	Diesel Prices in Rs. /Litre	92.76	0.41	17
B.5	Cross Subsidization (Industrial ABR/ ACS)	1.14	1.87	8
C. Performance of Utilities				
C.1	PAT/ Revenue (%)	-0.04	2.36	6
C.2	Overdues/ Cost of Power (%)	0.04	2.40	8
C.3	Payables for Power Purchase (Days)	119.00	2.07	12
C.4	Tariff Subsidy Billed/ Total Revenue (%)	0.04	2.32	11
3. ENVIRONMENTAL SUSTAINABILITY				
A. Energy Resource Productivity				
A.1	Energy Efficiency Score	17.5	0.58	18
A.2	Performance of Clean Energy (Capacity/Potential)(%)	7.12	0.88	9
A.3	Energy intensity (kgoe/GDP in 1000 INR)	1.60	2.01	9
B. Decarbonization				
B.1	Notification of SAPCC (1=Yes, 0=No)	1	3.09	12
B.2	CO2 reduced from LED Bulbs/1000 population (tonnes)	9.85	0.21	25
B.3	% of Forest Cover (Forest Cover wrt total area)	18.96	0.59	19
C. Emissions and Pollution				
C.1	Emission Intensity (kgCO2eq/ GSDP in 1000 INR)	0.02	2.47	23
C.2	Air Quality Index (on 27.07.21)	93.94	1.11	17
C.3	EV Penetration (%)	0.34	0.50	11

4. STATE CONTEXT				
A. Macroeconomic Environment				
A.1	Growth rate of GSDP	10.29	1.85	12
A.2	FDI Equity Inflows (in USD Million)	1033.90	0.08	9
A.3	States' Ranking: Start up Index*	NA	NA	NA
B. Regulations, Institutions & Governance				
B.1	Human Development Index	0.67	0.99	18
B.2	Good Governance Index	4.52	1.84	22
B.3	SDG Index	62	1.34	17
C. Stability for Investment & Innovation				
C.1	Innovation Score as per India Innovation Index	21.69	0.97	15
C.2	Industry, Infrastructure & Innovation Index	3.04	1.92	14
C.3	Investment Opportunities (in USD Billion)	83.25	0.91	7

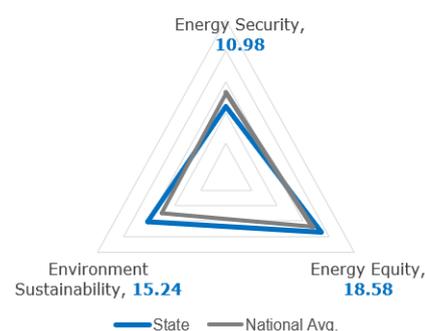
*100= Best performer; 80= Top Performer; 60= Leaders; 40=Aspiring Leaders; 20=Emerging States; 10= Beginners

Assam

17
Rank

53.42
Overall Score

Dimension	Score	Rank
Energy Security	10.98	22
Energy Equity	18.58	9
Environmental Sustainability	15.24	6
State Context	8.62	21



Note – Dimension wise scores are out of 25

No.	Indicator	Value	Score	Rank
1. ENERGY SECURITY				
A. Electricity Diversity and Power Supply Position				
A.1	Diversity of Electricity Installed Capacity (EMCI)	0.65	1.53	6
A.2	Share of RE in total installed capacity (%)	8.36	0.21	18
A.3	Installed generating capacity (Growth Rate in %)	2.88	0.39	19
A.4	Electricity consumption per capita (in kWh)	348.03	0.02	27
A.5	Energy not supplied (Deficit) in %	0.20	2.00	12
A.6	Installed Capacity (MW)/ Peak Demand (MW)	0.87	0.00	28
B. Viability of Energy/Electricity Systems in the State				
B.1	AT & C Losses (in %)	23.37	3.65	16
B.2	ACS-ARR Gap (in Rs./unit)	-0.14	3.17	3
B.3	Average Hours of Supply in Agriculture (Mins/day)	NA	NA	NA
2. ENERGY EQUITY				
A. Energy Access				
A.1	Access to Electricity %	100	2.60	8
A.2	LPG + PNG Connections against number of HHS %	0.99	1.29	17
B. Affordability				
B.1	ACS (Rs. /Unit)	5.87	2.34	14
B.2	Non-Subsidized LPG Price (Rs/14.2 kg Cylinder)	1052	0.72	17
B.3	Petrol Prices in Rs. /Litre	96.01	0.89	5
B.4	Diesel Prices in Rs. /Litre	83.94	0.94	5
B.5	Cross Subsidization (Industrial ABR/ ACS)	2.20	0.00	28
C. Performance of Utilities				
C.1	PAT/ Revenue (%)	0.00	2.41	4
C.2	Overdues/ Cost of Power (%)	0.00	2.60	3
C.3	Payables for Power Purchase (Days)	32.00	2.47	3
C.4	Tariff Subsidy Billed/ Total Revenue (%)	0.04	2.33	10
3. ENVIRONMENTAL SUSTAINABILITY				
A. Energy Resource Productivity				
A.1	Energy Efficiency Score	31	1.24	11
A.2	Performance of Clean Energy (Capacity/Potential)(%)	1.07	0.12	23
A.3	Energy intensity (kgoe/GDP in 1000 INR)	1.40	2.34	5
B. Decarbonization				
B.1	Notification of SAPCC (1=Yes, 0=No)	1	3.13	8
B.2	CO2 reduced from LED Bulbs/1000 population (tonnes)	21.37	0.50	17
B.3	% of Forest Cover (Forest Cover wrt total area)	36.09	1.25	12
C. Emissions and Pollution				
C.1	Emission Intensity (kgCO2eq/ GSDP in 1000 INR)	0.01	3.00	9
C.2	Air Quality Index (on 27.07.21)	56.45	1.64	6
C.3	EV Penetration (%)	1.37	2.03	2

4. STATE CONTEXT				
A. Macroeconomic Environment				
A.1	Growth rate of GSDP	11.36	2.33	5
A.2	FDI Equity Inflows (in USD Million)	18.53	0.00	20
A.3	States' Ranking: Start up Index*	60.00	1.56	9
B. Regulations, Institutions & Governance				
B.1	Human Development Index	0.65	0.82	20
B.2	Good Governance Index	4.04	1.33	24
B.3	SDG Index	57	0.68	26
C. Stability for Investment & Innovation				
C.1	Innovation Score as per India Innovation Index	16.38	0.44	22
C.2	Industry, Infrastructure & Innovation Index	2.63	1.16	22
C.3	Investment Opportunities (in USD Billion)	28.70	0.30	17

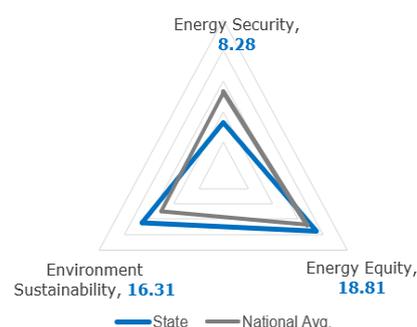
*100= Best performer; 80= Top Performer; 60= Leaders; 40=Aspiring Leaders; 20=Emerging States; 10= Beginners

Tripura

18
Rank

51.64
Overall Score

Dimension	Score	Rank
Energy Security	8.28	27
Energy Equity	18.81	7
Environmental Sustainability	16.31	2
State Context	8.24	23



Note – Dimension wise scores are out of 25

No.	Indicator	Value	Score	Rank
1. ENERGY SECURITY				
A. Electricity Diversity and Power Supply Position				
A.1	Diversity of Electricity Installed Capacity (EMCI)	0.40	0.78	21
A.2	Share of RE in total installed capacity (%)	4.58	0.05	26
A.3	Installed generating capacity (Growth Rate in %)	-1.50	0.02	27
A.4	Electricity consumption per capita (in kWh)	425.39	0.09	24
A.5	Energy not supplied (Deficit) in %	0.00	2.08	5
A.6	Installed Capacity (MW)/ Peak Demand (MW)	2.06	0.52	9
B. Viability of Energy/Electricity Systems in the State				
B.1	AT & C Losses (in %)	37.85	1.86	25
B.2	ACS-ARR Gap (in Rs./unit)	0.43	2.86	12
B.3	Average Hours of Supply in Agriculture (Mins/day)	NA	NA	NA
2. ENERGY EQUITY				
A. Energy Access				
A.1	Access to Electricity %	100	2.60	8
A.2	LPG + PNG Connections against number of HHS %	0.84	0.90	22
B. Affordability				
B.1	ACS (Rs. /Unit)	4.86	3.45	3
B.2	Non-Subsidized LPG Price (Rs/14.2 kg Cylinder)	1163.5	0.00	28
B.3	Petrol Prices in Rs. /Litre	99.49	0.69	13
B.4	Diesel Prices in Rs. /Litre	88.44	0.67	10
B.5	Cross Subsidization (Industrial ABR/ ACS)	1.48	1.29	25
C. Performance of Utilities				
C.1	PAT/ Revenue (%)	-0.10	2.33	9
C.2	Overdues/ Cost of Power (%)	0.14	2.04	17
C.3	Payables for Power Purchase (Days)	43.00	2.42	4
C.4	Tariff Subsidy Billed/ Total Revenue (%)	0.03	2.40	9
3. ENVIRONMENTAL SUSTAINABILITY				
A. Energy Resource Productivity				
A.1	Energy Efficiency Score	13.5	0.39	22
A.2	Performance of Clean Energy (Capacity/Potential)(%)	1.45	0.16	20
A.3	Energy intensity (kgoe/GDP in 1000 INR)	1.00	2.97	3
B. Decarbonization				
B.1	Notification of SAPCC (1=Yes, 0=No)	1	3.13	8
B.2	CO2 reduced from LED Bulbs/1000 population (tonnes)	26.99	0.65	15
B.3	% of Forest Cover (Forest Cover wrt total area)	73.64	2.70	6
C. Emissions and Pollution				
C.1	Emission Intensity (kgCO2eq/ GSDP in 1000 INR)	0.00	3.13	6
C.2	Air Quality Index (on 27.07.21)	95.50	1.10	18
C.3	EV Penetration (%)	1.40	2.08	1

4. STATE CONTEXT				
A. Macroeconomic Environment				
A.1	Growth rate of GSDP	10.38	1.91	11
A.2	FDI Equity Inflows (in USD Million)	0.56	0.00	24
A.3	States' Ranking: Start up Index*	40.00	0.78	17
B. Regulations, Institutions & Governance				
B.1	Human Development Index	0.67	0.95	19
B.2	Good Governance Index	4.51	1.84	21
B.3	SDG Index	65	1.77	15
C. Stability for Investment & Innovation				
C.1	Innovation Score as per India Innovation Index	12.84	0.07	27
C.2	Industry, Infrastructure & Innovation Index	2.50	0.91	24
C.3	Investment Opportunities (in USD Billion)	2.20	0.00	28

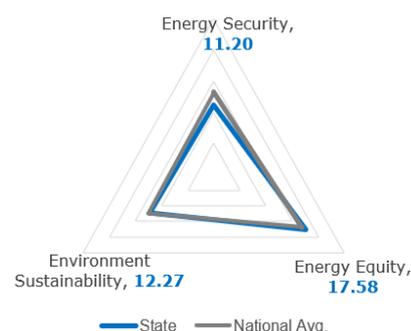
*100= Best performer; 80= Top Performer; 60= Leaders; 40=Aspiring Leaders; 20=Emerging States; 10= Beginners

Manipur

19
Rank

49.96
Overall Score

Dimension	Score	Rank
Energy Security	11.20	21
Energy Equity	17.58	13
Environmental Sustainability	12.27	16
State Context	8.91	19



