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At the 56th Annual Convention, the Society of Indian Automobile Manufactures (SIAM) urged the government to institute a single ministry to formulate technical norm, a longtime roadmap on safety, emission and fuel efficiency standard for the automotive industry. In order to make it practical and rational a single ministry and a single window should be provided to the industry to eliminate unnecessary measures. This is much needed for ensuring sustainable development of this industry.

The lack of clarity across several areas due to changing environment with new incoming regulations on emissions, safety and fuel efficiency created many problems for auto sector. It is known that the ban on diesel cars with engine displacement of more than 2,000cc in Delhi for some time had also put several carmakers in a catch-22 situation, where they raised doubts on the same and had asked for sustainable policy roadmap. OEMs such as Mercedes-Benz India and Toyota Kirloskar Motors had even spoken about holding up potential investments in India. The automotive industry had to bear a cumulative loss in the range of Rs 4,000-Rs 4,500 crore due to the 8-month ban on diesel cars in Delhi-NCR.

Whether it is the ban on diesel engines above 2000cc in Delhi-NCR or the leapfrogging of BS V norms to attain BS VI standards in a short span of less than four years, the automotive industry feels it is on the back foot when it comes to policy. At stake are thousands of crores of rupees in investment already done and thousands crores more to come. Policy stability is vital for companies looking to invest in the Indian growth story and in the absence of a clear roadmap, growth will be stunted and not achieve its potential. The ambitious Automotive Mission Plan 2026 targets sales of Rs 1,211,500 crore (US$ 200 billion) with exports contributing Rs 462,500 crore (US$ 75 billion) which is 35-40% of its overall output for 2026.

The Indian automotive industry, which contributes seven per cent to the GDP and eight per cent to central tax collections, deserved a nodal ministry for future growth.

A holistic long-term policy perspective is needed while formulating regulations for the Indian auto industry. The western governments supported their local champions by way of various support measures.
HINDUJA FOUNDRIES TO MERGE WITH ASHOK LEYLAND

The Indian supplier of automotive components Hinduja Foundries is going to amalgamate with commercial vehicle manufacturer Ashok Leyland, informed the company in an official statement released on Thursday. The appointed date for the proposed amalgamation is October 1, 2016.

The Board of Directors also approved (subject to regulatory approvals) the exchange ratio - 100 equity shares of Rs 10 each fully paid of Hinduja Foundries will get 40 equity shares of Re 1 each fully paid of Ashok Leyland, One thousand 2008 series GDRs of Hinduja Foundries will get 133 equity shares of Re 1 each fully paid of Ashok Leyland, One 2016 series GDRs of Hinduja Foundries will get 4,800 equity shares of Re 1 each fully paid of Ashok Leyland.

Vinod K Dasari, Chief Executive Officer and Managing Director, Ashok Leyland, said: "We welcome Hinduja Foundries into the fold of Ashok Leyland Limited. The amalgamation will result in operational efficiencies and help realize significant cost synergies. We are confident that the roll out of the best practices of Ashok Leyland will benefit Hinduja Foundries."

He further added, "While it is a critical supplier to Ashok Leyland will continue its focus to grow its relationships with other customers. In fact the new arrangement will help in providing a wider range of solutions to them. There is so much more Hinduja Foundries can do under the new arrangement."

FIEM INDUSTRY SUCCESSFULLY RAISE RS 120 CRORE VIA QIP

Auto component maker Fiem Industries today said it has raised Rs 120 crore from domestic and overseas investors through qualified institutional placement (QIP). Fiem will use part of the proceeds from the issue to recapitalise its international joint ventures and also expand the existing automotive/LED facility, the company said. The debt-free company has lined up Rs 45 crore capex to set up new ventures. Part of the proceeds of the QIP issue, for which Centrum Capital was the sole lead manager, will be used to fund the new ventures.

The Delhi-based company is one of the largest suppliers of automotive lighting, signalling equipment and rear-view mirrors to OEMs such as Tata Motors, Skoda, GM India, Honda Motorcycle and Scooter India, TVS Motors, Yamaha, Suzuki India, among others. It also supplies to auto majors in Japan, Britain, Germany, Indonesia, Thailand and Vietnam. Fiem, which has diversified into LED luminaries for indoor and outdoor applications, has its manufacturing facility at Sonepat in Haryana.

The company has also inked an agreement with two Japanese companies – Honda Locks and Toyota Tsusho Corporation – for a joint venture to manufacture key sets for four-wheelers and two-wheelers, door mirrors and handles. The company already has an agreement with Aisan Industry of Japan to manufacture canisters used in emission control systems for two-wheelers.

Fiem also has an agreement with Kyowa Co of Japan for developing mould/tooling aimed at the domestic automotive market. This JV will not only reduce its dependence on foreign mould manufacturers but also give it better control over new product development.

SOLARIS URBINO NOW ALSO WITH BAE HYBRID DRIVE

The Polish bus manufacturer will now offer BAE Systems’ hybrid electric drive propulsion system on its vehicles. Solaris has till now delivered more than 14,000 vehicles across 30 countries and now expands its offer with BAE Systems’ hybrid electric drive propulsion system.

BAE Systems is expanding its global reach in the market for electric drive propulsion systems through this agreement with Solaris Bus & Coach S.A. BAE’s global fleet of series electric drive propulsion systems exceeds 6,000 today, and is operating in cities such as London, Paris, Boston, Seattle, and Hong Kong. Metropolitan cities such as these use hybrid electric and electric drive technologies to decrease harmful emissions and noise pollution.

BAE Systems’ series electric drive system attracts transit operators because of its ability to prevent engine-idling at bus stops using its proprietary stop/start technology. BAE Systems’ Accessory Power System provides all the electric power a bus will need during the stop to keep its accessories running, such as the power steering, air compression, air conditioning, and even heat in colder temperatures.

A bus spends nearly 40 percent of its operation time picking up...
passengers, and with BAE Systems’ stop/start feature, the bus engine can be turned off during stops, saving both fuel and emissions. Each year, city buses powered by the company’s electric drive systems carry more than 1 billion passengers, saving 13 million gallons of fuel and preventing the release of more than 150,000 tons of Co2.

This agreement with Solaris further strengthens BAE Systems’ presence in the city of Poznan, Poland. For example, BAE Systems’ Applied Intelligence sector has already invested in the city, focused on its set of risk, fraud, and compliance solutions. Since 2013, the company has more than doubled the number of employees in the region and currently employs more than 80 people at its Poznan delivery center. These employees include a combination of engineering staff who build products and a services team that implements and supports those products for clients.

**FRESH ORDERS FROM STATE TRANSPORT FIRMS TO BOOST BUS SALES**

Over the past three months, India’s top three bus makers—Ashok Leyland, Tata Motors and VE Commercial Vehicles—have bagged orders for supplying 10,600 total units.

Bus makers in India have their order books full as efforts to boost road transport by some state governments and a switch to stricter emission norms in April are prompting state transport undertakings (STUs) to replace their ageing fleets, said officials at bus makers and STUs.

Over the past three months, India’s top three bus makers—Ashok Leyland, Tata Motors and VE Commercial Vehicles—have bagged orders for supplying an aggregate of 10,600 units. The orders are to be executed by the end of fiscal 2017 and are set to boost sales in a segment that has remained depressed for the past two years. On 6 September, Tata Motors said it won orders to supply 5,000 buses worth Rs900 crore to 25 STUs during the April-August period, an 80% jump from the same period a year ago and the highest in four years.

The new orders, the biggest since 2011 for Tata Motors, are for fully built buses that can meet upgraded specifications with regard to ground clearance and IT enablement, said Ravindra Pisharody, executive director of commercial vehicles at Tata Motors.

**70 NEW BUSES ADDED TO KSRTC’S FLEET IN BENGALURU**

As many as 70 new buses were launched by the KSRTC as part of the first phase of 380 Karnataka Sarige buses. Speaking to reporters after the inauguration, Transport Minister Ramalinga Reddy said, 1,594 new KSRTC buses will be inducted by March 2017. “We will launch the remaining 310 Sarige buses by November this year,” he said.

“We are planning to replace aged buses by March this year. These new Volvo-Eicher buses are mainly for rural areas in the state. It also has a fuel efficiency of 5.8 KMPL (Kilometres obtain per litre of high speed diesel), which is higher than other buses,” said Reddy. He said they will implement BS-VI norms for its buses by 2020 in a phased manner.

Apart from this, KSRTC is planning to introduce seven new fly buses directly from Bengaluru International Airport to Tirupati, Madikeri and Salem. At present, Bengaluru-Mysuru (five buses) and Bengaluru-Kundapur (two buses) are operating. It has also decided to install CCTV cameras in all depots, bus stations, regional workshops and divisional workshops to bring transparency. At present, four state road transport corporations are providing public transport services to 23,793...
villages and catering to about 1.25 crore passengers with the help of 23,700 buses and 1.17 lakh man power.

**AUTO COMPANIES ON TOP GEAR, BUY THESE STOCKS AHEAD OF FESTIVE SEASON**

Auto stocks are on a roll since the beginning of the ongoing financial year on hopes of rising demand from rural consumers buoyed by robust monsoon and salary hike of government employees after 7th Pay Commission. Markets experts believe auto sector will remain in limelight in the last quarter of 2016 also due to upcoming festive and wedding season. Since April 1, 2016, shares of auto majors such as Maruti Suzuki soared nearly 50 per cent to Rs 5566.50 till September 26, 2016, followed by Tata Motors (up 41.10 per cent), Eicher Motors (up 28.18 per cent) and Bajaj Auto (up 20 per cent).

In August 2016, two-wheeler sales increased by 26 per cent year-on-year helped by a weak base and buildup of channel inventory in anticipation of a good season ahead. Sales of motorcycle, scooter and moped grew by 22 per cent, 33 per cent and 37 per cent year-on-year with new launches contributing 7 per cent of overall sales in motorcycles and scooters. In passenger vehicles (PV), the UV segment continues to drive sales, growing 47 per cent year-on-year helped by new launches and model refreshes.

Auto ancillary and tyre companies too joined the rally with MRF shares soared over 22 per cent during April 1- September 26. Others like Motherson Sumi, Amara Raja Batteries and Bharat Forge also gained 20.50 per cent, 14.63 per cent and 8.48 per cent, respectively.

Rating agency India Ratings and Research is positive on the growth of tyre companies and expects the overall tyre volumes (in numbers) to grow around 7 per cent in the FY17 due to a steady demand from original equipment manufacturers (OEMs) and an improvement in replacement demand. However, revenue growth for sector companies might be lower than the overall growth in volume demand due to an increase in imports as well as pricing pressure. Brokerage firm Prabhudas Lilladher has ‘Buy’ rating on Ceat stocks with a target price of Rs 1,310. On Monday, shares of the tyre maker were trading at Rs 1,186.

**CUMMINS INDIA THE WHEELS OF CHANGE**

Cummins is well-placed to reap the benefit of the Centre’s increased thrust on infrastructure sector. Increasing allocation to roads and railways, ongoing policy changes to encourage mining activities and plans to increase investment in the port sector should benefit the company. The company makes industrial engines, power gensets and engines for auto manufacturers. It provides after-sales service for its equipment through its distribution business. A robust capital investment in its manufacturing units over the last few years, focus on developing strong R&D capabilities and the technical expertise of its parent company, Cummins Inc, are advantages.

But weakness in domestic private investment and a sluggish export market weigh on the company. The stock now trades at ₹ 921, nearly 22 per cent lower than the peak of ₹ 1,189 recorded in August 2015.

It trades at a price earnings multiple of 35 times its trailing 12-month earnings, higher than its three-year average of 33 times. The positives appear factored in the price. However, given the positive impact of higher investment by the Centre, investors can continue to hold the stock.

