



Safety, Security And **Restraint System**

Minda Corporation Limited

(NSE: MINDACORP; BSE: 538962)

Analyst and Investor Day Presentation

28th February 2019

Interior System















Instrument Clusters

Sensors

Wiring Harness

Door Handles

Starter Motors

AI & Zn Cutting Parts

Plastic Component



- Strategic Overview
- Business Overview and Financials
- Marketing and Technology





"Transform and Rise"







Mechanical

Automotive Mechatronics

'Minda Corporation' at a Glance





Founded by Late Sh. S.L. Minda



- Safety and Security
- Driver Information and Telematics
- Interior Plastic
- Aftermarket



No of Plants:

- India: 28
- Europe: 3
- South East Asia: 2
- North America: 1



FY2017-18 Turnover (Inc JV's)



Total No. of Employees

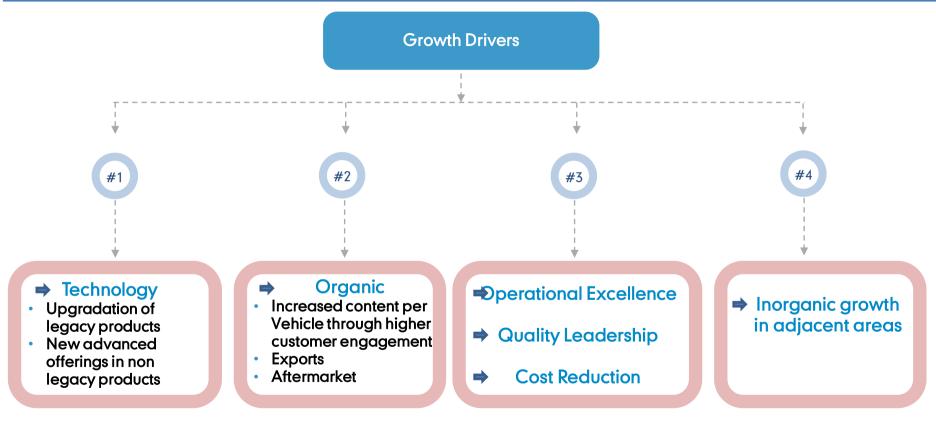


Market Capitalization

Minda Corporation is a leading automotive component supplier to Indian and Global OEM's

Strategic Focus – Growth Drivers











- Strategic Overview
- Business Overview and Financials
- Marketing and Technology

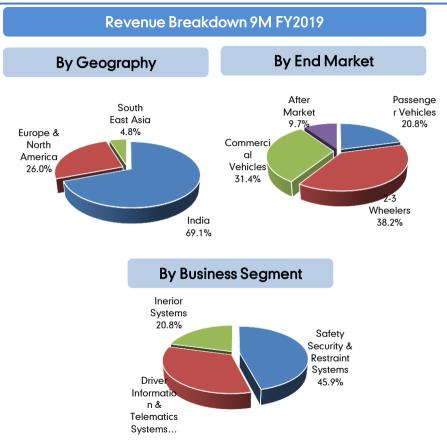


One of India's Leading Automotive Component Companies with Global Footprint



Diversified product portfolio, global customers, strong manufacturing, and advanced R&D with six decades of automotive experience

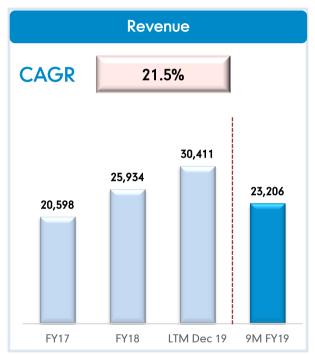
Revenue*	Rs. 25,934 mn (FY2018)
Business Verticals	 Safety, Security & Restraint System Driver Information & Telematics System Interior System Aftermarket
Key Customers	Ashok Leyland, Bajaj Auto, CNH, Daimler, Hero Moto Corp, , Honda Motorcycle and Scooter India, Mahindra & Mahindra, Maruti Suzuki, Suzuki Motorcycle, TVS Motor, Tata Motors, VE Commercial Vehicles, Volkswagen, Yamaha Motor
Manufacturing Facilities	34 Manufacturing facilities strategically located globally providing support to OEMs
R&D Capabilities	Advanced Engineering Centre of Electronics & Mechatronics in Pune and multiple specialised R&D Centre across India
Market Capitalisation (as of 31st December 2018)	Approx. Rs. 33,500 mn