Note – Dimension wise scores are out of 25

No.	Indicator	Value	Score	Rank
1. ENERGY SECURITY				
A. Electricity Diversity and Power Supply Position				
A.1	Diversity of Electricity Installed Capacity (EMCI)	0.75	1.91	2
A.2	Share of RE in total installed capacity (%)	6.37	0.13	22
A.3	Installed generating capacity (Growth Rate in %)	3.54	0.46	12
A.4	Electricity consumption per capita (in kWh)	385.01	0.06	25
A.5	Energy not supplied (Deficit) in %	0.10	2.11	3
A.6	Installed Capacity (MW)/ Peak Demand (MW)	1.08	0.10	23
B. Viability of Energy/Electricity Systems in the State				
B.1	AT & C Losses (in %)	20.27	4.16	11
B.2	ACS-ARR Gap (in Rs./unit)	1.64	2.26	23
B.3	Average Hours of Supply in Agriculture (Mins/day)	NA	NA	NA
2. ENERGY EQUITY				
A. Energy Access				
A.1	Access to Electricity %	100	2.69	5
A.2	LPG + PNG Connections against number of HHS %	0.99	1.31	15
B. Affordability				
B.1	ACS (Rs. /Unit)	6.50	1.70	22
B.2	Non-Subsidized LPG Price (Rs/14.2 kg Cylinder)	1154.5	0.06	25
B.3	Petrol Prices in Rs. /Litre	101.24	0.62	15
B.4	Diesel Prices in Rs. /Litre	87.16	0.77	6
B.5	Cross Subsidization (Industrial ABR/ ACS)	0.75	2.67	3
C. Performance of Utilities				
C.1	PAT/ Revenue (%)	-0.35	2.20	22
C.2	Overdues/ Cost of Power (%)	0.17	1.98	19
C.3	Payables for Power Purchase (Days)	137.00	2.08	10
C.4	Tariff Subsidy Billed/ Total Revenue (%)	0.18	1.50	18
3. ENVIRONMENTAL SUSTAINABILITY				
A. Energy Resource Productivity				
A.1	Energy Efficiency Score	6.5	0.05	27
A.2	Performance of Clean Energy (Capacity/Potential)(%)	0.16	0.00	28
A.3	Energy intensity (kgoe/GDP in 1000 INR)	1.60	2.10	8
B. Decarbonization				
B.1	Notification of SAPCC (1=Yes, 0=No)	1	3.23	5
B.2	CO2 reduced from LED Bulbs/1000 population (tonnes)	9.88	0.22	24
B.3	% of Forest Cover (Forest Cover wrt total area)	74.34	2.82	3
C. Emissions and Pollution				
C.1	Emission Intensity (kgCO2eq/ GSDP in 1000 INR)	0.00	3.14	5
C.2	Air Quality Index (on 27.07.21)	137.00	0.55	21
C.3	EV Penetration (%)	0.12	0.17	18

4. STATE CONTEXT				
A. Macroeconomic Environment				
A.1	Growth rate of GSDP	11.89	2.63	3
A.2	FDI Equity Inflows (in USD Million)	NA	NA	NA
A.3	States' Ranking: Start up Index*	40.00	0.81	15
B. Regulations, Institutions & Governance				
B.1	Human Development Index	0.69	1.14	16
B.2	Good Governance Index	3.49	0.74	26
B.3	SDG Index	64	1.68	16
C. Stability for Investment & Innovation				
C.1	Innovation Score as per India Innovation Index	22.78	1.13	12
C.2	Industry, Infrastructure & Innovation Index	2.39	0.73	26
C.3	Investment Opportunities (in USD Billion)	6.26	0.05	24

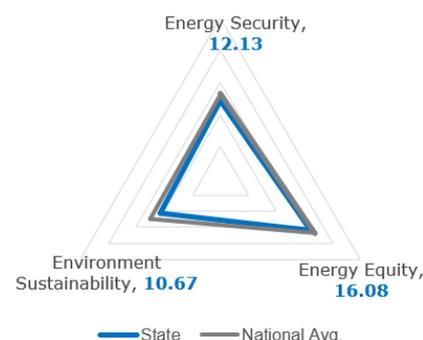
*100= Best performer; 80= Top Performer; 60= Leaders; 40=Aspiring Leaders; 20=Emerging States; 10= Beginners

Uttar Pradesh

20
Rank

49.34
Overall Score

Dimension	Score	Rank
Energy Security	12.13	19
Energy Equity	16.08	16
Environmental Sustainability	10.67	24
State Context	10.46	17



Note – Dimension wise scores are out of 25

No.	Indicator	Value	Score	Rank
1. ENERGY SECURITY				
A. Electricity Diversity and Power Supply Position				
A.1	Diversity of Electricity Installed Capacity (EMCI)	0.47	0.94	19
A.2	Share of RE in total installed capacity (%)	15.34	0.49	14
A.3	Installed generating capacity (Growth Rate in %)	4.32	0.49	11
A.4	Electricity consumption per capita (in kWh)	628.73	0.29	23
A.5	Energy not supplied (Deficit) in %	0.90	1.64	22
A.6	Installed Capacity (MW)/ Peak Demand (MW)	1.17	0.13	22
B. Viability of Energy/Electricity Systems in the State				
B.1	AT & C Losses (in %)	30.05	2.71	22
B.2	ACS-ARR Gap (in Rs./unit)	0.45	2.74	16
B.3	Average Hours of Supply in Agriculture (Mins/day)	1,099.50	2.70	10
2. ENERGY EQUITY				
A. Energy Access				
A.1	Access to Electricity %	100	2.50	18
A.2	LPG + PNG Connections against number of HHS %	1.10	1.49	13
B. Affordability				
B.1	ACS (Rs. /Unit)	6.38	1.71	21
B.2	Non-Subsidized LPG Price (Rs/14.2 kg Cylinder)	1040.5	0.76	16
B.3	Petrol Prices in Rs. /Litre	96.57	0.82	8
B.4	Diesel Prices in Rs. /Litre	89.76	0.57	13
B.5	Cross Subsidization (Industrial ABR/ ACS)	1.61	1.01	26
C. Performance of Utilities				
C.1	PAT/ Revenue (%)	-0.06	2.27	16
C.2	Overdues/ Cost of Power (%)	0.14	1.96	20
C.3	Payables for Power Purchase (Days)	269.00	1.38	20
C.4	Tariff Subsidy Billed/ Total Revenue (%)	0.15	1.60	16
3. ENVIRONMENTAL SUSTAINABILITY				
A. Energy Resource Productivity				
A.1	Energy Efficiency Score	35.5	1.40	9
A.2	Performance of Clean Energy (Capacity/Potential)(%)	16.96	2.06	4
A.3	Energy intensity (kgoe/GDP in 1000 INR)	2.60	0.45	25
B. Decarbonization				
B.1	Notification of SAPCC (1=Yes, 0=No)	1	3.00	18
B.2	CO2 reduced from LED Bulbs/1000 population (tonnes)	11.86	0.25	22
B.3	% of Forest Cover (Forest Cover wrt total area)	6.15	0.09	25
C. Emissions and Pollution				
C.1	Emission Intensity (kgCO2eq/ GSDP in 1000 INR)	0.02	2.24	24
C.2	Air Quality Index (on 27.07.21)	175.50	0.00	24
C.3	EV Penetration (%)	0.83	1.18	4

4. STATE CONTEXT				
A. Macroeconomic Environment				
A.1	Growth rate of GSDP	8.43	1.04	23
A.2	FDI Equity Inflows (in USD Million)	881.63	0.07	11
A.3	States' Ranking: Start up Index*	60.00	1.50	13
B. Regulations, Institutions & Governance				
B.1	Human Development Index	0.59	0.32	27
B.2	Good Governance Index	4.63	1.90	17
B.3	SDG Index	60	1.04	24
C. Stability for Investment & Innovation				
C.1	Innovation Score as per India Innovation Index	22.85	1.06	13
C.2	Industry, Infrastructure & Innovation Index	3.25	2.25	6
C.3	Investment Opportunities (in USD Billion)	119.30	1.28	4

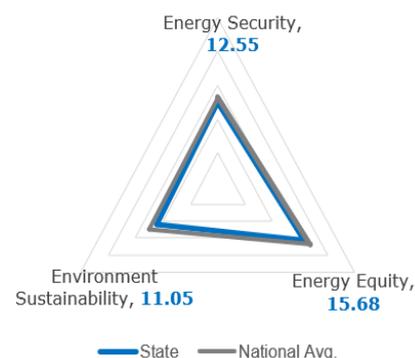
*100= Best performer; 80= Top Performer; 60= Leaders; 40=Aspiring Leaders; 20=Emerging States; 10= Beginners

Rajasthan

21
Rank

47.66
Overall Score

Dimension	Score	Rank
Energy Security	12.55	17
Energy Equity	15.68	19
Environmental Sustainability	11.05	23
State Context	8.38	22



Note – Dimension wise scores are out of 25

No.	Indicator	Value	Score	Rank
1. ENERGY SECURITY				
A. Electricity Diversity and Power Supply Position				
A.1	Diversity of Electricity Installed Capacity (EMCI)	0.61	1.35	11
A.2	Share of RE in total installed capacity (%)	50.80	1.95	2
A.3	Installed generating capacity (Growth Rate in %)	11.15	1.04	4
A.4	Electricity consumption per capita (in kWh)	1316.64	0.95	14
A.5	Energy not supplied (Deficit) in %	0.50	1.80	19
A.6	Installed Capacity (MW)/ Peak Demand (MW)	2.13	0.53	7
B. Viability of Energy/Electricity Systems in the State				
B.1	AT & C Losses (in %)	29.85	2.74	20
B.2	ACS-ARR Gap (in Rs./unit)	1.49	2.19	24
B.3	Average Hours of Supply in Agriculture (Mins/day)	390.00	0.00	18
2. ENERGY EQUITY				
A. Energy Access				
A.1	Access to Electricity %	100	2.50	18
A.2	LPG + PNG Connections against number of HHS %	1.10	1.50	12
B. Affordability				
B.1	ACS (Rs. /Unit)	6.81	1.26	25
B.2	Non-Subsidized LPG Price (Rs/14.2 kg Cylinder)	1006.5	0.98	5
B.3	Petrol Prices in Rs. /Litre	108.48	0.18	24
B.4	Diesel Prices in Rs. /Litre	93.72	0.34	18
B.5	Cross Subsidization (Industrial ABR/ ACS)	1.11	1.87	9
C. Performance of Utilities				
C.1	PAT/ Revenue (%)	-0.19	2.17	23
C.2	Overdues/ Cost of Power (%)	0.06	2.26	13
C.3	Payables for Power Purchase (Days)	252.00	1.45	18
C.4	Tariff Subsidy Billed/ Total Revenue (%)	0.22	1.18	22
3. ENVIRONMENTAL SUSTAINABILITY				
A. Energy Resource Productivity				
A.1	Energy Efficiency Score	61	2.58	3
A.2	Performance of Clean Energy (Capacity/Potential)(%)	6.28	0.75	13
A.3	Energy intensity (kgoe/GDP in 1000 INR)	2.50	0.60	23
B. Decarbonization				
B.1	Notification of SAPCC (1=Yes, 0=No)	1	3.00	18
B.2	CO2 reduced from LED Bulbs/1000 population (tonnes)	22.73	0.52	16
B.3	% of Forest Cover (Forest Cover wrt total area)	4.87	0.05	26
C. Emissions and Pollution				
C.1	Emission Intensity (kgCO2eq/ GSDP in 1000 INR)	0.02	2.48	21
C.2	Air Quality Index (on 27.07.21)	144.02	0.42	22
C.3	EV Penetration (%)	0.47	0.66	6

