



**U.S.–INDIA SCCP**

**USTDA**  
U.S. TRADE AND DEVELOPMENT AGENCY



U.S.–India Standards and Conformance Cooperation Program (SCCP), Phase II

# U.S.-India Virtual Standards Workshop The Future of Electric Vehicles in India

## Session II

### Promoting Investment in Indian EV Development through Standardization

February 25, 2021



# Opening Remarks

## United States Trade and Development Agency

Mehnaz Ansari, USTDA Representative, India, South and Southeast Asia

## U.S. Department of Commerce

Manoj Desai, Principal Commercial Officer (PCO) for South India

## Bureau of Indian Standards

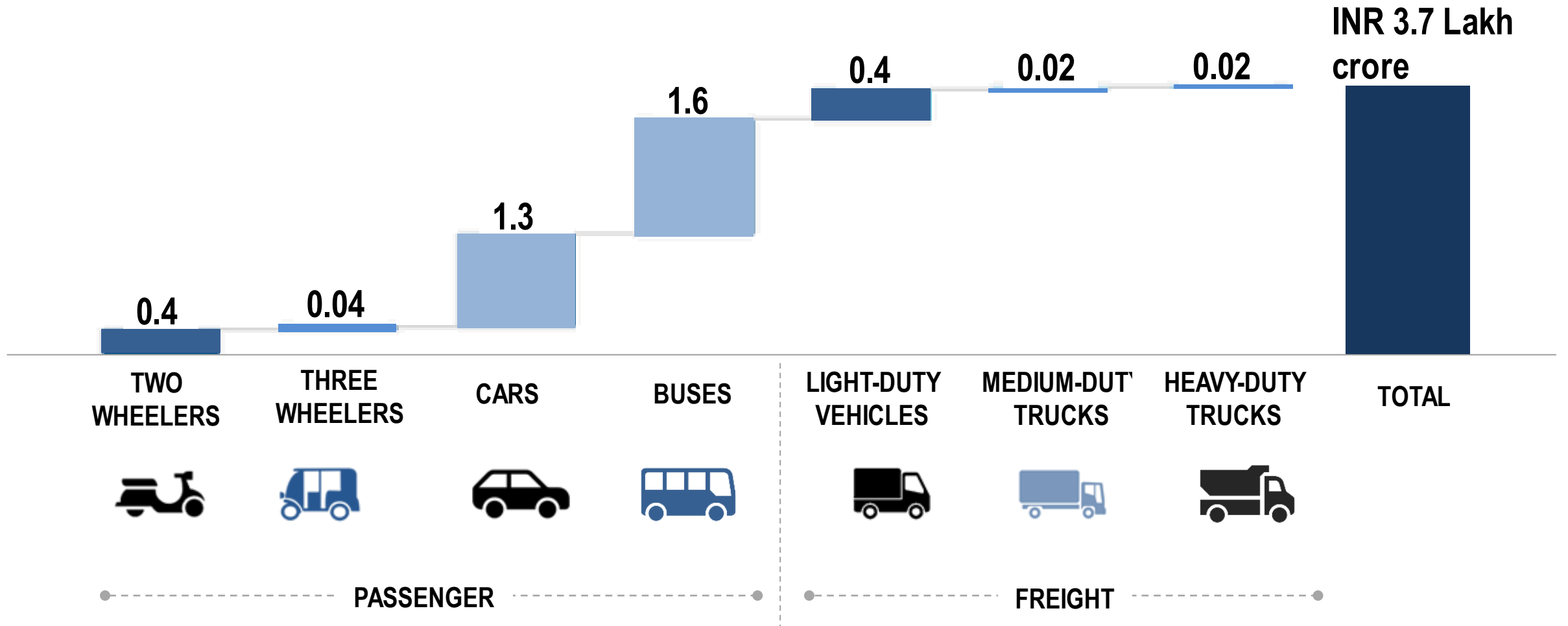
Sh. P V Mathew, Secretary of TC 51 Technical Committee

