

## India EV Seminar 2023

# CAN THE EV SECTOR BE INDIA'S NEXT GROWTH ENGINE?

Friday 28<sup>th</sup> April'23 | ICAT Centre 2

## POST-EVENT REPORT





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# MESSAGE FROM PATRON



## DR. HANIF QURESHI

Joint Secretary,  
Ministry of Heavy Industries (MHI), Government of India

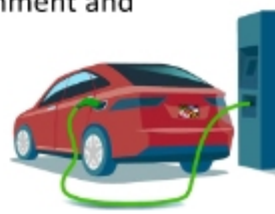
Hon'ble PM Shri Narendra Modi surprised the world when he announced his highly ambitious and long awaited 'net-zero mission by 2070' for India in his opening speech at the **UN COP-26 Conference** in November 2021 at Glasgow and presented his **Panchamrit or five nectar elements**, to deal with this challenge, -

- Reach 500GW Non-fossil energy capacity by 2030
- 50 percent of its energy requirements from renewable energy by 2030
- Reduction of total projected carbon emissions by 1 billion tons from now to 2030
- Reduction of the carbon intensity of the economy by 45% by 2030, over 2005 levels
- Achieving the target of net zero emissions by 2070.

Echoing PM's vision, India has implemented several green policy initiatives in recent years. Launched in 2008, National Action Plan on Climate Change (NAPCC) outlines India's strategy on renewable energy, energy efficiency, and sustainable agriculture. Launched in 2015, International Solar Alliance (ISA) is a partnership of over 120 countries aimed at promoting solar energy. India is a founding member of the ISA and has committed to generating 175 GW of renewable energy by 2022. Launched in 2014, the Swachh Bharat Abhiyan (Clean India Mission) is a national campaign to achieve an open defecation-free India and promote waste management and recycling. Launched in 2015, the Smart Cities Mission aims to develop sustainable and livable cities in India through the use of technology and innovation, smart infrastructure such as energy-efficient buildings, green spaces, and public transport. Launched in 2014, the Green India Mission aims to increase forest cover in India and enhance ecosystem services such as water conservation and soil health, increasing forest cover to 33% of India's total land area.

Launched in 2013, **National Electric Mobility Mission Plan (NEMMP)** aims to accelerate the adoption of electric vehicles (EVs) in India. The plan includes measures such as subsidies for EVs, funding for charging infrastructure, and research and development. Expressing our commitment to the PM's mission and make Indian transport green, Ministry of Heavy Industries have taken notable steps- FAME scheme is a case in point. This led to a surge in production, sales, and exports of EVs in all segments (bus, cars, commercial vehicles and scooties) and soon be Aam Aadmi's popular and affordable choice.

To further, on the occasion of **World Day for Safety and Health at Work**, MHI with ICAT and the Policy Times Chamber of Commerce (PTCC) has organized the India EV Seminar 2023 on '**Can The EV Sector Be India's Next Growth Engine?**' at Manesar on 28th April 2023 where 120 stakeholders, 10 speakers, and 25 journalists participated. We look forward to the views and recommendations expressed and shared by industry leaders to better the policy environment and effective implementation.





# EXECUTIVE SUMMARY

International Centre for Automotive Technology (ICAT), Ministry of Heavy Industries, Govt. of India, and the Policy Times Chamber of Commerce are organizing a series of India EV Seminars 2023 for public policy awareness and industry outreach. On the occasion of **World Day for Safety and Health at Work**, the second seminar was organised on the theme - **'Can the EV Sector Be India's Next Growth Engine?'** in Manesar in April 2023. 120+ stakeholders, including Gov't Officials, business leaders, and local policymakers, from all EV sub-sectors, joined. There were two sessions with 12+ speakers.

Electric vehicles are becoming the identity of New India and the pride of a self-reliant India. The net-zero by 2070 commitment by the Hon'ble Prime Minister of India has set a target for India. Green energy and green mobility are crucial to achieving this mission. Landmark and transformative policy initiatives, including FAME and PLI, are vital strategic steps in that direction.



# INTRODUCTION

The "India EV Seminar 2023" was held on 28th April 2023 and brought together policymakers, business leaders, and academicians from all EV subsectors to discuss the theme of 'Can The EV Sector Be India's Next Growth Engine?' in Manesar.

