

# SIAM

Society of Indian Automobile Manufacturers

*Building the Nation, Responsibly.*

## Annual Report 2023-24









# *SIAM*

Society of Indian Automobile Manufacturers

---

## Annual Report 2023-24





# TABLE OF CONTENTS

President's Message .....	3
About SIAM .....	9
Performance of the Automobile Industry in 2023-24 .....	10
Global Auto Industry Performance in 2023 .....	13
Building the Nation, Responsibly .....	15
SIAM Annual Activities & Milestones .....	17
SIAM 63 <sup>rd</sup> Annual Convention 2023.....	18
Bharat Mobility Global Expo 2024.....	21
Economic & Commercial Affairs .....	29
Technical Affairs .....	51
Initiatives of SIAM – SAFE .....	124
SIAM Councils & Groups 2023-24 .....	132
SIAM Executive Committee 2023-24 .....	140
Past Presidents .....	141
SIAM Members .....	142
SIAM Secretariat .....	143
Linkage with other Institutions in India .....	144
Overseas Linkage .....	145





## PRESIDENT'S MESSAGE

### **Mr Vinod Aggarwal**

*President, SIAM and MD & CEO*

*Volvo Eicher Commercial Vehicles Ltd.*

On the back of strong Indian economic growth of 8.2% during 2023-24, the Indian Automotive Industry posted a solid performance, growing 12.5% in volume terms. The industry contributed 6.8% to GDP with a respectable turnover of about Rs 20 Lakh Crores (equivalent to USD 240 Billion) and continues to be a strong source of employment. We appreciate the conducive policies of Government of India that made this possible. Let's take stock of some of the highlights:

- Passenger Vehicle segment led the growth with overall production touching almost 5 million units, including 4.2 million units domestic sales with a growth of 8.4% and 0.7 million units of exports.
- Two-wheeler segment continued the recovery path with a growth of over 13% in domestic sales to almost 18 million units, even though it remains lower than the earlier peak of 21 million units achieved in FY19.
- Commercial Vehicle industry had a marginal growth to 0.97 million units. While Bus segment grew significantly reaching a new peak, the trucks segments were almost static. However, with migration to higher tonnage trucks and tractor-trailers, there has been good increase in payload capacity of the truck industry.
- Three-Wheeler industry was almost close to the earlier peak of 0.7 million units in FY19.
- Exports remained distressed with sizeable drop in Commercial Vehicles, Two-Wheelers and Three-Wheelers, though Passenger Vehicles grew marginally. This was largely due to the geopolitical situation and economic distress in some key export markets.

### **Transformation in the industry: Sustainability and decarbonisation.**

Alongside this growth, the industry is transforming rapidly in response to the global and national priorities of sustainability, decarbonisation and safety. I am proud to note that the Indian Automotive Industry has risen to the occasion by:

- Adopting the globally state-of-art BS VI OBD II emission standards which took effect on April 1, 2023. With this step, India has closed the emission gap with advanced economies.
- Ramping up production and sales of Electric Vehicles (EVs), supported by the FAME program and Production Linked Incentive (PLI) scheme of Government of India. The year witnessed growth of 90% in Electric Passenger Vehicles and 30% in Electric Two-Wheelers, even if this is on a small base.



- Commencing production of vehicles which are compliant to 20% Ethanol, thereby paving the way for flex fuel vehicles in the coming years.
- Work has been started on developing solutions for Hydrogen based fuel based on the Government of India's Green Hydrogen Mission.
- Enhancing safety by incorporating active and passive safety devices, improved testing standards and training.
- Encouraging modernization of vehicle fleet through scrappage of old polluting and unsafe vehicles as envisaged in the Vehicle Scrappage Policy.

SIAM on its part led a number of initiatives to spotlight Sustainable Mobility and De-carbonisation:

- The first is Bio Initiative with a campaign called 'जैविक पहल (**Bio Initiative**)'. Under this narrative, we had organised the 2<sup>nd</sup> edition of the International Symposium on Thriving Eco-Energy in Mobility coinciding with the Bharat Mobility Global Expo 2024 and also hosted a Pavilion at the Expo on the theme 'Cleaner Mobility for LiFE', which brought together organizations from the Biofuel value chain. We also organised a Conference on the occasion of World Biofuel Day in August 2024.
- Under the second initiative on Electrification, i.e. 'विद्युतीकरण (**Electrification**)', SIAM organised the first ever "Green Plate EV Rally" that was successful in showcasing very wide product offering available in Electric Vehicles across various vehicle segments. The 3<sup>rd</sup> edition of the Global Electrification Mobility Summit was organised coinciding with the Bharat Mobility Global Expo 2024. A detailed report on Skills Gap in Electric Vehicles was also published and released at a separate Workshop organised on "Empowering an EV Ready Workforce in India's Auto sector."
- The third initiative is linked to encouraging increased adoption of gas-based fuels through a campaign of 'गैस गतिशीलता (**Gas based mobility**)' in-line with the Government vision of 15% gas share in the energy mix by 2030. SIAM has advocated through Conferences and Context Papers that Gas-based mobility with Compressed Biogas at the helm, is key to the accelerated adoption of Sustainable Mobility.
- 'चक्रीयता (**Circularity**)', on Recycling and Circular Economy is the fourth initiative. SIAM organized the 2<sup>nd</sup> edition of the International Conference on Sustainable Circularity coinciding with the Bharat Mobility Global Expo 2024 and also hosted the first ever Circularity Pavilion at the Expo with the theme "Nature positive pathways for LiFE"
- The fifth initiative 'हरित हाइड्रोजन (**Hydrogen Mobility**)' focuses on India's Green Hydrogen ecosystem which is in its nascent stages. SIAM has taken up the mantle of raising awareness of Hydrogen based mobility as a viable, sustainable transportation option.
- The final and the sixth initiative is associated with Road Safety, through a campaign on 'सुरक्षित सफर (**Safe Journey**)'. SIAM undertook a major initiative by signing a MoU on a comprehensive Road Safety Education Curriculum with Kendriya Vidyalaya Sangathan for imparting learnings of Road Safety to students across the country. SIAM also organised the 2<sup>nd</sup> Surakshit Safar Pavilion at Bharat Mobility Global Expo, which featured a Road Safety run, driving training sessions using simulators, working exhibits, road safety competitions, educational and awareness stage performances.

### Make in India

As part of our contribution to Make in India and Aatmanirbharta (self-reliance), SIAM members are committed to reduce import content by 16% – 20% by 2025 from the base 2019-20 levels, thereby targeting to reduce

imports to the tune of Rs 20,000 – Rs 25,000 crores in 5 years. The first phase of import reduction of 5.8% was achieved in last two years.

As part of its outreach to drive localization, SIAM also showcased certain shortlisted components at a specially demarcated 'SIAM Localisation Zone' at the Bharat Mobility Global Expo 2024.

SIAM members have embarked on the journey of deep localisation of components and are collaborating extensively with component manufacturers, both directly and through the Automotive Component Manufacturers Association of India (ACMA).

### **Bharat Mobility Global Expo 2024**

The First edition of Bharat Mobility Global Expo 2024 was held from 1<sup>st</sup> – 3<sup>rd</sup> February 2024 at Bharat Mandapam, New Delhi under the aegis of the Ministry of Commerce & Industry. SIAM took the lead in organising a Vehicles Pavilion where 28 Vehicle Manufacturers showcased its Make-in-India credentials and world class & cutting edge technologies. These included:

- Next-gen Electric Vehicles (Trucks, Buses, Cars, Two-Wheeler and Three Wheelers)
- Eco friendly, low particulate emission LNG and CNG Vehicles (Trucks, Buses, Cars and Three Wheelers)
- Ethanol Flex Fuel Vehicles (Cars and Two-Wheelers)
- Hydrogen IC Engine & Vehicles
- Fuel Cell powered Trucks, Buses & Cars

The highlight of Bharat Mobility Global Expo 2024 was the visit and subsequent Inaugural Address by the Hon'ble Prime Minister of India, Sh. Narendra Modi on 2<sup>nd</sup> February 2024.

### **Collaboration with Government 2023-24**

SIAM continues to work closely with Government stakeholders on areas of interest for the Auto sector. This included engaging with the Ministry of Finance and Ministry of Heavy Industries to secure Concessional Rate of Customs Duty for Lithium-ion cells up to March 2026. In addition, Government extended exemption for Customs duty on import of capital goods for manufacture of lithium-ion cell till March 2029 and exemption is also granted for import of parts, sub parts, input/raw material used in manufacturing of Lithium-ion Cell till March 2026.

With fact-based representation by SIAM, various Quality Control Orders (QCOs), Testing Protocols and Rules issued by Government have been aligned with the industry. This will facilitate uninterrupted delivery of world-class Automobiles to Indian consumers. We appreciate the supportive approach of the Ministry of Heavy Industries, Ministry of Finance, Ministry of Commerce, Ministry of Environment & Forests, Ministry of Road Transport & Highways, Ministry of Petroleum and Natural Gas, State Governments and various testing agencies in this regard.

### **Automotive Mission Plan III**

I am very proud to note that SIAM is a key stakeholder identified by Ministry of Heavy Industries for preparing the Automotive Mission Plan (AMP) III from 2024-2047. The AMP 2047 will provide a comprehensive roadmap for the Auto industry and associated sectors for significant contributions towards the vision of a developed India

(Viksit Bharat) by 2047. The plan is expected to be drafted in three stages: 5 years (2025-2030), 7 years (2031-2037), and 10 years (2038-2047).

### **International Engagements**

SIAM continues to engage very closely with various Auto Associations in Sri Lanka, Bangladesh, Nepal, Indonesia, Japan, Germany, UK and South Africa. During the year, SIAM launched the South Asian Automotive Forum (SAAF) to strengthen partnership with Bangladesh, Nepal and Sri Lanka and facilitate trade in vehicles.

SIAM continued its active participation with International Motor Vehicle Associations, OICA and IMMA, and worked on Harmonisation of Vehicle Regulations.

SIAM also organised a very successful 38-member delegation to Tokyo, coinciding with the Japan Mobility Show. In addition to meetings with senior officials in the Government of Japan, a seminar on India – Japan Partnership in the Auto Sector was also organised in partnership with the Indian Embassy.

### **Society for Automotive Fitness & Environment (SAFE)**

Each year, too many lives are lost in road accidents in India. Road Safety has been a priority for SIAM and SIAM – SAFE. Various programs were conducted during the year emphasizing the 5Es – Enforcement, Education, Engineering, Emergency Care and Environment.

- The SAFE Annual Convention and Mobility Expo was held on 26<sup>th</sup>-27<sup>th</sup> September 2023 at Guwahati and inaugurated by Transport Minister, Government of Assam.
- Continued partnership with Delhi Traffic Police to educate school & college students on Road Safety.
- Launched "Road Safety Education & Awareness Programme" with Kendriya Vidyalaya Sangathan for school students across the country.

As my tenure as SIAM President is coming to an end, when I look back at the last two years, I have a great sense of satisfaction at the progress made and would like to extend my sincere appreciation and gratitude to the Government of India, State Governments, Union and State Ministers, Policy Makers, Secretaries and Members of Government Ministries, and friends in the Media for the tremendous support received during my tenure.

I would also like to thank members of SIAM Executive Committee, Past Presidents and SIAM Members for their significant contributions and enthusiastic participation in all our meetings. My special thanks to the SIAM Secretariat for their tremendous support without which I could not have performed my duties.

I am confident that the Indian Automotive Industry is well positioned to deliver during India's Amrit Kaal, contributing to a Viksit Bharat (developed India) by 2047.

With warm regards,  
Jai Hind

**Vinod Aggarwal**

President  
SIAM



**MR VINOD AGGARWAL**

President, SIAM and  
Managing Director & CEO,  
Volvo Eicher Commercial  
Vehicles Ltd.



**MR SHAILESH CHANDRA**

Vice President, SIAM and  
Managing Director,  
Tata Motors Passenger  
Vehicles Ltd.  
& Tata Passenger Electric  
Mobility Ltd.



**MR SATYAKAM ARYA**

Treasurer, SIAM and  
CEO & Managing Director,  
Daimler India Commercial  
Vehicles Pvt. Ltd.





Prime Minister of India Shri Narendra Modi  
at Bharat Mobility Global Expo 2024



Meeting of SIAM CEOs Delegation with Hon'ble Minister of Road Transport and Highways



Launch of SIAM Report on EV Talent Landscape in India:  
Bridging the Skill Gap for 2030



SIAM सुरक्षित सफ़र (Safe Journey) Pavilion  
at Bharat Mobility Global Expo 2024





Society of Indian Automobile Manufacturers

***Building the Nation, Responsibly.***

The Society of Indian Automobile Manufacturers (SIAM) is an apex national body representing all major vehicle and vehicular engine manufacturers in India. It is a society with charitable objectives registered under the Societies Registration Act, 1860. Its objectives include enhancing the contribution of automobile industry to the growth and development of Indian economy, assisting the automobile industry to meet its social obligations and encouraging the efficiency of industry in general and automobile industry particularly in India. SIAM focuses on activities related to improvement of environment and ensuring safety and protection of automobile vehicle users and public at large. Recognising these objectives, SIAM has been granted registration under the Income Tax Act, 1961 as an institution with charitable purpose.

To meet these objectives, SIAM works closely with stakeholders in the formulation of the economic, environment and commercial policies, regulations and standards relating to automobiles. It provides economic and statistical information as well as technical and public policy services to the stakeholders on behalf of Indian Automobile Industry. It publishes Monthly Industry Statistics, Monthly Commodity Price Monitor and other periodic reports. SIAM organises seminars and workshops on the subjects of topical relevance and interest to the industry. It also carries out various public policy activities, particularly in the field of Road Safety and Environment.

SIAM works closely with various Government departments, both at Central and State level and with international bodies like International Organisation of Motor Vehicle Manufacturers (OICA), International Motorcycle Manufacturers Association (IMMA) and coordinate with other counterpart international associations.

SIAM, jointly with ACMA and CII, organises the Auto Expo – The Motor Show, an exhibition showcasing the trends in the Automobile Industry.

SIAM aims to promote Sustainable Mobility through focused initiatives and campaigns on जैविक पहल (Bio Initiative), हरित हाइड्रोजन (Hydrogen Mobility), गैस गतिशीलता (Gas based mobility), विद्युतीकरण (Electrification), चक्रीयता (Circularity) and सुरक्षित सफर (Safe Journey) in alignment with Sustainable Development Goals, 2030 and Net Zero by 2070.

# PERFORMANCE OF INDIAN AUTO INDUSTRY IN 2023-24

## Production

The industry produced a total of 2.84 Crore vehicles including Passenger Vehicles, Commercial Vehicles, Three Wheelers, Two Wheelers, and Quadricycles in FY 2023-24, as against 2.59 Crore vehicles in FY 2022-23.

## Domestic Sales

Total Passenger Vehicle Sales increased from 38.90 Lakh in FY 2022-23 to 42.19 Lakh units in FY 2023-24. Utility Vehicles from 20.04 Lakh to 25.21 Lakh units and Vans from 1.39 Lakh to 1.49 Lakh units. While Sales of Passenger Cars decreased from 17.47 Lakh to 15.49 Lakh units in FY 2023-24 as compared to the previous year.

The overall Commercial Vehicles sales increased from 9.62 Lakh to 9.68 Lakh units. Sales of Medium and Heavy Commercial Vehicles increased from 3.59 Lakh to 3.73 Lakh units while sales of Light Commercial Vehicles decreased from 6.03 Lakh to 5.95 Lakh units in FY 2023-24 as compared to the previous year.

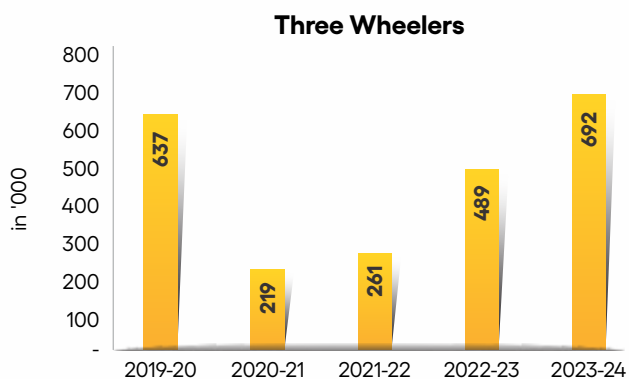
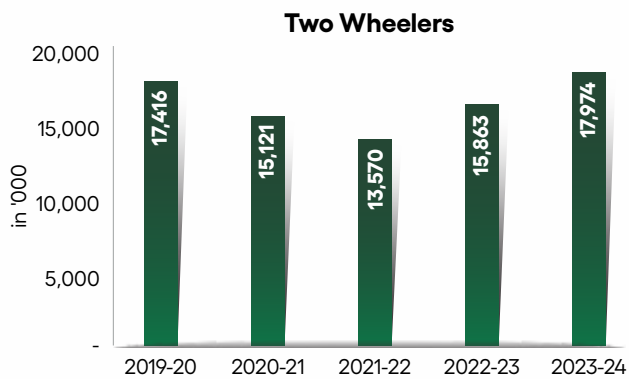
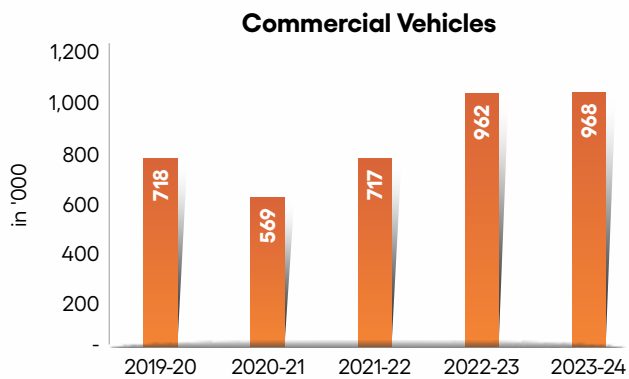
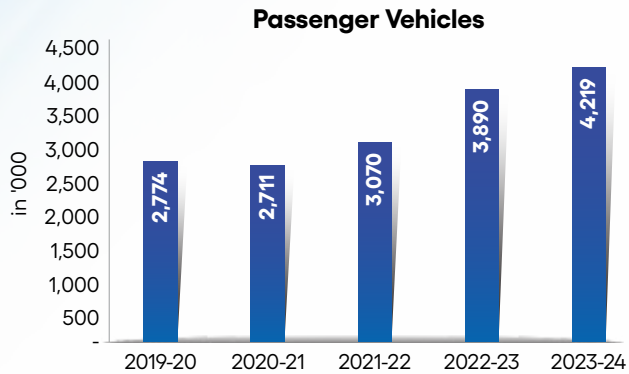
Sales of Three Wheelers increased from 4.89 Lakh to 6.92 Lakh units in FY 2023-24 as compared to the previous year.

Two Wheelers sales increased from 1.59 Crore to 1.80 Crore units in FY 2023-24 as compared to the previous year.

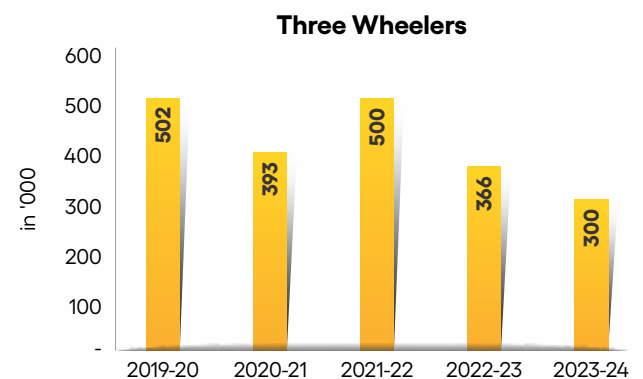
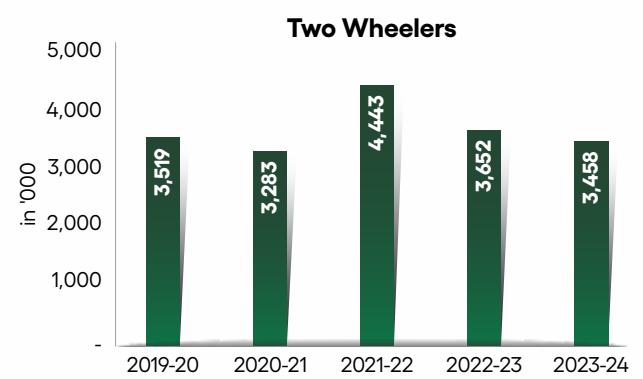
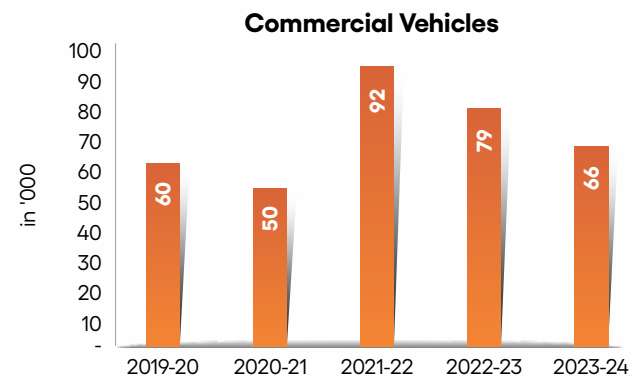
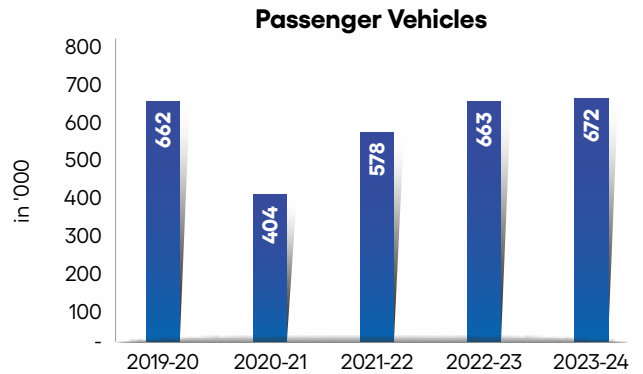
## Exports

In FY 2023-24, Passenger Vehicle Exports increased from 6.63 Lakh to 6.72 Lakh units, while Commercial Vehicle Exports decreased from 0.79 Lakh to 0.66 Lakh units. Three-Wheeler Exports decreased from 3.66 Lakh to 3.00 Lakh units. Two Wheelers Exports also decreased from 36.52 Lakh to 34.58 Lakh units over the same period last year.

## DOMESTIC SALES TRENDS



## EXPORTS TRENDS



## Automobile Production Trends

(Number of Vehicles)

Category	2019-20	2020-21	2021-22	2022-23	2023-24
Passenger Cars	21,56,868	17,72,972	18,44,985	21,84,844	19,79,911
Utility Vehicles	11,36,209	11,82,144	16,91,081	22,61,749	27,77,051
Vans	1,31,487	1,07,164	1,14,632	1,40,523	1,44,882
<b>Total Passenger Vehicles</b>	<b>34,24,564</b>	<b>30,62,280</b>	<b>36,50,698</b>	<b>45,87,116</b>	<b>49,01,844</b>
M&HCVs	2,32,414	1,81,242	2,72,167	3,79,259	3,92,474
LCVs	5,24,311	4,43,697	5,33,360	6,56,367	6,73,955
<b>Total Commercial Vehicles</b>	<b>7,56,725</b>	<b>6,24,939</b>	<b>8,05,527</b>	<b>10,35,626</b>	<b>10,66,429</b>
<b>Three Wheelers</b>	<b>11,32,982</b>	<b>6,14,613</b>	<b>7,58,669</b>	<b>8,55,696</b>	<b>9,92,936</b>
Scooters	60,27,198	45,59,222	44,57,790	56,01,501	63,91,272
Motorcycles	1,43,56,051	1,31,54,501	1,28,90,149	1,34,21,208	1,45,89,393
Mopeds	6,49,678	6,36,218	4,73,172	4,36,300	4,87,862
<b>Total Two Wheelers</b>	<b>2,10,32,927</b>	<b>1,83,49,941</b>	<b>1,78,21,111</b>	<b>1,94,59,009</b>	<b>2,14,68,527</b>
Quadricycle	6,095	3,836	4,061	2,897	5,006
<b>Grand Total</b>	<b>2,63,53,293</b>	<b>2,26,55,609</b>	<b>2,30,40,066</b>	<b>2,59,40,344</b>	<b>2,84,34,742</b>

## Automobile Domestic Sales Trends

(Number of Vehicles)

Category	2019-20	2020-21	2021-22	2022-23	2023-24
Passenger Cars	16,95,436	15,41,866	14,67,039	17,47,376	15,48,943
Utility Vehicles	9,45,959	10,60,750	14,89,219	20,03,718	25,20,691
Vans	1,32,124	1,08,841	1,13,265	1,39,020	1,49,112
<b>Total Passenger Vehicles</b>	<b>27,73,519</b>	<b>27,11,457</b>	<b>30,69,523</b>	<b>38,90,114</b>	<b>42,18,746</b>
M&HCVs	2,24,428	1,60,688	2,40,577	3,59,003	3,73,194
LCVs	4,93,165	4,07,871	4,75,989	6,03,465	5,94,684
<b>Total Commercial Vehicles</b>	<b>7,17,593</b>	<b>5,68,559</b>	<b>7,16,566</b>	<b>9,62,468</b>	<b>9,67,878</b>
<b>Three Wheelers</b>	<b>6,37,065</b>	<b>2,19,446</b>	<b>2,61,385</b>	<b>4,88,768</b>	<b>6,91,749</b>
Scooters	55,65,958	44,82,305	41,12,672	51,90,702	58,39,325
Motorcycles	1,12,13,662	1,00,21,231	89,84,186	1,02,30,502	1,16,53,237
Mopeds	6,36,812	6,17,247	4,73,150	4,41,567	4,81,803
<b>Total Two Wheelers</b>	<b>1,74,16,432</b>	<b>1,51,20,783</b>	<b>1,35,70,008</b>	<b>1,58,62,771</b>	<b>1,79,74,365</b>
Quadricycle	942	(12)	124	725	725
<b>Grand Total</b>	<b>2,15,45,551</b>	<b>1,86,20,233</b>	<b>1,76,17,606</b>	<b>2,12,04,846</b>	<b>2,38,53,463</b>

## Automobile Exports Trends

(Number of Vehicles)

Category	2019-20	2020-21	2021-22	2022-23	2023-24
Passenger Cars	4,75,801	2,64,907	3,74,986	4,13,786	4,29,677
Utility Vehicles	1,83,468	1,37,842	2,01,036	2,47,306	2,34,720
Vans	2,849	1,648	1,853	1,611	7,708
<b>Total Passenger Vehicles</b>	<b>6,62,118</b>	<b>4,04,397</b>	<b>5,77,875</b>	<b>6,62,703</b>	<b>6,72,105</b>
M&HCVs	22,333	17,548	32,181	22,067	18,225
LCVs	38,046	32,786	60,116	56,578	47,591
<b>Total Commercial Vehicles</b>	<b>60,379</b>	<b>50,334</b>	<b>92,297</b>	<b>78,645</b>	<b>65,816</b>
<b>Three Wheelers</b>	<b>5,01,651</b>	<b>3,93,001</b>	<b>4,99,730</b>	<b>3,65,549</b>	<b>2,99,977</b>
Scooters	3,69,998	2,32,020	3,50,443	4,16,935	5,12,347
Motorcycles	31,35,548	30,42,453	40,82,442	32,30,981	29,43,341
Mopeds	13,859	8,313	10,246	4,206	2,728
<b>Total Two Wheelers</b>	<b>35,19,405</b>	<b>32,82,786</b>	<b>44,43,131</b>	<b>36,52,122</b>	<b>34,58,416</b>
Quadricycle	5,185	3,529	4,326	2,280	4,178
<b>Grand Total</b>	<b>47,48,738</b>	<b>41,34,047</b>	<b>56,17,359</b>	<b>47,61,299</b>	<b>45,00,492</b>

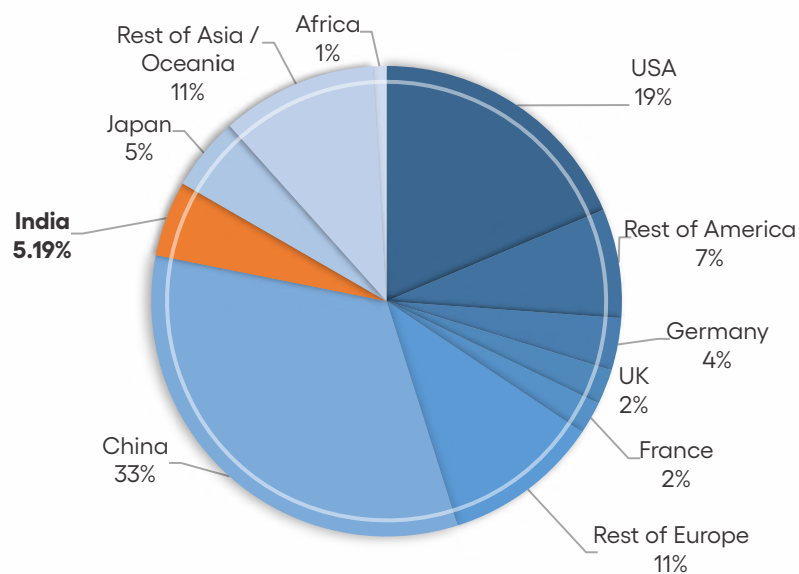
# GLOBAL AUTO INDUSTRY PERFORMANCE IN 2023

The Auto Industry is one of the most critical drivers of world economic growth, supporting a vast supply chain and generating massive employment.

**Sales Performance of Global Passenger Vehicles:** Overall Passenger Vehicles sales globally in 2023 is estimated to be about 78.9 Million units. Passenger Vehicles sales in China was about 26.06 Million units with a global share of about 33%, followed by USA with 14.72 Million units with a global share of about 19% in 2023.

In terms of share in Global Passenger Vehicles sales, 54% of sales are from the Asian / Oceania Countries, followed by Americas and Europe. In 2023, India was the 3<sup>rd</sup> largest Passenger Vehicles market with sales of 4.1 Million units with a global share of 5.19% behind China and USA, but ahead of Japan & Germany.

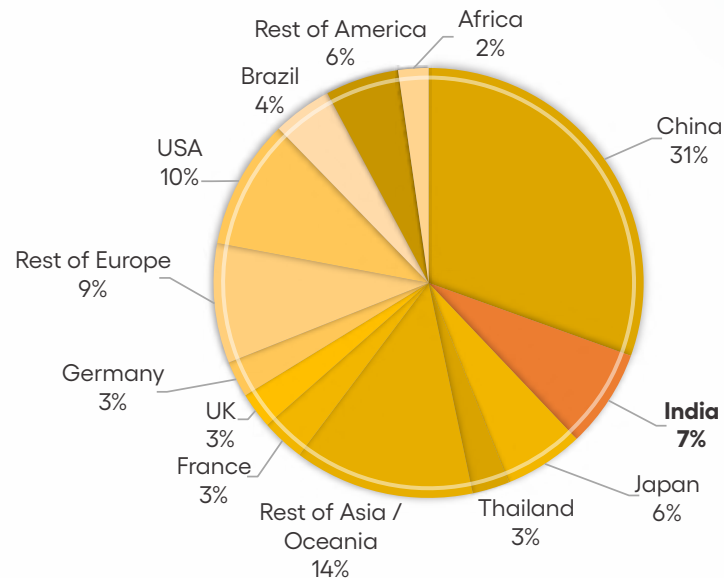
**Passenger Vehicles Sales- Region wise**



**Sales Performance of Global Commercial Vehicles:** Overall Commercial Vehicles sales globally in 2023 is estimated to be about 13.2 Million units. Commercial Vehicles sales in China was about 4.03 Million units with a global share of about 31%, followed by USA with 1.29 Million Units, with Global Share of 10%. India with 0.98 Million units has a global share of about 7% in 2023.



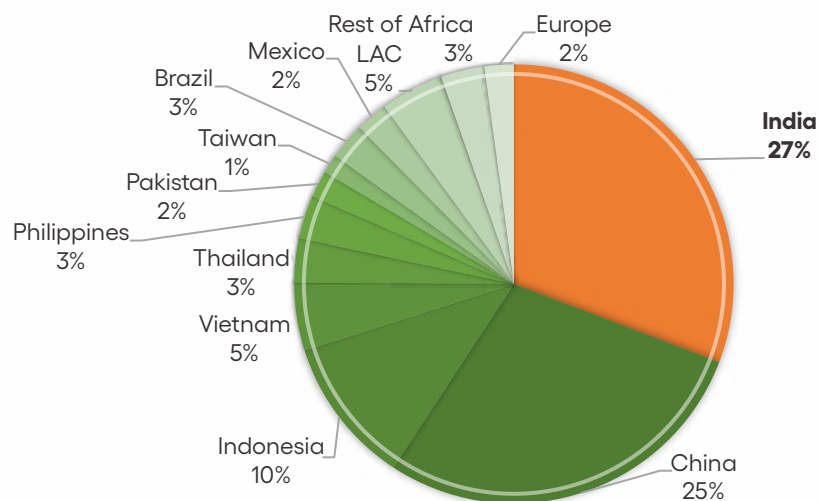
### Commercial Vehicles Sales- Region Wise



**Two Wheelers:** Since Two Wheelers are convenient and affordable mode of transport, this segment is majorly used by the masses in developing economies for personal mobility. Overall, Two Wheelers sales globally in 2023 are estimated to be about 65.8 Million units.

India is the largest Two Wheelers market in the world with sales of about 17.97 Million units and a global share of about 27%, followed by China with 16.6 Million units with a global share of about 25% in 2023. The other large market for Two Wheelers is Indonesia with a global share of 10%.

### Two Wheelers Sales- Region Wise



# BUILDING THE NATION, RESPONSIBLY

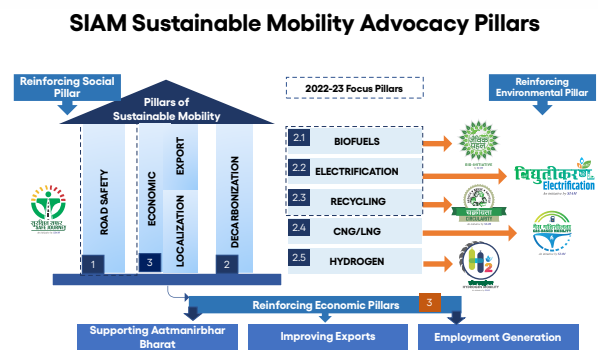
The Indian Automotive industry is the backbone of the country's economy, offering affordable mobility solutions, generating employment, and elevating India's global stature as one of the largest R&D and manufacturing hubs in the world.

1. **Economic Contribution:** In FY 2023-24, the industry generated an annual turnover of around Rs 20 Lakh Crore, contributing to about 6.8% in India's National GDP and about 40% in India's manufacturing GDP.
2. **Global Standing:** India is a significant player in Automotive manufacturing in the world and ranks among the top manufacturers in several categories:

- 4<sup>th</sup> Largest Passenger Vehicle Manufacturer
- 2<sup>nd</sup> Largest Two Wheelers Manufacturer
- 5<sup>th</sup> Largest Commercial Vehicle Manufacturer
- Largest Three Wheelers Manufacturer

3. **Milestones and Achievements:**

- **Democratising Mobility:** Enhancing both public and private transport options, the industry has made mobility more accessible across the country.
- **Brand India:** Concerted efforts to foster a strong global identity for Indian Automotive products.
- **Energy Security:** Contributing to the nation's energy security through advancements in alternative fuel technologies.
- **Adopting Global Standards:** Embracing international standards in emissions, safety, and manufacturing processes.
- **Sustainable Practices:** Promoting sustainable development through eco-friendly manufacturing practices and community initiatives.
- **Skill Development:** Continuously upgrading skills within the workforce to meet evolving industry demands.
- **Consumer Awareness:** Increasing consumer consciousness about safety, environmental impact, and quality standards.
- **Environmental Conservation:** Encouraging green practices and sustainable development across operations.
- **Engineering Prowess:** Showcasing India's Automotive engineering capabilities on a global stage.



