

July 28, 2021

National Stock Exchange of India Ltd.  
Exchange Plaza  
C-1, Block G, Bandra Kurla Complex  
Bandra (E), Mumbai - 400 051

BSE Limited  
Phiroze Jeejeebhoy Towers  
Dalal Street  
Mumbai - 400 001

Scrip Code: ASHOKLEY

Stock Symbol: 500477

Through: NEAPS

Through: BSE Listing Centre

Dear Sirs,

**Investor Meet - Presentation**

Further to our intimation dated July 22, 2021 on Investor Meet scheduled today at 14.00 hrs (IST), we attach herewith the Presentation for the same.

This is for the information of the stock exchanges.

Yours faithfully,  
for ASHOK LEYLAND LIMITED



N Ramanathan  
Company Secretary

Encl :a/a

**ASHOK LEYLAND LIMITED**

Registered & Corporate Office: No.1, Sardar Patel Road, Guindy, Chennai - 600 032, India | T : +91 44 2220 6000 | F : +91 44 2220 6001  
CIN - L34101TN1948PLC000105 | www.ashokleyland.com

**FASTER.  
HIGHER.  
GREATER.**  
**ROCK SOLID & RESILIENT**

**INVESTOR MEET**

JULY 2021

 **ASHOK LEYLAND**

Aapki Jeet. Hamari Jeet.

# Investor Meet

**Vipin Sondhi**  
MD & CEO



## OUR VISION

# To be a Top 10 Global CV Player

creating reliable and differentiated  
products and solutions,  
while delivering outstanding  
stakeholder value

*FASTER.  
HIGHER.  
GREATER.*

**I. Rock Solid & Resilient**

**II. Ready for the future**





# Domestic Network

*Widest reach – Deep commitment to customer*



Dealership 3S - MHCV



Dealership 3S - LCV



Dealership 1S



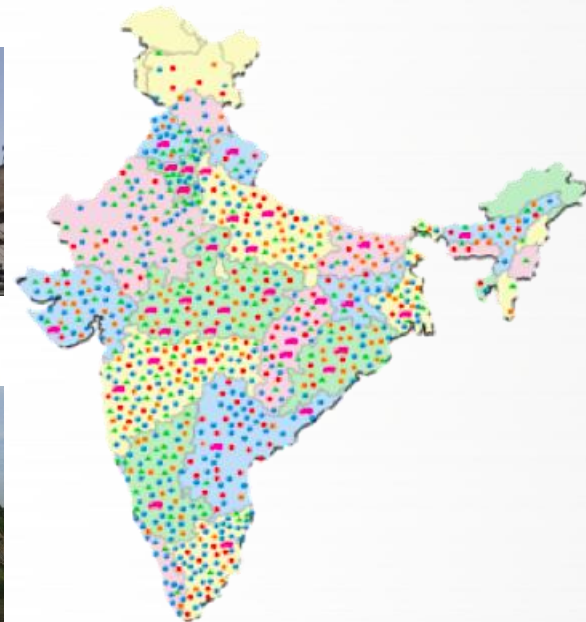
ALASC



SASSY



WOW

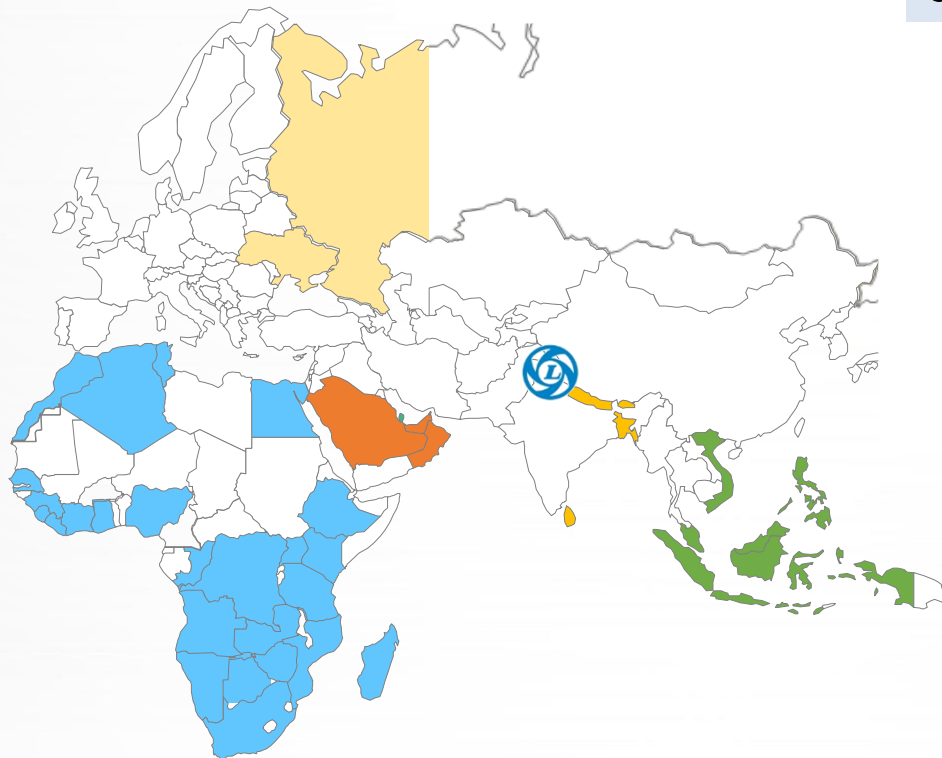


- Dealers
- AL Authorized Service
- ▲ AL Onsite Service
- AL Onsite Training
- AL Authorized Mechanic