4. STATE CONTEXT				
A. Macroeconomic Environment				
A.1	Growth rate of GSDP	7.05	0.47	25
A.2	FDI Equity Inflows (in USD Million)	1168.49	0.09	8
A.3	States' Ranking: Start up Index*	40.00	0.75	19
B. Regulations, Institutions & Governance				
B.1	Human Development Index	0.64	0.68	23
B.2	Good Governance Index	4.88	2.17	13
B.3	SDG Index	60	1.04	24
C. Stability for Investment & Innovation				
C.1	Innovation Score as per India Innovation Index	20.83	0.86	18
C.2	Industry, Infrastructure & Innovation Index	2.96	1.72	16
C.3	Investment Opportunities (in USD Billion)	56.70	0.59	11

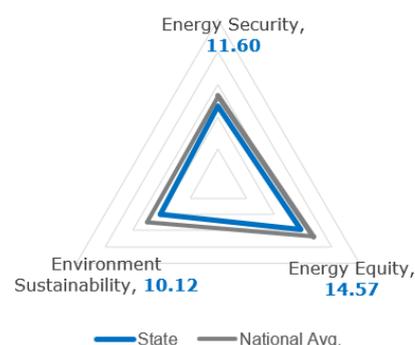
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Madhya Pradesh

22
Rank

47.04
Overall Score

Dimension	Score	Rank
Energy Security	11.60	20
Energy Equity	14.57	25
Environmental Sustainability	10.12	25
State Context	10.75	14



Note – Dimension wise scores are out of 25

No.	Indicator	Value	Score	Rank
1. ENERGY SECURITY				
A. Electricity Diversity and Power Supply Position				
A.1	Diversity of Electricity Installed Capacity (EMCI)	0.51	1.08	17
A.2	Share of RE in total installed capacity (%)	21.54	0.76	10
A.3	Installed generating capacity (Growth Rate in %)	5.29	0.58	9
A.4	Electricity consumption per capita (in kWh)	1085.96	0.75	15
A.5	Energy not supplied (Deficit) in %	0.10	2.00	12
A.6	Installed Capacity (MW)/ Peak Demand (MW)	1.59	0.31	13
B. Viability of Energy/Electricity Systems in the State				
B.1	AT & C Losses (in %)	30.38	2.73	21
B.2	ACS-ARR Gap (in Rs./unit)	0.79	2.61	19
B.3	Average Hours of Supply in Agriculture (Mins/day)	592.00	0.79	11
2. ENERGY EQUITY				
A. Energy Access				
A.1	Access to Electricity %	100	2.55	14
A.2	LPG + PNG Connections against number of HHS %	0.86	0.94	21
B. Affordability				
B.1	ACS (Rs. /Unit)	5.77	2.40	12
B.2	Non-Subsidized LPG Price (Rs/14.2 kg Cylinder)	1008.5	0.98	2
B.3	Petrol Prices in Rs. /Litre	108.65	0.18	25
B.4	Diesel Prices in Rs. /Litre	93.90	0.34	19
B.5	Cross Subsidization (Industrial ABR/ ACS)	1.42	1.36	23
C. Performance of Utilities				
C.1	PAT/ Revenue (%)	-0.11	2.28	15
C.2	Overdues/ Cost of Power (%)	0.19	1.80	22
C.3	Payables for Power Purchase (Days)	186.00	1.76	15
C.4	Tariff Subsidy Billed/ Total Revenue (%)	0.41	0.00	28
3. ENVIRONMENTAL SUSTAINABILITY				
A. Energy Resource Productivity				
A.1	Energy Efficiency Score	31	1.21	12
A.2	Performance of Clean Energy (Capacity/Potential)(%)	6.89	0.84	10
A.3	Energy intensity (kgoe/GDP in 1000 INR)	2.40	0.77	21
B. Decarbonization				
B.1	Notification of SAPCC (1=Yes, 0=No)	1	3.06	14
B.2	CO2 reduced from LED Bulbs/1000 population (tonnes)	21.61	0.50	18
B.3	% of Forest Cover (Forest Cover wrt total area)	25.14	0.81	16
C. Emissions and Pollution				
C.1	Emission Intensity (kgCO2eq/ GSDP in 1000 INR)	0.03	1.80	25
C.2	Air Quality Index (on 27.07.21)	91.55	1.13	16
C.3	EV Penetration (%)	NA	NA	NA

4. STATE CONTEXT				
A. Macroeconomic Environment				
A.1	Growth rate of GSDP	11.14	2.19	7
A.2	FDI Equity Inflows (in USD Million)	490.85	0.04	14
A.3	States' Ranking: Start up Index*	40.00	0.77	18
B. Regulations, Institutions & Governance				
B.1	Human Development Index	0.62	0.52	26
B.2	Good Governance Index	4.89	2.22	11
B.3	SDG Index	62	1.33	18
C. Stability for Investment & Innovation				
C.1	Innovation Score as per India Innovation Index	20.82	0.87	17
C.2	Industry, Infrastructure & Innovation Index	2.90	1.64	17
C.3	Investment Opportunities (in USD Billion)	107.68	1.17	5

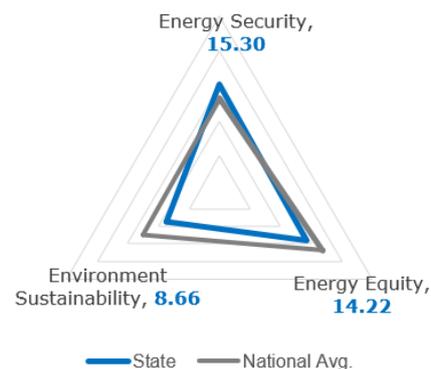
*100= Best performer; 80= Top Performer; 60= Leaders; 40=Aspiring Leaders; 20=Emerging States; 10= Beginners

Chhattisgarh

23
Rank

46.91
Overall Score

Dimension	Score	Rank
Energy Security	15.30	6
Energy Equity	14.22	27
Environmental Sustainability	8.66	27
State Context	8.73	20



Note – Dimension wise scores are out of 25

No.	Indicator	Value	Score	Rank
1. ENERGY SECURITY				
A. Electricity Diversity and Power Supply Position				
A.1	Diversity of Electricity Installed Capacity (EMCI)	0.18	0.10	27
A.2	Share of RE in total installed capacity (%)	6.50	0.13	23
A.3	Installed generating capacity (Growth Rate in %)	2.09	0.31	22
A.4	Electricity consumption per capita (in kWh)	2044.00	1.66	6
A.5	Energy not supplied (Deficit) in %	0.10	1.96	14
A.6	Installed Capacity (MW)/ Peak Demand (MW)	2.74	0.79	3
B. Viability of Energy/Electricity Systems in the State				
B.1	AT & C Losses (in %)	23.68	3.47	17
B.2	ACS-ARR Gap (in Rs./unit)	0.18	2.88	11
B.3	Average Hours of Supply in Agriculture (Mins/day)	1,440.00	4.00	3
2. ENERGY EQUITY				
A. Energy Access				
A.1	Access to Electricity %	99.67	0.00	28
A.2	LPG + PNG Connections against number of HHS %	0.77	0.70	26
B. Affordability				
B.1	ACS (Rs. /Unit)	4.98	3.19	6
B.2	Non-Subsidized LPG Price (Rs/14.2 kg Cylinder)	1074	0.56	23
B.3	Petrol Prices in Rs. /Litre	102.45	0.51	18
B.4	Diesel Prices in Rs. /Litre	95.44	0.24	24
B.5	Cross Subsidization (Industrial ABR/ ACS)	1.20	1.72	16
C. Performance of Utilities				
C.1	PAT/ Revenue (%)	-0.01	2.31	12
C.2	Overdues/ Cost of Power (%)	0.05	2.32	12
C.3	Payables for Power Purchase (Days)	163.00	1.82	14
C.4	Tariff Subsidy Billed/ Total Revenue (%)	0.27	0.87	24
3. ENVIRONMENTAL SUSTAINABILITY				
A. Energy Resource Productivity				
A.1	Energy Efficiency Score	23	0.81	17
A.2	Performance of Clean Energy (Capacity/Potential)(%)	4.35	0.51	15
A.3	Energy intensity (kgoe/GDP in 1000 INR)	2.90	0.00	28
B. Decarbonization				
B.1	Notification of SAPCC (1=Yes, 0=No)	1	3.00	18
B.2	CO2 reduced from LED Bulbs/1000 population (tonnes)	38.16	0.90	11
B.3	% of Forest Cover (Forest Cover wrt total area)	41.21	1.39	11
C. Emissions and Pollution				
C.1	Emission Intensity (kgCO2eq/ GSDP in 1000 INR)	0.08	0.00	28
C.2	Air Quality Index (on 27.07.21)	53.46	1.61	7
C.3	EV Penetration (%)	0.31	0.43	12

4. STATE CONTEXT				
A. Macroeconomic Environment				
A.1	Growth rate of GSDP	9.24	1.37	21
A.2	FDI Equity Inflows (in USD Million)	1.01	0.00	23
A.3	States' Ranking: Start up Index*	40.00	0.75	19
B. Regulations, Institutions & Governance				
B.1	Human Development Index	0.63	0.61	24
B.2	Good Governance Index	4.86	2.15	16
B.3	SDG Index	61	1.17	20
C. Stability for Investment & Innovation				
C.1	Innovation Score as per India Innovation Index	15.77	0.36	23
C.2	Industry, Infrastructure & Innovation Index	3.09	1.96	13
C.3	Investment Opportunities (in USD Billion)	35.18	0.36	15

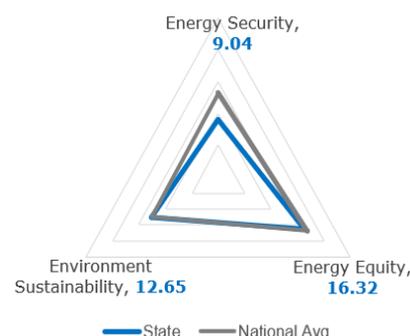
*100= Best performer; 80= Top Performer; 60= Leaders; 40=Aspiring Leaders; 20=Emerging States; 10= Beginners

Arunachal Pradesh

24
Rank

44.77
Overall Score

Dimension	Score	Rank
Energy Security	9.04	25
Energy Equity	16.32	15
Environmental Sustainability	12.65	14
State Context	6.76	26



Note – Dimension wise scores are out of 25

No.	Indicator	Value	Score	Rank
1. ENERGY SECURITY				
A. Electricity Diversity and Power Supply Position				
A.1	Diversity of Electricity Installed Capacity (EMCI)	0.45	0.97	18
A.2	Share of RE in total installed capacity (%)	18.47	0.68	12
A.3	Installed generating capacity (Growth Rate in %)	22.99	2.19	1
A.4	Electricity consumption per capita (in kWh)	631.38	0.32	22
A.5	Energy not supplied (Deficit) in %	0.10	2.14	2
A.6	Installed Capacity (MW)/ Peak Demand (MW)	3.91	1.41	2
B. Viability of Energy/Electricity Systems in the State				
B.1	AT & C Losses (in %)	45.71	0.94	27
B.2	ACS-ARR Gap (in Rs./unit)	4.92	0.40	27
B.3	Average Hours of Supply in Agriculture (Mins/day)	NA	NA	NA
2. ENERGY EQUITY				
A. Energy Access				
A.1	Access to Electricity %	100	2.73	4
A.2	LPG + PNG Connections against number of HHS %	0.86	1.00	20
B. Affordability				
B.1	ACS (Rs. /Unit)	8.00	0.00	28
B.2	Non-Subsidized LPG Price (Rs/14.2 kg Cylinder)	1068.5	0.64	21
B.3	Petrol Prices in Rs. /Litre	93.29	1.09	1
B.4	Diesel Prices in Rs. /Litre	82.36	1.09	2
B.5	Cross Subsidization (Industrial ABR/ ACS)	0.52	3.15	2
C. Performance of Utilities				
C.1	PAT/ Revenue (%)	-1.59	1.18	27
C.2	Overdues/ Cost of Power (%)	0.01	2.70	1
C.3	Payables for Power Purchase (Days)	NA	NA	NA
C.4	Tariff Subsidy Billed/ Total Revenue (%)	0.00	2.73	2
3. ENVIRONMENTAL SUSTAINABILITY				
A. Energy Resource Productivity				
A.1	Energy Efficiency Score	8	0.13	26
A.2	Performance of Clean Energy (Capacity/Potential)(%)	1.29	0.15	21
A.3	Energy intensity (kgoe/GDP in 1000 INR)	1.70	1.97	10
B. Decarbonization				
B.1	Notification of SAPCC (1=Yes, 0=No)	1	3.28	4
B.2	CO2 reduced from LED Bulbs/1000 population (tonnes)	33.94	0.87	13
B.3	% of Forest Cover (Forest Cover wrt total area)	79.33	3.07	2
C. Emissions and Pollution				
C.1	Emission Intensity (kgCO2eq/ GSDP in 1000 INR)	0.00	3.19	3
C.2	Air Quality Index (on 27.07.21)	NA	NA	NA
C.3	EV Penetration (%)	0.01	0.00	24

