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Tata Ultra SLEEK T. Series

MAHINDRA TREO ZOR



The scrappage policy ● Industry reaction to scrappage policy ● Interview: Rajaram Krishnamurthy

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STRAIGHT DRIVE



“THE VOLUNTARY SCRAPPAGE POLICY IS LIKELY TO WIPE OUT A CHUNK OF USED VEHICLE BUYERS AND OPERATORS”.

Bundled with a five-per cent rebate on new vehicle purchase and a likely 25 per cent discount in road tax, the voluntary scrappage policy follows a substantial BSVI price rise. Coming just before another substantial vehicle price rise of between one- and five-per cent, the policy isn't helped by the minute drop in fuel prices and fast rising other costs. De-incentivising the use of 15 and 20 year old vehicles through a steep registration cost hike among others measures, the voluntary scrappage policy is likely to wipe out a chunk of used vehicle buyers and operators along with their support system and means of livelihood. New vehicle buyers are likely to see the resale value of their auto drop faster than they could dream of. Financiers will find the going tough; the prospect of EVs costing as much as the conventional autos in the next two years of little use unless supported by an extremely efficient infrastructure. Burning Lignite to power them won't help curb pollution either. With hydrogen, bio-fuel and LNG as alternatives, the application of scrappage policy to such vehicles will make an interesting case. Especially with much subsidisation and push.

Bhushan Mhapralkar

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Smart manufacturing

The article on smart manufacturing highlighted an interesting side of the auto industry and its ways to adapt to the changing surroundings. Providing an insight into how manufacturing processes and technologies have changed, the article has also highlighted the shift in safety and security at the shop floor level. Nicely articulating how innovative manufacturing practices could benefit the CV industry, the article provides a good glimpse of how the art of manufacturing is changing the world over, or has changed in the last year or two. Highlighting growing clout of technologies like Artificial Intelligence (AI), the Industrial Internet of Things (IIoT), automation, 5G, etc., the article also touched upon the effect of Covid-19 and how the companies have dealt with it. What made for the most interesting part was how automation may take over to an extent, and how India has managed to balance between automation and manual labour given its populous nature.

●●● **Shanti Kumar**, Hosur, Tamil Nadu



Real-time E-bus

The increasing number of electric buses in India is interesting. Aptly highlighted by a webinar conducted by Busworld recently, the rise in the number of e-buses in the country is largely backed by FAME II, which includes a push by the various governments to get their captive transport undertakings to replace their aging fleet with e-buses. Starting with Olectra BYD, there are Tata and Ashok Leyland e-buses that are starting to be a familiar sight on Indian roads. Even the JBM ones to an extent. As the need for curbing vehicular pollution rises in urban regions, the number of e-buses is expected to only rise. However, it is essential to back them with an efficient infrastructure and electricity that is not generated by burning coal. Burning coal is only about shifting pollution from a city to its outskirts. Apart from e-bus to ensure a zero emission network of public transport buses, other related means like hybrid and hydrogen have to be considered too. A technology agnostic approach with emphasis on safety, sustainability and economy is likely to work the best.

●●● **Manoj Bodke**, Mumbai

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Editor Bhushan Mhapralkar



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Talbro's bags orders worth Rs.304 crore

Talbro's Automotive Components Limited along with its JV partners has won multi-year orders worth Rs.304 crore. Domestic and international in nature, the orders will be implemented over a period of five years starting from the current fiscal year. A major chunk of the orders will be addressed in the period between 2023 and 2025, and include Talbro's flagship products like gaskets and forgings. Including the supply of products from JVs, Talbro's Marugo

Rubber Pvt Ltd and Magneti Marelli Talbro's Chassis Systems Pvt Ltd., the orders would also form the basis of the company undertaking a capex of approximately Rs.20 crore. Established in 1956 to manufacture automotive and industrial gaskets in collaboration with Coopers Payen of UK, Talbro's has been offering mother brand of gaskets, chassis, rubber products and forgings in India. It has, including the JVs, eight manufacturing facilities at Haryana,

Uttarakhand, and Maharashtra along with one materials division in Gurgaon and an R&D technology centre at Faridabad. Key customers of the company include Bajaj Auto, Tata Cummins, Volvo Eicher India, Ashok Leyland, Escorts Group, Force Motors, Hero MotoCorp, Honda, Hyundai, John Deere, Mahindra & Mahindra, Maruti Suzuki, Suzuki, TAFE, Daimler India, Tata Motors, Simpsons, Carraro, Dana, Musashi, Spicer, GE and QH Talbro's.

Blue Dart all-women service centre

Blue Dart has commissioned an all-women service centre at Navi Mumbai in an effort to bring diversity and inclusivity to its operations. It has done so to change the perception about logistics and transportation being a male domain as well. Comprising of a team of 16 women, the service centre at Navi Mumbai will extend the same exceptional service quality that other centres of the organisation have been extending. Focusing on three key pillars, GoGreen (Protecting the environment), GoTeach (Championing education) and GoHelp (Disaster management response), Blue Dart, in India, is an express air, and integrated transportation and distribution company. It offers secure and reliable delivery of consignments to over 35,000 locations in India and is a part of the DPDHL Group. Accessing the largest and most comprehensive express and logistics network worldwide, Blue Dart offers an entire spectrum of distribution services including air express, freight forwarding, supply chain solutions and customs clearance.



Mahindra Logistics appoints Dr Anish Shah; to succeed Dr Pawan Goenka

Mahindra Logistics Limited (MLL) has announced the appointment of Dr. Anish Shah as the chairman of the board, effective April 02, 2021. Dr Shah was the deputy managing director and Group CFO of Mahindra & Mahindra (M&M) Limited, and is designated to take over as the managing director and CEO of M&M Limited from April 02, 2021. Succeeding VS Parthasarathy (President - Mobility Services Sector and Member of the Mahindra Group Executive Board) who has decided to leave the Mahindra Group to pursue personal interests, Dr Shah will be instrumental in helping MLL to exercise its growth strategy.



Isuzu hikes D-Max prices

Isuzu Motors India has announced that it has hiked the prices of its commercial pick-up range, D-Max Regular Cab and D-Max S-CAB (dual cab) with effect from April 0, 2021, for a sum of Rs.1,00,000. This would apply at the ex-showroom price level, and has been attributed to the increase in production cost, transportation cost and logistics cost. The D-Max Regular Cab is powered by a 78 hp, 2.5-litre engine

mated to a five-speed manual transmission, and has a GVW of 3.5-tonnes. It offers a cargo tray measuring 2440 mm in length, 1725 mm in width and 510 mm in height. The S-Cab dual cab version (with seat rows) is powered by the same engine and has a 2.9-tonne GVW. This is largely to do with its smaller cargo carrying area that measures 1485 mm in length, 1530 mm in width and 465 mm in height.



COGOS women force

COGOS Technologies has announced that it would employ and train 500 women drivers in its EV fleet by December 2021. It has successfully trained and hired 50 women already under the pilot scheme. With a presence in 21 states in India and a network in over 300 cities, the company would emphasise on imparting both functional skills (such as driving, vehicle maintenance) as well as soft skills training (such as communication while delivering, customer orientation). In other news, COGOS technologies has partnered Altigreen to deploy 1000 EVs in its fleet as part of its commitment towards electric mobility. It would initially operate the EVs across all metros in India including Bangalore, New Delhi, Mumbai, Pune, Hyderabad, and Kolkata, before expanding to Tier 1 and 2 cities. COGOS plans to bring in at least 30 per cent of its revenue from green technologies by 2023.

Goodyear leadership change

Following the company's recent announcement to acquire Cooper Tire, The Goodyear Tire & Rubber Company has announced that Ryan Patterson, currently president of its Asia Pacific business unit, will lead the integration effort as senior vice president, Business Integration. Nathaniel Madarang, currently managing director of Goodyear China, will succeed Patterson as president of Goodyear Asia Pacific.

Euler Motors fundraising

Electric CV maker Euler Motors has raised Rs.30 crore as part of its ongoing Series A round, led by existing investors, Inventus India and Jetty Ventures. Existing investor Sujeet Kumar, Co-founder, Udaan, also participated in this round, along with new investors Srinivas Anumolu & K Ganesh from Growth Story. Euler Motors plans to use these funds for a new production facility, R&D activities, and expansion of charging and servicing infrastructure. It has so far raised Rs.50 crore in its series A fundraise and has raised nearly

Rs.65 crore since the company's inception. The significant investment comes at a point when the company is gearing up to launch its first electric cargo three-wheeler in Q2 2021 and expand to new markets in the country. The company plans to expand its customer base in sectors like retail, FMCG, pharma, and utility. Around 250 Euler Motors three-wheeler EVs are used by ecommerce companies such as BigBasket, EcomExpress and Udaan in Delhi-NCR for their last mile delivery requirements.

New TVS Eurogrip tyres for electric 3Ws

TVS Srichakra Ltd. has a new tyre size for e-rickshaw application. It belongs to the e-Durapro brand and blends superior mileage, uncompromised performance and durability. Optimised for long lasting durability, the Eurogrip tyre, has an ability to carry heavy loads without compromising stability. With an improved tread design, it is also capable of enhancing the vehicle's performance by lower rolling resistance.



Birla Carbon hikes prices

Birla Carbon has hiked the price of its carbon black, which is used in the manufacture of tyres and other mechanical rubber products, globally by nine-per cent. This, effective April 19, 2021. The company has attributed the increase in price to the increasing costs of doing business in all regions. Stating that it is committed to serve its customers in every region of the world, the company, in a statement has said that it must take this action to ensure the continued supply of high-quality carbon blacks, innovative solutions and services, and new carbon black products.

Tata Signa 3118.T

Tata Motor has launched a new Signa heavy-duty truck called the 3118.T. Claimed to be India's first three-axle 6x2 (10 wheeler) rigid truck with 31-tonnes GVW, it taps the market mind set like no other. Reflecting Tata Motors' customer-centricity and market insight, the Signa 3118.T is innovative and application intensive. With a 3,500 kg higher certified payload than the corresponding 28-tonne GVW rigid truck and equivalent cost of operations with similar fuel, tyre and maintenance cost as a 28-tonne truck, the Signa 3118.T is capable of significantly enhancing the net operating profit

for its customers by up to 45 per cent over a 28-tonne truck. The incremental investment on the Signa 3118.T, over the corresponding 28-tonne truck, can be recovered in less than one year of operations and followed by years of incremental earnings, according to Rajesh Kaul, Vice President – Sales & Marketing, CBVU, Tata Motors.

