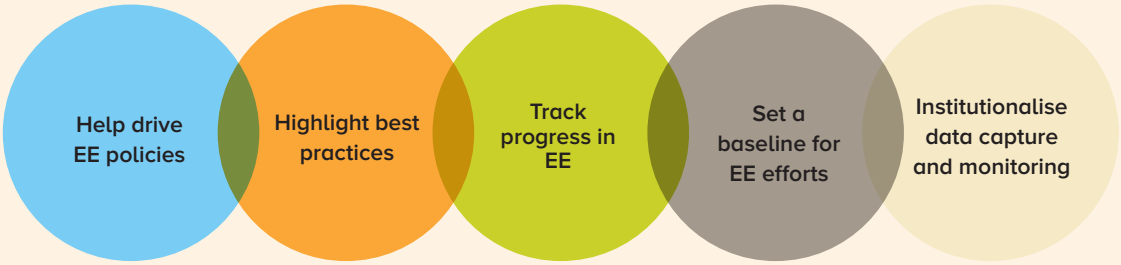
STATE ENERGY EFFICIENCY INDEX 2019

The success of India's goals for Energy Efficiency (EE) hinges as much on state-specific energy efficiency programmes, as on national programmes. States play a vital role in implementing energy efficiency policies. The national EE goals can only be realised with each state achieving their goals individually, keeping in mind the prevailing socio-economic conditions. To enable data-driven evidence-based policy formulation and help drive EE policies & programme implementation at the state and local government level **Alliance for an Energy Efficient Economy (AEEE),** under the guidance and leadership of the Bureau of Energy Efficiency (BEE) and NITI Aayog, developed & launched India's first '**State Energy Efficiency Preparedness Index**' for 29 states and the National Capital Territory of Delhi in August 2018. The State Energy Efficiency Index (SEEI) is a useful stock-taking tool to track the progress of states' energy efficiency programmes across the energy demand sectors. This year again, AEEE, under the guidance and leadership of BEE, has developed the SEEI 2019 for 36 Indian states and union territories.

Objective of State EE Index



APPROACH

The SEEI 2019 development exercise had three phases, as illustrated below.

Design phase

- Finalisation of 97 indicators for assessment
- Allocation of maximum score per sector, and finalisation of scoring criteria
- Grouping of states in 4 groups based on Total Primary Energy Supply (TPES) required to meet states' actual energy demand

Data Collection phase

- Orientation of states* for data collection
- Validation of data submitted by states
- Research and consultation to fill data gaps

Evaluation phase

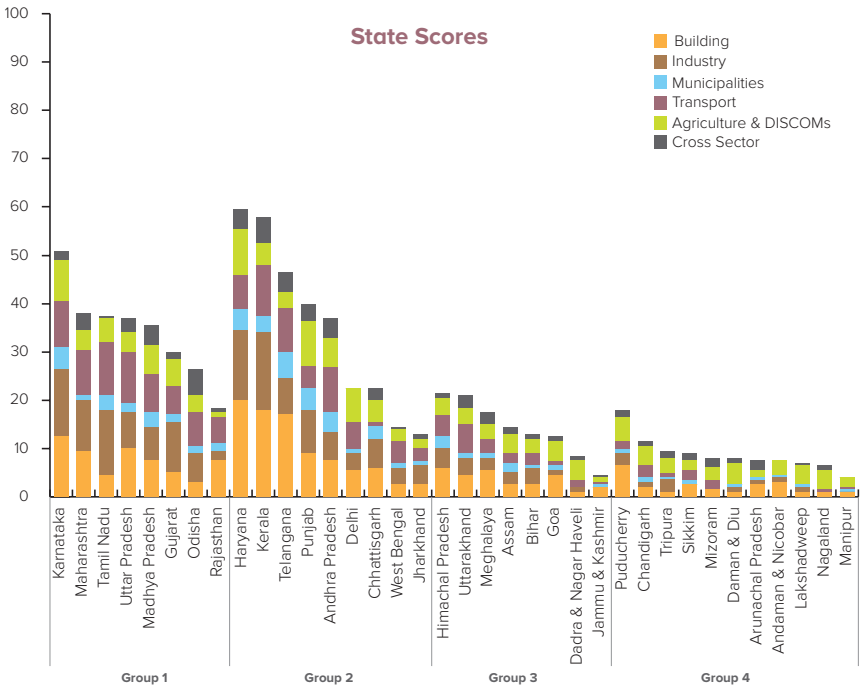
- Evaluation and validation of data
- Scoring of data
- Final reviews by SDAs and BEE
- Classification of states based on their performance