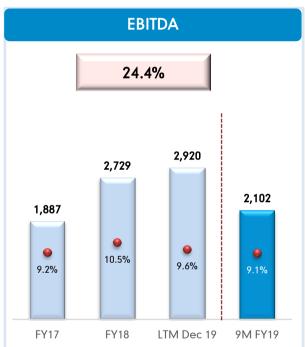


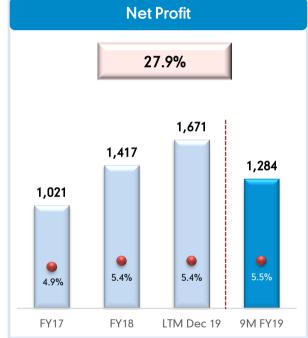
Robust Growth



Rs. mn







Notes:

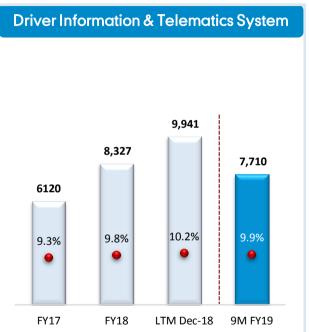
- Revenue including Minda Corp Subsidiaries and Joint Ventures for LTM Dec 19 is Rs. 41,592 million
- IND-AS are applicable to Minda Corporation from 1st April 2017 with transition date of 1st April 2016

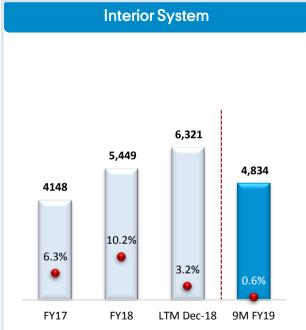
Business Vertical Performance



Rs. mn





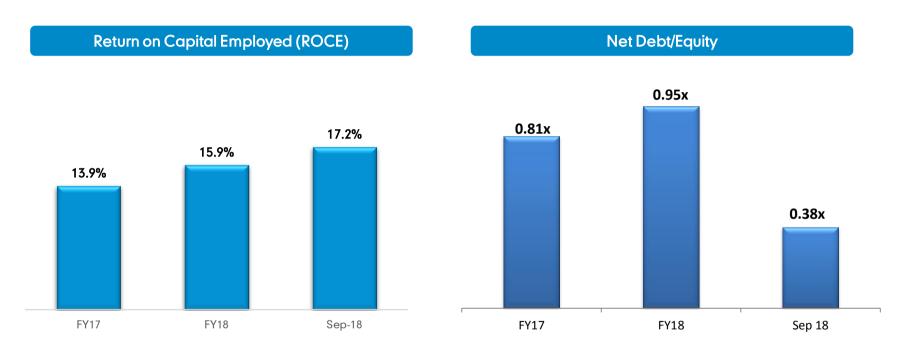


Notes:

- 1. IND-AS are applicable to Minda Corporation from 1st April 2017 with transition date of 1st April 2016
- 2. The above are indicative figures

Strong Balance Sheet with Steady Returns





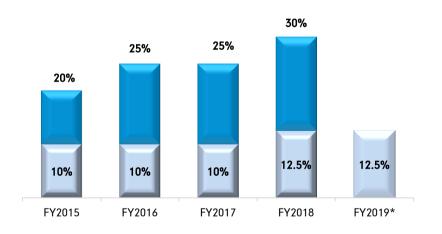
Note:

