

# Purchase of Electric Vehicles

## Overview

Electric transport systems are central to emissions and air pollution reduction. Along with public transport, the transition to EVs could mitigate 20% of annual GHG (CEEW, 2020). Although EV adoption is growing, widespread uptake of electric vehicles faces behavioural barriers.

Transport accounts for **12%** of energy CO2 emissions

The Low Carbon Lifestyles (LCL) programme by CSBC leverages behavioural science for sustainable lifestyle choices. Through a detailed literature review, diagnostic field work, and design ideation workshops, we identified behavioural pathways and interventions to improve the adoption of electric vehicles in urban India.

EVs and public transport can mitigate **20%** of annual GHG emissions

Behavioural insights tell us that solutions to encourage consumers to purchase EVs lay in emphasizing the network of charging infrastructure, and technological and cost-saving benefits. Creating opportunities for first-hand experiences and positive feedback from social circles are also effective.

## Behavioural Barriers

Target behaviour

Switching to electric vehicles from motorised modes of transport

Target population

Population looking to purchase a private four-wheeler vehicle

- **Range anxiety and fear of long-distance driving:** People often fear that they will run out of charge before they reach their destination, especially for long distances
- **Reliance on personal networks:** For car purchase decisions, people tend to trust friends or family over reliable sources, which may lead to discounting credible information about EVs
- **Limited knowledge of EV technology:** Unfamiliarity around EV maintenance, warranty, and battery life creates hesitation to adopt a new technology
- **High upfront costs:** Many people see EVs as luxury vehicles due to their high initial cost or lack of awareness about available government incentives
- **Perceived lack of charging infrastructure:** EV charging stations, especially compared to petrol pumps, are seen as scarce due to limited visibility and awareness of existing charging points



## Behavioural Pathways

### BEHAVIOURAL PATHWAY

### INTERVENTION IDEA



Reframing messaging around EVs

Highlight EVs as future-ready, high-status technology that is widely adopted and globally aligned

Position EVs as a viable second car for people who already own ICE vehicles as a sustainable and cost-effective option

Highlight EV performance features like acceleration, silent operation, safety, and high-tech design



Leverage peer influence

Prompt people to speak to friends and family about their EV experiences

Use influencers and celebrities in campaigns that promote EVs and its benefits as 'cool', and eco-conscious



Create personal experiences

Offer test-drives or EV-related experiences through a friend or EV taxis helps address doubts around comfort and performance



Emphasize cost-saving opportunities

Highlight government incentives and subsidies for EV purchases

Simplify financial benefits using "Total Cost of Ownership" or calculators for long-term savings to show lifetime savings of EVs over ICE vehicles



Highlight availability of charging options

Improve visibility of charging stations by using standardised colours and signage for easy identification

Place EV charging stations in public spaces like malls, theatres, and food courts makes them visible and allows users to utilize their waiting time

Introduce battery packs or offer battery swapping services to allow drivers to top-up or replace depleted batteries



Use digital tools for EVs

Promote EV-related mobile apps for route planning, locating charging station, real-time battery level tracking, and avail roadside assistance