120+ stakeholders, including 12 speakers, participated from a diverse group of stakeholders from the EV industry, including automakers, battery manufacturers, charging infrastructure providers, and policymakers. The event began with opening remarks of the Host, **Shri Saurabh Dalela**, Director, International Centre for Automotive Technology (ICAT), followed by special addresses by **Mr. Satoshi Sasaki**, Officer-in-Charge, ILO Decent Work Team for South Asia and Country Office for India, and **Shri Randheer Singh**, Director-E-Mobility & ACC Program, NITI Aayog highlighted the importance of the EV sector as a growth driver to mobilize India's green mobility mission. He emphasized the Government's commitment to supporting the EV industry through policy initiatives and incentives. A video message was delivered by **Dr. Hanif Qureshi**, Joint Secretary, Ministry of Heavy industries (MHI), Government of India.

The seminar featured 2 Plenary Sessions jointly and presentations by industry experts on **EV for Aatma Nirbhar Bharat (India- A Global EV Destination)** and **Making the EV Sector Sustainable and Future-Ready**, where speakers from a battery technology, charging infrastructure, and policy frameworks participated. The discussions were informative and engaging, with participants sharing their views and experiences on the challenges and opportunities in the EV industry.





# SPEAKER INPUTS

## WELCOME / THEME ADDRESS



### SHRI SAURABH DALELA

Director

The International Centre for Automotive Technology (ICAT)

Shri Saurabh Dalela, the host of the seminar believes that ‘the gravity is going to magnify as the transition is going to happen’. He clearly stated that there is no going back to the commitments made on 2030 and 2070. “The vision is all set it is just the strategies that are going to make it happen and different players play their role”, said the director. He highlighted the numbers wherein India has 1.4 billion EVs today and by 2030 cumulative EVs will be 45 billion, reflecting a CAGR of 49% unprecedented growth.

Further, he pointed out that the component industry is going to be \$14.5 million. Rs. 10000 crore investment by GOI through FAME scheme and PLI. When FAME started, the basic objective was to talk about EVs, government promoted startups and boosted them. The PLI scheme will bring in more technologies in India. It is also true that the R&D budget in auto sector will be Rs. 13000 crores. This is why when India says make in india it is not assemble in India, means primarily conduct research in India, make a product for India.

Mr. Daulela also highlighted the need for innovation in making the EVs safer for users and drivers. He pointed out that if ICE engine properly managed on heat; the engine seizes, piston melts, there are no fire and fatalities. It is all repairable with a cost. But if a similar thing happen in EV, the repercussions are difficult to handle. Thermal management of Evs in a country like India where temperatures are high is crucial. If somethings goes wrong in ICE engine performance gets hampered but if something goes wrong in EV, safety is hampered which we cannot ignore.

Over the years, it has been witnessed that any product that is good for India, it is good for world. The vice-versa is not true as products designed for China, Japan may not be suitable for India because of variation-climate, road, and driving habits. It is crucial to design for India and if that boost comes in, it will be great journey to make EV sector the next growth engine. It is going to offer opportunities on research and innovation, employment. India is currently





# SPEAKER INPUTS

## SPECIAL ADDRESS



**MR. SATOSHI SASAKI**

Officer-in-Charge

ILO Decent Work Team for South Asia and Country Office for India

Our Special Guest of Honour joined us on the occasion of the World Food of Safety to contribute towards the discussion on the potential of the EV sector as a growth engine of India. He mentioned the three key areas which can help the EV sector to be a significant contributor to the Indian economy.

First, the member countries of the ILO, including India, are obligated to work towards making progressive improvements to promote safety and health for all workers, irrespective of the level of economic development in the country. The ILO Declaration on Fundamental Principles and Rights at Work, which was adopted for 1998, had initially recognized fundamental rights at work which are; freedom of association and effective recognition of the rights to collective bargaining; the elimination of all forms of forced or compulsory labor; the effective abolition of child labor; and the elimination of discrimination in respect of employment and occupation. These rights are inseparable, interrelated and mutually reinforcing as the fifth simplest principle of the fundamental principles right of work ensuring safe and healthy working environment.

Second, India should also explore ratification of the two core OSH conventions; Occupational Safety and Health Convention 1981 and Promotional Framework of Occupational Safety and Health Convention 2006. Besides, it is also vital for India to

enable fair and sustainable supply chains for the EV sector in trade negotiations. Ratification of the ILO core conventions is a way for the country to demonstrate their capability of ensuring perfection of workers, while ratification of core ILO conventions, including Occupational Safety and Health Conventions, enable greater acceptability of the products manufactured in the countries and exported to the global market.

