HERE-SBD EV Index 2025 summary report

Assessing infrastructure maturity in the EV transition in India



Executive summary

The Indian electric vehicle (EV) market is accelerating rapidly, driven by surging consumer demand and progressive state-level policies. EV penetration has grown eightfold in just a few years, with **1.96 million EVs in fiscal year 2024-2025, marking a 17% year-on-year increase.**

For the second consecutive year, HERE Technologies, the leading location data and technology company, and **SBD Automotive**, a global automotive research firm, have included India in the global EV Index. The HERE-SBD EV Index 2025 measures and compares momentum in EV adoption and infrastructure development in 31 states and union territories in India, using an innovative methodology for analysis that leverages HERE's proprietary EV charge point data for fully public car chargers and several global government data sources.

The 2025 research includes a new addition: a consumer survey of over 1,000 Indian drivers. Among the respondents, 52% cite environmental benefits, while 48% point to better performance and advanced technology as the two main motivators. Advanced in-car technology and better value for money are tied as the third most important factors when considering an EV purchase. However, a limited availability of charging stations remains the top barrier to adoption, underscoring the need for coordinated investment and policy action.

The HERE-SBD EV Index 2025 assesses infrastructure growth and more significantly, assessing the maturity of EV infrastructure across multiple geographies, and the appropriateness of the charging networks for the market. While the scoring concept in 2025 still includes average charger power, the share of battery electric vehicles (BEVs) in the total vehicle fleet, the number of chargers per BEV, and public charger density, the recent analysis also introduces a balance metric.

Regions that are well-balanced are poised for sustainable growth. They tend to score more uniformly across all four metrics above, rather than exhibiting wide disparities. A higher balance score indicates greater consistency across the factors that must work in concert to support an optimal EV uptake and charging experience. A low balance score highlights uneven advancement across infrastructure metrics, signaling an imbalance that can cause significant challenges in meeting evolving driver and infrastructure needs. It may identify regions that are missing a critical characteristic that could unlock increased EV market penetration and improve EV drivers' experience.

India's EV journey is accelerating, propelled by rising consumer interest and progressive state-level policies. As adoption surges, the strain on infrastructure becomes more evident. The 2025 HERE-SBD EV Index highlights both the promise and pressure points of India's EV ecosystem. These insights can serve as a valuable guide for policymakers and industry leaders to align efforts, close infrastructure gaps, and build a more inclusive and sustainable mobility future for the country.

Abhijit Sengupta, HERE Technologies

These metrics help determine whether there are enough chargers to support growing adoption. However, in more mature markets where EVs are already widespread, the emphasis shifts toward the quality of the charging experience. In these cases, average charger power becomes a more critical measure, as it reflects how quickly and efficiently drivers can recharge their vehicles.

The Index's core metrics have been designed from the consumer's perspective to evaluate regional performance factors that directly impact driver experience.

India's transport sector stands on the cusp of rapid electrification, yet the challenges ahead are considerable. The nation must navigate the distinct requirements of its diverse mobility landscape, as the needs of two- and three-wheeler drivers differ greatly from those of car owners and public transport operators. Only through rigorous analysis of market dynamics, user sentiment, and charging infrastructure development can India create an electrification strategy that meets the needs of its increasingly mobile population.

Robert Fisher, SBD Automotive

These metrics are used to assess:

- → **How far drivers must travel to find a charger —** measured by the number of public EV chargers per road length
- → **How quickly drivers can charge —** measured by the average power capacity of public EV chargers
- → **Number of BEVs on the road versus ICE vehicles —** measured by the share of BEVs in the total vehicle fleet
- → **Likelihood of finding an unoccupied charger —** measured by the ratio of public chargers to BEVs on the road

The Index is calculated on a 100-point scale, with each of the four core metrics contributing up to 25 points. Each region's rank is determined by its total score.



Key findings



Overview and market trends

India's EV transition is gaining momentum, but progress remains uneven across states and vehicle segments. Between 2024 and 2025, India added 6,800 public charge points, though average charger power remains flat at 33 kW, highlighting a continued reliance on slower AC charging. Unlike other regions, India's infrastructure growth is more focused on coverage than speed.

