Introducing the next

Leader in urban electric mobility

SWITCH

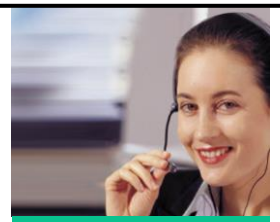
MOVE BETTER

The Hinduja Footprint

Automotive

Oil & Specialty Chemicals

Banking & Finance


Information Technology

Power

Cybersecurity

Media

Real Estate

Healthcare

HINDUJA GROUP

Project Development

Trading

A **diversified transnational conglomerate** founded over 100 years ago

Multi-billion dollar turnover

Presence across **11 industry verticals**

Employing over **200,000 personnel** with direct presence in 38 countries

Parentage with a Strong Legacy in Auto Sector

ASHOK LEYLAND

Aapki Jeet. Hamari Jeet.

- Founded in 1948. **Flagship Company of Hinduja group**, professionally managed & backed by a **strong legacy of Innovations**
- **Largest bus manufacturer in India and the 4th largest global bus manufacturer**
- **2nd largest manufacturer of commercial vehicles in India**
- Business portfolio across Trucks, Buses, LCV's, Defense and Power Solutions with footprint across 50 countries
- **Largest single model Defense logistics fleet in the world**. Fleet strength of over 70,000 with the Indian Armed Force

Optare

- Subsidiary of Ashok Leyland, founded in 1985.
- **Leading player in the electric bus sector with premium range of city buses**
- **Footprints in the U.K, Middle East, Australia and New Zealand**
- **First OEM to launch EV bus in 2009**
- **First British OEM to launch eBus in London in 2014**
- **3rd largest OEM by market share in the UK**