4. STATE CONTEXT				
A. Macroeconomic Environment				
A.1	Growth rate of GSDP	9.32	1.53	17
A.2	FDI Equity Inflows (in USD Million)	5.55	0.00	21
A.3	States' Ranking: Start up Index*	60.00	1.64	8
B. Regulations, Institutions & Governance				
B.1	Human Development Index	0.68	1.14	15
B.2	Good Governance Index	2.84	0.00	28
B.3	SDG Index	60	1.14	22
C. Stability for Investment & Innovation				
C.1	Innovation Score as per India Innovation Index	14.90	0.30	24
C.2	Industry, Infrastructure & Innovation Index	2.43	0.82	25
C.3	Investment Opportunities (in USD Billion)	18.83	0.20	19

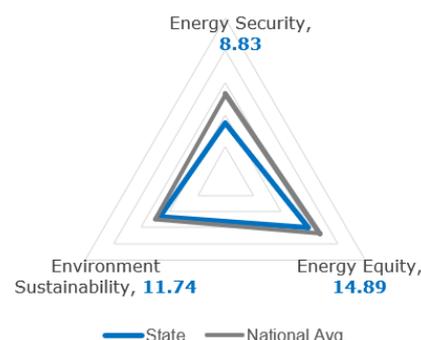
*100= Best performer; 80= Top Performer; 60= Leaders; 40=Aspiring Leaders; 20=Emerging States; 10= Beginners

Meghalaya

25
Rank

42.58
Overall Score

Dimension	Score	Rank
Energy Security	8.83	26
Energy Equity	14.89	21
Environmental Sustainability	11.74	21
State Context	7.12	25



Note – Dimension wise scores are out of 25

No.	Indicator	Value	Score	Rank
1. ENERGY SECURITY				
A. Electricity Diversity and Power Supply Position				
A.1	Diversity of Electricity Installed Capacity (EMCI)	0.51	1.11	16
A.2	Share of RE in total installed capacity (%)	8.13	0.20	19
A.3	Installed generating capacity (Growth Rate in %)	3.68	0.46	13
A.4	Electricity consumption per capita (in kWh)	861.09	0.53	17
A.5	Energy not supplied (Deficit) in %	0.60	1.83	17
A.6	Installed Capacity (MW)/ Peak Demand (MW)	1.52	0.29	14
B. Viability of Energy/Electricity Systems in the State				
B.1	AT & C Losses (in %)	34.32	2.30	23
B.2	ACS-ARR Gap (in Rs./unit)	1.81	2.10	25
B.3	Average Hours of Supply in Agriculture (Mins/day)	NA	NA	NA
2. ENERGY EQUITY				
A. Energy Access				
A.1	Access to Electricity %	100	2.60	8
A.2	LPG + PNG Connections against number of HHS %	0.48	0.00	28
B. Affordability				
B.1	ACS (Rs. /Unit)	5.70	2.53	10
B.2	Non-Subsidized LPG Price (Rs/14.2 kg Cylinder)	1070	0.60	22
B.3	Petrol Prices in Rs. /Litre	95.33	0.93	3
B.4	Diesel Prices in Rs. /Litre	83.22	0.99	3
B.5	Cross Subsidization (Industrial ABR/ ACS)	1.01	2.13	5
C. Performance of Utilities				
C.1	PAT/ Revenue (%)	-0.37	2.12	25
C.2	Overdues/ Cost of Power (%)	0.54	0.46	27
C.3	Payables for Power Purchase (Days)	601.00	0.00	23
C.4	Tariff Subsidy Billed/ Total Revenue (%)	0.01	2.54	6
3. ENVIRONMENTAL SUSTAINABILITY				
A. Energy Resource Productivity				
A.1	Energy Efficiency Score	14	0.41	21
A.2	Performance of Clean Energy (Capacity/Potential)(%)	0.83	0.08	24
A.3	Energy intensity (kgoe/GDP in 1000 INR)	2.70	0.31	26
B. Decarbonization				
B.1	Notification of SAPCC (1=Yes, 0=No)	1	3.13	8
B.2	CO2 reduced from LED Bulbs/1000 population (tonnes)	13.75	0.31	21
B.3	% of Forest Cover (Forest Cover wrt total area)	76.00	2.80	4
C. Emissions and Pollution				
C.1	Emission Intensity (kgCO2eq/ GSDP in 1000 INR)	0.01	2.92	13
C.2	Air Quality Index (on 27.07.21)	46.70	1.78	4
C.3	EV Penetration (%)	0.01	0.01	23

4. STATE CONTEXT				
A. Macroeconomic Environment				
A.1	Growth rate of GSDP	5.89	0.00	28
A.2	FDI Equity Inflows (in USD Million)	1.10	0.00	22
A.3	States' Ranking: Start up Index*	100.00	3.13	1
B. Regulations, Institutions & Governance				
B.1	Human Development Index	0.70	1.25	11
B.2	Good Governance Index	3.48	0.71	27
B.3	SDG Index	60	1.09	23
C. Stability for Investment & Innovation				
C.1	Innovation Score as per India Innovation Index	12.15	0.00	28
C.2	Industry, Infrastructure & Innovation Index	2.51	0.93	23
C.3	Investment Opportunities (in USD Billion)	3.80	0.02	27

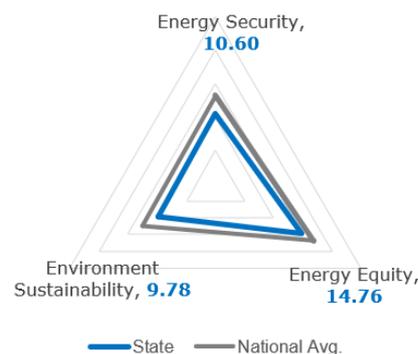
*100= Best performer; 80= Top Performer; 60= Leaders; 40=Aspiring Leaders; 20=Emerging States; 10= Beginners

Bihar

26
Rank

41.05
Overall Score

Dimension	Score	Rank
Energy Security	10.60	23
Energy Equity	14.76	22
Environmental Sustainability	9.78	26
State Context	5.91	28



Note – Dimension wise scores are out of 25

No.	Indicator	Value	Score	Rank
1. ENERGY SECURITY				
A. Electricity Diversity and Power Supply Position				
A.1	Diversity of Electricity Installed Capacity (EMCI)	0.15	0.00	28
A.2	Share of RE in total installed capacity (%)	5.29	0.08	25
A.3	Installed generating capacity (Growth Rate in %)	15.21	1.37	2
A.4	Electricity consumption per capita (in kWh)	332.12	0.00	28
A.5	Energy not supplied (Deficit) in %	1.10	1.56	24
A.6	Installed Capacity (MW)/ Peak Demand (MW)	1.02	0.07	26
B. Viability of Energy/Electricity Systems in the State				
B.1	AT & C Losses (in %)	40.38	1.49	26
B.2	ACS-ARR Gap (in Rs./unit)	0.92	2.49	20
B.3	Average Hours of Supply in Agriculture (Mins/day)	1,320.00	3.54	8
2. ENERGY EQUITY				
A. Energy Access				
A.1	Access to Electricity %	100	2.50	18
A.2	LPG + PNG Connections against number of HHS %	0.79	0.74	25
B. Affordability				
B.1	ACS (Rs. /Unit)	6.26	1.84	19
B.2	Non-Subsidized LPG Price (Rs/14.2 kg Cylinder)	1101	0.39	24
B.3	Petrol Prices in Rs. /Litre	107.24	0.25	22
B.4	Diesel Prices in Rs. /Litre	94.04	0.32	20
B.5	Cross Subsidization (Industrial ABR/ ACS)	1.24	1.64	19
C. Performance of Utilities				
C.1	PAT/ Revenue (%)	-0.14	2.21	21
C.2	Overdues/ Cost of Power (%)	0.10	2.11	16
C.3	Payables for Power Purchase (Days)	93.00	2.11	8
C.4	Tariff Subsidy Billed/ Total Revenue (%)	0.31	0.66	27
3. ENVIRONMENTAL SUSTAINABILITY				
A. Energy Resource Productivity				
A.1	Energy Efficiency Score	16	0.49	20
A.2	Performance of Clean Energy (Capacity/Potential)(%)	2.37	0.27	17
A.3	Energy intensity (kgoe/GDP in 1000 INR)	1.90	1.50	17
B. Decarbonization				
B.1	Notification of SAPCC (1=Yes, 0=No)	1	3.00	18
B.2	CO2 reduced from LED Bulbs/1000 population (tonnes)	16.51	0.36	20
B.3	% of Forest Cover (Forest Cover wrt total area)	7.84	0.16	23
C. Emissions and Pollution				
C.1	Emission Intensity (kgCO2eq/ GSDP in 1000 INR)	0.02	2.48	21
C.2	Air Quality Index (on 27.07.21)	146.00	0.39	23
C.3	EV Penetration (%)	0.79	1.13	5

4. STATE CONTEXT				
A. Macroeconomic Environment				
A.1	Growth rate of GSDP	10.73	1.98	9
A.2	FDI Equity Inflows (in USD Million)	167.09	0.01	15
A.3	States' Ranking: Start up Index*	20.00	0.00	22
B. Regulations, Institutions & Governance				
B.1	Human Development Index	0.55	0.00	28
B.2	Good Governance Index	4.62	1.90	19
B.3	SDG Index	52	0.00	28
C. Stability for Investment & Innovation				
C.1	Innovation Score as per India Innovation Index	14.48	0.23	25
C.2	Industry, Infrastructure & Innovation Index	2.77	1.37	19
C.3	Investment Opportunities (in USD Billion)	40.45	0.42	13

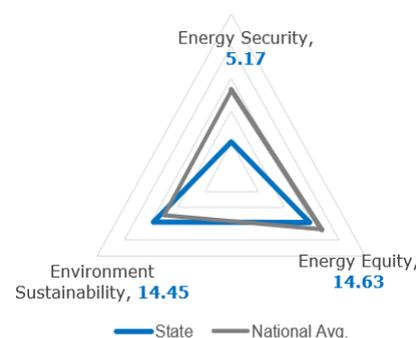
*100= Best performer; 80= Top Performer; 60= Leaders; 40=Aspiring Leaders; 20=Emerging States; 10= Beginners

Nagaland

27
Rank

40.27
Overall Score

Dimension	Score	Rank
Energy Security	5.17	28
Energy Equity	14.63	24
Environmental Sustainability	14.45	10
State Context	6.02	27