• IND-AS are applicable to Minda Corporation from 1st April 2017 with transition date of 1st April 2016

Consistent Dividend Payout and Ratings Upgrade



Consistent Dividend Payout



Minda Corp Long Term Credit rating upgraded by two rating agencies in current financial year









Interim Dividend



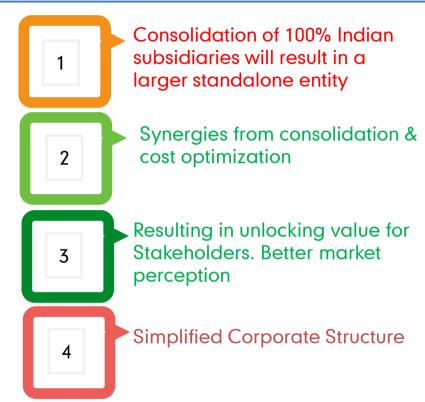
Scheme of Merger



Scheme of Merger of Domestic subsidiaries (WoS)



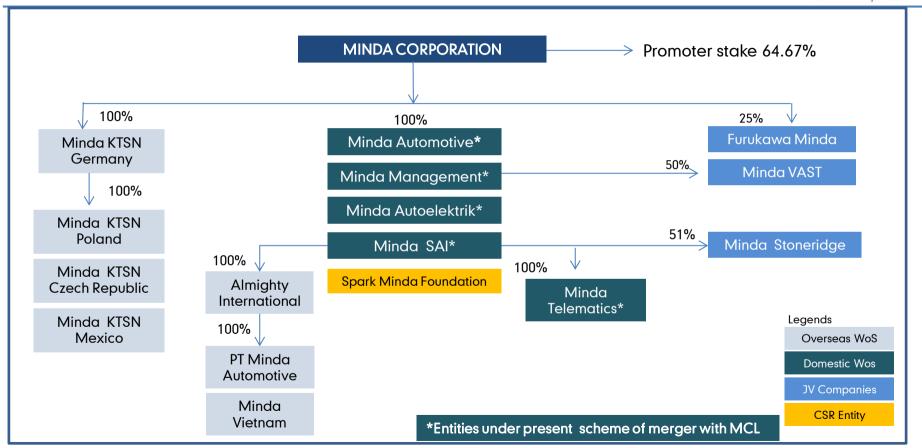
- The Company has filed the Scheme of merger with NCLT Delhi and Bengaluru for merger of domestic wholly owned subsidiaries (WoS) into Minda Corporation (MCL)
- Entities to be merged into MCL are:
 - Minda Management Services Ltd.
 - Minda Sai Ltd.
 - Minda Automotive Solutions Ltd.
 - Minda Autoelektrik Ltd.
 - Minda Telematics and Electric Mobility Solutions Pvt. Ltd.



Present scheme of merger will not result in expansion of equity capital or change in shareholding pattern of MCL

Current Group Operating Structure







Minda KTSN Europe



European Auto Industry Facing Challenges

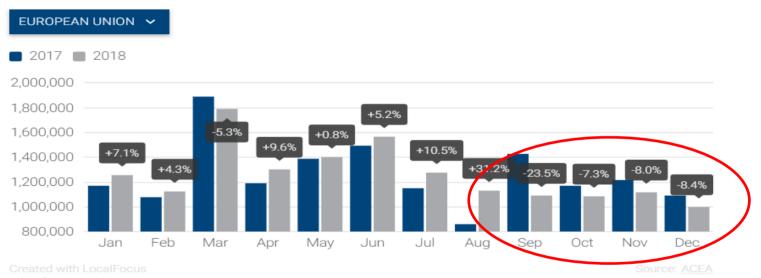


EU Car Registrations down Month on Month

New passenger car registrations in the EU

12 month trend





In December 2018, the EU passenger car market declined for the fourth month in a row. Last month registrations fell by 8.4%, continuing the downward trend that started with the introduction of WLTP in September. With the exception of Italy (+2.0%), all major EU markets saw demand for cars contract during the last month of the year.

