

FUELLING INDIA'S ELECTRIC VEHICLE DREAM

From Policy to Ecosystem

May 2021



Overview

- Global Electric Vehicle Market
- Key Growth Drivers – Globally
- Overview of China's EV Market



Indian EV Market

- Sales Trend
- Growth Driver & Challenges
- Policy Support from Central and State Government
- Outlook on EV Penetration in India Across Segments
- Investment Plans by Indian OEMs



Supply Chain

- Impact analysis on existing auto component suppliers
- Investment plans in EV ecosystem



Summary








Annexure

SUMMARY

*2W and 3W will lead India's EV
Journey*

ICRA's Estimates on EV Penetration Across Segments Over Next Five Years

2Ws and 3Ws will be the early adopters given the favorable economics and product features

	FY2020 Current Penetration %	FY2025 Base scenario %	FY2025 Optimistic scenario %
 Electric Two-Wheelers	<1%	8-10%	13-15%
 Electric Three-Wheelers*	<1%	>30%	-
 Electric Buses (SRTUs)	1-2%	8-10%	12-15%
 Light Commercial vehicles	Negligible	4-6%	8-10%
 Electric Passenger Vehicles	<1%	3-5%	6-8%

Source: ICRA Research; Note – Penetration measured in terms of new vehicle registrations

*Excludes rickshaw segment, which is already largely electrified

e2W and e3W will be early growth drivers for EVs in Indian market

India can capitalize on its vast 2W and 3W segment, to emerge as leading manufacturer of e2W and e3W, globally; however, it will continue to lag in electric car segment

Minimal range anxiety, limited upfront pricing difference and a viable TCO will enable faster penetration in e2W, e3W and intracity buses segments. In next 5 years, over 10% of new vehicles will be EVs in 2W/Buses compared to <5% in the car segment

Despite reasonably clear EV policy stance, implementation lacks momentum; FAME 2.0 has failed to encourage rapid EV penetration despite significant subsidy outlay

Over Rs. 12,000 crore investments announced for localization of EV components. Strong growth opportunity for domestic auto component suppliers to invest in EV related components

In terms of battery cell manufacturing (which is 30-50% of EV cost), China has massive first mover advantage as compared to Europe and USA; dependency of Indian OEMs on Chinese battery cell will continue in the medium term

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