

IRONING OUT WRINKLES



SAFETY

RECOMMENDATIONS

FOR BATTERY SWAPPING & CHARGING INFRA

**Battery Swapping at Charging Infra:
Subscription (BaaS) Challenges**



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CPOs OF INDIA HAVE GATHERED 12 RECOMMENDATIONS TO BRING EASE OF LIVING AND DOING BUSINESS FOR E-MOBILITY CONSUMERS AND STAKEHOLDERS.

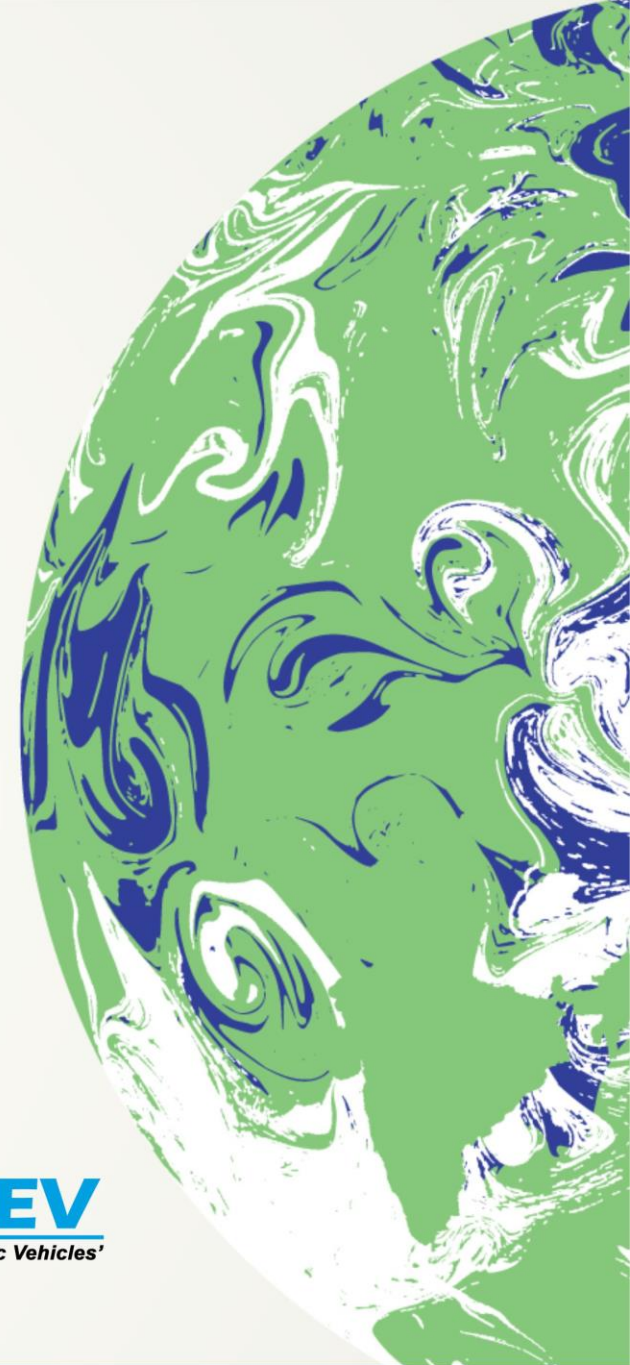
4

Administrative Recommendations
Technical Recommendations
Regulatory Recommendations



Ease of
Doing
Business.in
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ADMINISTRATIVE RECOMMENDATIONS



1

**Real-Time identification of batteries
and their current ownership details**

**Unique Identification of batteries
(UID) so that Digital Ownership should
be easily accessible.**



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ADMINISTRATIVE RECOMMENDATIONS

2

Users deserve to know what they are buying, driving and the risks associated to it

There should be high transparency to users regarding the information of their EV Batteries, components and third-party damage coverage.





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ADMINISTRATIVE RECOMMENDATIONS

3

Users discretion regarding sharing their location and privacy

User discretion to allow sharing their respective privacy, location, and other information, through OTP.



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ADMINISTRATIVE RECOMMENDATIONS