Cummins India (CIL) recorded its highest revenue ever of ₹4,603 crore in 2015-16, a 6.5 per cent increase compared with the previous year. Net profit after adjustments was at ₹752 crore, a growth of 4.9 per cent over the previous year. While revenue grew at an annualised rate of 0.7 per cent between 2012-13 and 2015-16, improved supply chain management led to a higher 1.4 per cent growth in profit (annualised) in the same time period.

**NEW PROTERRA CATALYST E2 HAS RANGE OF UP TO 350 MILES**

Proterra recently unveiled the E2 as the newest addition to its fleet of electric buses. The Catalyst E2 series, as it is called, is named for its Efficient Energy (E2) storage capacity of 440 - 660 kWh. Last month, an E2 series vehicle achieved a new milestone at Michelin’s Laurens Proving Grounds where it logged more than 600 miles (966 km) on a single charge under test conditions.

Its nominal range of 194 - 350 miles means the Catalyst E2 series is capable of serving the full daily mileage needs of nearly every US. mass transit route on a single charge and offers the
transit industry the first direct replacement for fossil-fueled transit vehicles. The high-mileage Catalyst E2 series joins the existing Catalyst FC and XR series vehicles, designed for circulator and intermediate-mileage routes, respectively.

E2 battery configurations can be fully charged at the depot with industry standard equipment. Proterra’s primary goal has always been to create a purpose-built, high-performance electric vehicle that can serve every single transit route in the United States. With the unveiling of the Catalyst E2 Series, that goal has been achieved. With annual sales already 220% higher than 2015, Proterra is experiencing a breakthrough year in the mass transit sector and expects the debut of the Catalyst E2 series to only further increase this success.

To date, Proterra buses across the United States have completed over 2.5 million miles of revenue service, displacing 540,000 gallons of diesel, and eliminating nearly 10 million pounds of carbon emissions.

CONTINENTAL TO SHOW DANDELION RUBBER BUS TYRES

Natural rubber derived from dandelion roots is making its debut in truck and bus tyres and in components produced by Continental. The German manufacturer unveiled a number of products that contain this raw material at the IAA Commercial Vehicles Show this month, including Conti EcoPlus HD3 tyres. These items merely offer a taste of things to come.

Continental states that production of Taraxagum – the name given to its dandelion rubber – will commence sometime within the next five to ten years. The Taraxagum Conti EcoPlus HD3 was joined at the IAA by a prototype for an engine mount that links the powertrain with the chassis and the first example of an intermediate propeller shaft bearing made from the new material.

According to Continental, tests on the truck tyres and vibration elements made from Taraxagum were “extremely promising” and demonstrate that this Hevea rubber alternative “is ideal for the commercial vehicle sector” and “fulfils the strictest requirements in the challenging field of freight haulage.” Continental is working on the industrialisation of dandelion rubber in a joint research project with the Fraunhofer Institute for Molecular Biology and Applied Ecology, the Federal Research Center for Cultivated Plants, Julius Kuehn-Institute, and the plant breeder ESKUSA.

NAVISTAR IN STRATEGIC ALLIANCE WITH VOLKSWAGEN TRUCK & BUS

American company Navistar International Corporation announced that it has formed a wide-ranging strategic alliance with Volkswagen Truck & Bus, which includes an equity investment in Navistar by Volkswagen Truck & Bus and framework agreements for strategic technology and supply collaboration and a procurement joint venture.

The agreements expected to be entered into in connection with the alliance will enable Navistar to offer customers expanded access to leading-edge products and services through collaboration on technology and the licensing and supply of Volkswagen Truck & Bus’s products and components, while better optimizing its product development spend. The alliance will also strengthen Navistar’s liquidity position. In addition, the procurement joint venture is expected to leverage the purchasing power of Volkswagen Truck & Bus’s three major truck brands, Scania, MAN and Volkswagen Caminhões e Ônibus, in addition to Navistar’s own International and IC Bus brands, providing Navistar with enhanced global scale.

Navistar products will benefit from Volkswagen Truck & Bus components and technology through licensing and supply agreements entered into pursuant to the framework agreement for strategic technology and supply collaboration, which longer term will generate increased parts sales.

USE PUBLIC TRANSPORT IS TEN TIMES SAFER THAN DRIVING A CAR

Bus, tram, metro. All together public transport are safer private car. To establish a recent study conducted by the American Public Transit Association, along with the Victoria Transport Policy Institute, which puts black on white the benefits of using...
public transport in terms of road safety. In 2015, the United States alone, fatalities ascertained related to automobile accidents were over 35,000, up 7.2% on 2014, reaching the highest levels of the last five years. By contrast, the number of accidents, even fatal, with a means of public transport involved is much lower.

The researchers have thus concluded that use a means of TPL reduces the risk of being involved in an accident by 90%. Data can seem extremely positive than advertised by the media every day, but the news coverage, experts say, is the result of greater newsworthiness of incidents involving large numbers of people involved, although the effects on the whole are less than those the sum of all motor vehicle accidents. The study, however, has warned: the sector’s companies have to change their style of communication, emphasizing the safety of public transport and using communicative reassuring tone, approaching as many people as possible to public transportation.

**OLLI TO START UP PRODUCTION IN GERMANY**

U.S. start-up Local Motors will build its highly automated electric bus in Berlin from early next year. A rent agreement for a 4,000 square metre facility has been signed. Production will begin with a small series of 50 units. If the vehicle gets permission to drive on the road, the Olli could conquer Berlin's roads street as early as 2017. The Olli is an autonomous electric minibus designed by Local Motors, which you might remember as the company that's planning to sell 3D-printed cars this year. While the automaker itself designed the 12-seater’s self-driving system, it teamed up with IBM to use Watson's capabilities to power the EV's other features. Thanks to Watson, you can tell Olli where you’re heading in natural.

Olli will be exclusive to DC these next few months, but Miami and Las Vegas will get their own in late 2016. Local Motors is also in talks to test the bus in cities outside the US, including Berlin, Copenhagen and Canberra. It's unclear if anyone can get the chance to ride one, since these are merely trial runs, but you can ask local authorities if the EV makes its way to your city.

If and when the time comes that driverless public vehicles can legally shuttle passengers, you'll be able to summon an Olli through an app, just like Uber. And if Local Motors’ plans pan out, a lot of people around the globe will be using that app: Company co-founder John Rogers envisions building hundreds of microfactories all over the world that can 3D print an Olli within 10 hours and assemble it.

**HALDEX AND VIE TO DEVELOP ELECTROMECHANICAL BRAKE SYSTEMS FOR BUSES**

HalDEX from Sweden and Zhejiang VIE Science and Technology Co., Ltd. from China have set up a joint venture to design, develop, produce, and sell electro mechanical brake systems for commercial vehicles with an initial focus on the electric bus market in China. As manufacturers and governments seek solutions to combat climate change, China is seen as taking a global lead in the market for fully electric commercial vehicles. Electro mechanical brakes is expected to be a fast growing niche within this market, especially supported by the recent strong development of the electric bus segment on the Chinese market. The Chinese market for electrical buses is forecasted to grow by 47% between 2015 and 2020, to over 141,000 vehicles produced during 2020. The new technology will offer customers a simplified and cost effective brake system layout; independent from pneumatic energy, with reduction of noise, improved braking performance, and better passenger and driver comfort.

Under the agreement, HalDEX and VIE will set up a green field joint venture with the parties owning 50% each. The joint venture will operate under the name HalDEX VIE (China) Electro Mechanical Brake Systems Co., Ltd. and be based in Shanghai, China. The joint venture will capitalize on HalDEX' early development of electro mechanical brake systems, not yet released to the market, and VIE's market leading position and customer base on the Chinese market.

Both parties will contribute with the necessary financial and engineering resources to bring the electro mechanical brake system to the commercial vehicle market. The initial focus will be on the growing electrical bus market in China and the joint venture is expecting revenue from the year 2020 and onwards.
Sustainable transport is a model of transportation system that is sustainable in social, environmental and economic sense in the global scope with supply of source energy indefinitely. Short-term activity often promotes incremental improvement in fuel efficiency and vehicle emissions controls while long-term goals include migrating transportation from fossil-based energy to other alternatives such as renewable energy and use of other renewable resources. The entire life cycle of transport systems is subject to sustainability measurement and optimization.

Short-term activity often promotes incremental improvement in fuel efficiency (economic-impact) and vehicle emissions controls (environmental impact) while long-term goals include migrating transportation from fossil-based energy to other alternatives such as renewable energy and use of other renewable resources.

The entire life cycle of transport systems is subject to sustainability measurement and optimization. Sustainable transport systems make a positive contribution to the environmental, social and economic sustainability of the communities they serve. Transport systems exist to provide social and economic connections, and people quickly take up the opportunities offered by increased mobility.

The advantages of increased mobility need to be weighed against the environmental, social and economic costs that transport systems pose. Transport systems have significant impacts on the environment, accounting for between 20% and 25% of world energy consumption and carbon dioxide emissions.

Traditional transport planning aims to improve mobility, especially for vehicles, and may fail to adequately consider wider impacts. Increased traffic congestion, exhaust emissions, noise emission has negatively impacted the environment with ever increasing socio-economic loss.

The European Union Council of Ministers of Transport defines a sustainable transportation system as one that:

- Allows the basic access and development needs of individuals, companies and society to be met safely and in a manner consistent with human and ecosystem health, and promotes equity within and between successive generations.
- Is Affordable, operates fairly and efficiently, offers a choice of transport mode, and supports a competitive economy, as well as balanced regional development.
- Limits emissions and waste within the planet’s ability to absorb them, uses renewable resources at or below their rates of generation, and uses non-renewable resources at or below the rates of development of renewable substitutes, while minimizing the impact on the use of land and the generation of noise.
Sustainability extends beyond just the operating efficiency and emissions. A Life-cycle assessment involves production and post-use considerations.

A cradle-to-cradle design is more important than a focus on a single factor such as energy efficiency. Many European cities are facing challenges when it comes to set up and implement truly sustainable mobility policies and measure. These measures shall require considering and balancing economy, environment and society in both short-term and long-term aspects.

**Use of Clean Fuels**

Developed nations throughout the world have started to move towards the use of Clean Fuels. Use of hybrid vehicle (Electric Energy), biodiesel, CNG, LPG, hydrogen cells are promoted to reduce the exhaust emission and dependence on petroleum products.

**Sustainable Transport Infrastructure**

Dedicated Bike-ways, Bus-ways (BRT), rail-ways and cycle tracks are being introduced to bring sustainable mobility at different levels of usage and for all division of commuter groups.

**Access Restriction**

Innovative parking management, traffic calming, pedestrian zones are created to facilitate and improve the sustainable commuting experience.

**Travel Information**

Intelligent transportation Systems (ITS) are being implemented across the whole of transport sector, which help better adaptive planning to meet the requirement of a sustainable mobility.

**Mobility Sharing**

Car-pooling, car-sharing, bike-sharing, cycle-sharing are introduced in major cities of the worlds to reduce the urban traffic congestion and reducing the carbon foot-print of
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Benefits for your city
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In India several cities have adopted steps to bring sustainability to their transportation system and thereby making commuting easy and affordable for its citizens. Some of these include:

- Metro Rails
- Mono Rails
- Light Rails
- BRT (Bus Rapid Transport)

E-rickshaws also have added to the last mile connectivity for the commuters throughout urban as well as rural landscape. They are usually battery operated and without any exhaust or noise pollution.

Use Alternate Fuel for Sustainable Mobility

Hydrogen fuel cell buses and Ethanol fuel based buses are being introduced on pilot study basis to study the sustainability and viability of use of alternate fuel in existing mode of transport systems. Examples include Fuel Cell based Star Bus promoted by TATA Motors and Ethanol based bus by SCANIA. As India’s population rapidly increases, the need for sustainable urban development and transport must be addressed. Efficiency, cost and employment will all be key factors in this change. Transport is an important part of India’s growth story. Rapid economic growth brought with it a stress on India’s transport infrastructure which has not kept pace with rising demand for services.