The third area where EV sector can be a driving force to create greener jobs and build a skilled workforce which will contribute towards the greening of the economy and reducing emissions and carbon footprint by responsibly managing the environment and skills in green energy. "ILO states the concept of the green jobs as the transformation of economy, workplaces, enterprise and labor markets into a low carbon sustainable economy that provides decent employment opportunities for all the renewable energy and jobs", said Mr. Sasaki. Annual Review Report 2022 by the ILO and International Renewable Energy Agency recognizes that the worldwide employment in renewable energy is 12.7 million. India shares 7% of such jobs, so the employment potential is immense. The shift to a low carbon and sustainable society must be equitable. It is imperative that the policies should be put in place to ensure that those likely to be negatively affected are protected.







# SPECIAL ADDRESS



**SHRI N MOHAN**  
CEO Delhi EV Cell  
Transport Dept, Govt of NCT of Delhi

Agreeing with EV to be India's next growth engine, Shri N Mohan highlighted the technology journey of India from 2015 which initiated the initial impetus for mobility industry. At national level FAME I & II brought a revolution and at a sub national level, states started raising out the EV policies.

Delhi was one of them to roll out a comprehensive mobility policy in August 2020. At the completion of three years in this current year, Delhi had a witnessed a series of experience in terms of how the mobility has increased at the state level, especially when it comes to transportation sector. He stated that 16% of the vehicle emissions are from road transport and this clearly indicates the need to decompose our transport sector and one of the way of doing it is by inducting more EVs. So, the state policy also shares the ambition where in 25% of all EVs sold in Delhi will be EVs by 2024. Besides, the government is also trying to create demand incentives for people to replace ICE vehicles with E-vehicles. A case study in Dwarka has proved that people are willing to switch to electric three-wheelers. Moreover, Delhi has close around 4000 charging points of which around 70% are slow charging points and around close to

12% are fast charging points. So this is helping the EV customers reach these network of EV charging stations across multiple locations be it public locations, semi-public locations are the private locations. Ministry of Heavy Industries have contributed to 300 e-buses presently operational in Delhi with plans to induct around close to 6300 buses in next three years' time. With this, 4% of the public transport that is currently electrified, in next, three years' time close to 80% of public transport in Delhi will be electrified. "So, this is one way we are trying to at least join the growth journey of electric mobility. It's a beginning and maybe like for the end generation we're pursuing electric mobility as their key area or expert present", said Mr. Mohan.



**SHRI ARINDAM LAHIRI**  
CEO  
Automotive Skills Development

Recounting the whole engineering skill building initiatives, Shri Arindam Lahiri highlighted the vital role of skilling. In India , skilling gets associated only with blue collar workers. So, "whether it's a blue or a gray, white or whatever it is, you need skilling", said Shri Lahiri. India's manufacturing matches the global standards and our exports is a testimony to that context.

This is an opportunity in the EV sector as we need hoards of youngsters coming into this industry and being excited about this industry and opportunities like this where we can send a message across to the youngsters that this is an industry of the future. This is a place, technology of the future. Therefore, there emerges an urgent need to skill, reskill and upskill our younger generation, especially in the two and three wheelers segment. The segment already involves significant population with no clue to ways to address the challenges in operating their vehicles.

Moreover, EV brings in another dimension of safety into our whole automobile industry. Mr. Lahiri pointed out the two large safety issues that the sector grapples with; industrial safety and road safety. As the government plans to increase the usage of e-buses- public transportation, there is a need to be very clear about the safety issues there.





# SESSION HIGHLIGHTS AND KEY SPEAKERS

All the panel address the current challenges and opportunities on both selected session on EV for Aatma Nirbhar Bharat (India- A Global EV Destination) and Making the EV Sector Sustainable and Future-Ready. The sessions highlighted the need for innovation in making the EVs safer for users and drivers. Thermal management of Evs in a country like India where temperatures are high is crucial. At present the sector grapples with the two core safety issues; industrial safety and road safety. As the government plans to increase the usage of e-buses- public transportation, there is a need to be very clear about the safety issues there. Besides, the panel also recognised the need to feminize the EV ecosystem; charging, infrastructure, sales, service driving, recycling units, collection, disposal and so much more. This can be done by upskilling the whole workforce (including women and transgenders), making workplaces safer, and increasing participation from all in the sector.