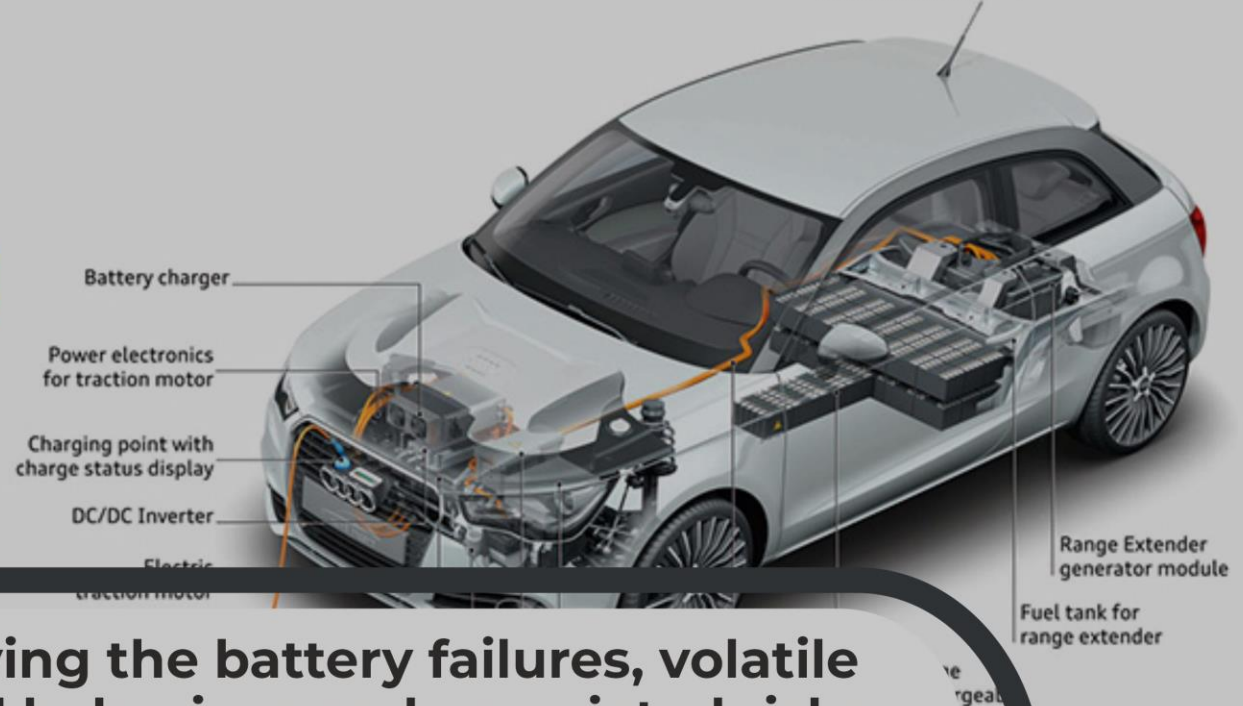
4

Ascertaining the battery OEM's after sale-services and assistance during battery life.

There should be a check on the financial stability of Battery OEM and capability to provide services to protect the user interest during battery life cycle.



TECHNICAL RECOMMENDATIONS



1 Identifying the battery failures, volatile thermal behaviour and associated risks.

Battery Monitoring Systems should also have a black box feature to capture the root cause of failure or fire to minimise post-incident investigations.



TECHNICAL RECOMMENDATIONS

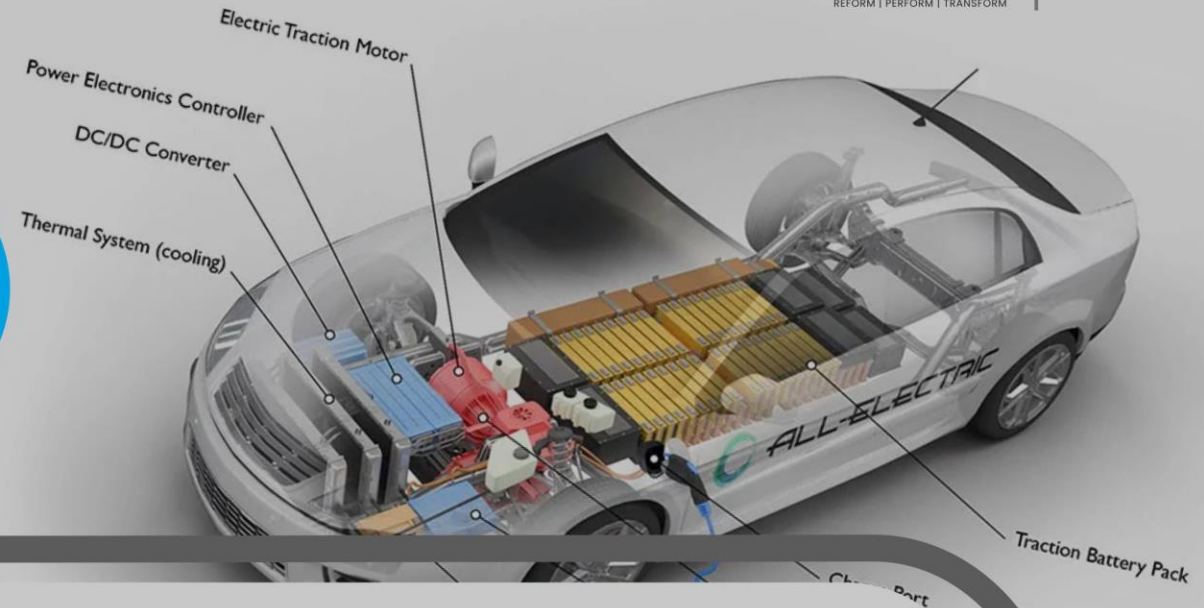
2

Battery connectivity for continued data transfer and upload

Mandatory e-SIM or data connectivity or cloud battery's daily behavioural data.



TECHNICAL RECOMMENDATIONS



3

Monitoring battery performance and timely recall

Remotely stationed Competent 24x7 AI-ML battery performance monitoring system



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TECHNICAL RECOMMENDATIONS



4

**Routing testing of battery
daily performance and its value**

**Required technical data must include
routine HALT(Highly Accelerated
Lifetime Testing) for critical battery
performance and operating parameters.**



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REGULATORY

1

Identifying the battery failures, volatile thermal behaviour and associated risks.

Battery Monitoring Systems should also have a black box feature to capture the root cause of failure or fire to minimise post-incident investigations.



REGULATORY



2

Smooth and real-time verifiable exchange value for swapping

Real-time accessible valuation portal with Value, RTO ownership data, Depreciation, and Insurance covering associated third party risks.



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REGULATORY

Provision of net metering for EV Batteries for our net-zero electrification emission goals.

Battery Charging Stations (BCS) should be allowed net metering from DISCOMs.



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REGULATORY

4

Financing and Insuring associated risks of users and investors

Batteries qualifying above recommendations should only be insured or financed by Banks, NBFCs, and Fintech.