The transportation sector accounted for a share of 6.4% of GDP in 2010. Historically, urban transport in India comprised of rail, road and water transport. Options ranged from low-end public transportation modes such as bicycles, rickshaws and state-owned buses to relatively more expensive rail transport and air – used by a privileged few.

The proliferation of private means and ownership of cars and two-wheelers is a common phenomenon across urban India, increasing road density, traffic snarls and commuting time. The impact on urban ecology and human health is starting to be felt. With transport infrastructure projects subject to time and cost overruns, development isn’t keeping pace with urbanisation. The role of government in bridging the demand-supply gap is a focal point and India’s Five Year Plan, starting
this year, envisages an increased focus on transportation infrastructure. Experiments in transportation systems include the metro, light and monorail rail, bus rapid transport systems (BRTS) and pod rapid transport (PRT).

Nascent policy action has begun in some small and big cities of India to move away from car centric city development.

The city governments are active to find ways to reform and fund public transport systems, reform bus sector policies, apply more sophisticated information technology in the management of public transport, develop innovative micro finance schemes for non-motorized transport, and design walking infrastructure to make cities more pedestrian friendly. Though just a beginning these are crucial steps forward. These interventions need support and push in all cities. Centre for Science and Environment presents a snapshot of these policy interventions across cities of India.

Dedicated Funds for Public Transport

Dedicated urban transport funds have been set up to improve the spending on public infrastructure to promote migration of the ridership from individual vehicle to transport vehicles in cities like Surat. Similar activities have been initiated in many cities across India. The twin cities of Pimpri-Chinchwad on the Bombay-Pune expressway have also set up a dedicated urban transport fund in September, 2008. The Pimpri Chichwad municipal corporation (PCMC), is a part of Pune urban agglomeration. Under the Urban renewal mission, PCMC is setting up a bus rapid transit network for 130 kilometers. Currently, work has started for the first 60 km. The project is being funded under the JNNURM.

The city of Indore has become quite iconic for its reform and expansion of the public bus
transport system. Indore like many other cities had fallen victim to gregarious growth of traffic, congestion, delays, and accidents. The sum of its public transport included private minibuses, tempos, mini-vans, and auto rickshaws. It did not have efficient, safe, and affordable public mass transport system.

Proactive city administration therefore made efforts to completely rebuild its public transport system and its reform its management. Dipbahan Rickshaw Bank Project began in Guwahati with an aim to design an indigenous tricycle rickshaw, an important means of localized transportation in many Indian cities.

This project was initiated by the Indian Institute of technology (IIT) Guwahati, to design an indigenous tricycle rickshaw suitable for Indian conditions, and a manufacturing system with participation from small and medium enterprises (SMEs).

The Karnataka State Road Transport Corporation (KSRTC) has become one of the leading public transport undertakings in India to introduce electronic ticketing machine in its buses. This is being done to optimize efficiency, reduce operational cost, increase revenue, reduce scope for revenue pilferage by conductors, help better labour relations, generate scientific accurate traffic information and great help in case of services operated with just driver cum conductor.

Similar electronic ticketing machines have been introduced in Delhi, Himachal, Chandigarh etc. India has lot of potential to introduce and implement sustainable technologies which have been tried and test around the world along with re-innovating new models and systems to meets its own specific transport requirements.
HELLA PRESENTS MODULAR LIGHTING SOLUTIONS AT IAA

Giving your vehicles an individual light signature with straightforward stepwise conversion to LEDs while simultaneously complying with the latest ECE regulations - numerous vehicle manufacturers are currently facing just these challenges. The lighting and electronics expert Hella also contributes technology and expertise to the commercial vehicle sector.

At the IAA, the international trade fair for mobility, transport and logistics, which will be held in Hanover from September 22 to 29, 2016, Hella will be presenting new and enhanced products specifically for trucks, trailers and buses (Hall 12, Booth B23). Under the motto "Think modular", the particular focus will be on solutions that enable manufacturers to put together lighting systems on a modular basis so as to flexibly meet these challenges.

The additional side flasher function in accordance with ECE R48 series 05 (CAT 5) is still completely optional. But starting in November 2017, trailer manufacturers have to equip all newly developed series for which they apply for a type approval with a side flasher function. Hella is presenting an effective and flexible solution for the first time at the IAA show.

For example, HELLA will be introducing its new Shapeline series of lamps. At the booth, visitors can don virtual reality goggles to make a live vehicle selection and configure lamps for its front, side or rear. Alternatively, they can use touch screen to create their design via an online configurator. The configurator automatically takes into account either current European ECE R48 regulations or American SAE regulations.

The ECE R48 regulations also apply to trailer manufacturers. From November 2017, manufacturers must provide side flasher functions on all newly developed series for which they request type approval. HELLA has developed a versatile product for this. At its booth the company will be presenting solutions that make it easy to integrate LED side marker lights with reflex reflectors and auxiliary indicators into a previously planned lighting system - with no need for expensive
conversions. HELLA has also expanded its modular product range for trailers. One highlight of the company’s trade fair presentation will be a new series of rear combination lamps.

And, in accordance with its "one-stop shopping" principle, HELLA also supplies appropriate cable architecture for all its trailer products. Both the EasyConn system – which was developed by HELLA – and the wiring system Superseal/DIN bayonet enable manufacturers to easily extend, retrofit or modify their lighting systems. This not only saves time and increases flexibility, but also minimizes the cost of storage for the aftermarket, for garages, and for fleet operators.

At the commercial vehicle fair HELLA will also present a number of exhibits to introduce its modular product portfolio specifically for buses and trucks. For example, for buses the automotive supplier will show a hybrid headlamp solution with xenon modules and a fully customizable headlamp solution based exclusively on LED technology. For trucks HELLA will be using a variety of rear combination lamps to illustrate its customizable and standard solutions. The daytime running lights on show at the booth center on 90 mm halogen, xenon, single-function and multi-function modules. Existing halogen versions in the series can be converted to LED modules at any time. Under auxiliary lamps HELLA will present aerodynamic light bars as an alternative to circular lights. ECE-certified LED Light Bars 470 are a new addition to the program. These 528 mm long LED auxiliary lamps offer optimal lighting conditions and - weighing only 950 grams - are ideal for installation on the roof of truck cabins.
India’s leading tyre major, Apollo Tyres unveiled its strategy to move from leadership to dominance in the fast growing truck-bus radial (TBR) segment. While the company is already in the process of doubling its truck-bus radial capacity in the Chennai facility, it introduced a new range of technologically superior truck-bus radial tyres. The new products Apollo EnduRace RD HD, Apollo EnduMile LHD and Apollo EnduComfort CA were unveiled in the presence of company’s countrywide large Fleet Operators, Business Partners, The Great Khali, power lifter and wrestler, and Milind Soman, winner of Ironman title and fitness enthusiast.

Speaking at the launch event, Satish Sharma, President, Asia Pacific, Middle East and Africa (APMEA), Apollo Tyres Ltd, said “This product introduction is part of our overall strategy to dominate the truck-bus radial category in India. Despite being a late entrant into the TBR category, our technologically superior products with a 360 degree service back-up, has helped us in achieving the leadership position very quickly in this segment. Our TBR journey is getting a booster dose with the improving road infrastructure across the country, which would take the radialisation levels to 65% and above in the commercial vehicle segment in the next 4-5 years.”

Designed and developed at the company’s Global R&D Centre, Asia in Chennai, this new range of TBRs have been extensively tested in the target markets across the country with some excellent results. With the increased capacity of truck-bus radials from the Chennai unit kicking-in sometime in the 3rd quarter of this fiscal, the company is fully geared-up to meet the increased demand from the replacement market, OEs and exports.
At Bosch, the “Connected Workshop”, its interaction with other web-based services and the application of Augmented Reality will be a key topic at Automechanika 2016. At the 2,400 m² Bosch exhibition booth in hall 9, the connected workshop of the future can be experienced live between September 13 and 17, 2016. Several product presentations, taking place at the top of each hour, allow the visitors to get to know latest Bosch solutions in an interactive manner.

Intelligent data processing, the “Internet of Things” and increased networking of products with their environment bear a huge potential for automotive workshops. They ease the scheduling and planning of workshop appointments and improve the individual working steps in servicing. Vehicle data and the repair history are already available once the vehicle arrives at the workshop. The diagnostic equipment automatically exchanges data with one another and important manufacturer information can be accessed by the workshop professional in real time.

The connected workshop: Bosch Connected Repair

At Automechanika 2016, Bosch will first present its Connected Repair software. Connected Repair connects Bosch diagnostic equipment already available at the workshop. Without delay, once collected vehicle data is also made available to and on all other computer-based systems. In order to access the data of an already identified vehicle, the user just has to enter the respective vehicle’s license plate or the vehicle identification number (VIN) at the work station in use. For subsequent workshop appointments, no additional identification is required. By means of the license plate or VIN, the complete vehicle history including all test results can be accessed at any work station and at any time. In addition, the software
uses an innovative vehicle identification allowing the individual test devices to complement specific parameters. At a future appointment, these identification parameters are then used again. This saves set-up times at the individual work stations, eases the processes and prevents unnecessary duplication of work. Using a photo feature, the vehicle condition can be documented by the workshop at a standardized and printable protocol. This allows informing the customers about necessary repairs in a transparent manner.

By means of an activation code, the software is activated for the connection of the whole workshop. It can then be used on any one of the workshop's computers. For optimum performance, Bosch recommends to set up a separate server unit. Information on the vehicle's life cycle can then be saved centrally and accessed at each individual work station if required. Using a standard interface, even the connection with most of the dealer-management systems is possible, too.

So far, the following Bosch systems can be connected using Bosch Connected Repair:

- ACS 752 air-conditioner service unit
- Esitronic 2.0 / KTS 5xx workshop-software package
**FWA 9000 and FWA 4630 wheel-alignment systems**

**FSA 500 vehicle system analysis**

By the end of 2016, the following systems will have been integrated as well:

**FSA 7xx vehicle system analysis**

**HTD 815 headlight tester**

**BEA 750 and BEA PC DE emission analyzer**

**Augmented Reality: Having an eye on key information at the right time.**

Additional information displayed by Augmented Reality is the key to an ever more sophisticated world of technology. It is increasingly difficult for automotive mechatronics to gain all required knowledge at everyday work and to apply it accordingly. Being able to access latest critical information at the right moment increases product understanding and saves time – the customers benefit from improved quality at repairs and the workshop from quicker processing.

Pointing the device camera onto the vehicle, required additional information can be integrated into the real image using a tablet computer or smart glasses. This information can reach from explanatory texts and instructions, manuals or circuit diagrams, three-dimensional objects or photos down to videos. In this manner, even hidden components or cable harnesses can be displayed – a feature held in high regard by the mechatronics. The time required to perform sophisticated repair tasks can thus be reduced by 10 to 15 percent.

Additional areas of application include apprenticeship, trainings and sales.

In order to create efficient Augmented Reality applications, Bosch created the Common Augmented Reality Platform (CAP) allowing the fast and easy integration of digital and visual contents, for instance into technical documentation. This cross-platform system works independently from specific tracking and rendering technologies. Bosch assumes that by 2018, the first workshops will already be working with such Augmented Reality applications.