The conclusion of the Faster Adoption and Manufacturing of Electric Vehicles (FAME) II program in late 2024 marked a turning point, shifting national focus toward electrifying high-impact segments like buses, trucks, and two-or three-wheelers. While four-wheel vehicles were not the focus, they benefited indirectly through tax deductions and supply-side incentives under the Production Linked Incentive (PLI) scheme.

Consumer sentiment on EV adoption

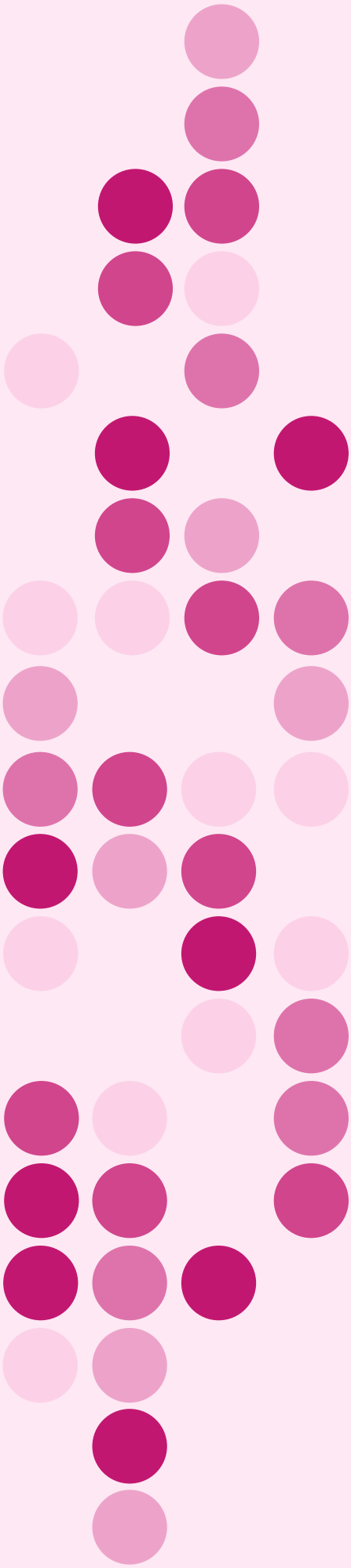
Indian consumers remain highly optimistic about electrification. Survey results show that 49% of respondents expect over half of all vehicles sold in 2030 to be electric, and 90% express confidence in India's ability to build supporting infrastructure. EV owners in India are younger than their global counterparts, with an average age of 35 years, and predominantly urban, with 63% residing in major cities. However, infrastructure reliability remains a concern: 73% of EV owners reported experiencing a failed charging attempt, and 47% cited lack of charging availability as the top barrier to adoption. The most requested improvement is the addition of more public charging stations, highlighted by 36% of respondents.

Indian state-level analysis

To understand adoption levels in each state, fleet share is a key metric. The metric represents the percentage of all registered four-wheel vehicles that are electric. For example, Goa's fleet share of 0.91% means roughly one in every 110 cars is electric, while most states remain below 0.5%. A higher fleet share means a stronger EV penetration, but it also creates pressure on charging infrastructure, as seen in Goa and Chandigarh.

Maharashtra is India's largest EV market by volume, with 63,930 four-wheel BEVs on the road. However, its charger-per-BEV ratio is under strain, indicating that infrastructure expansion has not kept pace with adoption. The state was in 4th place in 2024 but falls to 7th in 2025.