Featuring a fuel economy switch, gear shift advisor, ICGT brakes, Fleet Edge telematics system with inbuilt anti-fuel theft, and reverse parking assistance, the Signa 3118.T, with its 12.5-tonne dual tyre lift axle configuration, is available in 24 ft. and 32



ft. loading span. Operable at 31-tonnes GVW with the lift axle down and at 18.5-tonne GVW with the lift axle up, the truck is aimed at all types of tanker applications (it is certified by Petroleum & Explosives Safety Organization (PESO)

for 25KL POL tanker), industrial goods such as packed LPG cylinders, lubricants, agricultural products, etc.

The truck is powered by a 186 hp 5.8-litre BSVI diesel engine mated to a six-speed manual transmission.



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ACMA on local reservation

The Automotive Component Manufacturers Association of India (ACMA) has announced that it has once again requested the Haryana State Government to reconsider reservation of employment for locals in private enterprises.

Drawing attention to the 'Haryana State Employment of Local Candidates Bill' that mandates

75 percent reservation of factory and other blue-collar jobs in the private sector for locals, and which has been approved by the State Governor on March 02, 2021 to become a law, Deepak Jain, President, ACMA, said that the global nature of the Indian auto industry, with exports amounting to more than twenty-five percent of its production, makes it necessary

to hire on the basis of merit and talent rather than the domicile of the candidates. The move by the state government, he averred, would adversely impact the 'ease of doing business' in the state. Haryana is a major centre of auto industries. More than 25 per cent of the state's GDP is had from it, and an employment exceeding 10 lakh, he added.

RTS digital control tower

Third party logistics division of Spoton Logistics India, Raag Technologies and Services Pvt Ltd (RTS) has announced the development of a digital logistics control tower to ensure strong end-to-end visibility and traceability at the customer's dealer/distributor network level. Claiming to have enabled manufacturing and distribution companies to save costs and enhance efficiency, RTS is being projected as a one-stop control tower web portal, which would, apart from visibility and traceability, would enhance supply chain efficiency, create a transparent ecosystem to ensure a competitive advantage in the market. Leveraging AI technology, RTS is said to have found favour with project logistics, warehouse systems, milk-run systems, kan-ban & JIT systems, material storage and retrieval systems, distributor pull-systems as well as transportation networks.



Scania year-end report

Amid allegations against Scania raised by Swedish media house (SVT) citing internal investigation reportedly finding evidence of misconduct between 2013 and 2016 in India, the premium CV maker, in its year-end report for 2020, has announced that it experienced truck sales rebound starting mid-2020. While the Indian transport minister Nitin Gadkari is said to have filed a defamation case on Sweden's Sveriges Television and Germany's ZDF for reports alleged that Scania delivered a luxury bus to a company linked to Gadkari's son for bagging supply contracts in India, the Swedish company has announced that in the fourth quarter of 2020, vehicle deliveries (read trucks) were almost back to the previous year's level. Exiting the Indian bus market and shutting down its bus body making plant at Bangalore citing low demand in 2018, Scania has, in its statement, mentioned that cash

flow in vehicles and services remained strong due to its demand-driven output principle in production and efficient inventory management. Averred Henrik Henriksson, President and CEO, Scania, "Our structural cost transformation efforts continued in the fourth quarter whereas in financial Services, customers' need of rescheduling their payments of financial contracts returned to more normal levels in the second half of 2020 and by the fourth quarter." Stating that a vast majority of customers had returned to their previous payment plans by the end of 2020, Henriksson drew attention to the fact that data gathered from connected Scania vehicles has shown continued good transport activity, particularly in the long haulage, distribution and construction segments, and also in city buses. The Swedish CV maker continues to sell heavy-trucks – mining tippers in particular, in India through Larsen & Toubro.

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Rapid battery charging tech

A little known Bengaluru-based tech startup Log 9 Materials has announced the development of a unique rapid charging battery technology for electric vehicles. The technology, said to be capable of fully charging the batteries used in EVs within a short timeframe of only 15 minutes or less, employs 'Graphene' apart from leveraging the

company's expertise and know-how in supercapacitor technology. Claimed to be far superior than what applies to existing EV batteries, the technology, according to Akshay Singhal, Founder & CEO, Log 9 Materials, is not about quick charging but also long lasting. The company's rapid charging battery packs are thus claimed to last for over 15 years, significantly lowering

battery cost per km and enhancing uptime. Offering up to five times more power that results in increased load bearing capacity and acceleration, the new technology is also safer, fire-resistant and impact-resistant. Promising a true range of 60 to 80 km for three-wheeler EVs, the technology is specifically aimed at B2B last-mile delivery segment.

Yolobus emphasises reliability

An intercity bus service start-up, Yolobus is emphasising on reliability of bus travel. In-line with rapid urbanisation in India, and the consequent shift in travel requirements, Yolobus, is striving to reduce bus operator fragmentation (2,500+ active bus operators and 25+ state-owned road transport corporations) that has led to localisation of supply, lack of customer centricity as most operators have little incentive to deliver superior service excellence, and slow adoption of technology that is critical to customer experience and operational efficiency. The start-up, taking into consideration the rapid growth in road infrastructure (National Highways have grown at 21.44 per cent CAGR between 2016-2019) that has connected over 5000 previously obscured pin codes, is leveraging technology to present an app. that facilitates 100 per cent contactless boarding and de-boarding; provides real-time alerts and communication, and cuts down on the need for human interaction within the bus ecosystem thereby reducing potential contact significantly. For the challenging time the bus industry has had in India through a large part of the current fiscal, such app. look interesting if they were to reduce bus operator fragmentation and ensure better travel experience for the commuters.



Marc Llistosella opts out; new Magic Express ambulance

A new statement released by Tata Motors mentioned that Marc Llistosella would not be taking over as the managing director and CEO of the company, effective July 01, 2021. Instead, the current managing director and CEO, Guenter Butschek would continue in his role till June 30, 2021, after being requested by the board. Details of the sudden development have been divulged. In other news, Tata Motors has launched a patient transport ambulance on the Ace

Magic platform called the Magic Express Ambulance. Designed specifically for healthcare mobility in the economy ambulance segment against the Covid-19 backdrop, the vehicle is easily manoeuvrable and has essential equipment like an auto-loading stretcher, medical cabinet, provision for an oxygen cylinder, doctor's seat and fire extinguisher along with internal lighting, flame resistant interiors and an announcement system. The five-seater vehicle comes powered by an 800cc engine.

ZF focuses on diversity and inclusivity

ZF has announced that diversity and inclusion are one of the fundamental tenets of its corporate principles. It has stated in its report that the current transformation within the automotive industry and learnings from a challenging pandemic year are strong reminders of the importance of highly diverse and inclusive teams and their impact on long-term innovation, employee satisfaction and business success. Highlighting its commitment to diversity through new key performance indicators and a global approach to diversity and inclusion, ZF has revealed setting up of new targets like increasing the share of female leaders in management positions globally and focusing on improving the ethnic diversity of candidates in the workforce. Partnering with the



Centre for Automotive Diversity, Inclusion and Advancement (CADIA) to advance its culture of diversity, equity and inclusion within the US, ZF in India has had a long presence as a supplier of technology solutions and services towards mobility. Through global acquisitions of TRW and Wabco, JVs and its own manufacturing operations, ZF has been for long catering to the India auto and manufacturing sectors. Its strategic divisions and business units are already present in India, in the OEM and aftermarket space.

Ecom Express attracts USD 20 million investment

Ecom Express Private Limited has announced a USD 20 million investment by CDC Group, the UK Government's development finance institution and impact investor in South Asia and Africa. Stating that this is CDC's second round of investment in Ecom Express, the tech-enabled end-to-end logistics solutions provider to the Indian e-commerce industry has announced that it will utilise the funds to create 8,000 new jobs in addition to an initial target of 15,000 roles, prioritising employing women for jobs at delivery centres, fulfilment centres and warehouses across the nation. It has also announced that the equity infusion by CDC Group would be used for strategic initiatives such as growth driven capital expenditure, working capital requirements, new business initiatives, expansions, and potential strategic acquisitions/partnerships.

Shriram Automall used vehicle app.

Shriram Automall India Limited (SAMIL) has introduced a new web and app. platform 'ThePriceX' as an online calculator tool for getting true resale value of one's second hand vehicle and selling it at the best price. The app. is backed by the SAMIL's decade old experience of selling pre-owned vehicles. Specialising in selling pre-owned CVs as well as private vehicles, SAMIL is confident, that the new app. will help leading banks, insurance companies, NBFC's and OEM's to find out the market price of their vehicle. Claiming that the app. is scientific and insightful towards price discovery, the company has mentioned that users get the data and analytics driven results on basis of lakhs of successfully transacted vehicles over the past 10 years. SAMIL currently operates over 100 automalls, has over 17,50,000 registered customers, over 80,000 sellers, and over 8,00,000 listings per year.

Bus industry news

In what is seen as an interesting development, BMTC in first such attempt, has drawn up a five-year bus rejuvenation programme to improve its services and attract more passengers. Losing more than a crore on a daily basis due to poor ridership, the public transport organisation is said to be working towards raising a soft loan of Rs.700 crore by approaching international lenders such as the World Bank. In Goa, Kadamba Transport Corporation has floated a tender for leasing 500 vehicles per day per bus basis. This development comes hot on the heels of the organisation announcing launch of its first fleet of electric buses on March 23, 2021. It is claimed to be in the process of getting another 100 mini-buses. The Uttar Pradesh government has introduced 40 air-conditioned electric buses in Lucknow. Some 700 more buses will be added in the coming months and charging stations are being constructed.

Experts discuss EV recycling and vehicle scrappage

In view of the recent budget announcement on vehicle scrappage policy and the various policy regulations as well as notifications, the Society of Indian Automobile Manufacturers (SIAM) conducted its 10th Lecture Series recently on, "Imperatives of ELV Recycling: Indian ELVs Guidelines & Basel Ban Amendment 2019", virtually in New Delhi. Experts participating the lecture series -- Piyush Mahapatra, Program Coordinator – Chemical &

Health Program, Toxic Link; Sanjay Mehta President - Material Recycling Association of India (MRAI) & Director, MTC Group; Bharat Sharma Additional Director – Central Pollution Control Board; S. K. Gupta, Senior Advisor, Maruti Suzuki India Ltd; Dr. Sunil Pandey, Senior Fellow, The Energy and Resources Institute (TERI); Rachna Arora, Senior Technical Advisor, GIZ; Sue Schauls, Executive Director, Iowa Automotive Recyclers (USA), and Dr. Rashid

Hasan, Advisor, SIAM, spoke about sustainable material management and environmentally safe disposals.