Besides latest diagnostic equipment such as KTS 560 / 590 and the digital HTD 815 headlight tester, additional product highlights concerning the parts range will also include the M Li-ion motorcycle battery and the newly integrated product line Bosch steering systems. Furthermore, new connected telematics solutions for small and medium-sized businesses, which will be available for workshop customers, are presented as well. Besides Bosch, the Beissbarth, Robinair, Sicam and OTC brands will also present their latest innovations.
Unique system for Volvo Buses improves safety for unprotected road-users

Volvo Buses is now taking yet another important step toward increased safety for unprotected road-users in the urban environment. The Pedestrian and Cyclist Detection System, to be introduced on Volvo’s city buses for Europe in 2017, will reduce the risk of accidents for pedestrians and cyclists where buses operate.

“Accidents involving buses and unprotected road-users seldom occur, but when they do the consequences may be very serious. In order to minimise the risks, it is important that drivers and anyone moving around near buses – such as at bus stops and pedestrian crossings – pays close attention to the traffic. In this context the Pedestrian and Cyclist Detection System offers excellent support,” says Peter Danielsson, Director Vehicle Features and Safety at Volvo Buses.

The Pedestrian and Cyclist Detection System continuously monitors the bus’s vicinity using a camera. When the system detects unprotected road-users near the bus, it transmits a sound to warn other road-users that the bus is approaching. At the same time, the driver is alerted via sound and light signals inside the vehicle. If there is an imminent risk of an incident, the bus’s horn is activated.

“Several of the components in our system are based on the same tried and tested technology found in many cars. But we are the only vehicle manufacturer to offer a solution that simultaneously notifies both driver and unprotected road-user,” says Peter Danielsson. Volvo Buses’ introduction of this type of warning system is part of the company’s electromobility drive. As the proportion of electrified vehicles in urban traffic continues to grow, exhaust fumes and noise continue to disappear. At the same time, however, it is important to also eliminate any risks that might arise as the vehicles in the urban environment operate much more quietly. “The bus can be heard – but without being disruptive. We’ve solved this problem by developing a synthetic background sound with a frequency range that is not perceived as disruptive. For instance, it does not penetrate windows with triple glazing, unlike the low-frequency noise made by a diesel engine,” explains Peter Danielsson.

This autumn, the Pedestrian and Cyclist Detection System will become operational in field tests on route 55 in Gothenburg. At IAA the new system will be unveiled together with several other Volvo safety innovations, such as Volvo Dynamic Steering, Collision Warning and Emergency Braking and Lane Keeping Support.
Tata Motors today said it has bagged orders of over 5,000 buses worth of about Rs 900 crore from 25 state/city transport undertakings (STUs) across the country. "Tata Motors plans to execute all these orders in 2016-17. The orders will definitely enable us to further strengthen our leadership position in the CV passenger space," Tata Motors Executive Director, Commercial Vehicle Business Unit, Ravi Pisharody said in a statement.

Some of the orders require a fully IT-enabled bus to ensure trackability and traceability with features like public information systems, electronic destination boards, CCTV cameras, smart multi-mode ticketing and GPS-enabled on-board intelligent transport system, WiFi and diagnostics systems, the company said. "We are encouraged by adoption of latest technologies by these STUs for fleet modernisation, lower total operating costs, expanding user base and ridership," Pisharody added.

Over 1,500 of the ordered buses will be fully built and integrated with these features at Tata Motors JV manufacturing facility at Tata Marcopolo (Dharwad and Lucknow) and ACGL Goa. The company said the orders represented a healthy growth of over 80 per cent compared to last year in the orderbook position for Tata Motors.

"The big surge in STU buying across is being witnessed after a gap of nearly four years, indicating renewed focus of various state governments and city transport providers on public transport," it added.

Tata Motors Business Head (Commercial Vehicles - Passenger) Sandeep Kumar said the company has nearly doubled its orderbook in 2016-17 already and is adequately prepared to cater to the current and future demand for its buses.
The Society of Indian Automobile Manufacturers (SIAM) organised its 56th Annual Convention focussing on the theme of 'Building the Nation, Responsibly.'

Addressing the Convention Union Minister of Heavy Industries and Public Enterprises, Anant G Geete, who was the Chief Guest of the convention, said that the environment is one of the biggest concerns for the automotive sector.

He further said: “After the Prime Minister gave the 'Make in India' call, the auto industry has played a key role in this programme. The environment is one of the biggest concerns for the sector. We have therefore allocated Rs 14,000 crore for the FAME scheme for promoting hybrid and electric mobility, which will save Rs 60,000 crore fuel, thereby benefitting the environment.”

Reiterating the Government’s support to the Industry, Geete added: “India is looked upon as the world’s youngest nation because we have the most people below 35 years. We should use this youth power by giving them jobs. And the auto industry has the biggest scope for providing these jobs. If jobs fall in agriculture, only industry can make good this shortfall.”

The first session was organised on the topic of 'Sustainable Mobility for Creation of Wealth of Nations' and the second was on 'Technology Trends.'

Speakers welcomed the industry’s support in solving pollution problems and agreeing to move straight to BS-VI from BS-IV and also sought the industry’s support in improving road safety.

In the inaugural session, Vinod K Dasari, president, SIAM, said: “We appreciate the support from the minister and the Ministry of Heavy Industries. We also welcome the government's efforts in passing GST but request that there be no more than two rates for the automotive industry. The Indian automotive industry is facing new challenges in providing sustainable mobility for the masses. We have sought a long-term roadmap on...
safety, emissions and fuel efficiency norms. In order to make practical and rational regulations, we seek a single ministry, single window for the industry. We would also like to thank the government for accepting SIAM’s suggestion of the fleet modernisation scheme. Industry will be happy to offer further incentives to customers to supplement the government’s incentive for purchase of a new vehicle against a scrapped vehicle.” He added, “We need specific measures for public transport upgradation and rural connectivity.”

John Moavenzadeh, Head of Mobility Industries, World Economic Forum on Global Trends in Mobility, USA, said: “We are witnessing the fourth industrial revolution and the shifting automotive game. The fourth industrial revolution is not categorised by one single technology but by diverse technologies. The global auto industry is in the midst of a more profound transformation not seen in the past 100 years. Automotive demand is undergoing a seismic shift between developed and emerging economies. The automotive game is changing from volume to value; from the customer’s focus on the product to the mobility experience; from customer-driven vehicles to software-driven ones. By 2026, the Indian automotive industry will be among the top three in the world in engineering, manufacture and exports of vehicles and components.”
Pawan Munjal, chairman, MD and CEO of Hero MotoCorp, said: "The Indian automotive industry is conscious of its responsibility to provide cleaner & safer mobility. The industry will see a transition from horsepower to processing power."

Speaking on 'Sustainable Mobility for Creation of Wealth of Nations' Guenter Butschek, Chief Executive Officer and MD, Tata Motors stated that, “As a home ground to the world’s largest youth population, the Indian economy is witnessing an unprecedented advantage compared to other countries. The Indian automobile industry contributes to approximately 40% of the nation’s manufacturing GDP and is surrounded by a cloud of opportunities fostering new generation R&D and innovation. Taking into account challenges such as safety, pollution, unemployment and lack of adequate resources, it is imperative for the leading automobile manufacturers to focus on developing 'sustainable mobility solutions' in addition to nurturing skilled engineers and people managers rather technocrats and theory masters.

The good news is that new horizons like safety norms, GST and the scrappage policy are unfolding and will give us the opportunity to counter these challenges. The focus should be on building a strong partnership between the industry and the Government to ensure we work together towards a long-term regulatory regime for the industry. We need to identify technologies based on global mega trends and regulations and deep dive into the industry to map products in order to be future ready.”

He further added, “it is for the Indian automobile industry to decide whether they want to be followers or leaders and put India on the global automotive map.” Dr. Wilfried Aulbur, Managing Partner India, Chairman Middle East & Africa, Head Automotive Asia, Roland Berger India, said: “The automotive industry is a significant driver for FDI in India. It also drives process improvements and quality; however, these opportunities are not fully used. We need to stimulate volumes to boost GDP and create more job opportunities. While the Government's support is appreciated, a holistic, long-term policy is required. We believe GST will contribute in the growth of India's automobile sector.”

Speaking on 'Technology Trends', Chief Guest, Minister of Road Transport, Highways and Shipping, Nitin Gadkari – speaking via a recorded video message – welcomed the industry's support in solving pollution problems and agreeing to move straight to BS-VI from BS-IV and also sought the industry's support in improving road safety.

He said, “The automotive sector is on the road towards growth and success with a turnover of Rs. 4, 50,000 crore that is generating many jobs. The Government is seeking ways to ensure that a large part of the global supply can be exported from India. While pollution is one of the biggest concerns, the industry has been very supportive of our efforts to address this issue. We are attempting to implement a scrapping policy for old vehicles, which will help reduce pollution.”

The Minister also added: “The promise of GST will be fulfilled in this Parliament session. Five lakh accidents occur annually leading to 2.5 lakh deaths. We need the industry's support to address the issue of accident spots across the country. In 10 years, we believe India's automotive sector will be number one in the world and the industry's support is required to realise this goal.”

Policy stability is vital for companies looking to invest in the Indian growth story and in the absence of a clear roadmap, growth will be stunted and not achieve its potential. The ambitious Automotive Mission Plan 2026 targets sales of Rs 1,211,500 crore (US$ 200 billion) with exports contributing Rs 462,500 crore (US$ 75 billion) which is 35-40% of its overall output for 2026. Important, automakers and SIAM have appealed to the government to have only one ministry formulate technical regulations. This is much needed for sustainable development.”
Raghupati Singhania, chairman and managing director of JK Tyre and Industries Limited, has been conferred with the ‘Industry Leadership Award’ at the 11th Indo-US Economic Summit on Wednesday by Indo-American Chamber of Commerce.

JK Tyre is part of JK Organisation, one of oldest and biggest Indian business conglomerates having business interests across varied sectors and with a combined net worth of $4 billion, and business interests spread across 100 countries. This is the flagship industry leadership award in its 12th consecutive year being organized by The Indo-American Chamber of Commerce, North India Council. “I am humbled at the honour being given by Indo-American Chamber of Commerce. It is a moment of great joy and pride for all of us at the JK Organisation. We live in highly dynamic times and it is important that businesses get opportunities to share and exchange,” said Raghupati Singhania on getting this recognition.

This award is given to an astute business leader, who is a visionary, coupled with innovative and entrepreneurial zeal, have best demonstrated his pioneering effort of ushering innovative technologies in India and who has achieved great reputation for creative genius, inspirational leadership and distinguished service to the auto industry.

With operations spread across 100 countries, 12 plants, and producing 35 million tyres annually, and an indelible contribution to the global ambitions of the Indian motorsport. From passenger cars to India’s biggest Rigid Dump—truck, JK Tyre has serving one of the widest range of customers.

Under Singhania, JK Tyre became India’s first company to attain the historical feat of producing 10 million truck/bus radial tyres.
Bosch expands R&D facility in Bangaluru; invest Rs 350 Crore

“For the second phase of expansion, we will further invest in the coming years to develop Bosch Adugodi into a state-of-the-art R&D facility. In 2016, Bosch India will invest around Rs 1,170 crore.”

German automotive components manufacturer Bosch has inaugurated the first phase of expansion of its development center in Adugodi, Bengaluru, on Friday. The global supplier of technology and services started revamping its oldest facility in India into a technology and development center in 2014. Since then, the company has invested around Rs 350 crore.

"Bosch sees immense growth potential in India. The inauguration underscores our commitment to the country,” said, Peter Tyroller, member of the board of management of the Bosch Group responsible for the region Asia Pacific, during the inauguration. "For the second phase of expansion, we will further invest in the coming years to develop Bosch Adugodi into a state-of-the-art R&D facility," he commented further. In 2016, Bosch India will invest around Rs 1,170 crore.