Note – Dimension wise scores are out of 25

No.	Indicator	Value	Score	Rank
1. ENERGY SECURITY				
A. Electricity Diversity and Power Supply Position				
A.1	Diversity of Electricity Installed Capacity (EMCI)	0.68	1.66	4
A.2	Share of RE in total installed capacity (%)	16.36	0.57	13
A.3	Installed generating capacity (Growth Rate in %)	5.88	0.66	8
A.4	Electricity consumption per capita (in kWh)	367.04	0.04	26
A.5	Energy not supplied (Deficit) in %	0.10	2.10	4
A.6	Installed Capacity (MW)/ Peak Demand (MW)	1.19	0.15	20
B. Viability of Energy/Electricity Systems in the State				
B.1	AT & C Losses (in %)	52.93	0.00	28
B.2	ACS-ARR Gap (in Rs./unit)	5.62	0.00	28
B.3	Average Hours of Supply in Agriculture (Mins/day)	NA	NA	NA
2. ENERGY EQUITY				
A. Energy Access				
A.1	Access to Electricity %	100	2.67	6
A.2	LPG + PNG Connections against number of HHS %	0.71	0.58	27
B. Affordability				
B.1	ACS (Rs. /Unit)	7.49	0.58	27
B.2	Non-Subsidized LPG Price (Rs/14.2 kg Cylinder)	1022	0.94	7
B.3	Petrol Prices in Rs. /Litre	99.54	0.71	12
B.4	Diesel Prices in Rs. /Litre	87.61	0.74	8
B.5	Cross Subsidization (Industrial ABR/ ACS)	0.45	3.21	1
C. Performance of Utilities				
C.1	PAT/ Revenue (%)	-2.99	0.00	28
C.2	Overdues/ Cost of Power (%)	0.04	2.52	5
C.3	Payables for Power Purchase (Days)	NA	NA	NA
C.4	Tariff Subsidy Billed/ Total Revenue (%)	0.00	2.67	3
3. ENVIRONMENTAL SUSTAINABILITY				
A. Energy Resource Productivity				
A.1	Energy Efficiency Score	5.5	0.00	28
A.2	Performance of Clean Energy (Capacity/Potential)(%)	0.45	0.04	27
A.3	Energy intensity (kgoe/GDP in 1000 INR)	1.30	2.57	4
B. Decarbonization				
B.1	Notification of SAPCC (1=Yes, 0=No)	1	3.21	6
B.2	CO2 reduced from LED Bulbs/1000 population (tonnes)	52.24	1.33	7
B.3	% of Forest Cover (Forest Cover wrt total area)	73.90	2.79	5
C. Emissions and Pollution				
C.1	Emission Intensity (kgCO2eq/ GSDP in 1000 INR)	0.00	3.17	4
C.2	Air Quality Index (on 27.07.21)	80.00	1.35	13
C.3	EV Penetration (%)	0.02	0.02	22

4. STATE CONTEXT				
A. Macroeconomic Environment				
A.1	Growth rate of GSDP	9.93	1.76	14
A.2	FDI Equity Inflows (in USD Million)	0.01	0.00	25
A.3	States' Ranking: Start up Index*	40.00	0.80	16
B. Regulations, Institutions & Governance				
B.1	Human Development Index	0.68	1.07	17
B.2	Good Governance Index	3.62	0.88	25
B.3	SDG Index	61	1.26	19
C. Stability for Investment & Innovation				
C.1	Innovation Score as per India Innovation Index	14.11	0.21	26
C.2	Industry, Infrastructure & Innovation Index	2.02	0.00	28
C.3	Investment Opportunities (in USD Billion)	5.66	0.04	25

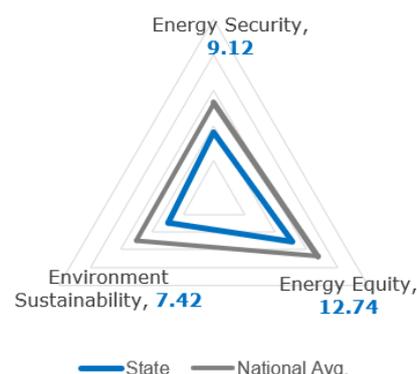
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Jharkhand

28
Rank

37.13
Overall Score

Dimension	Score	Rank
Energy Security	9.12	24
Energy Equity	12.74	28
Environmental Sustainability	7.42	28
State Context	7.85	24



Note – Dimension wise scores are out of 25

No.	Indicator	Value	Score	Rank
1. ENERGY SECURITY				
A. Electricity Diversity and Power Supply Position				
A.1	Diversity of Electricity Installed Capacity (EMCI)	0.21	0.19	26
A.2	Share of RE in total installed capacity (%)	3.55	0.01	27
A.3	Installed generating capacity (Growth Rate in %)	4.10	0.50	10
A.4	Electricity consumption per capita (in kWh)	853.49	0.53	18
A.5	Energy not supplied (Deficit) in %	5.00	0.00	28
A.6	Installed Capacity (MW)/ Peak Demand (MW)	1.48	0.27	15
B. Viability of Energy/Electricity Systems in the State				
B.1	AT & C Losses (in %)	36.96	1.99	24
B.2	ACS-ARR Gap (in Rs./unit)	1.35	2.38	22
B.3	Average Hours of Supply in Agriculture (Mins/day)	1,200.00	3.25	9
2. ENERGY EQUITY				
A. Energy Access				
A.1	Access to Electricity %	100	2.63	7
A.2	LPG + PNG Connections against number of HHS %	0.77	0.74	24
B. Affordability				
B.1	ACS (Rs. /Unit)	6.33	1.86	18
B.2	Non-Subsidized LPG Price (Rs/14.2 kg Cylinder)	1060.5	0.67	20
B.3	Petrol Prices in Rs. /Litre	99.84	0.68	14
B.4	Diesel Prices in Rs. /Litre	94.65	0.30	22
B.5	Cross Subsidization (Industrial ABR/ ACS)	1.18	1.84	11
C. Performance of Utilities				
C.1	PAT/ Revenue (%)	-0.34	2.16	24
C.2	Overdues/ Cost of Power (%)	0.66	0.00	28
C.3	Payables for Power Purchase (Days)	501.00	0.44	22
C.4	Tariff Subsidy Billed/ Total Revenue (%)	0.19	1.41	19
3. ENVIRONMENTAL SUSTAINABILITY				
A. Energy Resource Productivity				
A.1	Energy Efficiency Score	17	0.56	19
A.2	Performance of Clean Energy (Capacity/Potential)(%)	0.52	0.05	25
A.3	Energy intensity (kgoe/GDP in 1000 INR)	2.30	0.95	20
B. Decarbonization				
B.1	Notification of SAPCC (1=Yes, 0=No)	1	3.16	7
B.2	CO2 reduced from LED Bulbs/1000 population (tonnes)	1.66	0.00	28
B.3	% of Forest Cover (Forest Cover wrt total area)	29.76	1.02	14
C. Emissions and Pollution				
C.1	Emission Intensity (kgCO2eq/ GSDP in 1000 INR)	0.05	1.31	27
C.2	Air Quality Index (on 27.07.21)	NA	NA	NA
C.3	EV Penetration (%)	0.26	0.38	14

4. STATE CONTEXT				
A. Macroeconomic Environment				
A.1	Growth rate of GSDP	8.94	1.31	22
A.2	FDI Equity Inflows (in USD Million)	2650.53	0.21	7
A.3	States' Ranking: Start up Index*	NA	NA	NA
B. Regulations, Institutions & Governance				
B.1	Human Development Index	0.62	0.55	25
B.2	Good Governance Index	4.76	2.15	15
B.3	SDG Index	56	0.55	27
C. Stability for Investment & Innovation				
C.1	Innovation Score as per India Innovation Index	17.12	0.52	21
C.2	Industry, Infrastructure & Innovation Index	3.09	2.06	11
C.3	Investment Opportunities (in USD Billion)	45.16	0.49	12

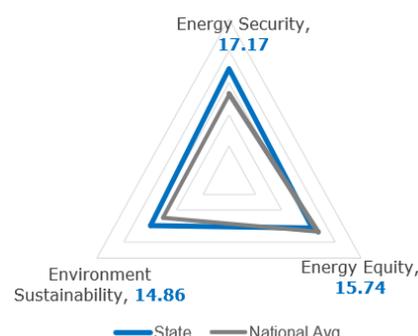
*100= Best performer; 80= Top Performer; 60= Leaders; 40=Aspiring Leaders; 20=Emerging States; 10= Beginners

Delhi

1
Rank

65.82
Overall Score

Dimension	Score	Rank
Energy Security	17.17	3
Energy Equity	15.74	6
Environmental Sustainability	14.86	1
State Context	18.06	1



Note – Dimension wise scores are out of 25

No.	Indicator	Value	Score	Rank
1. ENERGY SECURITY				
A. Electricity Diversity and Power Supply Position				
A.1	Diversity of Electricity Installed Capacity (EMCI)	0.55	1.54	5
A.2	Share of RE in total installed capacity (%)	3.55	0.00	8
A.3	Installed generating capacity (Growth Rate in %)	-0.57	0.00	8
A.4	Electricity consumption per capita (in kWh)	1571.58	0.18	5
A.5	Energy not supplied (Deficit) in %	0.00	2.00	6
A.6	Installed Capacity (MW)/ Peak Demand (MW)	1.04	1.04	4
B. Viability of Energy/Electricity Systems in the State				
B.1	AT & C Losses (in %)	8.19	4.60	5
B.2	ACS-ARR Gap (in Rs./unit)	0.20	3.80	5
B.3	Average Hours of Supply in Agriculture (Mins/day)	1,440.00	4.00	3
2. ENERGY EQUITY				
A. Energy Access				
A.1	Access to Electricity %	100	2.50	8
A.2	LPG + PNG Connections against number of HHS %	1.56	1.99	2
B. Affordability				
B.1	ACS (Rs. /Unit)	7.42	3.28	6
B.2	Non-Subsidized LPG Price (Rs/14.2 kg Cylinder)	1003	1.00	2
B.3	Petrol Prices in Rs. /Litre	96.72	0.35	5
B.4	Diesel Prices in Rs. /Litre	89.62	0.04	6
B.5	Cross Subsidization (Industrial ABR/ ACS)	1.53	0.02	7
C. Performance of Utilities				
C.1	PAT/ Revenue (%)	0.03	2.41	4
C.2	Overdues/ Cost of Power (%)	0.04	2.44	3
C.3	Payables for Power Purchase (Days)	355.00	0.00	3
C.4	Tariff Subsidy Billed/ Total Revenue (%)	0.09	1.71	6
3. ENVIRONMENTAL SUSTAINABILITY				
A. Energy Resource Productivity				
A.1	Energy Efficiency Score	29	3.00	1
A.2	Performance of Clean Energy (Capacity/Potential)(%)	12.39	0.04	3
A.3	Energy intensity (kgoe/GDP in 1000 INR)	1.30	3.00	1
B. Decarbonization				
B.1	Notification of SAPCC (1=Yes, 0=No)	1	3.00	8
B.2	CO2 reduced from LED Bulbs/1000 population (tonnes)	67.21	0.42	5
B.3	% of Forest Cover (Forest Cover wrt total area)	13.15	0.40	6
C. Emissions and Pollution				
C.1	Emission Intensity (kgCO2eq/ GSDP in 1000 INR)	0.00	3.00	1
C.2	Air Quality Index (on 27.07.21)	194.28	0.00	6
C.3	EV Penetration (%)	1.99	2.00	1

4. STATE CONTEXT				
A. Macroeconomic Environment				
A.1	Growth rate of GSDP	7.70	0.00	5
A.2	FDI Equity Inflows (in USD Million)	17658.89	3.00	1
A.3	States' Ranking: Start up Index*	40.00	1.00	6
B. Regulations, Institutions & Governance				
B.1	Human Development Index	0.84	2.00	1
B.2	Good Governance Index	5.01	3.00	1
B.3	SDG Index	68	1.06	4
C. Stability for Investment & Innovation				
C.1	Innovation Score as per India Innovation Index	46.60	3.00	1
C.2	Industry, Infrastructure & Innovation Index	3.36	3.00	1
C.3	Investment Opportunities (in USD Billion)	44.81	2.00	1