World Class Leadership Team - Extensive Mobility Experience

Board of Directors

Dheeraj Hinduja
Executive Chairman

Jose Maria Alapont
Independent Non-Executive Director

Dr. Miranda Brawn
Independent Non-Executive Director

Dr. Venkat Sumantran
Non-Executive Director

Shom Hinduja
Non-Executive Director

Diane Moore
Independent Non-Executive Director

Mahesh Babu
Global CEO and Executive Director

SWITCH

DEMOCRATISING ZERO CARBON MOBILITY

VISION

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

MISSION

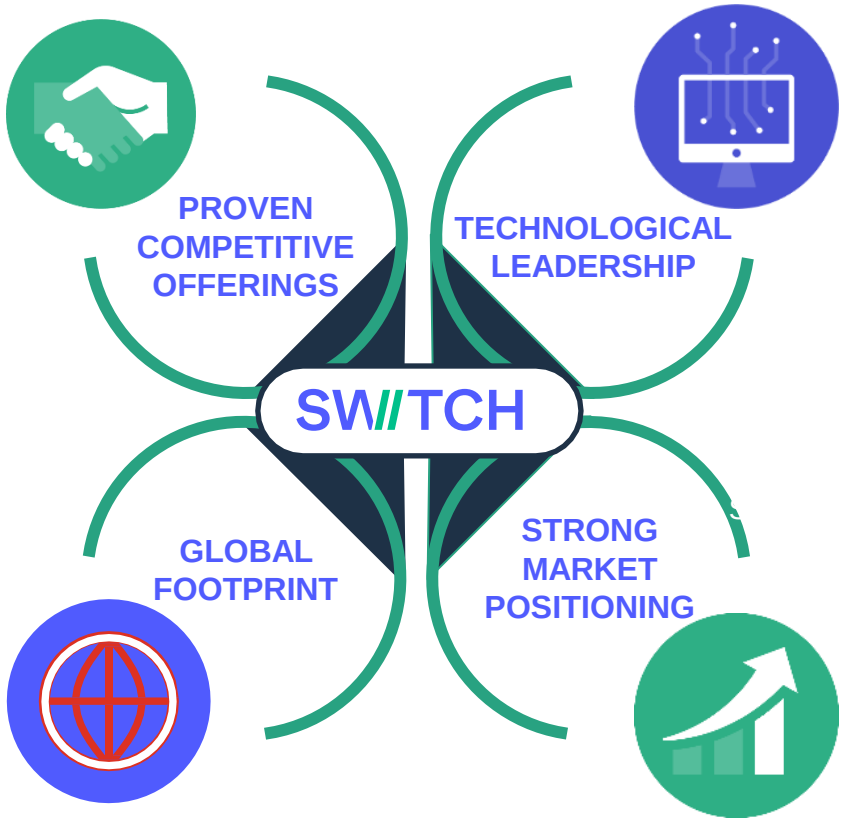
Enriching lives through green mobility

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

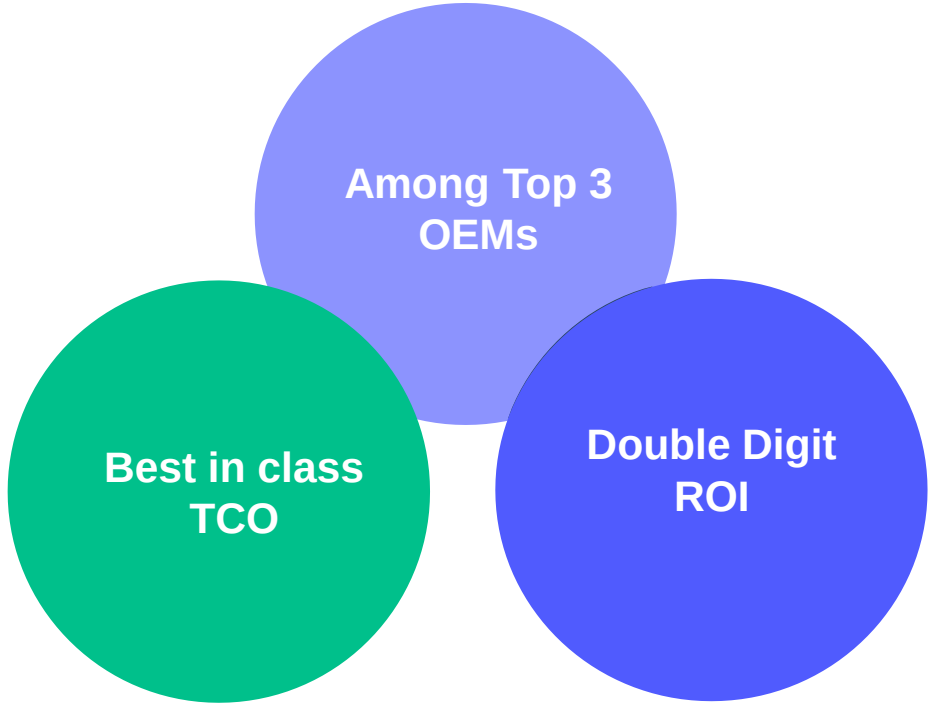
Why SWITCH Mobility?

*A unique advantage of having of an optimum mix of **Proven Platforms, Footprint, Technology and Manpower***

WHAT WE HAVE?



WHAT WE TARGET?

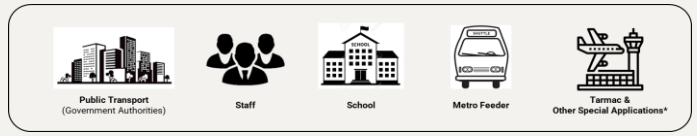


A comprehensive product offering developed with strong SWITCH underpinnings of **Modularity, Modernity and Efficiency**