Moreover, the Indian Auto Industry moves a billion people daily, for livelihood and recreation alike, and every single movement from one point to another ends up adding to the economic activity and income generation in the economy. Over the years, the industry's journey exemplifies resilience, innovation, and commitment to national development. It remains integral to India's economic fabric, ensuring inclusive growth and sustainable progress while fulfilling the mobility needs of millions.

United in this mission, the Indian Automobile Industry has played a pivotal role in **Building the Nation, Responsibly.**

## SIAM ANNUAL ACTIVITIES & MILESTONES

### August 2023

- SIAM Exports Group Delegation to Indonesia
- Taxation Group Meeting in Srinagar
- Vehicle Classification, Sales Reporting & Analysis Group Meeting
- Monthly Industry Data Release
- Monthly Economic Monitor
- KVS SIAM MoU signing
- BNCAP Launch
- EPR Workshop
- India-US Commercial Services conference on Safe, Secure, Sustainable Indian EV Standards

### September 2023

- SIAM Logistics Group Meeting with Railway Board Officials
- Monthly Industry Data Release
- Monthly Economic Monitor
- Gas based mobility Meeting of Members
- SIAM CV CEOs Council Meeting
- SIAM Two Wheeler CEOs Council Meeting
- First meeting of SIAM EC for 2023-24
- SIAM Annual Convention
- SAFE Mobility Exposition at Assam
- SAFE Workshop on Sustainable Mobility Imperatives around Road Safety & Environment at Assam
- SAFE Annual Convention in Assam

### October 2023

- SIAM Logistics Group Meeting with AFTO Licensees for finalising the free time for BCACBM Wagons
- Quarterly Press Conference on Industry Data
- Monthly Economic Monitor
- SIAM-JAMA Meetings in Japan
- SIAM Green Plate EV Rally
- College Students Plant visit at HMSI
- GRSG Meeting
- Global Ethanol Summit
- [Exemption to Spare parts from declaring month and year of manufacture under Legal Metrology Rules \(Packaged Commodities\)](#)

### November 2023

- SIAM Sourcing Conclave
- Finance, Leasing & Insurance Group meeting
- Monthly Industry Data Release
- Monthly Economic Monitor
- SIAM Two Wheeler CEOs Council Meeting
- Interaction with Original Equipment Manufacturer (OEM) to discuss setting up of Automated Testing Stations in the State
- 3<sup>rd</sup> EPR on ELV meeting

- Sukh Da Saah Initiative multimedia campaign
- JASIC Meeting at Vietnam

### December 2023

- Human Capital Group meeting
- Skill Group prepared a Handbook for Service Technicians & Advisors
- Monthly Industry Data Release
- Monthly Economic Monitor
- SIAM Economic Group Meeting
- SIAM 3W CEOs Council Meeting
- Two Wheeler meeting
- 6<sup>th</sup> Meeting of WTW Emission Assessment
- Safe Mobility Program with School Students
- COP 28 meeting, Dubai
- ASEAN Conference, Bangkok
- Ethanol Talk, Indonesia
- 71<sup>st</sup> AISC Meeting

### January 2024

- SIAM Looking Ahead Conclave
- Skill Pilot Project started at ITIs adopted by Members
- Quarterly Press Conference on Industry Data
- Monthly Economic Monitor
- SIAM PV CEOs Council Meeting
- Meeting on GSR 27
- National Road Safety Month
- SIAT 2024
- MRAI Conference

### February 2024

- Establishment of South Asian Automobile Forum with Bangladesh, Nepal, Sri Lanka and India.
- SIAM Exports Group meeting in New Delhi
- Monthly Industry Data Release
- Monthly Economic Monitor
- EPR on ELV Draft Discussion
- 2<sup>nd</sup> ICSC Conference
- 4<sup>th</sup> SIAM EC Meeting
- 3<sup>rd</sup> GEMS Conference
- 2<sup>nd</sup> ISTEM Conference
- Road Safety Rolling Trophy to Best School in Delhi
- Road Safety Run
- Surakshit Safar Pavillion
- Circularity Pavillion @ Bharat Mobility Global Expo 2024
- Decarbonization Pavillion @ Bharat Mobility Global Expo 2024
- SIAM Auto Aatmanirbhar Zone @ Bharat Mobility Expo 2024
- Delhi Police Road Safety Week



## March 2024

- Monthly Industry Data Release
- Monthly Economic Monitor
- SIAM Economic Group Meeting
- Stakeholder Consultation on Electric Mobility Promotion Scheme (EMPS)
- Stakeholders Interaction on ongoing study on Pathways for Transmission of Hydrogen in Natural Gas Pipelines and City Gas Distribution networks (IHC)
- Two Wheeler CEOs Council
- SIAM Styling & Design Conclave
- Meeting with ITRI, Taiwan
- Meeting with FAMI, Taiwan
- [Launch of Electric Mobility Promotion Scheme \(EMPS\)-2024](#)
- [Launch of Scheme to Promote Manufacturing of Electric Passenger Cars in India](#)

## April 2024

- SIAM Taxation Group Meeting in New Delhi
- Quarterly Press Conference on Industry Data
- Monthly Economic Monitor
- Inter-Ministerial Meeting with DGFT and DPIIT on Pneumatic Tyres
- Joint Meeting of SIAM Economic Research Group and SIAM Emissions & Conservation Group for CAFE Norms
- Electric Mobility Group Meeting in Srinagar, Jammu and Kashmir
- ATMA-SIAM Secretariat Meeting
- 3<sup>rd</sup> Technical committee meeting of BEE
- CMVR TSC meeting
- SIAM 66<sup>th</sup> SCOE Meeting
- Meeting with KV Commissioner
- EPR Regime: An Innovative Policy Tool for Fostering a Sustainable Circular Economy in the Automotive Industry, Mumbai.
- NATRAX Conference in Indore

## May 2024

- SIAM Sourcing group meeting in Chennai
- Monthly Industry Data Release
- Monthly Economic Monitor
- SIAM Concerns on 9<sup>th</sup> amendment in Plastic Waste Management Rules
- Stakeholder Consultations on MHI Electric Vehicles Roadmap
- IMMA Spring Congress
- GRVA Meeting, Detroit USA
- [Extension of implementation of QCOs on Nickel, Copper and Aluminum](#)

## June 2024

- MoF Consultations on Pre-Budget Recommendations
- Monthly Industry Data Release
- Monthly Economic Monitor
- SIAM CMVR and Safety Regulations Group Meeting
- SIAM ENC Group Meeting
- SIAM International Harmonization Group meeting
- SIAM Aftermarket Group meeting
- SIAM Connected Vehicles Group Meeting
- SIAM सुरक्षित सफर (Safe Journey) : Experts Meeting for developing Road Safety Modules under SIAM KVS Collaboration
- Workshop on Status of Persistent Organic Pollutants Management and their Sustainable Alternatives in the Indian Automotive Sector
- Activities by Members on the occasion of World Environment Day
- SIAM organises International Conference on Integrating Mission LiFE in Automobile Industry: Transitioning Towards Viksit Bharat on the occasion of World Environment Day
- OICA Technical Committee Meeting, London
- International workshop on GNSS based tolling in India
- [Inclusion of additional tyre sizes in the QCO Exemption List](#)

## July 2024

- SIAM Sourcing Group Meeting in Indore
- Evaluation of ITI Students participated in Skill Development Pilot
- Quarterly Press Conference on Industry Data
- Monthly Economic Monitor
- SIAM EC Meeting
- Developing Net Zero Pathways for the Transport sector and proposing strategies and interventions-Engagement with Niti Aayog
- EV Skill Gap Study Workshop
- Two Wheeler Group Meeting
- [Extension of Electric Mobility Promotion Scheme \(EMPS\)-2024](#)
- [Conditional exemption and re-scheduling implementation of Bolts, Nuts, and Fasteners \(Quality Control\) Order 2023](#)

## August 2024

- 10<sup>th</sup> SIAM Automotive Logistics Conclave
- Delegation to Nepal during Nepal Auto Show 2024
- 3<sup>rd</sup> International Conference on World Biofuel Day
- 72<sup>nd</sup> AISC Meeting
- 3<sup>rd</sup> International Conference on World Biofuel Day
- SIAM CMVR and Safety Regulations Group Meeting
- CIRT and BNCAP Facility Visit

# SIAM 63<sup>rd</sup> ANNUAL CONVENTION 2023

Society of Indian Automobile Manufacturers (SIAM), an apex national body representing all major vehicle and vehicular engine manufacturers in India, commemorated its 63<sup>rd</sup> Annual Convention on 12<sup>th</sup> September 2023 at New Delhi, deliberating on the way ahead for Sustainable Mobility.

On 63<sup>rd</sup> SIAM Annual Convention, Hon'ble Prime Minister of India, Shri Narendra Modi in his message

mentioned that for over six decades SIAM has been serving the Nation admirably. He said that India is the 5<sup>th</sup> largest economy and is soon poised to reach the top 3. By 2047, the vision is to build a sustainable, self-reliant, strong and developed India. Hon'ble Prime Minister also noted Indian Auto Industry's efforts towards decarbonization through introduction of vehicles with wide range of power train technologies.



प्रधान मंत्री  
Prime Minister

#### MESSAGE

It is heartening to learn about the 63<sup>rd</sup> annual convention of Society of Indian Automobile Manufacturers (SIAM). Greetings and best wishes on the occasion to all the stakeholders in the Indian automobile sector.

For over six decades, SIAM has been serving the nation admirably, especially in the automobile sector. This annual convention is an important gathering because it brings together global experts and leaders from the industry, as well as policy makers on a common platform.

This convention is a forum which understands the importance of mobility. In today's India, mobility in its various forms is a key driver of growth. As crores of people move out of poverty into the neo-middle class there is social and economic mobility. As they push the nation's growth through their aspirations, they power our economy to be the fastest growing in the world. Due to this, from being the 10<sup>th</sup> largest economy, India has become the 5<sup>th</sup> largest economy. Soon, we are poised to reach the top 3.

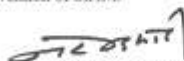
The automobile industry is both a catalyst and a beneficiary in this value creation cycle. Employing crores of people, the industry has contributed to income growth. At the same time, the automobile sector too has been a beneficiary of greater demand generated by economic growth.

The need of the hour today is to develop a mobility ecosystem that is sustainable and in harmony with the environment. Environmentally-conscious and economically viable mobility is the future.

The Indian auto industry's efforts towards decarbonisation through the introduction of vehicles with a wide range of powertrain technologies is noteworthy. Today, we have vehicles running on multiple alternative technologies like Ethanol, Flex-fuel, CNG, Bio-CNG, Hybrid Electric, Electric and Hydrogen. There is a need to continue and enhance such concerted efforts for reducing both carbon emissions and our country's dependence on oil imports.

The period till the year 2047, when we celebrate 100 years of independence, is an opportune time to realise the vision of building a strong, sustainable, self-reliant and developed India. I am confident that the discussions amongst industry experts and key stakeholders at this convention will help draw a pathway for the automobile industry towards achieving the goals of Amrit Kaal.

My best wishes for the success of the 63<sup>rd</sup> annual convention of SIAM.

  
(Narendra Modi)

New Delhi  
भाद्रपद 14, शक संवत् 1945  
05<sup>th</sup> September, 2023



During the inaugural session, themed “Sustainable Mobility – The Way Ahead for Indian Automobile Industry”, Chief Guest, Shri Nitin Gadkari, Hon'ble Union Minister of Road Transport & Highways, Government of India commented, "In 2014, the global automobile sector was ranked 7<sup>th</sup>, but today, it has climbed to the 3<sup>rd</sup> position. The automotive sector serves as a growth engine for our nation, aligning perfectly with the Hon'ble Prime Minister's vision to elevate India from its current 5<sup>th</sup> largest economy in the world to 3<sup>rd</sup>. Our ultimate goal is to become the world's leading automobile hub."

Guest of honour, Dr Mahendra Nath Pandey, (the then) Hon'ble Union Minister of Heavy Industries, Government of India said, "India's commitment to achieving net-zero carbon emissions by 2070 and reducing 1 billion tonnes of carbon emissions by 2030 aligns with the ambitious Amrit Kaal: Vision @ 2047." He also announced that the Government of India has extended the PLI scheme by another year to enable the Auto industry reap benefits of the incentives being provided for manufacturing Advanced Automotive Technologies.

Mr. Vinod Aggarwal, President of SIAM and Managing Director & CEO of Volvo Eicher Commercial Vehicles Ltd., noted the significant growth in the Automotive industry over the past two years. He emphasized the six pillars of sustainability on which the Auto industry and SIAM are presently focussing in close association with Government of India. He also mentioned the progress the industry has made in increasing its localization content, reflecting the sector's commitment to sustainability and innovation.

Mr. Shailesh Chandra, Vice President of SIAM and Managing Director of Tata Motors Passenger Vehicles Ltd. and Tata Passenger Electric Mobility Ltd., talked about Amrit Kal vision 2027 and the imperative to achieve net-zero emissions. He emphasized the ongoing transition towards electric vehicles (EVs) in India, which is helping the industry align with global standards. He also highlighted SIAM's strong commitment to India's environmental objectives and road safety. Mr. R. Dinesh, (the then) President of CII and Executive Vice Chairman of TVS Supply Chain Solutions Ltd., was also present at the session.

The 1<sup>st</sup> Plenary session themed “Balancing Growth Aspirations with Sustainability”, was moderated by Mr. Shailesh Chandra, Vice President of SIAM and Managing Director of Tata Motors Passenger Vehicles Ltd. and Tata Passenger Electric Mobility Ltd.

During the session, Mr. Kamran Rizvi, Secretary, Ministry of Heavy Industries, Government of India said, “Given the ever-increasing incentives being provided by Government of India for EVs, compared to phasing down of incentives in China, UK & Europe, Indian companies should now become global leaders in electric.” He requested the Auto Industry to launch campaigns on lowering the Total Cost of Ownership of EVs, which will automatically propel higher offtake of EVs.

Presenting his views during the session, Mr. Anurag Jain, Secretary, Ministry of Road Transport & Highways, said, “The Automotive industry should prioritize quality, sustainability, safety and research on high-end technologies as integral components of their business operations.” He also opined that there is a need to have requisite infrastructure for vehicle testing and scrapping facilities across the country to foster a sustained scrapping and recycling ecosystem.

Mr. Rajesh Jejurikar, Executive Director (Auto & Farm Sectors), Mahindra & Mahindra Ltd, Mr. K N Radhakrishnan, Director & CEO, TVS Motor Company Ltd., and Mr. Baba Kalyani, Chairman & Managing Director, Bharat Forge Ltd were also present during the session.

During the 2<sup>nd</sup> Plenary session themed "Sustainable Mobility – Global Benchmarks", Mr. Vinod Aggarwal, President of SIAM and Managing Director & CEO of Volvo Eicher Commercial Vehicles Ltd, Mr. Guenther F. Apfalter, President of Magna Europe & Asia, Prof. Suani Coelho, Professor, Institute of Energy and Environment and Coordinator of the Research Group of Bioenergy, University of São Paulo, Mr. Ashim Sharma, Senior Partner & Group Head of Business Performance Improvement Consulting (Auto, Engg. & Logistics) at Nomura Research Institute and Mr. Andreas Tschiesner, Senior Partner at McKinsey & Company also presented their views

in the session and talked about the global Automotive landscape. The esteemed speakers mentioned that learnings from global players can enhance sustainability and efficiency worldwide.

During the Valedictory session themed "Aatmanirbhar" – The Roadmap to Increased Localization and Harnessing Export Potential of the Indian Auto Industry", Chief Guest, Mr. Piyush Goyal, Hon'ble Union Minister of Commerce and Industry, and (the then) Hon'ble Union Minister of Consumer Affairs, Food and Public Distribution, and Textiles, Government of India, stated, "Democracy, demographic dividend, and diversity are the three D's propelling the Automobile industry onto the fast lane. India has achieved 'Aatmanirbharta' in many ways and has joined the ranks of nations where basic life aspirations such as digital connectivity, road infrastructure, healthcare, and water supply are being fulfilled, which is a testament to the 'new India' that our people collectively strive for. Today, the middle class seeks value and pride in their Automobile choices, driving significant market demand indigenously. We must encourage significant investment in electronic components and products made in India, boost R&D within our nation, and nurture domestic industries. We must

also reduce our dependence on imports and should rather trust our localised capabilities within our own ecosystem."

Addressing the session, Dr. Pawan Goenka, Chairman, Steering Committee on Advancing Local value-add & Exports (SCALE), Ministry of Commerce & Industry, said, "Indian Automotive industry has long embodied self-reliance, and has been working for very long towards being Aatmanirbhar. Currently, we are the world's third-largest Automobile market and India has clear advantages in terms of its demographics, geopolitical positioning, and now, with our success at the G20. With being one of the largest markets, it is pertinent that efforts be placed to increase Automotive exports and for that we need a dedicated task force that should work towards this goal. While we have come a long way in the domain of localization, true progress for the sector will be driven by the export market."

Mr. Vinod Aggarwal, President, SIAM and Managing Director & CEO, Volvo Eicher Commercial Vehicles Ltd., and Mr. Sunjay Kapur, (the then) President, ACMA and Chairman, Sona Comstar, were also present during the session.



Mr Nitin J Gadkari,  
Hon'ble Union Minister of  
Road Transport & Highways,  
Government of India  
at Annual Convention



Mr. Piyush Goyal, Hon'ble Union Minister of  
Commerce and Industry, and (the then)  
Hon'ble Union Minister of Consumer Affairs  
Food and Public Distribution, and  
Textiles, Government of India  
at Annual Convention



Dr Mahendra Nath Pandey  
(the then) Hon'ble Union Minister of  
Heavy Industries,  
Government of India  
at Annual Convention

# BHARAT MOBILITY GLOBAL EXPO 2024

## Trade Fairs Group

SIAM Trade Fairs Group aims to organise Exhibitions in India and overseas which provides a platform for SIAM members to showcase their latest technologies/products/services and enable members to engage and interact with current / future generation B2B & B2C customers generating fresh ideas, exploring collaborations, partnerships ventures and other business opportunities.

The Group serves as the organizing committee for India's largest biennial event, the 'Auto Expo – The Motor Show,' which is jointly organized with the Automotive Component Manufacturers Association of India (ACMA) and the Confederation of Indian Industry (CII).

The first edition of the Bharat Mobility Global Expo, supported by the Ministry of Commerce, was successfully organized from February 1-3, 2024, at Bharat Mandapam, Pragati Maidan, New Delhi. SIAM was one of the partner organizations for the event.

Several Trade Fair Group meetings were held online last year under the chairmanship of Mr. B. Srinivas, Executive Vice President, Strategy & Purchasing, VE Commercial Vehicles, to discuss and plan the organization of Bharat Mobility Global Expo 2024.

## Bharat Mobility Global Expo 2024

The first edition of the Bharat Mobility Global Expo held from 1 to 3 February 2024, at Bharat Mandapam, Pragati Maidan, New Delhi was a groundbreaking event that showcased India's potential as a global hub for mobility innovation. Inspired by India's Hon'ble Prime Minister, Shri Narendra Modi, the expo showcased cutting-edge technologies, sustainable solutions, and breakthroughs in mobility.

The event was inaugurated by Mr. Narendra Modi, Hon'ble Prime Minister of India. The inaugural ceremony was also graced by the presence of Dr. Mahendra Nath Pandey, (the then) Hon'ble Union Minister for Heavy Industries; Shri Narayan Rane, (the

then) Hon'ble Union Minister for Micro, Small and Medium Enterprises; Shri Nitin Gadkari, Hon'ble Union Minister for Road Transport and Highways; Shri Piyush Goyal, Hon'ble Union Minister for Commerce and Industry; and Shri Hardeep Singh Puri, Hon'ble Union Minister for Petroleum & Natural Gas.

Over 28 vehicle manufacturers participated in the Bharat Mobility Global Expo 2024, showcasing the latest vehicle models and state-of-the-art technologies. Auto OEMs also exhibited various powertrain technologies including Electric, Hybrid, Ethanol, Flex fuel and CNG / LNG, demonstrating their commitment towards Cleaner and Sustainable Mobility.

Several senior Government officials also attended the event including Mr Kamran Rizvi, Secretary, Ministry of Heavy Industries; Dr Hanif Qureshi, Additional Secretary, Ministry of Heavy Industries; Mr Sunil Barthwal, Union Commerce Secretary, Government of India, Mr Amardeep Singh Bhatia, (the then) Additional Secretary, Department of Commerce, Government of India and Mr Santosh K Sarangi, DGFT.

## SIAM Conferences at Bharat Mobility Global Expo 2024

SIAM organised the 3rd Global Electrification Mobility Summit (GEMS), 2nd edition of the International Symposium for Thriving Eco-Energy in Mobility (ISTEM) and 2nd edition of the International Conference on Sustainable Circularity (ICSC) during Bharat Mobility Global Expo 2024.

## SIAM Pavilions at Bharat Mobility Global Expo 2024

SIAM organised several Pavilions at the Bharat Mobility Global Expo 2024.

- Surakshit Safar (Safe Journey) Pavilion
- Auto Aatmanirbhar Zone
- Circularity Pavilion
- Decarbonisation Pavilion















# ON THE ROAD TO VIKSIT BHARAT @ 2047

The government of India's vision under the leadership of the Prime Minister has outlined the vision for a Viksit Bharat by 2047 which will serve as an ambitious and comprehensive blueprint for India's future. It aims to transform India into a global powerhouse by focusing on sustainable development, technological innovation, inclusive growth, and robust governance. This vision seeks to harness the potential of every sector and citizen, driving the nation towards unprecedented progress and prosperity by the time it celebrates 100 years of independence, and outlines a roadmap for various sectors, aiming to position India as a global leader in multiple domains.

The Government outlines the Key Components of the Vision @2047 with a focus on Economic Growth & Development, Infrastructure & Urbanization, Sustainability & Green Economy, Digital Transformation, Governance & Policy Reforms, Global Leadership and Diplomacy & Innovation, and Technology, just to name a few, a vision which SIAM holds in true spirits and sense.

The government of India by implementing various supportive sector-specific and region-specific policies like PLI, Gati Shakti, Skill India, National Electric Mobility Mission, FAME -I, II, III to name a few are encouraging innovation, industrial indigenous productivity, skill development as a driver of sustainable mobility.

In the context of the automobile industry, the Viksit Bharat @ 2047 vision is an amalgamation of two distinct visions. The first focuses on sustainable mobility, which includes promoting electric vehicles, reducing carbon emissions, and encouraging alternative fuels. The second aims to make India a global leader in sustainable automotive manufacturing under the Atmanirbhar Bharat initiative. The successful implementation of these strategies will contribute significantly to India's energy transition goals and help build a cleaner, more sustainable future.

## Viksit Bharat and Sustainable Mobility

### Sustainable Mobility in the Indian context

Sustainable mobility is about balancing the current and future transport needs of people including coming generations by providing affordable, efficient, environmentally friendly, safe, comfortable, and connected transport to all. The use of low-emission, energy efficient vehicles, adoption of stringent emission norms as well as espousing various traffic decongestion practices like carpooling, shared vehicles, etc. are the key strategies to achieve Sustainable mobility.

Besides adopting new and advanced vehicular technologies, there is also a need to focus on the entire eco system which includes road infrastructure, driver behavior as well as the availability of high-quality fuels. Mobility of any country is driven by economic growth and societal demands, at the same time, demand for mobility leads to an impact on the environment. Therefore, the balance between these three fundamental pillars (Economy, Society, and Environment) is Sustainable mobility.

Sustainable mobility is a means to allow equitable access to transport to fulfill the needs of people for jobs, markets and goods, social interaction, education, and a full range of other services contributing to healthy and fulfilled lives. An increase in economic growth coupled with the increase in the per capita income, population growth as well as an increase in urbanization are driving the demand for transportation in India. Hence leads to increased emissions and reduces the efficiency of vehicles on the road.

Thus, from an Indian perspective, it becomes imperative that the transportation solutions are designed in a way that improves affordability and thus accessibility, while also ensuring, minimized impact on the environment. Sustainable mobility is crucial in not only helping the economic development of the country but also in improving the

living standards for the people through technological interventions.

### India's Energy transition and Sustainable Mobility

During the COP-26 at Glasgow, the Hon'ble Prime Minister of India announced India's plan to achieve 'Net Zero' by 2070. He also announced a five-point agenda for India (Panchamrit) with specific targets to increase India's non-fossil energy capacity and reduction of carbon emissions. Technology will and is playing an important role in achieving such targets. Government authorities, industry, and academic/research communities are geared towards fulfilling such visions by innovating and adopting new and emerging technologies and also by implementing relevant policies towards achieving ambitious targets.

As the third largest aggregate emitter in the world, India's commitment marks a significant boost for low-carbon energy and is a directional shift in the fossil fuel business. With India's rapid pace on its growth trajectory, the focus on energy transition is also critical for the sustainable mobility targets as the addition of more renewable and low carbon energy sources such as solar and wind power, biofuels, natural gas, and green hydrogen, will provide the necessary energy support to the automobile industry. However, the transition in energy also depends on its technical, economic, and environmental acceptability along with the availability of fuel/energy sources and its infrastructure. SIAM's pillars on Electrification, bio-initiative, and Hydrogen are playing a pivotal role in India's energy transition.

### The Environmental, Social, and Governance (ESG) Framework in Energy Transition

Sustainable mobility and ESG are two concepts that are closely related and mutually reinforcing. ESG stands for environmental, social, and governance, and measures the sustainability and ethical impact of an organization or an investment. Sustainable mobility is a concept that aims to provide safe, efficient, and environmentally friendly transportation for people and goods. Sustainable mobility and ESG are not only important for achieving the 2030 Agenda for Sustainable Development but also for creating value and opportunities in the mobility market. By pursuing sustainable mobility and ESG, we can create multiple benefits for our planet and our people. India's Business Responsibility and Sustainability Report (BRSR)—a framework for environmental, social, and governance (ESG) reporting—came into effect in 2023.

The ESG framework is fundamental to the energy transition, providing a structured approach to achieving sustainable and responsible energy production and consumption. By integrating environmental preservation, social responsibility, and strong governance practices, the framework can help reduction of Greenhouse Gas Emissions, shift from fossil fuels to renewable energy sources such as wind, solar, and hydropower to minimize carbon footprints, and help decarbonization by implementing technologies and practices that enhance energy efficiency across production, distribution, and consumption stages. The Environmental, Social, and Governance (ESG) framework is crucial in guiding the automobile sector towards more sustainable and responsible practices.

Here is how the ESG framework applies to energy transition:





ESG reporting in India is evolving, driven by regulatory mandates, investor demand, and the need for corporate accountability. As companies embrace ESG principles, they contribute to sustainable development, enhance their reputation, and create long-term value for all stakeholders. Multiple steps have been taken in India over the past few years to promote ESG reporting, details of some of which have been captured:

**1. The Securities and Exchange Board of India (SEBI) has played a key role in promoting ESG reporting. Key initiatives include:**

- *Business Responsibility and Sustainability Report (BRSR)*: SEBI mandates the top 1,000 listed companies by market capitalization to include BRSR as part of their annual reports. The BRSR framework emphasizes ESG disclosures and includes both qualitative and quantitative data.
- *Integrated Reporting*: Encouraging companies to adopt integrated reporting, which combines financial and non-financial performance in a single report.

**2. National Guidelines on Responsible Business Conduct (NGRBC)**

- Developed by the Ministry of Corporate Affairs, NGRBC provides a comprehensive framework for businesses to operate responsibly. It includes principles on environmental sustainability, social equity, and governance.

**3. Companies Act, 2013**

- The Companies Act mandates certain companies to spend at least 2% of their average net profits on CSR activities, emphasizing the social component of ESG.

**Automobile industry's Focus on ESG**

Indian Automobile Industry is committed to meeting the Government's targets of reducing Fuel consumption and reducing CO<sub>2</sub> from the transport sector. To meet its obligation at the national and international level, some of the actions taken by the industry, which are measurable and quantifiable are as follows:

- Agreeing with the government on the Fuel efficiency target in a staggered and phased manner to meet the CO<sub>2</sub> targets in the form of CAFÉ and defining the model and the corporate targets.
- Adoption of the BS6 regulation for all fuels from April 1, 2020, which reduces the particulate and emission levels of fuels and that of automobiles. These targets will become more stringent over time.
- This aligns with the government's vision of adopting Biofuels, gaseous fuels, and other low-emission fuels developed to lower emissions and also to provide a fleet complying with those fuels.
- Helping the government to develop the framework of Electric mobility which will reduce the consumption of fuels over time. Electric mobility will drive sustainable consumption as it will reduce lower components to be produced and serviced in the future. Greater renewable capacity addition and increase of the renewable energy in the electricity mix further amplify the impact of electric vehicles in reducing emissions.
- Development of technology to aid newer development such as OBD (On Board Diagnosis) and RDE (Real Driving Emissions) etc, which will aid in more sustainable mobility.

The Indian automobile industry is tracking its ESG activities in many ways. Some of the actions listed are:

Environment	
Climate change and Carbon emissions	Participating in the Fuel efficiency norms, adopting alternative low carbon fuels, towards reduction of CO <sub>2</sub> .
Energy Efficiency	Inhouse reduction of energy consumption by deploying energy-efficient machinery, lighting, equipment, etc.
Water Management	Zero Liquid Discharge (ZLD) aims to eliminate all liquid discharge from facilities, Safe disposal of pollutants, and also enable water recovery for reuse.

Social	
Customer Satisfaction	Carrying out regular surveys to measure the customer satisfaction level at the level of dealers, offices, and companies.
Gender and Diversity	Implementing thorough safety protocols and promoting a culture of well-being and prevention at the workplace.
Employee engagement	Defining companies' policies that are non-discriminatory and provide equal opportunities to all.
Community relations	Regular communication engagement with all levels of the employees and eliminating barriers to the ease of communication
Labor Standards	Readily engaging the community welfare programs such as eye checkups, health checkups, etc.

Governance	
Board composition	Participating in the Fuel efficiency norms and reduction of CO <sub>2</sub> . Ensuring adherence to national and international standards, and also actively participating and contributing to standard developments through SDOs.
Audit committee	Defining structures of corporate governance and carrying out audits of each activity regularly.
Bribery and Corruption	Non-participation in any such activity and abiding by the law.
Compensation	Appropriate structure definition.

Integrating Environmental, Social, and Governance (ESG) principles with energy transition and sustainable mobility is essential for creating a resilient, low-carbon future. By integrating these aspects, businesses and governments can create resilient, low-carbon economies that promote environmental preservation, social equity, and strong governance. This integrated approach not only addresses climate change but also fosters inclusive growth and long-term sustainability.

#### **Viksit Bharat and Atmanirbharta**

The automobile industry in India is the largest 3-wheeler manufacturer, 2<sup>nd</sup> largest 2-wheeler manufacturer, 4<sup>th</sup> largest passenger vehicle manufacturer, and 5<sup>th</sup> largest commercial vehicle manufacturer in the world as per 2024 statistics. The Indian automobile industry with support from the government has been working towards the goal of not only increasing the industry size but also increasing the local value add and helping the country emerge as a key automobile supplier to the world. The government has rolled out multiple schemes in the form of PLI scheme, FAME scheme for electric vehicles, ACC for advance cell chemistry, focused on developing domestic capabilities, and

going forward the support of these schemes would be critical to help achieve the goal of producing for the world.

As important stake holders, SIAM & ACMA have taken steps to ensure increased localization levels in various automotive components. SIAM & ACMA had jointly prepared a detailed "Localisation Roadmap for the Indian Automobile Sector" in May 2021 analysing data for 2019 – 20. This was followed by another report on "Localization Assessment for the Indian Automotive Sector" in April 2023 analysing data for 2021-22. It was found that the industry achieved a reduction of imports by about 5.8% in 2021-22, compared to the target of 3-5% it had set for itself in 2019-20 for these 2 years. This import reduction has primarily been achieved in items related to Engines, Electricals, Electronics, Tyres etc.

This accomplishment shows the automotive industry's and SIAM's support for the "Atmanirbhar Bharat" initiative through increased localization. The industry plans to continue enhancing localization of various components to keep added value within the country and ensure that India emerges as a global automotive manufacturing powerhouse.

# **ECONOMIC & COMMERCIAL AFFAIRS**



## EXPORTS GROUP

SIAM Exports Group has been continuously engaged with the Government of India in addressing the market access issues faced in the export markets such as the ASEAN region – Indonesia, Philippines, the Latin American region - Brazil, Chile, Peru and the South Asian region - Sri Lanka and seeking NIL duty market access in markets of export interest including Chile, Indonesia, Malaysia, Peru, Philippines, Thailand, and Vietnam.

Detailed Recommendations were also submitted to the Drawback Committee for giving revised /additional RoDTEP benefits to certain HS Codes of automobiles, especially for Commercial vehicles and Two-wheelers. DG DGFT also held a discussion with SIAM to understand the Sector-specific Vision for Exports along with other associations. DGFT also deliberated on a possible scheme for Promoting Indian Vehicle Brands abroad. A discussion was held with SIAM members in this regard.

SIAM Exports Group mounted a delegation to Indonesia to address the bottlenecks faced by Indian vehicle manufacturers in the Indonesian market and to increase the presence of Brand India and to understand the auto policy environment of Indonesia. SIAM delegation met the First Secretary, Indian Embassy in Jakarta, Directorate General Customs & Excise, Ministry of Finance, Republic of

Indonesia, Director General of Oil and Gas, Ministry of Energy and Mineral Resources, Republic of Indonesia, Ministry of Transport, Republic of Indonesia. The discussions revolved around highlighting the quota restrictions placed by Indonesia on import of two-wheelers, Issues with obtaining the certificate of origin under India-ASEAN FTA, understanding the development of biofuel norms, and the Emissions Roadmap. SIAM members from Bajaj Auto, Royal Enfield, Tata Motors and Volvo Eicher Commercial Vehicles participated in the delegation.

To further strengthen the cooperation of the Indian vehicle industry with the neighbouring markets, a South Asian Automobile Forum (SAAF) was established in February 2024 with the automobile associations: Bangladesh Automobiles Assemblers and Manufacturers Association (BAAMA), Ceylon Motor Traders' Association, Sri Lanka (CMTA) and NADA Automobiles Association of Nepal (NADA) and SIAM – India. This forum is aimed at exploring opportunities for collective growth of the automobile sector of these countries and promoting best practices and responsible advancement of the sector. SIAM Exports Group has also initiated planning for taking delegation to Sri Lanka in 2024.