They shared their industry experience on eliminating waste through material and End-of-Life Vehicle (ELV) recycling. The lecture was a part of SIAM's 20 thematic areas on environment and road safety for integrating and mainstreaming the environmental and safety imperative for attaining sustainability in automotive sector.



Eicher observes National Road Safety month

Participating in the National Road Safety month from January 18 to February 17, 2021, Eicher Trucks & Buses organised 400 activities across 19 states, and 46 cities, to raise road safety awareness among different stakeholders (over 27,000 people including students) with the support of the Ministry of Road Transport & Highways (MoRTH), India. The company, in the month long drive, also conducted driver awareness programme involving over 140 drivers. The programme covered crucial aspects of safe transportation, emission control methods, BSVI technology and its functions and maintenance. Close to 180 vision and hearing healthcare screening programmes for transport segment and 22 driver awareness programmes through the Driver Pragati Kendra associations were conducted too.

BatX battery buy-back programme

BatX Energies has announced the launch of a 'Buy Back Battery Programme', which aims to make India energy sufficient. Coming from a company that is working on Lithium-ion battery manufacturing and Lithium-Ion Battery Recycling, the programme includes taking back batteries from the market and harvesting good cells from them, understanding the life and state of health of those cells and putting them back for stationary applications by developing Lithium-ion batteries for inverters and Solar Storage batteries.

Batx would offer a 10 per cent Buyback cost to its Electric Vehicle OEM's clients like Electric Rickshaw and Electric two Wheelers manufacturers who can further offer this as a value addition to their customers. Mentioned Vikrant Singh, Co-Founder and CTO, BatX Energies Pvt. Ltd., that Lithium-ion batteries are treated as waste after first life application, but at the end of its life, an expert handling that meets the safety requirements set by law along with the right use of technology helps a lot of material to be recovered from these batteries and can be reused into the battery supply chain.

Abutani Trucking Delivers 1000th BharatBenz

Daimler India Commercial Vehicles (DICV) dealer from Guwahati, Abutani Trucking, has delivered the 1000th BharatBenz truck to a customer in the North East. It marks a significant milestone for the dealer as well as the company. According to DICV sources, BharatBenz CVs are finding much use in bulk carriage and mining applications in the region. They add that the sales milestone is a testament to growing customer faith and confidence in their products, which are in the nine to 49-tonne categories. The North East region of India has traditionally had high demand for tippers. Reveal sources that DICV is looking at increasing its footprint in the region by increasing service infrastructure at Dibrugarh, Barpeta and Numaligarh. Abutani Trucking is present in Assam, Meghalaya, Arunachal Pradesh,



Mizoram, Nagaland, Manipur and Tripura. DICV currently has 250 touchpoints in the country with a capacity to service 13,000 vehicles a year.

Zyngo to deploy 500 vehicles

A third party logistics company, Zyngo has partnered with Sun Mobility to utilise the latter's services through a network of swap points, available at Indian Oil Corporation fuel filling stations for its last-mile delivery services using electric cargo three wheelers. As part of the deal, Zyngo will subject 120 vehicles to the scheme, which have been deployed in Gurugram, Delhi, Noida and Ghaziabad. It is chalking plans to subject 500 vehicles to the scheme by the end of this year. Hoping that the partnership would help create a win:win situation and accelerate clean last mile delivery operations, the two partners are confident that they will contribute to the environment and set a new benchmark for others to follow in terms of mass adoption. The arrangement, according to Prateek Rao, Founder & CEO, Zyngo, will provide a complete ecosystem.

Automechanika goes virtual

Organisers of ACMA Automechanika New Delhi, Messe Frankfurt India and Auto Component Manufacturers of India (ACMA), have announced that the fifth edition of ACMA Automechanika New Delhi has moved to an all-virtual concept. The all-virtual concept of the biannual show will include company presentations and product demonstrations while it connects buyers and sellers, automatically matches potential suppliers when buyers launch product or service queries and set-up virtual appointments to continue trade conversations focused on the 'sourcing interests'. The physical show has been rescheduled for 2023 as of now.

BorgWarner to accelerate electrification strategy

BorgWarner Inc. has announced that it will accelerate its electrification strategy to increase its participation in the respective field. The over 100 year old tier automotive supplier has informed that it is keen to increase its revenue from electric vehicle business to 45 per cent by 2030 from the current three-per cent. Planning for the next decade of profitable growth and move away from a balanced propulsion strategy towards electrification, BorgWarner is, through project 'Charging Forward', looking at strengthening its three pillars that comprise of profitably scaling electric light vehicles, expanding into electric commercial vehicles and optimising the company's combustion portfolio through the planned dispositions of businesses with between USD-three billion and USD-four billion in aggregate revenue, and decentralised organisational structure apart from the system and component offerings to scale up in terms of commercialising innovative technologies.

MAHINDRA TREO ZOR

Mahindra Treo Zor has the capability to pull a variety of buyers due to its unique status and build.

Bhushan Mhapralkar



Photos by: Mahesh Reddy

Pictures fail to do justice to the Mahindra Treo Zor electric cargo three-wheeler. They simply don't; not until the vehicle is seen in flesh and admired. Not only does the vehicle look attractive when seen by the naked eye, it looks a design that seems to nicely marry the art of understanding the market needs with technology and aesthetics. A clue of this is had by the positioning of the 47 kWh lithium-ion battery and its associated electronics in a secured compartment under the driver's seat. Achieving a good mix of form and function, the electric three-wheeler looks attractive. Creating its own identity in the crowd of diesel cargo three-wheelers, the Treo Zor turns heads. With a single wheel at the front and two wheels at the rear,

it is a three-wheeler all right. It is different however, and in a subtle and sophisticated way that is fast becoming a hallmark of the new CVs entering the Indian market. Looking simple yet attractive and appealing, the Treo Zor stands out. With its body

made up of rugged SMC body panels at front, in a colour combination of blue and white, the vehicle draws strength from its tubular frame. The SMC panels are bolted to it on the inside. Highlighting the use the light weight alternate materials over steel,



the vehicle, coming across as cute, honest and practical, leverages technology to offer a significantly lower TCO as compared to a diesel cargo three wheeler. Despite the use of alternate light-weight material, the vehicle does not ever give an impression of being inferior in its built quality when compared to a diesel cargo three-wheeler either. Coming from an organisation that the Mahindra & Mahindra is, the Treo Zor exhibits a rare ability to pull buyers to it.

Promising Rupees-two per km fuel saving as compared to a diesel cargo three-wheeler,

the Treo Zor is also low on maintenance. The Mahindra folks put the figure at forty-paise per km as compared to a diesel cargo three-wheeler. Backed by a three-year standard warranty, the electric three wheeler weighs 999 kg. With a payload of 550 kg, which is claimed to be the best in class, it is aimed at first mile and last mile applications. Accompanied by a 48V, 2000W AC charger capable of charging the battery in three hours and fifty minutes, the Treo Zor is powered by an eight-kW motor placed adjacent to the

rear axle. Calling for a 15A three-pin 230V AC socket that is usually used to drive a home refrigerator or a washing machine at home, the vehicle has the rear half of its frame made of square tubes of various dimensions welded together. The motor controller is placed above the motor and is accessed by removing a square lid built into the cargo tray floor. Unlike the front arrangement where a rather conventional looking fork has the wheel attached to it with the help of a helical spring and shock absorber, the rear suspension is made up of leaf







springs and shock absorbers. In the delivery van guise, the superstructure – a box with lockable gates, looks light and usable. Its fit and finish is clearly not in the same league as the rest of the vehicle though.

Available in the pickup guise with a cargo tray that has three-drop sides, the Treo Zor highlights good application flexibility. The flat-bed version could be adapted to serve a number of unique applications and operator/end user needs. Aimed at FMCG, e-commerce, vegetables, fruits, poultry, milk, industrial, electronics and other applications, the electric three-wheeler has a top speed of 50 kmph. Developing a maximum torque of 42 Nm, it has a range of 80 km on a full charge. Having seven-degree gradeability, the Treo Zor, with a wheelbase of 2216 mm, makes an interesting vehicle indeed. It is positioned in a market that is said to be 110,000 units (per year) strong. Termed as wide-bodied, it measures 3100 mm in length, 1460 mm in width and 1762 mm in height. Competing with the likes of Kinetic Shakti, Gayam Taskman and Singha (Max) as the other cargo electric three wheelers, the Treo Zor looks better conceived and executed. With good fit and finish and build quality to boast of, the vehicle is made at a modern manufacturing facility on the outskirts of Bangalore. Sans a clutch or transmission, it is of the direct drive variety.

A zero tailpipe emission CV, the Treo Zor comes across as innovative in terms of how it drives and feels. It has two drive modes, which influence

its drive range. These could be used as per the road and load conditions. The drive mode switch is part of a small switch bank besides the throttle on the handlebar. A red other vertical switch is used to go forward, turn neutral or to reverse. Apart from the accelerator, there's not much to operate. Like a gearless scooter, the mere twist of the accelerator has the electric three wheeler moving ahead with zest. It feels energetic and agile. Confidence to drive the Treo Zor comes from the fact that it has a robust hydraulic braking system. Press the brake pedal and the vehicles quickly comes to a halt. The ergonomically well designed cabin and a comfortable seating position add to the ease of driving the vehicle. A bigger back cushion squab could offer some more support, and is perhaps one of the few ergonomic shortcomings. The other could be the ORVM placement. To see beyond the delivery box, it is required to tilt the head to either see the left or the right mirror. The ORVMs also seem to jut out far enough to hit another object in a narrow, crowded lane. The delivery box too gives an impression of being a bit too wide. Factoring the same aids driving the electric three-wheeler without side swiping.