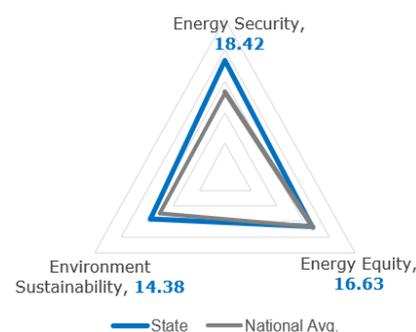
*100= Best performer; 80= Top Performer; 60= Leaders; 40=Aspiring Leaders; 20=Emerging States; 10= Beginners

Chandigarh

2
Rank

63.95
Overall Score

Dimension	Score	Rank
Energy Security	18.42	2
Energy Equity	16.63	5
Environmental Sustainability	14.38	3
State Context	14.52	2



Note – Dimension wise scores are out of 25

No.	Indicator	Value	Score	Rank
1. ENERGY SECURITY				
A. Electricity Diversity and Power Supply Position				
A.1	Diversity of Electricity Installed Capacity (EMCI)	0.68	1.96	3
A.2	Share of RE in total installed capacity (%)	24.55	0.45	3
A.3	Installed generating capacity (Growth Rate in %)	4.90	0.31	5
A.4	Electricity consumption per capita (in kWh)	985.67	0.08	7
A.5	Energy not supplied (Deficit) in %	0.00	2.05	5
A.6	Installed Capacity (MW)/ Peak Demand (MW)	0.53	0.33	8
B. Viability of Energy/Electricity Systems in the State				
B.1	AT & C Losses (in %)	4.60	5.05	4
B.2	ACS-ARR Gap (in Rs./unit)	-0.82	4.10	4
B.3	Average Hours of Supply in Agriculture (Mins/day)	1,440.00	4.10	2
2. ENERGY EQUITY				
A. Energy Access				
A.1	Access to Electricity %	100	2.56	7
A.2	LPG + PNG Connections against number of HHS %	1.02	0.58	5
B. Affordability				
B.1	ACS (Rs. /Unit)	3.67	4.10	4
B.2	Non-Subsidized LPG Price (Rs/14.2 kg Cylinder)	1012.5	0.98	3
B.3	Petrol Prices in Rs. /Litre	96.20	0.39	4
B.4	Diesel Prices in Rs. /Litre	84.26	0.57	2
B.5	Cross Subsidization (Industrial ABR/ ACS)	1.54	0.00	8
C. Performance of Utilities				
C.1	PAT/ Revenue (%)	0.18	2.56	3
C.2	Overdues/ Cost of Power (%)	0.15	2.31	4
C.3	Payables for Power Purchase (Days)	NA	NA	NA
C.4	Tariff Subsidy Billed/ Total Revenue (%)	0.00	2.56	4
3. ENVIRONMENTAL SUSTAINABILITY				
A. Energy Resource Productivity				
A.1	Energy Efficiency Score	13.5	1.21	3
A.2	Performance of Clean Energy (Capacity/Potential)(%)	919.50	3.08	1
A.3	Energy intensity (kgoe/GDP in 1000 INR)	1.90	1.92	2
B. Decarbonization				
B.1	Notification of SAPCC (1=Yes, 0=No)	1	3.08	7
B.2	CO2 reduced from LED Bulbs/1000 population (tonnes)	47.83	0.22	6
B.3	% of Forest Cover (Forest Cover wrt total area)	20.07	0.65	5
C. Emissions and Pollution				
C.1	Emission Intensity (kgCO2eq/ GSDP in 1000 INR)	0.00	2.05	3
C.2	Air Quality Index (on 27.07.21)	92.40	1.85	2
C.3	EV Penetration (%)	0.38	0.33	3

4. STATE CONTEXT				
A. Macroeconomic Environment				
A.1	Growth rate of GSDP	10.47	1.91	3
A.2	FDI Equity Inflows (in USD Million)	64.99	0.01	3
A.3	States' Ranking: Start up Index*	40.00	1.03	5
B. Regulations, Institutions & Governance				
B.1	Human Development Index	0.83	1.91	2
B.2	Good Governance Index	4.54	2.20	3
B.3	SDG Index	79	3.08	1
C. Stability for Investment & Innovation				
C.1	Innovation Score as per India Innovation Index	38.57	2.37	2
C.2	Industry, Infrastructure & Innovation Index	3.06	1.79	2
C.3	Investment Opportunities (in USD Billion)	5.56	0.21	3

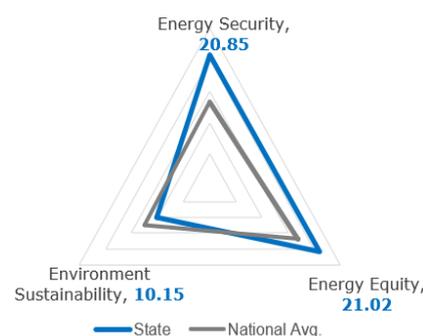
*100= Best performer; 80= Top Performer; 60= Leaders; 40=Aspiring Leaders; 20=Emerging States; 10= Beginners

DNH-DD

3
Rank

57.16
Overall Score

Dimension	Score	Rank
Energy Security	20.85	1
Energy Equity	21.02	1
Environmental Sustainability	10.15	5
State Context	5.15	6



Note – Dimension wise scores are out of 25

No.	Indicator	Value	Score	Rank
1. ENERGY SECURITY				
A. Electricity Diversity and Power Supply Position				
A.1	Diversity of Electricity Installed Capacity (EMCI)	0.38	1.37	6
A.2	Share of RE in total installed capacity (%)	6.08	0.07	5
A.3	Installed generating capacity (Growth Rate in %)	28.02	2.06	2
A.4	Electricity consumption per capita (in kWh)	11945.44	2.61	2
A.5	Energy not supplied (Deficit) in %	0.14	2.58	2
A.6	Installed Capacity (MW)/ Peak Demand (MW)	0.61	0.57	6
B. Viability of Energy/Electricity Systems in the State				
B.1	AT & C Losses (in %)	3.69	6.54	1
B.2	ACS-ARR Gap (in Rs./unit)	-0.10	5.04	2
B.3	Average Hours of Supply in Agriculture (Mins/day)	NA	NA	NA
2. ENERGY EQUITY				
A. Energy Access				
A.1	Access to Electricity %	100	3.27	3
A.2	LPG + PNG Connections against number of HHs %	0.81	0.00	7
B. Affordability				
B.1	ACS (Rs. /Unit)	4.75	4.96	2
B.2	Non-Subsidized LPG Price (Rs/14.2 kg Cylinder)	1017.5	1.23	1
B.3	Petrol Prices in Rs. /Litre	94.43	0.62	2
B.4	Diesel Prices in Rs. /Litre	89.98	0.00	7
B.5	Cross Subsidization (Industrial ABR/ ACS)	1.10	1.27	6
C. Performance of Utilities				
C.1	PAT/ Revenue (%)	0.02	3.14	1
C.2	Overdues/ Cost of Power (%)	NA	NA	NA
C.3	Payables for Power Purchase (Days)	26.00	3.27	1
C.4	Tariff Subsidy Billed/ Total Revenue (%)	0.00	3.27	2
3. ENVIRONMENTAL SUSTAINABILITY				
A. Energy Resource Productivity				
A.1	Energy Efficiency Score	8.5	0.77	5
A.2	Performance of Clean Energy (Capacity/Potential)(%)	NA	NA	NA
A.3	Energy intensity (kgoe/GDP in 1000 INR)	NA	NA	NA
B. Decarbonization				
B.1	Notification of SAPCC (1=Yes, 0=No)	1	3.92	3
B.2	CO2 reduced from LED Bulbs/1000 population (tonnes)	27.55	0.00	8
B.3	% of Forest Cover (Forest Cover wrt total area)	37.83	1.61	3
C. Emissions and Pollution				
C.1	Emission Intensity (kgCO2eq/ GSDP in 1000 INR)	NA	NA	NA
C.2	Air Quality Index (on 27.07.21)	81.33	2.61	1

C.3	EV Penetration (%)	0.98	1.23	2
4. STATE CONTEXT				
A. Macroeconomic Environment				
A.1	Growth rate of GSDP	NA	NA	NA
A.2	FDI Equity Inflows (in USD Million)	150.04	0.03	2
A.3	States' Ranking: Start up Index*	40.00	1.31	3
B. Regulations, Institutions & Governance				
B.1	Human Development Index	0.68	0.23	6
B.2	Good Governance Index	4.24	2.11	4
B.3	SDG Index	62	0.00	8
C. Stability for Investment & Innovation				
C.1	Innovation Score as per India Innovation Index	24.75	1.47	3
C.2	Industry, Infrastructure & Innovation Index	NA	NA	NA
C.3	Investment Opportunities (in USD Billion)	NA	NA	NA

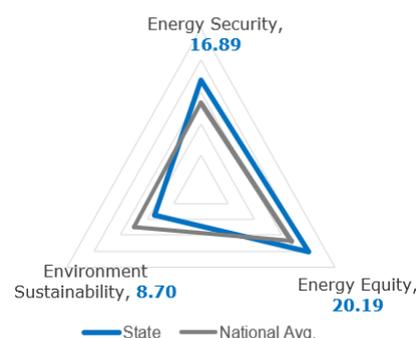
*100= Best performer; 80= Top Performer; 60= Leaders; 40=Aspiring Leaders; 20=Emerging States; 10= Beginners

Puducherry

4
Rank

55.03
Overall Score

Dimension	Score	Rank
Energy Security	16.89	4
Energy Equity	20.19	2
Environmental Sustainability	8.70	7
State Context	9.25	4



Note – Dimension wise scores are out of 25

No.	Indicator	Value	Score	Rank
1. ENERGY SECURITY				
A. Electricity Diversity and Power Supply Position				
A.1	Diversity of Electricity Installed Capacity (EMCI)	0.71	2.06	2
A.2	Share of RE in total installed capacity (%)	3.56	0.00	7
A.3	Installed generating capacity (Growth Rate in %)	0.95	0.09	7
A.4	Electricity consumption per capita (in kWh)	1751.92	0.22	4
A.5	Energy not supplied (Deficit) in %	0.00	2.06	4
A.6	Installed Capacity (MW)/ Peak Demand (MW)	0.83	0.77	5
B. Viability of Energy/Electricity Systems in the State				
B.1	AT & C Losses (in %)	18.45	3.81	7
B.2	ACS-ARR Gap (in Rs./unit)	0.97	3.76	6
B.3	Average Hours of Supply in Agriculture (Mins/day)	1,440.00	4.12	1
2. ENERGY EQUITY				
A. Energy Access				
A.1	Access to Electricity %	100	2.58	6
A.2	LPG + PNG Connections against number of HHS %	0.98	0.48	6
B. Affordability				
B.1	ACS (Rs. /Unit)	5.78	3.71	5
B.2	Non-Subsidized LPG Price (Rs/14.2 kg Cylinder)	1015	0.98	4
B.3	Petrol Prices in Rs. /Litre	96.16	0.39	3
B.4	Diesel Prices in Rs. /Litre	86.33	0.37	3
B.5	Cross Subsidization (Industrial ABR/ ACS)	0.41	2.57	3
C. Performance of Utilities				
C.1	PAT/ Revenue (%)	-0.18	2.36	5
C.2	Overdues/ Cost of Power (%)	0.01	2.56	2
C.3	Payables for Power Purchase (Days)	144.00	1.65	2
C.4	Tariff Subsidy Billed/ Total Revenue (%)	0.00	2.54	5
3. ENVIRONMENTAL SUSTAINABILITY				
A. Energy Resource Productivity				
A.1	Energy Efficiency Score	23.5	2.43	2
A.2	Performance of Clean Energy (Capacity/Potential)(%)	3.56	0.01	4
A.3	Energy intensity (kgoe/GDP in 1000 INR)	2.90	0.00	4
B. Decarbonization				
B.1	Notification of SAPCC (1=Yes, 0=No)	1	3.09	6
B.2	CO2 reduced from LED Bulbs/1000 population (tonnes)	39.86	0.14	7
B.3	% of Forest Cover (Forest Cover wrt total area)	10.88	0.33	7
C. Emissions and Pollution				
C.1	Emission Intensity (kgCO2eq/ GSDP in 1000 INR)	0.01	1.03	4
C.2	Air Quality Index (on 27.07.21)	109.18	1.55	3
C.3	EV Penetration (%)	0.18	0.12	4