*SIAM Exports Group Members with Ms Indu Nair, Joint Secretary, Ministry of Commerce and Industry for a discussion on Exports related issues in ASEAN.*



Annual Report Card (2023-24)			
Deliverables	Measures	Owner	Stakeholders
Strategies to increase Automobile exports	Mounted a delegation to Indonesia and Nepal.	SIAM Exports Group	Members and Government
	Establishment of South Asian Automobile Forum (SAAF) with Bangladesh, Nepal, India and Sri Lanka.		Members
	Initiated planning a Delegation Visit to Sri Lanka.		Members
Resolve tariff and non-tariff barriers in Exports markets	Highlighted non-tariff barriers in Brazil, Chile, Indonesia & Sri Lanka.		Members and Government
	Sought NIL duty market access in various FTA negotiations such as ASEAN, Chile and Peru for Indian Vehicle manufacturers to increase exports.		Members and Government
EXIM Policy	Recommendations to Drawback Committee on HS Codes for revised/additional RODTEP benefits.		Members and Government
	Session with Commercial Banks on Issues in INR Trade Settlement.		Members
	Submitted recommendations to DGFT for Export Policy 2024.		Members and Government



SIAM Exports Group Meeting held in New Delhi



*Establishment of South Asian Automobile Forum with associations - BAAMA (Bangladesh), NADA (Nepal), CMTA (Sri Lanka) and SIAM (India)*



*SIAM Exports Group Delegation with Ms Anita Iskandar, Director of International Affairs, Directorate General of Customs & Excise, Indonesia*



*SIAM Exports Group Delegation with Mr Joko Kusnanto, Head of Vehicle Type Approval Certification, Ministry of Transportation, Indonesia*



*SIAM Exports Group Delegation with Ms Malvika Priyadarshani, First Secretary(Eco & Commerce), Embassy of India, Jakarta, Indonesia*

A delegation to Nepal was mounted on 27<sup>th</sup> and 28<sup>th</sup> August 2024 during Nepal Auto Show 2024 organized by NADA. The delegation included participation from all the segments of auto industry with presence of major auto OEMs. The delegation during the visit had fruitful interactions with various

Ministers of Government of Nepal along with the members of NADA Automobiles Association of Nepal. The meetings involved discussions around the developments taking place in Indian and Nepalese Auto industry and the importance of continued cooperation between both the countries.





*SIAM delegation meeting with Hon'ble Deputy Prime Minister and Finance Minister,  
Mr. Bishnu Prasad Paudel*



*SIAM delegation meeting with  
Mr. Devendra Dahal and Hon'ble Minister of Industry,  
Commerce and Supplies, Mr. Damodar Bhandari*



*SIAM delegation meeting with  
Hon'ble Minister of Physical Infrastructure and Transport*



*SIAM-NADA Joint Meeting*

## INTERNATIONAL RELATIONS & TRADE POLICY GROUP

SIAM International Relations and Trade Policy (IRTP) Group has continued policy advocacy in terms of providing recommendations to the Government of India on topics related to International Trade. The group has remained actively engaged in providing inputs in terms of Market access, including Tariff concessions, non-tariff issues, Rules of Origin and Auto specific Annexures.

With Government of India's emphasis on engaging bilaterally/multilaterally with various economies, there have been recent developments with respect to: a) review or expansion of already concluded trade agreements like India-Australia, India-Chile, India-Japan, India-Korea and India-Sri Lanka; b) New trade agreements with countries like the United Kingdom, the European Union, Peru, among others. IRTP group has been keenly involved in these negotiations as the Auto sector has remained one of the important stakeholders for these trade negotiations. Additionally, to foster bilateral dialogues with various countries, SIAM has also been advising the Government of India on possible discussion points for Joint Trade committee meetings.

Government of India has recently concluded Trade and Economic Partnership Agreement (TEPA) with European Free Trade Association (EFTA), which

includes countries namely Iceland, Liechtenstein, Norway, and Switzerland. There is no tariff reduction offered by India for vehicles under the agreement. However, tariff concessions have been offered by India for majority of Parts and Accessories of vehicles, along with some types of engines, particularly for two-wheelers and diesel engines greater than 250cc. India Auto exports to have zero duty market access in EFTA countries.

SIAM has been organizing virtual meetings with other Auto counterparts periodically to understand the developments in their respective countries. Various Automobile associations, namely Bangladesh Automobiles Assemblers and Manufacturers Association (BAAMA), Ceylon Motor Traders' Association, Sri Lanka (CMTA), NADA Automobiles Association of Nepal (NADA) and Association of Indonesia Automotive Industries (GAIKINDO) were also invited to attend the Bharat Mobility Global Expo 2024, held during 1<sup>st</sup> to 3<sup>rd</sup> February 2024 in New Delhi.

SIAM partnered with Confederation of Indian Industry (CII) and Centre for WTO Studies (CWS) on joint Capacity Building session, which focused on understanding the provisions of FTAs and better utilizing the existing FTAs to reap the benefits from preferential liberalization.

Annual Report Card (2023-24)			
Deliverables	Measures	Owner	Stakeholders
Maintaining International Dialogue	Recommending discussion points to Government of India for various G2G visits, Joint Trade Committee and Joint Trade Working Group meetings.	SIAM IR&TP Group	Members and Government
Policy Advocacy on International Trade Agreements	Submitted recommendations for India-Chile, Ind-Australia, Ind-ASEAN, Ind-Sri Lanka, Ind-Peru, Ind-GCC, Ind-EU and Ind-UK trade negotiations on tariffs, Rules of Origin and Auto Annexes.		Members and Government
Capacity Building	Jointly Organised Capacity Building Session on "Leverage rising opportunities from Trade Agreements –Special Focus on Auto and Auto components"		Members





Capacity Building Session on Trade Agreements



Meeting of CMTA with Shri Anant Swarup, Additional Secretary, Department of Commerce



Capacity Building Session on Trade Agreements



SIAM meeting with High Commissioner, UK

## SKILLING GROUP

In response to the evolving dynamics of the Automotive industry, spanning manufacturing, marketing, supply chain management, and beyond, the Skilling Group is dedicated to enhancing skills and ensuring workforce readiness.

The Group's primary goal is to establish a robust framework for cultivating a workforce that is prepared for immediate employment within dealerships and OEMs. The Group is focused on improving youth employability through strategic partnerships between industry, dealerships, and educational institutions.

To better align educational outcomes with industry needs, the group conducted a comprehensive skill gap analysis across various ITI institutes nationwide. This analysis targeted Service Technicians and Service Advisors, and its findings have informed the development of specialized course curriculum. Skill Group developed Skill-Gap bridging curriculum in line with the survey outcomes and implemented sixty hours training programs at nine ITIs and evaluation of the performance of students who have completed these courses is under process. The institutes under pilot are mentioned as below:

S. No	OEMs	ITI	Zone
1	Honda Motorcycle & Scooters	ITI Chengalpattu, Tamil Nadu	South
2	Hyundai Motor	ITI St. Aloysius, Mangaluru, Karnataka	South
3	Mahindra & Mahindra	ITI Don Bosco, Hassan, Karnataka	South
4	Mahindra & Mahindra	ITI Nashik, Maharashtra	West
5	Mahindra & Mahindra	ITI H J Bhabha, New Delhi	North
6	Maruti Suzuki India	ITI Arab Ki Sarai, New Delhi	North
7	Royal Enfield	ITI Tollygunge, Kolkata, West Bengal	East
8	Skoda VW	ITI Morwadi, Pune, Maharashtra	West
9	Tata Motors		
10	Bajaj Auto		
11	VECV	ITI Ahmedabad, Gujarat	West

This collaboration between academia and industry aims to facilitate a smoother transition from education to employment.

The Group's ongoing efforts are focused on creating a workforce that is not only skilled but also immediately deployable for both dealerships and vehicle manufacturers.



ITI Arab Ki Sarai, New Delhi



ITI Chengalpattu, Tamil Nadu

Annual Report Card (2023-24)			
Deliverable	Measure	Owner	Stakeholder
Workforce upskilling	Listing core critical job roles	SIAM Skill Group	Vehicle manufacturers/ Dealerships
	Conducted Skill-Gap Survey on the five competencies required for identified job roles at ITI and Polytechnique colleges (Pan-India)		Vehicle manufacturers/ Dealerships
	Developed Skill-Gap bridging curriculum in line with the survey outcome		Vehicle manufacturers/ Dealerships/ Institutes
	Conducted the students training at nine it is as per the curriculum		Vehicle manufacturers/ Dealerships/ Institutes
	Assessment of the ITI students post course is under process		Vehicle manufacturers/ Dealerships/ Institutes



ITI Don Bosco, Hassan, Karnataka



ITI H J Bhabha, New Delhi



ITI Morwadi, Pune, Maharashtra



ITI Nashik, Maharashtra



ITI St. Aloysius, Mangaluru, Karnataka



ITI Tollygunge, Kolkata, West Bengal



ITI Ahmedabad, Gujarat



## TAXATION GROUP

The SIAM Taxation Policy, Procedural and Direct Tax Group is involved in addressing the direct and indirect taxation issues affecting the Automobile industry to, Government of India. The group keeps a close eye on the new policies, provisions introduced by Ministry of Finance or any rulings of the judicial courts and its impact on the Auto industry.

This group also submitted recommendations on Union Budget to Ministry of Finance and held meetings with Revenue Secretary, Chairman CBIC and other senior ministry officials. SIAM President also met Hon'ble Finance Minister in an industry stakeholder consultation for Pre-Budget.

For developing the EV Ecosystem, SIAM Taxation Group has requested for extension of concessional customs duty on import of Lithium-ion cells @ 5% for another three years, GST rate reduction on EV charging service from 18% to 5%, mitigate the impact of Inverted duty structure, nomination of testing agency for certifying the nature of imported li-ion for applicability of concessional customs duty, withdrawal of GST exemption to GCC service providers for e-buses, among others. In addition, exemption of customs duty is also sought for Capital Goods for manufacturing and R&D of Li-ion cells

For customs regulations, SIAM Taxation Group has requested allowing RoDTEP benefits to MOOWR license holders, allowing concessional customs duty for import of vehicles by OEMs for testing/ R& D purposes, extension of exemption on customs duty on import of R&D Equipment, among others.

Under the GST policy and procedural issues, SIAM Taxation Group has sought clarifications on prospective applicability of compensation cess due to changes in the definition on SUVs, levy of appropriate GST on Extended Warranty provided by vehicle manufacturers to customers, concessional compensation cess in case of supplies to merchant exporter by domestic supplier, waiver of interest on GST accrued in secondment of

expat employees, clarification on procedures related to post-sale discounts by OEMs to dealers etc.

Other than persistent recommendation of reducing GST rates of all vehicle segments from 28% to 18%, SIAM Taxation group has also recommended to reduce the GST rates of CNG and Flex Fuel two-wheelers, initially to 18% and subsequently to 12%, once the GST rates for all vehicle segments are reduced to 18%. Removal of compensation cess on Two wheelers > 350cc has also been a key ask of pre-budget recommendations.

Some of the key recommendations given under the direct taxation were Clarification on applicability of Equalization Levy, extension of cut – off date for commencing new manufacturing operations to avail 15% Corporate tax instead of 22%, investment-based incentive to existing manufacturing companies, withholding tax provision for companies having significant economic presence and weighted deduction for R&D expenditures.

The Government of India in its Union Budget announced in July 2024, has accepted a number of recommendations made by the auto industry such as the long pending request of the Auto Industry related to withdrawal of Equalization Levy of 2% on e-transactions, Clarification on applicability of GST rates for Extended warranty and clarification related Post Sale Discounts to dealers offered by OEMs.

Based on the recommendations submitted by this group to support the Electric vehicle ecosystem, Government of India has extended the Concessional Rate of Customs Duty on import Lithium-ion cell till March 2026, exemption of Customs duty on import of capital goods, parts, sub-parts, inputs/raw material for manufacture of lithium-ion cell is extended till March 2029, benefit of concessional Customs Duty rate on import of goods for R&D purposes is also extended.

### Annual Report Card (2023-24)

Deliverables	Measures	Owner	Stakeholders
To review and analyse policy changes in the country's taxation structure and gauge its impact on automobile industry	Make Pre-Budget & Post Budget recommendations to the Government of India.	SIAM Taxation Policy, Procedural & Direct Tax Group	Government, Members
	Analyse the policy, circulars released by CBIC, announcements in the Union Budget and its impact on the auto industry.		
Policy advocacy on various burning issues affecting the automobile industry	Representing to Government of India on taxation issues related to direct, indirect (GST and Customs) taxes.	SIAM Taxation Policy, Procedural & Direct Tax Group	Government, Members



SIAM Taxation Group Meeting, New Delhi



SIAM Taxation Group Members for a meeting with JS-TRU, Ministry of Finance, North Block



SIAM Pre-Budget Consultation with Revenue Secretary, Ministry of Finance



SIAM Taxation Group Meeting, Srinagar



## HUMAN CAPITAL GROUP

SIAM Human Capital Group's diverse focus encompasses critical domains such as Human Resources (HR), Industrial Relations (IR), labour dynamics, benchmarking and rewards, and performance evaluation within the Auto sector. The Group has identified five critical themes under the overall umbrella of a Design Studio viz., People Policy Advocacy, Talent Attraction & Retention, Talent Capability, Organization Effectiveness, and Workplace Harmony which is impacting the Auto sector presently. Various potential activities are being identified and undertaken under each of these themes by HR leads of SIAM members.

In 2023-24, SIAM partnered with Deloitte India for the Annual Performance and Rewards Study. The study aims to gauge the rewards competitiveness of SIAM members and provide analytically supported insights for informed increment and rewards decisions. Beyond compensation metrics, the survey offers invaluable insights into industry

performance projections, performance management methodologies, productivity analyses, and more. This year's survey saw participation from over 21 members. Industry benchmarking exercises were also undertaken on various HR policies on request of SIAM members, empowering them to appraise their company policies against industry standards.

Additionally, the Group has been actively working towards promoting the Diversity, Equity, Inclusion & Belonging (DEIB) initiatives in the Automotive industry. To accelerate women's participation and advancement within the Industry, the Group has partnered with the Bill & Melinda Gates Foundation on a multi-year project that helps firms to identify structural barriers to gender parity and evaluate targeted solutions to improve working conditions, company policies and practices, and hiring approaches.

Annual Report Card (2023-24)			
Deliverable	Measure	Owner	Stakeholder
To work on HR and IR related issues in Auto sector	SIAM made representation giving Auto Industry's inputs and suggestions on Labour Codes through Ministry of Heavy Industries.	SIAM Human Capital Group	Membership
	Annual Performance and Compensation Rewards Study covering the following modules.		
	Benchmarking survey on practices followed in the industry for relocation assistance, employee experience, work from home policy, travel policy and avoid drink & drive policy.		
	Benchmarking survey on practices followed in the industry for Learning & Development initiatives.		
	Benchmarking survey on practices followed in the industry for Self (Employee) arranged car lease scheme.		
	Initiated a project to accelerate women's participation in the Auto Industry.		Bill & Melinda Gates Foundation



SIAM Human Capital Group Design Studio

## LOGISTICS GROUP

The SIAM Logistics Group is dedicated to enhancing efficiencies in Automotive Logistics, constantly exploring the latest innovations and strategies within the sector. Our unwavering commitment is focused on addressing and overcoming challenges faced by Automobile OEMs, with a particular emphasis on solutions that alleviate logistical hurdles and reduce outbound logistics costs.

In our pursuit of minimizing carbon footprints and emissions while also cutting logistics expenses, we have engaged in ongoing discussions with the Railways. This collaboration has led to a notable increase in the use of railways for Passenger Vehicle transportation over recent years. We are also exploring the creation of dedicated railway hubs for vehicle transportation to streamline loading and

unloading processes, as well as enhancing infrastructure at key stations.

Additionally, the SIAM Logistics Group hosted the 10<sup>th</sup> edition of the SIAM Automotive Logistics Conclave on August 9, 2024. This event brought together key stakeholders, including representatives from the Ministry of Road Transport, DPIIT, NHLML, logistics service providers, and vehicle manufacturers. Discussions focused on specific interventions needed to improve logistics across both rail and road networks.

To motivate Logistics Service Providers to continue delivering excellence in their services to OEMs, SIAM took an initiative for the first time in its history to recognize Logistics Service Providers for their outstanding services in new vehicle logistics for SIAM members.

Annual Report Card (2023-24)			
Deliverable	Measure	Owner	Stakeholder
Enhancing Outbound Logistics Efficiency in the Automotive Sector	Group engaged with the Railway Board for addressing issues related to availability of railways for automobile shipment and associated freight charges.	SIAM Logistics Group	Membership and Government
	Group engaged with the Logistics Service Providers (Rail) for preparing proposal to Railway Board the uniform loading/unloading durations.		Membership, Logistics Service Providers and Government
	Group engaged with the Logistics Service Providers (Road) for enhancing efficiencies in automotive logistics		Membership, Logistics Service Providers and Government
	Group successfully organized Logistics Conclave, with related stakeholders including policy makers for collaborative exchange of insights and ideas.		Membership, Logistics Service Providers and Government





10<sup>th</sup> SIAM Automotive Logistics Conclave, New Delhi



SIAM Logistics Group Meeting at Rail Bhawan, New Delhi (21<sup>st</sup> Sept, 2023) Under the Chairmanship of Mr. Ravinder Goyal, Additional Members (Commercial), Railway Board



SIAM Logistics Group Meeting with AFTO Licensees at SIAM, New Delhi (6<sup>th</sup> Oct, 2023) for finalising the free time for BCACBM Wagons,

## AATMANIRBHAR BHARAT – SOURCING GROUP

SIAM Aatmanirbhar Bharat Sourcing Group has been making efforts in ensuring localization in the Auto industry, to complement the Government's initiative of Aatmanirbhar Bharat. The Aatmanirbhar Bharat Sourcing Group organized the first edition of SIAM Sourcing Conclave with a focus on building a resilient supply chain and showcased components where localization can be achieved in the Automotive industry. To foster collaborative efforts by the industry, during the Bharat Mobility Global Expo 2024 at Pragati Maidan, New Delhi, the Group exhibited critical components where localization efforts have already started along with the items where localization is yet to commence, at SIAM Auto Aatmanirbhar Zone.

The Group consistently engaged with the Government of India in highlighting issues with respect to various QCOs. Several representations were made to the Department of Promotion for Industry and Internal Trade (DPIIT) for QCOs on Bolts, Nuts and Fasteners and Aluminium Products. The Group also pursued Ministry of Mines in deferring the implementation of QCO related to Aluminium, Nickel & Copper.

The Group highlighted concerns to Directorate General of Trade Remedies (DGTR) with respect to the Anti-dumping duty on PCBs and interacted regularly with Automotive Components

Manufacturers Associations Concerns (ACMA) and Indian Printed Circuit Association (IPCA) to address these issues.

The Group remained actively engaged with Automotive Tyre Manufacturers Association (ATMA), for inclusion of tyre sizes, that are not manufactured domestically in the exemption list, in the Exemption List of Pneumatic Tyre Quality Control Order (QCO). With significant efforts of the industry, majority of the tyres are domestically procured and only the sizes/specs not available domestically are imported, primarily owing to the specific export requirements.

SIAM Sourcing Group with its continuous efforts and interactions with Ministry of Consumer Affairs, was successful in getting exemption for spare parts from declaring of month and year of manufacture on the packaged goods with respect to the Legal Metrology (Packaged Commodities) Rules.

A Supply Chain Regulation Monitor has also been put in place by the Group which aims to provide regular updates on the regulations/QCOs impacting the auto industry.

SIAM also participated in various sectional committee meetings related to Steel, organized by Metallurgical Technical Department (MTD-4 and MTD-16) of Bureau of Indian Standards (BIS).



Visit to VECV Plant at Pithampur



Annual Report Card (2023-24)			
Deliverables	Measures	Owner	Stakeholders
Increasing Localisation in the Auto Industry	Organised Aatmanirbhar Bharat Sourcing Conclave with a focus on "Towards Building a Resilient Supply Chain"	SIAM Aatmanirbhar Bharat Sourcing Group	Members and Government
	Localization Zone during Bharat Mobility Global Expo 2024		Members and Government
To Mitigate Challenges in Automotive Supply-Chain	Deferment of implementation of QCOs on Aluminum, Nickel and Copper		Members and Government
	Deferment of implementation of QCOs, along with exemptions related to Bolts, Nuts and Fasteners		Members, ACMA and Government
	Initiated steps to propose moderation of Anti-dumping duty on PCBs		Members, ACMA, IPCA and Government
	Exempted additional 392 tyres from the QCO on Pneumatic Tyres		Members, ATMA and Government
	Exempted spare parts from the applicability of revised Legal Metrology Rules on Packaged Commodities		Members and Government



1<sup>st</sup> Edition of SIAM Sourcing Conclave



SIAM Sourcing Group Meeting in Chennai



Meeting with SBS Reddy, Additional DGFT on Pneumatic Tyres



SIAM Sourcing Group Meeting in Indore



Visit of key govt. officials in Auto Aatmanirbhar Zone at Bharat Mobility Global Expo 2024



Visit of Hon'ble Commerce and Industry Minister,  
Shri Piyush Goyal in SIAM Auto Aatmanirbhar Zone  
at Bharat Mobility Global Expo 2024



Visit of Shri Sunil Barthwal, Secretary, MoCI,  
in Auto Aatmanirbhar Zone at Bharat Mobility Global Expo 2024



## ECONOMIC RESEARCH GROUP

SIAM Economic Research Group (ERG) continues to engage actively to derive valuable insights into the Automotive market, to make informed decisions.

The 18<sup>th</sup> edition of SIAM Looking Ahead Conclave was organized in January 2024. The theme of the conclave was “Automobile Industry: Leveraging Domestic & Export Opportunities”. The Conclave provided diverse perspectives on the need to become future ready and continuously innovate to meet the aspirational requirements to leverage domestic and export opportunities. The Conclave provided projections of different vehicle segments – Passenger Vehicles, Commercial Vehicles, Three Wheelers, and Two Wheelers – in the Indian market for the year ahead.

Every year, the Group undertakes the exercise of estimating the contribution of the Indian Automotive Industry to the overall GDP of the country, by taking into consideration several factors. The Automotive turnover for the year 2023-

24 has been estimated to be about Rs 20 lakh crores, contributing about 6.8% to India's GDP. The Group undertook an exercise to estimate the overall contribution and tax paid by a Passenger Vehicle during its lifetime.

SIAM ERG is also involved in the preparation of the third edition of the Automotive Mission Plan 2024-2047 under the leadership of the Ministry of Heavy Industries (MHI). AMP III will layout a roadmap of how the Automotive sector will transform in 3 phases from now to 2030, from 2030 to 2037 and then from 2037 to 2047. The Ministry of Heavy Industries has also constituted an Apex Committee for preparation of AMP III. The stakeholders include relevant Government ministries, research institutes, academia, along with Automobile and Auto component industry.

An Economic Monitor is also shared every month, which provides information on various Economic parameters impacting the Auto Industry.

Annual Report Card (2023-24)			
Deliverables	Measures	Owner	Stakeholders
Industry Forecast	Organised 18 <sup>th</sup> Looking Ahead Conclave with a focus on “Leveraging Domestic & Export Opportunities”	SIAM Economic Research Group	Membership
Contribution to the economy	Highlighted the achievements of the Indian Auto Industry to the government		Membership and Government
Automotive Mission Plan III (AMP III)	Third edition of Automotive Mission Plan (AMP III) being prepared for 2024-2047		Membership and Government



18<sup>th</sup> SIAM Looking Ahead Conclave



## VEHICLE CLASSIFICATION, SALES REPORTING & ANALYSIS GROUP

SIAM Vehicle Classification Sales Reporting & Analysis Group has been closely engaged in enhancing the robustness of SIAM's data releases on a monthly and quarterly basis to various stakeholders. Timely and accurate reporting of data by members helps in assisting policymakers in making informed decisions for the sector.

Data analysis and industry performance insights have been shared with the media during quarterly data releases and circulated to various Ministries of Government of India.

Utilizing digital data from available member companies, SIAM has established a dashboard for accessing statistical data from FY 2019-20 onwards and access of the same is available to members and subscribers.

The Group is also exploring the possibility of collating and structurally reporting Vehicle Registrations data from the Vahan Portal which would give an indication of the retail sales and also interacting with stakeholders to develop a mechanism for reporting sales of second hand vehicles.

Annual Report Card (2023-24)			
Deliverables	Measures	Owner	Stakeholders
Accurate reporting of SIAM Monthly and Quarterly Data	<ul style="list-style-type: none"> <li>Finalisation of Reporting Categories</li> <li>Collection of Data from Members</li> <li>Release of Data to Various Stakeholders</li> </ul>	SIAM Vehicle Classification, Sales Reporting & Analysis Group	Media, various Departments of Government of India, SIAM members and Subscribers of SIAM Data



Media briefing on Quarterly Motor Vehicle Data







# TECHNICAL AFFAIRS





## SUSTAINABLE MOBILITY - A ROAD TO FUTURE

### Global Agenda for Sustainable Mobility

Sustainable mobility is a concept that aims to provide safe, efficient, and environmentally friendly transportation for people and goods. It is closely related to the three verticals of sustainability: social, environmental, and economic. It involves balancing the needs and interests of different stakeholders, such as governments, businesses, civil society, and individuals. It also requires coordination and collaboration across different sectors, such as energy, environment, health, education, and urban planning. The role of transport in sustainable development was first recognized at the 1992 United Nations Earth Summit and reinforced in its outcome document – Agenda 21. Since then, at multiple UN General Assemblies, world leaders have recognized the importance of sustainable mobility and its impact on creating a sustainable planet and supporting various human development parameters.

The United Nations Economic Commission for Europe (UNECE) also provides a harmonized

framework for developing sustainable transport systems across road, rail, and inland waterways. This framework enhances the mobility of people and the movement of goods, with 147 countries, including 91 outside the UNECE region, participating as contracting parties to at least one of these conventions.

One key aspect of this initiative is the World Forum for Harmonization of Vehicle Regulations, also hosted by UNECE. This intergovernmental platform establishes technical requirements for the global automotive sector, driving advancements in safety and environmental performance and facilitating the introduction of new technologies.

The 2030 UN Sustainable Mobility Agenda focuses on advancing sustainable transportation systems worldwide to support the broader goals of the 2030 Agenda for Sustainable Development. Sustainable mobility is essential for achieving many of the Sustainable Development Goals (SDGs), including those related to climate action, economic growth, and sustainable cities.

### KEY OBJECTIVES OF THE AGENDA



#### Accessible and Inclusive Transport:

- Ensure access to safe, affordable, accessible, and sustainable transport systems for all, improving road safety, notably by expanding public transport, with special attention to the needs of those in vulnerable situations, women, children, persons with disabilities, and older persons.



#### Environmental Sustainability:

- Reduce the environmental impact of the transport sector, which is a significant contributor to greenhouse gas emissions. Promote the adoption of clean energy and technologies to combat climate change.
- Encourage the shift from fossil fuels to renewable energy sources in transportation.



#### Economic Growth and Innovation:

- Foster economic development by enhancing transport infrastructure, ensuring it is resilient and sustainable, and promoting innovation in the mobility sector.
- Support economic activities and employment opportunities through improved transport connectivity.



#### Health and Safety:

- Improve road safety by implementing policies that reduce traffic accidents and fatalities.
- Promote active transport options like walking and cycling, which have health benefits and reduce environmental impact.



#### Efficient Urban Planning:

- Encourage integrated urban and rural development planning to ensure that transportation systems support sustainable urbanization.
- Address the challenges of urban congestion and pollution through smart city initiatives and improved public transportation networks.

## United Nations Sustainable Development Goals 2030



### Global Industry Associations Drive Towards Sustainable Mobility

The Auto Industry globally represented by OICA, in response to the COP26 Joint Declaration (Glasgow Agreement) on 12<sup>th</sup> November 2021, announced their commitment to realizing the goal of carbon neutrality by 2050. It further stated that no single government policy or industry commitment will achieve this ambitious goal and all countries, will need to work collaboratively – at all levels of government and across all economic sectors - to identify the suite of approaches necessary to establish sustainable pathways to carbon neutrality across sectors and the unique realities of individual nations around the world. Other associations such as JAMA, IMMA etc. have also resonated with the vision.

Decarbonization of the transport sector is essential to reduce the GHG emissions and to meet the ambitious target of achieving net-zero emissions by 2070 set by Government of India. Major decarbonization pathways for transportation include switching to lower-carbon fuels/ energy sources, improving vehicle efficiency, and improving system-wide efficiency. However, efficiency of the vehicle is not only depends on the use of efficient powertrains, green fuels, lightweight materials but is also depends on the other external factors which includes – uniform road infrastructure, availability of the high-quality fuel, age of the vehicle, driving cycle, driver's behaviour etc.

The auto industry recognizes the importance of decarbonizing road transport as a way to help achieve this broader goal by 2050. Transport accounts for more than a third of CO<sub>2</sub> emissions from end-use sectors including (land, sea, and air transport). According to the International Energy Agency, in 2022, transport as a whole contributed to 23% of the global CO<sub>2</sub> emissions from end-use sectors, while road transport (cars, trucks, and buses) accounted for 74% of the total transport sector. As a result, 17% of the global CO<sub>2</sub> emissions can be attributed to the road transport sector. To that end, the industry is planning to invest \$515 billion globally by 2030 to help facilitate the transition to an electrified future (including battery, plug-in hybrid, and fuel cell electric vehicles), while simultaneously continuing to innovate on the broad array of powertrain technologies necessary to meet the broad and diverse needs of a global market.

In India to achieve resilient and inclusive sustainable mobility, it is necessary to continuously plan for a carbon neutrality model of growth, rather than focusing on physical infrastructure for vehicle mobility alone. The need is to integrate transport planning with all the tools and measures for inclusive sustainable mobility which includes traffic management strategies and technical innovations, and these will go hand in hand with supportive government policies.

## SIAM Vision for Sustainable Mobility: "Embracing the future of mobility"

Globally the automobile industry is transforming at an unprecedented pace and the role of associations needs to keep pace with the changes. SIAM has accordingly prioritized its actions and mandate toward furthering the cause of sustainable mobility. To guide the industry and to enable the country in the journey towards sustainability, SIAM envisions a 3-pronged vision:

- Showcasing Decarbonization Leadership:**  
Envision a future where India leads the world in sustainable automobile solutions. SIAM aims to champion the shift towards decarbonization, adopting a range of low-carbon technologies and fuels that will massively reduce the automobile industry's carbon footprint, in alignment with global carbon neutrality commitments
- Creating a Mobility Ecosystem:** Commit to creating an integrated mobility ecosystem that supports a seamless transition to low-carbon alternative sources of energy which includes a nationwide, accessible, infrastructure coupled with legislative support that encourages investment and innovation.
- Strengthening Domestic Manufacturing Industry:** Aspire to transform India into a hub for automobile excellence, where increased domestic value addition enhances global competitiveness. This involves nurturing a robust supply chain that leverages local materials and talent while promoting Atmanirbharta.

## Approach towards Policy Advocacy

SIAM collaborates closely with various government ministries, departments, and R&D institutions to

develop and advocate for policies that support sustainable mobility. This collaboration is part of a broader effort to align with national objectives, including those set forth by the Prime Minister, aimed at fostering automobile growth and advancing India's self-reliance under the Atmanirbhar Bharat Mission. SIAM has been organizing networking events from local to international scales that involve the participation of not just the automobile industry and the government but also the constituents of the new sustainable mobility ecosystem including clean energy producers, retailers, and material recyclers. SIAM also holds discussions on pertinent topics with the respective stakeholders to support the government's ongoing efforts to make the automobile sector more affordable, accessible, efficient, and sustainable.





The policy approaches previously discussed play a vital role in promoting sustainable mobility and embedding sustainability within the automobile industry. Achieving these goals requires the active involvement and participation of all stakeholders across the value chain.

### Plan for the Upcoming year

SIAM, under the banner "Building the Nation, Responsibly," aims to position India as a global center for automobile design and manufacturing while promoting sustainable mobility, in alignment with the Sustainable Development Goals – SDGs for 2030.

The Indian automobile industry is transforming at a rapid pace by adopting and innovating new and advanced technologies toward making automobiles – Greener, safer, and affordable.

SIAM has identified the 3 pillars of Sustainable Mobility namely, Road Safety, Decarbonization & Economic sustainability. Over the last two years, SIAM has worked on establishing a strong foundation for sustainable mobility and also broad-basing these actions to ensure that all relevant stakeholders can work together to achieve the target of sustainable mobility transition in the country. Over the last year, SIAM has spearheaded several critical initiatives such as विद्युतीकरण (Electrification), जैविक पहल (Bio-initiative), चक्रीयता (Circularity), गैस गतिशीलता (Gas-Based Mobility) and हरित हाइड्रोजन (Hydrogen Based Mobility) towards achieving the set ambitious target of attaining carbon neutrality by 2070 and also by supporting the Viksit Bharat initiative by 2047.

In line with the above initiatives, SIAM has organized several national and international conferences, workshops, brainstorming meetings, awareness camps, and consultation meetings with the subject matter experts from within the automobile industry

as well as with the experts working in R&D institutes, academia, government organizations, to discuss the key issues about the growth of these areas and devise solutions to the same. SIAM also focused on engaging the general public and improving their awareness about key aspects of sustainable mobility and the steps being taken by the Indian automobile industry, by setting up the decarbonization, circularity, and safety pavilion at the Bharat Mobility Global Expo 2024. Further, an EV rally was also organized to showcase the various models developed by the Indian industry, along with improving customer awareness about the benefits of electric vehicles.

Going forward SIAM's focus will be to not only continue to effectively engage various stakeholders in the sustainable mobility ecosystem but to also sharpen the focus on understanding and adopting the key emerging and advanced technological developments across the globe towards making the Indian automobile industry globally competitive. Besides organizing national and international conferences, workshops, brainstorming meetings, awareness camps, and consultations with the subject matter experts, SIAM will strengthen the development of the whole ecosystem towards the adoption of sustainable mobility in the country which includes not only the development and adoption of new, advanced and energy-efficient vehicular technologies, skilling / re-skilling workforce but also focuses on the development of infrastructure, support framing policy and regulatory framework as well. SIAM is actively participating and vigorously contributing to the preparation of standards by closely working with the national and international Standard Development Organizations. SIAM continues to closely work with the Government, policymakers, auto industry leaders, R&D institutes, and other relevant stakeholders to ensure achieving the sustainable mobility goal in line with the nation's vision.

## SUSTAINABLE MOBILITY GROUP

The responsibility of the **Sustainable Mobility Group** is to guide the industry with suitable technology adoption with the right investments to mainstream sustainability. The automobile industry needs to lead the transition in the energy domain and spearhead mitigating global climate change. The Group has adopted various initiatives of sustainability under the Sustainable Mobility Pillars, Decarbonization & Road Safety: 'Jaivik Pahal', 'Vidyutikaran', 'Gas Gatisheelta', 'Harit Hydrogen', 'Chakriyata', and 'Surakshit Safar' and urged the members to be part of the ongoing initiatives of sustainable mobility. The Group is providing space and priority for new ideas and innovations in the automobile industry. The Group enthuses the momentum of sustainable mobility and a great show was put up in the Bharat Mobility 2024 on the theme of material circularity and various other aspects of sustainable mobility. The Group has put commendable efforts and energy due to which, sustainability is now getting more prominent in the mindshare of OEMs and other stakeholders in value chains, especially in the discourse of net zero emissions, material circularity, and decarbonization.