Minda KTSN Europe



Snapshot

- Manufactures Interior Plastic Products-Cupholder, Glovebox, steering column shrouds etc.
- Marquee Customers including VW, Audi, BMW, Daimler, Porsche and Tier 1 suppliers

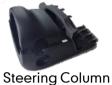
Challenges

- Impacted by WLTP emission norms, general Industry slowdown, customer concentration
- High Breakeven point, Increasing input cost, constraint in passing on raw material cost to customer

Countermeasures

- To diversify Customer base
- Focus on cost reduction program
- Converting fixed cost to variable/semivariable
- Strengthening the management team

Minda KTSN Product Portfolio





Cup Holder







Seat Panel









- Strategic Overview
- Business Overview and Financials
- Marketing and Technology



Diversified Customer Portfolio





Growth Factors / Key Focus Areas / Inorganic

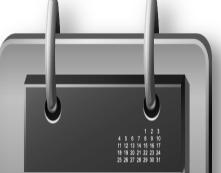




- Premiumization
- Increased focus on Export & after market
- Increasing content per vehicle
- Increase in market share



- Shift from component to module/ system supplier
- Adapting the changeover from existing technology to the new technology
- Integration with EV and automated vehicles



- Electronification
- KAM for better account acquisition & penetration
- Early supplier engagement for upcoming tech.
- Leverage JV Partners' technology strength



Guiding Force - Automotive Mission Plan 2026



AMP 2026 envisages a 3 – 3.5x growth in volumes over its tenure

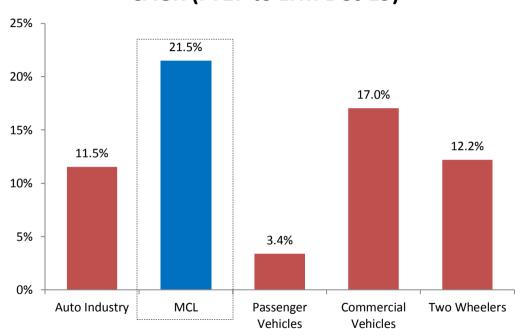
Figures in million units

Category-wise projections of production		Base case	Optimistic case
Category type	FY 2015	FY 2026	FY 2026
Passenger Vehicles	3.2	9.4	13.4
Commercial Vehicles	0.7	2.0	3.9
Two wheelers	18.5	50.6	55.5
Three wheelers	0.95	2.8	3.0
Tractors	0.6	1.5	1.7
Total	23.4	66.3	75.8

Outperforming the Industry Growth







- Consistently outperformed industry growth over the years through
 - New products in existing customers
 - New customers with existing products
 - New customers with new products
- Export remained a focus area over the past few years. In Aluminium die casting, added major European Tier 1s
- Entry into Starter Motor & Alternators and Telematics through inorganic route
- Entry into Sensor business

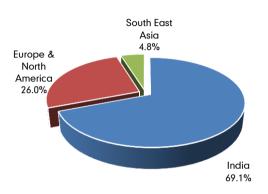
Note:

