The Future Mobility Show (FMS) 2019 by CII is a unique platform to bolster transformation of India’s mobility sector by bringing all stakeholders together to prepare an EV roadmap for a shared and connected future that is clean and efficient.

**Ensuring Smooth Road for EVs**

FMS 2019 has been planned by CII as a follow-up of the MOVE Summit organised by government’s policy think tank NITI Aayog, in New Delhi, in September 2018. Promising a smooth road for electric vehicles, the global summit further bolstered India’s efforts to usher in a new era of electric and alternate fuel powered vehicles. The summit assured of the government’s commitment to reducing emissions and encouraging cleaner vehicles on its roads. It promoted the idea of driving investments across the value chain.

The industry looks forward to a stable policy framework for electric and alternate fuel powered vehicles. Industry leaders are confident that policies will be designed as a win-win for all and will enable huge opportunities in the Indian automotive sector.

**We Want to make India a world leader in electric vehicles and energy storage devices.**

Shri Narendra Modi
Prime Minister of India

With as many as 70 exhibitors from across India and the world set to showcase their innovative products and technologies at the three-day FMS Expo, CII has partnered with various ministries of the Government of India, Government of Karnataka and various industry associations for making it one of the most comprehensive events in the EV space. The first edition of FMS will also have country pavilions set up by Japan and China apart from participation from countries like Germany to provide useful insights into the global EV industry to help India gain from emerging technology trends in EVs across the world.

**Convergence For Policy Push**

A coherent policy on electric mobility is the need of the hour if India is to achieve its green goals. For this to happen, convergence of various EV stakeholders is inevitable. It is with objective in mind that FMS 2019 has partnered with various ministries of the Government of India, including Heavy Industries and Public Enterprises; Petroleum and Natural Gas; Road Transport and Highways; Environment, Forest and Climate Change and Niti Aayog, to provide some clarity on policy making.

**Partners in Transformation**

FMS 2019 will also see for the first time coming together of various EV stakeholders to form an association called Alliance of Manufacturers of Electric Vehicles (AIMEV), representing manufacturers from nearly 80% of overall electric vehicles in India.

**Focused on five national objectives of Responsible Mobility, Energy Security, Environment, Urban Mobility and Make in India, a number of international conferences will be organised concurrently with FMS on February 26 and 27.**

With special focus on Urban Infrastructure, R Mobility, Alternative Fuels and Shared & Connected Mobility, a large number of B2B, B2G and B2C meetings have also been planned on all three days of FMS 2019.

The show is set to help India realise its carbon emission reduction target and leapfrog it to a low carbon economy using high-end and emerging technologies.
Policies Paving Way for Future Mobility Growth in India

India, with a population of 1.3 billion people which is continuously rising, is at the centre stage of world energy transformation. The country relies heavily on conventional fuels to meet its energy demand and transport continues to be highest oil consuming sector. As India aims at reducing 10 percent of total oil import by 2022, there is an urgent need for a comprehensive government policy that is geared towards creating a sustainable future for mobility.

In this context, EV policies have made meaningful progress in India. In 2013, Government of India launched a National Electric Mobility Mission Plan 2020 aimed at electric/hybrid vehicle fleet of 6-7 million by 2020. Keeping in view the low level of annual share of electric vehicle sale to total vehicle sale, the government launched FAME (Faster Adoption and Manufacturing of Hybrid and Electric Vehicles) India Scheme on 1st April, 2015 with the objective to support hybrid/electric vehicles market development and manufacturing ecosystem, which led to marginal improvement to pre-existing technology.

Subsequently, several states like Delhi, Karnataka, Kerala, Telangana, Maharashtra, Andhra Pradesh and Uttar Pradesh have also announced an EV policy to complement national policy and address state specific needs.

However, there still remain barriers in wider adoption of electric vehicles in areas of consumer perception, efficiency of batteries, driving range, speed of EVs, charging time, creation of infrastructure for charging, battery recycling and technology development. Focused events like FMS 2019 are set to play a major role in bringing together all EV stakeholders on one platform to deliberate on the ways to help India overcome the existing challenges.