### Advocacy Initiatives for the Environmental Pillar

In 2022, SIAM's leadership decided that the organization should play a central role in India's transition to sustainable mobility and become a preferred partner for the government in its decarbonization efforts. As a result, SIAM identified

several key areas under the pillars of "Road Safety" and "Decarbonization." These included Electrification, Ethanol, Circularity, Gas Mobility (CNG/LNG), and Hydrogen. Each of these areas was mapped to an advocacy initiative for their promotion. It's worth noting that each of these initiatives was planned to be handled by separate technical groups within SIAM.

SIAM then developed a strategy to broad base these initiatives, guided by 4 key values to ensure focus on all key stakeholders:

- **Taking the members along** Ensuring that all member perspectives are considered for garnering collective action towards sustainable mobility goals
- **SIAM for India first:** Addressing India's unique needs in mobility and environmental impact, aiming to drive local innovation
- **Leading the conversation in India/Global South:** Being at the forefront of sustainable mobility discussions, not only in India but across the Global South, influencing regional and global policies
- **Balancing industry competitiveness:** Protecting the competitive edge of India's automobile industry by advocating for policies that support growth, innovation, and fair trade practices

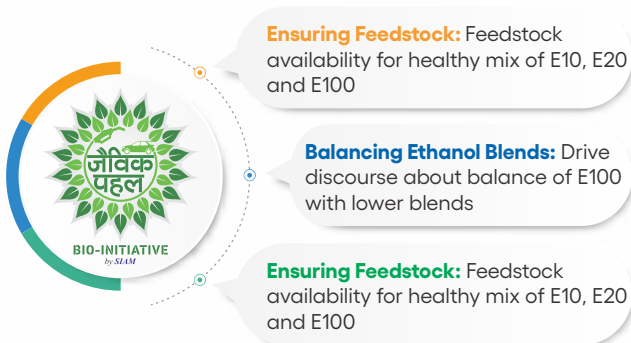


1. **जैविक पहल (Bio Initiative):** SIAM launched a Bio Initiative campaign called 'जैविक पहल (Bio Initiative)', which promotes biofuels produced from renewable biological materials. It also focuses on the decarbonization through promotion of Ethanol blending fuel in the automobile industry. By promoting the conversion of waste into biofuel or manure, SIAM aims to create awareness about increased farm income and other benefits related to it.
2. **विद्युतीकरण (Electrification):** SIAM has undertaken an initiative to focus on the proliferation of electricity as an alternate fuel called 'विद्युतीकरण (Electrification)' which aims to power vehicles with electric batteries, fuel cells, and hybrid or plug-in hybrid technologies.
3. **गैस गतिशीलता (Gas Based Mobility):** An initiative

undertaken by SIAM to encourage an increase in the adoption of gas-based fuels through a campaign of 'गैस गतिशीलता (Gas Gatisheelta)', which retains the focus on CNG/LNG-based mobility, especially for PV, 3W, and CV.

4. **हरित हाइड्रोजन (Hydrogen Mobility):** SIAM has taken a Green Hydrogen initiative called 'हरित हाइड्रोजन (Hydrogen Mobility)' in alignment with the recently announced Green Hydrogen Mission of the Government of India. This initiative focuses on driving Indian mobility using Green Hydrogen as an alternate fuel.
5. **चक्रीयता (Circularity):** An initiative focusing on Recycling and the Circular Economy, called 'चक्रीयता (Circularity)' is undertaken by SIAM. The promotion of a Circular Economy will minimize waste and ensure that resources are used efficiently and sustainably.

## 1. जैविक पहल (Bio-Initiative)



As the backbone of modern mobility, fossil fuels significantly impact the automobile industry's contribution to the nation's GDP and employment levels. The focus on climate change and recent actions by international bodies have spotlighted vehicular pollution due to fossil fuels. As the world's third-largest crude oil importer, India has launched several initiatives including the promotion of biofuels to mitigate these harmful effects. The Indian government aims to harness the advantages of domestically produced biofuel, such as enhancing the farm economy's growth opportunities, saving on crude imports, and developing alternative powertrain technologies.

Indian automakers have consistently aligned with the policymakers' decarbonization goals, ensuring that all new vehicles sold since 2008 are E10 fuel-compliant. With multiple policy interventions accelerating the manufacture and adoption of ethanol nationwide, India reached its E10 blending target five months ahead of schedule in June 2022. Furthermore, the target of 20% blending of ethanol in petrol was advanced to 2025-26 from 2030.

During FY22-23, SIAM conducted a series of influential events to advocate for ethanol adoption and promote sustainable mobility across India. The campaign began at the International Conference on Biofuels, where SIAM introduced the 'CLEAR' strategy. Launched during the Parali burning season, this strategy showed the importance of biofuels for sustainable transportation in India and garnered support from prominent policymakers, including Shri Hardeep Singh Puri, Hon'ble Minister of Petroleum and Natural Gas, and Shri Ashwini Kumar Choubey, then Hon'ble Minister of State, Ministry of Environment, Forest, and Climate Change.

The agenda for FY23-24 had two main objectives: to demonstrate the Indian automobile industry's readiness for higher ethanol blends and to lead



international collaboration efforts. Within this strategic framework, SIAM outlined various initiatives and events aimed at achieving these goals. Through the 'Bio Initiative,' SIAM planned to organize a series of events to encourage engagement with stakeholders across the ethanol



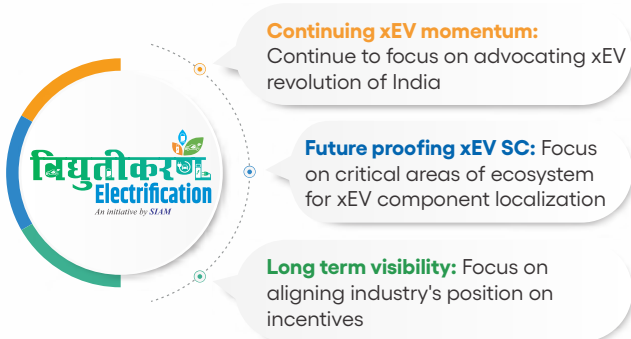
Indian delegation at World Ethanol Summit Washington DC

value chain and facilitate dialogue with policymakers. These events would provide platforms to display technological advancements, industry readiness, and the benefits of adopting ethanol and other biofuels.



Sustainable Mobility Ethanol Talk Indonesia organized by Govt of Brazil in Indonesia

## 2. विद्युतीकरण (Electrification)



India's road transport sector accounts for about 12% of the country's total CO<sub>2</sub> emissions as per IEA. Embracing E-mobility helps shift away from CO<sub>2</sub>-emitting fossil fuels towards cleaner, healthier, and more affordable transportation options. Raising awareness about E-mobility enables India to pursue sustainable transportation and achieve decarbonization goals. The Indian government has embraced the concept of LIFE—Lifestyle for Environment—as a movement, towards sustainability. At COP26, India introduced the Panchamrit strategy, comprising various schemes and policies to encourage EV production and adoption, helping the development of the e-mobility ecosystem. Following the central government's lead, state governments have drafted and implemented their policies.

The successful integration of electric vehicles significantly depends on several key factors. Accessibility to EVs plays a crucial role, influenced by affordability, availability of models in different segments, and the establishment of a comprehensive charging infrastructure. Developing local manufacturing capabilities, especially for batteries and essential components, is equally important, not only to ensure cost-effectiveness but also to create local employment opportunities. The EV industry landscape is constantly evolving, marked by rapid technological advancements across the value chain. Thus, it is crucial to encourage collaboration among stakeholders to drive innovation and develop sustainable business models within India's growing EV ecosystem.

Since recognizing the importance of xEV adoption, SIAM has focused on crafting a narrative to drive mobility electrification with government support. Over the years, SIAM has taken a leading role in developing the electrification ecosystem by engaging with the government to prevent abrupt policy shifts that could affect the growth of the xEV ecosystem and advocating for support and incentives to promote electrification across various vehicle segments to meet government EV penetration targets. After identifying the need for a long-term narrative, SIAM launched the "विद्युतीकरण

(Electrification)" strategy in 2022, to unite all electrification stakeholders, including automotive manufacturers, EV finance players, technology pioneers, and policymakers, to achieve SIAM's goal of leading xEV policy, regulations, and future roadmap development, and establishing SIAM as a central stakeholder in India's xEV revolution.

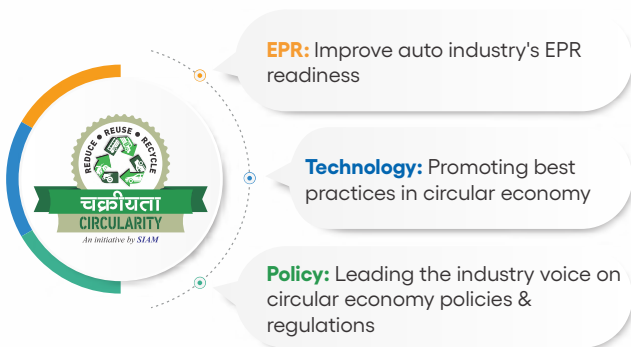
For FY23-24, the agenda was twofold:

1. To build on the momentum of the "विद्युतीकरण (Electrification)" Initiative and advocate for xEV adoption in India;

2. To lead collaboration with OEMs and other xEV stakeholders to ensure a stable and safe ecosystem.

Under this strategic framework, SIAM organized a series of initiatives and events, including the Bharat Mobility Global Expo, to engage stakeholders across the xEV value chain and facilitate discussions with policymakers. These events provided platforms to display technological advancements, industry readiness, and the benefits of xEV adoption.

### 3. चक्रीयता (Circularity)



In response to the pressing need to reduce waste, conserve resources, and promote recycling in India, various initiatives have been implemented to encourage industries to adopt a circular economy, aligning with the UN Sustainable Development Goals. The Indian automotive industry, a major sector of the economy with approximately 29.5 crore vehicles on the roads and an annual addition of around 2 crore vehicles, is facing a challenge. The increasing number of vehicles reaching the end of their lifecycle has necessitated an organized approach to vehicle scrappage. The introduction of the Vehicle Scrappage Policy and the Voluntary Vehicle Fleet Modernization Program (V-VMP) in 2021 marked a crucial step toward establishing an automotive circular economy. This initiative has spurred the rapid development of recycling infrastructure. However, the industry still faces challenges related to the volume of feedstock collected.

Ministry of Environment, Forest and Climate Change set up targets for waste management in India covering the management of various waste streams including batteries, e-waste, plastic packaging, waste tyres, and used oil for extended producer responsibility (EPR).

For automotive batteries, targets are set from a 30% collection rate in 2022-23 to 90% in 2025-2026. EV batteries have differentiated targets based on the vehicle type, ranging from 70% in early years to maintaining this level over subsequent cycles. E-waste collection targets start at 60% by weight in 2023-2024, aiming for 80% by 2028-2029. Plastic packaging follows a swift escalation in recycling requirements, reaching 100% by 2024-2025. Waste tyre and used oil regulations also specify progressive collection and recycling targets, reaching full compliance within a few years. The draft regulations for ELV are under discussion, focusing on commercial and private vehicles with a compliance cycle extending 15 years.



DigiELV launch at IHC, New Delhi

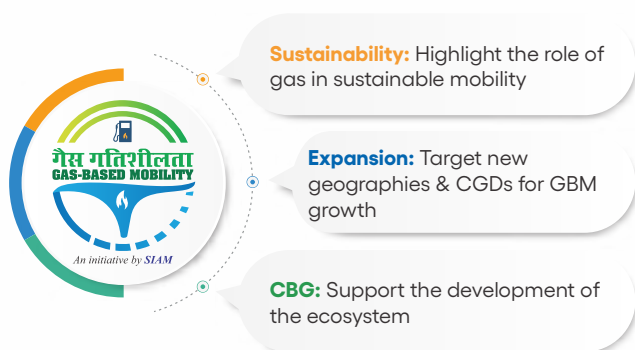
Considering these developments, SIAM recognized the need for a dedicated, long-term strategy to promote fleet modernization and the scrapping of End-of-Life Vehicles. In 2022, SIAM initiated the चक्रीयता (Circularity) campaign with a strategy that focused on highlighting the importance of the circular economy within the automobile sector.

The strategy for FY2023-24 was developed to sustain the progress achieved in FY22-23. This year's comprehensive strategy aims to increase awareness and expand the adoption of the automotive circular economy's elements, including the 3R principles, types of ELV recycling wastes, and Extended Producer Responsibility – EPR. This approach effectively covers all essential sectors within the automotive circular economy. The implementation plan for the strategy involves organizing conferences and seminars to cultivate connections between government and nodal bodies and the industry, enhancing transparency.

In line with the strategy for FY2023-24, SIAM has made three primary submissions in the topic of EPR.

1. SIAM has provided the inputs of the automobile industry for the formulation and finalization of the Used Oil EPR No. G.S.R 677 (E), notification dated Sep 18, 2023.
2. Present Gazette Draft (January 2024) - Modifications from SIAM include setting initial EPR targets at 10% for private and commercial vehicles starting in 2025, with a gradual increase to 30% over ten years. The requirement for a minimum percentage of recycled materials has been removed. A new compliance cycle of 15 years is proposed, along with an annual addition of 3% to the EPR targets.
3. ELV EPR draft (March 2024) - SIAM suggested dilution of targets further, proposing a staggered increase in EPR targets for private and commercial vehicles over a 15-year cycle, beginning with 5% in 2025 and aiming for 15% by 2039. Additional annual EPR targets of 3% are suggested, with these being standalone rather than cumulative.

#### 4. गैस गतिशीलता (Gas-based Mobility)



The journey of gas-based mobility in India began in the late 90s with the introduction of CNG as a cost-effective alternative to petrol. Originating from natural gas, CNG represents a diverse energy source compared to crude oil, benefiting from a

broader base of global trade partners. This diversity proved especially beneficial following the Russia-Ukraine crisis, which unexpectedly increased the availability of natural gas. Such resilience in supply is highly advantageous for countries like India, where energy security is a critical concern. As of 2022, natural gas accounted for approximately 7.73% of India's primary energy supply, with government plans to increase this figure to 15% by 2030. Efforts are currently underway to expand the necessary infrastructure and supply chain to achieve this goal.

Over the years, the perception of CNG has evolved from merely an alternative to petrol to a mainstream fuel option. Major automobile manufacturers have begun to incorporate CNG technology into a broader array of vehicles,



including high-end models. Unlike earlier versions that were limited to basic models, modern CNG vehicles are equipped with advanced features such as entertainment systems, improved safety measures, and more. Today, the market also includes LNG trucks and vehicles compatible with Compressed Biogas – CBG, collectively referred to as gas-based vehicles.

Recognizing the need for advocacy for gas-based mobility, SIAM launched the गैस गतिशीलता (Gas Based

Mobility) campaign. This initiative aims to promote the adoption of gas-based fuels, with a focus on CNG and LNG for passenger vehicles, commercial vehicles, and three-wheelers. This effort aligns with governmental incentives designed to enhance the gas ecosystem, including revised pricing mechanisms, the Unified Tariff Regime, and obligations for CBG blending. For FY23-24, the strategy focused on aligning gas-based mobility (CNG, LNG, CBG) with sustainable mobility to maintain the momentum of CNG vehicle adoption.

## 5. हरित हाइड्रोजन (Hydrogen Mobility)



The Indian automobile sector is actively transitioning to alternative mobility forms, focusing on exploring innovative energy alternatives for the future of transportation. Among these, hydrogen is emerging as a promising solution, especially through the production of green hydrogen. This method employs renewable energy sources for electrolysis, significantly advancing environmentally friendly fuel options for both electric and internal combustion vehicles.

On January 4, 2023, the Union Cabinet approved the National Green Hydrogen Mission, marking a major step toward establishing India as a global hub for the production, use, and export of green hydrogen. Aiming to achieve a production capacity of 5MMT per year, the mission seeks to reduce fossil fuel dependence, promote economic growth, and secure India's leadership in the global green energy sector.

The automobile industry plays a crucial role in the

success of the National Green Hydrogen Mission. SIAM recognizes the hydrogen economy as essential for energy security and an opportunity to enhance domestic technology and manufacturing capabilities. Several SIAM member companies are actively developing fuel cell systems and vehicles, focusing on using hydrogen in internal combustion engines and fuel cell electric vehicles. Efforts are underway to localize fuel cell stack production, with numerous projects in progress and undergoing field trials.

MNRE has led several hydrogen economy projects over the years, building recognition and awareness among industry members that hydrogen could soon become a key energy source for various sectors, including road transportation. This has paved the way for a gradual shift toward fuel-cell electric vehicles as zero tailpipe emission alternatives to battery-operated electric vehicles.

At this nascent stage of the Hydrogen mobility ecosystem, SIAM had the unique opportunity to lead its development by connecting the government, the auto industry, and the Green Hydrogen sector. The strategy for the current year focused on promoting Hydrogen mobility as a viable, sustainable transportation option. This initiative began with the soft launch of the हरित हाइड्रोजन (Hydrogen Mobility) initiative during the World Environment Day conference. A key part of the strategy involved organizing a conference with a session dedicated to Hydrogen Mobility that garnered eminent speakers from the Hydrogen sector.

## Environmental Impact Reduction Projects

### 1. Sukh Da Saah Project



SIAM had been implementing the Sukh Da Saah project to combat stubble burning in the villages of Patiala, Punjab since 2018 in the larger interest of social cause by adopting best agricultural practices for improving air quality and minimizing GHG emissions. The SIAM flagship programme on corporate social responsibility on Sukh Da Saah project finally culminated on highly successful note and the final report spanning from 2018 to 2022 SDS was published. This project, a joint effort between SIAM-SAFE and CII, has yielded remarkable replicable results in combating stubble burning in Punjab.

The project has been immensely successful in achieving a 71% reduction in stubble burning in 2018-19, 81% in 2019-20, 91% in 2020-21, and 81% in 2021-22.

#### Mass-media Blitz Campaign for Promotion of in-situ Crop Residue Management:

The Sukh Da Saah education and awareness TV campaign was launched in 2018 and it continued till 2023, The annual campaign was watched by at least 60 lakh people in Punjab, Haryana, and NCR. In November 2023 alone, 114 video advertisements were broadcasted in the PTC channel. The aim was to spread awareness about halting stubble burning and protecting the environment. The campaigns have generated much-needed awareness and a positive impact on the masses, particularly on the farmers of the region. With the intensive

and comprehensive multi-media campaign, the SIAM, Sukh Da Saah project, has become a household name in rural Punjab.

### 2. Future Prospect Project on Carbonization Technology



Carbonization technology involves converting organic materials, such as biomass or waste, into carbon-rich products through the removal of volatile components. This process typically occurs in the absence of air or with limited oxygen to prevent combustion. The resulting product is known as biochar, with vinegar as a byproduct.

In this regard, SIAM has undertaken an official visit to ITRI, Taiwan during March 2024, which has developed this technology and is promoting it globally. Earlier to this visit, SIAM had submitted a project proposal titled "Demonstration of Carbonization Technology Converting Crop (Rice) Residue into Useful Byproducts (Biochar & Vinegar) and Its Potential for Earning Carbon/Green Credits in Punjab". to the CPCB seeking financial assistance from the EPC fund administered by them.



On March 7, 2024, SIAM presented the proposal to the Technical Group of CPCB for review and assessment. The above-mentioned proposal is under consideration of CPCB.

### Sub-groups On Sustainable Mobility Topics

#### 1. Sub-Group on Diesel:

While examining the matter in the backdrop of a ban on diesel-based three-wheelers and tempos by some state governments in compliance with the NGT order, the Sustainable Mobility Group found that this NGT order puts the diesel powertrain at a disadvantageous position vis-à-vis other powertrains, ignoring the improvements and positives of diesel technology in recent years. Further, in a recent meeting, the Ministry of Petroleum & Natural Gas (MoP&NG) emphasized the need to eliminate diesel and promote low-carbon alternative fuels for cleaner mobility. On one hand, there is an embargo on the mobility of public utility vehicles in some states, particularly three-wheelers and tempos, while on the other, the mass public transport system still relies heavily on diesel fleets, such as State Transport Undertakings (STUs), government vehicles, and municipal vehicles. In view of the above, the Sustainable Mobility Group decided to constitute a Sub-Group in June 2023 on Diesel with the objective of defining the rightful place of diesel based on quality and performance among the existing powertrain matrices.

The Sub-group has been tasked with analyzing existing documents such as white papers and research on the emission convergence of diesel and gasoline in BS-VI compliant vehicles. They will review the materials, provide scientific recommendations on tailpipe emissions differences between diesel and gasoline vehicles, include additional experts for further insights. The Sub-group had in depth deliberations and the report of the sub group is being finalized.

#### 2. Sub-Group on Framework & Guidelines for Circular Economy in the Automobile Sector:

The Sub-Group on Framework & Guidelines for Circular Economy was constituted on June 22, 2023. The objective of the Sub-Group is to envisage a broad framework and guidelines on ELV recycling and the circular economy, incorporating perspectives from OEMs.

The Sub-group's mandate is to develop framework guidelines for the automotive sector, aiming on resource efficiency, waste reduction, and sustainable practices to foster a circular economy by leveraging the EPR regime. They are to outline key principles such as material circularity and sustainability, and connect focus areas like product design and waste management.

The Sub-Group on 'Framework & Guidelines for Circular Economy' in the Automobile Sector held two meetings during the year 2023-24 and intensively deliberated on various aspects of the circular economy. The draft 'Framework & Guidelines for Circular Economy' is being created in preparation for the report.

#### 3. Sub-Group on WTW GHG Assessment:

The Well-to-Wheel GHG Assessment of Various Futuristic Powertrains was established on June 22, 2023, under the overarching Sustainable Mobility Group. The objective of the Sub-Group is to minimize GHG emissions from the automotive sector, facilitating carbon neutrality by 2050. The well-to-wheel GHG emissions assessment may entail an LCA-based emission analysis, comparative evaluation, emission mitigation strategies, stakeholder engagement, etc.

The Sub-group's tasks include outlining the scope of the assessment, detailing methodologies for evaluating WTW GHG emissions that incorporate data collection methods, assumptions, emission factors, identification of reliable data sources and



establishing data validation protocols. Furthermore, the group will assess the impact of various policy measures and technological innovations on GHG emissions, and prepare the final assessment report.

The Sub-Group has held 8 meetings so far and deliberated intensively various aspects of WTW GHG emissions. The draft report is under finalization.

## Stakeholder Consultations on Sustainable Mobility Topics

### 1. Update on Procedure for Fuel Monitoring and market Diesel Exhaust Fluid (DEF) monitoring

During the 66<sup>th</sup> SCOE meeting on April 4, 2024, it was informed that the Ministry of Chemicals and Fertilizers had published the "Diesel Engines – NOx Reduction Agent AUS 32 (Quality Control) Order, 2024" under S.O. 922(E) on February 26, 2024. SIAM raised concerns regarding certain provisions, particularly the

prohibition on manufacturing, sale, distribution, and certification. It was suggested that the system of random fuel sampling used in Europe be adopted. The Ministry of Petroleum and Natural Gas had agreed that AUS 32 would be monitored at the retail level.

## Organization of Thematic Events

	6	<b>Conferences</b> SAFE Annual Convention, World Environment Day, World Biofuel Day, ISTEM, GEMS, ICSC
	4	<b>Workshops</b> SAFE Technology, Extended Producer Responsibility, Persistent Organic Pollutants, EV skill gap
	3	<b>Papers</b> Gas Mobility, Road Safety, Biofuels
	3	<b>Exhibitions</b> Decarbonization, Circularity, Suncoast Safe
	1	<b>Rally</b> Green Plains EV Rally
	10+	<b>New Stakeholder engagement</b> Charging infra, Battery manufacturers, RVSF etc.
	10+	<b>Stakeholder consultation</b> Ministerial stakeholder consultation (MHL, MoRTH, MoEFCC, MNRE, MoPNG)



India on Path of Sustainable Mobility



## October 2023 | Green Plate EV Rally



The 'Green Plate EV Rally' hosted by the SIAM was a strategic event held at Pragati Maidan, New Delhi on October 18, 2023, aimed at increasing consumer awareness about Electric Vehicles. This rally was organized in collaboration with the Ministry of

Heavy Industries and various leading member OEMs. The event was graced by several notable dignitaries, including the Chief Guest, Dr. Mahendra Nath Pandey, the then Hon'ble Union Minister of Heavy Industries. He officially started the event by flagging off the rally. More than 100 electric vehicles participated, including two-wheelers, three-wheelers, cars, and buses. The rally's main goal was to increase public awareness about the benefits of vehicle electrification and to build confidence among potential electric vehicle buyers. Starting and concluding at Pragati Maidan, the rally was a visible and impactful demonstration of the move towards more sustainable and environmentally friendly transportation options.





**December 2023 | Safe Mobility Event with 9<sup>th</sup> Inter-School Competition on 'Road Safety'**

With the aim of fostering secure mobility nationwide at the grassroots level, SIAM hosted the 9<sup>th</sup> Inter-School Competition on 'Road Safety' from December 7<sup>th</sup> to December 8<sup>th</sup>, 2023. In collaboration with Gyan Mandir Public School, Naraina Vihar, New Delhi, this event was part of SIAM's Road Safety Initiative, known as सुरक्षित सफ़र (SAFE JOURNEY). The two-day competition engaged students in various activities designed to raise awareness about issues related to 'Safe Mobility.'

The annual inter-school competition on Safe Mobility serves as an attempt to sensitize children to various issues related to road safety and to raise awareness about their responsibility towards themselves, their families, society, and the country at large. The event offers children the chance to explore and showcase their imagination and creativity, further enhancing their critical thinking skills to ensure safer mobility on roads.

The program comprised various competitions

centered around the theme of SDG goal 3.6 – to reduce road injuries and deaths. Students from all age groups were involved in several activities, including 'E-Poster making,' 'Jingle,' 'Logo Designing,' 'Presentation on road safety,' 'Brochure Designing,' 'Movie Making,' 'Photography,' etc.

Approximately 1000 students from various schools participated in the inter-school competition. The activities were judged by experts in their respective fields, which ensured unbiased and transparent results.

The inter-school competition reflects SIAM's commitment to advancing safer mobility and fostering a sense of responsibility among children to enhance the safety of Indian roads for all. Over time, SIAM has actively partnered with governments, corporations, and diverse stakeholders to promote the importance of Safe Mobility across the country.



## April 2024 | Workshop on Extended Producer Responsibility Regime: An Innovative Policy Tool for Fostering a Sustainable Circular Economy in the Automotive Industry



Against the backdrop of the announcement of the draft Extended Producer Responsibility (EPR) regulations for End-of-Life-Vehicles, SIAM collaborated with the Maharashtra Pollution Control Board to host a Circularity Workshop on April 8, 2024, in Mumbai. The event, part of SIAM's चक्रीयता (Circularity) initiative, focused on its role in advancing a sustainable circular economy in the automotive industry.

The workshop aimed to foster discussions on regime of EPR's benefits and challenges, of

recycling, waste management, and sustainability in the automotive sector. The workshop broadly focused on the regulations, implementation strategies, R&D, and innovations for managing used oil and plastic, tyre, battery, and e-waste. Overall, the workshop successfully showcased SIAM's initiatives in addressing the ELV EPR norms in the auto industry. The event facilitated a rich exchange of ideas and, best practices between the government and industry stakeholders, supporting India's path towards sustainable mobility.

## June 2024 | World Environment Day Activities



The Society for Automotive Fitness & Environment – SAFE, a pioneering Road and Environmental safety initiative under SIAM, spearheaded the celebrations for World Environment Day 2024. This momentous occasion featured an array of environmentally responsible activities executed in collaboration with automobile dealers and service stations throughout India.

This year's World Environment Day theme—"Land Restoration, Desertification, and Drought Resilience"—aptly aligned with SIAM's commitment to sustainability. In support of this theme, SIAM organized extensive mass awareness campaigns designed to promote sustainable development within the automotive industry. As part of these initiatives, SIAM in collaboration with members and their dealerships and service stations conducted complimentary, day-long Pollution Under Control (PUC) check-ups for vehicles and distributed free PUC certificates at authorized centres. Furthermore, SIAM handed out free saplings to customers, to highlight the value of

environmental conservation and encourage the adoption of eco-friendly practices.

The event served as an opportunity to reinforce SIAM's commitment to environmental preservation and to advance sustainability in the automotive sector. These initiatives are part of SIAM's broader effort to encourage eco-friendly practices and increase public awareness on significant environmental challenges. By these means, SIAM continues to support an environmentally conscious approach within the industry, aiming for a more sustainable future.





## June 2024 | Observing World Environment Day | 4th International Conference on Integrating Mission LiFE in the Automobile Industry: Transitioning Towards Viksit Bharat



*Launch of SIAM Speaks at 4<sup>th</sup> International Conference on Integrating Mission LiFE in the Automobile Industry: Transitioning Towards Viksit Bharat*

On 5<sup>th</sup> June 2024, SIAM hosted an international conference titled "Integrating Mission LiFE in the Automobile Industry: Transitioning Towards Viksit Bharat" in New Delhi. This event was aligned with World Environment Day 2024 celebrations and focused on promoting sustainable mobility.

The conference featured key speakers from the mobility ecosystem as well as experts engaged in environmental preservation activities including Chief Guest Shri Tarun Kapoor, Advisor to the Prime Minister, Pankaj Jain, Secretary of the Union Ministry of Petroleum and Natural Gas, and representatives from Brazil and the Indian automotive sector. Discussions centered on advancing India's carbon neutrality goal by 2070, with a focus on Electric Vehicles, Ethanol and other sustainable fuel options. The conference is comprised of several thematic sessions discussing environmental preservation, decarbonization, and the role of new technologies in promoting sustainable mobility.

During the conference, SIAM also launched '**SIAM Speaks**', an initiative aimed at disseminating a series of educational videos on the Indian automobile industry. Overall, the conference served as a platform for dialogue on policy, innovation, and



industry collaboration towards achieving greener transportation solutions, marking a significant step in SIAM's leadership in fostering a sustainable future in mobility. The event highlighted SIAM's commitment to integrating sustainability in all facets of vehicle lifecycle and operational practices.





## June 2024 | Workshop on Status of Persistent Organic Pollutants Management and their Sustainable Alternatives in the Indian Automotive Sector



As a part of the चक्रीयता (Circularity) initiative, SIAM collaborated with the Ministry of Environment, Forest and Climate Change (MOEFCC) and the National Environmental Engineering Research Institute (NEERI) to host a workshop centered on the issue of Persistent Organic Pollutants (POPs) in the automotive industry. This workshop aimed to address the growing concerns associated with the use of toxic chemicals, particularly those used as flame retardants in various automobile components like seats, paints, and dashboards.

Persistent Organic Pollutants are notorious for their durability and resistance to natural degradation, making them a significant threat to environmental and human health. These chemicals tend to release toxic fumes, especially under heat stress, such as during hot sunny days, which are then inhaled by humans, posing serious health risks. An essential aspect of handling POPs is their disposal method; these chemicals must not be recycled due to their hazardous nature and instead require incineration to be safely eliminated. However, it was highlighted during the workshop that the current practices in RVSFs do not align with these safety measures, raising concerns about the effectiveness and enforcement of existing protocols.

The international response to the dangers posed by POPs was formalized through the Stockholm Convention in 2001, which aims to curtail and eventually eliminate the use of these dangerous substances. The convention regularly updates its list of controlled chemicals, expanding the scope of its regulatory framework. Despite these efforts, challenges persist at the national level. For instance, in India, while seven POPs originally listed were banned in 2019, vehicles manufactured prior to this

date still contain these substances, and the total quantity present in the environment remains unclear. NEERI's recent research shed some light on this issue by determining the concentration of several dangerous POPs in parts of ELVs, particularly those that are over 15 years old.

A major concern articulated by SIAM's OEM members during the workshop is the complexity of modern vehicle manufacturing, which involves a multitude of components, some of which may still contain POPs. The challenge is exacerbated by the continuous updating of the restricted chemicals list, making it difficult for manufacturers to verify the absence of new POPs in the parts supplied by Tier 1 suppliers. Although suppliers are required to declare that their components are free of these hazardous chemicals, this verification process is both inefficient and time-consuming. In contrast, developed countries have adopted more robust systems like the International Material Data System (IMDS), which tracks the use of substances in automotive components more effectively.

The lack of comprehensive data on the presence of POPs in vehicle components hampers the ability of the MOEFCC to formulate and implement clear guidelines or regulations for the phased elimination of these substances from the automotive sector. In response to this data gap, SIAM has proposed a gradual phase-out of these chemicals, starting in 2024 and continuing through 2032 and possibly beyond.

The workshop concluded with several action items designed to address these challenges associated with POPs in automotive sector through collaborative efforts.



## July 2024 | Workshop on Charging Ahead – Empowering an EV-Ready Workforce in India's Automobile Sector



SIAM organized a significant workshop titled "Charging Ahead – Empowering an EV-Ready Workforce in India's Automobile Sector" in New Delhi on July 16, 2024. This event was part of SIAM's विद्युतीकरण (Electrification) initiative aimed at addressing the skill gaps within India's EV sector.

The Workshop was graced by the newly appointed Hon'ble Union Minister of Heavy Industries Shri H.D. Kumaraswamy, who joined alongside other prominent government officials and industry leaders. The workshop highlighted the growing need for a skilled workforce to support the expanding EV market in India.

The "SIAM EV Talent Landscape in India" report was launched during the event, providing a comprehensive blueprint to bridge the skills gap by 2030. The report included identifying 40 technical

competencies essential for the industry, ranging from EV battery technology to after-sales services.

Speakers emphasized the importance of training and upskilling to meet the demands of a rapidly evolving automotive market, with a commitment from the government to support these initiatives. The discussions also revolved around creating a sustainable and skilled workforce by integrating EV technology courses and certification programs into academic curricula and also fostering innovation, and achieving India's ambitious EV targets.

The workshop concluded with a strong agreement on the need for continuous collaboration among all stakeholders and towards bridging the skill gaps the Indian automotive industry is facing today, to drive the growth and success of the EV sector in India.

### Key Events at Bharat Mobility Global Expo 2024

Over the past two years, SIAM has organized internationally recognized events under these initiatives. The Auto Expo – The Motor Show 2023 featured the first edition of the International Symposium for Thriving Eco-Energy in Mobility (ISTEM), focusing on Biofuels, the second edition of the Global Electrification Mobility Summit (GEMS) on Electrification, and the first edition of the International Conference on Sustainable Circularity (ICSC), concentrating on Circularity. Additionally, SIAM organized an Ethanol pavilion and a Surakshit Safar pavilion to showcase advancements in these areas.

To broaden the impact of these initiatives, SIAM revisited these events in an enhanced format during the Bharat Mobility Global Expo 2024. This included the second edition of ISTEM, emphasizing Biofuels, Gas, & Hydrogen; the third edition of GEMS, focusing on Electrification; and the second edition of ICSC, highlighting Circularity. Furthermore, SIAM introduced a Sustainable Mobility Zone featuring Decarbonization & Circularity pavilions and the second instalment of the Surakshit Safar pavilion as a standalone structure.



## 2<sup>nd</sup> International Symposium for Thriving Eco-Energy in Mobility (ISTEM)



SIAM organized the 2<sup>nd</sup> edition of the International Symposium for Thriving Eco-Energy in Mobility (ISTEM) on February 1<sup>st</sup>, 2024 held during the Bharat Mobility Global Expo 2024 at Pragati Maidan, New Delhi, this event is part of SIAM's ongoing efforts to promote alternative fuels. These initiatives include जैविक पहल (Bio Initiative), गैस गतिशीलता (Gas Based Mobility), and हरित हाइड्रोजन (Hydrogen Mobility). The event attracted various stakeholders from the alternate fuel economy, including OEMs, oil marketing companies, gas distributors, ethanol producers, and hydrogen powertrain specialists.