# International Operations

*Rapidly expanding global reach*



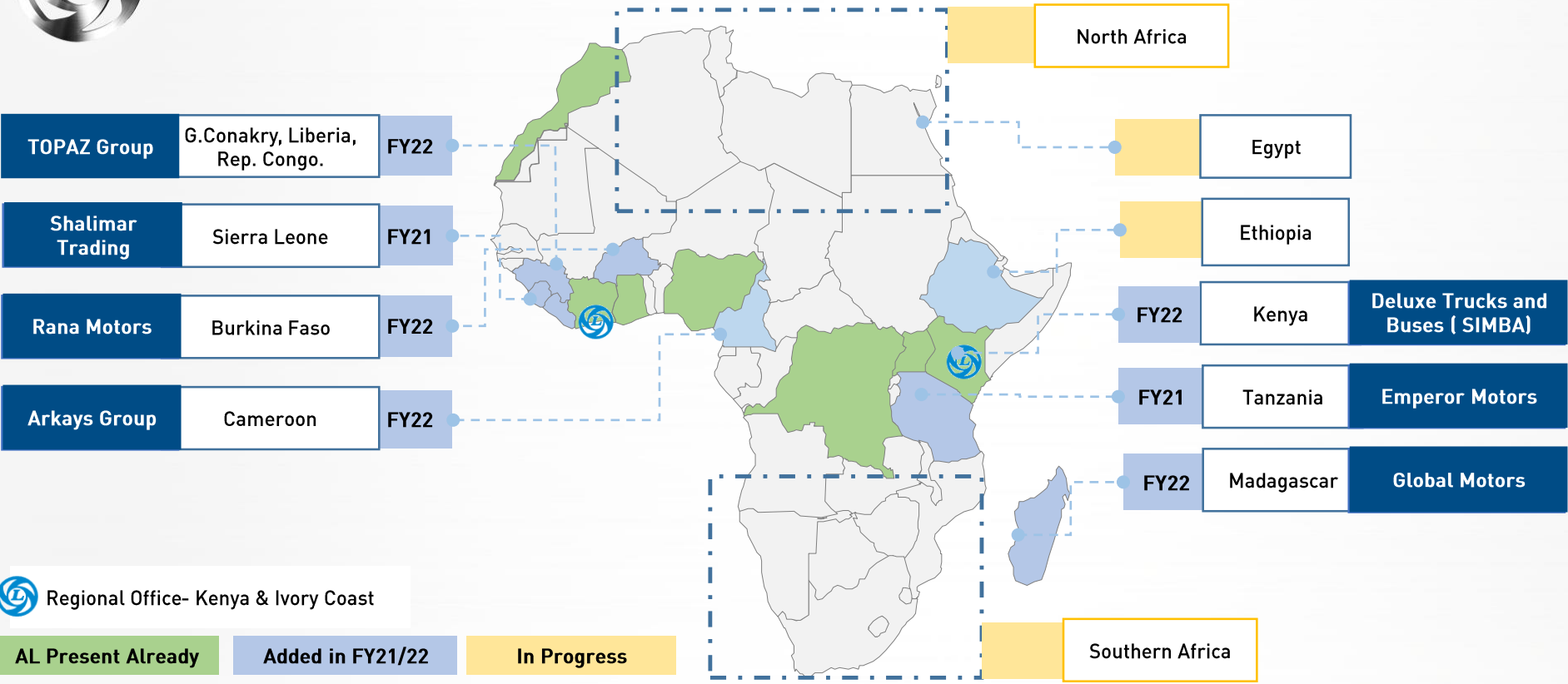
## 5 Clusters Targeted


-  SAARC
-  GCC
-  AFRICA
-  CIS
-  ASEAN





# Enhancing our reach in Africa



 Regional Office- Kenya & Ivory Coast



# Modular Range of Trucks

*Delivering value to customers*



Configure your truck online



Customers can configure the vehicle directly



Evaluate the advantages and features of the selected vehicle online



View the price of the configured/selected vehicle



## Customer Feedback



Better Mileage  
Lower Ad Blue consumption



Sturdier aggregates  
Stronger Suspension



Improved cabin comfort  
Driver Assist features

Package protected for RHD & LHD





# Commonized Platform – Fully built offerings

*Complete range*



**Ashok Leyland is the Market Leader**



**Reliable and Safe**



# Light Commercial Vehicles

## Setting new benchmarks



2.5T

2.8T

2.99T

3.49T

7.2T

7.49T

18 - 46 seater

**DOST**

**BADA DOST i3** **BADA DOST i4**

**PARTNER**

**MITR**



Gross Vehicle Weight (GVW)

Passenger Seats

Bada Dost platform to expand domestic and global play



# Defence

## Mobility solutions : *Logistical to Tactical*

### Logistics

- Troop Carrier
- Light Recovery Vehicle
- Water Bowser
- Ambulance
- Parts Container



### Combat Support

- Field Artillery Tractor 6x6
- Common Gun Tower 6x6
- Mounted Gun System 6x6
- Multi Barrel Rocket Launcher 6x6
- High Mobility Vehicle 8x8



### Armoured

- Medium Bullet Proof Vehicle
- Mine Protected vehicle
- Protected Personnel Carrier



### Light Specialist

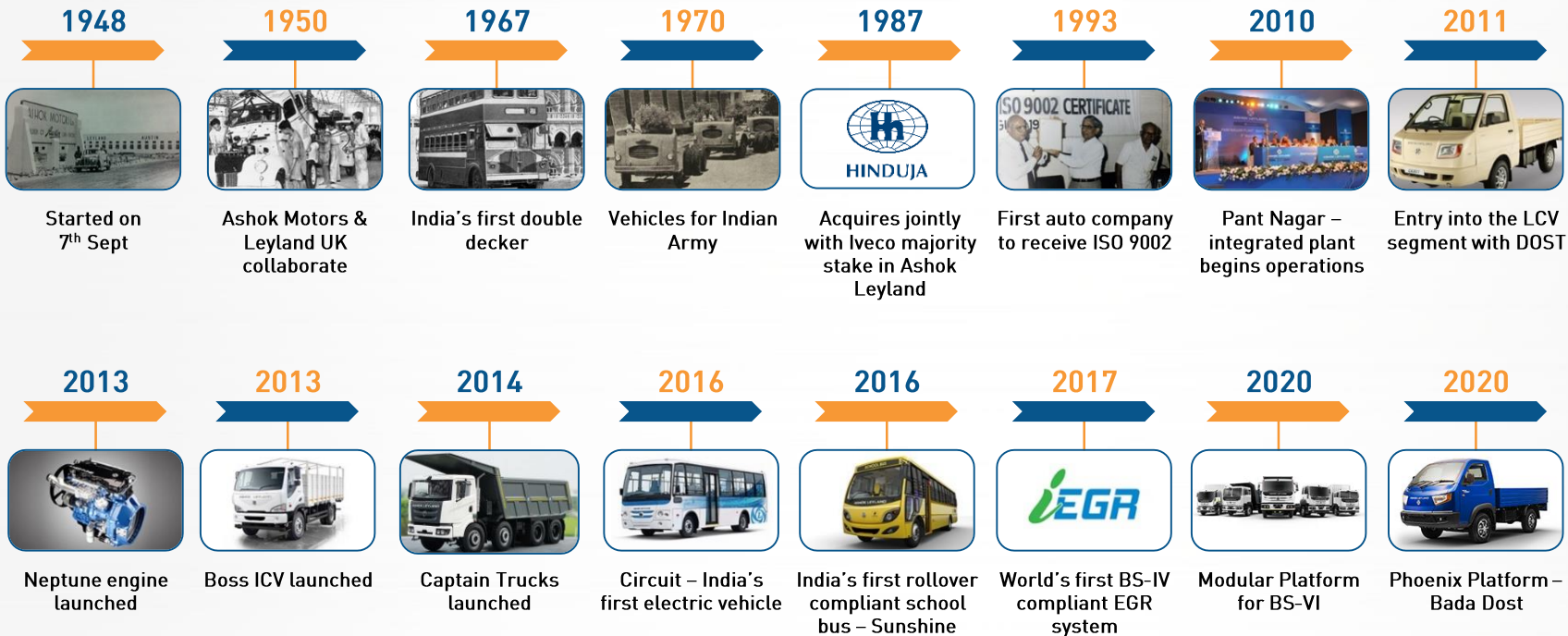
- Light Specialist Vehicle
- Light Bullet Proof Vehicle