# EV Finance barriers and Solutions

Randheer Singh

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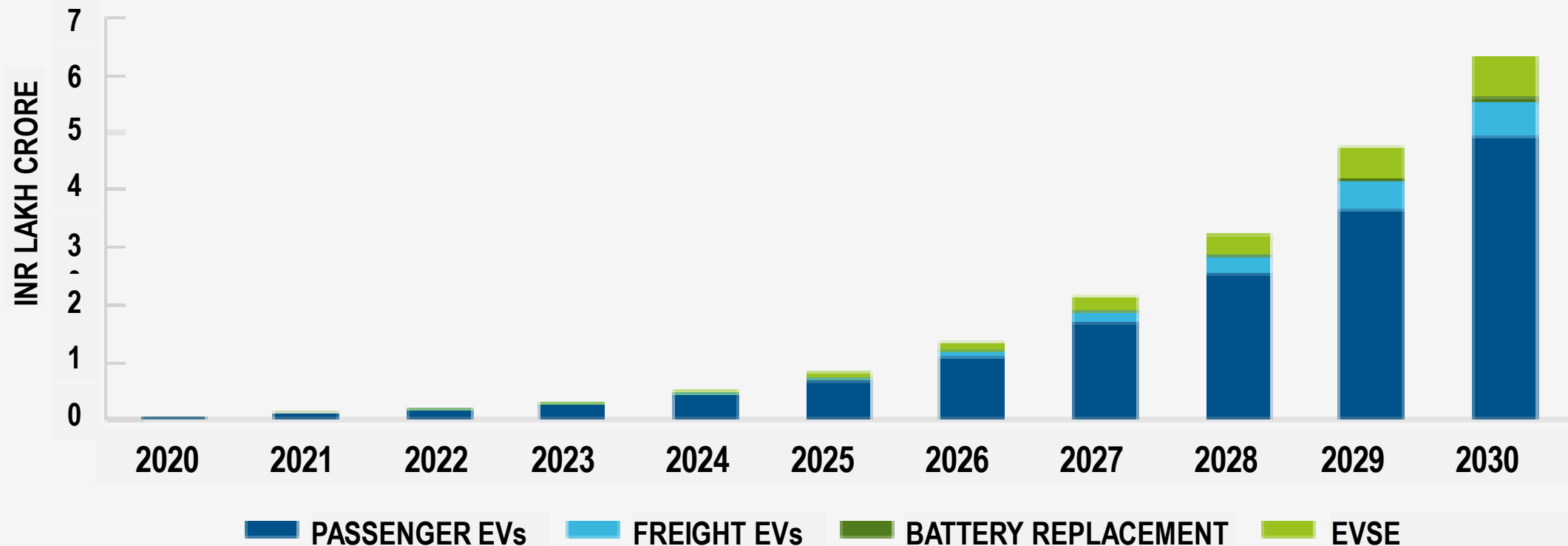
# By 2030 :India's EV Financing market shall be ~50 b USD...



\*1 USD = 74 INR

# Cumulative cost of India's EV Transition ~266 Bn USD (2020-30)

CUMULATIVE CAPITAL COST OF INDIA'S EV TRANSITION, 2020-30: INR 19.7 LAKH CRORE (266 Bn USD)