Themed "Nature-Based Solutions: Road to Decarbonization," the conference aimed to explore and promote nature-based solutions for mobility.

The conference began with a focus on sustainable mobility solutions and the significant role of biofuels in decarbonizing economies. Discussions covered the launch of the Global Biofuel Alliance, the benefits of biofuels for farmers, and the strategic collaborations for promoting ethanol blending in transportation.

The event also addressed the advancement of hydrogen as a clean energy source, with insights from industry leaders about integrating hydrogen into India's energy framework. The role of biogas and LNG as cost-effective, low-carbon alternatives was explored, highlighting their potential in supporting the natural gas ecosystem and contributing to rural economic development.

Overall, the conference stressed the collaborative efforts required from all stakeholders to achieve decarbonization goals, emphasizing the multi-dimensional impacts on the economy, environment, and energy security.





### 3<sup>rd</sup> Global Electrification Mobility Summit (GEMS)



SIAM held the 3<sup>rd</sup> Global Electrification Mobility Summit (GEMS) at the Bharat Mobility Global Expo 2024 in New Delhi on February 2<sup>nd</sup>, 2024. The event took place at Pragati Maidan and was themed "विद्युतीकरण (Electrification): Electrifying India's Journey towards Sustainable Mobility." This summit served as a platform for dialogue among government officials, industry leaders, and other stakeholders on the electrification of transportation in India.

The primary goal of the GEMS was to advance the dialogue on EVs and align efforts towards reducing emissions in the transportation sector. This aligns with India's broader sustainability objectives and commitments to reduce its emissions intensity relative to GDP. The summit aimed to catalyze discussions on policy, technology, and industry collaboration, fostering a shared vision for the future of electrification in India.

The summit was participated by Senior officials from the government, Industry leader, and senior subject matter experts who provided insights into the current state and prospects of EVs in India. Sessions included a panel discussion of CXOs

where the importance of collaborative efforts in technology development, supply chain management, and policy frameworks to support the EV market were discussed. Discussions also focused on standardizing charging infrastructure to enhance user accessibility and integration as infrastructure is one of the key enabler for the wider adoption of EV.

The event concluded with a collective acknowledgment of the challenges and opportunities in transitioning to electric mobility, setting a proactive agenda for achieving India's net-zero emissions target by 2070 through concerted action in the automotive sector.



## 2<sup>nd</sup> International Conference on Sustainable Circularity (ICSC)



On February 3<sup>rd</sup>, 2024, in New Delhi, SIAM organized the 2<sup>nd</sup> edition of the International Conference on Sustainable Circularity (ICSC) as part of the Bharat Mobility Global Expo 2024. SIAM, serving as the apex body for the automotive industry, has been at the forefront of integrating circular economy principles into the sector. This year's conference, under the banner of the चक्रीयता (Circularity) initiative, highlighted the theme "Towards Nature Positive Pathway: Embracing Circular Economies with Low Carbon Strategies."

The objective of the conference was to advance discussions on circular economy practices within the automotive industry, with a focus on transitioning to low-carbon and sustainable operations. The event brought together key industry stakeholders, government representatives, and experts to deliberate on effective strategies for fostering a nature-positive circular economy in India.

The conference kicked off with the unveiling of the

context paper on "Gas Based Mobility: Fuelling India's Economy" context paper by the Hon'ble Chief Guest, Mr. Arvind Nautiyal, Joint Secretary & Member Secretary, Commission for Air Quality Management. The paper discussed the role of CBG in sustainable mobility.

Discussions throughout the conference emphasized the importance of scrapping older vehicles, incentives for vehicle recycling, and hazardous waste management as critical components of a circular economy. Presentations covered various themes, including Extended Producer Responsibility (EPR), the role of recycling in sustainable mobility, and innovative recycling technologies for End-of-Life Vehicles.

The conference concluded with a reaffirmation of SIAM's commitment to promoting circularity in the automotive sector, highlighting the productive discussions and the exchange of strategies geared towards sustainable mobility and resource conservation.



## सुरक्षित सफर (Safe Journey) Pavilion

SIAM organized the सुरक्षित सफर (Safe Journey) Pavilion at the Bharat Mobility Global Expo 2024, held from February 1st to 3rd at Pragati Maidan, New Delhi. This event followed the successful installation of a similar pavilion during the Auto Expo 2023. The initiative focused on increasing road safety awareness amidst escalating road accident rates in India. This event drew participation from key industry stakeholders, including prominent OEM leaders like Honda Motorcycle & Scooter India, Ashok Leyland, Maruti Suzuki, Tata Motors, and Eicher Motors, alongside several renowned road safety organizations such as GARC, Natrax, ARAI, etc. The esteemed Union Minister of Commerce & Industry, Shri Piyush Goyal, also attended, lauding SIAM's efforts in aligning with the government's objectives to enhance road safety.



The Front Gate symbolized Enforcement, emphasizing the role of law enforcement; the Back Gate highlighted Emergency Care, focusing on rapid medical response; the Left Gate showcased Engineering, highlighting vehicle and infrastructure safety innovations; and the Right Gate emphasized



The pavilion was strategically designed around the concept of the 4Es of road safety: Education, Enforcement, Engineering, and Emergency Care, each represented through unique thematic gates.

Education, promoting safety knowledge among road users.

The pavilion featured four educational panels focused on various aspects of road safety:





- General Road Safety Education: Targeted at broadening public knowledge on safe road behaviors.
- School Engagement: Programs designed to teach school children about traffic rules and safe road practices.
- Driver Education: Highlighting standardized driver training programs across India.
- Public Awareness: Showcasing events and campaigns aimed at educating the wider community on road safety.

The Engineering panels provided insights into:

- Road and Vehicular Engineering: Comparisons of past and present safety infrastructures and vehicle designs.
- Safety Standards and Testing: Discussion on Bharat NCAP and other safety tests.
- Advanced Safety Technologies: Showcasing ADAS and other technological advancements in road safety.

Enforcement-themed panels covered:

- Role of Traffic Personnel: Importance of traffic police and law enforcement in managing road safety.

- Technological Advancements: Use of smart surveillance and automated traffic management systems.
- Compliance with Traffic Rules: Importance of adhering to road signs and regular vehicle maintenance.

Panels under Emergency Care included:

- First Response Actions: Educating the public on immediate actions post-accidents and promoting 'The Good Samaritan Law'.
- Golden Hour Importance: Training and awareness on critical first aid during the golden hour following accidents.
- Professional Emergency Response: Highlighting the role of Emergency Response Teams and Trauma Care Facilities.

The pavilion also hosted a range of interactive activities like simulators, competitions, street plays, CPR training sessions, and health check-ups. A notable event was the "Run for Road Safety," which saw participation from over 1200 school children, aimed at fostering responsible road behavior.

Overall, the सुरक्षित सफर Pavilion served as a comprehensive platform for educating and engaging visitors on the various facets of road safety, combining educational efforts with practical demonstrations and interactive activities.

## Decarbonization Pavilion



SIAM actively supports the decarbonization of India's automotive industry. Collaborating with government entities and various stakeholders in the ecosystem, SIAM promotes the use of alternative fuels such as biofuels, CNG, and hydrogen. These efforts align with the government's vision of sustainable mobility and involve fostering discussions on the specific needs associated with these fuels. To represent these initiatives, SIAM established the Decarbonization Pavilion at the Bharat Mobility Global Expo 2024 event. The design of the pavilion was thematic, emphasizing the importance of various alternative fuels equally. This

approach ensured that attendees received a comprehensive overview of each fuel type without bias.

The exhibits within the Decarbonization Pavilion were structured to educate visitors on several fronts. The panels provided a historical perspective on the development of alternative fuel technologies, evolution within the Indian context, the benefits and progress made locally and the upcoming developments and future plans in the realm of alternative fuels.





## Circularity Pavilion



The Circularity Pavilion was jointly organized by SIAM and the Material Recycling Association of India (MRAI), themed "Nature Positive Pathways for LiFE." This pavilion was developed as a part of India's commitment to achieving net-zero emissions by 2070, as announced by Prime Minister at COP 26 in 2021. It also aligned with the Government of India's efforts and the Indian automotive industry's move towards sustainability and circularity. Central to the initiative was the automotive industry's drive to integrate circularity across its value chain, resonating with PM's "Lifestyle for Environment (LiFE)" initiative which promotes sustainable and circular living in balance with nature.

The design of the Circularity Pavilion integrates theme panels strategically placed alongside exhibitor stalls, correlating directly with relevant waste streams. This setup was intended to provide visitors with a contextual and in-depth understanding of the challenges and solutions associated with each waste stream, promoting a holistic educational experience. The pavilion was set up to deconstruct the end-of-life journey of vehicles into categories such as ELV, used oil, batteries, tires, e-waste, and plastic, emphasizing the need for systematic recycling processes.



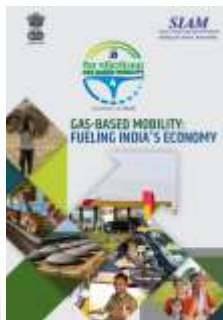


## Context Papers on Key Themes of Sustainability



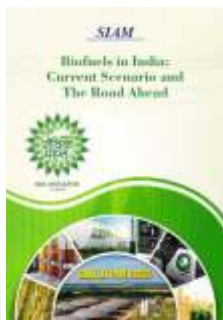
### Context Paper on 'Analyzing India's imperatives for Road Safety'

The Context Paper on 'Analyzing India's imperatives for Road Safety' was released by the Chief Guest Hon'ble Transport Minister of the Government of Assam, Shri Parimal Suklabaidya at the SAFE Annual Convention held on 26<sup>th</sup> September 2023. The context paper highlights the road safety standards and 4E road safety initiatives taken up in the states of Tamil Nadu, Gujarat, Delhi, Maharashtra, and Karnataka for learning and assimilation.



### Context Paper on 'Gas-Based Mobility: Fueling India's Economy'

The context paper on 'Gas-Based Mobility: Fueling India's Economy' was unveiled by the Chief Guest, Shri. Arvind Nautiyal, Member Secretary CAQM, at the International Conference on Sustainable Circularity on 3<sup>rd</sup> February 2024 at the Bharat Mobility Global Expo 2024. The context paper puts focus on the role of CBG in gas-based mobility and on the imperatives for transitioning into a gas-based economy.



### Context Paper on 'Biofuels in India: Current Scenario and the Road Ahead'

The context paper on 'Biofuels in India: Current Scenario in India and The Road Ahead' was released during the 3<sup>rd</sup> International Conference on World Biofuel Day 2024. The context paper highlights the role of Biofuels in sustainable mobility, the current scenario, and the way forward for Biofuels in India

## Leveraging Social Media

Social media has revolutionized the way people and organizations communicate with each other. Social media has been transformed into a vital communication channel, bridging the gap between organizations and the public by facilitating instant information sharing, enhancing brand visibility, and engaging both existing and potential stakeholders in continuous dialogue. Various organizations in India's automotive sector have harnessed social media to expand their reach and influence. By crafting engaging content and interactive campaigns, companies have enhanced customer engagement and fostered a sense of community.

### SIAM's Social Media Journey

SIAM has maintained an active social media presence since 2022. However, it was only in the past year, that SIAM completely revamped its social media strategy to create focused campaigns on all pillars of sustainable mobility, reinforcing the activities and events conducted under the advocacy initiatives. Since then SIAM has actively utilized social media to promote sustainable mobility by expanding the scope beyond the confines of the industry to reach out to new and more stakeholders. The efficacy of SIAM's advocacy has been improving as an outcome.

## Leveraging Social Media

Social media has revolutionized the way people and organizations communicate with each other. Social media has been transformed into a vital communication channel, bridging the gap between organizations and the public by facilitating instant information sharing, enhancing brand visibility, and engaging both existing and potential stakeholders in continuous dialogue. Various organizations in India's automotive sector have harnessed social media to expand their reach and influence. By crafting engaging content and interactive campaigns, companies have enhanced customer engagement and fostered a sense of community.

## SIAM's Social Media Journey

SIAM has maintained an active social media presence since 2022. However, it was only in the past year, that SIAM completely revamped its social media strategy to create focused campaigns on all pillars of sustainable mobility, reinforcing the activities and events conducted under the advocacy initiatives. Since then SIAM has actively utilized social media to promote sustainable mobility by expanding the scope beyond the confines of the industry to reach out to new and more stakeholders. The efficacy of SIAM's advocacy has been improving as an outcome.

## Top Posts in LinkedIn



### SIAM SOCIAL MEDIA FOLLOWERS (AT THE PRESENT)



The result has been a massive growth in the social media following of SIAM especially in LinkedIn

which has firmly cemented SIAM as an influential entity among the corporate workforce.

## SIAM Speaks

SIAM launched its Green Tea talk show series in 2022, aimed at having in-depth discussions with industry leaders on pertinent topics related to sustainable mobility. This initiative was appreciated by the members of the secretariat. Banking on the early traction, SIAM decided to broad-base this series to make it not just accessible to the general public, but also disseminate this content simply and

concisely. The series matured over the year and relaunched itself as SIAM Speaks.

Through initiatives like SIAM Speaks, SIAM has started disseminating insights from industry leaders about the future of mobility and its sustainability. By posting these episodes on SIAM's YouTube channel and sharing them across various social platforms, SIAM is ensuring that the information reaches a broad audience, maximizing impact and engaging viewers in meaningful discussions about

advancements and sustainable practices in the automotive sector.

Since its inception, SIAM Speaks has successfully aired five episodes, each receiving substantial acclaim from the industry and general viewers alike. The series has contributed to raising awareness about sustainable mobility, and shed light on the potential transformations within the automotive sector.





## International Cooperation

The Group deliberated on International Cooperation and understanding the prerequisites for strengthening the technological base and attaining national & international goals of Sustainable Mobility. SIAM has been actively involved in the following global cooperation initiatives:

- (i) **SIAM and Global Biofuel Alliance:** The Global Biofuel Alliance (GBA), launched in 2023, is an initiative led by India aimed at uniting governments, international organizations, and the industry to promote the adoption of biofuels. This alliance seeks to enhance India's global stature by representing the interests of the global South and engaging countries that have not yet started their biofuels programs. India and Brazil, leading nations in biofuel mobility, have further strengthened their collaboration through a MoU signed in 2022 between SIAM and the Brazilian Sugarcane Industry Association (UNICA). This MoU supports the creation of a Virtual Center of Excellence to advance the use of ethanol and its blends in the automotive sector, thereby supporting the goals of the GBA.
- (ii) **SIAM and JAMA:** In 2014, SIAM and the Japan Automobile Manufacturers Association (JAMA) signed a MoU to enhance cooperation in various sectors. This partnership focuses on collaboration between top research institutions and the private sectors of both countries, aligned with their respective energy transition plans. Industry Delegation of 35 plus members led by President SIAM visited Tokyo Japan to participate in the annual SIAM JAMA Meetings held in October 2023 with a visit to the Japan Mobility Show. These meetings brought together member companies from both associations and featured discussions on a range of technical



subjects such as regulations, emissions, two-wheelers, and fuels. Participants from both countries shared updates on the latest developments within their respective automotive sectors.



- (iii) **SIAM and USGC:** SIAM has maintained a robust partnership with the U.S. Grains Council (USGC) since 2019. Both organizations became key participants in the US-India Biofuels Taskforce in 2021, which focused on expanding ethanol usage and production in India. In 2023, SIAM and USGC formalized their partnership by signing an MoU. This MoU aims to foster collaborative efforts on several fronts: enhancing awareness of ethanol's benefits as a fuel and octane booster, establishing baseline gasoline standards and the regulatory frameworks necessary for industry growth, and sharing best practices for integrating higher ethanol blends.



- (iv) **SIAM and UNEP:** In 2019, India introduced the India Cooling Action Plan (ICAP), which outlined strategies to address the environmental concerns that the United Nations Environment Programme (UNEP) is currently raising. India has been at the forefront globally in adopting technologies that do not deplete the ozone layer and have a low Global Warming Potential (GWP), actively phasing out Ozone Depleting Substances (ODS) in manufacturing. SIAM is closely involved with the ICAP, serving on both the Empowered Steering Committee (ESC) and the Steering Committee. This involvement ensures that the automobile sector aligns with national climate goals by adopting more efficient cooling technologies and reducing reliance on high-GWP refrigerants. The 46<sup>th</sup> meeting of the ESC and the 6<sup>th</sup> meeting of the ICAP Steering Committee in August, 2024, will further these objectives.
- (v) **SIAM and Global South Alliance:** According to UNCTAD, the Global South includes regions such as Africa, Latin America and the Caribbean, Asia (excluding Israel, Japan, and South Korea), and Oceania (excluding Australia and New Zealand). Historically referred to as the "Third World" or developing nations, these areas now play a crucial role in the two-wheeler market.

The Global South Alliance – GSA was established to address the disparity in two-wheeler production and usage across the world. In 2023, Global South countries accounted for 94% of global two-wheeler sales, compared to just 6% in Global North countries. Key regions like India, ASEAN, and Brazil make up 54% of global motorcycle sales. Factors such as high traffic congestion, price sensitivity, short travel distances, and multiple use cases make two-wheelers particularly vital in these areas. The unique operating conditions and affordability constraints in these areas are often not appreciated by the developed world.

Given the dominant usage by the Global South and affordability constraints in these countries, this alliance must take a key role in regulation formulation because such regulations can have an impact on the product price and can thus impact the mobility options for the majority of the world. Thus there is a need for the countries in this alliance to come together to ensure a greater participation in regulation formulation, especially in the areas of sustainable mobility, and thus the Global South Alliance is needed to

provide a platform for collaboration and more concerted action.

SIAM has been actively involved in shaping the trajectory of the 2W industry within the Global South. As a representative of one of the largest markets for motorcycles and scooters, SIAM's participation in the GSA is crucial, especially in the 2W market as the opportunities are immense. In March 2024, SIAM was invited as a special invitee to the GSA meeting held on the sidelines of the Federation of Asian Motorcycle Industries (FAMI) General Assembly in Taiwan. The meeting agenda focused on several critical aspects pertinent to the 2W industry:

- **Road Safety:** Discussions aimed at enhancing safety measures for 2W users through improved vehicle standards and better traffic regulations.
- **Electrification:** With an increasing focus on sustainability, the shift towards electric 2-wheelers was a significant theme, discussing the infrastructure and policy support required to facilitate this transition.
- **Recycling and Biofuels:** Exploring sustainable practices in the manufacturing and disposal phases of 2W lifecycle, including the use of biofuels.

During the meeting, representatives from various countries including those from JAMA (Japan), TAI (Taiwan), Abraciclo (Brazil), VAMM (Vietnam), and MDPPA (Philippines) shared their national priorities, challenges, and opportunities in the 2W sector.

SIAM's proactive participation in the Global South Alliance is a reflection of its commitment to advancing the 2-wheeler industry not just in India but across the developing world. By focusing on collaboration and innovation in areas such as road safety, electrification, and sustainability, SIAM and its partners in the GSA are setting the stage for a transformative shift in how 2-wheelers are perceived and utilized globally.



## Advocacy Documents

The SIAM Secretariat has prepared several advocacy documents aimed at promoting sustainable mobility. These include (i) Declaration on the Use of Hazardous Materials in the Automotive Sector, (ii) Declaration on Cleaner

Mobility 2020 & Beyond, and (iii) the SIAM Comprehensive Roadmap for Sustainable Mobility. These documents are going to be disseminated to all OEMs and other relevant stakeholders.



### Annual Report Card (2023-24)

Deliverables	Measures	Owner	Stakeholders
Advocacy Initiatives for Pillars of Sustainable Mobility	<ul style="list-style-type: none"> <li>Broad-basing the advocacy strategy for the year 2023-24 for the initiatives जैविक पहल (Bio-Initiative), विद्युतीकरण (Electrification), गैस गतिशीलता (Gas-based Mobility), हरित हाइड्रोजन (Hydrogen Mobility), चक्रीयता (Circularity), सुरक्षित सफर (Safe Journey)</li> </ul>	SIAM Sustainable Mobility Group	Government, State, Government, Membership, Subject matter experts, R&D
Environmental Impact Reduction Projects	<ul style="list-style-type: none"> <li>Publication of the final report of the entire project in 2023-24 for dissemination amongst various stakeholders.</li> <li>Visit of the delegation from SIAM, including key SIAM representatives and partners from NRI Consulting, Chairman, Punjab Pollution Control Board, and the Indian Paryavaran Sahayak Foundation, to ITRI Taiwan to explore the functioning of the carbonization technology.</li> <li>A proposal on carbonization technology was submitted to the Technical Group of CPCB in January 2024 for financial support.</li> </ul>		Government, State Government Farmers, Membership, Agricultural Institutes, Universities etc.



Sub-groups On Sustainable Mobility Topics	<ul style="list-style-type: none"> <li>Constitution of a Sub-Group on Diesel in June 2023 on Diesel with the objective of defining the rightful place of diesel based on quality and performance among the existing powertrain matrices.</li> <li>Meeting of the Sub-Group on 'Well-to-Wheel (WTW): A total of 8 meetings were held during the period from July 2023 to July 2024</li> <li>Preparation of the draft 'Framework &amp; Guidelines for Circular Economy' by the Sub-Group on 'Framework &amp; Guidelines for Circular Economy' in the Automobile Sector, which was a result of two meetings in 2023-24 and intensive deliberations on various aspects of the circular economy.</li> </ul>		Government, Regulatory bodies, R&D institutions, other stakeholders
Organization of Thematic Events related to Sustainable Mobility	<ul style="list-style-type: none"> <li>SAFE Annual Convention 2023 in Sep 2023</li> <li>SAFE Technology Workshop in Sep 2023</li> <li>Green Plate EV Rally in Oct 2023</li> <li>Safe Mobility Event in Dec 2023</li> <li>Workshop on Extended Producer Responsibility Regime in Apr 2024</li> <li>World Environment Day Activities in Jun 2024</li> <li>Organization of 4th International Conference Observing World Environment Day in Jun 2024</li> <li>Organization of Workshop on Status of Persistent Organic Pollutants Management in Jun 2024</li> <li>Organization of Workshop on Charging Ahead – Empowering an EV-Ready Workforce in India's Automobile Sector in Jul 2024</li> <li>Organization of 3rd International Conference in the observance of World Biofuel Day in Aug 2024</li> </ul>	SIAM Sustainable Mobility Group	Government, State Government, Membership
KEY Events Mainstreaming Sustainability at Bharat Mobility 2024	<ul style="list-style-type: none"> <li>2nd International Symposium for Thriving Eco-Energy in Mobility (ISTEM)</li> <li>3rd Global Electrification Mobility Summit (GEMS)</li> <li>2nd International Conference on Sustainable Circularity (ICSC)</li> <li>सुरक्षित सफर (Safe Journey) Pavilion</li> <li>Decarbonization Pavilion</li> <li>Circularity Pavilion</li> </ul>		Government, State Government, Membership

Context Papers on key themes of Sustainability	<ul style="list-style-type: none"> <li>Context Paper on 'Analyzing India's imperatives for Road Safety'</li> <li>Context Paper on 'Gas-Based Mobility: Fueling India's Economy'</li> <li>Context Paper on Biofuels in India: Current Scenario and the Road Ahead</li> </ul>	SIAM Sustainable Mobility Group	Government, State Government, Membership
SIAM's Global Cooperation for Attaining National and International goals of Sustainable Mobility	<ul style="list-style-type: none"> <li>Collaboration between SIAM and Global Biofuel Alliance</li> <li>Ongoing Collaboration between SIAM and JAMA</li> <li>Collaboration between SIAM and USGC</li> <li>Ongoing collaboration between SIAM and UNEP</li> </ul>		Government, State Government, Membership, International government bodies
SIAM advocacy documents for Sustainable Mobility	<p>Preparation of following policy documents aimed at promoting sustainable mobility</p> <ul style="list-style-type: none"> <li>(i) Declaration on the Use of Hazardous Materials in the Automotive Sector</li> <li>(ii) Declaration on Cleaner Mobility 2020 &amp; Beyond, and</li> <li>(iii) the SIAM Comprehensive Roadmap for Sustainable Mobility</li> </ul>		Membership

## ELECTRIC MOBILITY GROUP

Concerns about sustainable mobility, pollution-free transportation, and international clean mobility dialogues have accelerated growth in India's electrified vehicle (xEV) market. The Indian Government has ambitiously targeted a 30% EV penetration by 2030. This goal aligns with the Gols vision for a Viksit Bharat by 2047, which calls for a strong R&D infrastructure to support a self-sufficient domestic EV ecosystem. However, the EV market faces challenges such as raw material scarcity, immature manufacturing systems, and the trade flow of essential components. To address such challenges and to increase the adoption of EVs, several supportive policies were implemented by GoI which includes FAME I, II, and now III, PLI etc.

Keeping in mind the importance of Electric vehicles and in lines with the Gols vision towards Electric mobility, SIAM established the Electric Mobility Group to support the government's E-mobility objectives. Since its inception, the EV market in India has seen remarkable growth, with annual sales exceeding 1.7 million vehicles in FY2024 and cumulative EV sales topping 4 million units by the end of FY2024.

This past year, India has made significant progress in sustainable and electric mobility, with SIAM playing a key role. SIAM has advocated for better policies, organized events, and partnered globally to advance EVs and clean energy solutions. This below report highlights SIAM Electric Mobility Group's achievements and future goals aimed at enhancing India's automotive sector sustainability.

### Collaboration with US Commercial Services on EV Standards



In August 2023, SIAM partnered with the US Commercial Service and UL Standards & Engagement to improve standards for a safe and sustainable Indian EV ecosystem. This collaboration aimed to strengthen the safety framework for electric vehicles, including manufacturing standards, infrastructure development, and public awareness.

### SIAM's 1<sup>st</sup> Green Plate EV Rally



SIAM conducted its first Green Plate EV Rally during Sept, 2023, an event that showcased EVs from various categories including two-wheelers, three-wheelers, four-wheelers, and commercial vehicles. The rally was flagged off by the Hon'ble Minister of Heavy Industries Shri. Mahendra Nath Pandey. The event aimed to increase public awareness of electric vehicles and their advantages, encouraging the adoption of environmentally friendly mobility solutions.

### Participation in COP28 (Dubai, November 2023)

In November 2023, SIAM attended the COP28 summit in Dubai to engage in global discussions about climate change and sustainable mobility. The summit allowed SIAM to showcase India's advancements in electric mobility and call for international collaboration to address climate issues.







### Collaboration with Natrax on Indian Testing Agencies



SIAM collaborated with Natrax at a conference to discuss the global role of Indian testing agencies. The event focused on the capabilities and advancements of Indian testing facilities in the automotive sector, particularly in supporting the transition to electric and sustainable mobility.

### ASEAN & India Automotive Powertrain Summit 2023



At the 3<sup>rd</sup> ASEAN & India Automotive Powertrain Summit, SIAM participated in discussions on India's emission standards and the latest EV incentives. The summit gathered industry experts and policymakers from India and Southeast Asian Countries to discuss the future of automotive powertrains, focusing on India. SIAM highlighted India's active approach to developing regulations and incentives in the EV sector.

### 3rd Global Electrification Mobility Summit (GEMS)



SIAM held the 3rd GEMS at the Bharat Mobility Global Expo in February 2024 themed, "Driving the Future of Mobility.". This summit focused on electric mobility, featuring discussions on new trends and technologies with Indian and International industry leaders and government officials, eminent experts from Academia and R&D labs etc. The event showcased India's advancements in electric mobility and discussed strategies to increase the adoption of electric vehicles in the country.

### Bharat Mobility Global Expo 2024



At the Bharat Mobility Global Expo 2024, SIAM showcased a range of electrified vehicles at a special Decarbonization Pavilion. This pavilion featured the latest technologies in EVs, Renewable Energy integration, and Green Transportation Infrastructure.

### Industry Recommendations for FAME-III

SIAM submitted detailed recommendations for the FAME-III scheme to the Ministry of Heavy Industries, with focus on the importance of ongoing incentives for EVs after FAME-II ends on March 31, 2024. SIAM suggested launching the Electric Mobility Promotion Scheme (EMPS) to ensure a smooth transition and continued growth in the EV market.

### 1<sup>st</sup> EMG Meeting for FY 2024-25

The first meeting of the EMG for the fiscal year 2024-25 was held in Srinagar, Jammu and Kashmir, in April 2024. The meeting centered on strategic initiatives to promote electric mobility in India, including policy advocacy, industry collaboration, and technology development. The EMG confirmed its support for the government's vision of a



developed India and outlined its main priorities for the coming year, which includes FAME-III, EMPS and regulations related to electric vehicles.

### Development of EV Roadmap for Viksit Bharat



The Ministry of Heavy Industries has appointed the SIAM to develop a comprehensive EV roadmap. This effort is in collaboration with various agencies like WRI, RMI, World Bank, and Climate Trends, aligning with the Government of India's Vision of Viksit Bharat. The roadmap aims to boost the adoption of electric vehicles in categories such as two-wheelers, three-wheelers, cars, buses, and trucks. SIAM's role includes coordinating with government agencies, industry players, and research institutions to develop a clear and actionable plan for India's EV future.

### JASIC Meeting on EV Fire Safety (Vietnam)

SIAM collaborated with international partners at the JASIC meeting in Vietnam during November, 2023, focusing on fire safety standards for EVs. The meeting discussed safety concerns and shared best practices to ensure the safety of EV users. SIAM reiterated the importance of international



cooperation in developing and harmonizing safety standards for the global EV market.

### SIAM Advocacy for Removal of UL Standard and Introduction of New AIS Standards

SIAM's advocacy was key in removing the UL Standards for Electric Vehicle Battery Safety and replacing it with amendments amd3 AIS156 and AIS038 Rev2. These changes were essential to avoid a halt in testing facilities across India, which would have disrupted electric vehicle development and testing. SIAM's proactive efforts helped the industry continue smoothly while updating to new safety standards.

### Removal of Capping on ICE Vehicles in Chandigarh

SIAM successfully advocated for the removal of restrictions on ICE vehicles in Chandigarh across all categories. This decision was a significant win for the automotive industry, as it ensures that consumers can choose from a broad selection of vehicles. SIAM's efforts highlighted the importance of market flexibility and consumer choice in the quickly evolving automotive sector.

### Vidyutikaran Social Media Promotion

To promote EVs and increase public awareness of their benefits, SIAM launched विद्युतीकरण (Electrification) social media campaign. This campaign included activities such as myth-busting sessions, educational content about the advantages of EVs, and quizzes. The goal was to engage the public, correct common misconceptions, and emphasize the environmental and societal benefits of electric vehicles. The campaign's success showed the effectiveness of digital platforms in influencing public opinion and encouraging the adoption of sustainable mobility solutions.

### Launch of SIAM's EV Skill Gap Study

SIAM recently launched the "EV Talent Landscape in India: Bridging the Skill Gap for 2030" study to



address the need for skilled professionals in the EV sector. The study, released by the Hon'ble Union Minister of Heavy Industries, Shri H.D. Kumaraswamy, during the workshop, offers a detailed analysis of the current talent situation in India's EV industry. It identifies critical skill gaps and

suggests strategies to develop the workforce needed by 2030. This is part of SIAM's ongoing effort to build a strong talent base to support India's shift towards electric mobility and ensure sustainable growth in the future.

Annual Report Card (2023-24)			
Deliverable	Measure	Owner	Stakeholder
To Ensure Smooth Transition to Electric Mobility	<ul style="list-style-type: none"> <li>• Collaboration with US Commercial Services on EV Standards</li> <li>• SIAM's 1st Green Plate EV Rally</li> <li>• Participation in COP28, Dubai</li> <li>• Collaboration with Natrax on Indian Testing Agencies</li> <li>• ASEAN &amp; India Automotive Powertrain Summit 2023</li> <li>• 3rd Global Electrification Mobility Summit (GEMS)</li> <li>• Bharat Mobility Global Expo 2024</li> <li>• Industry Recommendations for FAME-III</li> <li>• 1st EMG Meeting for FY 2024-25</li> <li>• Development of MHI EV Roadmap for Viksit Bharat</li> <li>• JASIC Meeting on EV Fire Safety (Vietnam)</li> <li>• SIAM Advocacy for Removal of UL Standard with the introduction of New AIS Standards on battery safety</li> <li>• Removal of Capping on ICE Vehicles in Chandigarh</li> <li>• Vidyutikaran Social Media Promotion</li> <li>• Launch of SIAM's EV Skill Gap Study</li> </ul>	SIAM Electric Mobility Group	Membership / Government



SIAM Electric Mobility Group Meeting at Srinagar, Jammu & Kashmir



## RECYCLING & MATERIALS GROUP

The SIAM Recycling and Materials Group is mandated to attain material circularity by advancing the paradigm of sustainable mobility in the automotive sector. This involves designing, manufacturing, and managing vehicles and their components in ways that maximize reuse, recycling, and regeneration of materials. The group guides the industry in recycling and circular economy practices to minimize the use of natural resources and reduce environmental pollution's impact on natural ecosystems. Resource scarcity and environmental pollution drive the circular economy as a unique solution to enhance both economy and sustainable development. The group ensures the integration of technological advancements in recycling and circular economy, showcasing best practices and strategies that are vital for the circular economy.

The Government of India has notified the regulations for the following six waste streams:

**Battery Waste Rules, 2022:** S.O. 3984(E)- 22<sup>nd</sup> August 2024

**E-Waste Rules, 2022:** GSR 801(E) 2<sup>nd</sup> November 2024

**Plastic Waste Rules, 2022:** GSR 133 (E) 16<sup>th</sup> Feb 2022

**Waste Tyres Rules 2022:** GSR 593 (E) 21<sup>st</sup> July '22

**Waste Used Oil:** GSR 677 (E) 18<sup>th</sup> Sept. 2023,

**Draft EPR Framework for ELV:** S.O. No. 367(E) -30<sup>th</sup> Jan 2024

### Group Strategy

The Recycling and Material Group has focused on the following principles and imperatives, which have been adopted and adapted to foster sustainable recycling and a circular economy in the automobile sector. The key principles and imperatives are briefly outlined below:

- Promoting Design for Circularity
- Promoting State-of-the-Art Recycling Processes
- Promoting Reuse and Remanufacturing
- Focussing Sustainable Material Sourcing
- Lifecycle Management through EPR Regime & Re-use

- Promoting Innovative Models of Circular Economy
- Ensuring Collaboration and Partnerships
- Education & Awareness Stakeholder consultations

The Group has been extensively engaged with MoEF&CC, and CPCB on the EPR regime in the implementation of the six waste streams and had several in-person and online meetings with them for ironing out the issues for smooth and effective implementation.

### Group meetings



During the Meetings of Recycling & material Group, the following issues figured during the deliberations:

- AIS 129 – Status & Review,
- Status of implementation regime notified under the various waste streams by the MoEF&CC, including challenges,
- Determination of cost on environment compensation for each waste regulations,
- Challenges under the ELV notification,
- Co-branding and implementation of EPR by brand owner,
- SIAM deliberations with officers of MoEF&CC,
- Hazardous materials - POPs - Status of chemicals, challenges and alternate solutions
- Progress review / status update on EPR regime- fostering circular economy

## Deliberations on Chemical Management in Automobile Sector

The Group deliberated conventions or regulations on hazardous materials like Stockholm convention for Persistent Organic Pollutants (POPs), Rotterdam convention, Basel convention & India REACH. The chemicals like POPs, Refrigerants & Heavy metals were discussed to phase out their use from automobiles.