Trusted mobility companion of the Armed Forces



# Backed by a strong legacy of innovations





# Closer to Customer

## *Enabled by digital – Our journey*



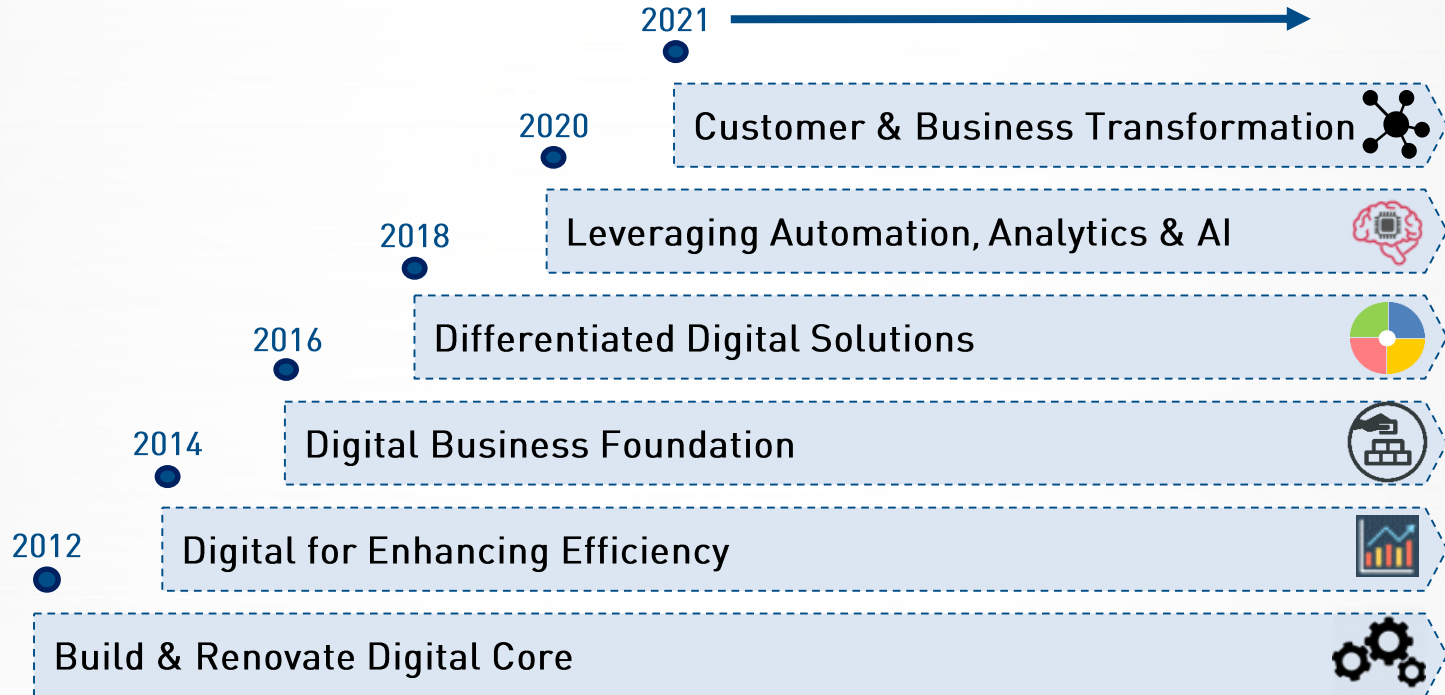
Uptime Solution Centre



i-Alert 3.0



AL Care





# Aftermarket *Parts & Service : Key differentiators*



iAlert 3.0



Uptime Solution Center

Enhancing customer lifetime value through continuous engagement



# People

*Appreciation – Respect – Joy*



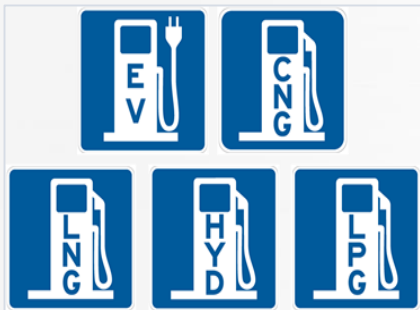


# ESG Roadmap

*Passion for sustainable engineering*



## Alt Fuels/Zero emission



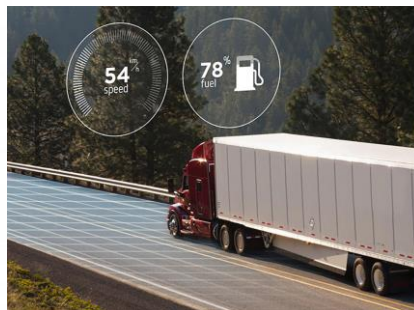
Electric, CNG, LNG, LPG,  
Hydrogen, Bio-Diesel