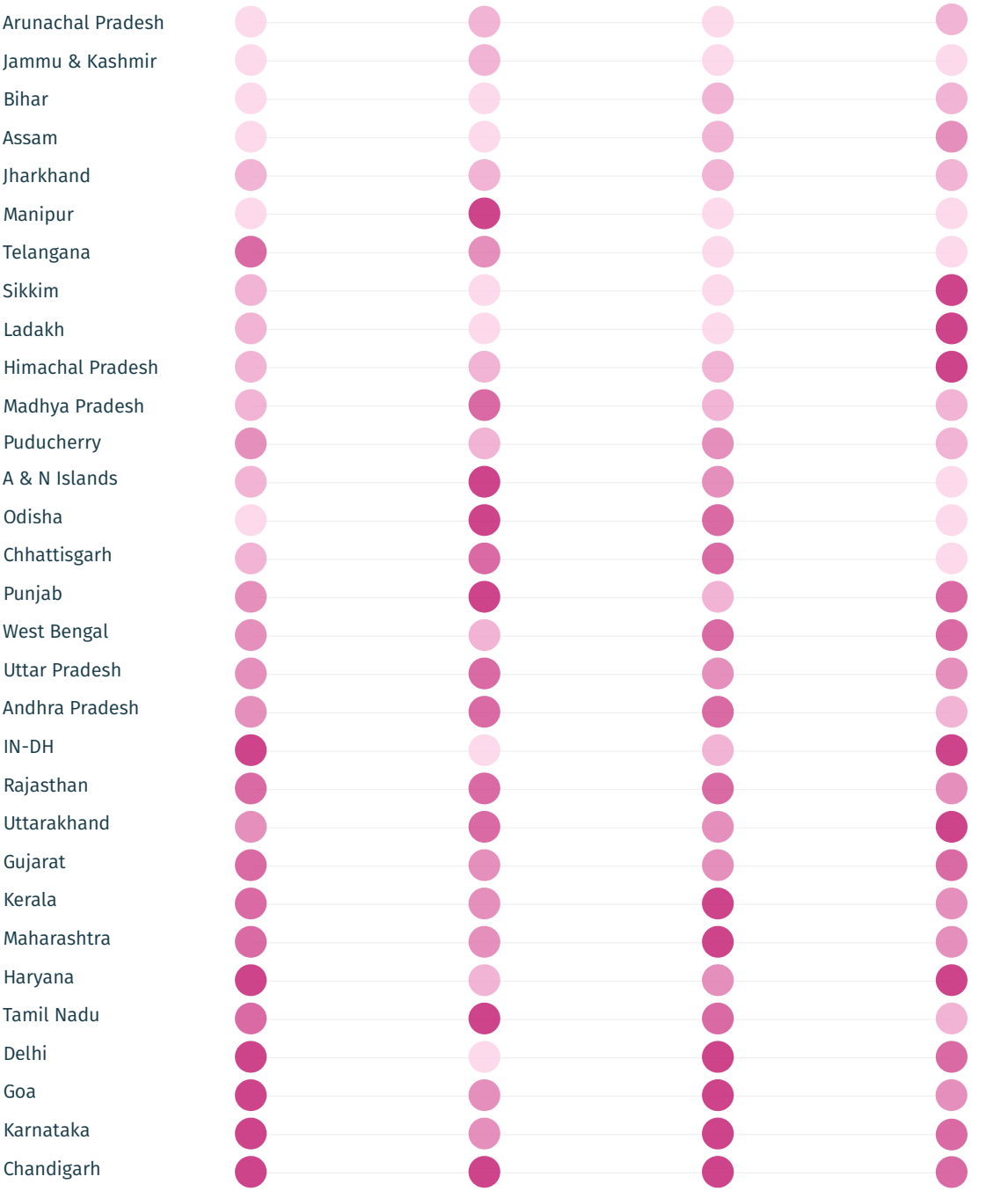
Chandigarh is ranked as India's top-performing region with a score of 87.9 out of a possible 100 points, driven by strong policy support. Karnataka climbed to second place, benefiting from an improved charger-per-BEV score despite a slight decline in charger availability. Goa, now ranked third, leads the country in BEV fleet share, while Delhi continues to dominate in charger density, offering one public charger for every 9 km road. Tamil Nadu rounds out the top five, reflecting steady growth in EV adoption and infrastructure readiness.