## Deliberations on AIS 129 (Part 2)

The Group discussed the proposal for Revision of timelines for implementation of AIS-129 part 2 will be taken during the upcoming CMVR TSC meeting. It is proposed to consider timeline of X + 18 months for M1, L1 & L2 categories and X + 42 months for other vehicle categories from the date of notification (X – Date of notification). Earlier timeline for implementation of Dec 2023 for M1, L1 & L2 vehicle categories & Dec 2025 for other vehicle categories has been withdrawn and new timelines will be confirmed after CMVR TSC panel discussion. In the ensuing meeting of the Recycling & Material Group will deliberate on the finalization of the notification of AIS-129 Part-2.

## Meetings with Officials of MoEF&CC

Several meetings have been arranged with SIAM members and officials of MoEF&CC on the issues related to draft notification on EPR Framework for ELV dated 30th Jan 2024 for effective implementation. A couple of meetings of the Technical Committee on EPR for ELVs were held in the Ministry of Environment, Forest and Climate Change which were participated by SIAM secretariat and its members. These meetings were highly productive in terms of incorporation of SIAM views in the draft notification.

## Meeting with CPCB officials

About three meetings were arranged by SIAM to discuss the EPR regime with CPCB officials on the new CPCB guidelines on ELVs, including harmonization of guidelines with other waste management rules, Battery Waste Management Rules, etc.

During the meeting, the following issues were submitted to CPCB Officials for consideration and actions:

- Setting up of RVSFs with categorization as 'Orange category' was discussed. CPCB informed that list of conditions / criteria in which

RVSF can operate in areas other than orange category will be notified.

- It was informed by CPCB that EPR on ELVs is under consideration and draft for this policy is being prepared and will be subsequently shared with industry.
- SIAM raised a concern that many EPR portals are being introduced based on upcoming waste management policy such as battery, E waste, tyres etc. and industry may face various challenges. It was suggested to introduce a common interlinked portal to avoid duplicity in material accounting.
- It was informed that currently material EPR certificates are being generated manually by the authorised recyclers. After implementation of the EPR portal EPR certificates should be generated online as a replacement of manual certificates for foolproof transaction and trading in EPR certificates.

In addition, SIAM members also discussed the following issues for redressal for smooth implementation of battery waste management rules

- **EPR Targets** for xEV Lithium-ion battery to be reviewed based on actual life of batteries.
- **Complete alignment of labelling with EU rules** (i.e. Heavy metal symbol to be put if they are used beyond acceptable value)
- **Use of recycled materials** based on availability of recycled materials.

## Other deliberations



SIAM members also taken up the issues of double accounting of battery EPR targets in case imported batteries are being traded and then sold to OEMs without a brand name mentioned on it. In such cases both trader as well as OEMs are obliged to fulfil EPR targets. This leads to duplication and targets needs to readjust for such cases. SIAM's

Recycling and Material Group plays a central role. The group engages in the oversight of diverse initiatives across various government ministries that pertain to vehicle recycling and scrapping. This oversight includes an extensive analysis of global best practices and insights from vehicle recycling worldwide. SIAM's active participation extends to deliberations with the Central Pollution Control Board (CPCB) and the Ministry of Environment, Forest and Climate Change (MoEF&CC) to ensure the proper implementation of the Battery Waste Management Rules (BWMR) 2022. The group is committed to providing valuable feedback to the government on critical topics such as Tyre Extended Producer Responsibility (EPR), the ELV on EPR Zero draft, and EPR on Used oil, reflecting its dedication to actively influencing regulations in favour of sustainability. SIAM's commitment extends further as it shares insights from the automotive industry on various chemicals, including persistent organic pollutants (POPs), and actively advocates for these inputs in international conventions.

## 2<sup>nd</sup> International Conference on Sustainable Circularity

On February 3rd, 2024, in New Delhi, SIAM organized the 2nd edition of the International Conference on Sustainable Circularity (ICSC) as part of the Bharat Mobility Global Expo 2024. SIAM, serving as the apex body for the automotive industry, has been at the forefront of integrating circular economy principles into the sector. This year's conference, under the banner of the चक्रीयता (Circularity) initiative, highlighted the theme "Towards Nature Positive Pathway: Embracing Circular Economies with Low Carbon Strategies."

### Circularity Pavilion



The Circularity Pavilion was jointly organized by SIAM themed "Nature Positive Pathways for LiFE."

This pavilion theme was derived from Hon'ble PM's "Lifestyle for Environment (LiFE)" initiative which promotes sustainable and circular living in balance with nature.

### EPR Workshop



Against the backdrop of the announcement of the draft EPR regulations for End-of-Life-Vehicles, SIAM collaborated with the Maharashtra Pollution Control Board to host a Circularity Workshop on April 8, 2024, in Mumbai. The event, part of SIAM's चक्रीयता (Circularity) initiative, focused on its role in advancing a sustainable circular economy in the automotive industry.

### POPS workshop



As a part of the चक्रीयता (Circularity) initiative, SIAM collaborated with MOEFCC and the National Environmental Engineering Research Institute (NEERI) to host a workshop centered on the issue of Persistent Organic Pollutants (POPs) in the automotive industry. This workshop aimed to address the growing concerns associated with the use of toxic chemicals, particularly those used as flame retardants in various automobile components like seats, paints, and dashboards.



Annual Report Card (2023-24)			
Deliverables	Measures	Owner	Stakeholders
SIAM as the member of various committees of MoEF&CC and CPCB is responsible for EPR regulations under the various waste streams and provide inputs for effective implementation	Engaged in the overarching initiatives across various government ministries related to vehicle recycling and scrapping, including a comprehensive analysis of global best practices and insights from vehicle recycling worldwide.	SIAM Recycling group	Membership / Government / Society / Media
	SIAM deliberations with CPCB and MoEF&CC for proper implementation of BWMR 2022 and related amendments 2024		
	SIAM's Assessments of EPR related to Tyre, ELV Battery, Plastic, Used oils and E-waste and submission of comments/suggestions to MoEF&CC and CPCB		
	Furnish the government with insights from the automobile industry concerning various chemicals, including persistent organic pollutants (POPs), and assist in effectively advocating these inputs in international conventions		
SIAM initiatives	Organized a Seminar on 'Achieving circularity in the Automotive industry through Extended Producer Responsibility (EPR)', New Delhi		
	2nd edition of ICSC – International Conference on Sustainable Circularity at Bharat Mobility Show, New Delhi		
	Organized SIAM Workshop: EPR Regime: An Innovative Policy Tool for Fostering a Sustainable Circular Economy in the Automotive Industry, 8 APRIL 2024, Mumbai		
	"Integrating Mission LiFE in the Automobile Industry: Transitioning towards Viksit Bharat" at New Delhi		
Sub-Group on Framework & Guidelines for Circular Economy in the Automobile Sector: The Sub-Group on Framework & Guidelines for Circular Economy was constituted on 22nd June 2023.	<p><b>2 Meetings of the Sub-Group 'Framework Guidelines for Circular Economy' were held last year and draft Framework &amp; Guidelines for Circular Economy are being prepared</b></p> <ul style="list-style-type: none"> <li>1st Meeting of the Sub-Group preliminary on 'Framework Guidelines for Circular Economy' held on 6th July 2023</li> <li>2nd Meeting of the Sub-Group preliminary on 'Framework Guidelines for Circular Economy' held on 4th October 2023</li> </ul>		

## GAS BASED MOBILITY GROUP

The Indian economy is currently believed to be on a healthy growth trajectory and is poised to become one of the largest economies globally. As the economy grows, energy consumption in the country is also expected to increase. This increase will likely be supported by a shift in the primary energy mix, with the share of natural gas expected to rise from 9% to 15% by 2030 in line with the vision of the Government, thanks to the expansion of infrastructure such as additional RLNG (Regasified Liquefied Natural Gas) terminals, nationwide transmission pipelines, and transnational pipelines.

Natural gas stands out as the cleanest fossil fuel option for the transport sector. Consequently, clean, affordable, and renewable energy has become a clear pathway for the transport sector to lower greenhouse gas emissions and attain sustainability. Prompted by its commitment to sustainable mobility and the potential of gas mobility, SIAM established the Gas-Based Mobility group which aims to collaborate with all relevant stakeholders, including the government, gas companies, component manufacturers, and others, to promote the adoption of gas vehicles in India and help decarbonize the transport sector.

### Contributing to Increasing Demand for Natural Gas

In recent years, the demand for natural gas in India has surged due to greater availability, development of transmission and distribution infrastructure, cost savings from using natural gas over alternate fuels, and its environmentally friendly characteristics. India can be segmented into six major regional natural gas markets: Northern, Western, Central, Southern, Eastern, and North-Eastern, with the Western and Northern markets currently having the highest consumption. However, the expansion of natural gas infrastructure is expected to correct this regional imbalance. The demand for natural gas is projected to grow at a CAGR of 6.8% from 242.6 MMSCMD in 2012-13 to 746 MMSCMD in 2029-30, much of it led by the CGD (City Gas Distribution

sector which includes CNG vehicles.

### Advocacy on Supportive Policies for Growth

The natural gas sector in India is on the verge of rapid growth, fueled by increasing demand, enhanced exploration efforts under the New Exploration Licensing Policy (NELP), and the commissioning of LNG (Liquefied Natural Gas) import terminals on the West Coast. However, a proactive enabling environment is necessary to support the rapid development of natural gas infrastructure. This environment would include providing appropriate policy support, correct pricing signals for investment, reforming current regulations to adapt to changing needs, and addressing distortions in the fiscal regime applicable to natural gas. The group has been instrumental in the pricing reforms in the past year and is currently advocating for leaner taxation by the state governments.

### Support the Expansion of the City Gas Distribution Network



The expansion of the City Gas Distribution (CGD) network in India is managed by the Petroleum and Natural Gas Regulatory Board (PNGRB). Since the PNGRB Act of 2006, detailed regulations and a competitive bidding process for authorizing geographical areas for CGD have been initiated. From 2008 to 2017, PNGRB conducted eight rounds of CGD bidding, attracting significant private sector participation in the 9th and 10th rounds. An additional 67 geographical areas were authorized

during the 11th and 11A CGD bidding rounds, and the upcoming 12th round is expected to cover 100% of mainland India. The authorized CGD network has expanded significantly, with the number of stations growing by over 660% from 783 in FY14 to 6035 in FY24. The group has been instrumental in the achievement of these scales.

### Fuel the Growth in Gas-Based Vehicle Market

The pursuit of sustainable alternatives in the automotive industry is evident through the rising demand for gas-based vehicles in India. In FY24, the retail sales of gas-based vehicles surpassed the 1 million-unit mark for the first time, indicating a significant shift in consumer preference towards more economical and environmentally friendly fuel options. The gas-based passenger vehicle segment led by the members of the group saw a remarkable

growth of 54% from FY23 to FY24, capturing a substantial 10.5% share of the overall retail sales of passenger vehicles in the country. This growth is a clear indicator of the shifting dynamics in the automotive fuel market.

### Context Paper on Gas Based Mobility: Fueling India's Economy

The Gas Based Mobility Group was actively involved in developing a context paper on the Gas Mobility Ecosystem in India. The context paper focused on Compressed Biogas (CBG) for securing the future of the Gas ecosystem as it enables energy security, has immense environmental benefits, and is a boon to the rural economy. The context paper has served as a tool for SIAM's engagement with the state governments for CNG fuel and vehicle policy matters.



4<sup>th</sup> International Conference on Integrating Mission LiFE in the Automobile Industry: Transitioning Towards Viksit Bharat



Launch of SIAM context paper titled "Gas Based Mobility: Fuelling India's Economy" at 2<sup>nd</sup> International Conference on Sustainable Circularity (ICSC)



## MANUFACTURING, INDUSTRY 4.0 AND EASE OF DOING BUSINESS -MANUFACTURING GROUP

In 2020, SIAM's Executive Council established a specialized group related to Manufacturing activity, namely, Manufacturing, Industry 4.0, and Ease of Doing Business (EODB)-manufacturing. The primary objective was to understand the contribution of automobile manufacturing to the manufacturing GDP.

### Role in Sustainable Automotive Manufacturing

SIAM has maintained regular interaction and consultation with the automotive industry regarding Manufacturing activities, concentrating on:

- Sustainable Manufacturing
- Industry 4.0 Use Cases
- Ease of Doing Business

The manufacturing sector is crucial for economic development as it acts as a lever for poverty reduction and provides employment opportunities for skilled, semi-skilled, and unskilled labour. However, the pursuit of economic progress often comes at the expense of environmental health, leading to significant ecological challenges, including climate change. The current challenge is threefold: improving manufacturing performance without compromising environmental standards, while employing modern manufacturing techniques.

### Industry 4.0 and Transformation in the Automotive Industry

The fourth industrial revolution, known as Industry 4.0, offers a huge opportunity to address both economic and environmental issues within manufacturing. It is essential to maintain the triple bottom line of sustainability, ensuring social, economic, and environmental aspects are harmonized. The automotive industry is experiencing a substantial transformation, largely driven by Industry 4.0 and the digitization of the

entire value chain. This revolution has expanded digital transformation possibilities and emphasized its importance to OEMs, suppliers, dealers, and others in the mobility ecosystem.

By utilizing a combination of digital and physical technologies—such as AI, IoT, additive manufacturing, robotics, cloud computing, and more—companies throughout the value chain are becoming more flexible, efficient, and responsive. This reshapes how businesses operate, engage customers, and deliver products and services. Industry 4.0 is revolutionizing automotive design and manufacturing, enhancing quality, and improving security across products and partnerships.

While Industry 4.0 offers numerous opportunities for innovation, there are significant challenges, especially with integrating proprietary systems. Peer consortiums, industry associations, and government bodies are working to establish industry standards, yet there is no clear consensus on which standards will prevail. Companies face foundational challenges that can impede their ability to adopt these advanced digital technologies.

### Strategic Direction on Industry 4.0

In this context, SIAM has established a group focused on Industry 4.0 to guide the industry in implementing and integrating the technologies associated with this new industrial paradigm. This includes the

- Industrial Internet of Things (IIoT)
- Big data and analytics
- Artificial intelligence (AI) and machine learning
- LPWANs (Low powered Wide Area Networks) for machine-to-machine (M2M) and IoT networks
- IT/OT convergence

- Touch and voice interfaces, Augmented Reality (AR) systems
- Advanced robotics
- Additive manufacturing etc.

The overarching goal of Industry 4.0 is to transform manufacturing and all related industrial operations—from design to logistics to end-of-

product lifecycle—into more efficient, innovative, and customer-responsive processes. Industry 4.0 aims to enhance interoperability across the supply chain, facilitate seamless data sharing, and improve productivity, safety, and environmental sustainability. The role of this group is to provide comprehensive guidance on the implementation and convergence of technologies envisioned in Industry 4.0.

### Annual Report Card (2023-24)

Deliverable	Measure	Owner	Stakeholder
<ol style="list-style-type: none"> <li>1. To provide guidance to industry with implementation and convergence of technologies envisaged in industry 4.0</li> <li>2. To transform manufacturing and all its related industrial operations from design to logistics to end-of-product-lifecycle into a more efficient and innovative customer-responsive manufacturing.</li> <li>3. Use the industry 4.0 tools to enhance 3.0 Use the industry 4.0 tools to enhance interoperability across the supply chain and sharing data seamlessly and enhance productivity, safety and environmental compatibility.</li> <li>4. To engage with policy makers for incentivizing the digitalized manufacturing and ease of doing business with interventions.</li> </ol>	<ol style="list-style-type: none"> <li>1. Become familiarity with the concept and business principles of Industry 4.0.</li> <li>2. Understand the impact of Industry 4.0 emerging technologies on products, processes, people and organization as a whole.</li> <li>3. Understanding the various challenges and barriers in implementing Industry 4.0 technologies</li> <li>4. Application of Industry 4.0 technologies in various sectors like manufacturing and service sectors</li> <li>5. Become aware about other organizations/ industries that made significant transformational changes using Industry 4.0</li> <li>6. Develop an ability to conceive and propose a framework for achieving sustainability across organizations.</li> </ol>	<p>SIAM Manufacturing, Industry 4.0 and Ease of Doing Business - Manufacturing Group</p>	<p>Membership</p>

## EMISSIONS AND CONSERVATION GROUP

The Emissions and Conservation (ENC) Group within SIAM has been an influential force propelling the automotive industry toward sustainable development during the 2023-24 fiscal year. The group's unwavering commitment to meeting the objectives of SIAM members and aligning with the interests of OEMs has positioned them at the forefront of several critical initiatives, all with sustainability as the guiding principle.

### Progress in Regulatory Frameworks for Commercial Vehicles

The year 2023-24 has been very progressively propelling the auto-industry into defining the next state of Regulations for HDV and LDV. The year gone by has seen the substantial progress is in addressing the Fuel quality/regulations and efficiency Issues. The industry proactively engaged in discussions and deliberations, involving both Membership and Government stakeholders, has borne fruit across multiple fronts. These discussions have spanned a wide spectrum of measures, from the complex task of amending standards to accommodate the benefits of biogenic CO<sub>2</sub> reduction for E10/E20 fuel, to meticulously crafting notifications for the mandated E20 Ethanol blend. These endeavours not only align seamlessly with the goals of SIAM members but also underscore the ENC Group's unwavering commitment to promoting cleaner and more sustainable fuels.

### Advancements in Fuel Consumption and Emissions Standards



The ENC Group's influence extends into the Heavy-Duty Vehicles (HDVs) sector, where the notification of fuel consumption norms for heavy /light duty vehicles effective 1st April 2023 were rolled out. Also, to proactive move forward on the new set of HDC regulations, SIAM created the groups for discussion on the BHARAT VECTO TOOL to define the next set of regulations. Engagement with Ministries and other government stakeholders for financing the tools and also to meet industry objective, this has been a major progress. Also, the PEMS test for HDVs and providing equal opportunity for OEMs and bus body builders, Status of current and future COP, has been some of the milestones reached. The government is still discussing the elimination of the CH<sub>4</sub> limits for Natural Gas Vehicles. Also, the while papers on Diesel was prepared and submitted to the ENC group to bring out qualitative aspects of Diesel after the BS6 notification in 2020 and that Diesel should be perceived as a good fuel for transportation due to the lower pollutants and better efficiency. It was suggested to take the paper to its logical conclusion by bringing the same to the notice of the various ministries.

### Light-Duty Vehicles: Enhancing CAFÉ Standards and Fuel Definitions

In the realm of Light-Duty Vehicles (LDVs), the ENC Group's active involvement in discussions regarding the defining the methodology for the next phase of CAFÉ regulations for 2027 and 2032 has been a major effort. ENC group took the matter with BEE to define the CO<sub>2</sub> Bio-Genic factor for E10 & E20 fuels. A strong and dedicated team of the ENC prepared international comparisons and stated that the proposal on number is based on stoichiometric calculations and requested practical / test data to prove the numbers for taking subject forward. Further that the proposal is based on the principles set by IPCC and is well practiced in Brazil and other countries. The industry also reacted to the BEE proposal on defining automotive sector under PAT. Stating that the energy consumption in the sector is relatively small, the earlier proposal of SIAM towards carbon trading may be explored. Proposal



regarding the Credit and Debit mechanism under the EC Act was deliberated and the unified agreed position in the ENC explored. SIAM also proposed new CAFÉ standards to BEE for 2027 and 2032 based on MIDC cycles and to be merged later with WLTP cycles. The implementation timeline for the Worldwide Harmonized Light Vehicles Test Procedure (WLTP) exemplifies their dedication to maintaining high industry standards, catering to the interests of OEMs. Moreover, their engagement in ongoing discussions about emissions, particularly the mandate for Non-Methane Hydrocarbon (NMHC) limits for Natural Gas Vehicles, underscores their commitment to reducing the environmental footprint of the industry.

In the context of India's commitment to reduce the carbon footprints by 2070 has amplified by the honourable Prime Minister, auto industry also took initiative on the Carbon Neutrality, the ENC Group has demonstrated its commitment to sustainability through various avenues including adoption of low carbon fuels. They have taken steps to understand and implement the Perform, Achieve, and Trade (PAT) Scheme, a critical initiative that complements the sustainability goals of the industry. Additionally, their focus on Extended Producer Responsibility (EPR) for Used Oil, contributions from a Diesel white paper, and adoption of higher blends of ethanol beyond E20 in a defined time frame, all underline their dedication to responsible and efficient fuel utilization. Engagement with Niti Aayog and other stakeholder has been some of the highlights of this year.

#### **Promoting Carbon Neutrality and Alternative Fuels**



Moreover, the ENC Group's endeavours extend beyond the confines of SIAM, emphasizing collaboration for a sustainable future. In February, 2024, during the Bharat Mobility Global Expo 2024, the ENC supported SIAM to organize the 2nd edition of the International Symposium for Thriving Eco-Energy in Mobility (ISTEM), "Nature-Based Solutions: Road to Decarbonization," to promote alternative fuels. These initiatives include Jaivik Pehal (Bio Initiative), Gas Gatisheelta (Gas Based Mobility), and Harit Hydrogen (Hydrogen Mobility). The event attracted various stakeholders from the alternate fuel economy, including OEMs, oil marketing companies, gas distributors, ethanol producers, and hydrogen powertrain specialists. This aligns with the Indian Government's agenda to reduce carbon emissions and foster the adoption of biofuels, emphasizing the role of bioenergy in achieving global climate targets.

#### **Collaboration with JAMA and Exploration of Emerging Technologies**

Collaboration remains a recurring theme for the ENC Group, with a productive SIAM-JAMA meeting providing a platform for both agencies to explore emerging technologies in the automotive field. This collaborative spirit underlines their dedication to staying at the forefront of industry advancements.

#### **Consensus Building and Strategic Meetings**

Additionally, the ENC Group has taken steps to ensure consensus building within all OEMs. Their meetings, held three times, serve as platforms for discussing pending and current issues, fostering collaboration, and driving sustainable solutions. Likewise, multiple Fuel Group meetings have played a pivotal role in aligning strategies and initiatives toward the pursuit of cleaner and more efficient fuels.

#### **Standards Development and Emissions Testing**

Drafting of standards for AIS 175 and RDE Procedure for the M1 and N1 category of vehicle is finalized and added in AIS-175 and the post-processing procedure for M1/N1 low powered category vehicle is reserved. Discussions on BS7 also begin under the ENC as a forward looking approach. In-Use Emission Test for BS VI Vehicles (latest status), Emission/CO<sub>2</sub> measurement with A/C ON in Type Approval. Fuel Quality monitoring

and draft QCO on DEF released by Ministry of Chemicals and ENC tool up with the ministry for its compliance. The comments were provided on the IS 2796 for inclusion of RON 95 and also the GSR 27E on the type approval of vehicle released.

Emissions and Conservation Group's multifaceted approach, encompassing collaborations, discussions, and consensus building, has been instrumental in steering the automotive industry

toward a more sustainable and environmentally responsible future. Their efforts span a broad spectrum of initiatives, ranging from fuel standards to emissions reductions, all while ensuring alignment with SIAM members' objectives and OEMs' interests. This holistic and proactive approach exemplifies their unwavering commitment to sustainable development within the automobile industry, positioning them as key drivers in shaping its future.

Annual Report Card (2023-24)			
Deliverables	Measures	Owner	Stakeholders
Fuel Transition Issues	Standards : Deliberations in Progress for Amendment in AIS-137 to accommodate Biogenic CO2 reduction benefit for E10/E20 fuel	SIAM Emissions and Conservation Group	Membership and Government
	GSR 27E released for making limits of flex fuel from E20-E85. E100 also notified as mono fuel.		
	GSR 27E released for mandate of E20 Ethanol blend as a Mono Fuel		
	E20 2025 Commitment : Notification to amend E20 Commercial Fuel (IS 17021) with E20 Reference Fuel (IS 17943) for E20 Vehicle Homologation		
	Update on the recent fuel specifications & revisions : Discussion for Revision of IS 2796 with fuel specification of min. RON95 E10 & pursuing deletion of lower RON specification from the table with MoPNG		
	Study / Project study on the Impact of E20 fuel on E10 Compatible vehicles under progress. Final report submitted		
LDV (Light-Duty Vehicles)	WLTP Implementation : WLTP implementation timeline to be discussed in next SCOE meeting as per agreement in 68th AISC meeting	SIAM Emissions and Conservation Group	Membership and Government
	CAFÉ Related: Discussion underway on the method to define "Carryover of Carbon credits from Phase 1 to Phase 2"		

	BEE Discussion topics: Discussion and liaison with BEE for the Industry proposal on "Inclusion of transport sector in Carbon Market mechanism"		
	Emission : Discussion on the notification to mandate only NMHC Limits for Natural Gas Vehicles		
	CAFÉ Related : Deliberations underway for discussions on CAFÉ III & CAFÉ IV		
HDV (Heavy-Duty Vehicles)	Regulation : Discussion on the notification to eliminate CH4 limits for Natural Gas vehicles		
	Bharat VECTO Tool: Discussions with BEE to collaborate on defining new normal for LDV/HDV alike EU VECTO.		
	Notification release of HDV norms from 1st Apr 2023 for Fuel efficiency measurement with inclusion of all OEMs		
Carbon Neutral Trends	Work on understanding and implementation of PAT Scheme - Inclusion of Automobile Assembly unit (energy consumption of > 3,000 MTOE per year) vide Ministry of Power notification S.O. 2523(E) dated 06th June 2023		
	G.S.R 338 notified on EPR for Used Oil and its Way forward		
	White paper on Diesel circulated to ENC to sensitise Govt. stakeholders on efficient use of diesel.		
	GSR released for implementation of fuel Quality Monitoring & DEF Monitoring for notification of QCO for DEF.		



SIAM Emissions & Conservation Group Meeting at Delhi



## AFTERMARKET PARTS GROUP



SIAM Aftermarket Parts Group Meeting at Delhi

The automotive industry faces significant challenges from counterfeiting non-genuine automobile parts, which can compromise safety, reduce performance, and harm brand reputation. With the nation's growing focus on quality, self-reliance, and digitalization, the rising counterfeit market for auto components is a major concern for the industry. The SIAM Aftermarket Parts Group was established with an objective to combat these issues.

### Efforts to Preventing Counterfeit Auto Parts

The group is supported by the industry and it continuously working towards formulating various strategies and initiatives. These include:

- Technological and blockchain solutions in supply chain
- Strengthening legal and regulatory frameworks for automotive parts

- Enhancing consumer awareness and education on counterfeit risks
- Optimizing supply chain management against counterfeits
- Collaborative stakeholder engagement to uphold quality and safety

These efforts are essential in ensuring safety, maintaining quality, and protecting the brand integrity of automotive manufacturers.

The group, focusing on consumer awareness, quality standards, and enforcement, has spread awareness about the menace of counterfeit through its **“Be Genuine, Buy Genuine”** campaign under SIAM's sustainable mobility advocacy pillars of road safety and decarbonization.

Annual Report Card (2023-24)			
Deliverable	Measure	Owner	Stakeholder
To promote use of genuine parts	<ul style="list-style-type: none"> <li>• Continuous engagements on Lead OEM aftermarket business expansion</li> <li>• Augmentation by positioning of genuine parts during and after end of product life cycle at the best price within reach of every individual customer</li> <li>• Supporting 'Made in India' campaign within horizon of government policies.</li> <li>• “Asli-Naqli Campaign” during Auto Expo – The Motor Show to promote “Be Genuine, Buy Genuine”.</li> </ul>	SIAM Aftermarket Parts Group	Membership / Government

## CMVR & SAFETY REGULATIONS GROUP

The SIAM Group continued to remain engaged with several stakeholders like Government, Members, Testing Agencies, BIS, etc. to promote Safer Mobility in the country by promoting several new international regulations.

In the last one year, discussions were held related to upcoming safety regulations, new standard formulation and latest technology/initiatives related to Automobile sector.

Automobile industry was in continuous dialogue with Test Agencies, BIS, MoRTH, etc. through CMVR TSC and AISC meetings. The outcome of these meetings resulted in Government mandating several regulations in the last year, a few of them are mentioned below:

1. Global Navigation Satellite System (GNSS)
2. Safety Belt and Safety Belt Reminder
3. Troop Carrier
4. Pass by Noise
5. Fire Alarm Protection System (FAPS)
6. AVAS
7. ESC for School Buses

8. Feracrylum 1% Gel
9. ADAS – AEBS
10. Stringet Offset & Side Crash Regulations.
11. Rear Crash Regulation
12. Cyber Security Regulations

During interactions with the Ministry of Road Transport & Highways in CMVR TSC meetings, several new standards were accepted for adoption and the implementation dates were finalised, while for the other standards it is yet to be finalised.

Discussions were initiated on upcoming technologies/initiatives like ADAS, Advantages of “5G” for automotive applications, Common Receptacle for Electric Vehicle Charging, Caravan Trailer pulled by vehicles and Onboard Weighment in Commercial Vehicles. The Group plans to continue discussions on these topics in the coming year also.

The SIAM Group will continue to work towards promoting safer, greener, and more innovative transportation solutions in the next year and will work on the Long-Term Safety Roadmap in collaboration with SIAM International Harmonization Group.

### Annual Report Card (2023-24)

Deliverable	Measures	Owner	Stakeholder
Formulation of standards and regulations for promoting safer and technology advanced vehicles	Organised interactions with several stakeholders like Test Agencies, BIS, Government, etc to discuss safety regulations.	SIAM CMVR, Safety and Regulations Group	Government, Membership and Society
	Participated in AISC, CMVR TSC Meetings and several other meetings.		



SIAM CMVR and Safety Regulations Group Meeting at Delhi



SIAM CMVR and Safety Regulations Group Meeting at Pune





62<sup>nd</sup> Meeting of Central Motor Vehicle Rules-Technical Standing Committee (CMVR-TSC)



SIAM Delegates visit to Central Institute of Road Transport(CIRT) at Pune, Maharashtra



SIAM Delegates visit to B-NCAP Facility at Pune, Maharashtra



72<sup>nd</sup> AISC Meeting at ARAI Pune, Maharashtra



## INTERNATIONAL HARMONIZATION GROUP

The International Harmonization Group of SIAM is to promote technical regulatory harmonization based on the position finalized by SIAM members.

SIAM along with its members represented the country in several international Automobile forums like WP.29, OICA TC, IMMA and UN ECE (GR groups) also given inputs to few FTA proposals on mutual recognition of approvals for promoting Indian Automobile position in harmonizing regulations.

In the last year, Group members actively participated in deliberations related to Emission, Safety, Decarbonization, International Trade, etc.

SIAM members also participated in IMMA General Assembly where discussions were held on several important topics.

The Group is also planning to work on several new initiatives like Revision of Regulatory Roadmap, Road Accident Data Analysis, Organise Workshops on latest technologies, etc.

With an objective to promote vehicular exports from the country, the Group also participated in discussion with the Government on various trade related matter and helped formulate the industry position.

### Annual Report Card (2023-24)

Deliverable	Measures	Owner	Stakeholder
Promote technical regulations and harmonize them based on India position	<ol style="list-style-type: none"> <li>1. Participated in international forums like OICA, IMMA, UN ECE to deliberate on upcoming regulations and shared India's position.</li> <li>2. Analysed upcoming regulations and their potential impact on Indian Auto sector.</li> </ol>	SIAM International Harmonization Group	Government, Membership and Society



*Indian Delegation attending UNECE GRVA session at SAE International Office, Troy, Detroit, USA*

## TWO WHEELER GROUP

The Indian two-wheeler industry demonstrated resilience, adaptability and growth during the fiscal year 2023-24, overcoming obstacles to pave the way for a brighter future. Driven by customer preferences for lower fuel costs and reduced maintenance, EV sales surged. Electric two-wheeler sales surge by 33.3% in 2023-24.

Today, Indian two-wheelers not only comply with the latest international EU regulations but also surpass them in terms of safety standards, making them the most environmentally friendly and secure vehicles globally. SIAM two wheeler group successfully organized JAMA (Japan Automobile Manufacturers Association) two-wheeler group meetings and IMMA (International Motorcycle Manufacturers Association) Steering committee, technical committee, and road safety working group meetings along with IMMA General Assembly where they showcased the alignment of Indian two-wheelers with the global norms and technologies. The level of international harmonization the Indian two-wheeler Industry has been able to commit over the years was praised by all the global stakeholders.

Over the past three years, SIAM has spearheaded several initiatives aimed at reducing the carbon footprint and nurturing the industry to meet its decarbonization targets. The industry has adopted an ecosystem approach to develop the EV ecosystem in the country. Collaborative efforts led to the establishment of more EV charging stations across cities. This infrastructure expansion facilitated EV usage and addressed range anxiety concerns. The electric two-wheeler segment represents a unique opportunity for India to become a global leader in the green technology space. The growth of this segment in the country is being driven by strong policy support, combined with homegrown engineering and innovation. However, the industry has yet to fully harness the global electric vehicle (EV) opportunity, and policy uncertainties are impeding innovation and investment. Continued growth in EV sales, new model launches are expected to drive the industry. Monitoring global trends and addressing

affordability concerns remain crucial. Challenges persist, but the trajectory is promising.

The government is ambitious of attaining 20 per cent ethanol-blended petrol by 2024-25. The government has advanced the target of E20 fuel from 2030 to 2025. EBP program started with E10 (10% ethanol) and has now progressed to E20. In line with government target to achieve E20 by Apr 2025, SIAM made persistent efforts to issue a binding notification to mandate E20 under monofuel. Following this, GSR 27(E) was released by MoRTH on Jan 5, 2024. As per GSR 27(E), government has mandated that by April 2025, all vehicles must comply with E20 standards. E20 fuel or fuel with a 20 percent ethanol and 80 percent petrol mixture can improve certain pollutants in tail pipe emissions, reduce our dependency on fossil fuels since ethanol is made of plant resources and encouraging the use of more sustainable and renewable sources of energy. The Indian government is continuously working to increase the number of E20 fuel retail outlets by 2025. SIAM members are ready to rollout fully compatible E20 vehicles as per plan in 2025. Also, in the notification, MoRTH accepted SIAM request to define FFV range as E20 to E85, as per Indian conditions. Industry members are aligning

Based on government direction, SIAM members successfully applied E20 sticker on all E20 material compatible vehicles from Apr 2023 onwards. The step was taken to differentiate the new E20 compliant vehicles in the market and prevent misfuelling in the existing vehicles. To facilitate introduction of E20 fully compatible Veh, SIAM has proposed to change E10 from RON91 to RON95, which govt has taken favourably. The industry collaborated with regulatory bodies, manufacturers, and other stakeholders to ensure seamless implementation. These stickers helped consumers to identify whether their vehicles are suitable for E20 fuel. By promoting awareness and adherence to E20 norms, SIAM has played a pivotal role in advancing cleaner fuel options and supporting environmental sustainability in India's automotive sector.

### Annual Report Card (2023-24)

Deliverable	Measure	Owner	Stakeholder
To foster Indian two-wheeler industry, grow sustainably and navigate regulatory challenges	After persistent efforts by SIAM, government released notification to introduce and mandate E20 under monofuel category. Also, the FFV range was defined as E20-E85.	SIAM 2W Group	Membership/ Society
	Industry, in alignment with Indian government's directions, actively facilitated the adoption of E20 stickers on vehicles.		
	SIAM successfully organized JAMA Two Wheeler Technical Group Meeting and IMMA Meetings in May 2024 and showcased the International harmonization of Indian two wheeler industry with global norms and technologies		
	SIAM successfully organized JAMA Two Wheeler Technical Group Meeting in October 2023 and participated in Japan Mobility Show Tokyo Japan.		