## Material Technology



Light weighting - HSS,  
Aluminium Composite

## Connected Vehicles



ADAS, Telematics,  
Remote Diagnostics

## Comfort & Safety



AMT, HVAC,  
Airbag

ESG committee formed to enable sustainability governance and reporting





# Sustainability

## Commitment to the community



### Carbon Footprint



#### Renewable energy

60% consumption all India across plants

- Solar park
- Windmill

### Water Conservation



#### Positive Water Balance Index

Verified by DNV-GL in 2019

- > 7L trees planted
- Recharge over twice the consumption

### Promotion of Education



#### Road to School Program

Online teaching, learning and assessments. Social & emotional wellbeing

- 70,000+ Students
- 800+ Schools



### Water, Health & Hygiene



#### Jal Jeevan

Sustainable water management, health and hygiene



*FASTER.  
HIGHER.  
GREATER.*

I. Rock Solid & Resilient

II. Ready for the future





# Mobility undergoing disruptive change



2020

2021-2030

> 2030

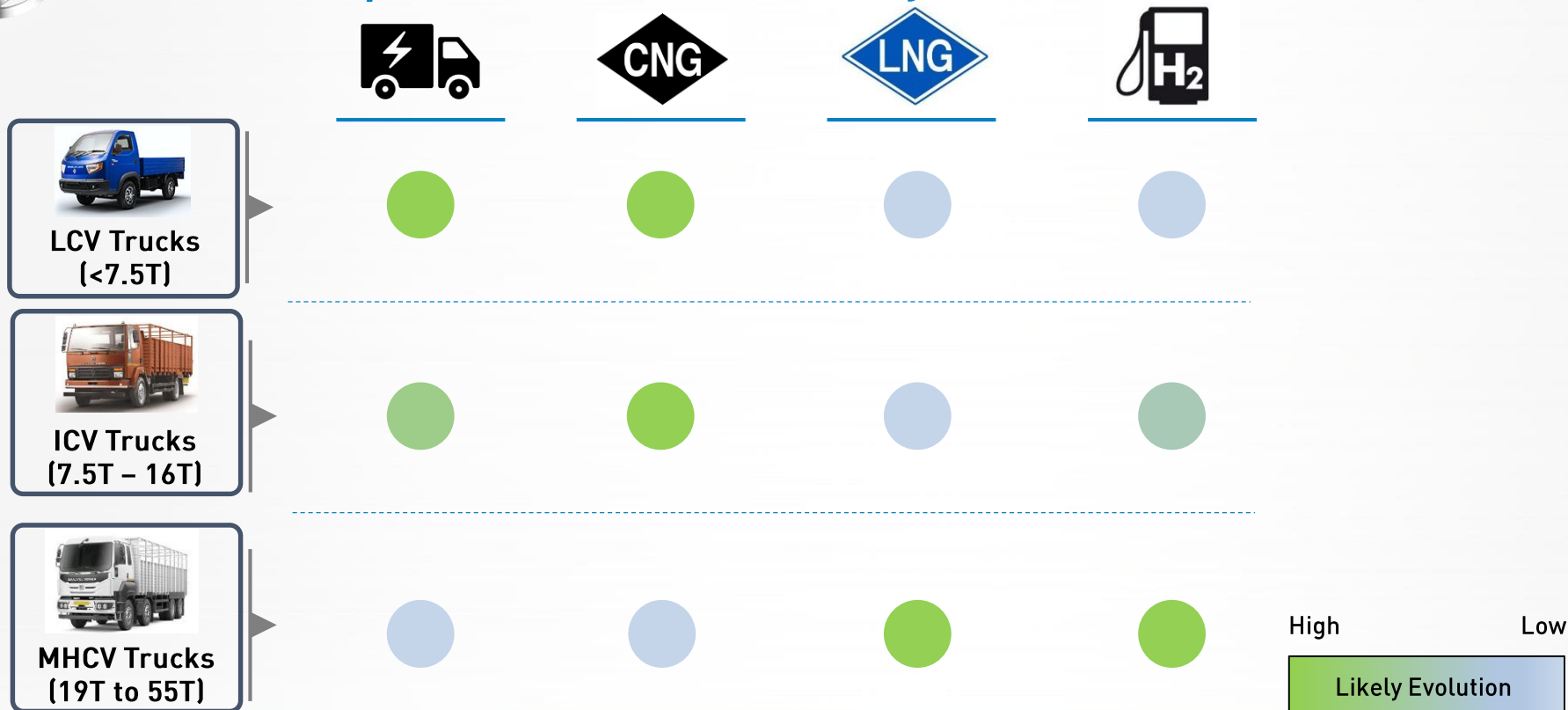


↑ Higher Volumes ↓ Lower Volumes



# Technology Ready – Trucks

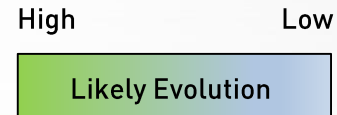
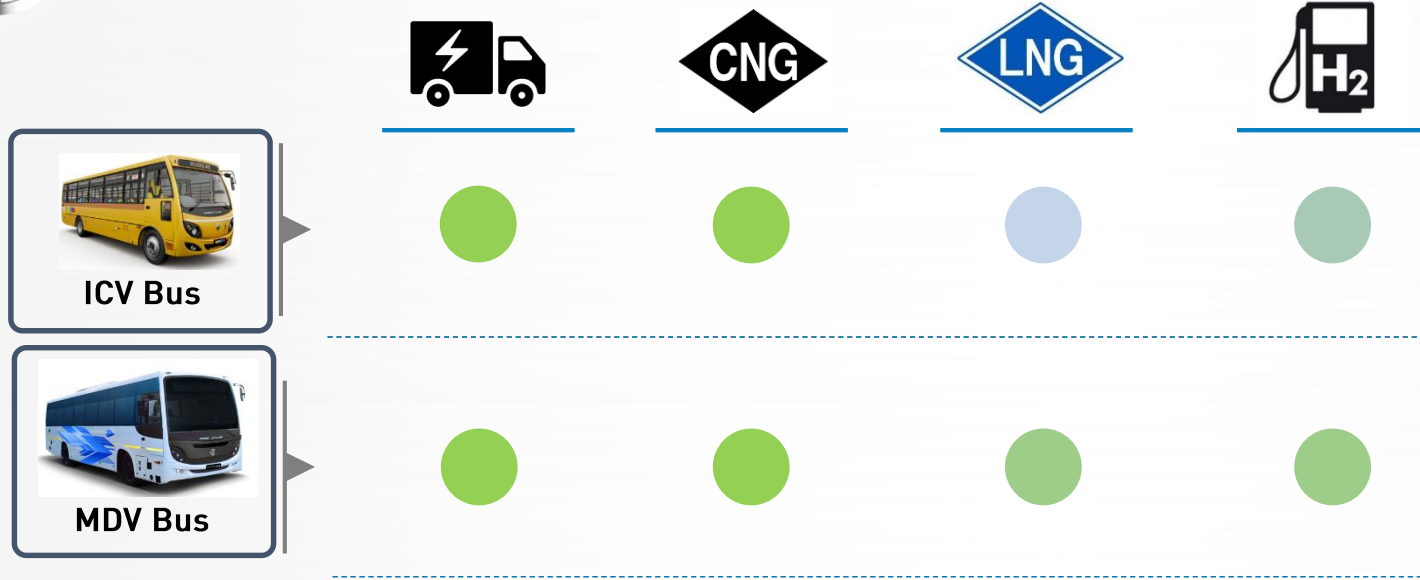
## Alternative powertrains (Next 10 years)





# Technology Ready – Buses

## Alternative Powertrains (Next 10 years)





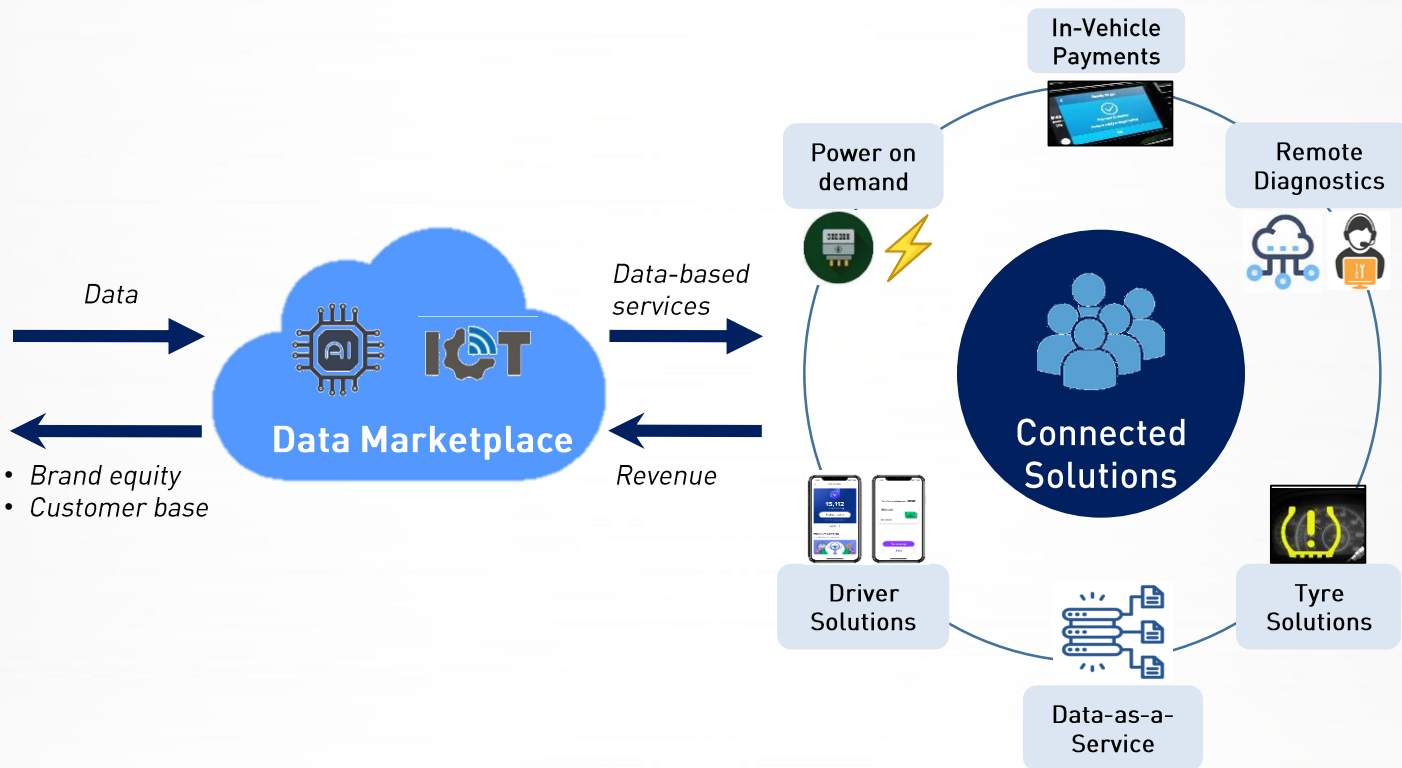
# Building Digital Mobility Ecosystem

## Connected Solutions Marketplace of the Future



**Ecosystem data**

OEMs, Channel partners,  
Customers, Charging  
providers, Govt. bodies,  
Financiers, Insurers,  
Aftermarket, etc.





# SWITCH

*Democratising zero carbon mobility*



## e-LCVs



## e-Buses



- A separate entity : nimble-footed, “Startup characteristics”
- Leverage AL's distribution network, technology capability
- Headquartered @ UK : closer to key EV transition geographies
- Large manufacturing facilities : UK & India as hubs



# SWITCH

## Core value proposition



### PROVEN

- ▶ Established platform - Scalable



### NET ZERO

- ▶ Sustainable practices



### WORLD-CLASS

- ▶ Lowest Total Cost of Ownership (TCO)



### INTELLIGENT

- ▶ Digital native approach







# OHM Global Mobility

## *Enabling faster adoption to EV through e-MaaS*



### Key Differentiators



#### Business Models

Gross-cost Contract (GCC), Battery as a Service, Vehicle as a Service, Vehicle Subscription



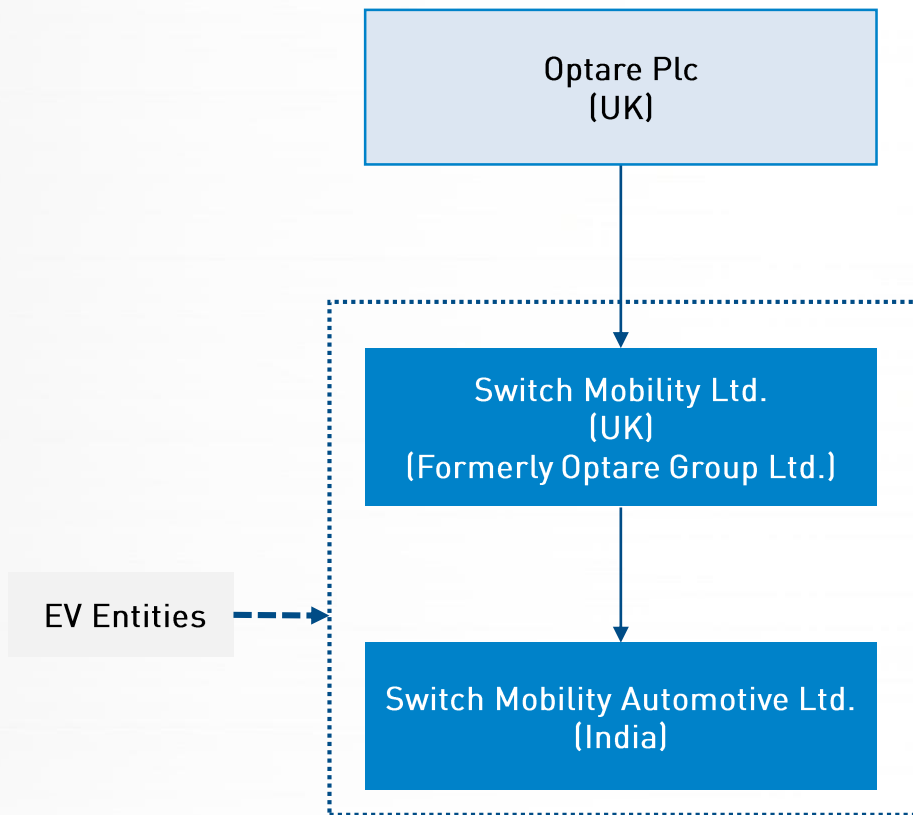
#### Lowest TCO in the Industry



#### End to End Solutions



# Structure of SWITCH



RESPOND  
FASTER

AIM  
HIGHER

FOR A  
GREATER  
ASHOK LEYLAND



**FASTER.  
HIGHER.  
GREATER.**  
**ROCK SOLID & RESILIENT**

**INVESTOR MEET**

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 **ASHOK LEYLAND**

Aapki Jeet. Hamari Jeet.