Women participation should be increased in the EV sector to propel India's growth. Electric mobility ecosystem is well poised for robust growth in the country and will emerge as a key employment generator. Regardless of the size and characteristics of cities, the willingness to adopt EVs by denizens across the country is huge.

A flagship study conducted by The Omi Foundation, Ease of Moving Index india Report 2022 endeavoured to create mobility baselines for cities benchmark improvements achieved on each mobility parameter over the years, with a special attention to electric mobility as well. The study revealed that cities like Amdabh, Jamo and many others demonstrated high willingness to adopt EVs. "But where are our women?", reminding all dignitaries; charging, infrastructure, sales, service driving, recycling units, collection, disposal and so much more. Traditional auto industry has seen higher share of women in electrical equipment and components manufacturing. Tata Motors, Mahindra and Mahindra, Hero Motor Corp. Bajaj and so many others have introduced women on the assembly lines. Increasingly, such companies, including Mahindra Electric, Kymatic, Green, CESL are replacing women in leadership positions. Where else are our women? Entrepreneurial opportunities are plenty. We have several companies women led startups that are supplying affordable portable chargers for EVs in many of our states. The Delhi government has reserved 33% of its permits for women drivers in the state. With immense opportunities to feminize the entire EV ecosystem.

ICE vehicles manufacturing relies heavily on heavy machinery, EV companies are focused on electronics, assembly software and design skill sets that are more widely available among women. For every ten new hires in the EV sector, six tend to be women skilled in business modeling, design, redevelopment, E Mobility and renewable energy management. Going forward, there is a need to well foster academia and industry relations to create more courses on EVs incentivize OEMs, including startups striving for gender parity in jobs through tax rebates incentivize hiring of women across the EV value chain. This will go a long way in ensuring their integration into the labor force.

## Other Speakers:

- Shri Randheer Singh, a Director-E-Mobility & ACC Progam, NITI Ayog
- Mr. Uday Narang, Chairman, Anglian Omega Group & Omega Seiki Mobility
- Mr. Shirish Mahendru, Technical Advisor - Sustainable Mobility, GIZ India
- Mr. Amit Bhatt, MD, International Council on Clean Transportation (India)
- Ms. Aayeshwariya Ramanman, Executive Director of OMI Foundation
- Ms. Aayushi Jain, VP External Relations, MoEVing
- Mr. Sudeept Maiti, Associate Program Director, WRI India
- Ms Ashpreet Sethi, Head of Public Affairs, EVage
- Mr. Jasmeet Khurana, Lead, Moving Emerging Markets, World Economic Forum
- Dr. Tapan Sahoo, Executive Director (Engg), Maruti Suzuki India
- Mr. Sudeept Maiti, Associate Program Director, WRI India
- Ms Ashpreet Sethi, Head of Public Affairs, EVage
- Mr. Dev Ashish Aneja, Vice President, C4V Li-ion Battery





# PLENARY SESSION

## EV for Aatma Nirbhar Bharat (India- A Global EV Destination) & Making the EV Sector Sustainable and Future-Ready

Electric Vehicles (EVs) are the key to decarbonize road transport, a sector that amounts 16 per cent of global emissions. The exponential growth in the sale of EVs together with wider model availability and improved performance, carbon dioxide emissions can now be put on a path line with the target net zero emissions by 2030. "India is now the world's third largest automotive market, but not the third largest EV market- an untamed market where we need to get", said Mr. Jasmeet Khurana, Lead Moving Emerging Markets, World Economic Forum. He further added that in the last year, 25% of the total cars sold in China were electric. United States has also announced policies wherein 60% of the cars sold in US will be electric by 2032. The world is moving ahead, and this lays immense opportunities as trillions of dollars are being invested in the sector globally.

This lays a good chance that EVs will occupy substantial proportion over the next decades, but EV is not only the future but also the present. We have successfully tested a three-wheeler with 400km on a single charge. As now we move towards developing this technology for heavy vehicles or trucks, test runs have been done on trucks from 1 to 10 ton. However, not everything produced can be sold in India. There is a need to create a demand for them. The demand for 1 ton trucks is phenomenal but we need to see how it shall work for heavier vehicles. The promotion of all types of plug-in electric vehicles is pivotal to India's carbon neutrality strategy, but it is equally crucial to understand the vehicle market evolution and its impact on cost, sales, fuel economy, battery and its material demand. Monetary and non-monetary support policies from national and state governments shall play a critical role in establishing a circular ecosystem for these vehicles. Contrarily, consumer acceptance along with technological progress shall be the ultimate determinant after the government ends financial support. Therefore, society, industry, and people as a community must take a step forward.