Karnataka: An EV hub in the making

To maintain the lead share of Karnataka as a preferred destination for attracting investments in manufacturing of electric vehicles, Karnataka has come up with an Electric Vehicle & Energy Storage Policy. As a part of the FAME India scheme, Karnataka has linked up with Electric Vehicle & Energy Storage Policy. As a partner state at FMS 2019, Karnataka has significantly increased the incentives and concessions to EV and its components manufacturing enterprises. Known as IT capital and preferred destination for attracting investments, Karnataka is set to highlight the incentives and concessions to EV and its components manufacturing enterprises.

FMS 2019 - A Blueprint for Green India

FMS 2019 follows the two previous editions of Green Mobility Xpo (GDX) which was organised by CII in 2015 and 2017 at Pragati Maidan, New Delhi. As the EV industry is poised to step into a new era of accelerated growth marked by a shift in the government’s position to offer incentives on electric vehicles, unveiling of EV policies by several state governments, FMS will prove to be a key platform to bring together and engage with key stakeholders within the rapidly transforming global mobility landscape to evolve a public interest framework for a shared, connected, zero emission and inclusive mobility agenda for the future.

As per a report by the McKinsey Center for Future Mobility, India holds 11th rank in the Market Electric Vehicle Index (EVI) of selected countries and 7th in the India Electric Vehicle Index, which are topped by Norway and China respectively. In terms of electric vehicle market adoption, India was ranked 4th just behind China, France and Germany. While the report stresses that both EV market acceptance and EV industry dynamics are at an early stage in India with demand coming mainly from commercial owners and the public sector and the country lacking charging infrastructure, the country’s emergence in the EV space is important given its carbon dioxide levels from electricity generation are among the world’s highest. This presents huge opportunities for automakers and more profitable for consumers.

Setting the Framework for Future Mobility

NITI Aayog came up with a groundbreaking study that provides basis for engaging discussions and dialogues, and for helping India collectively march towards a sustainable mobility pathway.

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The world is on the cusp of a mobility revolution, which is set to transform the way we move people and goods. It will happen on the back of fast emerging technologies, creating unprecedented opportunities for making transportation clean as well as efficient. Therefore, for any country investment in hyperloops, autonomous vehicles and digital railways will pave the way for the future of transport. In India, city and state governments also need to embark on a sustainable and equitable urban mobility pathway for the future of mobility products, the international exhibition at the show will put on display Electric Buses, Electric & Hybrid Cars, Electric Two Wheelers, Fuel Cell Technologies, Charging Infrastructure and Software solutions, among others. Building on the success of previous editions of Green Mobility Xpo (GMX), CII’s FMS 2019 aims to broaden the conversation to focus on disruptive forces driving the new mobility ecosystem and how they could impact different stakeholders.

EXPRESSORS AT FUTURE MOBILITY SHOW 2019

![EXHIBITORS AT FUTURE MOBILITY SHOW 2019](image-url)

**KEY DRIVERS OF FMS 2019**

The show has been conceptualised as a unique platform to highlight latest trends in connectivity, new mobility solutions, emerging business opportunities in the new mobility ecosystem and innovative ways to make the future of mobility environmentally sustainable.

**AUTONOMOUS VEHICLE**
First driverless car was introduced by Google in 2009 and has covered 1.3 million miles on normal streets by 2016, compiling a vast array of automated driving knowledge.

**HYPERLOOP**
Hyperloop will have floating train pods using magnetic levitation technology in a tube operating at near-vacuum and gliding at an airline speed of 670 mph over long distances.

**ROCKET TRAVEL**
Elon Musk envisions long-distance travelling between cities on Earth by using the same rocket system which is being developed for the Moon and Mars trips.

**ROVER TRAVEL**
Rovers send back images to Mars and Earth; Terraforming Mars could be made possible.

**DISRUPTIVE FORCES TO DRIVE FUTURE OF MOBILITY**

More cities and governments are going for new mobility solutions like MRT, LRT and monorail. Investments in hyperloops, autonomous vehicles and digital railways is paving the way for the future of transport, which aren’t just set to change how we travel, they are set to change the world we live in.

**FLYING CARS**
Airbus’ self-piloting flying car concept ‘Vahana’ plans to offer modular functionality, which means it can operate both on ground and in the air.