**THANK YOU!**





INTRODUCING THE NEXT  
**LEADER IN URBAN**  
**ELECTRIC MOBILITY**  
**SWITCH**

Company Introduction

July 2021

## VISION

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Be a global technology leader providing zero carbon commercial mobility products and solutions that creates outstanding value for all our stakeholders

## MISSION

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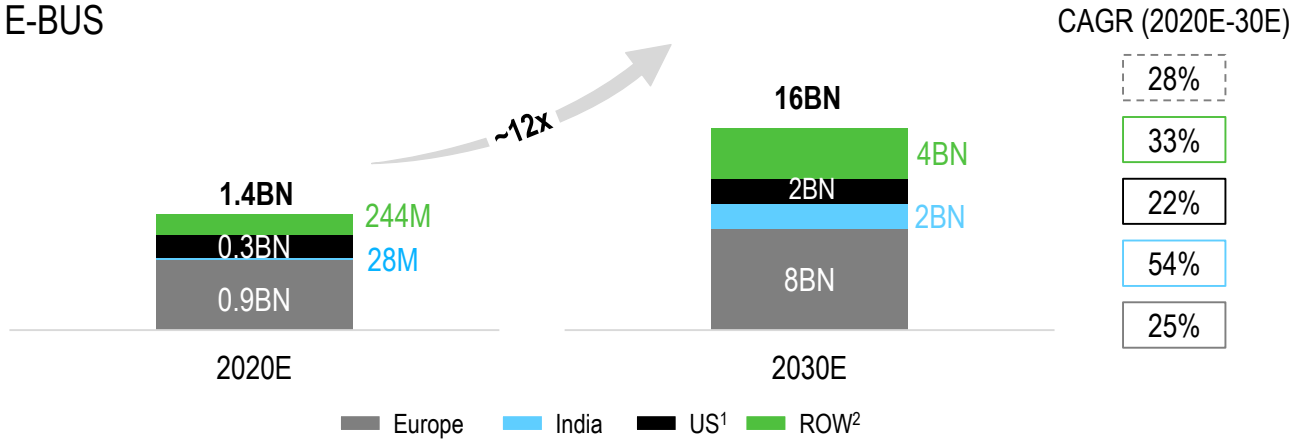
Enriching lives through **green mobility**

- ▶ Empowering our people to be agile, innovative and responsible
- ▶ Intelligently using our technology and data
- ▶ Delivering lowest lifecycle cost products and solutions
- ▶ Ensuring zero impact on the environment

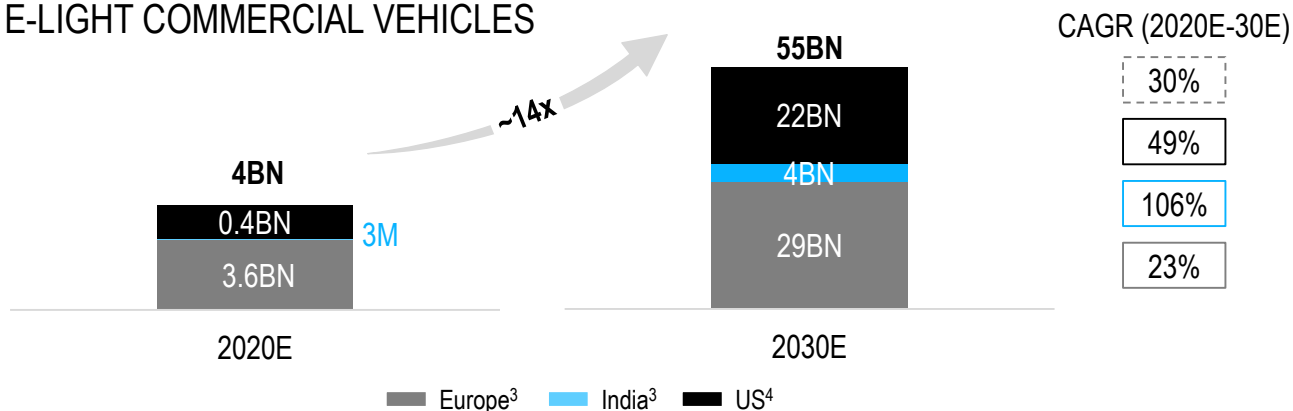
# SWITCH TARGETS A TAM OF GREATER THAN 70 BN USD IN LARGEST AND FASTEST GROWING EV MARKETS

## TOTAL ADDRESSABLE MARKET

### E-BUS



### E-LIGHT COMMERCIAL VEHICLES



Total Addressable Market Excludes China

- Rapid electrification of buses and LCVs
- Favourable regulations
- Government funding support
- Sustainability goals of cities & companies
- Improving cost economics led by batteries

Source: McKinsey, Frost & Sullivan, Company data analysis  
 Note: 1. E-Transit. 2. ROW = Australia, New Zealand, Jakarta, Singapore, S.Africa, Malaysia, Barbados, Bermuda, Mauritius, HK, Nigeria, UAE, Saudi Arabia, Egypt, Qatar, M. East (Egypt, Oman, Kuwait), SAARC (excl. India), Japan, Korea, LATAM 3. E-LCV. 4. E- Medium Duty Trucks.

# CORE VALUE PROPOSITION

1



## PROVEN

- ▶ Proven track record with **280+ EVs** on road in developed & developing markets.
- ▶ Day 1 established platform with global scale

2



## WORLD-CLASS TECHNOLOGY

- ▶ **Lowest Total Cost of Ownership (TCO)** driven by light-weighting technology & vehicle optimization
- ▶ **Unique MaaS offering** e-bus and e-LCV focused ecosystems

3



## INTELLIGENT

- ▶ **Digital native approach** to fleet solutions with all EVs embedded with proprietary telematics platform
- ▶ **2TB of data used each day** to feed digital solutions

4



## NET ZERO

- ▶ **Zero emissions emitted** from vehicles and net zero carbon in all company operations
- ▶ **Sustainable practices** e.g., 2nd life battery partnerships



# SWITCH IS A MATURE SET-UP FUELLED BY INNOVATION AND TECHNOLOGY

With 280+ EVs already on road, >\$130 Mn invested, SWITCH has a strong product line which is technologically advanced as compared to peers