The increase in fuel economy requirements and trends towards electrification prompts automakers to develop hybrid ICE vehicles or EVs. However, it has been witnessed that as the fuel economy of ICE vehicles improves, the marginal cost of an additional one mile per gallon gasoline equivalent improvement also increases. A country like India that imports 87% of petroleum products from outside cannot be self-reliant if we are running vehicles on fossil fuels. On the other hand, batteries acquire 40% of the total manufacturing cost in EVs and 14% in ICE vehicles. Additionally, the geographic disequilibrium between the battery raw material supply chain (lithium, nickel, and cobalt) and battery manufacturing is becoming a critical issue to impact EV sector's growth potential.





# RECOMMENDATIONS

**W**ith the aim to make the EV sector in India the next growth drive, following recommendations have been derived from our esteemed panelist discussion;

**Formalize the informal:** There is a need the trucking community to have believe as it is largely an informal sector and from our perspective, manufacturing is key. There has to be focus on modular factories that can manufacture fast and deliver to the customers from the basis, circular manufacturing. The heavy vehicles and its components should be provided easily to them but the drivers need to be trained. In the coming two years, heavy vehicles shall also be running on cleaner fuels and therefore, there is a need to formalize the sector and educate the drivers with the basic knowledge of the vehicle and safety concerns.

**Infuse confidence among people:** We need to put confidence in people about its use, its safety concern and also from finance perspective. People must be confident of investing in a green initiative. Three-wheelers think before investing, skill building from maintenance perspective is required. Accessible and reliable charging and further building A's-accessibility, affordability, accommodation, and acceptability among people is crucial.

**Mandates For RWA:** We need mandates for RWA so that they create charging stations. We need public charging stations, in public charging units, prices vary Rs 20-30 per unit as against 5-6 rs. If the cost goes up by 4 folds, the cost will have adverse effect. Here we need to look back and see why we are doing EV. Even with India's existing grid, which is predominantly coal, e-car is cleaner 20% and two-wheelers are cleaner 40-45%. However, as per PM Modi's commitment to increase energy from renewable sources, we would be more cleaner.

**Localize Energy Reliability:** Gogoro Taiwan- an excellent example of localizing energy reliability by deploying virtual power plants (VPP) and pausing the energy grid usage. It is a global leader in battery swapping ecosystem that enables sustainable mobility solutions for cities. While we have a battery swapping policy lined up, we need to have such solutions in place to support India's renewable energy transition. Maharashtra has partnered with Gogoro to build a \$2.5 billion battery swapping infrastructure, it has also launched a pilot in Delhi NCR by unveiling 4 battery swapping station in Gurgaon and two in Delhi.

**Sustainable & Fair Supply Chains:** The supply chain needs to be fair and sustainable and focus on promoting this network and fundamental rights of work, including occupational, sex and health participation of businesses in global supply chains can enable development of the country, including employment, technology, advancement and transfer, skilling, capacity enhancement, diversification and so on. This shall also encourage FDI in the sector.

For the EV sector to be a lead runner contributing to the domestic and global economy, decent work needs to be ensured not just in the large enterprises, but down to the supply chain. Reaching up to the second and third tiers of the suppliers that gives more challenges for the industry related to labor, raw materials and production processes.

**Social Dialogue:** Social dialogue is a critically important component of a job transition, especially in the workplace, where the voices of both employers and workers are needed to determine the design of the new sustainable production system and work practices.

**Green Workplaces:** In some instances, employees and workers begin to work together in greening their workplace, building on the long tradition of collaborating on occupational safety and health and other issues. This movement towards a green economy has created more opportunities for green technology, green investment and green jobs. This requires human capital, including women and workers from their vulnerable communities use marginalized groups to be skilled, less skilled and upskilled to match the requirements emerging in the labor market. This can help inclusive development and contribute towards more and better employment, greater return on investment, on training and increased productivity.