- 1. MCL Business value
- 2. Auto Industry, PV, CV, 2W Production volume

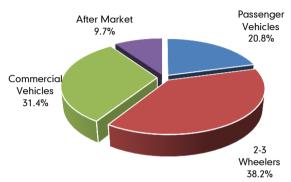
Revenue Breakdown 9M FY2019



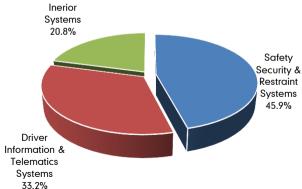
By Geography



By End Market

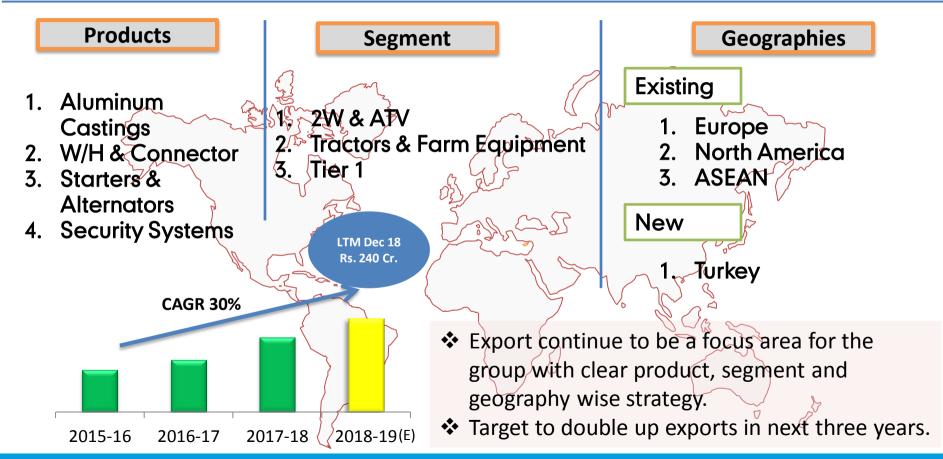


By Business Segment



Exports Long Term Focus





Current Market Position – Domestic





Market Leader in India for Locksets in 2W segment (>30% Market Share)



Market Leader for Wiring Harness in CV, 2W and Tractor segment in India (>30% Market Share each)



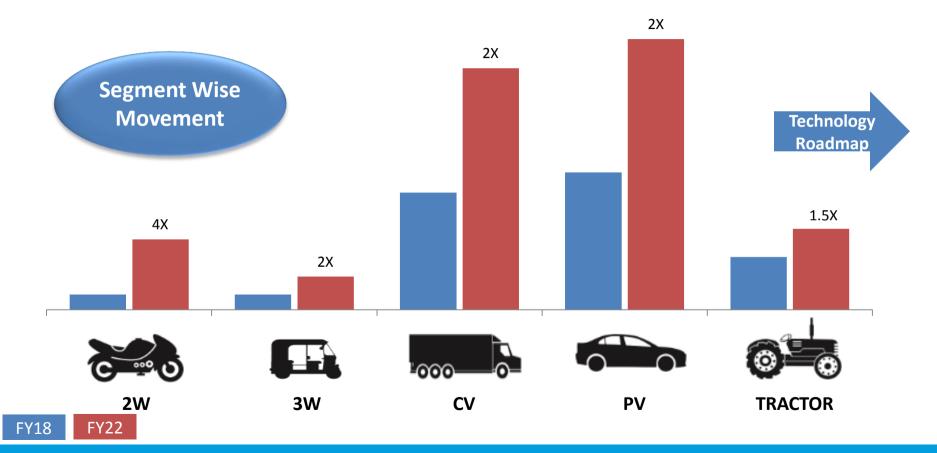
Market Leader in India for Instrument Clusters, Commercial Vehicle segment (>60% Market Share)



Market Leader for Instrument Clusters in 3W and Tractor segment in India (>60% Market Share each)

Future Market Situation (Content per Vehicle) – Domestic







Technology



Mega Trends Leading to Opportunities









ADAS, Autonomous & Al, Safety



Shared Mobility



Electrification





Electronification (Implementation)





Regulatory (Push)

"CASE" is seen as a driver towards the future of mobility



Spark Minda Technical Centre (SMIT)













~100 Engineers!!

> 30% Masters Degree

Anechoic EMC Lab

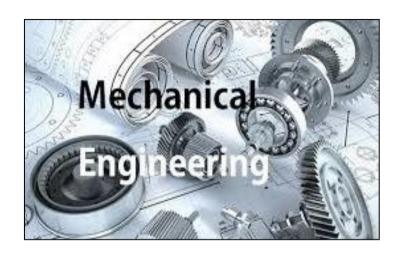
2 PhD's

Diverse work force

HIL / SIL Lab

SMIT is able to attract talent resources from automotive industry!!