## EVOLUTION OF E- BUS



METROCITY      CIRCUIT      METRODECKER



NEW E-BUS CONCEPT      SOLO CONCEPT

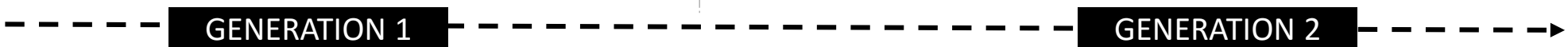
## EVOLUTION OF E- LCV



E-LCV CURRENT



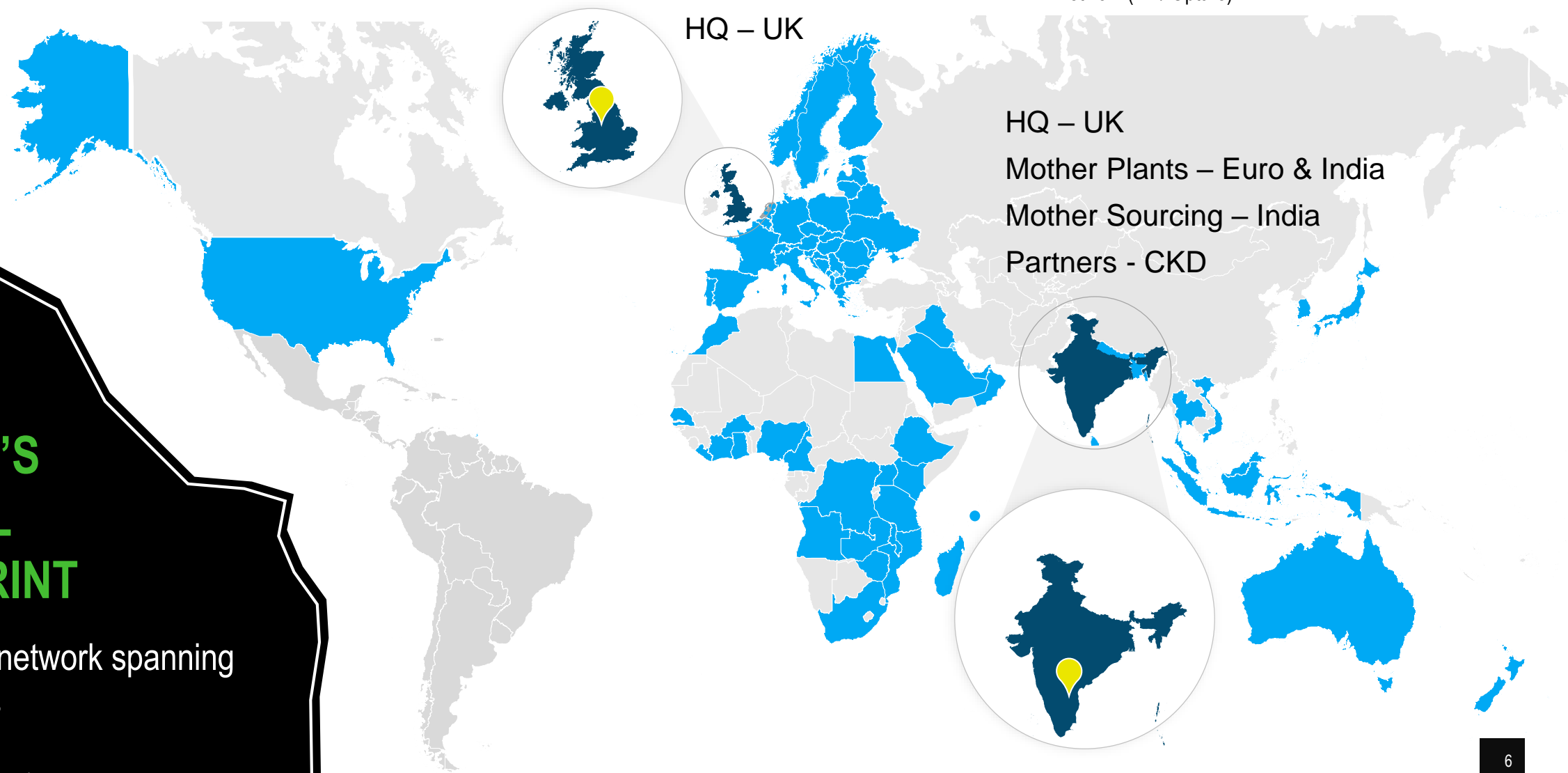
E-TRUCK CONCEPT      E-CREW CONCEPT      E-VAN CONCEPT



Source: Company information.

# SWITCH LEVERAGES AL'S DISTRIBUTION STRENGTH

- Management offices
- Switch's partner dealership network (AL / Optare)
- R&D



**SWITCH'S GLOBAL FOOTPRINT**

Distribution network spanning 50 countries

Source: Company information.

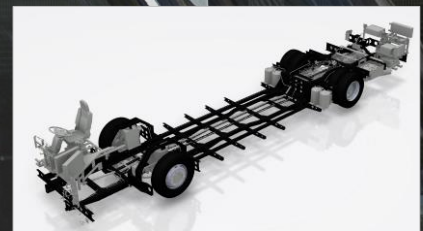
# SWITCH LEVERAGES GLOBAL SCALE TO ACHIEVE LOWEST TCO IN ALL MARKETS



## SWITCH JOURNEY TO **BEST-IN-CLASS TCO**

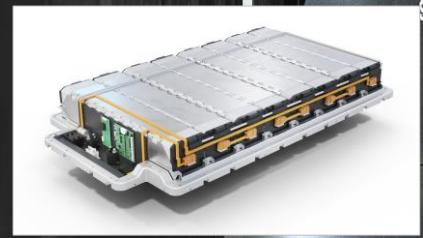
### 1 **STARTING POINT: LIGHT-WEIGHT COMPETITIVE ADVANTAGE**

- ▶ Lighter material (incl. plant based composites) used with semi-monocoque design
- ▶ Efficient battery size and placement configurations



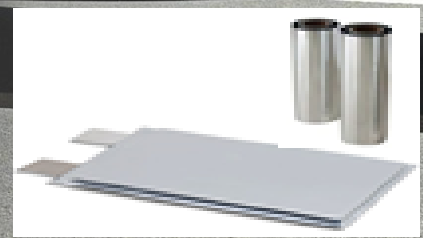
### 2 **COMBINING BEST OF UK & INDIA: MODULAR PLATFORMS**

- ▶ Universal platform across applications & geography
- ▶ Economies of scale and wage
- ▶ Expertise advantage with India-based R&D CoE



### 3 **BEST IN CLASS CELL, BATTERY PACK & BMS:**

- ▶ Strategic cell sourcing from reputed global suppliers
- ▶ Co-develop BMS software with leading partners
- ▶ Design, develop and assemble battery pack



# SWITCH USES DATA IN A 'DIGITAL TWIN' APPROACH TO REDUCE TCO AND CARBON FOOTPRINT

## 'DIGITAL TWIN' APPROACH SIMULATES ROUTES BASED ON DATA

### Vehicle

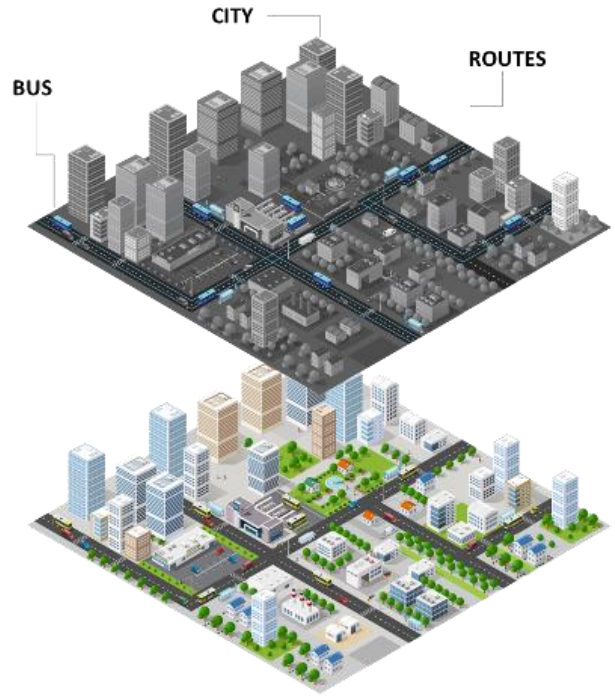
Onboard tracking of EV location, speed, performance, temperature, tire performance, battery and driver performance, occupancy rate

### Route

Digital twin mapping of the EV route, with information on roads, traffic rules

### City

Enrichment of bus and route digital twin data with traffic patterns, weather data, etc.