\*1 USD = 74 INR

# Unavailability of the right financing option is the key barrier...

Key barriers related to EV adoption

1. Technology cost



2. Infrastructure availability



3. Consumer behaviour



**Incentives** such as FAME II is the first order solution to reduce the upfront cost.

**Financing**—in terms of the cost and quantum of capital—is another hurdle for India's electric mobility transition.

# High Asset risk is one of the reasons for Low EV Financing...



Reasons

## Business model Risk



Operations & Maintenance



Utilisation



Customer

## Asset Risk



Resale



Policy

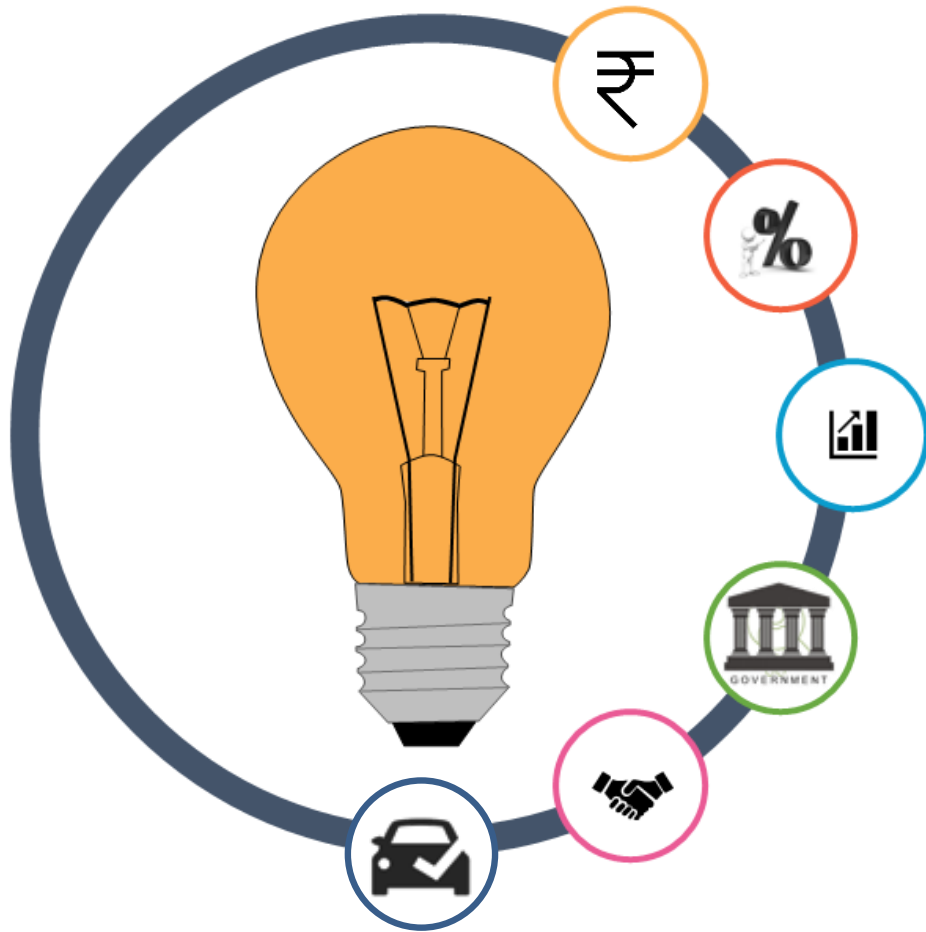


Technology



Manufacturing

# Holistic approach required to over EV Financing barriers...



1 Priority Sector Lending

2 Interest rate subvention

3 Product warranties and Guarantees

4 Government and Multilateral led

5 Fleet operator led

6 Secondary market development



Thank you





# Panel Discussion

## Moderator

- Mr. Rich Byczek, Global Technical Director, Transportation Technologies, Intertek

## Speakers

- Mr. Sohinder Gill, CEO, Hero Electric India
- Mr. Sajid Mubashir, Chair ETD 5 I and Head, Technology Development & Transfer (EV) Division, Ministry of Science and Technology, Department of Science & Technology, New Delhi
- Mr. Peter Qu, CEO, Zebra E-Bikes
- Mr. John Halliwell, Sr. Technical Executive, Electric Power Research Institute (EPRI)



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# Thank you!

**A post-workshop survey will be distributed shortly**

Reach out to [us-indiasccp2@ansi.org](mailto:us-indiasccp2@ansi.org) with any questions