**Academia & Training:** Going forward, there is a need to well foster academia and industry relations to create more courses on EVs incentivize OEMs, including startups striving for gender parity in jobs through tax rebates incentivize hiring of women across the EV value chain. This will go a long way in ensuring their integration into the labor force. Provide accelerator support and credit channels for women led EV entrepreneurial opportunity. Recognition of such opportunities under dedicated MSME schemes could provide women with the much needed financial support and incentive in taking up roles in the EV revolution of the country. Learning from other models like the Dual System for Training initiative in Haryana. We could also look at replicating this within the EV ecosystem. The effort to create a world class killing program needs to start from the grassroots. India can take inspiration from plumbing institutes in Odisha and beyond and replicate that within the EV ecosystem. Overall, of course, India can transform itself to be a powerhouse of EV skills and there is a great case to be made for feminizing this transition from day one.



# CONCLUSION

The event concluded with a closing address by Mr. Akram Hoque, Director General, Policy Times Chamber of Commerce said that this is one of a series of Seminars that the MHI is planning to create public awareness of the public policies, industry outreach, and facilitate networking. To achieve PM's 2070 mission of a carbon-neutral India, India is taking the right policy steps to achieve green mobility and green energy. He thanked all the Speakers and participants for their valuable contributions to the seminar. He emphasized the importance of the EV industry in achieving India's green mobility mission and reiterated the Government's commitment to supporting the industry.

Overall, the "India EV Seminar 2023" was a resounding success, with participants gaining valuable insights into the EV industry's challenges and opportunities. The seminar provided a platform for stakeholders to exchange ideas and collaborate on driving the growth of the EV industry in India, contributing to India's mission of achieving a sustainable, green mobility future.

# MEDIA COVERAGE



India EV Seminar 2023. The seminar's focus was on 'Can The EV Sector Be India's Next Growth Engine?' held on April 28th, 2023. Organised by Ministry of Heavy Industries Government of India, Policy Times Chamber of Commerce, and International Centre for Automotive Technology (ICAT) in ICAT Convention Centre 2 in Manesar. Where 30+ media are joined, including print media, online media, social media, and multimedia. They played an important role in shaping attendees' opinion, policy decisions, and public discourse on a particular issue.

Those media provide a platform to reach a wider audience and communicate the event's purpose, achievements, and outcomes. They help us to creating public awareness and generating interest in the topic of discussion. mainly they covered the press conference on Electric Vehicles, taken views from industry leaders, policymakers, and experts in the field of electric vehicles and attended people also.



<https://youtu.be/S86U003Ms-4>  
<https://youtu.be/NzKaz7Dftmw>

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<https://youtu.be/GC4Qb1hpgRy>



# ABOUTS

## MINISTRY OF HEAVY INDUSTRY

The Ministry of Heavy Industries promotes the engineering industry viz. machine tools, heavy electrical, industrial machinery, and auto industry and administration of 29 operating Central Public Sector Enterprises (CPSEs) and 4 autonomous organizations. The CPSEs under the Ministry are engaged in the manufacture and in consultancy and contracting services.

The Ministry also looks after the machine-building industry and caters to the requirements of equipment for basic industries such as steel, non-ferrous metals, power, fertilizers, refineries, petrochemicals, shipping, paper, cement, sugar, etc. The Ministry supports the development of a range of intermediate engineering products like castings, forgings, diesel engines, industrial gears and gearboxes.

## THE INTERNATIONAL CENTRE FOR AUTOMOTIVE TECHNOLOGY (ICAT)

The International Centre for Automotive Technology (ICAT), Manesar, located in the Northern Automotive hub of India, is a leading world class Automotive Testing, certification and R&D service provider (for Automotive & Non-Automotive sectors) under the aegis of NATRiP (National Automotive Testing and R&D Infrastructure Project), Government of India. ICAT is one of the authorised Testing Agencies under Rule 126 of Central Motor Vehicles Rules (CMVR) notified by MoRTH, Govt. Of India.

ICAT continues its endeavour towards knowledge sharing and dissemination, through seminars and events, on important topics like Power Train, Emission, HEV and EV technology, NVH, Crash, Lighting, Inspection & Certification and Fatigue.

## POLICY TIMES CHAMBER OF COMMERCE (PTCC)

PTCC supports policymaking, investment, and business-friendly environment and business growth by building synergy between industry, policymakers, academia, civil society, and the international community through networking, advocacy, consultation & training. With its Secretariat and Sectoral Committees in Delhi, Kolkata, and Nagpur, PTCC works powerfully on various sectors - sustainability & waste management, healthcare & pharma, IT & Electronics, education & Skill development, Tourism & hospitality, manufacturing, Agriculture and food processing, etc. Mr. Akram Hoque is the Director General of the Policy Times Chamber of Commerce.