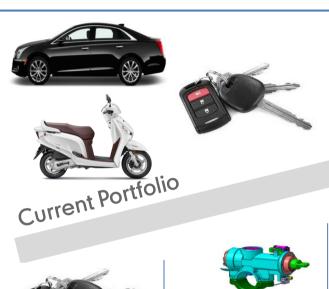




Mechanical to Mechatronics: Transformation

Evolution of vehicle access technology







Key Entry











Gesture based / Smart access

Artificial Intelligence

Ignition Key

Evolution of vehicle access technology







Smart Key

- Two Types of Smart Key Systems developed Knob Type and Automatic
- Content per Vehicle → Knob Type : 3X & Automatic :6X
- 5 Programs acquired, 1st SOP from Oct 2019









iRIS 1.5 / 2.0 & Standalone ESCL

- > IRIS 1.5 : Price differentiator , 50 % price of PEPS
- Advance customer engagement for iRIS 1.5
- Development initiated for iRIS 2.0
- Standalone ESCL being developed to for PC









Several IP's are registered and industrialization plan in progress to make it successful!!

Mechanical to Digital Clusters



Reliability
Basic Features



Stepper

Cable Driven



Mechanical



Mechatronics

Reliability

Enhanced Features

TFT + Telematics





Digital

Digital: Connected

Working on various 2W / 4W programs

Content per vehicle: 2X

SOP's starting M'2019 (BS6 Programs)

Group is prepared well for the digitization technologies leading to content increase,

Acquired the Prestigious ASIA Truck Program of VOLVO

Wiring Harness: Technology & complexity increase





Changes

BS4 to BS6 →

CRDI + Exhaust
after treatment
+ Safety
featu Content
Increase
by ~

Element	BSIV	BSVI	Impact
Circuits	~ 200	~ 250	~30% Increase
Connectors	~ 30	~ 45	~15% Increase
Special Circuit	•Twisted Pairs •Shielded cables	•Twisted Pairs •Shielded cables	Already Used



BS4 to BS6 →

EFI

Content Increase by ~ 2.5X

Element	BSIV	BSVI	Impact
Circuits	~ 50	~ 150	3X increase
Connectors	~ 6	~ 16	> 2X increase
Special Circuit	Not needed	•Twisted Pairs •Shielded cables	Addition of Special Circuits

Group is ready for the technology changes resulting content increase!!

Connector localization and reduction of import contents will help to sustain!!

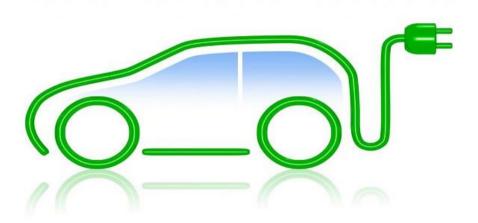
Sensors: Technology & complexity increase





Advanced sensing and actuation applications, Group is prepared well to address Regulatory, Technological and Future requirements, e.g., 2W-EFI system, BS6 emissions, etc.





Spark Minda: EV Products Strategy (Non-legacy)