4. STATE CONTEXT				
A. Macroeconomic Environment				
A.1	Growth rate of GSDP	10.98	2.28	2
A.2	FDI Equity Inflows (in USD Million)	58.85	0.01	4
A.3	States' Ranking: Start up Index*	40.00	1.03	4
B. Regulations, Institutions & Governance				
B.1	Human Development Index	0.75	1.04	3
B.2	Good Governance Index	4.71	2.54	2
B.3	SDG Index	68	1.09	3
C. Stability for Investment & Innovation				
C.1	Innovation Score as per India Innovation Index	25.23	1.20	4
C.2	Industry, Infrastructure & Innovation Index	NA	NA	NA
C.3	Investment Opportunities (in USD Billion)	2.31	0.06	5

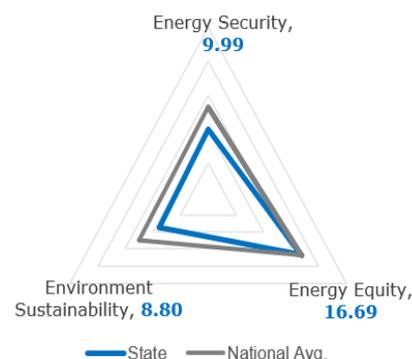
*100= Best performer; 80= Top Performer; 60= Leaders; 40=Aspiring Leaders; 20=Emerging States; 10= Beginners

Andaman & Nicobar

5
Rank

45.68
Overall Score

Dimension	Score	Rank
Energy Security	9.99	7
Energy Equity	16.69	4
Environmental Sustainability	8.80	6
State Context	10.20	3



Note – Dimension wise scores are out of 25

No.	Indicator	Value	Score	Rank
1. ENERGY SECURITY				
A. Electricity Diversity and Power Supply Position				
A.1	Diversity of Electricity Installed Capacity (EMCI)	0.35	1.16	7
A.2	Share of RE in total installed capacity (%)	46.45	1.04	2
A.3	Installed generating capacity (Growth Rate in %)	7.60	0.53	4
A.4	Electricity consumption per capita (in kWh)	585.45	0.01	8
A.5	Energy not supplied (Deficit) in %	2.40	1.81	7
A.6	Installed Capacity (MW)/ Peak Demand (MW)	1.25	1.55	2
B. Viability of Energy/Electricity Systems in the State				
B.1	AT & C Losses (in %)	22.71	3.89	6
B.2	ACS-ARR Gap (in Rs./unit)	19.58	0.00	9
B.3	Average Hours of Supply in Agriculture (Mins/day)	NA	NA	NA
2. ENERGY EQUITY				
A. Energy Access				
A.1	Access to Electricity %	100	2.92	4
A.2	LPG + PNG Connections against number of HHs %	1.17	1.12	4
B. Affordability				
B.1	ACS (Rs. /Unit)	24.60	0.00	8
B.2	Non-Subsidized LPG Price (Rs/14.2 kg Cylinder)	1079	0.79	5
B.3	Petrol Prices in Rs. /Litre	84.10	1.17	1
B.4	Diesel Prices in Rs. /Litre	79.74	1.17	1
B.5	Cross Subsidization (Industrial ABR/ ACS)	0.18	3.51	1
C. Performance of Utilities				
C.1	PAT/ Revenue (%)	-3.90	0.15	7
C.2	Overdues/ Cost of Power (%)	0.01	2.92	1
C.3	Payables for Power Purchase (Days)	NA	NA	NA
C.4	Tariff Subsidy Billed/ Total Revenue (%)	0.00	2.92	3
3. ENVIRONMENTAL SUSTAINABILITY				
A. Energy Resource Productivity				
A.1	Energy Efficiency Score	11.5	1.10	4
A.2	Performance of Clean Energy (Capacity/Potential)(%)	2.71	0.01	5
A.3	Energy intensity (kgoe/GDP in 1000 INR)	2.90	0.00	4
B. Decarbonization				
B.1	Notification of SAPCC (1=Yes, 0=No)	1	3.51	4
B.2	CO2 reduced from LED Bulbs/1000 population (tonnes)	104.67	0.96	2
B.3	% of Forest Cover (Forest Cover wrt total area)	81.75	3.17	2
C. Emissions and Pollution				

C.1	Emission Intensity (kgCO ₂ eq/ GSDP in 1000 INR)	0.01	0.00	5
C.2	Air Quality Index (on 27.07.21)	NA	NA	NA
C.3	EV Penetration (%)	0.11	0.05	6

4. STATE CONTEXT

A. Macroeconomic Environment				
A.1	Growth rate of GSDP	12.15	3.51	1
A.2	FDI Equity Inflows (in USD Million)	NA	NA	NA
A.3	States' Ranking: Start up Index*	60.00	2.34	2
B. Regulations, Institutions & Governance				
B.1	Human Development Index	0.71	0.58	4
B.2	Good Governance Index	4.23	1.85	5
B.3	SDG Index	67	1.03	6
C. Stability for Investment & Innovation				
C.1	Innovation Score as per India Innovation Index	18.89	0.72	5
C.2	Industry, Infrastructure & Innovation Index	NA	NA	NA
C.3	Investment Opportunities (in USD Billion)	4.00	0.16	4

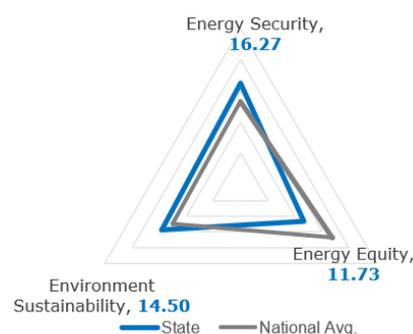
*100= Best performer; 80= Top Performer; 60= Leaders; 40=Aspiring Leaders; 20=Emerging States; 10= Beginners

Lakshadweep

6
Rank

44.60
Overall Score

Dimension	Score	Rank
Energy Security	16.27	5
Energy Equity	11.73	8
Environmental Sustainability	14.50	2
State Context	2.10	7



Note – Dimension wise scores are out of 25

No.	Indicator	Value	Score	Rank
1. ENERGY SECURITY				
A. Electricity Diversity and Power Supply Position				
A.1	Diversity of Electricity Installed Capacity (EMCI)	0.00	0.00	9
A.2	Share of RE in total installed capacity (%)	100.00	3.15	1
A.3	Installed generating capacity (Growth Rate in %)	35.72	3.15	1
A.4	Electricity consumption per capita (in kWh)	550.95	0.00	9
A.5	Energy not supplied (Deficit) in %	0.00	3.15	1
A.6	Installed Capacity (MW)/ Peak Demand (MW)	0.30	0.00	9
B. Viability of Energy/Electricity Systems in the State				
B.1	AT & C Losses (in %)	14.28	6.41	2
B.2	ACS-ARR Gap (in Rs./unit)	18.22	0.42	8
B.3	Average Hours of Supply in Agriculture (Mins/day)	NA	NA	NA
2. ENERGY EQUITY				
A. Energy Access				
A.1	Access to Electricity %	100	3.94	1
A.2	LPG + PNG Connections against number of HHS %	NA	NA	NA
B. Affordability				
B.1	ACS (Rs. /Unit)	22.63	0.59	7
B.2	Non-Subsidized LPG Price (Rs/14.2 kg Cylinder)	NA	NA	NA
B.3	Petrol Prices in Rs. /Litre	NA	NA	NA
B.4	Diesel Prices in Rs. /Litre	NA	NA	NA
B.5	Cross Subsidization (Industrial ABR/ ACS)	0.60	3.26	2
C. Performance of Utilities				
C.1	PAT/ Revenue (%)	-4.12	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 (%)	0.00	3.94	1
3. ENVIRONMENTAL SUSTAINABILITY				
A. Energy Resource Productivity				
A.1	Energy Efficiency Score	5	0.28	7
A.2	Performance of Clean Energy (Capacity/Potential)(%)	10.55	0.05	2
A.3	Energy intensity (kgoe/GDP in 1000 INR)	NA	NA	NA
B. Decarbonization				
B.1	Notification of SAPCC (1=Yes, 0=No)	1	4.72	1
B.2	CO2 reduced from LED Bulbs/1000 population (tonnes)	309.38	4.72	1
B.3	% of Forest Cover (Forest Cover wrt total area)	90.33	4.72	1
C. Emissions and Pollution				
C.1	Emission Intensity (kgCO2eq/ GSDP in 1000 INR)	NA	NA	NA
C.2	Air Quality Index (on 27.07.21)	NA	NA	NA
C.3	EV Penetration (%)	NA	NA	NA

4. STATE CONTEXT				
A. Macroeconomic Environment				
A.1	Growth rate of GSDP	NA	NA	NA
A.2	FDI Equity Inflows (in USD Million)	NA	NA	NA
A.3	States' Ranking: Start up Index*	NA	NA	NA
B. Regulations, Institutions & Governance				
B.1	Human Development Index	0.69	0.43	5
B.2	Good Governance Index	3.36	0.00	7
B.3	SDG Index	68	1.67	2
C. Stability for Investment & Innovation				
C.1	Innovation Score as per India Innovation Index	11.71	0.00	7
C.2	Industry, Infrastructure & Innovation Index	NA	NA	NA
C.3	Investment Opportunities (in USD Billion)	0.99	0.00	6

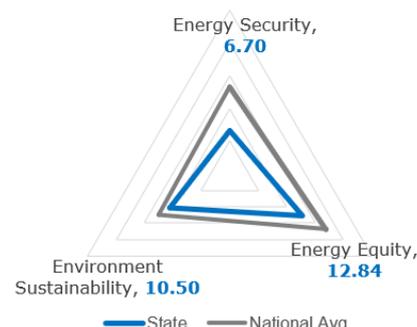
*100= Best performer; 80= Top Performer; 60= Leaders; 40=Aspiring Leaders; 20=Emerging States; 10= Beginners

Jammu & Kashmir

7
Rank

37.97
Overall Score

Dimension	Score	Rank
Energy Security	6.70	8
Energy Equity	12.84	7
Environmental Sustainability	10.50	4
State Context	7.93	5