Lack of any sound (except some whine of the motor) also calls for careful manoeuvring on a crowded lane. With a ground clearance of 123 mm, the Treo Zor feels stable and reassuring to drive. As part of the well designed and configured dashboard (with lockable glovebox and a 12V

charging socket) is a digital instrument cluster that informs of the battery charge in per centage, the range available and more. Riding on 12-inch dia. wheels, the Treo Zor, sold across 20 states, 157 cities and 174 dealerships in India, has high local content. Only a few child parts and cells are imported. With the pickup version priced at Rs.309,000, the flat bed version priced at Rs.303,000, and the delivery van version priced at Rs.338,000, the

vehicle is said to be eligible for Rs.74,000 subsidy under the FAME II guidelines, which is Rs.10,000 per kWh. Already serving some big e-commerce players like Amazon, the Treo Zor, amid a growing competition that includes start-ups, legacy players, and organised as well as unorganised players, appeals. Supported by smart features like cloud-connectivity, advanced telematics, reverse parking sensors, and data and

machine learning, the vehicle looks promising from a TCO, uptime and TAT point of view. As a first and last mile application, it looks at home in an urban sprawl or a rural expanse. An application-based offering, the Treo Zor displays a rare capability to shake up the traditional order in the cargo three wheeler space. Going by that scale, it looks like a product that could well set a benchmark. **CV**



TATA ULTRA SLEEK T. SERIES

Tata Motors has introduced a Sleek T. Series of range I&LCV segment-based trucks on the highly modular Ultra platform.

Bhushan Mhapralkar

Launched in 2018, the Ultra has been one of the most modular and modern platforms to come out of Tata Motors after the Prima, which began life as the World Truck Programme. Seeding units even before 2018, the L&ICV-based platform has sprung more than the 14 key models that were announced in 2018. It has grown almost in every direction, and the new Sleek T. Series of trucks are no exception. Borrowing the narrow 1.9 m day cabin of the Ultra T.7, the Ultra Sleek T. Series has come to spring four-tyre and six-tyre models in an effort to address certain emerging (white space) market requirements in the first mile, last mile and line-haul categories. With the Indian CV market showing signs of LCV and ICV segments recovering faster than the M&HCV segments post the economic slowdown of 2019 and the pandemic of 2020, the Ultra Sleek T. Series vehicles include the T.6, T.7 and T.9.

Joining the legendary Tata 407 semi-forward control LCV and the other forward control LCVs

and ICVs on the LPT platform, the Ultra Sleek T. Series vehicles reflect a much needed change in terms of performance, efficiency, safety, comfort and productivity. The modern narrow cabin of the new trucks is not only smart looking, it is also safe. It has been subjected to European cabin crash standards, according to Girish Wagh, President – CVBU, Tata Motors. Designed and engineered to suit contemporary urban transportation demands, the Ultra Sleek T. Series trucks ride on the popularity and familiarity of the existing Ultra truck and bus offerings. The Ultra family has grown to bridge the gap between the ICV and MCV segment. The Ultra 2821.T model with a sleeper cab has been well-received. Garnering 40 per cent market share by selling more than 20,000 vehicles in the domestic market and another 2000 units in the international market since 2018, the Ultra Sleek T. Series, according to Ajoy Lall, Head – Manufacturing (CVBU), Tata Motors, is built at a modern facility at Pune. The facility, he informed, includes a robotic weld line,



The Ultra Sleek T. Series trucks are about the changing market requirements and bridging the gaps in the I&LCV segments in a BSVI environment.





The Ultra Sleek T.6.



The modern, narrow 1.9 m wide day cabin is the highlight of the Ultra Sleet T. Series.



dedicated clean room, world-class final assembly line, and a robust testing-line at the final roll-out stage.

PRODUCT TRANSFORMATION

Arriving in a BSVI environment, the Ultra Sleet T. Series trucks are said to be a result of product rationalisation at Tata Motors. Claimed to be the ones that go beyond mere BSVI transition, and instead help their manufacturer drive a clear-cut strategy of re-conceptualising and re-segmenting its entire product portfolio, the vehicles aim at a significant shift visible at the urban and line-haul level concerning e-commerce, construction and other streams. Claimed to offer best-in-class TCO, higher uptime, and driver comfort and convenience, the

Ultra Sleet T. Series is about better connectivity with the help of an advanced telematics system called Fleet Edge. The 1900 mm wide walk-through safety cabin, engineered to aid manoeuvrability through narrow city lanes, is ergonomically well-sorted. It has modern interiors and features a dashboard-mounted gear lever, two-way adjustable seats (with armrest for the driver), and ABC pedals with tilt and telescopic steering. There's also a factory fitted music system with two high-speed mobile charger USB ports on offer. The melba fabric of the seats ensures comfort in every season of the year. A good assortment of utility and storage spaces ensure convenience.

The digital instrument

console provides comprehensive information. It includes a real-time gear shift advisor to help the driver drive his truck in the most efficient manner. Also providing distance to the empty indication, the console has service alert, which helps to schedule a service appointment in advance. Fitted with an anti-skid foot

step, the cabin is tiltable up to 45-degrees to provide easy access to the engine. Sporting striking looking clear-lens headlamps that provide good illumination at night, the Ultra Slek T. Series trucks have LED lamps at the rear. Backed by the 'power of six' philosophy, which encompasses superior vehicle performance, driving comfort, convenience and connectivity,

safety, and lower TCO. Sleeker, smarter, and capable of supporting faster movement, the Ultra Slek T. Series of trucks are equipped with a new generation GB400 six-speed manual transmission and a larger 280 mm dia. clutch.

SLEEK AND MODERN

Engineered for higher utilisation and revenue per trip, the vehicles, fitted with a clutch booster to reduce the clutch pedal effort, are refined. Offering superior fuel efficiency, dynamism and drivability, according to Wagh, the trucks boast of a five-millimetre thick 'C' section chassis of high strength (HSS800) steel. The short members are bolted the the long member apart from the other mounting points for suspension, driveline, etc., for higher strength and modularity. The various models of the series sprig from multiple wheelbases achieved by varying the long member length and other related parts. Laced with a hydraulic braking system, the Ultra Slek T. Series trucks have good gradability to address



The Ultra Slek T.7.



diverse application needs. Fitted with low rolling resistance radial tyres, the vehicles, capable of achieving up to 10 per cent better fuel efficiency, are had with a payload of between 3.3-tonnes and 5.2-tonnes. With a deck length measuring between 10 and 20-ft. - the T.6 is available in 10 ft., 12 ft. and 14 ft., the T.7 is available in 12 ft., 14 ft., 17 ft. and 20 ft. whereas the T.9

is available in 14 ft., 17 ft. and 20 ft., the Ultra Sleek T. Series has an extended service interval of 40,000 km.

Priced at Rs.14 lakh ex-showroom Delhi (T.6), Rs.15.29 lakh ex-showroom Delhi (T.7) and Rs.17.29 lakh ex-showroom Delhi (T.9) respectively, the Ultra Sleek T. Series vehicles are backed by a warranty of three years and three lakh kilometres, whichever is earlier. They also stand to profit from Tata Motors'

'Sampoorna Seva 2.0', which is a complete care package that begins with the purchase of the vehicle, and includes insurance assistance, breakdown assistance, rewards, genuine spares, resale assistance, warranty assistance and more. It is designed to aid the transporter to concentrate where he or she should be, in fact, and looks beyond a mere annual maintenance contract, according to Tata Motors sources. Underlining a clever prospect of bridging the gaps between some of the segments that are showing better traction over others, and in view of the changing market and regulatory requirements, the Ultra Sleek T. Series trucks has the potential to take the game to the next level. What makes it more interesting perhaps is the talk of those players who have until now refrained from entering new segments like the LCV segment are now talking about getting there. Interestingly, the much familiar 407 with German roots still soldiers on, a number of buyers still finding it suitable for their kind of application! **CV**



The Ultra Sleek T.9.



THE SCRAPPAGE POLICY

The scrappage policy has turned real after being in news for a long time.

Bhushan Mhapralkar

All images for representative purpose only.



Turning real after being in the news for a long time, the voluntary scrappage policy is expected to have a deep and long-standing effect on the Indian automotive industry. If it is positive or negative would be a matter of debate, or too early, the fact is, the effect of the policy would be long and deep. With the devil in the details, the scrappage policy is certain to have an effect on the transport industry involving CVs as well. Announced by transport minister Nitin Gadkari, the scrappage policy,





though voluntary, does carry measures to de-incentivise CV owners to scrap their vehicles after 15 years. A vehicle owner, which is very likely to the serial number two, three or four on the registration certificate, will have to re-register his vehicle after 15 years for a period of five years by paying a hefty registration fee as compared to what the new vehicle owner paid. He will also have to pay a hefty penalty for delay in re-registration, and a 'green tax'. Regular price escalation with every model change or at the start of every calendar year, or with every new regulation, is not unusual. If, then, the price of a new vehicle were to be considered to re-register a new CV, the costs would be much higher than the ROI a vehicle owner would expect. And, beyond that is the 'green



tax' element for five years.

Mentioned an industry source that the vehicle scrappage policy is more likely to wipe out a considerable chunk of transporters – small and medium, rather than to achieve its intended target of lower pollution or higher vehicles sales. There are

instances when vehicles manufactured in 2015 and 2017 have failed to pass the 'PUC' test because of lack of maintenance, bad fuel quality and a malfunction in the powertrain or its allied system, he added. Questioning the study behind the policy framework,



another source stated that the much likely effect would be to wipe out a chunk of businesses contributing to the economy rather than reducing pollution as much. A one size fits all policy approach towards autos will be highly destructive and despite the five-per cent rebate against regularly escalating vehicle

prices, he added. Pointing at driver-operators in Europe, he mentioned that this move reminds him of the new axle norms of 2018 and their effect.

Stating that the lack of demand and lower freight rates aren't helpful, and the call for higher operating costs in the form of new trucks,

however efficient they may be, just does not make a compelling business case for a large chunk of transporters in the country. A six-truck owner transporter from Hubli, on the condition of not revealing his name said that he does not intend to buy new CVs and would exit the business over time. He explained that his business needs call for buying a truck that is priced between Rs.45 and Rs.50 lakh, which he cannot afford. In such a situation, he added, it would be prudent to shut down the business. Said a small transporter from Kolhapur that three of his four trucks are over 15 years of age and ply short distances. They often do work for government organisations and clients that he has gathered over 40 years. I maintain my trucks well. They undergo 'PUC' test from time to time.



The scrappage policy risks to ruin all the hard work and dedication towards my business in one swipe. I cannot afford new trucks and would be left with no other option but to shut down my business and send home my trusted set of drivers and employees.