**ROCKET TRAVEL**
Rovers send back images to Mars and Earth; Terraforming Mars could be made possible.

**ROVER TRAVEL**
Elong Musk envisions long-distance travelling between cities on Earth by using the same rocket system which is being developed for the Moon and Mars trips.

Population growth, urbanisation and globalisation are expected to continue accelerating the deployment of new mobility solutions. The forces that are driving the new mobility ecosystem will get reflected in the Future Mobility Show 2019. The show will witness participation from auto majors like Ashok Leyland, Maruti Suzuki, Toyota Kirloskar; Tata Motors, BHEL, Indian Oil, Bajaj Auto, Delta Power Solutions, JBM Group, BMW Mahindra Electric, Fast, Nissan and TVS Motor company.

Technology providers like Bosch, Helia, Vector, Ailarc; MSC Software, Faurecia Clean Mobility; Okinawa Scooters, SEG Automotive, Continental Devices, Greenfuel Energy, AVL India, Aster Energy and Lucas TVs, will also demonstrate their technological innovations at FMS 2019.

As a comprehensive platform for future mobility products, the international exhibition at the show will put on display Electric Buses, Electric & Hybrid Cars, Electric Two Wheelers, Fuel Cell Technologies, Charging Infrastructure and Software solutions, among others. Building on the success of previous editions of Green Mobility Xpo (GMX), CII’s FMS 2019 aims to broaden the conversation to focus on disruptive forces driving the new mobility ecosystem and how they could impact different stakeholders.
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By 2050, about 70 percent of the world’s population is projected to live, commute and work in urban areas, which in turn will require cities to have mobility and energy solutions that are sustainable, affordable, secure and inclusive, and integrated with customer-centric infrastructure and services.

Given the fast pace of urbanisation in India with urban population expected to reach about 480 million by 2030, the country has already embarked on an ambitious plan to develop 100 smart cities under the Smart Cities Mission, making them citizen friendly and sustainable.

Under the mission, Smart Mobility is a key component to help move Indian cities towards a more connected and sustainable future.

Indian cities in near future are set to witness rapid changes in mobility as electric vehicles (EV) proliferate, ride sharing continues to grow, and eventually autonomous vehicles (AV) enter urban fleets.

As per a recent study, EVs are set to become more affordable than vehicles powered by internal combustion engines (ICEs) as the cost of batteries declines.

With Special Purpose Vehicles (SPVs) already in place for most of the smart cities in India, the Government of India has announced funding to Smart Cities for the purchase of purchasing electric vehicles to be used for mass transportation under the Faster Adoption and Manufacturing of (Hybrid and Electric Vehicles in India (FAME) programme. The government has also proposed that it will provide funds to set up charging infrastructure in the selected cities.

The Smart Cities Mission will, therefore, provide a much-needed boost for India to reach its targeted goal of deploying millions of electric vehicles in the country for a sustainable future.

With India embarking upon an ambitious target of achieving an all-electric nation status in a decade, smart cities being developed under the Smart Cities Mission will pave the way for the EV evolution.

Decoding India’s Mobility Vision

To be organised concurrently with FMS 2019 along the five national objectives of Responsible Mobility, Energy Security, Environment, Urban Mobility and Make in India, international conferences will anchor debate and deliberations on preparing a collective mobility agenda.

The knowledge sessions on 26 and 27 February are set to draw stakeholders from India and abroad to highlight and discuss how technological innovation and the existing ecosystem will play a supporting role to achieve the national objectives by charting out a clear roadmap.

The conference will have participation from stakeholders covering the entire mobility value chain like EV/Alternate Fuel vehicle Manufacturers, Energy Companies, Components Manufacturers (xEV parts, Alternate fuel part makers), Charging Infrastructure & Technology providers, Software solution providers & Solution Integrators, Start-up, Academicians representing the best Engineering Colleges and Universities and Government officials (State and Centre). It will have sessions on 7C’s Vision: India’s Roadmap towards sustainable mobility; Make in India: Manufacturing Hub for Automobiles; Responsible Mobility: Building a Sustainable Ecosystem; Smart, Shared and Connected Mobility: India’s Urban Mobility Landscape, and Future of Transportation Fuel in India.

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