SIAM Two Wheeler Group Meeting at Delhi



SIAM-JAMA Two Wheeler Technical Meeting at Tokyo, Japan



IMMA Meeting at Lausanne, Switzerland



## THREE WHEELER GROUP

The Indian Three-Wheeler industry experienced a significant surge in the last year, primarily driven by a strong shift towards electric vehicles. The Society of Indian Automobile Manufacturers (SIAM) has been always working towards promoting sustainable mobility solution with cutting edge technologies. Notable improvements have been made in various aspects like emission standards, adoption of alternative fuels and promotion of electric mobility which has also resulted in significant increase in sales of electric 3-wheeled vehicles.

To promote sustainable mobility solutions and circular economy, Government of India has come out with Extended Producer Responsibilities (EPR) for batteries, tyres, used oil, plastics etc. motor vehicles including three wheelers. SIAM has extended full support and collaboration with multiple stakeholders to work towards compliance of respective EPRs.

SIAM under its initiative “Hydrogen Mobility” has proactively prepared Hydrogen safety standard for two wheelers, three wheelers and quadricycles. The draft standard AIS 206: “Safety and Procedural

Requirements for Type Approval of Hydrogen Powered L Category vehicles (Liquid / Compressed gaseous hydrogen)” approved during 62nd meeting of CMVR-TSC.

Three-wheeler industry is now gearing of for adoption of advance On-Board Diagnostic OBD stage II-B norms from 1st April 2025. MoRTH has also mandated type approval of all vehicles with E20 reference fuel from 1st April 2025, SIAM is fully committed to comply with E20 norms and support ethanol blending program of government. To further improve user convenience and efficiency of three wheeled vehicles, SIAM has proposed an option of providing tyre repair kit instead of spare wheel. This proposal has also received a go ahead during 62nd meeting of CMVR-TSC.

SIAM unwavering commitment and collaborative endeavors will continue to promote affordable & sustainable mobility solutions to its customers. Government of India support like EMPS-2024 & PLI scheme is further catalysing the adoption of electric vehicles. The electric three wheeler segment witnessed a remarkable increase in sales during this year.

Annual Report Card (2023-24)			
Deliverable	Measure	Owner	Stakeholder
To ensure the growth of the 3W industry in India in a sustainable manner and navigate the industry through regulation formulation	Mandatory Type approval of three wheelers with E20 reference fuel from 1st April 2025. (similar to other motor vehicles)	SIAM Three Wheeler Group	Membership/ Society/ Government
	Introducing New Category Vehicles by MoRTH “L2-5: Three wheeled motor vehicle, with a 2 & 3-wheeler combination module”		
	Electric Mobility Promotion Scheme (EMPS)-2024 for two and three wheelers is published for 4 months starting from 1st April to 31st July 2024 and then extended by 2 more moths up to 30th September 2024 30th September 2024		
	New standard AIS-206 is formulated on Safety and Procedural Requirements for Type Approval of Hydrogen Powered L Category vehicles (Liquid / Compressed gaseous hydrogen)		

## CONNECTED VEHICLES GROUP

Indian road transport sector is witnessing an increase in vehicle penetration every year and this trend is expected to continue due to the rapid growth of population linked with urbanization, economic growth and increase in per capita income. This has resulted into traffic congestions, deterioration of air quality and rising import bill of petroleum products. Government alongwith the automotive industry stakeholders are adopting and implementing several new and advanced technologies and strategies towards making the Indian transport sector a sustainable transport.

To make the transport system effective and efficient, each mode of transport should be integrated with each other and with infrastructure. For that it is not only the vehicle that needs to be smart, infrastructure is also required to be intelligent to enable interaction between various modes of transport.

Therefore, collaboration among all stakeholders is essential towards enhancing mobility and ensuring efficient last-mile connectivity.

The SIAM Connected Vehicle Group was established as a key forum for discussing trends like the Internet of Things (IoT), shared mobility, and autonomous vehicles. These technologies are crucial for introducing new mobility solutions and integrating them quickly. Through the industry's collective efforts, SIAM aims to create a future where mobility is not only smart but also supports India's continued economic development. SIAM is actively pursuing initiatives to drive advancements in mobility, aiming to lead the automotive industry towards a more sustainable and innovative future.

### Connected Vehicles & Technology Showcase

In June 2023, SIAM hosted a Connected Vehicles & Technology Showcase at the Hyatt Pune. This event brought together seven leading technology suppliers to demonstrate their latest contributions to the mobility sector. It provided a platform for SIAM members to explore and discuss new advancements, encouraging collaboration and a

unified approach to industry progress.

### Engagement with Ministry of Road Transport and Highways (MoRTH) and Department of Telecommunications (DoT)

SIAM has been actively engaged with the Ministry of Road Transport and Highways (MoRTH), advocating for the delicensing of frequency bands for automotive use. Through proposals to the Department of Telecommunications (DoT), SIAM has pushed for making specific frequency bands available to facilitate connected vehicle technologies. Discussions are ongoing to finalize these implementations.

### Engagement with Department of Telecommunications (DoT) on M2M SIM Relaxation

Regarding M2M (Machine to Machine) SIM regulations, SIAM has successfully argued for an increase in the IP address limit on M2M SIM cards from 4 to 100. This change, officially notified on 21st March 2024, is intended to support the expanding needs of the M2M sector.

### Engagement with IHMCL and MoRTH on GNSS-Based Tolling System

In collaboration with the Indian Highways Management Company Limited (IHMCL) and MoRTH, SIAM is involved in finalizing amendments to AIS-140 and launching a GNSS-based tolling system in India. These discussions aim to address the technical and regulatory aspects necessary for implementing this modern tolling technology.

### Collaboration with the Embassy of Japan on V2X System Workshop

SIAM partnered with the Embassy of Japan to host a "Technical Workshop on V2X System in Japan and India" on 21st February 2024. This workshop featured live demonstrations and discussions on the development and application of V2X technologies, promoting knowledge exchange and strengthening ties between Japan and India in advancing these systems.

### Annual Report Card (2023-24)

Deliverable	Measure	Owner	Stakeholder
Policy Advocacy for formulation of guidelines/policies and ease implementation hurdles in Automotive Regulations	<ol style="list-style-type: none"> <li>1. Connected Vehicles &amp; Technology Showcase</li> <li>2. Engagement with Ministry of Road Transport and Highways (MoRTH) and Department of Telecommunications (DoT)</li> <li>3. Engagement with Department of Telecommunications (DoT) on M2M SIM Relaxation</li> <li>4. Engagement with IHMCL and MoRTH on GNSS-Based Tolling System</li> <li>5. Collaboration with the Embassy of Japan on V2X System Workshop</li> </ol>	SIAM Connected Vehicles Group	Membership/ Government



SIAM Connected Vehicles Group Meeting and Connected Vehicles Tech Demo at Pune, Maharashtra



International Workshop on Global Navigation Satellite System(GNSS) based Electronic Toll Collection in India



## FRONTIER TECHNOLOGY AND INNOVATIONS GROUP

As India continues its ascent as an economic powerhouse and a prominent hub for automotive innovation, SIAM's Frontier Technology and Innovations Group (FTIG) remains dedicated to steering industry-oriented advancements, promoting innovation, adopting sustainable practices, and advancing technologies within the automotive sector.

Over the past year, there have been significant developments, particularly in hydrogen as a viable alternative fuel. SIAM focuses on sustainable mobility initiative of हरित हाइड्रोजन (Hydrogen Mobility), its collaborations, and achievements, especially with the launch of the Government of India's National Green Hydrogen Mission (NGHM).

### SIAM's Role in Hydrogen Applications R&D

SIAM has been nominated as a member of Sub-Committee on Hydrogen Applications. Under the R&D roadmap released by the MNRE. This sub-committee is responsible for reviewing Hydrogen Applications R&D projects, a critical part of the R&D under the NGHM (National Green Hydrogen Mission). The committee assesses and recommends projects that could advance India's hydrogen technology sector, contributing to the country's goals of becoming a global leader in hydrogen production and usage.

### Hydrogen Testing and Infrastructure Scheme

As part of the NGHM, MNRE launched the Hydrogen Testing and Infrastructure Scheme with an outlay of INR 200 crores. SIAM was consulted during the development of this scheme, which aims to establish a robust infrastructure for testing hydrogen technologies. This initiative is designed to ensure that emerging hydrogen innovations meet the highest safety and performance standards. The involvement of SIAM ensured that the industry's perspectives and requirements were considered in the scheme's framework.

### Hydrogen Mobility Pilot Projects

SIAM played a key role in the Hydrogen Mobility Pilot Projects, an initiative funded with INR 496 crores under the NGHM. ARAI managed the project, overseeing the development and deployment of hydrogen-powered vehicles. SIAM submitted detailed proposals and successfully advocated for extending the submission deadline with ARAI and MoRTH. This extension was critical for a comprehensive evaluation of the projects and ensuring maximum participation from SIAM members.

### Collaboration for the International Conference on Advanced Powertrain for Mobility

In collaboration with ARAI, SIAM participated in the International Conference on Advanced Powertrain for Mobility in December 2023 at Pune. The conference focused on hydrogen mobility as a potential alternative fuel, bringing together industry experts, researchers, and policymakers. The discussions centered on recent technological advancements in powertrain systems, the potential of hydrogen fuel cells, and the various challenges and opportunities associated with transitioning to hydrogen-based mobility solutions.

### 2<sup>nd</sup> ISTEM Conference at Bharat Mobility Global Expo 2024

SIAM hosted the 2nd ISTEM Conference at the Bharat Mobility Global Expo 2024 in February 2024. This conference featured a session on Hydrogen which discussed the potential of hydrogen as a future fuel. Keynote speakers and panellists covered topics ranging from the production and storage of hydrogen to its distribution and integration into vehicles. The event concluded with reiterating the need for interdisciplinary collaboration to fully realize the potential of hydrogen as a clean energy source.

### Decarbonization Pavilion at Bharat Mobility Global Expo 2024

At the Bharat Mobility Global Expo 2024, SIAM curated a Decarbonization Pavilion. This space

showcased the latest hydrogen-based vehicles and technologies. This pavilion featured the latest technologies in hydrogen based mobility, Renewable Energy integration, and Green Transportation Infrastructure.

### Transportation Sub-Committee of the US-India Hydrogen Taskforce

SIAM's leadership was recognized with its nomination as the Co-Chair of the Transportation Sub-Committee of the Hydrogen Taskforce. This task force, formed by the US Department of Energy and MNRE. The task force is focused on advancing

hydrogen technology. As Co-Chair, SIAM will guide the development of strategies and policies for adopting hydrogen in the transportation sector.

### Collaboration with the Hydrogen Association of India

In December 2023, SIAM joined the Hydrogen Association of India at the 10th International Hydrogen and Fuel Cell Conference (IHFC-2023). This conference was a key platform for industry leaders, researchers, and policymakers to share knowledge and insights on hydrogen and fuel cell technologies.

Annual Report Card (2023-24)			
Deliverable	Measure	Owner	Stakeholder
To Ensure Smooth Transition to New technologies	<ul style="list-style-type: none"> <li>SIAM's Participation in Hydrogen Applications R&amp;D</li> <li>Hydrogen Testing and Infrastructure Scheme</li> <li>Hydrogen Mobility Pilot Projects</li> <li>Collaboration for the International Conference on Advanced Powertrain for Mobility (December 2023)</li> <li>2nd ISTEM Conference at Bharat Mobility Global Expo 2024</li> <li>Decarbonization Pavilion at Bharat Mobility Global Expo 2024</li> <li>Transportation Sub-Committee of the US-India Hydrogen Taskforce</li> <li>Collaboration with the Hydrogen Association of India (IHFC-2023)</li> </ul>	SIAM Frontier Technology and Innovations Group	Membership / Government



10<sup>th</sup> International Hydrogen and Fuel Cell Conference (IHFC-2023)

## SERVICE, INSPECTION, MAINTENANCE & CERTIFICATION GROUP

### Vehicle Recall Initiatives

The Service, Inspection, Maintenance & Certification Group has been actively promoting the recall of faulty vehicles. This effort is supported by close collaboration with MoRTH to develop the Vehicle Recall Portal. Since its inception, SIAM and its members have diligently updated the recall data on this portal. Following the regulations mandated by MoRTH, effective April 1, 2021, automobile manufacturers are required to recall faulty vehicles to enhance consumer safety and reduce road accidents.

### Right to Repair Framework and LiFE Initiative

The Right to Repair framework, aligned with the Lifestyle For Environment (LiFE) initiative introduced by Honorable Prime Minister Shri Narendra Modi in 2021, was officially launched by the Ministry of Consumer Affairs in July 2022. A committee was formed to develop a comprehensive framework,

which offers substantial benefits for both producers and consumers. This initiative supports circular economy goals by improving the lifespan, maintenance, reuse, upgradeability, recyclability, and waste management of various products. The initial focus of this framework encompasses farming equipment, mobile phones, tablets, consumer durables, and automobiles along with their components.

### SIAM's Call to Action for Member Companies

Following a recent interaction on July 5, 2024, with the Department of Consumer Affairs, Govt. SIAM has encouraged its member companies to actively participate and register on the designated portal. Member companies are further encouraged to request their service departments to upload

Several member companies have already onboarded the portal, showing support for the initiative.

Annual Report Card (2023-24)			
Deliverables	Measures	Owner	Stakeholders
To combat issues related to maintenance procedures and on-ground hurdles faced by OEMs post sale of vehicles	Actively contributed towards frequent updation of Vehicle Recall Portal under the aegis of MoRTH.	SIAM Service, Inspection, Maintenance and Certification Group	Society, Government and Membership
To provide consumers with required knowledge about their vehicle related to maintenance and repair procedures	Discussion and Deliberation on provisions for 'Right to Repair' ongoing while government has emphasized the importance of safety, environment, and security in vehicle maintenance and repair. SIAM also has requested its members to onboard and submit the requisite information on the portal.		





Meeting with Ministry of Consumer Affairs on Right to Repair



SIAM 2024

## STYLING & DESIGN GROUP

SIAM Styling & Design group was established to work towards capacity and capability building in the area of Automotive Styling & Design in the country. The objective of the Group is to bridge the gap between industry and academia through information exchange among various stakeholders, including design professionals, students, and academicians.

### Styling & Design Conclave and Automotive Design Challenge

During the year, two major events namely, the 18th edition of the Styling & Design Conclave and the 16th edition of the Automotive Design Challenge (ADC) were organized on March 22, 2024, in Varanasi, UP. The theme of the Conclave was "Designing for Aspiring India," focusing on the future of vehicle styling and design in India. The event brought together several experienced automobile designers from India and abroad to share their ideas and inputs, shaping the future of aesthetic vehicle design.

The conclave witnessed participation from more than 150 delegates, comprising design practitioners from Auto OEMs, component suppliers, design students, academicians, management executives from the automotive fraternity, and other stakeholders.

### Showcasing Top Talent in Automotive Design

The 16th edition of the annual design competition ADC was organized with the theme – "Designing a new age compact mobility solution for emerging India in 2030."

The conclave showcased the selected top-10 presentations of the Automotive Design Challenge (ADC) 2023 from design students.. SIAM initiated the design challenge to provide a platform for aspiring Automobile Designers to exhibit their talent and capitalize on opportunities for the future. The top-three winners of the ADC 2023 were announced during the conclave, showcasing the best emerging talent in Automotive Styling & Design. Mr. Likhith Sarvareddy from Strate School of Design was declared the first prize winner, followed by Mr. Vinayak Tiwari from Ajeenkya DY Patil University and Mr. Bhujang Sakore from National Institute of Design (NID), who emerged as the first and second runner-up, respectively.

The Group plans to expand its horizon by organizing several design activities by closely collaborating with various stakeholders to promote the Automotive Styling & Design vocation in the country.

Annual Report Card (2023-24)			
Deliverable	Measures	Owner	Stakeholder
To promote Automotive Styling & Design domain in the country	1. Organised 18th edition of SIAM Styling & Design Conclave	SIAM Styling & Design Group	Membership and Society
	2. Organised 16th edition of Automotive Design Competition (ADC) for design students and Top-3 students were awarded.		
	3. Organised interaction with Design Department at IIT Guwahati		





16<sup>th</sup> edition of Automotive Design Challenge (ADC) at Varanasi, Uttar Pradesh



18<sup>th</sup> edition of Styling & Design Conclave at Varanasi, Uttar Pradesh

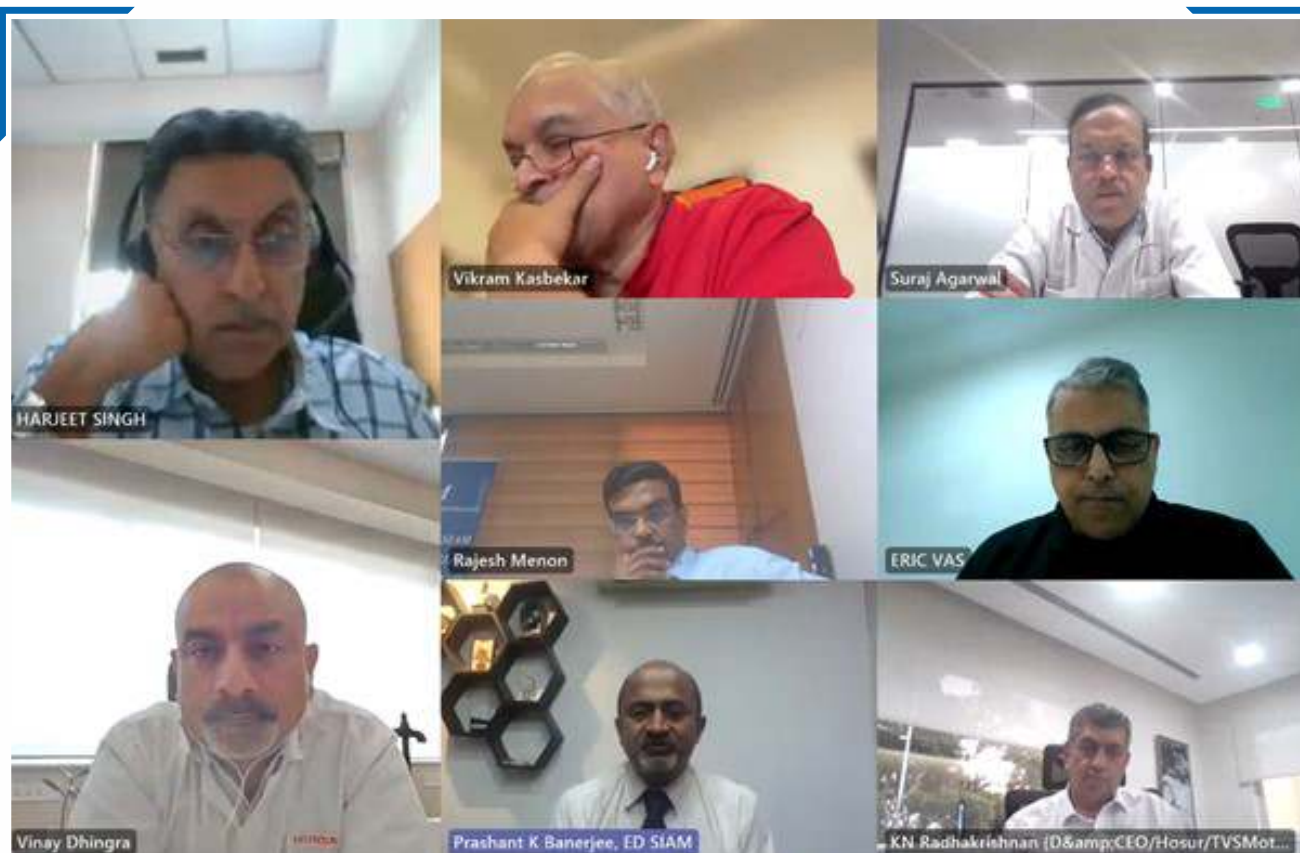


## TWO-WHEELER CEOs COUNCIL

Two-wheeler segment continued the recovery path with a good growth of over 13% in domestic sales to almost 18 million units, even though still lower than the earlier peak of 21 million units in FY19.

The Council, led discussions on GST reduction for CNG and flex-fuel vehicles, swappable battery standards, and concerns about FAME 3 delays. Updates were shared on CAFÉ, Feracrylum, and OBD II regulations. Concerns over vehicle scrappage and automated test centers were discussed, with the Secretariat tasked to follow up on various issues and draft submissions to relevant ministries

Other critical topics, included the implementation of BS-VII emission standards and the latest CAFÉ norms. Introduction of Flex Fuel Two-Wheelers and preparations for the upcoming SIAM-JAMA Annual Meetings in October 2024. Under other subjects, the Council considered awarding the AVAS project to IIT Delhi on a cost-sharing basis, discussed forming a Two-Wheeler Safety Committee in response to airbag regulations, and received updates on the Extended Producer Responsibility (EPR) and End-of-Life Vehicles (ELV) submissions. These discussions aimed to address regulatory and safety developments within the industry.



*Members at SIAM Two-Wheeler CEOs Council Meeting*

## THREE-WHEELER CEOs COUNCIL

Three-wheelers provide an inexpensive & eco-friendly mode of transport with better fuel economy. India's three-wheeler market is forecasted to grow at double-digit CAGR as the need for last-mile connectivity is rising. India is the world's foremost producer, consumer, and exporter of three-wheelers and the three-wheeler industry segment is linked closely with some of the most crucial (mass) sections of economic activities in India. The decisions and suggestions of SIAM 3W CEOs Council have always motivated SIAM to move forward by introducing global safety and emission regulations.

The volumes of 3W have gone up over the last year due to the significant efforts of the industry. Last year 691749 three-wheelers were sold in the country which is an 41.5% increase in sales compared to the previous year's sales of 488768. Passenger 3W sales

recorded a massive growth of 48.6% while Goods 3W grew by 14.3%. Electric 3W are also growing rapidly and constituted 16.3% of all 3W sold.

SIAM's 3W CEOs council works towards benefit of the 3W industry by defining a clear roadmap of engagement and decisions to move forward. Last year the group deliberated on various agendas of importance namely Ban of E Rikshaw in Agra from Jan 2024 in both urban and rural areas, FAME and PLI. The CEOs Council deliberated and decided to submit to the Government seeking extension of FAME till 50% electric vehicles share is achieved in the market, Reduction of GST on Exclusive parts for EV Manufacturing from 18% to 5%, No restriction on no. of vehicles incentivized for individuals or business purchases

Annual Report Card (2023-24)			
Deliverable	Measure	Owner	Stakeholder
To review the industry performance and create actions for demand creation and sustainability	Continuous engagement with the Government of India to address industry concerns	SIAM 3W CEOs Council Group	Membership / Government



Members at SIAM Three-Wheeler CEOs Council Meeting

## PASSENGER VEHICLE CEOs COUNCIL

The domestic sales for the passenger segment led the growth with overall production touching almost 5 million units, including 4.2 million units domestic sales with a growth of 8.4% over 2022-23.

Passenger Vehicle CEO Council discussed on the following 2 key issues :

- Vehicle Scrappage Policy
- New EV Manufacturing Policy

**Vehicle scrappage policy:** The council stressed on the Certificate of Deposit, the percentage of discount that can be given on the value of the vehicle and the incentives that can be given to the Registered Vehicle Scrapping Facilities (RVSF).

**Development of New EV Manufacturing Policy for India:** The council emphasized to modify the PLI Auto phase -II scheme as well as to rationalize import duties which would allow the adoption of new technologies. The council also emphasized to develop technologies indigenously and utilize local talent for advancing the technologies in the auto industry , and promote the manufacturing sector in India.

SIAM should do a detailed representation to the Ministry of Heavy Industries (MHI), Ministry of Commerce (MoC), and the Department for Promotion of Industry and Internal Trade (DPIIT) highlighting the need for industry protection, particularly in the context of local manufacturing.



Members at SIAM Passenger Vehicle CEOs Council Meeting



## COMMERCIAL VEHICLE CEOs COUNCIL

The Commercial Vehicle CEO Council was established to bolster demand in the vehicle segment. Since its inception, the council has been meeting regularly to advance the interests of the commercial vehicle industry by defining a clear roadmap for engagement and making strategic decisions to progress.

### Economic Growth and Industry Performance

On the backdrop of a robust economic growth of 7.6% based on conducive policies of Government of India, the Indian Automobile Industry has posted a satisfactory performance with domestic industry growing by 12.5% during the Financial Year 2023-24. Domestic Commercial Vehicle industry had a marginal growth to 0.97 million units and within that, some drop was experienced in LCVs and SCVs due to degrowth in CNG segment. The growth in Commercial vehicles was also impacted due to migration to higher tonnage trucks which created higher payload capacity, that is not reflected in the number of units.

### Market Composition and Outlook

The India Commercial Vehicles Market is fairly consolidated, with the top five companies occupying 91.28%. The major players in this market are Ashok Leyland Limited, Mahindra & Mahindra Limited, SML Isuzu Limited, Tata Motors Limited and VE Commercial Vehicles Limited (sorted alphabetically). Other important companies include Asia Motor Works Limited, Daimler India Commercial Vehicles Pvt. Ltd., Eicher Motors Ltd., Force Motors Ltd., Volvo Buses India Private Limited. For commercial segment, the long-term demand seems favourable, backed by a strong macroeconomic environment, healthy replacement demand (specifically passenger vehicles), good traction on infrastructure projects (higher allocation in the recent interim Budget), and improving freight demand.

### Decarbonization Strategies in the Commercial Vehicle Sector

The Indian commercial vehicle industry is exploring several green options for the decarbonisation of the heavy-duty truck segment. Due to the price-sensitive nature of the heavy-duty truck segment, Indian commercial vehicle manufacturers are open to embracing a technology-agnostic approach. Dynamic and cost-sensitive nature of the heavy commercial vehicle market, MHCV manufacturers are willing to embrace the technology-agnostic approach in order to meet the zero carbon emission target by utilising green and clean fuel. With this approach, the heavy commercial vehicle industry has explored multiple pathways to ride environment-friendly. Some of the options being explored by the industry are:

#### Battery-Powered Heavy Commercial Vehicles

- Battery-powered heavy commercial vehicles to help to ensure zero carbon emission: Though Zero on emissions, high up-front costs and inadequate charging infrastructure on the highways and hinterlands, the rate of electrification in this commercial vehicle (CV) segment is very low. Moreover, the high payload capacity and maximum uptime considerations play an important role in haulage operations. These vehicles are still in the early stages of EV technology because the battery packs contribute a significant amount of dry weight which limits the vehicles' load-carrying capacity and range capability.

#### Hydrogen ICE Technology in HCV Segment

- Clean fuel technology like hydrogen ICE offering eco-friendly mobility solutions: The emerging era of zero carbon-emission commercial mobility in India was demonstrated at the Auto Expo 2023, Greater Noida, held last year and the recently concluded Bharat Mobility Global Expo 2024, where Original Equipment Manufacturers (OEMs)

showcased a variety of innovative products to push the heavy-vehicle industry beyond the low-carbon technologies of CNG and LNG. Among innovative products and cutting-edge technologies, the hydrogen ICE (internal combustion engine) technology is prominent for heavy trucks. Also, a 'fuel-agnostic' IC powertrain that supports hydrogen fuel is on the anvil as a low carbon technology for this segment.

Largely similar to CNG engines, hydrogen engines do not change much metamorphically but hydrogen technology modifies the engine heads, fuel ignition system, and control electronics. Hence, it is easier for OEMs to adopt this technology without any metamorphic change to transition out of diesel.

#### **LNG Heavy Commercial Vehicles**

- Indian heavy commercial vehicle industry has witnessed another green and clean fuel technology – LNG (liquefied natural gas) – which is stored in a fuel tank and works similarly to a diesel-powered vehicle with a spark-ignited internal combustion engine. Since LNG is a pure clean fuel option, it provides lesser emission to the environment as compared to diesel and CNG-powered vehicles.
- Companies in India are working on this technology to utilise LNG fuel in heavy-duty trucks to ensure reduced carbon emissions in the Indian transportation sector.
- Secretary, MoPNG chaired a meeting on 9th April 2024 on the usage of LNG as a Transport Fuel for M&HCVs and requested an elaborate and comprehensive justification from SIAM on providing the LNG dispensing stations required pan India, giving location details, with proper justification of traffic and fuel offtake. Also requested was the details based on vehicle category (tractor, tipper, duper, cargo, etc.), application (long haul, tankers, vehicle carriers, etc.), operating conditions (mining, construction, intracity, etc.) and axel type/tonnage and Expected technology improvements for efficiency in M&HCV. SIAM compiled the recommendations and are under review.

#### **Eco-Friendly Commercial Vehicle Initiatives**

The ambitious goal set by the Indian government is to reduce the emissions intensity by 45 percent by the year 2030. This target can be achieved by utilising clean fuel technology to ensure minimal carbon footprints and green commercial vehicle mobility. In this backdrop, the Indian commercial vehicle industry is finding several ways to decarbonise the heavy-duty truck segment, led by low-carbon CNG and LNG fuels in the short run, zero-carbon hydrogen ICE technology in the middle run, and EV technology in the long run.

#### **Efforts by CV Council to support Decarbonization**

Studies under the CV CEO council concluded :

- To ensure deployment of CNG as a transitional fuel till FY30 post which, efforts should shift towards increasing adoption of EVs in the LCV segment
- There is also a clear need to deploy adequate Natural Gas infrastructure which can increase the adoption of LNG vehicles in the MHCV segment between FY25 till FY35.
- Rollout of the Fuel efficiency norms under the Energy Conservation Act, 2001 commenced from April, 2023, with the exclusion of tippers, the norm is in line with the request of the council. Further, the group under CV council completed the initial scanning of the development of Bharat VECTO tool to define the next stage of FE regulations which shall require engagement of the CV industry with the test agencies in future.
- The CV CEO council worked in closed coordination with MORTH to try to issue a notification ensuring level playing field for both OEMs manufacturing Buses and the Bus Body builders. Government of India has now eliminated the provision of self-certification of the Bus Body built by a Bus Body fabricator and instead, made it mandatory that testing and approval of Body building of Buses with seating capacity of 13 or more passengers, excluding driver, has to be done by the Test Agencies. Hence, all new buses, whether manufactured by OEM or fabricated on a drive-away chassis by a Body builder has to be uniformly tested and with same parameters, for obtaining a Bus Body Certificate.

The council has been working towards promoting the interest of CV industry by defining a clear roadmap of engagement and decisions to move forward.

### Annual Report Card (2023-24)

Deliverables	Measures	Owner	Stakeholders
To review the Industry performance and create actions for Demand creation.	Engagement with Ministry of Petroleum and Natural Gas and revived the demand for the LNG fleet segment by sharing the phase-wise implementation of the LNG station keeping in view of the movement of freight and vehicles in the heavy duty segment. This shall create the specific demand for vehicles. The report is under review.	SIAM Commercial Vehicles CEO Council Group	Membership
Measures taken to create a level playing field between OEM/Non-OEMs for compliance for buses.	G.S.R. 159(E) dated 6th March, 2024 was notified by MoRTH basis the request of SIAM.		
FE regulations for Heavy and Light duty vehicles.	<ol style="list-style-type: none"> <li>The FE norms for HDV ( based on constant speed fuel consumption) have been made effective from April,2023 onwards with exclusion of Tippers.</li> <li>The group under CV CEO council conducted the preliminary work for defining the Created a framework for developing of Bharat VECTO tool for future Fuel efficiency compliance. The Financial support for development of the tool has been requested from BEE.</li> </ol>		



Members at SIAM Commercial Vehicle CEOs Council Meeting



## INITIATIVES OF SIAM – SAFE

India has the world's second-largest road network, covering around 6.21 million kilometers. At the same time, the transport sector in India is dominated by the road sector which carries about 60% of freight and 87% of passenger traffic. Although India has 1% of the world's vehicles with 37,45,15,039 total vehicles on the road, the highest number of road accident fatalities worldwide occur in India, with about 1.5 lakh deaths annually - averaging 47 accidents and 18 fatalities per hour resulting in a 3% GDP loss.

Therefore, SIAM under its initiative Society for Automotive Fitness & Environment (SAFE) has adopted proactive measures in coordination with the various stakeholders including Centre and State Governments, educational institutes, Delhi police, NGOs etc to address the critical issue of road safety by organizing awareness campaigns, workshops, and training programs. SIAM has launched the “सुरक्षित सफर (Safe Journey)” strategy in September 2022, which is focused 5 E's i.e. Engineering, Enforcement, Education, Environment & Emergency care, and Evaluation for robust road safety and attaining the UN-led Sustainable Development Goals 2030..

Aligning its efforts with India's commitments to the Sustainable Development Goals, SAFE exemplifies collective action and highlights the potential for a safer, cleaner, and more prosperous future..

These efforts are crucial for reducing road accidents and fatalities, ultimately contributing to the global goal of halving road traffic deaths and injuries by 2030.

### Strategies and Approaches Adopted by SAFE

SAFE actively collaborates with auto OEMs, government agencies, NGOs, and other stakeholders in pursuit of developing a comprehensive road safety and environmental protection strategy.

- **Promoting Responsible Road Behaviour and Environmental Sustainability:** SIAM conducts workshops, educational programs, and awareness campaigns to promote road safety and eco-friendly practices. Through its MoU with Kendriya Vidyalaya Sangathan, the SIAM-SAFE initiative aims to educate over 1.4 million school students on these values from their formative years. The curriculum is based on the 4 Es of safety—Education, Enforcement, Emergency Care, and Engineering—and is tailored to different age groups and class levels. SAFE has been an advocate of sustainable practices and through its campaigns like Sukh da Saah, is spreading awareness about the consequences of parali burning, to mitigate the subsequent air pollution.
- **Hands-On Training and Health Initiatives:** SAFE with support of member companies emphasizes practical training and health checks to ensure the well-being of riders. The interactive courses cater to various literacy levels in all major Indian languages, equipping novice riders with essential safe riding skills. SIAM-SAFE collaborations with NGOs and hospitals to organize regular health check-up camps offering eye and ear care, along with tests for blood pressure and sugar levels. These camps help improve the visual and hearing abilities of riders, contributing to reduced road accidents.
- **Advocating Regular Vehicle Maintenance and Fitness:** SAFE advocates for routine vehicle maintenance and fitness checks to prevent accidents caused by technical faults and to minimize emissions. Regular inspections contribute to safer roads and a healthier environment, emphasizing the importance of vehicle upkeep in road safety.

- Enhancing Vehicular Engineering Standards:**  
Following the government's 2019 directive, SIAM has worked with two-wheeler manufacturers to improve safety standards by implementing combi-braking systems (CBS) for two-wheelers with engine capacities under 125cc and anti-lock braking systems (ABS) for those over 125cc. The adoption of tubeless tyres and LED lighting in newer two-wheelers further reduces the risk of road accidents.
- Shaping Policy and Regulatory Frameworks:**  
SIAM actively participates and facilitates interactions with policymakers, governmental bodies, and industry stakeholders to shape a regulatory environment that prioritizes road safety and sustainability. Thereby ensuring transparency and collaboration in policy development, keeping road safety and environmental concerns at the forefront of regulatory frameworks.