**The required data were collected from the concerned state departments such as DISCOMs, Urban Development departments and other departments with the help of State Designated Agencies (SDAs) nominated by BEE. Apart from the data furnished by SDAs, AEEE also guided SDAs to fetch data from various central government organisations.*

FINDINGS

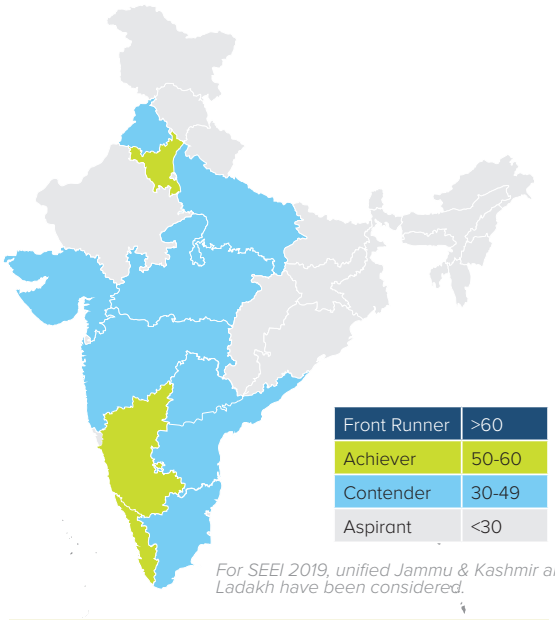
States and Union Territories have been categorised as 'Front runner', 'Achiever', 'Contender' and 'Aspirant', based on their performance. For State EE Index 2019, there are no 'Front Runner' states, and the top performing states Haryana, Karnataka and Kerala are in the 'Achiever' category, as indicated in the map. Since there isn't any 'Front runner' state, it can be inferred that a lot more can be done at the state level to realise energy savings from energy efficiency.

States have scored lower this year, primarily due to the lack of data for outcome-based indicators, coupled with the increased weightage for outcome-based indicators and stringent scoring criteria and evaluation process.



Note: States are grouped based on the states' aggregated Total Primary Energy Supply (TPES) required to meet states' actual energy demand (electricity, coal, oil, gas, etc.) across sectors, for a rational comparison of similar energy consuming states.

Note: All data is as of 15 November 2019, subsequently reviewed by SDAs and BEE, and updated thereafter. No data was received from Andaman & Nicobar, Dadra & Nagar Haveli, Goa, Jammu & Kashmir and Lakshadweep.



For SEEI 2019, unified Jammu & Kashmir and Ladakh have been considered.

SEEI 2019 shows that majority of the initiatives taken by states are related to Policies and Regulations - 6 states have notified ECBC 2017 and 9 have initiated the process for adoption of ECO Niwas Samhita 2018-Energy Conservation Building Code for Residential Buildings; 6 states have released e-mobility policies, and 4 have published draft e-mobility policies; 24 states have ToD tariff for industrial and commercial consumers, and 5 have ToD tariff for residential consumers.

There are still very few state-specific initiatives for non-PAT industries and MSME. Efforts in municipal energy efficiency are still primarily driven with the help of EESL. On a positive note, 11 states have installed centralised control and monitoring systems for street lighting.

Data on outcome-based indicators are by and large not available. While a few states provided some information on energy savings in specific buildings, industries or municipal programmes, there is no structured, comprehensive method for measurement, reporting and verification (MRV) of programmes and the resultant energy savings.

TAKEAWAYS

1. **Proactive role by states in policy formulation and implementation:** States must take an active authority to exercise powers under the Energy Conservation Act and start formulating supporting policies and implementation rules to shift the focus from "policies in place" to "policies successfully implemented".
2. **Strengthening the mechanism for data capture, management and public availability of data:** SDAs being the competent authority on matters related to EE should significantly enhance their engagement with other state actors and the private sector to build and maintain a robust data system for demand side energy consumption. This initiative will also contribute significantly towards a national Energy Data Management System.
3. **Enhancing the credibility of EE schemes:** States must include and strengthen enforcement and compliance checks to ensure the integrity of EE programmes. Independent monitoring and verification of savings should be made integral to all EE policies and programmes.

To find out more visit the State Energy Efficiency Index Portal

https://www.aeee.in/state-ee-index

Supported by

MacArthur Foundation

ACEEE American Council for an Energy-Efficient Economy