"The two newly inaugurated buildings in Adugodi have state-of-the-art laboratory facilities and accommodates over 3,000 associates. Adugodi will house the majority of the local development - including R&D centers of Bosch Limited, Robert Bosch Engineering and Business Solutions and Bosch Home Appliances," mentioned, Dr Steffen Berns. Engineers at the facility work on key topics such as driver assistance and passive safety, active safety, anti-lock braking system (ABS) and electronic stability program (ESP), and hardware development. Other areas of focus include big data and software solutions for the Internet of Things (IoT). "Bosch has been making conscious efforts to offer superior products that are environmentally friendly, cost-effective and above all possess the ability to connect with the youth,” said Dr Berns.

At the locations in Adugodi, Bangalore and in Coimbatore, the company employs over 14,000 research and development associates. This makes India an important hub for Bosch’s global R&D network. This role will further increase with the expansion of the Adugodi facility - as increasingly Bosch’s leading edge in technology is the result of a "local for global" exchange of findings and experience. "Today’s youth thrive in a fun, dynamic and transparent work environment. Our current facility has incorporated such elements. We are providing our associates with resource and facilities that will aid them in improving the quality of innovation," said, Vijay Ratnaparkhe, managing director, Robert Bosch Engineering and Business Solutions.
To keep the demand growing, German luxury car maker Mercedes-Benz introduced the locally built GLC SUV (both petrol and diesel versions) in Pune. The company has begun to assemble the Mercedes-Benz GLC at its Chakan Plant, helping the company reduce the popular SUV’s price further. With this, Mercedes-Benz expands its Made-in-India portfolio to nine models in total.

“The GLC has already become one of Mercedes-Benz’s highest-selling products and we are very confident that it will replicate the global success in India as well. With the localisation and availability in petrol and diesel, we are confident that the GLC will become an attractive proposition for our discerning buyers with enhanced value propositions and increased availability,” said Roland Folger, MD and CEO, Mercedes-Benz India.

“GLC is the ninth product from Mercedes-Benz to be locally produced after Mercedes-Maybach S500, S-Class, E-Class, C-Class, GLS, GLE, GLC, GLA and CLA. Our local production helps us make our customer the winner by passing on the benefit to them,” he said. Folger said that local manufacturing has not brought down the quality of the product. “We have brought more stringent quality criteria here at our Chakan plant. We began the local production of our cars in 1995 with the E-Class. India is the first market outside the United States to locally produce the Mercedes SUV,” he said.

The GLC is launched in three variants that include GLC 220 d 4MATIC Style, GLC 220 d 4MATIC Sport and GLC 300 4MATIC Sport. While the GLC 220 d 4MATIC Style is priced at Rs 47.90 lakh, the GLC 220 d 4MATIC Sport and the GLC 300 4MATIC Sport are priced at Rs 51.50 lakh.
The company is betting big on the segment especially in Delhi NCR after Supreme Court lifted the ban on the registration of diesel vehicles over 2,000 cc. According to company, the market in the region is picking up gradually and Mercedes will gain the significant market position in the category.

According to Folger, Mercedes Benz India is waiting for compatible fuel quality and as soon as the required diesel fuel is made available it is ready to switch its portfolio quickly to the EU-VI standard. GLC luxury SUV Mercedes-Benz’s one of the bestselling models for the company in India. Till now, the company was importing the SUV as Completely Built Units (CBU), which was attracting huge taxes and duties in India. The locally built vehicle will help to reduce the price and will further boost the demand. With this, Mercedes will cope with the rising demand.
Axalta Coating Systems India has announced that it has won the Quality Circle Forum of India (QCFI) Golden award in Six Sigma and 5S categories at the QCFI 27th Annual Convention. QCFI is a national body of professionals that assist individuals and organisations in the implementation of quality concepts.

QCFI invited over 190 participants from across the country to present case studies on quality concepts such as Quality Circle, Lean, Six Sigma 5S and Kaizen integrated with Total Productive Maintenance (TPM). Two project teams from Axalta India presented best practices from case studies, which included reduction in cycle time using Six Sigma methodology and 5S approach, the company said.

Axalta said that products manufactured at its plant in Savli, Gujarat, are formulated for refinish, automotive plastic component and industrial customers located in India and the greater Asia-Pacific region. The Savli facility has embraced Lean Six Sigma and 5S concepts that have combined to enable the plant to ensure consistent product quality, manufacturing processes and service delivery, noted Axalta. The plant's robust internal audit system also assists in maintaining and improving Axalta's quality standards, it added.

Vinay Rajadhyaksha, MD Axalta Coating Systems India Pvt Ltd, said it is an achievement to win highest honours in Six Sigma and 5S categories at the QCFI 27th Annual Convention. He added that Axalta believes in putting customers first and makes sure it offers them the highest quality and service.
Education in India has been improving every year. As days pass, the rate of illiteracy has been decreasing thoroughly. In the current scenario, every town and almost every village has atleast one school. Private Schools have grown in high numbers, that each school started offering additional features that cover the parents. One such feature used by almost every private school is the transport facility. Some schools are famous for the transport they offer, they are known for the size of the fleet they own.

Providing transport facility by the school literally means that, the school is taking the responsibility of picking up children every morning and at the end of the day dropping them at their respective homes safely…! Well, over a period of time every school management has become result oriented and they concentrated mostly only on studies. Transport safety was almost forgotten both by the school managements and the parents. It took time for them to realize this huge mistake. And the incident which made them to realize was strong enough, that made the government to implement certain new rules to every school to follow in their transport department.

It was 25th of July 2012, when a six year old school girl of a famous matriculation school in Chennai, was run over by the school bus she was travelling. The shocking reports are that the bus had a huge hole on the platform, below the girls seat, covered by a wooden plank. As the bus was moving, the plank was also displaced, exposing the hole, through which the girl fell on the road. This triggered angry parents and public to improve the safety of every school transport vehicle. Along with this incident, few other incidents followed, which led to strict rules for school transport system. The rules are for buses and its drivers and attendants also.

The rules were so strict that, most of the schools had a tough time to begin with the rules. The major reason behind this was that the most of the schools had a fleet of old buses. The standards of these old buses do not meet the standards of the rules implemented by the RTO department. As the rules went mandatory and had strict penalties for violation, the management somehow altered the older buses to new standards. Buying new buses was also not a good idea, as major OEMs like Eicher, SML and bus...
body manufacturers like Prakash, Veera follow certain safety standards. But the RTO rule was somewhere higher than the manufacturer standards. For examples, the emergency exit provided in the buses by the OEMs and body builders do not match with the rules. Such rules confused the fleet owners. Later aftermarket proved to be the best idea.

We have listed the rules, RTO department has implemented on the school buses.

**Construction and Maintenance of the School Buses:**

1. **Type of Body.** - Every School Bus shall be of semi-saloon type with steel body and no vehicle shall be covered with canvass hood.

2. **Painting.** - Every School Bus shall be fully painted as follows as specified in rule 349-A of the Tamil Nadu Motor Vehicles Rules.
   
   a. Every School Bus shall be fully painted in yellow colour.
   
   b. The inscription “School Bus” shall be painted in the front and rear top of the School Bus, as the case may be, in bold and clearly visible letters.
   
   c. On both exterior sides of the School Bus in a circle of 60 centimeter diameter, and on both the front and rear exterior sides, in a circle of 20 centimeters diameter, the following diagram shall be painted, in dark blue colour with yellow back-ground
   
   d. The particulars of name and address of the School, contact phone number, mobile phone number etc., shall be painted on exterior of the body of the School Bus on the left rear side.
   
   e. The name of the School shall be written conspicuously at the top of the front and rear ends and on both sides of the body of the School Bus and the writing shall be horizontal.
   
   f. In the rear right side of the School Bus the contact number of Transport Officer in-charge of the School, local Regional Transport Officer and Police authority should be painted. A separate e-mail ID shall be created and displayed for registering the complaints.

3. **Entrance-cum-exit.** - In every School bus, there shall be one entrance-cum-exit in the front left side. Hand rails shall be fixed firmly along the steps in the front entrance-cum-exit. It shall be provided with a suitable door.

4. **Doors.** - In every School Bus, the door in the entrance-cum-exit shall be well maintained to ensure safe locking and also easy unlocking.

5. **Foot Board.** - In every School Bus, the first step of the foot-board shall be at a height not exceeding 300mms and not less than 250 mms from the ground and all steps shall be fitted with non-slip treads. In case the School Bus is used exclusively for the conveyance of
differently abled students, the steps shall be suitably constructed to suit their convenience. In the case of a Bus, which is used as a School Bus.

6. Driver’s Cabin.- In every School Bus, grilled partition shall be provided to separate driver cabin. In the case of a Bus, which is used as a School Bus.

7. Seats.- In every School Bus, all the seats shall be firmly fixed to the floor board by bolts or studs and nuts and fastened by some efficient device to the floor board so as to prevent them coming loose.

8. Bag racks.- In every School Bus, suitable grilled provision shall be made for bag racks under the seat for keeping bags and other things of the students.

9. Floor Board.- In every School Bus, the floor boards shall be so fitted as to exclude as far as possible draughts and dust. If any part of the floor board caves in or weakens, no patch work shall be done. Instead, the entire length and breadth of that stretch of the floor board shall be replaced by the new floor board.

10. Windows.- Every School Bus shall be provided with windows on either sides of size not less than 55cms x 70cms.

11. Window grill.- In every School Bus, three horizontal steel bars shall be fixed on the exterior of the bus along the windows in such a manner that the distance between adjoining bars does not exceed 5cms.

12. Emergency exit.- (a) Every School Bus shall be fitted with an emergency exit door at the rear right side or at the rear wind screen with quick release latches mechanism which can be operated from inside and outside of the Bus.

b. The emergency exit shall be in the form of a frame fixed with a toughened glass with dimensions of 150cms x 120cms or in the form of a door with the same dimension hinged at the top, capable of being operated both from inside and outside. The words “EMERGENCY EXIT” shall be
prominently inscribed in red colour on a white background both inside and outside of the emergency exit.

13. Reflecting Tape.- Every School Bus, shall have retro reflecting marking as specified in rule 104 of the Central Motor Vehicles Rules.

14. First Aid Box.- In every School Bus, a first aid box containing complete first aid tool kit should be present, in the reach of driver and the attendant.

15. Fire Extinguisher.- In every School Bus, two fire extinguishers of ABC type having a capacity of 2kg each, bearing ISI mark shall be properly mounted.

16. Fitment of Speed Governor.- In every school bus, speed controlling device (Speed governor) conforming to standards prescribed, shall be fitted so that the speed of the vehicle does not exceed 40 kilometer per hour within Corporation limits and 50 kilometer per hour in other places.

17. No School Bus shall be fitted with any pressure horn or any other device for producing tonal sound which is operated on air pressure drawn from the braking system.

Apart from these rules implemented for school buses, there are also certain rules for drivers and attenders to follow. On asking a transport incharge of a famous education institute about these rules, he said that the rules are welcomed by them as these rules directly increase the safety of children. At the same time they also had a very tough time in modifying their old buses. Also the new ones they had was to undergo few modifications. Well, though these rules are costly for fleet owners, they do bring back the responsibilities of the institution in safety of the buses. In the future we can see these modifications done by the manufacturer itself, which assures better finish and eventually, improved safety.

By: Ganesh Kumar E.
The second edition of the Ashok Leyland India Bus Awards 2016- India’s most coveted and prestigious Awards for excellence in the Bus Travel Industry was held on July5, 2016 at Goa.

To honour excellence and celebrate achievement, Bus Alliance India Pvt. Ltd. and Abhibus.com conducted the second edition of Ashok Leyland ‘India Bus Awards 2016. The awards were given in 25 categories & Ernst & Young LLP was the official tabulator for the awards. 650 nominations were received across 25 excellence categories. 4 rounds were held to decide the best in the industry.