**THE CITY DIGITAL TWIN LOWERS TCO BY COMBINING BUS AND ROUTE INSIGHTS TO MINIMIZE BATTERIES BY OPTIMIZING BUS OFFERING GIVEN ROUTE REQUIREMENTS**

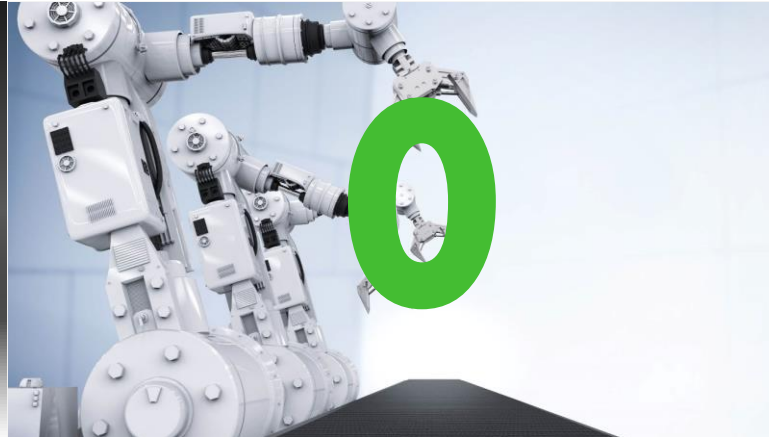


# OUR CARBON EMISSIONS VISION IS BOLD: ZERO, ZERO, ZERO



## ZERO CARBON IN USE

- ▶ 100% zero emission vehicles
- ▶ Green power options with local energy partners
- ▶ Renewables power for MaaS miles with eMaaS entity



## ZERO CARBON OPERATIONS

- ▶ Renewables power all plants and offices
- ▶ Carbon free logistics powered by fossil-free fuels
- ▶ Use of BEV service fleet



## ZERO CARBON SUPPLY CHAIN

- ▶ All emissions abated from incoming materials, e.g., fossil-free steel
- ▶ End-of-life recycling of vehicles and partnerships for 2<sup>nd</sup> life battery usage

OHIM



# **OHM Global Mobility**

**ACCELERATING ZERO CARBON MOBILITY**



## ACCELERATING ZERO CARBON MOBILITY

## VISION

Be a leading mobility services provider enabling access to zero carbon commercial mobility products and solutions that creates outstanding value for all our stakeholders

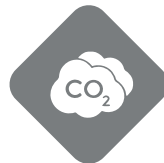
## MISSION

Enriching lives through accelerating **green mobility**

- ▶ Empowering our people to be agile, driven and responsible
- ▶ Offering innovative and customer centric service models
- ▶ Deploying fully integrated portfolio of services
- ▶ Ensuring lowest lifecycle cost for our services



**Electrifying  
Public and Freight  
Mobility**



**Zero Emissions**



**Zero Capital –  
OPEX based  
Business Model**

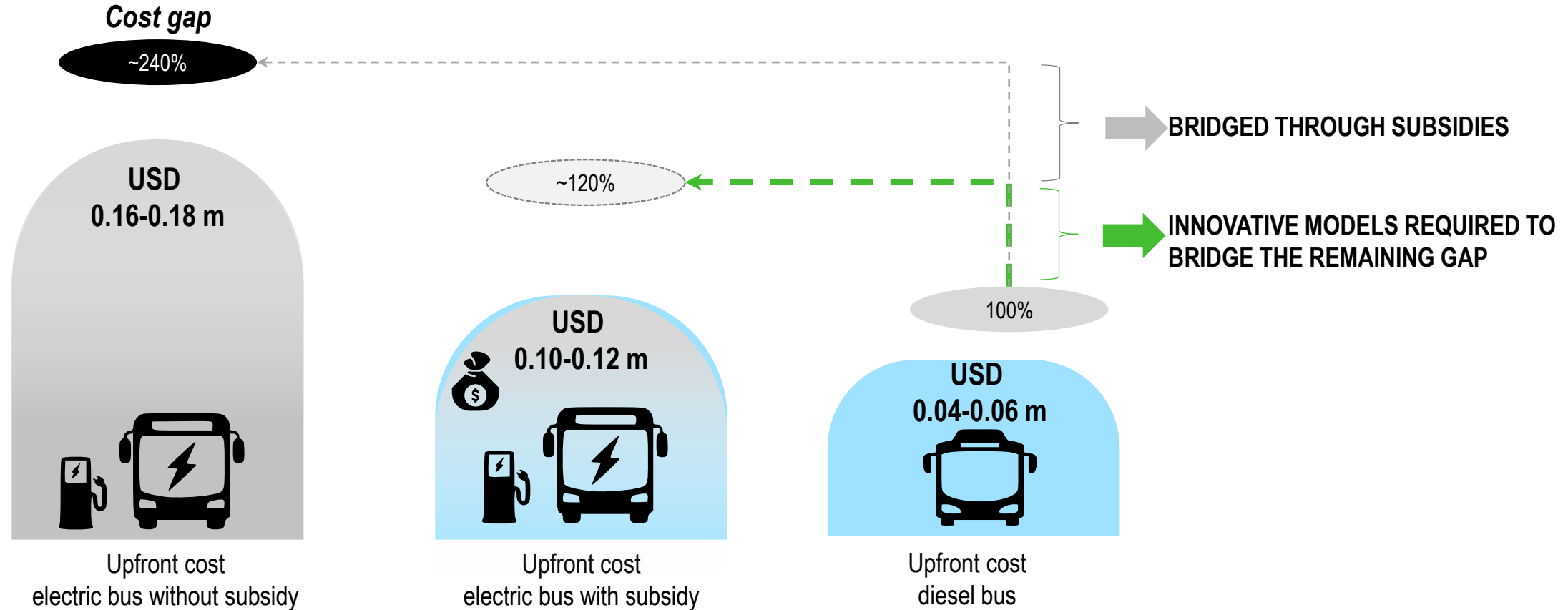


**Vehicle Lifecycle  
Management**



**Advanced Digital,  
Connected and  
Energy Services**

# INNOVATIVE PAY-AS-YOU-USE MOBILITY-AS-SERVICE MODELS ARE CRITICAL TO ENABLE UPTAKE OF ELECTRIC CVS



- ICE\* diesel bus today costs about one-third of electric bus
- Subsidies still do not bridge the gap between ownership
- Parity can only be achieved through vehicle lifecycle management

\*Basis ICE Bus price, subsidy in India

Source: Company information.

