White paper

The Future of Automobile Industry in India

In face of uncertain diesel policy, GST, Bharat Stage Emission Standards and Consumer Shift

Preface

The Journey So Far

1958...

First totally India made car ambassador was rolled out. It dominated Indian roads till 1970s. Even now it is used by government officials and till 2014 the car was still manufactured.

India's automotive industry has had a long journey since then. Today it accounts for 7.1% of country's GDP and is one of the largest in the world. Production increased with a compound annual growth rate (CAGR) to 9.4% during the period FY06-16, passenger vehicle showing fastest growth at 10.09% followed by 2-wheeler.

With initiatives by Government of India and prominent automobile manufacturers, India is expected to lead the world in 2-wheeler and 4-wheeler segments by 2020.

However, with increased environment concern, introduction of diesel policy, GST, fuel efficiency norms and major transformation in consumer preference, India's auto industry faces several challenges ahead.

This paper attempts to assess the journey of India's auto industry from where it stands now to its future objective and how it is trying to face the challenges and remould itself in the process.

Recent Storm Over Auto Industry

a) The Crunch And Grind Of GST

The industry was very hopeful around GST. Because, a plethora of indirect taxes excise taking the lion's share, plagued small cars with 30-32% and larger cars around 48-54% tax. With GST replacing various different indirect taxations and bringing them under a single umbrella, the hope was, prices would go down for automobiles.

However, now with the declaration of *GST rates for all passenger vehicles fixed at 28% and larger luxury cars to attract additional cess (apart from 28% slab)*, it seems the prices will remain same more or less. There could be a marginal price downgrade though but nothing substantial.

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Besides, the cess for the luxury cars is yet to be determined. The finance minister has indicated all current cesses and special taxes will be considered while determining the cess and keep the tax on luxury cars under 40%. How much of it finally comes to count is yet to be seen. The minister's idea of considering a work-out of incentive for fuel efficient, environment friendly small cars could be a silver lining for this sector as it would increase sales.

Nonetheless, the industry will surely be illuminated by the brighter side of GST which will enhance the ease of doing business. It would reduce the unnecessary logistic costs, improve interstate sales, transport and delivery. As the point of manufacture and consumption locations for this industry is vastly different, improvement in logistics and movement will surely help the sector.

The outcome of GST will be good for the automobile industry not only in simplifying administration, logistics and tax structure but also will help 'MAKE IN INDIA' more efficient and encouraging for the foreign car makers too as parts and accessories could be more easily manufactured and distributed within the country instead of importing.

b) The Diesel Dilemma

1. Supreme Court's Verdict: Past, Present And Future?

Earlier, on December 16, 2015, Supreme court had imposed a ban on diesel run luxury vehicles and SUVs with engine capacity of 2000cc and more to check air pollution in Delhi and NCR. The city was marked as the most polluted by WHO, gauged by the level of micro particles floating in the air especially caused by burning of fossil fuel. Such particles easily penetrate into lungs and heart causing acute and chronic respiratory diseases, asthma, heart disease, strokes, lung cancer.

Rapidly growing number of diesel cars both large and small was one of the major contributors to this. Diesel being cheaper than petrol, though emitting higher level of micro particles, diesel run cars were an obvious preferred choice of the buyers. Nearly half the diesel consumed in India goes to personal vehicles (causing misuse of fiscal policy).

A plea from a few SUV and luxury car manufacturers to lift the ban on the ground that their 4-wheelers were less polluting than most of the small cars was met with a sarcastic remark from the apex court-"Do your cars emit oxygen?"

However, the apex court has then modified its decision allowing fresh registration of luxury and SUVs in Delhi and NCR after the manufacturers and dealers came to an agreement to collect from the buyers the Green Charge or Environment Compensation Charge (ECC) of 1% of the vehicle's ex-showroom price. The ECC charge (a concept from Mercedes) now a 'condition precedent' for registration, is to be deposited to Central Pollution Control Board.

The apex court has also agreed to consider imposition of hefty environment compensation or Green Cess ranging from 10-30% on all types of diesel cars- small and large both.

"Do your cars emit oxygen?" Sarcastic Supreme Court

Buyers to pay the Green Charge or Environment Compensation Charge (ECC) of 1% of the vehicle's ex-showroom price.

2. National Green Tribunal (NGT): Ban on all diesel vehicles aged more than 10 years

Two years before, NGT passed a resolution to ban all cars irrespective of petrol or diesel more than 15 years old in Delhi, NCR and Kerala with other states to follow soon. With the turbulence that happened there after, the apex court had passed the order to de-register diesel vehicles more than 10 years old with immediate effect.

Subsequently, the registering authorities had started the process from November 2016 which affected all private and heavy vehicles including trucks, buses and imported vehicles. The ministry of heavy industry has challenged the order.

The government has moved to the apex court against NGT's order. It said that the limit should be kept to 15 years and to be equally applied to petrol cars too.

Road Ahead For Auto Industry

1. Bharat Stage Emissions and CAFÉ proving too hot

The restrictions and bans on diesel vehicle is only a portion of the challenge the industry is facing, coupled with the uncertainty on the future of diesel vehicles. Is the ban going to remain and would be implemented to other states too? Such questions are making the automakers hesitant to invest in diesel facilities.

But apart from that, even a tougher challenge looms auto industry. Meeting the emission norms, now with the government deciding to go for BSVI emission norm by 2020.