HERE-SBD EV Index 2025: Ranking India

Ranking of Indian states – by public chargers per road length, average charger power, the ratio of battery electric vehicles (BEVs) to non-BEVs on the road, and the ratio of public chargers to registered BEVs – each scoring up to 25 points. The combined score across the four metrics determines the state's final ranking.

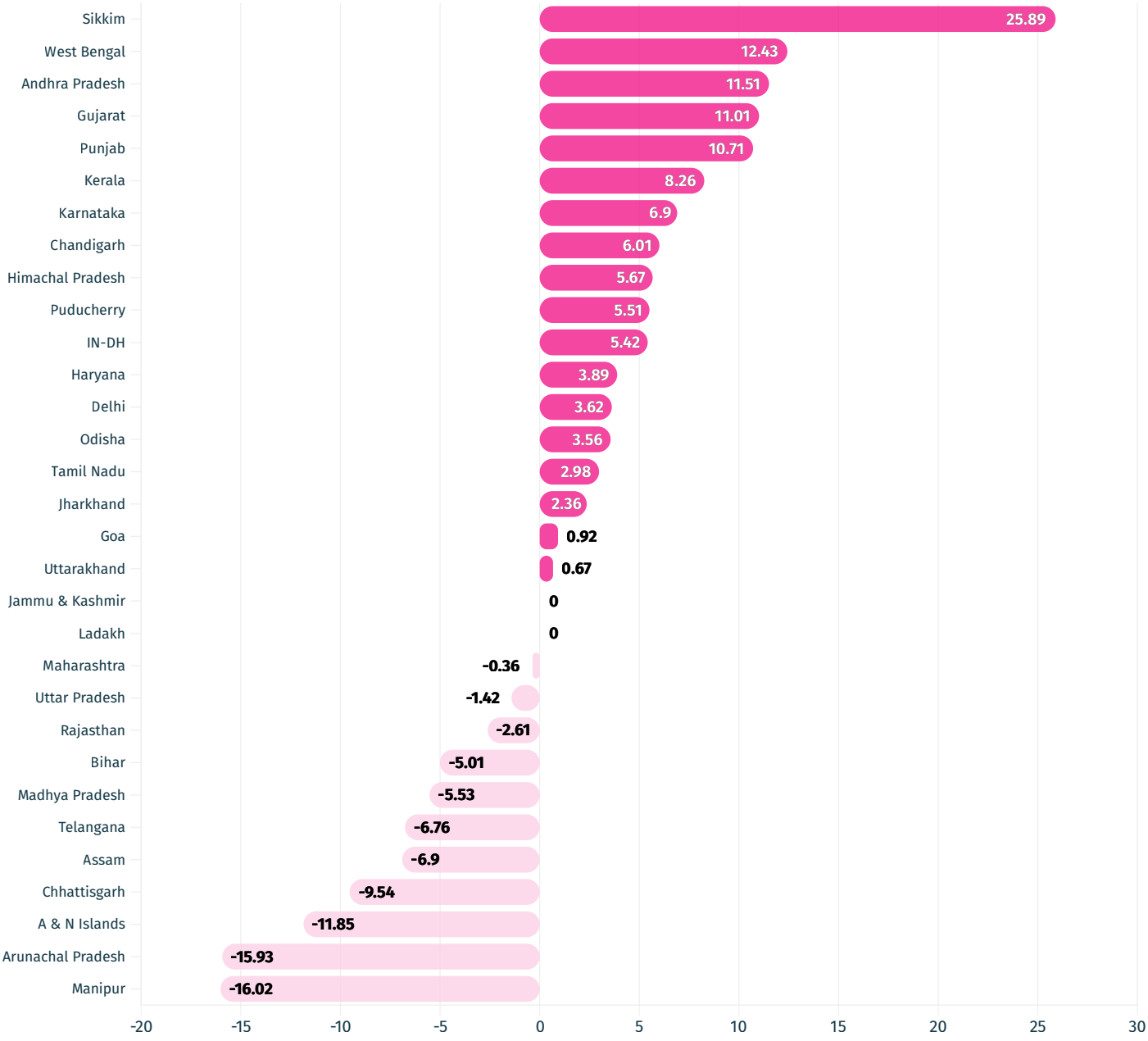
Worst - 0 Best - 25



Sources: HERE EV Products, EAFO, CIA World Factbook

HERE-SBD EV Index 2025:
Indian states compared to the previous year

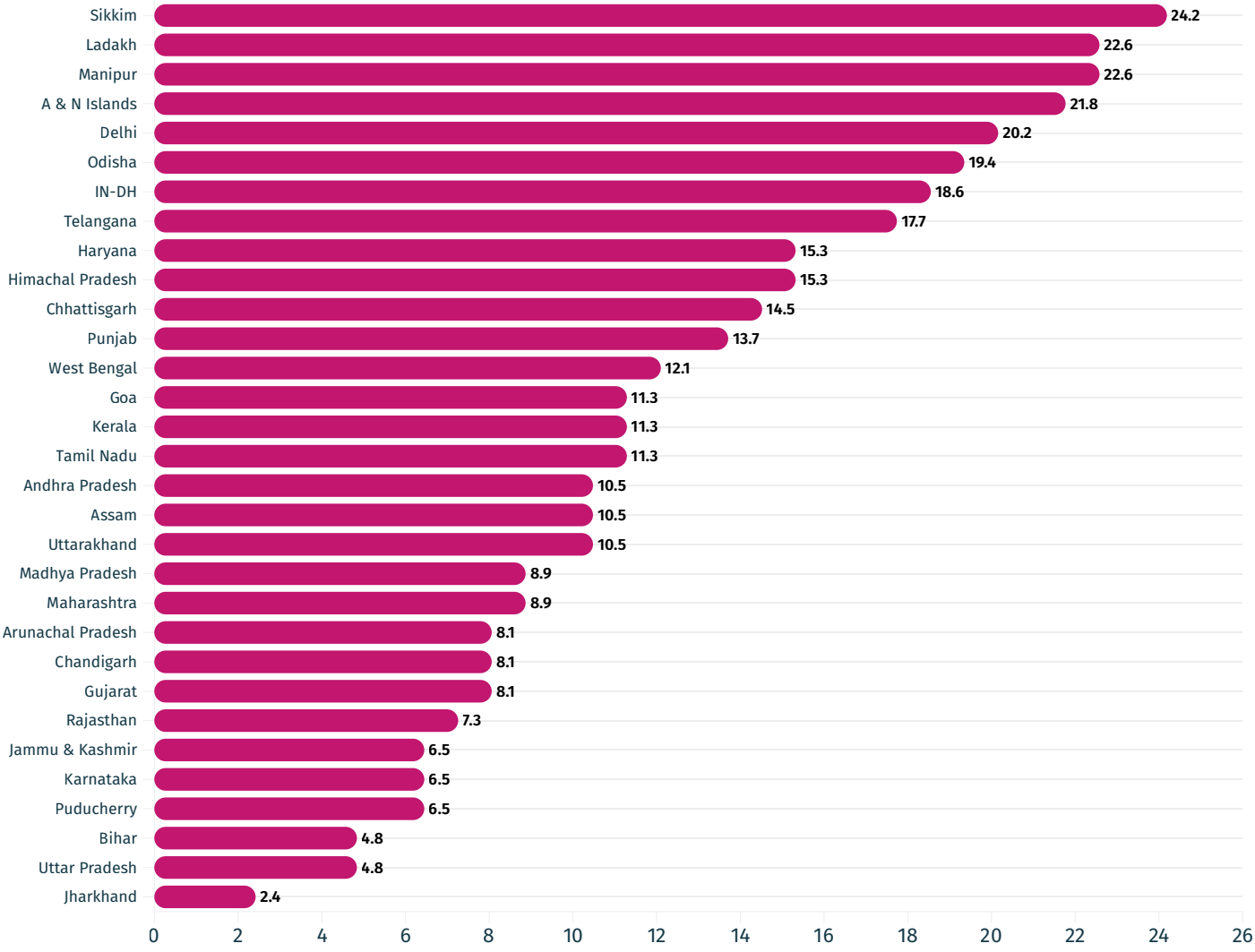
Changes in each state's overall ranking compared to 2024.