World Class products with underpinnings of…

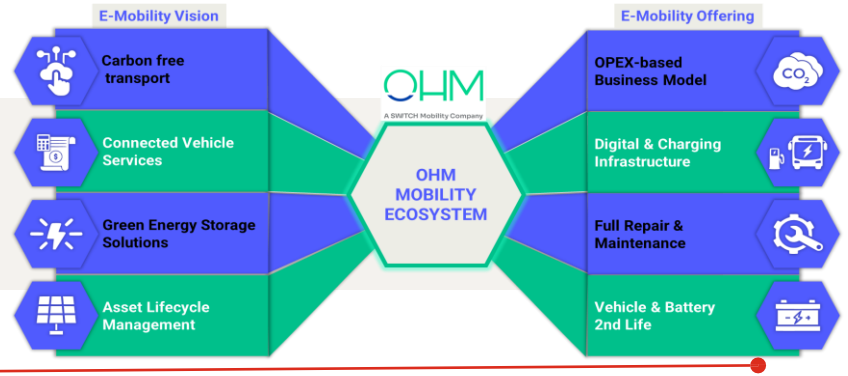
- All new platforms (Light weight and modern)
- Built to last
- Modular Architecture
- Max Efficiency
- Comprehensive Battery strategy
- Favorable TCO

+ BUSES IN MULTIPLE APPLICATIONS



+ FULL RANGE LIGHT VEHICLES (0-7.5T)

+ INNOVATIVE BUSINESS MODEL



Proven and Reliable performance (98% Uptime)

// 550+ buses already on road across India & UK covering a combined 56 Mn+ green KMs

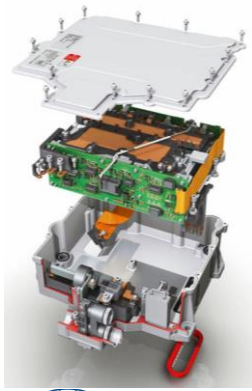
India

- **300+ buses** (9m/ 12m buses) on road already covered **16Mn+ green KMs** in India across 5 cities – Ahmedabad, Chandigarh, Patna, Bangalore & Mumbai
- Highly reliable: **98%+ uptime**

UK

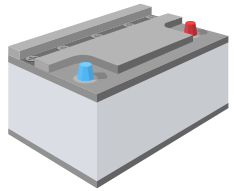
- **250 buses** on road including iconic double decker buses in London
- **40 Mn+ green KMs** covered till date

Battery Strategy - *In-house development and assembly of battery pack to offer significant cost advantage*

COMPONENT		LEVER	SWITCH STRATEGY
	BATTERY CELLS	**Competitively source cells centrally**	► Source lowest cost cells centrally from best-in-class cost country
	BATTERY PACK	**Best in class design for manufacture, with global purchasing of cells**	► Work with an established partner ► Reduced lead-time to market ► Proven manufacturing and quality process
	BATTERY MANAGEMENT SYSTEM	**Proprietary BMS software**	► To develop 1st generation of BMS Software with leading supplier ► Make 2nd and 3rd generation in-house based on learnings from 1st generation
	**EV POWER ELECTRONICS** **E-DRIVE / E-AXLE** **E-BUS FRAME & STRUCTURE, OTHERS**[1]	Move to **best-in-class sourcing in lowest cost countries**	► Optimize sourcing from global suppliers and lowest cost country ► Open to partnerships with non-competitive OEMs to jointly purchase key components

COST ADVANTAGES

As compared to a non-commonised platform



~3.5%

Average cost decrease for an e-bus for battery pack in-sourcing

~0.5%+ more range

Decrease in cost for an e-bus based on 30% savings in BMS and increased range through more efficient battery

up to 5%

Decrease in e-bus costs based on additional design changes and sourcing in low-cost countries

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1. All other bus components/systems including, e.g., AC systems, cabin heaters, seats/interior content, non-EV electronics components, thermal mgmt. system and lighting, and chassis systems (steering, braking, wheels / tires, etc.)