Dr. P Mahendar Reddy, Minister for Transport, Government of Telangana, Shri Sudin Dhavalikar, Minister for Transport, Government of Goa, T. Venkatraman Global head- Buses, Ashok Leyland & Sudhakar Reddy Chirra, Founder & CEO, Abhibus.com, inaugurated the awards ceremony by lighting the traditional lamp.

Biju Mathews, COO, abhibus.com, said, “These awards will not only recognise & honor excellence in bus travel, but also boost the image of the industry while encouraging them to strive for excellence. The awards were open to four business entities - state road transport corporations, private fleet operators & bus manufacturers and bus body builders. In the coming years, we will add more business entities to cover & recognize the entire bus travel ecosystem.” “We included conferences and panel discussions to the program this year to make the platform more informative to all delegates he added”

Abhibus.com is glad to be a part of India Bus Awards, as this industry is poised for exponential growth in the coming years. Awards would only catalyse and fortify the growth of the industry. We are currently working with large state transport undertakings and over 250 private fleet operators. We have recently bagged the KSRTC AVATAR project. Currently we are the number one player in terms of Hosting Services for the private bus operators and State RTC’s, with a market share of more than 50% Chirra said, “
ASHOK LEYLAND INDIA BUS AWARDS 2016

AWARDS NIGHT
ASHOK LEYLAND INDIA BUS AWARDS 2016

INDIA BUS AWARDS NIGHT - HONORING EXCELLENCE

EXCELLENCE IN BUS TRANSPORT (PRIVATE) - WEST PRASANNA PURPLE MOBILITY SOLUTIONS PVT LTD
EXCELLENCE IN BUS TRANSPORT (PRIVATE) - SOUTH SVR APPLE I BUS
TOP BUS DRIVER - PRIVATE T. SRINIVAS - ORANGE TOURS & TRAVELS
BEST OPERATOR FOR PASSENGER FIRST INITIATIVE PRIVATE ORANGE TOURS & TRAVELS
EXCELLENCE IN ENVIRONMENTAL INITIATIVE - GOVERNMENT DELHI TRANSPORT CORPORATION
EXCELLENCE IN ENVIRONMENTAL INITIATIVE - PRIVATE THARAI TRAVELS

EXCELLENCE IN BUS TRANSPORT (PRIVATE) - PAN INDIA EMPLOYEE WALLACE (PRIVATE BUS TRANSPORT) CORPORATION SRS TRAVELS
EXCELLENCE IN MARKETING INITIATIVE - PRIVATE HEBRON INFRASTRUCTURE PVT LTD
EXCELLENCE IN MARKETING INITIATIVE - GOVERNMENT KARNATAKA STATE ROAD TRANSPORT CORPORATION
EXCELLENCE IN TECHNOLOGY ADOPTION - PRIVATE SAINI TRAVELS PRIVATE LIMITED
EXCELLENCE IN TECHNOLOGY ADOPTION - GOVERNMENT ANDHRA PRADESH STATE ROAD TRANSPORT CORPORATION
EXCELLENCE IN BUS TRANSPORT - PUBLIC BUS TRANSPORT CORPORATION ROYAL TOURIST

EXCELLENCE IN BUS TRANSPORT - PUBLIC CITY TRANSPORT CORPORATION BENGALURU METROPOLITAN TRANSPORT CORPORATION
EXCELLENCE IN BUS TRANSPORT SERVICE SMALL & MEDIUM SIZE CITIES GOVERNMENT NORTH EASTERN KARNATAKA ROAD TRANSPORT CORPORATION
EXCELLENCE IN EFFICIENT ADMINISTRATION/MAINTENANCE FOR LARGE & COMPLEX FLEET IN GOVERNMENT MAHARASHTRA STATE ROAD TRANSPORT CORPORATION
OUTSTANDING PUBLIC TRANSPORTATION (SMALL STATE) IN PPP MODEL KASHMIRA TRANSPORT CORPORATION LTD
EXCELLENCE IN BUS TRANSPORT GOVERNMENT PAN INDIA TELANGANA STATE ROAD TRANSPORT CORPORATION
EXCELLENCE IN BUS TRANSPORT SERVICE PRIVATE NEETA TOURS & TRAVELS

BEST OPERATOR FOR INNOVATION IN PUBLIC TRANSPORT SERVICES PRIVATE NEETA TOURS & TRAVELS

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JBM Group, a leading electric bus manufacturer, is very much confident that it will see 20 percent growth at around Rs 1800 crore in FY17. JBM Executive Director Nishant Arya hinted that the company has started manufacturing of buses and is seeing good demand for the coming years.

The bus division will meaningfully start contributing to the topline this fiscal. For the last fiscal the growth stood at Rs 1500 crore. The company recently entered into a joint venture (JV) with Polish firm Solaris to manufacture electric and hybrid buses. The Joint Venture named JBM Solaris will invest Rs 300 crore towards electric mobility in India and will develop India’s first 100 percent electric bus ECOLIFE.

He expects that the bus division to contribute around 400 crore to the total revenues in 2018. The JBM has sold most of its buses which had been manufactured by the JBM and now the customers will be lifting the buses constantly on a quarterly basis.

As the Company has started a new joint venture, which is one of its kind with the largest European manufacturer of electric buses and hybrid buses which is Solaris. And they are considered among the leading players globally in the city buses also. They have supplied about 14,000 buses across 30 countries. So, “we have tried to reduce the time to market. Normally, any player which is coming into this segment of electric buses does take a few years. But, we have turned around within a year’s span itself. We had showcased this product earlier this year. And by the end of this financial year, we will be putting it on the road. Already we have been participating in multiple tenders with different customers and we will be seeing those results by the end of this year. Similarly, for the city buses, we see that a lot of different municipal corporations and state government undertakings, are really seeing the potential of our product and they recognise the same. That is where we see good pipeline being created for this in the coming months,” Arya had said. Nishant Arya added, “As a group, we are committed to creating and offering innovative green solutions. We are consistently participating in government initiatives such as Make in India and Smart City Development to contribute towards sustainable development of the nation.

This JV between JBM Auto and Solaris Bus perfectly aligns with the government’s vision to make India a 100% electric vehicle nation by 2030.” The Ecolife will be manufactured in India using Solaris’s technology. The vehicle will be powered by lithium batteries and run 150-200 km in 10-15 hrs of city bus operation. Once it gets into commercial production, Ecolife will be the second indigenous mass public transport product from JBM Group, the company had said. Solaris Bus & Coach is one of the major producers of city, intercity and special-purpose buses as well as low-floor trams in Europe. JBM Auto is the flagship company of the JBM Group and a leading manufacturer of auto components and buses. Its manufacturing facilities are strategically located near automobile hubs of India at Faridabad, Greater Noida, Nashik, Chennai, Sanand, Pune and Indore.

It started production in 1996 and has sold over 14,000 vehicles across 30 countries. It has a factory at Bolechowo near Poznan.
The Indian Commercial vehicle market is on the hot line, with many foreign commercial vehicle manufacturers laying their footprint and tyre marks on the Indian tarmac and the soils. Especially the passenger transport in our country is on a boom, as these foreign commercial vehicle manufacturers concentrate too much on their passenger transport segment, The Buses...!

There is too much competition in this bus manufacturing segment that, people are left with too much choices of travelling, right from the Indian made Ashok Leyland and Tata to the luxury kings like Volvo and Mercedes Benz.

The foreign brands have gone so deep in the market that the comparison between them and local brands have been a past trend. Now the battle is between different foreign bus manufacturers, as they design their giants, that satisfies all the needs of an average passenger.

**VOLVO**

One of the most famous commercial vehicle manufacturers all over the world, has laid its footprint in India in 1998, with its legendary B7R as the introductory passenger commercial vehicle. Volvo has gained its name as the market leader, as most of the private operators and also the state transports of various states go for Volvo buses. They introduced the concept of “Multi Axle Buses” in India. Currently the company is ruling the market with its very famous B9R and B11R.

Volvo were the first ones to change the way the Indians traveled. Though based on Sweden, the company has come down to Indian
standards. Well, not really come down to Indian standards completely! But also transformed the passenger transport to German standards.

Volvo then became best in class in all the aspects of passenger transport, including safety, efficiency, power and still not compromised with luxury and entertainment!!

The Rivals

Volvo was leading the market as said before, with only late competitions like Mercedes Benz and Isuzu made their way to the Indian market. Meanwhile the rivals took time to settle in the huge Indian commercial vehicle market, Volvo has gone roots deep in the segment, and still remained the Market Leader!

Though Mercedes gained little popularity, others like Isuzu and Corona have not impressed very much, as their buses were only bought by their respective state transports and operators where they manufacture them.

The Original Rival

Entered Late into the Indian Commercial vehicle market, but has already gained much popularity within the private operators and most of the state transports is the “SCANIA”. Scania is also from Volvos native, Sweden. Scania has started its bus production facility in 2015, in its truck assembly plant which was setup in 2013 in Bengaluru. Scania came up with a successful opening by rolling out their new Metrolink coaches, what people call the “PERFECT RIVAL FOR THE VOLVO B11R”.

The Metrolink coaches came with a tags stating “Taking you further” and also “The world leader”. Well are they?... Does Scania have the potential to overcome the name Volvo has
gained in the Indian Bus market?... Does the battle from Sweden continue in Indian roads?... Let's see...

Who's leading?

To find out whether Scania has taken the First seat or not, let's compare these Swedish giants by their highest selling factors: The B11R and The Metrolink HD coaches.

Comparison Table

From the comparison, we come to know that, both these Swedish giants have very little differences between them. But, we also to know that even small differences make huge outcomes in the Indian commercial market!

Power or efficiency?

First to impress the state transports who believe in efficiency a lot, and to impress the private operators who believe in speed to reach the

<table>
<thead>
<tr>
<th>Features</th>
<th>Volvo B11R</th>
<th>Scania M. 14.5m</th>
</tr>
</thead>
<tbody>
<tr>
<td>Description</td>
<td>Fully built Bus (9700)</td>
<td>Fully built Bus (Metrolink HD)</td>
</tr>
<tr>
<td>Chassis</td>
<td>B11R</td>
<td>K Series</td>
</tr>
<tr>
<td>Engine</td>
<td>Volvo D11C Turbocharger</td>
<td>Scania DC 13 115</td>
</tr>
<tr>
<td></td>
<td>Intercooled In-built Retarder</td>
<td>Turbocharged, Intercooled</td>
</tr>
<tr>
<td>Engine Location</td>
<td>Rear</td>
<td>Rear</td>
</tr>
<tr>
<td>Engine Cylinders</td>
<td>6 Cylinders</td>
<td>6 Cylinders</td>
</tr>
<tr>
<td>Emission Norms</td>
<td>Euro-3</td>
<td>Euro-3</td>
</tr>
<tr>
<td>Displacement</td>
<td>10.8 Litres</td>
<td>13 Litres</td>
</tr>
<tr>
<td>Power</td>
<td>370hp@1400-1950</td>
<td>410hp@1900rpm</td>
</tr>
<tr>
<td>Power</td>
<td>1770nm@1000-1300 rpm</td>
<td>2000nm@1000-1350nm</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Features</th>
<th>Volvo B11R</th>
<th>Scania M. 14.5m</th>
</tr>
</thead>
<tbody>
<tr>
<td>Transmission</td>
<td>12 Speed-Automatic</td>
<td>8 Speed Automatic Manual</td>
</tr>
<tr>
<td></td>
<td>(Opticruise Gearshift)</td>
<td>(Opticruise Gearshift)</td>
</tr>
<tr>
<td>Fuel Tank</td>
<td>300 Litres</td>
<td>465 Litres</td>
</tr>
<tr>
<td>Turning Radius</td>
<td>12.8m</td>
<td>12.5m</td>
</tr>
<tr>
<td>Max Speed</td>
<td>120kmph</td>
<td>110kmph(Locked)</td>
</tr>
<tr>
<td>Ground Clearance</td>
<td>270mm</td>
<td>270mm</td>
</tr>
<tr>
<td>Suspension</td>
<td>All Wheel Pneumatic (Compressed Air)</td>
<td>All Wheel Pneumatic (Compressed Air)</td>
</tr>
<tr>
<td>Axle Configuration</td>
<td>6X2</td>
<td>6X2</td>
</tr>
<tr>
<td>Vehicle Length</td>
<td>14.5m</td>
<td>14.5m</td>
</tr>
<tr>
<td>Braking System</td>
<td>Disc Brakes</td>
<td>Disc Brakes</td>
</tr>
<tr>
<td>Safety Features</td>
<td>ABS, EBS, ESP, HHC, Reserve Camera</td>
<td>Traction Control, Retarder (Man/Auto), Auto Exhaust Braking</td>
</tr>
</tbody>
</table>
destination quickly, the vehicles heart should be balanced on power and efficiency i.e; it should be a true horse, as well as drink less! Under this topic, initially the Volvo stays ahead of Scania as it is more efficient. Scania has concentrated on too much horse power, but Volvo though on lower side, gives enough push to the vehicle.