Sources: HERE EV Products, CIA World Factbook, EAFO

HERE-SBD EV Index 2025: State balance score

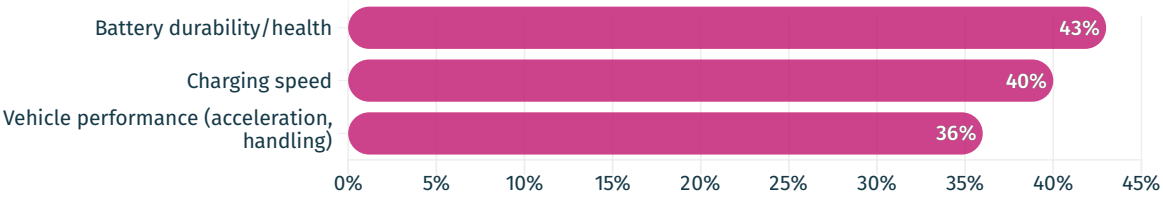
The balance score shows how every state performs across the four metrics – higher scores indicate better balance. Even scores support sustainable growth, while imbalances create challenges that negatively impact user experience.



Sources: HERE EV Products, EAFO, CIA World Factbook

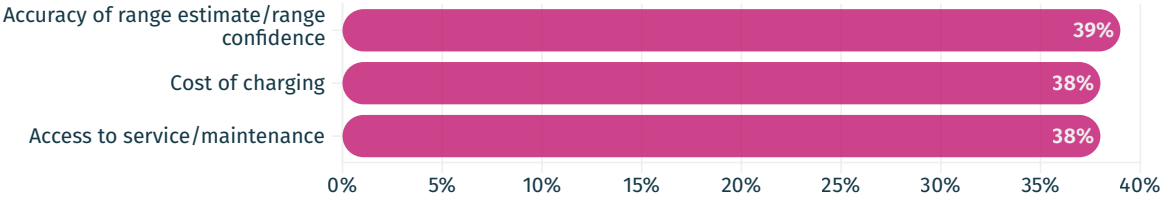
HERE-SBD EV Index 2025: Consumer survey India

Key satisfaction drivers for EV owners among survey respondents (EV owners only).



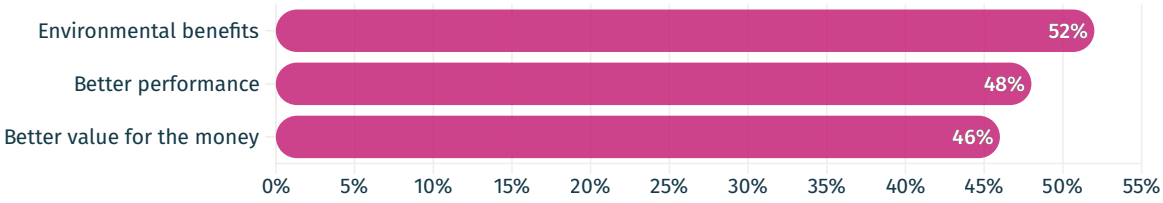
Source: HERE-SBD EV Index Consumer Survey 2025, N=120

Top three reported frustrations with EV ownership among survey respondents (EV owners only).



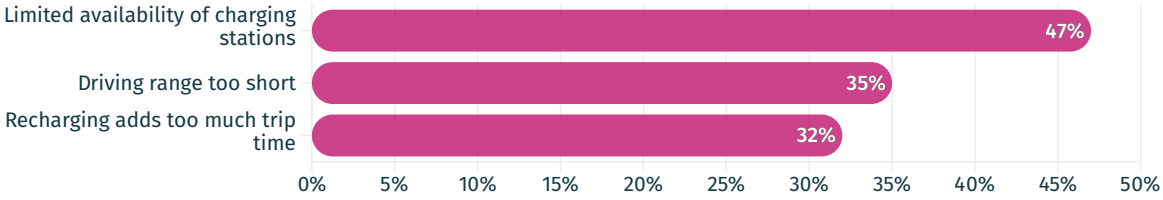
HERE-SBD EV Index Consumer Survey 2025, N=120

Top three motivators for EV adoption among all survey respondents.