SWITCH iON | A proprietary, connected technology solutions with 100+ connectivity features

Fleet Management System
- Trip management
- Route management
- Driver scheduling
- Trip performance monitoring
- Trip based analytics
- Spares/inventory planning

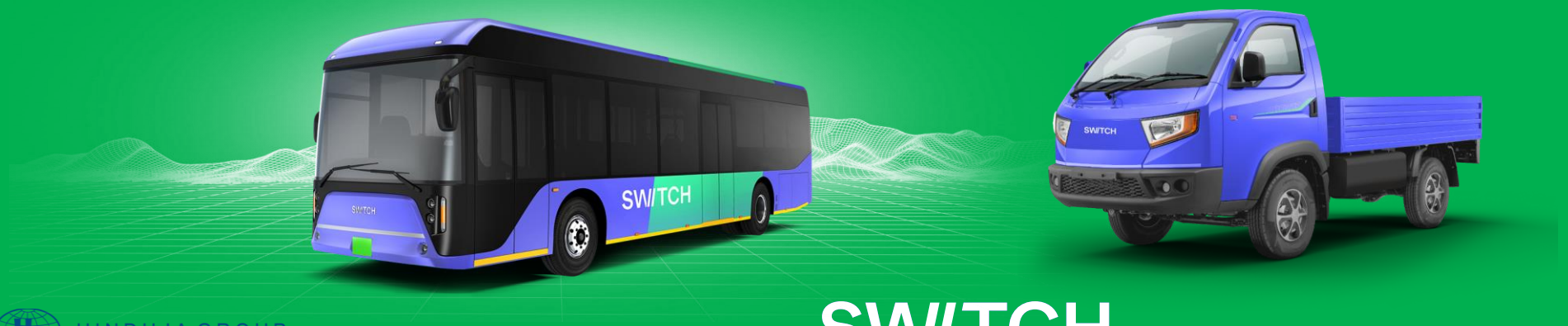
Vehicle Location Services
- Vehicle tracking
- Vehicle trace
- Trend view
- Vehicle utilization
- Critical health alerts
- Geofence features

Driver Leader Dashboard
- Driver coaching app
- Driver scoring
- Driver feedback module
- Trips scheduling
- Driver club

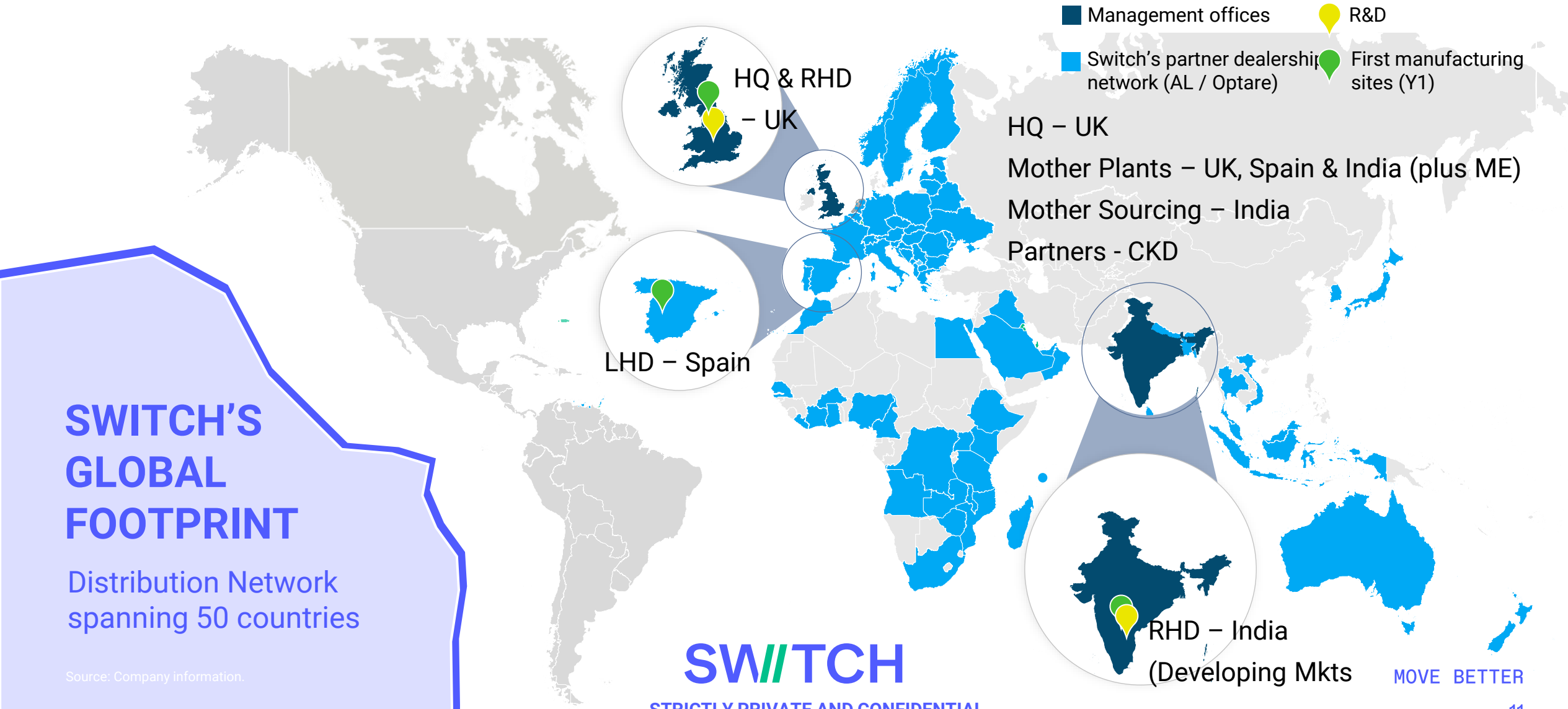
Advanced Driver Assistance Systems
- Adaptive cruise control
- Frontal collision
- Lane departure
- Blind spot detection
- Crash detection