Mentioned a local transport organisation representative on the condition of not mentioning his name that freight rates are not good enough to be able to afford new CVs. For a new truck, an EMI of between Rs.40000 and Rs.50000 is simply not feasible in the current situation. With small and medium transporters said to be struggling to survive in the wake of lower demand and high compliance costs, as a disincentive measure for CVs over 15 years of age under the guise that they are more polluting than the newer and stricter emission standards complying vehicles, the scrappage policy, claim sources, includes much higher fees for fitness certificate and fitness test. While draft notifications, in the next few weeks, will be published and be in the public domain for a period of 30 days to solicit comments and views of all involved stakeholders, sources mention that vehicles aged 20 years should be considered.

Said the local transport organisation representative that the scrappage policy should cover vehicles that are aged 20 years and above and reduce it gradually. Though the exact number of CVs aged over 15 years is not known,





they are claimed to amount to between 28 and 30 per cent of the total CV parc in the country. Of the opinion that BSVI has been very unkind to transporters, an industry source stated that the ability of transporters to afford new trucks has depleted further. Especially, those that are involved in cargo segments. Tippers, he said, are subject to fixed-term infrastructure projects and contracts. Drawing attention to the fact that small operators will not get the input credit for GST, the local transport organisation representative expressed that the scrappage policy is likely to do more harm to the nation's economy than to hand hold transporters across lines to move up the ladder. The expectation, it seems, is to get

only the bigger businesses to contribute to the nation's economy. Interestingly, the scrapping of government and PSU vehicles which are older than 15 years are to come into effect from April 1, 2022. In case of private vehicles, the rules for fitness tests and

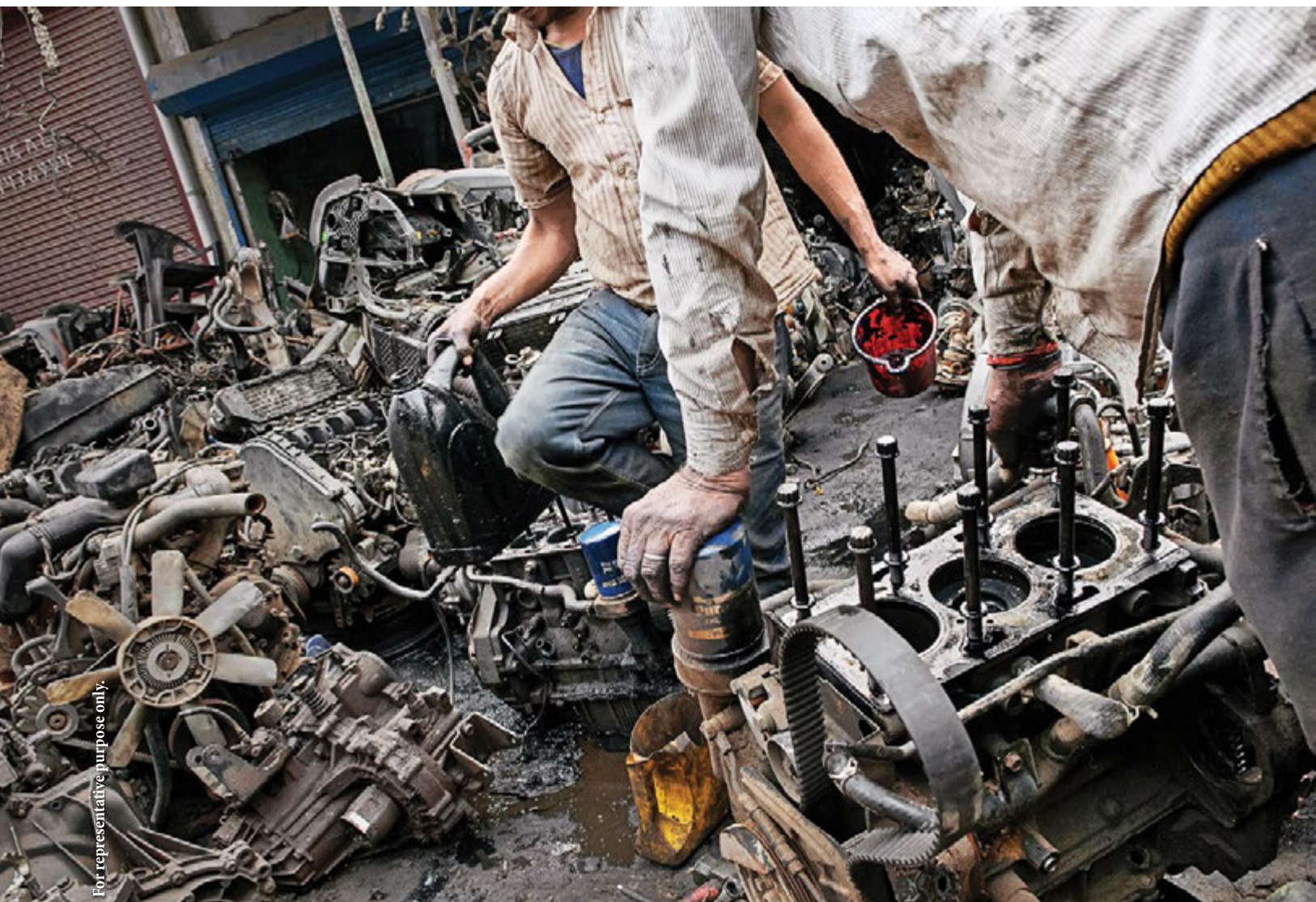
scrapping centres are to be applicable from October 01, 2021. The mandatory fitness testing for heavy CVs is to come in force from April 01, 2023. The same will be put in place in a phased manner for other categories from June 01, 2024. **CV**



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Advertising in traditional media continues to enjoy high trust amongst consumers, with 86%* expressing confidence in print – making it the most trusted medium.

* ASCI - ISA Report Findings



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INDUSTRY REACTION TO SCRAPPAGE POLICY

The industry reaction to the scrappage policy announcement has been interesting and insightful.

Team CV

Post the announcement of the scrappage policy by the transport minister Nitin Gadkari reactions and opinions have emerged

from different strates of the society at large, and the auto industry along with its various stakeholders and observers. Expressed Vinutaa S, Assistant Vice President

& Sector Head, ICRA Ltd., that the scrappage policy will be positive for the auto components industry. It will benefit the auto components industry from higher demand



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for new vehicles from FY2024 onwards (with three to four per cent upside) owing to a favourable incentive structure, more than offset the loss of revenues from the aftermarket business, which may be pegged at three to five per cent because of part scrapping of vehicles undergoing the fitness test, she added. Satyakam Arya, Managing Director & CEO, Daimler India Commercial Vehicles, mentioned that his company has been long advocating for a well-designed, incentivised 'end of life' policy that would boost demand, improve safety and support the environment by encouraging CV owners to exchange their older vehicles for new ones, meeting current emissions norms. "Only a joint effort by government, industry and the customer can result in a scrappage policy that offers true safety, economic and environmental



Saurav Kumar, CEO & Founder - Euler Motors



Satyakam Arya, MD and CEO, DICV - Daimler

benefits,” he averred.

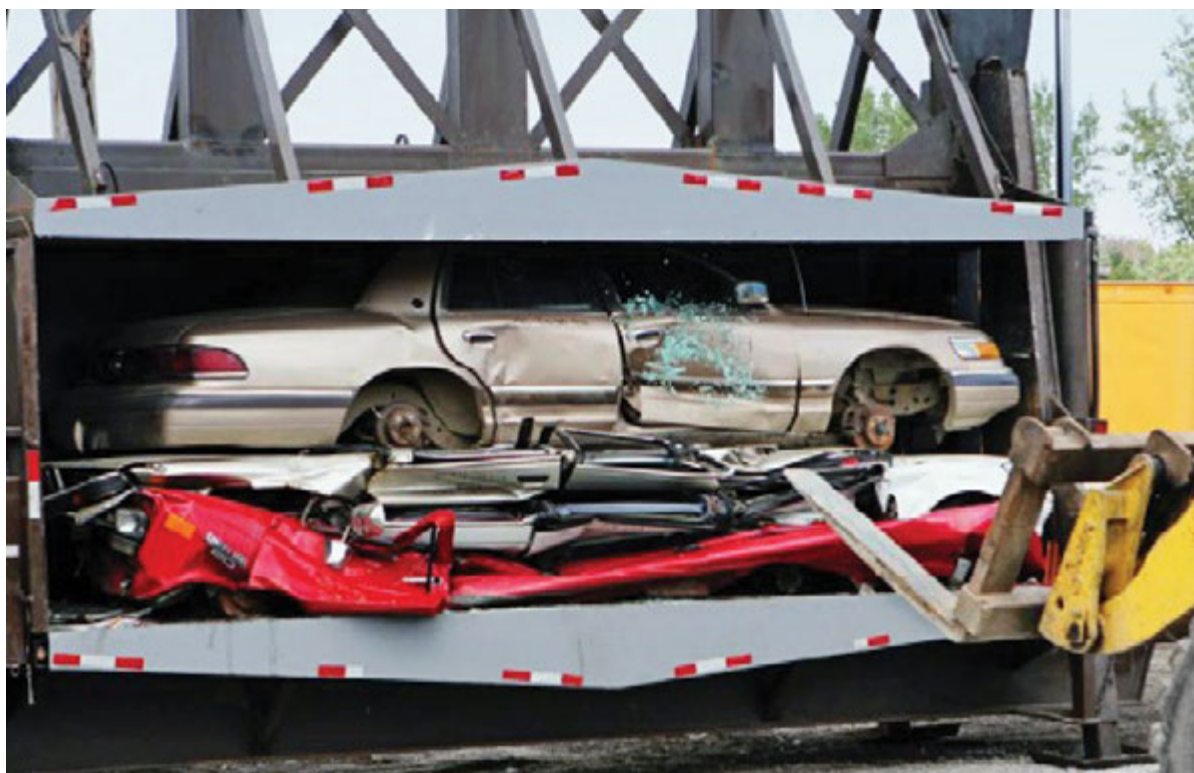
Saurav Kumar, Founder and CEO, Euler Motors, stated that the scrappage policy is an incremental step towards the Government’s continued thrust on emission control and sustainable mobility. “It will provide an opportunity to boost demand for energy efficient vehicles and curb pollution,” he added. Of the opinion that measures to impose a green cess and exempting vehicles running on environment friendly technology would augur well for EVs, Kumar said that the policy, once effective, will pave way for newer vehicle technologies in segments like intra city logistics, which relies on commercial vehicles. Vinkesh Gulati, President, Federation of Automobile Dealers Associations (FADA), expressed that the guidelines and advice announced (in the



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scrappage policy) are in the right direction. Of the opinion that the state governments and OEMs have to do their part to ensure success, Gulati drew attention to the some of the key points like the scrappage value of vehicle to be in range of four to six per cent of the ex-showroom price; a rebate of upto 25 per cent for passenger vehicle and

15 per cent for a commercial vehicle by state governments on road tax, and a five per cent discount from an OEM on a new vehicle and registration fee being waived off. Deepak MV, CEO & Co-founder, Etrio, averred that the policy will improve fuel efficiency, whereas recycling will reduce the cost of components for the automobile industry. **CV**



For representative purpose only.