**Shifting Gears...**

Well now, Scania has got a chance to take the lead. Scania offers an 8-speed automatic, which is not an ordinary automatic transmission. Just like all the brands of Volkswagen family have, Scania also has the Auto/Manual option for gear shifting. Scania has named it the “OPTICRUISE Gearshift”. It allows the driver to shift between manual and auto shifting options. Intercity drivers will love it right? They love to keep the vehicle in their control. Whereas Volvo offers 12-speed automatic. But still B11R doesn’t give up, it offers comparatively equal power to pull at slightly lower rpm.

**The Dynamics...**

Considering both these giants on road, both the buses are equipped with hydraulic power assisted steering system with a circulating ball and nut type steering gear. This gives the driver an advantage of doing a short U-turn. Here, Scania has a very slight shorter U-turn radius.

Both buses can do a little bit offroading, I mean they can tackle the average Indian road conditions as they both offer 270mm ground clearance.

**Comfort ...**

Now this is one of the hot topic. Every Indian traveller will think more than
once that, “Why should I invest more money for the same distance, just because I am travelling in a Swedish designed bus?”... Both the companies have given travellers adequate answers!... Both buses have all wheel pneumatic suspension, which is an Compressed air suspension system. Remember those Ashok leyland buses having Air Bus tag on them? ... Well, air suspension of Scania and Volvo are far better. Passengers barely feel the travelling on road effect. Comfort levels are extremely high in these swedish giants, for both driver and the passengers.

This bus is very comfortable...but, is it safe...?

It’s natural for people to be concerned on this topic. Manufacturers highly concentrate on this topic. Also there are various norms given by the Govt of India, which all bus manufacturers follow. In addition, both Scania and Volvo have many features to improve the safety standards.

- Sophisticated suspension system with multi axle configuration, provides a balanced centre of gravity.
- Better weight balancing resulting in superior stability at higher speeds, eventually controlling the vehicle is better.
- Also these buses are equipped with very good brake assisting systems.
- ABS – Antilock Braking System, reduces braking distance, prevents wheel slipping, and also prevents steering locking during sudden brakings.
- EBS – Electronic Braking system reduces response and pressure build-up time in the braking system, eventually reducing braking distance by several metres.
- ESP – Electronic Stability Programming keeps the vehicles centre of gravity on spot, while braking on corners.
- HHC – Hill Hold Control prevents the bus from rolling back on climbing gradients, when the brakes are released.

At the end of safety of the bus topic, Scania takes the leading step as it offers additional traction control, auto exhaust brake and also the retarder has an auto/manual option.

Safety and comfort are what all people care of. There is one more thing that rolls in mind of state transports and private operators. The seating capacity!! B11R offers 40 semi sleeper seat option. Whereas, the Metrolink HD14.5 offers 53 seats... Hot routes definitely get Scania Metrolink HD 14.5m coach...!

Both B11R and Metrolink HD are highly customisable vehicles.
Reading lamps, Screen for windows, gangway lights, LED screens, DVD player, USB/Radio speakers with subwoofers, refrigerators and even lavatory are some notable customisable options. Metrolinks get LCD screens in front and at the middle with Scania fleet Management system installed in them.

The Neutral Gear....

Both B11R and Metrolink HD 14.5 are designed for maximum performance, maximum safety, maximum comfort and are designed equal. There are very little differences in them, in certain areas where they overtake each other. Both the buses have proved their market leading capacity.

Volvo has been the Indian bus market leader for more than 10 years, hence they already proved their spot. Well, Scania also proved its potential to its native rival, which was ruling the market with no competition. The features these Swedish road kings offer are high and worth of money investment for both operators and passengers. So, considering the specification, performance, comfort and safety features Volvo B11R and Scania Metrolink HD are highly matching and the crown cannot be given to one! As these manufacturers are continuously indulged in improving these road kings!!

At last...wait!.. I guess one topic is left... The looks?

Well, all buses look boxy and tall. But that doesn’t mean they are ugly. Volvos has still has one of the best looks all over the world. The B11R looks aggressive, the only thing is its been aged now. Scania is young to India with its Metrolink HD, which has a bold look, with black panels at the front, which gives a complete different look.

Thanks to the Swedish designers, who made these Swedish Beasts to have the Swedish Beauty name tag...

Well, B11r and Metrolink HD are just the beginning of the battle of these luxury giants. As the expectations are high, we do expect more models not only from Volvo and Scania, also from other competitors in the Industry...!

By: Ganesh Kumar
Continental has won the Innovation and the Green Award both at the international trade fair Automechanika 2016 for its "Taraxagum – Dandelion Rubber Tires" project. With these awards, experts at the automotive service industry trade fair recognized the research and development work of the Hanover-based company, which is making long-term plans to produce some of the rubber used in both its tires and other rubber products from the roots of the dandelion plant. By cultivating the Russian dandelion close to the Continental plant, the distances over which the rubber must be transported become much shorter and the resulting CO2 emissions are significantly reduced. In doing this, Continental also hopes to become a little less dependent on developments on the global rubber market.

"We are delighted to receive these accolades," says Maria Hanczuch from the Continental Business Development for Passenger and Light Truck Tires business unit, who was in Frankfurt to accept the award. "Our Taraxagum project demonstrates one aspect of the material development involved in the tires of the future. We are working both on improving our products’ technical performance and on making the tire compound and its production process significantly more sustainable."

Continental began work on the development of "Taraxagum" in collaboration with the IME Fraunhofer Institute, Münster, the Julius Kühn Institute, Quedlinburg, and plant breeding expert ESKUSA, Parkstetten, around five years ago. Russian dandelion was cultivated in a way that would enable its long-term per-hectare production in similar quantities to the traditional rubber tree, the "Hevea brasiliensis", from the tropics.
Continental has also developed new production methods that allow the natural rubber required for the production of tires and other rubber products to be extracted from the latex sap of the plant.

Initial batches have already seen the production of passenger car winter tires, commercial vehicle tires, and engine mounts using this "Taraxagum" rubber. Tests carried out at the corporation’s own test sites prove that the dandelion rubber performs at least as well as traditionally extracted natural rubber in equivalent standard products. The plants can also be cultivated in Northern and Western Europe. Therefore, long transportation routes can be avoided. These routes previously had to cover the distance from the "rubber belt" in the tropics 30 degrees north and south of the equator.

This saves valuable resources and reduces CO2 emissions. Continental recently announced the construction of a research facility in Anklam, Mecklenburg-Western Pomerania, for the production of rubber from the latex sap of the Russian dandelion and plans to invest around €35 million in this new location by 2021.

The institutes and companies involved in the project have already received internationally recognized prizes and awards for the advances they have made. In 2014, for example, the project received the "Green Tec Award", and in 2015 the research team was awarded the Joseph von Fraunhofer prize from the Fraunhofer Society.
Daimler India to export School Buses to Middle East this Year

Daimler Commercial Vehicles India is getting into fully-built bus business and plans to start exporting 9-tonne Mercedes-Benz school buses to the Middle East by November this year.

The company, a wholly-owned subsidiary of Daimler AG, also plans to expand its product portfolio in the domestic market by bringing in a 16-tonne bus chassis next year.

It also plans to get into the business of selling buses to state governments and departments next year. "The 9-tonnes Mercedes-Benz branded school bus is meant to be sold in the GCC (Gulf Cooperation Council) countries and this is our start of fully-built bus business from India," Head of Daimler Buses India, Markus Villinger told reporters on the sidelines of IAA Commercial Vehicles show here. The company will start displaying the buses in the Middle East in November-December this year, he added.

The school bus will be sold under Mercedes-Benz brand in the Middle East. They are sold as Bharat Benz brand in India. DICV currently exports buses in chassis form (9-tonne) to South East Asia, Africa and Latin America. When asked if the company is looking at new markets, Villinger said: "In these regions (Africa, Latin America and South East Asia) we will look for new countries." Commenting on the expansion of bus business in India, Villinger said: "Right now, we have 9-tonne front engine chassis and beginning of next year we will start with 16-tonne front end chassis."

DICV currently sells the 9-tonne bus chassis under Bharat Benz brand and fully built 24-tonne bus with the Mercedes-Benz tag in India.

Not disclosing the sales figure for buses, Villinger said: "First learning is that you have to fully adapt to Indian conditions, get rid of perceptions." On market share he said: "We have not planned for any market share target but yes, we want to increase it going ahead". "We have established competition in India. We have to see that the product which we give has an additional value and we are better in terms of safety ergonomics and quality in terms of competition," Villinger said.
When asked if the company plans to introduce buses with alternative technology, Villinger said: “Daimler has the technology, we just need to select. But here, we are not supported by the government enough.”

Speaking on the business with state governments, Villinger said: “Next year, we are getting into business with state government undertakings and state governments. We will give fully built buses to the government.” DICV currently has a production capacity to roll out 24,000 buses from Oragadam plant near Chennai every year. The company has made an initial investment of Rs 4,400 crore for truck manufacturing and an additional Rs 425 crore for the over 400-acre bus plant near Chennai.

Earlier, parent Commercial vehicle maker Daimler AG on Tuesday night unveiled a semi-autonomous city bus, an urban eTruck and vision van to the global media. “We are reinventing transportation for goods and people, on highways and cities,” said Wolfgang Bernhard, Member of the Board of management, Daimler AG while underlining the need for connectivity, efficiency and safety with numerous innovative features in vehicles. “In the coming 10 years, there will be more changes in our vehicles than in the past 120 years. We are on the edge of new era. A new era we all can look forward to as Daimler will be inspiring,” he said.

Addressing the press at the inaugural session of the 66th IAA 2016, the commercial vehicles fair in Hannover, on Wednesday, he said that the electric-powered driven van would be rolled out by 2018 and city buses by 2020. By 2030 about 70 per cent of the matured market will be driven by electric vehicles.

While refusing to give details, he said Mercedes buses would be rolled out in the by next decade and that the company would have necessary sales volume to build the vehicles. Mr. Bernhard said: “At this IAA, our focus is in on cities. We are presenting our vision for urban transport. The goal is to make it safer and more efficient than ever.”

Daimler commercial vehicles businesses are not about hardware any more, he said. “We go way above and beyond hardware. We will offer our customers comprehensive mobility concepts, by continuously adding intelligent and connected services and solutions to our portfolio,” he said. Explaining further, he said: “We are not in a race with Daimler passenger cars. We will be complimenting each other and helping each other.”

Head of Daimler Bus Division Hartmut Schick said that several changes were happening in the bus industry. “Electric buses are going to be a reality step by step, and Daimler is going to be the drivers of change.”