Uptime Solutions
- Assistance from USC
- FOTA
- Remote diagnostics
- Scheduled diagnostics
- Prognostic alerts
- BLE based diagnostics

Battery Management
- Live charging view
- Live anomaly alerts
- Battery performance analytics
- Battery health
- Enhancement
- Battery charge reports
- Charge slot booking
- Chiller Temperature monitoring



Global operating footprint *with manufacturing facilities in 3 countries and a distribution network spanning 50 countries*



SWITCH'S GLOBAL FOOTPRINT

Distribution Network spanning 50 countries

Source: Company information.

SWITCH

MOVE BETTER

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Why Switch Buses?

Max Comfort

Full Air suspension
High head rest & Reclinable seating
Silent Saloon (AC Bus)
Stowage / Wifi and Reading Lights

Max Convenience

300/400mm Low floor
Wide Doors (for ease of entry & exit)
Maximum flat floor
Ergonomically designed seating

Max Customization

Buses for every application
City Bus, Staff Bus, School bus
Intercity / Coach, Tarmac

Max Efficiency

Lowest Energy consumption delivered by
Monocoque platforms (for Western markets) and Traditional Platforms (for India) using light weight materials, Advanced Battery solutions, Integrated aggregates and Aerodynamic styling

Max Range

12M - upto 500Km daily
9M – upto 250Km daily
Small buses - upto 150km daily
Delivered by
Lower energy consumption and Opportunity charging

Favorable TCO

Lowest TCO delivered by
Built to last 12+ years life
Longer 4000+cycles Battery
Best in class Daily operation Range