HERE-SBD EV Index Consumer Survey 2025, N=1025

Top three perceived barriers for EV adoption among all survey respondents.



HERE-SBD EV Index Consumer Survey 2025, N=1025

Top overall Indian states in the HERE-SBD EV Index 2025

1. **Chandigarh (1st in 2024)**
   Placing first again in 2025, Chandigarh extended its already significant lead by a large margin, scoring almost 13 points higher than its nearest competitor. Chandigarh's increase in its BEV fleet is nearing 1%, the highest growth among leading states. While this surge slightly impacted its Chargers per BEV ratio, the overall infrastructure remains strong. The state's Zero Emission Vehicles (ZEV) deployment plan includes direct incentives for four-wheel EV purchases and charger installations, reinforcing its leadership in both policy and execution.

2. **Karnataka (4th in 2024)**
   Karnataka moved from 4th to 2nd place, driven by improvement in its score for chargers per BEV relative to other states. While the ratio of chargers to BEVs actually declined from 1:9 to 1:18 due to a surge in BEV registrations statewide, Karnataka outperforms other states that saw sharper declines. Consequently, its score rose. To support the region's proactive EV stance, further BEV uptake will need to be matched with infrastructure development to maintain Karnataka's position as a rising leader in India's electrification journey.

3. **Goa (2nd in 2024)**
   Goa's ranking slips slightly due to pressure on charger density. As BEV adoption accelerates, the number of chargers per BEV has declined—a common trend in fast-growing markets. Despite this, Goa's overall score remains stable, reflecting strong early adoption and a need to scale infrastructure to match demand.

4. **Delhi (3rd in 2024)**
   Delhi drops one spot to 4th but sees a modest increase in its total score, thanks to its fleet share rising to 0.7%. It leads the country in charger density per road length, with one charger every 9 km, making it a standout in urban accessibility. Continued investment in public charging and policy support keeps Delhi among the top performers.

5. **Tamil Nadu (6th in 2024)**
   Tamil Nadu enters the top five with a notable increase in average charger power, bucking the trend seen in other leading states. While its Chargers per BEV ratio has declined slightly, the state's infrastructure is evolving to support growing demand. Tamil Nadu's balanced progress across the metrics signals a maturing EV ecosystem with potential for further growth.

Methodology

- The HERE-SBD EV Index 2025 measures and compares momentum in EV adoption and infra structure development across the globe, including the US, 30 European countries and a total of 31 Indian states and union territories. It uses an innovative methodology for analysis of HERE proprietary EV charge point data and several global government and automotive industry data sources between June 2024 and June 2025, including publicly available data from Indian government sources and state transport departments.
- The index covers the following 31 states and union territories in India: Andaman & Nicobar Islands, Andhra Pradesh, Arunachal Pradesh, Assam, Bihar, Chandigarh, Chhattisgarh, Dadra & Nagar Haveli & Daman & Diu, Delhi, Goa, Gujarat, Haryana, Himachal Pradesh, Jammu & Kashmir, Jharkhand, Karnataka, Kerala, Ladakh, Madhya Pradesh, Maharashtra, Manipur, Odisha, Puducherry, Punjab, Rajasthan, Sikkim, Tamil Nadu, Telangana, Uttar Pradesh, Uttarakhand, West Bengal.
- To compile the study's consumer sentiment data, SBD surveyed over 1,000 drivers online across India during July and August 2025.

Find out how location technology can help increase your confidence in the EV transition and build better EV infrastructure solutions in India.

Contact us

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HERE-SBD EV Index 2025 dataset

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