DC-DC Convertor





Battery: Lead acid / Lithium

Battery Voltage: 48 to 60 v

Battery Capacity: 25 to 120 AH

Motor: 600W – 3 kW

Peak Speed: 25km – 80 km

Range: 60km - 120km

Products ≤ 3 KW

Evolution of EV in India: 2W / 3W solutions





DC-DC Converter

DC-DC Converter: 12V, 120 & 240 W

Project Status

Vol. ramp-up in 2019





Motor Controller

Motor Controller: 600 W - 3KW

Project Status

Discussions initiated with potential OEMs, Likely SOP from Mar 2020



Product Developed & in Mass Production

Content Per Vehicle ~ INR 5150





Content Per Vehicle
~ INR 6300





Battery Charger

Battery Charger: 190V-270V AC

Project Status

OEM acquisition ongoing, Likely SOP from Dec 2019





Telematics

Telematics

Project Status

Additional customer acquisition in EV ongoing

Pr M

Product under Validation & Marketing ongoing

Pilot

Evolution of EV in India: Entry level PC solutions





Telematics



Content Per Vehicle ~ INR 20000







Battery Charger

Battery Charger: 190V-270V AC

Project Status

Launch by M'2020



Project Status

Additional customer acquisition in EV ongoing







Product Developed & in Mass Production

Product development progress

DC-DC Convertor: 12V, 1-1.5KW

Project Status

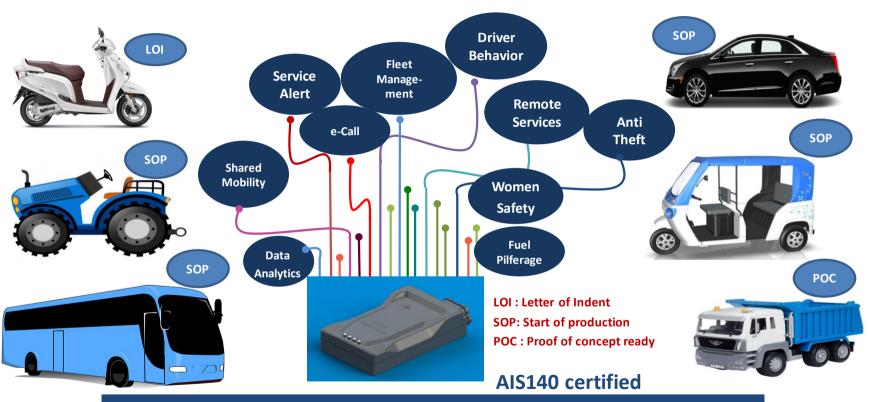
Launch by M'2020



Connected Mobility Solutions

Connected Mobility Solutions

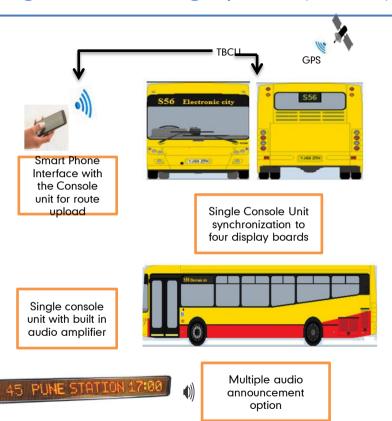




Group has developed various IP's and use cases which are moving to SOP

Integrated Tracking System (ITS 1.0)





Features

- Store up to 150 routes with 150 stops in each route
- GPS location synchronization
- Synchronized Audio and Visual information inside bus
- Multi Lingual display with display intensity control
- User friendly software to download / modify / create route data in the console through PC

> USP's

- Single console unit with built in audio amplifier
- Smart Phone Interface
- Telematics Integrated vehicle / bus tracking device
- Multiple audio announcement option
- Integrated display board (4 Nos)

Spark Minda is engaged with leading commercial vehicle OEM, Product launch by Nov' 2019

Cost effective solution being worked out to disrupt the todays market





Electronification & Regulatory Solutions

Commercial Vehicles: Regulatory Driven Solutions



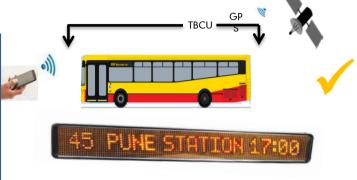
Intelligent Transportation System [ITS]

Fire Detection & Alarm System [FDAS]



