

Potential for EV in Logistics and Delivery

January 2020

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micelio

The Network That Drives You

MICELIO – CONSTITUTENTS



Lightning Logistics

Pure play EV fleet with over 500 bikes. Currently serving clients in the grocery and ecommerce sectors. Looking to be the largest pure EV delivery fleet in India.



Product

Looking to develop a 2W/3W form factor smart vehicle exclusively for B2B cargo. Additionally, we homologate bikes with different component specifications and are developing advanced IoT capabilities.



Fund

\$20 million fund focused exclusively on electric vehicle technology with a 10-year timespan. Looking to make seed stage investments.



mLabs

Long-term gestation projects working on complex scientific projects like cell chemistry



Discovery Studio

Primarily to support early-stage startups with equipment facilitation, testing and validation expediting. Our portfolio companies can thus use funding for other purposes and additionally use the studio as a collaborative design space.

EV USE CASE: OPPORTUNITY AND SHARE



Flipkart aims to replace 40% of its last mile delivery vehicles with electric vehicles by March 2020. They had 30 e-bikes in Bengaluru as of June 2019.



Already deploying e-vans in New Delhi and Jaipur and wants to expand its electric fleet to 500 e-vans across 13 cities.



Plans to convert 40% of its fleet into power-assisted bikes



Logistics – 14% of the GDP of India compared to 8% in Germany and 9% in the US

OPEX of EV is 20% of an ICV

OPERATING ISSUES AND CHALLENGES FACED IN SPECIFIC EV USE CASES

Parking



The lack of proper parking facilities for EVs leads to damage of the vehicle and adversely affect the possibility of charging the vehicle.

Charging/ Build Quality/ Aftermarket delays



The quintessential chick and egg problem. Presently, Bescom has 12 EV charging centers, which it aims to scale to 100.

Poor build quality of vehicles in the delivery space has forced fleet operators to scrap multiple EVs and incur heavy losses. Additionally, the lack of talent in servicing causes heavy downtime of vehicles.

Theft/Vandalism



According to Yulu, around 300 of its bicycles were vandalised, damaged and stolen between January 2018 and May 2019. In Bengaluru, Bounce witnesses at least 2000 cases of theft and vandalism every month.

FUTURE PLAN FOR INTRODUCING/ENHANCING EV USAGE

Financing

Financing for EVs is prohibitively expensive

Data

Lack of data on the residual value of EVs leads to ambiguity in financing

Policy Focus B2B usage

No policy specifically targeting B2B customers to transition to EVs

Current ICE vehicles are majorly financed by banks which would need to be the case for EVs to accelerate demand

POLICY, REGULATORY, INFRASTRUCTURE REQUIREMENTS AND ASKS FOR EV IN BENGALURU

Short term (3-6 months)

Data acquisition to increase usage and facilitate multi-modality

Bounce has a common database with a list of offenders, who are ranked according to the company's behavior rating system.

Medium term (6 - 12 months)

Dedicated EV parking/charging spaces

Buildings in Karnataka may have to set aside 20% parking space for EV charging. The amended Model Building Bye-Laws 2017 will mandate residential and commercial buildings in the state to allocate 20% of their parking space for EV charging facilities.

Long term (12 months and above)

Dedicated manufacturing and skill development areas.

Karnataka EV Cluster

Dedicated manufacturing, testing, R&D and skill development on a 1000-acre plot.