#### Activities & Accomplishments of SAFE to minimise accidents and fatalities

SIAM towards achieving the above goals under the SAFE, an initiative of SIAM has emerged as a pioneering force dedicated to ensuring road safety and promoting environmental sustainability within the Indian automotive industry. This non-profit aims to create awareness, advocate policy changes, and foster collaborations to enhance and strengthen road safety. Over the past year, several initiatives were taken to improve road safety in the country, some of the key initiatives include:

#### SAFE Annual Convention 2023 – Safe Roads, Safe India: Strategies for Ensuring Safer Transportation

The Society for Automotive Fitness & Environment (SAFE), an initiative by SIAM, hosted its 24<sup>th</sup> Edition of the SAFE Annual Convention 2023 in Guwahati, Assam, on September 26<sup>th</sup>, 2023. This year's convention was themed "SAFE Roads, SAFE India:



"Strategies for Ensuring Safer Transportation," focusing on enhancing road safety through improved driving habits, road discipline, and vehicle safety.

The primary goal of the convention was to outline and advance strategies for bolstering road safety in India. This involved promoting safer driving practices, increasing public awareness, and implementing more stringent safety measures for vehicles and roads. The event aimed to create a lasting impact on these fronts by engaging various stakeholders to discuss and collaborate on effective solutions.



The convention featured several prominent dignitaries:

- Dr. Himanta Biswa Sarma, Hon'ble Chief Minister of Assam, provided a message highlighting the importance of road safety in the context of national growth and the role of the automobile industry.

- Shri Parimal Suklyabaidya, Hon'ble Transport Minister of Assam, served as the chief guest and spoke about the government's efforts and accomplishments in improving vehicular safety.
- Shri Adil Khan, IAS, Secretary of Transport, Government of Assam, and Prof. Dr. Nani Gopal Mahanta, Academic Advisor to the Government of Assam, were among the other key speakers, addressing the urgent need for road safety education and enforcement.

### **SAFE Technology Workshop 2023 – Sustainable Mobility Imperatives Around Road Safety & Environment**



SAFE, under the aegis of the SIAM, held its Technical Workshop 2023 in Guwahati, Assam, focusing on 'Sustainable Mobility Imperatives concerning Road Safety and the Environment'. This event aimed to promote safe and environmentally conscious transportation across India.

Key themes included the integration of environmental considerations into road safety strategies, the adoption of EVs, the role of biofuels in green transportation, and improvements in vehicle management and regulations.

The workshop featured an array of distinguished guests and speakers:

- Shri Gyanendra Pratap Singh, IPS, Director General of Police, Government of Assam
- Shri Adil Khan, IAS, Secretary of Transport, Government of Assam
- Dr. S Lakshmanan, IAS, Managing Director, Guwahati Smart City Limited
- Shri Oinam Sarankumar Singh, IAS, Managing Director, Assam Hydrocarbon & Energy Company Ltd.

SAFE Annual Convention felicitated 10 senior govt. officials for their outstanding contributions to road safety in Assam.



- **Sukh da Saah Multi-Media Campaign:** conducted via PTC TV during 2023-24 included 114 video advertisements broadcasted in November 2023. Its aim was to raise awareness about halting stubble burning and safeguarding the environment from pollution. Under its Sustainable Mobility initiative, SIAM endorsed the ongoing multimedia campaign, emphasizing its importance in promoting sustainable agricultural practices among farmers.
- **SAFE Mobility Project (7<sup>th</sup> & 8<sup>th</sup> December 2023):** With the aim of fostering safer mobility at the grassroots level, SIAM under its सुरक्षित सफर (SAFE JOURNEY) hosted the 9th Safe Mobility Inter-School Competition on Road Safety during 07th & 8th December 2023. The two-day competition engaged more than 1000 students from 38 schools who participated in various competitions designed to raise awareness about issues related to 'Safe Mobility'.



- **National Road Safety Week (11<sup>th</sup> - 17<sup>th</sup> January 2024):** The National Road Safety Week was celebrated by SIAM members by organizing various road safety activities such as driver training, road safety education for students, health check-ups, etc. across dealerships, manufacturing plants and service stations to spread the awareness on roads safety.
- **सुरक्षित सफर (Safe Journey) Pavilion at Bharat Mobility Global Expo (1<sup>st</sup> – 3<sup>rd</sup> February 2024):** A dedicated Road Safety pavilion was set up to educate attendees about road safety standards featuring driving simulators, safety technologies in vehicles, road infrastructure equipment, emergency care equipment etc on the sidelines of the Bharat Mobility Global Expo 2024, which saw a footfall of more than 1 lakh visitors. Road Safety Run for 1500 students and Road Safety Street plays by more than 500 students in these three days were the attraction of the pavilion.
- **Road Safety awareness initiatives with school students:** SIAM support Delhi Traffic Police in educating the school students in the area of road safety. Various workshops and competitions were organised throughout the year.
- **Valedictory event for the Road Safety Club of New Delhi (18<sup>th</sup> February 2024):** SIAM in close collaboration with Delhi Police organized various road safety awareness programs with school students. Recognize schools by awarding the Road Safety Rolling Trophy and the Runner Up Trophy to schools. SIAM and Delhi Police presented the Road Safety Rolling Trophies, along with cheques and certificates to winner schools.
- **World Environment Day 2024:** SIAM through its environmental sustainability initiative under SAFE hosted an international conference titled "Integrating Mission LiFE in Automobile Industry: Transitioning Towards Viksit Bharat" discussing various imperatives of sustainable mobility and the contributions of automotive sector.
- **Road Safety Education & Awareness Program:** In August 2023, SIAM formalized a Memorandum of Understanding (MoU) with the Kendriya Vidyalaya Sangathan (KVS) to instill responsible road behaviour among school students. This strategic partnership aims to reach over 1.4 million students across 1,250 Kendriya Vidyalaya schools nationwide through a large-scale educational campaign. SIAM is currently developing video modules tailored to junior, secondary, and senior secondary students. These nine modules cover a range of essential topics from Pedestrian Safety, Basics of Road Safety, and Safety Gears to Responsibilities of a Good Samaritan, and Legal Tips on Challan and Driving Licenses. These modules aim to create a comprehensive and engaging road safety curriculum, fostering a culture of safety and responsibility among the up-coming generation.

Moving forward, continued dedication to these initiatives will be crucial in ensuring long-term success and safety on India's roads.

### Meeting the National Commitments to Sustainable Development Goals

In support of the sustainable development goal of Industry, Innovation, and Infrastructure, SAFE collaborates with the automotive industry to enhance technologies and infrastructure. SAFE's road safety campaigns contribute to safer urban environments aligning with the UN's SDG of sustainable cities and communities. Aligning with the Responsible Consumption and Production goal, SAFE minimizes environmental impacts and promotes efficient resource use.

SAFE supports UN's Climate Action goals through its focus on alternative fuels and electric vehicles, and initiatives like the 'Sukh Da Saah' program to combat air pollution. SAFE also exemplifies UN's SDG of Partnerships for the Goals by working with various stakeholders to achieve shared goals in sustainability and road safety.

Annual Report Card (2023-24)			
Deliverable	Measure	Owner	Stakeholder
To Bring Safety on our Roads that lead towards fatality reduction (Policy intervention, awareness, training and education)	SIAM-KVS signed an MoU on 2 Aug 2024	SAFE	Society/ Government/ Membership/ Media / NGOs and other stakeholders
	SIAM will develop Road Safety Videos		
	SIAM will create Road Safety Educational Gallery		
	Workshop on Sustainable Mobility Imperatives around Road Safety & Environment		
	SAFE Roads, SAFE India: Strategies for Ensuring Safer Transportation		
	College Students Visit to Automobile Manufacturing Plant		
	Sukh da Saah Multi Media Campaign		
	Road Safety Competitions with School Students		
	National Road Safety Month		
	Surakshit Safar Pavilion during Bharat Mobility Global Expo		
	Road Safety Run with Students		
	Road Safety Rolling Trophy to School		



SAFE Annual Convention 2023, Guwahati, Assam



SAFE Governing Council (GC) Meeting at Guwahati, Assam



SAFE Technology Workshop, Guwahati, Assam











# SIAM COUNCIL & GROUPS 2023-24

## A. COUNCIL ON INTERNATIONAL BUSINESS



**Chairman: Mr Un Soo Kim**  
Managing Director & CEO,  
Hyundai Motor India Ltd



**Co-Chairman: Mr Yash Pal Sachar**  
Vice President (Corporate Affairs),  
Ashok Leyland Ltd

## B. COUNCIL ON MARKET

### 1. INTERNATIONAL RELATIONS & TRADE POLICY GROUP



**Chairman: Mr Rahul Bharti**  
Executive Director,  
Corporate Affairs,  
Maruti Suzuki India Ltd



**Chairman: Mr Rajesh Kaul**  
Vice President –  
Sales & Marketing (CVBU),  
Tata Motors Ltd



**Co-Chairman: Mr Sachin Arolkar**  
Head, International Operations,  
Mahindra & Mahindra Ltd



**Co-Chairman: Mr. Narender Kukreti**  
Head –  
External Affairs & Public Affairs,  
Toyota Kirloskar Motor Pvt Ltd

### 2. EXPORTS GROUP



**Chairman: Mr Rakesh Sharma**  
Executive Director,  
Bajaj Auto Ltd



**Chairman: Mr Tapan Ghosh**  
Vice President - Sales,  
Hyundai Motor India Ltd

### 3. CSR & COMMUNITY SERVICES GROUP



**Co-Chairman: Mr Anurag Mehrotra**  
Vice President, Commercial  
Vehicle-International Business  
Tata Motors Ltd



**Chairman: Mr Puneet Anand**  
Associate Vice President &  
Vertical Head,  
Hyundai Motor India Ltd





**Co- Chairman:**  
**Mr Bhagwan K Bindiganavile**  
Executive Vice President –  
Strategic Planning,  
VE Commercial Vehicles Ltd

#### 4. SERVICE & INSPECTION, MAINTENANCE AND CERTIFICATION GROUP



**Chairman:**  
**Mr Shrinivas P Chakravarty**  
Head of Quality Management  
Skoda Auto Volkswagen India Pvt. Ltd

#### 5. GAS BASED MOBILITY GROUP (CNG & LNG)



**Chairman: Mr Ashish Chutani**  
Head – Government & Policy Affairs,  
Maruti Suzuki India Ltd



**Co-Chairman: Mr D Balakrishnan**  
General Manager,  
Product Development,  
Ashok Leyland Ltd



**Co-Chairman: Mr P Gowrishankar**  
General Manager- Engineering Quality,  
Domestic Regulations,  
Tata Motors Ltd

#### 6. TRADE FAIR GROUP



**Chairman: Mr B Srinivas**  
Chief Operating Officer  
Volvo Eicher Commercial Vehicles Ltd

### C. COUNCIL ON ECONOMIC AFFAIRS



**Chairman: Mr. Gopal Mahadevan**  
Wholetime Director & CFO,  
Ashok Leyland Ltd

#### 1. AATMANIRBHAR BHARAT GROUP/SOURCING



**Chairman: Mr. Sunil Kakkar**  
Senior Executive Director –  
Supply Chain,  
Maruti Suzuki India Ltd



**Co-Chairman: Mr. Veeraraghavan R**  
Senior Vice President -  
Strategic Sourcing,  
Mahindra & Mahindra Ltd



**Co-Chairman: Mr. Sachin Kulkarni**  
Executive Director – Corporate  
Procurement & Member of the Board,  
Skoda Auto Volkswagen India Pvt Ltd



**Co-Chairman: Mr. Badrish Sinha**  
Vice President-Purchasing,  
VE Commercial Vehicles Ltd

## 2. ECONOMIC RESEARCH GROUP



**Chairman: Mr Vikram Gulati**  
Country Head & EVP –  
Corporate Affairs & Governance,  
Toyota Kirloskar Motor Pvt Ltd

## 3. TAXATION POLICY GROUP



**Chairman: Mr. Rajesh Shukla**  
Head – Indirect Taxation,  
Tata Motors Ltd

## 4. TAXATION PROCEDURAL & EODB-TAX GROUP



**Chairman: Mr Rajeev Goyal**  
Chief Financial Officer –  
Auto & Farm Sector,  
Mahindra & Mahindra Ltd



**Co-Chairman: Mr Dinesh Gandhi**  
Vice President-Finance,  
Maruti Suzuki India Ltd

## 5. DIRECT TAX



**Chairman: Mr. Sanjeev Agarwal**  
Head –Taxation & Customs,  
BMW India Pvt. Ltd

## 6. FINANCE, LEASING & INSURANCE GROUP



**Chairman: Mr G. Parthasarathy**  
Head- Finance,  
TVS Motor Company Ltd

## 7. HUMAN CAPITAL GROUP



**Chairman: Mr Charles JS Walter**  
Vertical Head & AVP -  
Human Resources,  
Hyundai Motor India Ltd

## 8. SKILLING GROUP



**Chairman: Mr. Piyush Arora**  
Managing Director & CEO,  
Skoda Auto Volkswagen India  
Pvt Ltd



**Co-Chairman: Mr. Hardeep S Brar**  
Sr. Vice President – Sales & Marketing,  
Kia India Pvt Ltd

## 9. AFTER MARKET PARTS



**Chairman: Mr R Ramesh**  
Executive Vice President –  
Customer Service, Retail Excellence  
& Network Development,  
VE Commercial Vehicles Ltd



**Co-Chairman: Mr Pankaj Tiwari**  
Vice President - Parts,  
Maruti Suzuki India Ltd.

## D. TECHNICAL COUNCIL



**Chairman: Dr N Saravanan**  
President &  
Chief Technology Officer,  
Ashok Leyland Ltd



**Co-Chairman: Dr Tapan Sahoo**  
Executive Director (Engineering),  
Maruti Suzuki India Ltd

## 1. E-MOBILITY GROUP



**Chairman: Mr Sushant Naik**  
Global Head,  
Government & Public Affairs,  
Tata Motors Ltd



**Co-Chairman: Ms Suman Mishra**  
MD & CEO,  
Mahindra Last Mile Mobility Ltd



**Co-Chairman: Mr Vipin Surana**  
Vice President  
VE Commercial Vehicles Ltd



**Co-Chairman: Mr Manu Saxena**  
Sr. Vice President - Future Mobility,  
TVS Motor Company

## 2. RECYCLING AND MATERIAL GROUP



**Chairman: Mr M S Anandkumar**  
Sr. General Manager (R&D),  
TVS Motor Company Ltd



**Co-Chairman: Mr Balaje Rajan**  
Chief Strategy Officer &  
VP - International Business,  
Tata Passenger Electric Mobility



### 3. SUSTAINABLE MOBILITY GROUP



**Chairman: Mr Ashwath Ram**  
Managing Director,  
Cummins India Ltd



**Co-Chairman: Dr Rajendra M Petkar**  
President and CTO,  
Tata Motors Ltd



**Co-Chairman: Ms Pamela Tikku**  
VP - Auto, Group Public Affairs,  
Mahindra & Mahindra Ltd

### 4. CONNECTED VEHICLES GROUP



**Chairman: Dr Venkat Srinivas**  
Sr. VP- Product Development,  
Mahindra & Mahindra Ltd



**Co-Chairman: Mr Sameer Jindal**  
Director,  
MG Motor India Pvt Ltd

### 5. STYLING & DESIGN GROUP



**Chairman: Mr. G Sathiyaseelan**  
Vice President –  
Styling & Product Development,  
Ashok Leyland Ltd



**Co-Chairman: Mr Nilesh Kirtane**  
General Manager- Planning,  
Honda R & D (India) Pvt. Ltd.

### 6. FRONTIER TECHNOLOGY & INNOVATIONS GROUP



**Chairman: Mr Pradeep K Thimmaiyan**  
Vice President (PE),  
Daimler India Commercial Vehicles Ltd



**Co - Chairman: Mr Milind Pagare**  
Vice President (R&D),  
Bajaj Auto Ltd

### 7. MANUFACTURING, INDUSTRY 4.0 AND EODB-MFG



**Chairman: Mr Satyakam Arya**  
CEO & MD,  
Daimler India Commercial Vehicles Ltd



**Co-Chairman: Mr Mahesh Kaikini**  
Chief of Quality,  
Hero MotoCorp Ltd



**Co-Chairman: Mr S Sakthivelan**  
Head - Program Management,  
Homologation CoE, Mahindra  
Vehicle Development Center,  
Mahindra & Mahindra Ltd



**Co-Chairman:**  
**Mr Nalinikanth Gollagunta**  
CEO - Auto,  
Mahindra & Mahindra Ltd.



**Co-Chairman: Mr Makarand Kulkarni**  
Sr. General Manager -  
Small / Light Duty Diesel – CV,  
Tata Motors Ltd

## E. NATIONAL & INTERNATIONAL REGULATIONS COUNCIL

### 2. CMVR & SAFETY REGULATIONS GROUP



**Chairman: Mr R S Sachdeva**  
Chief Operating Officer,  
VE Commercial Vehicles Ltd



**Chairman: Mr R Velusamy**  
President-  
Automotive Technology and PD,  
Mahindra & Mahindra Ltd

### 1. EMISSIONS & CONSERVATION GROUP



**Chairman: Mr C V Raman**  
Member Executive Committee,  
Maruti Suzuki India Ltd



**Co-Chairman: Mr Alok Jaitley**  
Executive Vice President  
(Engineering),  
Maruti Suzuki India Ltd

### 3. TWO WHEELERS GROUP



**Co-Chairman: Mr Sachin Agrawal**  
Sr. Vice President,  
VE Commercial Vehicles Ltd



**Chairman: Mr Harjeet Singh**  
Executive Advisor (Tech),  
Hero MotoCorp Ltd



**Co-Chairman: Mr Suraj Agarwal**  
Operating Officer – Cost Innovation,  
Honda Motorcycle and Scooter  
India Ltd

## 4. THREE WHEELERS GROUP



**Chairman: Mr V Pattabiraman**  
Vice President,  
TVS Motor Company Ltd



**Co-Chairman: Mr Arvind Kumbhar**  
Divisional Manager (R&D),  
Bajaj Auto Ltd

## 5. INTERNATIONAL HARMONIZATION GROUP



**Chairman: Mr Anil Kumar C**  
Sr. General Manager-  
Body & Trim Cars,  
Tata Motors Ltd



**Co-Chairman:  
Mr N Balasubramanian**  
VP, Renault Nissan Technology &  
Business Centre India



**Co-Chairman: Mr Prakash Rao**  
Principal Chief Engineer -  
Power Train,  
Mahindra & Mahindra Ltd.

## F. ENGAGEMENT & COMMUNICATION



**Chairman: Mr Rahul Bharti**  
Executive Director,  
Corporate Planning & Govt. Affairs,  
Maruti Suzuki India Ltd



**Co-Chairman: Mr Sushant Naik**  
Global Head,  
Government & Public Affairs,  
Tata Motors Ltd



**Co-Chairman:  
Mr Bhagwan K Bindiganavile**  
Executive Vice President –  
Strategic Planning,  
Brand and Communication,  
VE Commercial Vehicles Ltd

## G. COMMERCIAL VEHICLES CEOs COUNCIL



**Chairman: Mr Girish Wagh**  
Executive Director – CVBU,  
Tata Motors Ltd

## H. THREE WHEELERS CEOs COUNCIL



**Chairman: Mr Diego Graffi**  
Chairman & Managing Director,  
Piaggio Vehicles Pvt. Ltd



## I. TWO WHEELERS CEOs COUNCIL



**Chairman: Mr K N Radhakrishnan**  
Director & CEO,  
TVS Motor Company Ltd

## L. SAFE – SOCIETY FOR AUTOMOTIVE FITNESS & ENVIRONMENT



**President: Mr Sushant Naik**  
Global Head,  
Government & Public Affairs,  
Tata Motors Ltd

## J. PASSENGER VEHICLE CEOs COUNCIL



**Chairman: Mr Veejay Ram Nakra**  
President - Automotive Division,  
Mahindra & Mahindra Ltd



**Vice President: Mr Alok Jaitley**  
Executive Vice President  
(Engineering),  
Maruti Suzuki India Ltd

## K. PASSENGER VEHICLE CEOs COUNCIL SUB-GROUP ON “LOW VOLUME HIGH VALUE VEHICLES”



**Chairman: Mr Vikram Pawah**  
President,  
BMW India Pvt Ltd

## SIAM EXECUTIVE COMMITTEE 2023-24

COMPANY	MEMBER	ALTERNATE MEMBER
Ashok Leyland Ltd	Mr Shenu Agarwal	Dr N Saravanan
Bajaj Auto Ltd	Mr Rakesh Sharma	Mr Eric Vas
BMW India Pvt Ltd	Mr Vikram Pawah	Mr Vinod Pandey
Cummins India Ltd	"Mr Ashwath Ram(Co-opted)"	Ms Anjali A Pandey
Daimler India Commercial Vehicles Pvt. Ltd	Mr Satyakam Arya	Mr Pradeep Kumar Thimmaiyan
Force Motors Ltd	Mr Prasan Firodia	Mr Pankaj Gupta
Hero MotoCorp Ltd	Dr Pawan Munjal	Mr Vikram Kasbekar
Honda Cars India Ltd	Mr Takuya Tsumura	Mr Praveen Paranjape
Honda Motorcycle & Scooter India Pvt Ltd	Mr Tsutsumu Otani	Mr Vinay Dhingra
Hyundai Motor India Ltd	Mr Unsoo Kim	Mr Puneet Anand
India Yamaha Motor Pvt Ltd	"Mr Eishin Chihana(Co-opted)"	Mr Ravinder Singh
JSW MG Motor India Pvt Ltd	Mr Rajeev Chaba	Mr Yash Yadav
Kia India Private Limited	Mr Gwanggu Lee	Mr Hardeep Brar
Mahindra & Mahindra Ltd	Mr Veejay Ram Nakra	Ms Abanti Sankaranarayanan
Maruti Suzuki India Ltd	Mr Hisashi Takeuchi	Mr Rahul Bharti
Mercedes-Benz India Pvt Ltd	Mr Santosh Iyer	Mr Shekhar Bhide
Piaggio Vehicles Private Limited	Mr Diego Graffi	Mr Jagdish Gandhe
Simpson & Co. Ltd	Mr P S Rajamani	Mr Balavijayan Nagarajan
SKODA AUTO Volkswagen India Pvt Ltd	Mr Piyush Arora	Ms Deepti Singh
Tata Motors Ltd	Mr Shailesh Chandra	Mr Sushant Naik
Toyota Kirloskar Motor Pvt Ltd	Mr Masakazu Yoshimura	Mr Vikram Gulati
TVS Motor Company Ltd	Mr K N Radhakrishnan	Mr M S Anandkumar
VE Commercial Vehicles Limited	Mr Vinod Aggarwal	Mr Bhagwan K Bindiganavile

## PAST PRESIDENTS

YEAR	NAME	COMPANY
1960	Mr Lalchand Hirachand*	Premier Automobiles Ltd
1961	Sir L P Misra*	Hindustan Motors Ltd
1962 & 1963	Mr A E L Collins*	Ashok Leyland Ltd
1964	Mr Keshub Mahindra*	Mahindra & Mahindra Ltd
1965 & 1966	Dr M A Chidambaram*	Automobile Products of India Ltd
1967 & 1968	Mr K V Srinivasan*	Standard Motor Products India Ltd
1969	Mr A H Tobacchowala*	TELCO Ltd
1970 & 1971	Mr A Sivasailam*	Simpson & Co. Ltd
1972 & 1973	Mr N K Firodia*	Bajaj Tempo Ltd
1974 & 1975	Mr J E Talaulicar*	TELCO Ltd
1976 & 1977	Mr Rahul Bajaj*	Bajaj Auto Ltd
1978 & 1979	Mr P N Venkatesan*	Premier Automobiles Ltd
1980 & 1981	Mr C V Karthik Narayanan*	Standard Motor Product India Ltd
1982 & 1983	Mr R J Shahaney*	Ashok Leyland Ltd
1984 & 1985	Dr V Krishnamurthy*	Maruti Udyog Ltd
1986 & 1987	Mr S L Bhatte*	Hindustan Motors Ltd
1988/89 & 1989/90	Mr B De Souza*	Mahindra & Mahindra Ltd
1990/91 & 1991/92	Dr Abhay Firodia	Bajaj Tempo Ltd
1992-1993	Mr Subodh Bhargava	Eicher Motors Ltd
1993/94 & 1994/95	Mr Vinod L Doshi*	Premier Automobiles Ltd
1995/96 & 1996/97	Dr Brijmohan Lall*	Hero MotoCorp Ltd
1997/98 & 1998/99	Mr V M Raval*	TELCO Ltd
1999/00 & 2000/01	Mr Venu Srinivasan	TVS Motor Company Ltd
2001/02 & 2002/03	Mr R Seshasayee	Ashok Leyland Ltd
2003/04 & 2004/05	Mr Jagdish Khattar*	Maruti Udyog Ltd
2005/06 & 2006/07	Mr Madhur Bajaj	Bajaj Auto Ltd
2007/08 & 2008/09	Mr Ravi Kant	Tata Motors Limited
2009/10 & 2010/11	Dr Pawan Goenka	Mahindra & Mahindra Ltd
2011/12 & 2012/13	Mr S Sandilya	Royal Enfield (Unit Eicher Motors)
2013/14 & 2014/15	Mr Vikram Kirloskar*	Toyota Kirloskar Motors Ltd
2015/16 & 2016/17	Mr Vinod K Dasari	Ashok Leyland Ltd
2017/18	Dr Abhay Firodia	Force Motors Ltd
2018 /19 & 2019/20	Mr Rajan Wadhera	Mahindra & Mahindra Ltd
2020/21 & 2021/22	Mr Kenichi Ayukawa	Maruti Suzuki India Ltd
2022/23 & 2023/24	Mr Vinod Aggarwal	Volvo Eicher Commercial Vehicles Ltd

\* Since deceased

Note: The names of the Companies are as they were known then.



## SIAM MEMBERS

 <b>ASHOK LEYLAND</b> ASHOK LEYLAND	 <b>ATHER</b> ATHER ENERGY	 <b>ATUL</b> ATUL AUTO	 <b>BAJAJ</b> BAJAJ AUTO	 <b>BMW</b> BMW INDIA	 <b>BAXY</b> CONTINENTAL ENGINES
 <b>Cummins</b> CUMMINS INDIA	<b>DAIMLER</b> DAIMLER INDIA COMMERCIAL VEHICLES	 <b>FIAT</b> FIAT INDIA AUTOMOBILES	 <b>FORCE</b> MOTORS FORCE MOTORS	 <b>FOTON</b> FOTON MOTORS MANUFACTURING INDIA	<b>GREAVES</b> GREAVES CUTTER
 <b>Hero</b> HERO MOTORCYCLES	 <b>HONDA</b> HONDA GEAR INDIA	 <b>HONDA</b> HONDA MOTORCYCLES & SCOOTER INDIA	 <b>HYUNDAI</b> HYUNDAI MOTOR INDIA	 <b>Kawasaki</b> INDIA KAWASAKI MOTORS	 <b>YAMAHA</b> YAMAHA INDIA
<b>ISUZU</b> NEVER STOP ISUZU MOTORS INDIA	 <b>JAGUAR LAND ROVER</b> JAGUAR LAND ROVER INDIA	 <b>JBM</b> JBM AUTO	 <b>KIA</b> KIA INDIA	 <b>mahindra</b> MAHINDRA & MAHINDRA	 <b>MARUTI SUZUKI</b> MARUTI SUZUKI INDIA
 <b>MERCEDES-BENZ</b> MERCEDES-BENZ INDIA	 <b>MG</b> MG MOTOR INDIA	<b>NISSAN</b> NISSAN MOTOR INDIA	 <b>OKINAWA</b> OKINAWA AUTOTECH	 <b>Olectra</b> OLECTRA GREENTECH	 <b>CITROËN</b> CITROËN INDIA
 <b>PIAGGIO</b> PIAGGIO VEHICLES	 <b>eka</b> EKA ENERGY SOLUTIONS	 <b>PRESTIGE</b> PRESTIGE INDIA	 <b>ROYAL ENFIELD</b> ROYAL ENFIELD (A UNIT OF ROYAL ENFIELD MOTORS)	 <b>SCANIA</b> SCANIA COMMERCIAL VEHICLES INDIA	 <b>Sipson &amp; Co</b> SIPSON & CO
<b>SKODA VOLKSWAGEN</b> SKODA AUTO VOLKSWAGEN INDIA	 <b>SML ISUZU</b> SML ISUZU	 <b>SUZUKI</b> SUZUKI MOTORCYCLES INDIA	 <b>SWITCH</b> SWITCH ENERGY AUTOMOTIVE	 <b>TATA MOTORS</b> TATA MOTORS	 <b>MONTRA</b> MONTRA
 <b>TOYOTA</b> TOYOTA MOTOR INDIA	 <b>TRIUMPH</b> TRIUMPH MOTORCYCLES INDIA	 <b>TVS</b> TVS MOTOR COMPANY	 <b>VE COMMERCIAL VEHICLES</b> VE COMMERCIAL VEHICLES	 <b>VOLVO</b> VOLVO AUTO INDIA	

as on 30<sup>th</sup> April 2024

## SIAM SECRETARIAT



Mr Akshat Verma

Mr Amit Kumar

Mr Amit Kumar

Ms Anushka Tamrakar

Mr Arindom Ghatak

Mr Arnab Chakraborti

Mr Atanu Ganguli

Ms Bhawna Mendiratta

Mr Bhisham Prasad Rai

Mr Debasish Majumder

Mr Dinesh Patnaik

Mr Jitendra Rai

Ms Kanishka Chana

Mr Kartike Karwal

Ms Manju Dhamija

Mr Manoj Das Mohapatra

Ms Meenakshi Kukreja

Mr Mohit Khandelwal

Ms Mukti Prasad

Mr P K Banerjee

Mr Philip Skaria

Ms Pooja Nagpal

Mr Rabinder Singh

Ms Ragmani Sharma

Mr Rajesh Menon

Mr Raju Kamat

Dr Rashid Hasan

Mr Rohan Singh Rawat

Ms Ruby Ganguly

Dr Sandeep Garg

Ms Supriya Sinha

Mr Tribhuvan Ray

Mr V K Pandey

*In alphabetical order*

## LINKAGE WITH OTHER INSTITUTIONS IN INDIA

All India Motor Transport Congress (AIMTC)	Indian Machine Tool Manufacturers Association (IMTMA)
Alloy Steel Producers Association (ASPA)	Indian Rubber Institute (IRI)
Aluminium Association of India (AAI)	Insurance Regulatory and Development Authority of India (IRDAI)
Association of State Road Transport Undertakings (ASRTU)	Institute of Road Traffic Education (IRTE)
Automotive Component Manufacturers Association of India (ACMA)	Indian Sugar & Bioenergy Manufacturers Association (ISMA)
Automotive Skills Development Council (ASDC)	International Centre for Automotive Technology (ICAT)
Automotive Tyre Manufacturers Association (ATMA)	Kendriya Vidyalyaya Sangathan (KVS)
Bureau of Energy Efficiency (BEE)	National Automotive Test Tracks (NATRAX)
Bureau of Indian Standards (BIS)	National Automotive Testing and R&D Infrastructure Project (NATRiP)
Central Institute of Road Transport (CIRT)	National Council of Applied Economic Research (NCAER)
Central Pollution Control Board (CPCB)	National Green Hydrogen Mission (NGHM)
Central Road Research Institute (CRRRI)	National Institute of Design (NID)
Confederation of Indian Industry (CII)	National Skill Development Corporation (NSDC)
Delhi Transport Corporation (DTC)	Material Recycling Association of India (MRAI)
Delhi Metro Rail Corporation (DMRC)	Petroleum Planning & Analysis Cell (PPAC)
Energy Transition Advisory Committee (ETAC)	Research & Information Systems for Non-aligned and Other Developing Countries (RIS)
Federation of Automobile Dealers Association (FADA)	Society for Automotive Fitness & Environment (SAFE)
Federation of India Petroleum Industry (FIPI)	The Automotive Research Association of India (ARAI)
Global Automotive Research Centre (GARC)	The Energy and Resources Institute (TERI)
Indian Auto LPG Coalition	Tractor Manufacturers Association (TMA)
Indian Diesel Engine Manufacturers Association (IDEMA)	Vehicle Research & Development Establishment (VRDE)
Indian Institute of Foreign Trade (IIFT)	
Indian Institute of Petroleum (IIP)	
Indian Institute of Technology (IIT)	

*In alphabetical order*



## OVERSEAS LINKAGES

African Association of Automotive Manufacturers (AAAM)

Asia Pacific Economic Cooperation Automotive Dialogue (APEC AD)

Associação Nacional dos Fabricantes de Veículos Automotores (ANFAVEA)

AusTrade Commission, Australia

Auto Alliance, USA

Automotive Research & Testing Centre, Taiwan

Association of Indonesian Electric Motorcycle Manufacturers (AISMOLI)

Bangladesh Automobiles Assemblers and Manufacturers Association

Bangladesh Motorcycle Assemblers and Manufacturers Association

Ceylon Motor Traders' Association (CMTA), Sri Lanka

China Association of Automobile Manufacturers (CAAM), P R China

Comité des Constructeurs Français d'Automobiles (CCFA), France

European Automobile Manufacturers Association (ACEA), Europe

European Association of Motorcycle Manufacturers (ACEM).

Federal Chamber of Automotive Industry (FCAI), Australia

Federation of Asia Motorcycle Industries (FAMI), Singapore

Gulf Cooperation Council (GCC)

Indonesian Automotive Industry Association (GAIKINDO), Indonesia

Indonesian Motorcycle Industry Association (AISI), Indonesia

International Motorcycle Manufacturers Association (IMMA)

International Organization of Motor Vehicle Manufacturers (OICA)

Japan Automobile Manufacturer Association (JAMA), Japan

Japan Automobile Standards Internationalisation Centre, Japan

Korean Automobile Manufacturers Association (KAMA), South Korea

Motorcycle and Scooter Assemblers and Distributors Association of Malaysia

National Association of Automobile Manufacturers of South Africa (NAAMSA)

National Highway Traffic & Safety Authority, USA

Nepal Auto Dealers Association, Nepal

Singapore Motorcycle Trade Association, Singapore

Taiwan Transportation Vehicle Manufacturers Association, Taiwan

Thailand Automotive Institution, Thailand

The Society of Motor Manufacturers and Traders (SMMT), UK

The Thai Automotive Industry Association (TAIA), Thailand

The United Nations Economic Commission for Europe (UNECE)

UK Trade & Investment (UKTI)

US Grains Council (USGC)

The Brazilian Sugarcane Industry Association (UNICA)

Verband der Automobilindustrie e.v. (VDA), Germany

Vietnam Register, Vietnam

*In alphabetical order*







## SIAM INITIATIVES TOWARDS SUSTAINABLE MOBILITY



# SIAM

Society of Indian Automobile Manufacturers

*Building the Nation, Responsibly.*

Core 4-B, 5th Floor, India Habitat Centre

Lodhi Road, New Delhi - 110 003, India

Phone : +91-11-47103010, Email: [siam@siam.in](mailto:siam@siam.in)

Website: [www.siam.in](http://www.siam.in)

Social Media Handles >>>

[siamindia](https://twitter.com/siamindia)

[siamindia](https://www.linkedin.com/company/siamindia)

[SIAMIndia1](https://www.facebook.com/SIAMIndia1)

[siamindia](https://www.instagram.com/siamindia)

[siam\\_india](https://www.youtube.com/siam_india)