Diesel engine maker Bosch feels that a time of four years would be needed to upgrade from BSIV to BSV and another four to BSVI, a total of 8 years. If these are not done in phases, it could lead to massive safety and quality problems which already Indian auto industry faces.

Because, vehicles need to go through real time cycles of validation in different climatic conditions like summer, winter, monsoon which come in phases and testing in high altitude as well. Feasibility of BSVI by 2020 is worrying the industry experts.

Cost would be a factor creeping in, as auto makers will not be able to go for cost optimisation under such short timeline. So with emission norms in place, price difference between petrol and diesel cars may shoot up to 30-40%. The diesel vehicles would become more expensive making them unattractive.

Again, there is the dilemma of fulfilling the Corporate Average Fuel Economy (CAFÉ) norms which stipulate improvement in fuel economy by double digit. This would be impossible to meet without diesel vehicle. A car manufacturer company with less than

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30% diesel vehicles in the convoy will have tough time in meeting CAFÉ norms, as diesel vehicles emit 10-20% lesser co² and give better mileage per litre by 25-30%.

With regulations, safety, fuel efficiency and emission norms that too in a matter of 3-4 years are sure to increase the prices going beyond affordability unlike the developed countries where par capita income is more and therefore consumers can absorb such price increase.

This would in turn affect the demand which will affect the manufacturing, the industry as a whole and employment opportunity as well.

2. India's plan to become 100% e-vehicle nation by 2030

With rising fossil fuel prices, demand for fuel efficiency and environmental concern, electric vehicles seem to be the only viable option. As per McKinsey report, by 2030, shared electric vehicles (hybrid, plug-in, battery electric and fuel cell) could range from 10-50% of new vehicle sales.

India plans to become e-vehicle nation by 2030. The government has started working on a scheme to come out with electric cars at zero down payment. The buyers could pay out of their savings on expensive fossil fuel.

The speed of reaching the target will be definitely influenced by consumer demand and regulatory push which could differ at regional and local level. At the moment what lacks is proper charging infrastructure.

3. Consumer Shift

As per McKinsey report three driving factors are going to shape the future of automotive sector. Diverse mobility and connectivity, Autonomous driving and Electrification.

The report finds diverse mobility (on demand car sharing, e-hailing) to generate around 30% more revenue by 2030 for the automotive sector. Auto maker companies have already started tying up with cab-service companies to cater to e-hailing and shared mobility demands.

This trend, as per the report, is going to slow down the annual growth rate of car sales to around 2% by 2030.

With e-hailing services from Ola, Uber some people could in future think of giving up car ownership. Because of the shift towards diverse mobility solutions one out of ten new cars sold in 2030 could be a shared vehicle.

This would mean reduced life of shared cars of up to three years only. Which implies the car manufacturers would need to constantly work on technology upgradation of vehicles.

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Vehicle Emission standards in India: http://www.4uauto.com/uploadfile/2011/1123/20111123045950975.pdf

Changing The Gear

ndia's most ambitious plan National Electric Mobility Mission Plan 2020 aims to bring a 'transformational paradigm shift in the automotive and transportation industry in the country'. NEMMP-2020 sets forth a comprehensive and collaborative planning for promotion of hybrid and electric vehicles in India through promoting technology, R&D, charging infrastructure, supply side incentives.

The country saw its first electric car in 2013, manufactured by Mahindra at its Bengaluru facility. India's auto industry has since then seen several types of electric hybrid cars, motorcycles, scooters, buses, mini pick-up trucks.

In 2015 Motor Vehicles Amendment Bill passed by Parliament established battery-powered erickshaws as a valid form of commercial transport in India which is now gaining popularity in Delhi-NCR especially in small lanes and congested areas. Cab service provider OLA now offers the facility of booking e-rickshaw through its APP for Delhi-NCR region.

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However, charging infrastructure in India is yet to be fully developed though initiatives have started to set up community charging stations like Plug-in Electric Vehicle Charging Stations, solar powered charging points at the existing fuel stations in the country.

To wrap up, with increased concern of global warming there is immediate need to reduce the dependency on fossil fuel based vehicles. India's air quality indices clearly indicate that many Indian cities are posing serious health threat to citizens, automobile pollution being the major contributor. Also, with shift in consumer choice, India's automotive sector needs to focus on the changing needs and consumer preference to be helped by government's paced up efforts in coming up with the requisite infrastructure, facilities and support.

About Mahindra Group www.mahindra.com

Mahindra embarked on its journey in 1945 by assembling the Willys Jeep in India and is now a US \$6.3 billion Indian multinational. It employs over 1,00,000 people across the globe and enjoys a leadership position in utility vehicles, tractors and information technology, with a significant and growing presence in financial services, tourism, infrastructure development, trade and logistics. The Mahindra Group today is an embodiment of global excellence and enjoys a strong corporate brand image.

Mahindra is the only Indian company among the top tractor brands in the world and has made an entry in the two-wheeler segment, which will see the company emerge as a full-range player with a presence in almost every segment of the automobile industry.

The Mahindra Group expanded its IT portfolio when Tech Mahindra acquired the leading global business and information technology services company, Satyam Computer Services. The company is now known as Mahindra Satyam.

Mahindra's Farm Equipment Sector is the proud recipient of the Japan Quality Medal, the only tractor company worldwide to be bestowed this honour. It also holds the distinction of being the only tractor company worldwide to win the Deming Prize. The US based Reputation Institute ranked Mahindra among the top 10 Indian companies in its Global 200: The World's Best Corporate Reputations list.