Q & A

Rajaram Krishnamurthy,
Vice President – Marketing & Sales,
and Customer Services, Daimler
India Commercial Vehicles (DICV)

IN PURSUIT OF GROWTH

Bhushan Mhapralkar

Q. How was the year 2020 for DICV?

A. The year 2020 was about strategic announcements to help shape our business and operations. DICV introduced a host of new services, which helped to gain momentum during the pandemic. Some of these include focus on digitization and connected features, the BharatBenz Exchange programme, MoUs with 18 leading banks for greater financing flexibility, announcement of global competition 'Startup Sparks' to support early-stage startups, and expansion of dealerships network to reach 250 numbers.

Q. How did the 2020 models perform amid a very challenging situation?

A. We introduced our BSVI range with profit technology plus in January 2020. Due to the lockdown, April 2020 was a month of zero sales for all the auto manufacturers including us. As the lockdown eased, green shoots were witnessed. DICV recorded over 9,600 unit sales, a drop of 34 per cent against the industry average of 60 per cent sales drop. The BharatBenz range experienced strong traction, especially after the BSVI emission norms gained force in April 2020.

Q. What was the effect on BSVI transition amid what has come to be termed as the world's most stringent Covid-induced lockdown?

A. DICV was well-prepared for the BSVI transition. It sold all its BSIV CVs before the April 2020 deadline. The BSVI products received tremendous customer support and helped us to capture a much larger market share. In part, we celebrated several key milestones last year. For example, the sale of over one-lakh BharatBenz CVs. DICV also achieved an export milestone of over 35

thousand vehicles and 150 million parts in 2020.

Q. How did DICV support its CV users (transporters, operators, drivers, etc.) from going out of work in 2020, and with utilisation levels falling steeply?

A. During the lockdown, our customers were not able to operate their trucks or visit our BharatBenz workshops to avail scheduled services, warranty or extended warranty. Witnessing this, we extended the warranty by two months of vehicles whose warranty or extended warranty was ending between March 15, 2020 and May 15, 2020. Together with Hindustan Petroleum Corporation Limited (HPCL), DICV offered much-needed support to truck drivers who were away from home via 24/7 toll-free numbers. DICV also maintained close communications with stakeholders through online platforms, including digital webinars. Imparting training and provisioning health, safety, and hygiene guidelines, DICV ensured that claims and advances were paid to ensure cash liquidity. It worked with dealers to optimise operational expenses without compromising customer deliverables.

Q. How do you anticipate the Indian road freight and bus transport to perform in 2021?

A. In 2021, road freight transport is expected to witness an uptick as a result of higher infrastructure spending planned by the government, revival in private consumption and global trade, e-commerce growth and overall economic revival. Payload availability is expected to improve from key sectors such as e-commerce, parcel, coal, steel, cement and agriculture.

Q. For your 2021 models, which include two buses and six trucks, what kind of growth are you expecting?

A. These eight new products will fill the inter-space in our product portfolio. They will target specific segments and meet the precise requirements of our customers. For example, our 1917R is available in 20, 22, 24, and 31-foot load span options, which are ideal for a wide range of on-highway applications and great for freight movement for sectors like FMCG and e-commerce. Our 2828C is now available with 22 cu. m. loading capacity to cater to coal transportation. It comes with the longest wheelbase in its class, which makes it the most stable coal carrier in the market.

Q. What has prompted the shift at DICV from a tonnage-based outlook to an application-based outlook?

A. The need to serve our customers better. For example, vaccine truck needs are very different from that of an oil tanker. Giving either a BharatBenz truck, with best-in-class fuel efficiency, safety and comfort, reliability, maintenance cost and connectivity means they are able to fully focus on their business.

Q. Will the vehicle scrappage policy boost CV growth or drive more and more transporters out of business?

A. The details of the scrappage policy need to be understood in terms of direct benefit to the auto sector as far as demand generation is concerned. If incentives are not sufficient, then voluntary scrappage schemes might not be as effective as they should be. Capable of creating some additional demand for both passenger and commercial vehicles, and providing access to raw materials for the auto industry at an optimal cost, the scrappage policy, apart from a positive impact on demand and environment, could improve safety by taking out older vehicles with poor maintenance, safety and comfort standards. A fitness test for CVs after 15 years is an effective step in this direction. The scrappage policy and infrastructure spends have the potential to trigger M&HCV demand.

Q. Would it not run the risk of what the new axle norms did by creating excess capacity overnight?

A. WScrappage policy's effectiveness will largely depend on the incentives provided. The policy will,



“The details of the scrappage policy need to be understood in terms of direct benefit to the auto sector as far as demand generation is concerned.”

however, remove end-of-life vehicles plying on road and create demand for new vehicles that are less polluting, safe and efficient.

Q. What would be the effect of steadily rising fuel prices and other prices, including road toll tax on CV industry growth?

A. Higher fuel prices and road toll taxes are straining fleet owners and leading to higher cost of operations. With best-in-class fuel efficiency, safety and comfort, reliability, maintenance cost and connectivity of BharatBenz trucks, DICV is helping its customers to optimize their operations and run them more efficiently. The economic revival and necessity to transport more goods domestically and outside the country in 2021 should lead to the return of demand for M&HCVs.

Q. With M&HCV segment showing slow signs of growth, is DICV looking at new segments?

A. Green shoots can be seen in the economy that indicate the worst is over when it comes to market demand. We expect the Indian M&HCV segment to register non-linear growth in 2021, up 50 to 80 per cent compared to 2020, before returning to a linear growth rate in 2022. We are continually looking at market needs and industry trends. In-line with that, we are adjusting our portfolio.

Q. How do you look at the emerging vaccine transportation segment? Will it grow faster than the e-commerce segment?

A. Trucking will play a crucial role in vaccine transportation across India. The biggest challenge faced by the government is seamless and safe transportation of vaccines via an adequate number of advanced reefer trucks. We expect good demand for vaccine trucks in the second round of vaccination. With an estimated increase in demand of over 10,000 specialized trucks needed for the vaccine to be transported across the country - and a strong export opportunity as neighbouring countries

rush to vaccinate as well - we are positive about growing demand for vaccine-carrier reefer trucks. The National Centre for Cold-chain Development has said that India needs 30,000 new pack-houses with pre-cooling facilities and 60,000 refrigerated trucks.

Q. Who did you collaborate with the tanker superstructure?

A. We have many authorised body-builders that we collaborate with in different parts of the country. We work with them on the basis that they should be able to meet the various customer requirements towards customisation and others.

“Higher fuel prices and road toll taxes are straining fleet owners and leading to higher cost of operations.”

Q. How has been the progress of the used CV business that you entered in 2020?

A. The business has picked up well and providing DICV a sizeable chunk of its monthly sales. Offering customers the chance to trade in their vehicles of any brand for a BharatBenz, the BharatBenz Exchange programme has

been very popular.

Q. DICV was to announce an alternate fuel roadmap by the end of 2020. Will it do so this year?

A. HWe are currently working on a 'Future Mobility' roadmap that will address this and many other forward-looking topics. This will be presented in the coming months.

Q. How do you think the decision to hive-off the trucks business by Daimler Group will influence the Indian operations as its Asian manufacturing hub?

A. The announcement by Daimler AG is welcomed by Daimler India Commercial Vehicles (DICV). It will help Daimler Trucks become faster, more agile, and more focused. It will be easier to find new partners and forge new cooperation pacts to tackle the manifold challenges of transformation. The development would help leverage scale in the truck industry, to raise returns, and to fulfil customer needs. **CV**

DAIMLER TRUCK AND CUMMINS TO COOPERATE

In what is considered as a departure from the traditional way of doing business, Daimler Truck AG has inked a deal with Cummins Inc.

Bhushan Mhapralkar

Daimler Truck AG and Cummins Inc. have announced the signing of a memorandum of understanding to establish a global strategic partnership for medium-duty engine systems. Evaluating other opportunities for collaboration too, the two companies, as per the MoU will see Cummins investing in further development of medium duty engine systems for Daimler Trucks and Buses and globally produce as well as deliver them beginning from the second half of the decade. Expressed Martin Daum, Chairman of the Board of Management at Daimler Truck AG and a member of the Board of Management at Daimler AG, "The memorandum

of understanding between Daimler Truck AG and Cummins makes engine production at the Mannheim location fit for the future." "With the changeover to Euro VII, we are now freeing up funds to focus them on technologies that are crucial to our long-term corporate success in the transformation of our industry rather than to invest them in further development of our medium-duty engines," he added. Tom Linebarger, Chairman and CEO, Cummins Inc., averred, "We are pleased to announce this important strategic partnership with Daimler to provide the medium duty engine systems for Daimler Trucks and Buses in global markets. "Our partnership is a terrific opportunity for both

the companies to be more competitive, drive global innovation, expand offerings to customers and reduce emissions," he added.

Looking at exploring other potential opportunities while it works with Daimler on the production of medium-duty engines, Cummins, as a leading independent global power solutions provider, with the Daimler contract by its side, would be in a strategically advantageous position to pursue its core philosophy concerning powertrains and powertrain technologies. Keen to offer its customers right solutions at their doorsteps, and from among a broad portfolio that comprises advanced diesel, near-zero natural gas, fully





electric, hydrogen and other technologies, Cummins, according to Linebarger, will establish an engine plant within the Mercedes-Benz Mannheim campus, efficiently utilizing existing resources to produce medium duty engines compliant with the Euro VII emissions standard for Mercedes-Benz and ensuring continued joint success in the medium duty vehicle segment. With this strategic partnership, Daimler Truck AG and Cummins will help maintain employment at the Mannheim plant. Cummins will use its existing footprint and strong production and supply chain networks in all other regions for use in other Daimler Trucks' brands, including those of Daimler Trucks North America.