AIS-135 standard





AIS-140 standard

Reverse Parking & driver assistance systems



✓ RFQ's received from OEM's

Spark Minda is working to deploy various new tech. products by Nov 2019

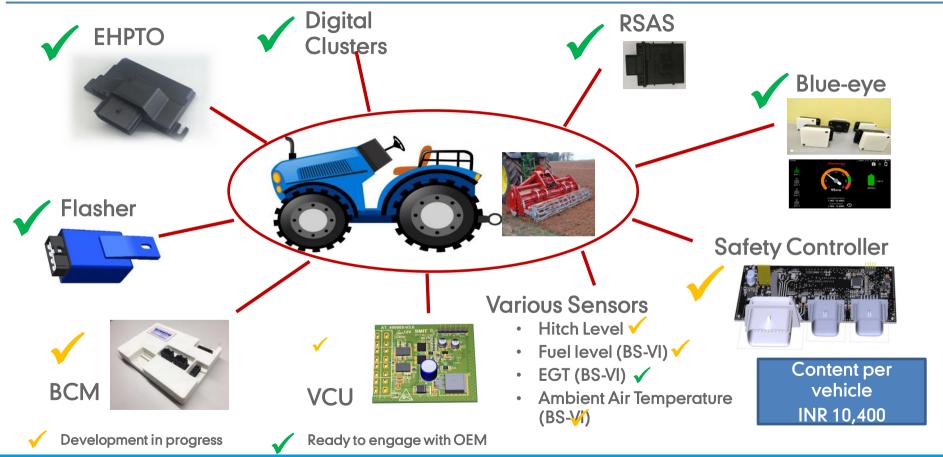
Two Wheeler: Electronification Solutions





Tractor: Electronification Solutions





Passenger Cars: Electronification Solutions





Executive Summary

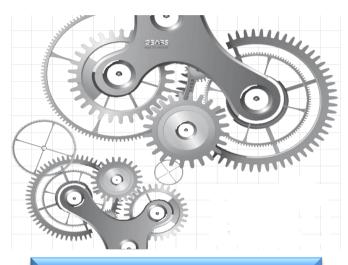


- 1 Spark Minda is equipped to provide end-to-end system solutions
- 2 Identify the opp. in EV and Connected Mobility and be the front runner
- 3 Focus on localization in specific components to bring the value
- "CASE" is seen as a driver towards the future of the mobility
- Improvising on manufacturing technologies to cater the new developments

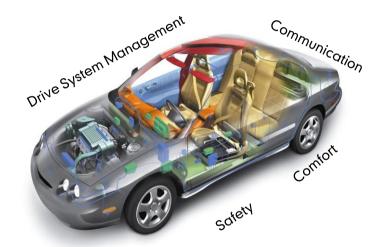
Spark Minda is exploring the strong partnership with OEM's for the futuristic and new technology products



"Transform and Rise"







Mechanical

Automotive Mechatronics

Thank You

This presentation contains statements that contain "forward looking statements" including, but without limitation, statements relating to the implementation of strategic initiatives, and other statements relating to Minda Corporation Limited ("Minda Corp" or the Company) future business developments and economic performance.

While these forward looking statements indicate our assessment and future expectations concerning the development of our business, a number of risks, uncertainties and other unknown factors could cause actual developments and results to differ materially from our expectations.

These factors include, but are not limited to, general market, macro-economic, governmental and regulatory trends, movements in currency exchange and interest rates, competitive pressures, technological developments, changes in the financial conditions of third parties dealing with us, legislative developments, and other key factors that could affect our business and financial performance.

Minda Corp undertakes no obligation to publicly revise any forward looking statements to reflect future / likely events or circumstances.

















MINDA CORPORATION LIMITED

(CIN: L74899DL1985PLC020401)

Corporate Office:

Plot No: 404-405, 5th Floor, Udyog Vihar, Phase-III

Sector - 20, Gurugram - 122016

Tel: +91 124 469 8400 • Fax: +91 124 469 8450

Registered Office:

A–15, Ashok Vihar, Phase – 1, Delhi – 110 052

INVESTOR RELATIONS CONTACT Bikash Dugar Lead-Investor Relations Minda Corporation Bikash.dugar@minda.co.in +91 124 469 8485

Ravi Gothwal / Vikas Luhach Churchgate Partners minda@churchgatepartners.com +91 22 6169 5988