Note – Dimension wise scores are out of 25

No.	Indicator	Value	Score	Rank
1. ENERGY SECURITY				
A. Electricity Diversity and Power Supply Position				
A.1	Diversity of Electricity Installed Capacity (EMCI)	0.54	1.60	4
A.2	Share of RE in total installed capacity (%)	6.81	0.07	4
A.3	Installed generating capacity (Growth Rate in %)	1.41	0.12	6
A.4	Electricity consumption per capita (in kWh)	1383.64	0.16	6
A.5	Energy not supplied (Deficit) in %	10.60	0.00	8
A.6	Installed Capacity (MW)/ Peak Demand (MW)	1.01	1.07	3
B. Viability of Energy/Electricity Systems in the State				
B.1	AT & C Losses (in %)	60.46	0.00	8
B.2	ACS-ARR Gap (in Rs./unit)	2.03	3.68	7
B.3	Average Hours of Supply in Agriculture (Mins/day)	NA	NA	NA
2. ENERGY EQUITY				
A. Energy Access				
A.1	Access to Electricity %	100	2.67	5
A.2	LPG + PNG Connections against number of HHS %	1.33	1.47	3
B. Affordability				
B.1	ACS (Rs. /Unit)	4.18	4.17	3
B.2	Non-Subsidized LPG Price (Rs/14.2 kg Cylinder)	1119	0.55	6
B.3	Petrol Prices in Rs. /Litre	101.22	0.13	6
B.4	Diesel Prices in Rs. /Litre	86.51	0.36	4
B.5	Cross Subsidization (Industrial ABR/ ACS)	1.00	1.27	5
C. Performance of Utilities				
C.1	PAT/ Revenue (%)	-0.56	2.21	6
C.2	Overdues/ Cost of Power (%)	1.45	0.00	5
C.3	Payables for Power Purchase (Days)	NA	NA	NA
C.4	Tariff Subsidy Billed/ Total Revenue (%)	0.30	0.00	7
3. ENVIRONMENTAL SUSTAINABILITY				
A. Energy Resource Productivity				
A.1	Energy Efficiency Score	9.5	0.75	6
A.2	Performance of Clean Energy (Capacity/Potential)(%)	0.21	0.00	6
A.3	Energy intensity (kgoe/GDP in 1000 INR)	2.30	1.20	3
B. Decarbonization				
B.1	Notification of SAPCC (1=Yes, 0=No)	1	3.21	5
B.2	CO2 reduced from LED Bulbs/1000 population (tonnes)	66.10	0.44	4
B.3	% of Forest Cover (Forest Cover wrt total area)	39.15	1.36	4
C. Emissions and Pollution				
C.1	Emission Intensity (kgCO2eq/ GSDP in 1000 INR)	0.00	2.67	2
C.2	Air Quality Index (on 27.07.21)	154.06	0.76	5
C.3	EV Penetration (%)	0.16	0.10	5

4. STATE CONTEXT				
A. Macroeconomic Environment				
A.1	Growth rate of GSDP	8.51	0.58	4
A.2	FDI Equity Inflows (in USD Million)	0.36	0.00	5
A.3	States' Ranking: Start up Index*	80.00	3.21	1
B. Regulations, Institutions & Governance				
B.1	Human Development Index	0.66	0.00	7
B.2	Good Governance Index	4.20	1.63	6
B.3	SDG Index	66	0.75	7
C. Stability for Investment & Innovation				
C.1	Innovation Score as per India Innovation Index	18.62	0.64	6
C.2	Industry, Infrastructure & Innovation Index	2.64	0.00	3
C.3	Investment Opportunities (in USD Billion)	23.77	1.11	2

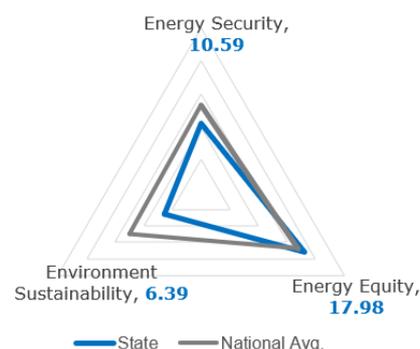
*100= Best performer; 80= Top Performer; 60= Leaders; 40=Aspiring Leaders; 20=Emerging States; 10= Beginners

Ladakh

8
Rank

36.01
Overall Score

Dimension	Score	Rank
Energy Security	10.59	6
Energy Equity	17.98	3
Environmental Sustainability	6.39	8
State Context	1.05	8



Note – Dimension wise scores are out of 25

No.	Indicator	Value	Score	Rank
1. ENERGY SECURITY				
A. Electricity Diversity and Power Supply Position				
A.1	Diversity of Electricity Installed Capacity (EMCI)	0.54	2.24	1
A.2	Share of RE in total installed capacity (%)	3.88	0.01	6
A.3	Installed generating capacity (Growth Rate in %)	NA	NA	NA
A.4	Electricity consumption per capita (in kWh)	1383.64	0.22	3
A.5	Energy not supplied (Deficit) in %	10.60	0.00	8
A.6	Installed Capacity (MW)/ Peak Demand (MW)	1.73	2.99	1
B. Viability of Energy/Electricity Systems in the State				
B.1	AT & C Losses (in %)	60.46	0.00	8
B.2	ACS-ARR Gap (in Rs./unit)	2.03	5.14	1
B.3	Average Hours of Supply in Agriculture (Mins/day)	NA	NA	NA
2. ENERGY EQUITY				
A. Energy Access				
A.1	Access to Electricity %	100	3.73	2
A.2	LPG + PNG Connections against number of HHS %	1.75	3.73	1
B. Affordability				
B.1	ACS (Rs. /Unit)	4.18	5.82	1
B.2	Non-Subsidized LPG Price (Rs/14.2 kg Cylinder)	1240	0.00	7
B.3	Petrol Prices in Rs. /Litre	103.61	0.00	7
B.4	Diesel Prices in Rs. /Litre	88.85	0.16	5
B.5	Cross Subsidization (Industrial ABR/ ACS)	1.00	1.77	4
C. Performance of Utilities				
C.1	PAT/ Revenue (%)	-0.94	2.76	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 (%)	0.30	0.00	7
3. ENVIRONMENTAL SUSTAINABILITY				
A. Energy Resource Productivity				
A.1	Energy Efficiency Score	3.5	0.00	8
A.2	Performance of Clean Energy (Capacity/Potential)(%)	0.21	0.00	7
A.3	Energy intensity (kgoe/GDP in 1000 INR)	NA	NA	NA
B. Decarbonization				
B.1	Notification of SAPCC (1=Yes, 0=No)	1	4.48	2
B.2	CO2 reduced from LED Bulbs/1000 population (tonnes)	81.14	0.85	3
B.3	% of Forest Cover (Forest Cover wrt total area)	1.35	0.00	8
C. Emissions and Pollution				
C.1	Emission Intensity (kgCO2eq/ GSDP in 1000 INR)	NA	NA	NA
C.2	Air Quality Index (on 27.07.21)	154.06	1.06	4
C.3	EV Penetration (%)	0.07	0.00	7

4. STATE CONTEXT				
A. Macroeconomic Environment				
A.1	Growth rate of GSDP	NA	NA	NA
A.2	FDI Equity Inflows (in USD Million)	0.16	0.00	6
A.3	States' Ranking: Start up Index*	20.00	0.00	7
B. Regulations, Institutions & Governance				
B.1	Human Development Index	NA	NA	NA
B.2	Good Governance Index	NA	NA	NA
B.3	SDG Index	66	1.05	5
C. Stability for Investment & Innovation				
C.1	Innovation Score as per India Innovation Index	NA	NA	NA
C.2	Industry, Infrastructure & Innovation Index	NA	NA	NA
C.3	Investment Opportunities (in USD Billion)	NA	NA	NA

*100= Best performer; 80= Top Performer; 60= Leaders; 40=Aspiring Leaders; 20=Emerging States; 10= Beginners

Annexures

Data sources for indicators

Sl.	Indicators	Source	Year/ Period
1.	Diversity of Electricity Installed Capacity (EMCI Index)	CEA Executive Summary Report	As on Mar-22
2.	Share of RE in total installed capacity (%)	CEA Executive Summary Report	As on Mar-22
3.	Installed generating capacity of Electricity (Growth Rate in %)	CEA Executive Summary Report	Five-year CAGR (FY18 - FY22)
4.	Electricity consumption per capita (in kWh)	CEA Dashboard	FY 2019-20
5.	Energy not supplied (Deficit) in %	CEA L.G.B.R Report	FY 2021-22
6.	AT & C Losses (in %)	PFC Report on Performance of Power Utilities	FY 2019-20
7.	ACS-ARR Gap (in Rs./unit)	PFC Report on Performance of Power Utilities	FY 2019-20
8.	Average Hours of Supply in Agriculture (Mins/day)	CEA Executive Summary Report	As on Mar-22
9.	Installed Capacity/ Peak Demand	CEA Executive Summary Report and CEA L.G.B.R Report Data for DNH-DD as per POSOCO Monthly Operation Report for June & July 2022 (segregated data available before June 2022 for DNH and DD)	FY 2021-22
10.	Access to Electricity %	Saubhagya Dashboard	As on Mar-19
11.	LPG + PNG Connections against number of HHs %	PPAC Ready Reckoner, Jun-22	<ul style="list-style-type: none"> • LPG Connection as on 31-Mar-22 • PNG Connection as on 01-Apr-21 • Household as on 01-Apr-21
12.	ACS	PFC Report on Performance of Power Utilities	FY 2019-20

Sl.	Indicators	Source	Year/ Period
13.	Non-Subsidized LPG Price (Rs/14.2 kg Cylinder)	PPAC Ready Reckoner	As on Jun-22
14.	Petrol Prices in Rs/litre	PPAC Ready Reckoner	As on Jun-22
15.	Diesel Prices in Rs./litre	PPAC Ready Reckoner	As on Jun-22
16.	PAT/Revenue	PFC Report on Performance of Power Utilities	FY 2019-20
17.	Overdues/ Cost of Power	PRAAPTI Portal and PFC Report on Performance of Power Utilities	As on Mar-22
18.	Cross Subsidization (Industrial ABR/ ACS)	PFC Report on Performance of Power Utilities	FY 2019-20
19.	Payables for Power Purchase (Days)	PFC Report on Performance of Power Utilities	FY 2019-20
20.	Tariff Subsidy Billed/ Total Revenue	PFC Report on Performance of Power Utilities	FY 2019-20
21.	Energy Efficiency Score	BEE, State Energy Efficiency Index	2020
22.	Performance of Clean Energy (Capacity/Potential) in %	CEA Executive Summary Report and MOSPI Energy Statistics	CEA: As on Mar-22 MOSPI: 2022
23.	Energy intensity (kgoe/GDP in 1000 INR)- Data	State Energy and Climate Index, NITI Aayog	2022
24.	Notification of SAPCC (State Action Plan on Climate Change)	MoEFCCC	As on Jul-22
25.	CO2 reduced/saved from LED Bulbs per 1000 population (in tonnes)	CO2 reduction - Ujala dashboard; Projected Population - MoHFW	As on Jul-22
26.	% of Forest Cover (Forest Cover wrt total area)	Forest Survey of India	2021
27.	Emission Intensity (kgCO ₂ eq/ GSDP in 1000 INR)	State Energy and Climate Index, NITI Aayog	2022
28.	Air Quality Index	CPCB National Ambient Air Quality Monitoring Programme	2020-21 (as on 27.07.21)

Sl.	Indicators	Source	Year/ Period
29.	EV Penetration in %	PIB press release (https://pib.gov.in/PressReleasePage.aspx?PRID=1842704)	Jul-22
30.	Growth rate of GSDP	RBI Handbook of Statistics on Indian States	5-year CAGR (till FY21 or FY20, depending upon data availability)
31.	FDI Equity Inflows (in USD Million)	DPIIT FDI Statistics, Mar 2022	Oct-19 to Mar-22
32.	States' Ranking: Start up Index 100= Best performer; 80= Top Performer; 60= Leaders; 40=Aspiring Leaders; 20=Emerging States; 10= Beginners	Start Up India, Ministry of Commerce	2021
33.	Human Development Index (Score)	MOSPI Gendering Human Development	2017-18
34.	Good Governance Index (Score)	DoARPG Good Governance Index	2020-21
35.	SDG Index (Score)	NITI Aayog SDG India Index	2020-21
36.	Innovation Score as per India Innovation Index	NITI Aayog India Innovation Index	2020
37.	Logistics Index (Index Scores)	LEADS Index, Ministry of Commerce	2020-21
38.	Investment Opportunities (in USD Billion)	Invest India	As on Sep-22

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

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