Of the opinion that the arrangement would present a

clear future perspective for the Mannheim site which produces medium duty engines today and will continue to do so, Daum mentioned, "By signing this memorandum of understanding, the clear future perspective for

the Mannheim site would spell a good move into the future." It is a given that the Mannheim site would undergo some changes as per the regulatory and other criteria, which need to be adhered to. Said Daum



that the changes to the site would be carried in cooperation with the works council. Looking at his Group and Cummins to shape the changes in the coming years in the view of developing joint solutions, and keeping the interests of the customers, employees and other stakeholders at the front, Daum is keen to get a handle on the alternate fuel technologies as they emerge and proliferate. Anticipating the partnership with Cummins will enable it to increase and accelerate its development efforts on alternative and emerging technologies, including non-

diesel engines, Daimler Truck AG, it is clear, in focusing on the further progression of zero emission drive technologies as well as further development of commercial heavy-duty drivetrains. The production of the current medium duty engine generation (MDEG) by Daimler Truck AG will end with the start of production of the Cummins engines at Mannheim where engineer Carl Benz invented the world's first automobile with the patent number 37435 in January 29, 1886. The Mannheim site to say the least is linked by a very special history thus. The site has over 5000 employees working

on the production of engines and associated components for all categories of commercial vehicles worldwide. The plant's foundry is one of the world's leading producers of cast-iron vehicle components.

As the next step of the strategic cooperation deed, the partners will evaluate a broader global strategic cooperation through identifying potential synergies in areas such as powertrain components and engine system components. The Daimler heavy-duty engine platform (HDEP) for the heavy-duty vehicle segment of Daimler Trucks and Buses will remain in the Daimler Truck AG portfolio. The HDEP engine family will continue to be manufactured by the global production network in Mannheim and Detroit, Michigan (USA) and will be fitted in heavy-duty trucks, in touring coaches as well as in third-party products worldwide. Raising eyebrows as the development involving Cummins and the historic Mannheim site comes just after Daimler AG announced that it is spinning off its truck and bus business into a separate entity, a picture that seems to be emerging is about cost sharing and technology sharing to rebound to profitability amid a new world order influenced by unprecedented developments like the Covid-19 pandemic. Focusing on restoring earnings and starting production of an electric big rig in the form of the e-Actros, the truck and bus business of Daimler, getting ready to separate from the larger Mercedes-Benz luxury-car division after more than a century, looks destined to





induce more agility; to lift profitability and advance the development of carbon-neutral drive technologies.

Of the opinion that the planned independence will help them make even faster progress into the future, Daum said about the Cummins cooperation that it would further strengthen his company's competitiveness. Known to traditionally produce more components itself than many peers, with the acquired independence, the Daimler Truck AG is expected to enter more cooperation agreements to enhance operational efficiencies. It is also expected to leverage its production site in India to produce trucks and buses for the Asian region as well as source components for its sites across the world. Collaborating with Volvo on fuel cells; with Waymo LLC on autonomous driving, the Daimler Truck AG business in

India has from the beginning concentrated on achieving high levels of localisation. Its medium-duty engines from the start of Daimler's operation in 2013 came to be built by AVTEC, claim sources. Sources also mention that

AVTEC supplies transmissions to some BharatBenz CVs as well. In India, the Daimler Truck AG's subsidiary produces BharatBenz, Fuso, Mercedes-Benz and Freightliner trucks for domestic consumption as well as exports. **CV**



SCANIA R450 HYBRID HGV FOR GERMAN E-HIGHWAY

Seven more Scania R450s are being supplied to the German e-highway project, Elisa.

Bhushan Mhapralkar

Scania will deliver seven more R450 Hybrid Heavy Goods Vehicles (HGVs) to the German e-highway that became fully operational on Autobahn A5, south of Frankfurt, late last year. The seven Scania R450 HGVs with pantographs fitted on top of them all will add to the already five such vehicles plying on the e-highways stretch measuring five-kilometers in length. As part of an effort of the European Union and the countries within to reduce vehicular greenhouse gases 80 to 95 per cent by 2050, the e-highway project, termed as Elisa (for electrified, innovative heavy traffic on the Autobahn), began taking shape in late 2017 with the involvement of Volkswagen Group and Siemens among others. Driven by the fact that shifting freight transport to rail has its limitations, the Elisa e-highway project attempts to look at long-haul heavy duty trucks especially, in a different light. It looks at the share of road transport in the form of trucks combining reliable service with minimum environmental impact. The e-highway system is thus being evaluated under the premise that it is twice as efficient as conventional internal

combustion engines.

With Siemens Mobility innovation supplying the Scania trucks with power from an overhead contact line laid over a distance of five-kilometers across both the sides – one facing Frankfurt and one facing Darmstadt, the Elisa project is showing high potential to reduce air pollution and contribute significantly to the decarbonization of the transport sector. Functioning such that a Scania R450 tractor-trailer in the lane right-most lane marked for HGVs and under the overhead power lines, a sensor in the vehicle detects the lines and emits a signal. This prompts the driver to press the button to allow the pantograph fitted on the roof of his cab to rise. It connects to the overhead lines and the truck turns electric with nary a sound to produce. If the internal combustion engine was running (a hybrid truck uses a smaller displacement internal combustion engine to part-propel the vehicles either by directly supplying power to the wheels or by charging the battery, which then gets the electric motor to turn the road wheels), it shuts down. Instead, the electric motor begins to power the truck.

With work to double the

length of the e-highway to 10 km with the supply of additional Scania R450 hybrid HGVs by the Volkswagen Group (Scania is a Volkswagen Group company) set to be complete by 2022, the Elisa project is providing much data and information to the stakeholders. The best part of the project perhaps is its functioning on a 'real' expressway – the famous Autobahn of Germany and not some highway that is called an expressway because a certain minister or government authority would like it to be called such. Evaluating whether such overhead power line trucks could be a viable alternative to road freight transport, the Elisa project, supported by the German Federal Ministry for the Environment, has been put in place with an investment of Euro 15 million. Its successful operation thus far has encouraged the undertaking of two more e-highway test sections in Baden-Württemberg and Schleswig-Holstein. Of the opinion that overhead contact line roads make one of the several promising technologies that can help freight transport on roads to a sustainable future, Claes Erixon, Executive Vice President for Research and Development, Scania,



mentioned that his company, like its sister brands MAN Truck & Bus, is also pursuing other, more direct ways to make traffic as green as possible. "“Vehicle electrification is developing quickly and with its environmental, social and cost benefits, it will play an important role in the shift to a fossil-free transport system,” he added.

Headed by Hessen Mobil, the operation of electrically driven heavy CVs using energy supply by overhead catenary in real traffic and on a public road in Germany for the first time is made special by the integration of climate-friendly technologies into the system network of cooperative automated transport, which would enable the traffic of the future to be made more environmentally friendly, safe and efficient. Expressed Gerd Riegelhuth, President, Hessen Mobil, that his company has been developing and testing solutions for the

mobility of the future for many years in the Rhine-Main area, Germany’s transport hub, with long-term experience in carrying out major projects for the development, testing and introduction of innovative transport technologies. The Elisa project, he added, marked a logical step for Hessen Mobil to make an important contribution to the vision of largely emission-free road freight transport.

Made interesting by the fact that if the HGV in the far-right lane wants to overtake another HGV in front and thus pulls into the over taking lane, the pantograph lowers itself. After the overtaking manoeuvre is complete and the HGV moves back into the lane with overhead wires the pantograph rises again. The view of the pantograph is available in the LCD screen on the dashboard of the truck for the driver to see. Enabling the

hybrid, battery powered HGV to run on electricity as well as top-up its battery over the five-kilometer stretch until it moves away from the Autobahn or continues beyond, the Elisa project, being managed out of the Hesse control centre, draw power from renewable sources in the form of solar panels situated not very far from the Autobahn. Highlighting a unique solution to the question of how does electricity get into the truck, the Elisa project, said Riegelhuth, is about the wise use of energy since it is valuable. He drew attention to a Federal Ministry of Transport and Infrastructure, Germany, report, which estimates that truck traffic will increase 38 per cent by 2030 as compared to 2010. The interim target of the German Federal Government being to reduce CO2 emission 94 metric-tonnes in the the transport sector by 2030, a reduction of 45 per cent, the



Elisa project is made important by the fact that the power required per 100 kilometres for electrically powered vehicles is up to 90 per cent lower than for combustion engines and 50 per cent lower than for fuel cells.

Though not the first project of its kind in Europe – the first project is said to have come up in Sweden some two years prior to this one, the Elisa project is made important by the fact that it is situated in the densely populated Rhine-Main area close to Frankfurt Airport, and the ‘Frankfurter Kreuz’ motorway junction provides optimal test conditions. It is an eight-lane motorway with a passage of 134,000 vehicles per day. The share of heavy goods traffic is approximately 10 per cent. The operational environment made challenging by its high public visibility, the Elisa project is helping the transferability of the research



Claes Erixon, Executive Vice President - Research & Development, Scania.



Gerd Riegelhuth, President, Hesse Mobil.

results to further sections of the motorway. Such is the location of the test track with regard to its potential to handle as many journeys as possible within existing transport networks, that it is throwing open new possibilities of transport companies using catenary trucks in their everyday business. Many more transport companies have shown interest in participating

in the test operation than there are catenary trucks available, according to Scania sources. Said Riegelhuth, “Compared with fuel cell concepts, the direct use of electric power is by far the most efficient in the transport sector. For electricity-based liquid fuels (called ‘power-to-liquid’ or ‘e-fuels’) the conversion losses are





higher. This is also reflected in the system costs.” “In the long run, RES-electricity-based fuels should thus only be used for modes of transport for which electrification in the foreseeable future is unrealistic (air and shipping traffic),” he added.