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Chinese manufacturer BYD is marking its first appearance at the IAA Show (Hanover; 22-29 September) with the debut of an all-electric coach – and predicts it will return to the next IAA event with buses, coaches and commercial vehicles.

The coach can carry up to 51 seated passengers and their luggage (4 cu metres of space). It has a typical range of between 140 and 200km in typical city conditions, based on real-world operating experience in China, and can be fully charged in three hours.

Two French operators, BE Green and Nedroma, have already ordered a total of 15 vehicles to serve the Parisian sightseeing market. The coaches will be delivered later this year, says BYD. Also on show at IAA is BYD’s 12-metre ebus, the company’s standard electric bus model now in service in London and Schipol. The vehicle on show is designed for the European market and is similar in specification to the 35-strong order delivered to Schipol airport for airside passenger transportation.

Isbrand Ho (pictured), managing director of BYD Europe, says: “We are fully structured to supply European operators with outstanding and proven electric buses and, now, coaches and the after-sales support they require. Our vehicles deliver outstanding reliability, range and of course we are the only company where the battery technology comes first – all of our competitors have to source theirs from third parties.”

Ho also predicts that BYD “will soon be on the radar screens of all those in Europe concerned about improving air quality”, adding: “Not only with our fast developing bus and coach range, but thanks to our taxis (now being trialled by Uber in London as well as in service in Brussels and Barcelona), our plans to enter the light commercial vehicle and then heavier truck markets and, slightly further way, our intention to bring to Europe our well respected and successful range of hybrid and electric cars.”

Ho says: “In fact, two years from now at our second IAA appearance I expect us to be present with buses, coaches and commercial vehicles.”
Daimler Buses is reinforcing its sales position in the Middle East and eastern European markets with a new generation of the Mercedes-Benz Conecto urban bus family. These markets are characterised by price-sensitive tendering business and a particularly strong focus on lowest Total Cost of Ownership (TCO), without dispensing with the use of state-of-the-art vehicle technology right through to Euro VI diesel technology and optimum safety technology.

In just under ten years, the outgoing Mercedes-Benz Conecto has notched up outstanding sales figures with eastern European transport operators and in Middle Eastern and Central Asian countries. More than 3000 vehicles have been delivered overall. With its extended range and state-of-the-art technology, the new vehicle family meets the evolving requirements regarding driving safety, passenger comfort, handling, etc. The new Conecto unites an uncompromising focus on low Total Cost of Ownership (TCO) with minimal emissions in accordance with the Euro VI emission standard. It combines the very latest driveline and chassis technology with supreme safety and high comfort for passengers, as well as user-friendliness for the driver. In this way, the new Mercedes-Benz Conecto is the perfect accompaniment to the globally best-selling Mercedes-Benz Citaro. It is, however, less customised and clearly differs from the Citaro thanks to its focus on largely ready-made configurations, providing for lower acquisition costs.

Ultra-efficient, low-emission diesel engines in accordance with the Euro VI emission standard without exception operate in the rear of the Conecto. The Conecto G benefits from the latest, even more economical generation of the OM 470 heavy-duty engine. Alternatively, the Conecto is also available for the first time with the ultra-quiet, low-emission natural-gas drive. This makes it even more compelling than ever in typical natural-gas markets such as Turkey or in Eastern Europe. Mercedes-Benz continues to supply the previous model for markets still looking for the Euro III emission standard.

Examples of the high level of safety technology include the electronic stability programme ESP on the solo vehicle and the Mercedes-Benz ATC (Articulation Turntable Controller) on the articulated bus as well as independent front suspension for a high standard of driving safety and ride comfort.

Mercedes-Benz supplies the low-floor urban regular-service bus as a 12.13 m long three-door Conecto solo bus and as an 18.12 m long four-door Conecto G articulated bus. By concentrating on clearly focused configurations with regard to vehicle length, engines, equipment and appointments, the Conecto is more than ever the perfect solution for the typical tendering business in particularly price-sensitive regions.
India lost 1.4 million lives to air pollution in 2013, while in China the toll was 1.6 million, estimates a World Bank report released on Thursday.

The report, released by the World Bank and the Institute for Health Metrics and Evaluation, shows that in 2013 more than five million deaths worldwide were attributed to health conditions caused by air pollution. About 60% of them were in the world’s two most populous countries. Exposure to air pollution increases a person’s risk of contracting ailments such as lung cancer, stroke, heart disease and chronic bronchitis.

China and India aren’t among the worst hit in absolute terms because of the sheer size of their respective populations. Even after adjusting for population, these two countries along with Bangladesh, Sri Lanka and Pakistan were among the 15 nations with the highest toll per million populations.

China and India ranked 4th and 6th worst in the world respectively. Bangladesh, Sri Lanka and Pakistan were ranked 11th, 12th and 15th on this count.

The bank estimates that in 2013 Georgia saw the highest rate of air pollution deaths per million of its population at 2,117. It was followed by Cambodia with a death rate of 1,300 per million. Among the 142 countries for which the bank compiled this data, there were 10 where the rate was higher than 1,000 deaths per million. Australia fared best on this parameter with an estimated death rate of 34 per million.

The report also estimated that air pollution cost the world economy more than $5 trillion - purchasing power parities (PPP) at 2011 prices - in welfare losses and an additional $66 billion worth of manpower loss.

China’s overall welfare and manpower loss was $1.6 trillion while India lost more than $560 billion, which was equivalent to over 10% of China’s and 8.5% of India’s GDP.

Air pollution is estimated to be the fourth leading fatal health risk worldwide after metabolic risks, dietary risks and tobacco smoke. The estimates are based on exposure to PM2.5 pollutants. It is noticeable in the report that the risks are much higher in the developing world.

By damaging people’s health and causing fatal diseases, air pollution can have a lasting effect on a person’s economic productivity. Experts argue that typically the economically weakest section is the worst hit because of limited access to health care facilities. Thus, exposure to bad air quality and other risks will ultimately widen the existing economic inequalities, they say.
Global Automotive Industry Outlook

While the global automotive market continues to forge ahead due to low interest rate and low fuel prices, fundamental assumptions of political structure and technical truisms are increasingly challenged. As industry stakeholders plan ahead for the future, they will face plenty of strategic decisions on their way. The global light vehicle outlook, based on PwC Autofacts, is summarized below:

North America

The sales environment in the US, while still looking positive, continues to show signs of a cooling down. Through the first half of 2016, light vehicle sales have increased by 1.3 percent, by far the lowest percentage in the recent years.

The outlook in Canada and Mexico remains much more promising with both markets poised to have another historic sales year and without any overriding concern of a slow down on the horizon in either market. Through first half of 2016, the light vehicle sales have increased by 5.9 percent in Canada and 16.8 percent in Mexico.

South America

Through March 2016, light vehicle sales in Brazil have decreased by 28.4 percent and Argentina by 29.4 percent. Each passing quarter, it seems the South American forecast both from sales and assembly standpoint is a big challenge. As Brazil continues to languish during deep economic recession both sales and assembly have nose-dived. Hopes for recovery in Brazil are now well into the latter half of 2017.

In the recent quarter, Argentina has fared well. As economy rebounds, demand for new vehicles will increase. Meanwhile, Venezuela sales and production remain at a near zero, given the inability of both consumers and corporations alike to obtain the dollar need to make purchase and operate business. There is a speculation that the authorities are considering dollarization to save the automotive industry and this provides the same hope that the industry won’t be entirely idle for the year.

EU + EFTA

EU has dominated by the UK decision to leave the EU. Uncertainty is the surety the major risk factor in the short term that could undermine consumer and business confidence in the upcoming months and adversely affect the UK market.

Some companies have already publicly announced postponement of freezing up investments until the post Brexit picture becomes clear. Through the first half of 2016 EU + EFTA new car sales have increased by 7.9 percent and LCV sales by 9.7 percent.

As domestic demand continues to play an important role in the expansion of EU output, the European light assembly is forecasted to grow to 18.9 million units in 2016.

East Europe

Through May 2016, sales have decreased by 14.6 percent in Russia, 0.3 percent in Turkey, and an increase in Ukraine by 62 percent. As Brent crude oil prices have climbed past $50 per barrel in July 2016 after dipping below $30 per barrel in 2015, the strength
of Russian rouble has risen in kind however the nation’s GDP has not reflected this positive moment.

Turkey is currently going through many challenges both internally as well as externally. Despite all the issues the Turkish economy has stayed surprisingly resilient showing little impact on private consumption.

In Ukraine, a new EU Ukraine free-trade agreement was agreed upon in Jan 2016 helping to the jump start the market. The total light vehicle production for Eastern European region is expected to decrease by 2.8 percent to 2.8 million units in 2016.

Middle East & Europe

Through June 2016, Iran light vehicle sales have decreased by 6.2 percent. South Africa light vehicle sales by 10 percent. With lifting of economical sanction on Iran the country gained global traction in the recent months and is expected to remain at a forefront of market to watch as OEM continue to explore local manufacturing options. South Africa has been struggling through a difficult stretch and 2016 seems to be continuing on this path.

The National currency, the rand is also expected to stay weak with related high inflation rate in the mid-term, increase in interest rate will also limit the National Automotive market, hurting the consumers who are already price
sensitive with higher financial costs. All these lead towards the anticipation of ongoing decline in the vehicle sales.

**Developed Asia Pacific**

Through June 2016, Australia light vehicle sales have increased by 3.4 percent, South Korea have increased by 8.7 percent and Japan decline by 6.7 percent. Through assembly is set to end in Australia in the next 18 months, the light vehicle sales have forged ahead to reach the highest half year sales mark in the history.

The first half of the year has not been so positive for Japan where the plant accidents, major earth quakes and fuel economy scandals have rocked the market. In order to prevent the severe dipping the private consumption, the government has prolonged its sales tax increase maintaining the 8 percent rate for the next two and half years before increasing to 10 percent.

From the assembly stand point the sector faces multiple challenges in Japan including growing localization in the overseas market as well as shrinking labor base, as a quarter of the nation
The population is now over the age of 65. The long term forecast of Japan assembly will remain around 8 million.

With the introduction of 15 percent sales tax reduction until June 2016, the South Korean market showed the robust growth through the first five months of 2016. However the market, is expected to struggle for the next several months as the consumers pull their vehicle purchase forward to take advantage of the lower tax rate. On assembly front, South Korea market remains fairly flat between 4 to 4.5 million units.

Developing Asia Pacific

Through March 2016, sales of light vehicles have increased by 6.9 percent in China and 5.6 percent in India. Through the 6.7 percent GDP growth in Q1 of 2016 was seen by many as indicator of slowing Chinese economy, the enhancement of supply side reforms and currency deflation should lead to an improvement for the year. Light vehicle sales through May 2016 were on pace with the economy as a whole inching upto 6.9 percent to reach 10.2 million units, thanks to the tax stimulus that will continue through 2016. On the product portfolio while SUV’s were up by staggering 46.9 percentand indeed SUV’s have continued gaining momentum within the Chinese market and now becoming the first choice for many buyers.

Light vehicle sales in India showed a positive development in the second quarter of 2016 and new models and compact SUV’s are driving the demand for vehicles. The positive moment is expected to continue with better monsoon.

At a macro industry level the sticker position towards emission targets may have negative influence on the long term investments. How the diesel vehicle ban in the NCR region will be dealt with is the key going forward on the investment climate in the automotive sector.

ASEAN

The Thai and Indonesian markets, the top two within in ASEAN, seemed to have bottomed out on a downward spiral, but the third largest market of Malaysia is experiencing double digit decline this year due to sluggish economy. The Vietnamese and Philippine markets continued to expand at robust rates, with the automakers increasing local assembly in these countries to meet demand. In total, 4.2 million unit is forecasted for 2016 full year production, will be assembled in 2016 and 6.4 million units within ASEAN markets.

By : Abdul Majeed
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