# OHM GLOBAL MOBILITY PROVIDES CUSTOMISED AND CONNECTED MOBILITY SOLUTIONS, BASED ON LOWEST TCO PROPOSITION



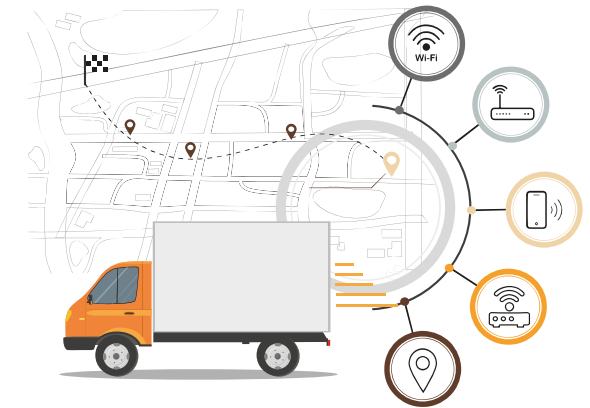
**1** CUSTOMIZED BUSINESS MODELS FOR DIFFERENT CUSTOMER ARCHETYPES



**2** LOWEST TCO PROPOSITION IN THE INDUSTRY

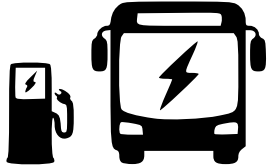


**3** DRIVEN BY SUCCESSFUL E-MAAS EXPERIENCE IN INDIA



**4** CONNECTED, INTELLIGENT AND SUSTAINABLE PLATFORM

# CUSTOMIZED BUSINESS MODELS – FLEXIBLE AND CUSTOMER-CENTRIC



**Gross-cost Contract  
(GCC) = State Bus  
Transport Operators**



**Battery as a Service  
= Bus Fleet  
Operators**



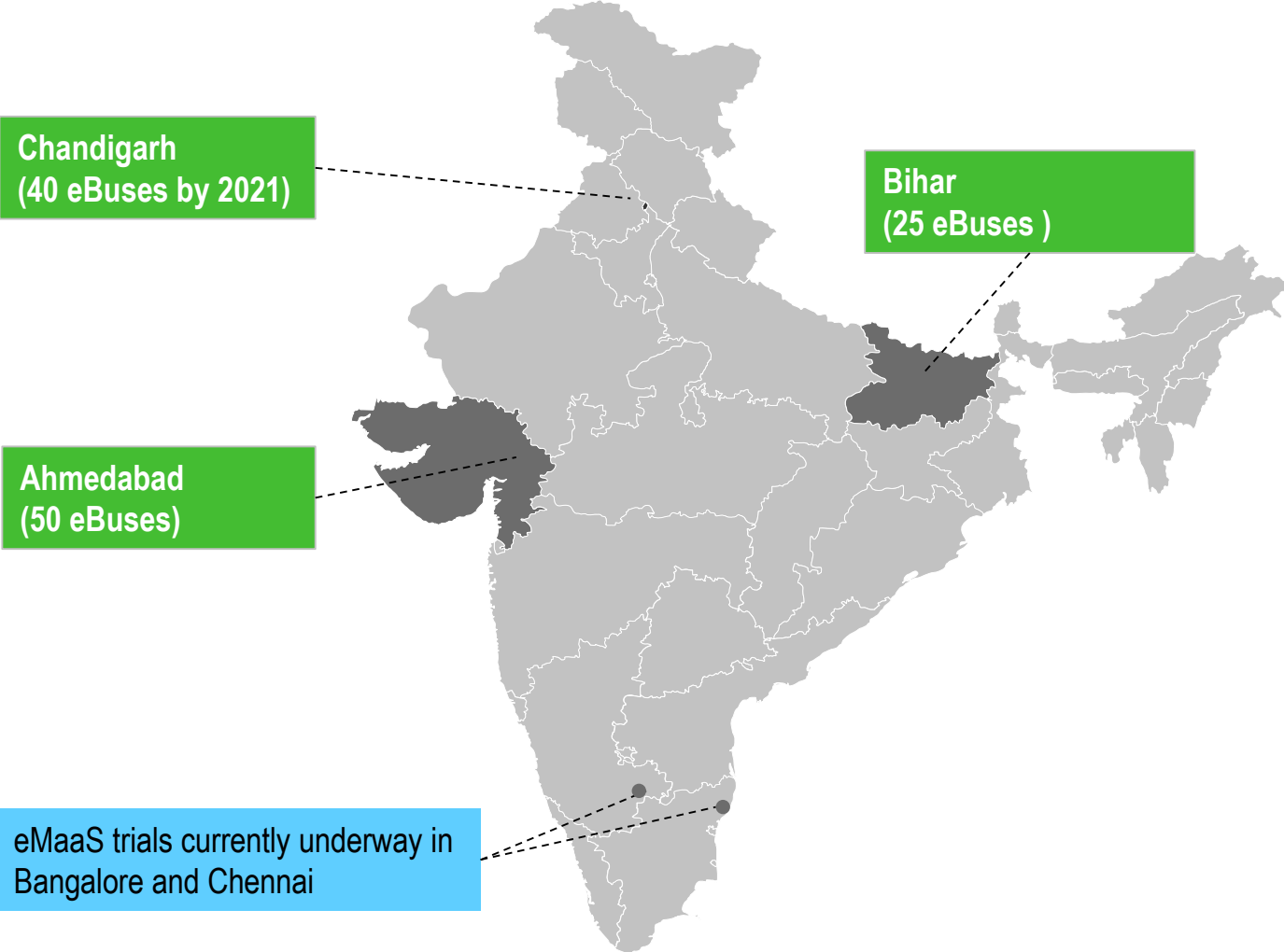
**Vehicle as a Service  
= Large LCV Fleets**







**Vehicle Subscription  
= SME Green LCV  
Fleets**

# OVER 2 MN. EMAAS BASED ELECTRIC MILES CLOCKED IN INDIA

Over 2 MN. Electric Miles Already Covered Across 3 Cities

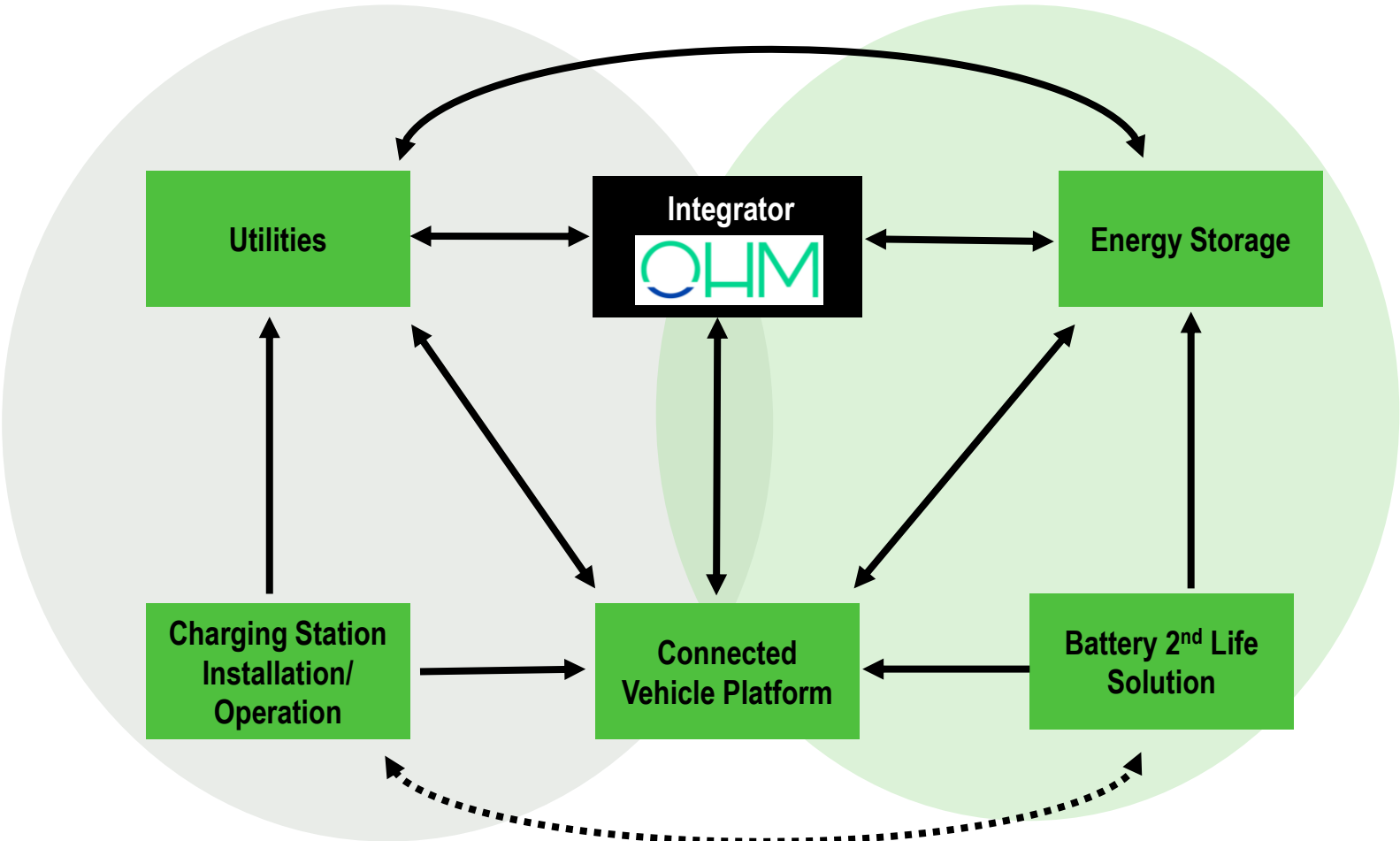











-  Route And Schedule Planning
-  Bus Operations
-  Charging Planning And Operations
-  Operational Planning And Monitoring

Source: Company information.

Source: company data, Frost & Sullivan

# INTEGRATOR MODEL: CONNECTED, INTELLIGENT AND SUSTAINABLE PLATFORM



	Business Model	Integrator
	Offering e-vehicle	✓
	Installation / operation charging station	✓
	Battery and Services	✓
	Sale of Energy (in partnership with utilities)	✓
	Value-Added Services (load balancing, V2G)	✓
	Energy Management & Storage Solution	✓
	Fast-charging solution	✓
	Connected Intelligent Fleet Management Solution	✓
	Battery 2 <sup>nd</sup> Life	✓

Source: Company information.

# WE ARE REVOLUTIONIZING COMMERCIAL E-MOBILITY



Complete Freedom of Vehicle Design



Modular Battery Configuration



Low Cost Sourcing & Manufacturing



Digital native approach for Smart Cities



Unique Mobility as a Service Offering



Digital Fleet Management Services



Integrated Energy Offering



OPEX based ownership solution



Asset Life cycle management



280+ EVs already on the road across the Globe