Of the opinion that catenary trucks are a vital complement to rail transport, Riegelhuth averred that even today, 80 per

cent of all freight transport is by truck and only eight-per cent is by rail. Stating that freight transport overall is increasing and requiring environmentally friendly drive solutions, he said that many regional truck transport operations like delivery of goods to supermarkets is not possible by rail. Expected to help develop financing or operator models, the Elisa project with

the involvement of Scania as a Volkswagen Group entity, Siemens, Darmstadt Technical University, Hesse Mobil and others is turning heads. It is drawing attention of the world in terms of how it could shape the future of road transportation in real-world conditions, and anticipating the rise in density as well as in terms of behavioural changes. **CV**





PROTERRA ZX5 ELECTRIC BUS

Proterra has introduced the fifth generation version of its battery-electric transit vehicle, the Proterra ZX5.

Team CV

A leading designer and manufacturer of zero-emission electric transit vehicles and EV technology solutions for commercial applications since 2004, US-based Proterra's new offering -- the Proterra ZX5, marks significant improvements in performance, range and operating costs. Featuring a streamlined design that has a better ability to cheat the wind, the new electric bus, according to company sources, presents an ability to store the most energy a vehicle of its type would. This, in-turn, has an effect on enhanced performance and range extension. Measuring 40 ft. in length, the Proterra ZX5, coming from a company that is at the forefront of electric commercial vehicle technology development, builds on the

Proterra bus-line legacy that began its journey over a decade ago. Designed to tackle the most challenging routes and terrains across North America with zero emissions, according to Jack Allen, CEO and Chairman, Proterra, the new e-bus is equipped with a 660 kWh battery pack that supports a drive range of up to 329 miles. It is also available to customers as a 35-ft long vehicle with a 220 kWh battery pack or a 440 kWh battery pack.

Drawing from its manufacturer's expertise and knowledge that has seen top OEMs utilise its battery systems, the Proterra ZX5 is designed for full-fleet electrification. Built ground up with a refined composite bus body design, the e-bus, apart from performance, range and operating costs, delivers on

safety and durability as well. Building on the experience of Proterra delivering its first battery-electric transit bus a decade ago, according to Allen, the Proterra ZX5 is poised to start a transportation electrification revolution in North America with its new vehicle and battery technology. Designed to include every functionality of a bus, the Proterra ZX5 has a lower vehicle height, which enables it to have greater route access. Equipped with new shock absorbers, the e-bus also flaunts superior ergonomics. These enable the driver and the passengers to experience a smoother ride. Drawing from the legacy of over 16 million service miles, the new e-bus has had a lot of work done in the area of dimensions and safety. Thus, the Proterra ZX5 gains a good deal in safety and



handling as the project that led to it, touched most of the system on the bus, according to Allen.

A lot of attention is paid to the chassis, the new e-bus can kneel lower and faster. Averred Allen, that much work has gone into ensuring that the e-bus

has smoother acceleration as well as smoother decelerations. Noticeably more comfortable and safer than the earlier generation vehicle, the e-bus offers an additional front port transit. It also offers vehicle charging to allow transit customers' flexibility and

optionality. With an improved hill-climbing ability to boast of, the Proterra ZX5 is also bought with a roof-mounted pantograph. Like the Scania R450 hybrid truck being tested on Germany's e-highway south of Frankfurt, the Proterra ZX5's pantograph system enables it to have its batteries charged on an e-highway. This translates into added charging flexibility as well as operational freedom. Mentioned Allen, "We want improved scalability by 'commonising' the base platform. Doing so has enabled us to make our process more repeatable, more efficient, and scalable. We are now better positioned to ramp up production. We are in a better position to ensure that our customer and end-user have a better experience operating or riding the e-bus."

Equipped with the company's standard ProDrive drivetrain, which includes a single permanent magnet drive motor with a two-speed auto



PROTERRA POWER

Since 2004, Proterra has clocked more than 16 million service miles in heavy-duty applications. As an electric bus and electric passenger and cargo commercial vehicle battery solutions provider, Proterra has been at the forefront in the e-mobility space in North America. Specialising in the design of electric transit buses, electric school buses, delivery trucks, coach buses, and shuttles, Proterra has earned a strong reputation for its battery technology solutions. Providing drivetrain solutions for commercial vehicles in a bid to help automakers and fleets to reduce their carbon footprint and lower operating costs, Proterra has managed to gather a good presence in the transit bus space for itself in the US and Canada. It has sold more than 1,000

electric buses to 130 communities across 43 US states and Canadian provinces. Offering a turn-key approach to an energy ecosystem for e-CVs, Proterra has achieved an edge through high-power charging systems and energy fleet solutions. Providing an ecosystem which includes charging infrastructure design, build, financing, operations, maintenance and energy optimisation, Proterra electric energy solutions have found use in Daimler's Thomas Built Buses, Freightliner Custom Chassis Corporation, Van Hool, Optimal, and Bustech. The company's silicon valley R&D lab and manufacturing facilities are claimed to be the most modern and capable of turning out to be the best on offer against existing and emerging competition.

shift gearbox, or a DuoPower drivetrain, which features two electric motors supporting 1.5 times faster acceleration by the virtue of nearly twice the horsepower (550 hp) and five times better fuel efficiency than a standard diesel engine, the Proterra ZX5 is a showcase of technology in the form of a bus that exhibits an ability to supersede CNG or diesel powered buses by a good margin. Interestingly, the 550 hp DuoPower drivetrain,

presenting the e-bus with an ability to accelerate from 0 to 20 mph in less than six seconds, has a new generation battery pack that is highly customisable in nature. With a grade-ability of the Proterra ZX5 up by 25 per cent on steep hills, courtesy the DuoPower drivetrain that is manufactured at the company's California facility dedicated for the purpose, what distinctly stands out regarding the new e-bus is

the amount of attention that has gone into its designing and execution. Emphasising innovation as the factor at the core of their working principles, Allen said that the Proterra ZX5 better-engineered, better designed and safe. He concluded that they have spent months toiling over every millimetre of the product in view of the fact that thousands of decisions are made, which put together make a huge difference." **CV**





WORLD'S CUTEST ELECTRIC PICKUP

Canoo has unveiled what might be the world's cutest electric pickup truck

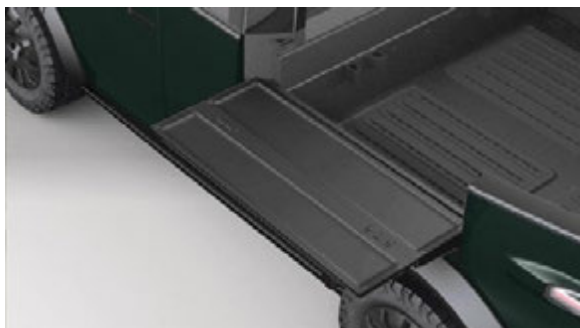
Team CV

If the Ashok Leyland Bada Dost strives to unlock the potential that lies in the Indian pickup truck segment with its clever design and global benchmarking, on the international scene, the electric pickup that Canoo has unveiled might be the world's cutest vehicle of its kind. With no need to house a big engine under a long hood, the Canoo electric pickup truck reflects

the thinking of designers that there's room for more creativity, which should be unlocked and exploited. Getting creative with shapes thus, designers are exploring new ways; new alternatives. If the Tesla's wedge-shaped Cybertruck could be described as an example of this, the Amazon-backed Rivian, it is no secret, is planning to put a trunk where the engine would normally fit.

Unlike a legacy pickup truck manufacturer, Canoo is an electric vehicle startup.

A California-based electric vehicle startup, Canoo is devoid of the baggage a legacy pickup truck manufacturer would carry. This is more or less apparent by the startup's electric pickup, which has a 'cab forward' design. It places the driver almost directly over the front wheels. Some would



call it a half van-half pickup, the fact however is, the Canoo electric pickup has a flat front like a van. If it reminds of the Volkswagen Transporter vans of the yesteryears, the Canoo e-pickup facilitates more room for cargo bed by omitting the hood. In the process, it does not make itself look too

large overall either. Measuring 184 inches in length, which makes it a touch longer than a Toyota Corolla, the Canoo e-pickup is made interesting by the fact that it has a cleverly designed cargo bed. Shorter than the Tesla Cybertruck, the six feet long cargo bed of the e-truck has an extension that

can slide out, providing two additional feet of length. Minus the extension, the cargo bed, when compared to that of the Cybertruck, is only six inches shorter! The up side of the Cybertuck is that it seats more people though.

If the Bada Dost, benchmarked against some of

the best performing pickups to emerge out of Japan and Far East Asia, is immensely modular to spring a CNG or electric version, and could have its rear wall removed to turn into a van for ambulance, e-commerce or similar such duty application, the Canoo goes a few steps further in its ability to mould itself to different application needs. The vehicle's snub-nosed body shape said to be similar to some trucks from the 1950s and '60s, like General Motors' Corvair pickup, the Jeep Forward Control truck and the Volkswagen Type 2 pickup, which was based on the VW bus, the Canoo e-pickup does a good job of dedicating the space unleashed by eliminating the engine. It, besides the cargo bed, allows for more storage space inside the truck. There's additional storage up front under the cab, for instance. The door that folds

down from the front of the truck can also be used as a work table, the same way people often use pickup tailgates. Similarly, doors also fold down from the sides of the cargo bed to allow easier access over there. Those doors can also be used as workbenches. Canoo expects the truck to produce up to 600 hp and 550 pound feet of torque from two electric motors. It is more than a V8-powered Ford F-150 pickup. The truck will be able to drive over 200 miles on a charge, according to the company statement.

In February 2020, Canoo and the Hyundai Motor Co. (HYMTF) announced plans to jointly develop an engineering platform for electric vehicles for use in both Hyundai and Kia vehicles. The startup company previously unveiled two vans, one a work van and another a 'lifestyle' passenger

van. Both the vans, and the pickup, are based on Canoo's skateboard-like platform that allows for a variety of body styles. Going public late last year through a special purpose acquisition company, or SPAC, merger and now having a market capitalization of USD 3.4 billion, Canoo has not yet announced the price of its electric pickup truck. It has instead said that it would begin delivering it to customers in 2023. So, it is quite likely that the price would be announced closer to the launch, or as the production begins. Interestingly, besides the Tesla Cybertruck, the Canoo electric pickup truck is expected to face competition by the time it is out. Other startups like Rivian, and the legacu pickup truck manufacturers are certain to up their ante. Ford has already announced that it plans to make an electric F-150 pickup soon. **CV**



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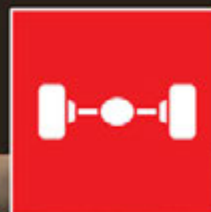
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