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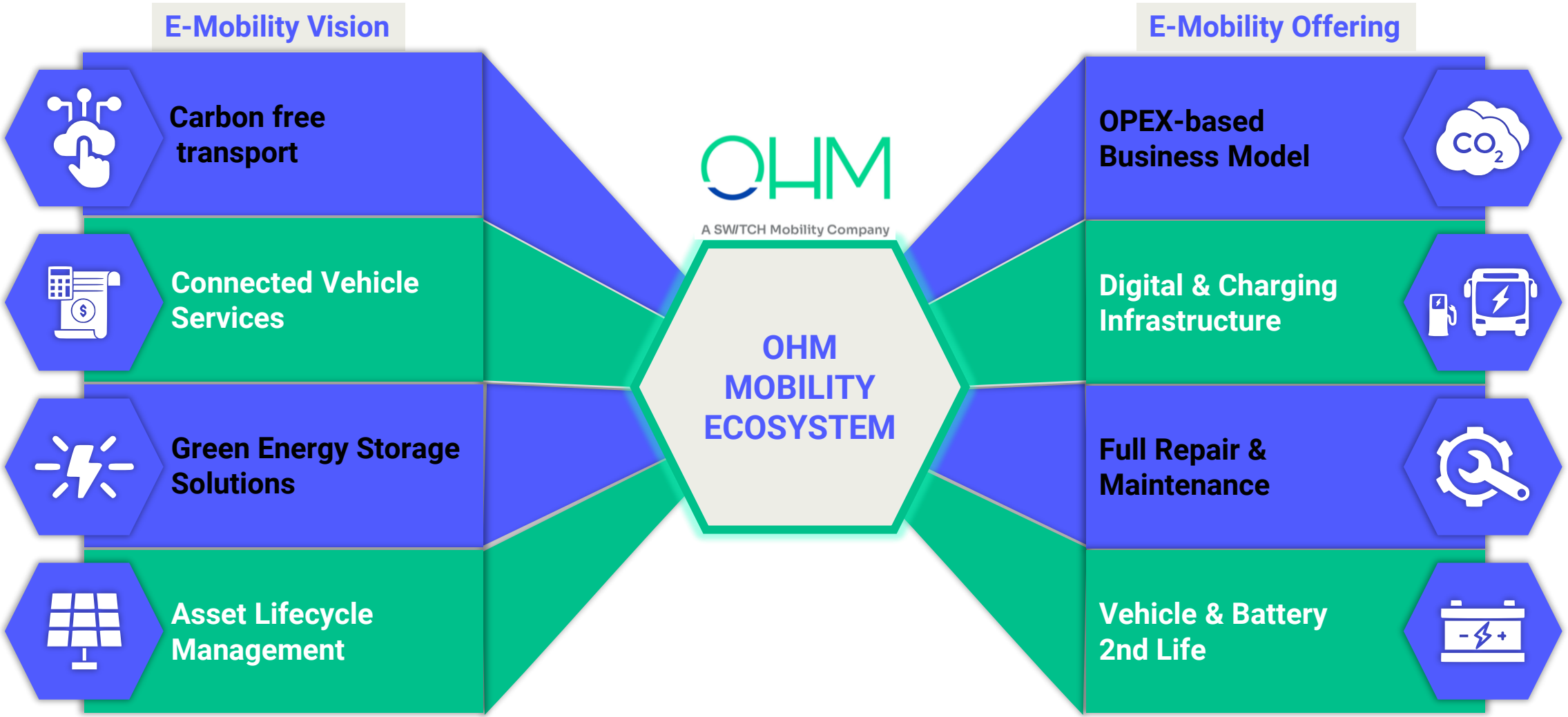
Why Switch Light Vehicles?

What we offer?	How we deliver?
LOW LOADING HEIGHT — "Ease of Loading and Unloading"	400MM LOW BED FLOOR
FLEXIBLE BODY DESIGN — "Multiple Body Type configurations"	FIXED DECK/ PANEL VAN
wxhxd MAX CARGO SPACE — "BIC Cargo deck length + BIC Cargo Volume"	UPTO 650 CU.FT OF CARGO SPACE

What we offer?	How we deliver?
TURNAROUND TIME — "Unparalleled Pick up / performance"	FASTEST UPTO 80 KMPH MAX ACCELERATION FAST CHARGING
DURABLE — "Proven and Robust Platforms"	ROBUST BUILD QUALITY TO PERFORM UNDER DEMANDING LOCAL MARKET CONDITIONS
CONNECTED — "SWITCH iON for real time diagnostics"	100+ CONNECTED FEATURES

OHM Global Mobility will provide a pioneering full suite of integrated vehicle services gaining first mover advantage



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OHM Global Mobility provides customised and connected mobility solutions, based on lowest TCO propositions

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