











Green Technology – Mobility and Sustainability Trends and Opportunities in India

Looking into the future of mobility, there now stands a chance to develop a transportation system which can facilitate thriving and vibrant communities in our cities and towns. Future mobility is about striving towards environment-friendly, integrated, automated and personalized travel on-demand.

The world is set to experience key changes in mobility in the coming times. Trends such as electrification, shared mobility and autonomy are set to take off. Services like car-sharing and ride-hailing have already been at work in hundreds of cities around the world. New advancements like intelligent transportation systems, traffic management applications, robo-taxi and Hyperloop are in the pipeline for enhanced mobility in major cities.

Indigenously, the Indian mobility industry has been witnessing a silent revolution since electric rickshaws were first spotted in Delhi in 2010.

The Indian automotive industry is the 4th largest industry in the world. The automobile exports from India grew by 15.54% during the financial year 2018. The government of India allows 100% FDI under the automatic route and has taken several initiatives in order to maintain global standards of mobility in the future.

The recent initiatives

- To develop India as a global manufacturing centre and an R&D hub. Under NATRiP, plans are afoot to set up R&D centres at a total cost of \$388.5 mn.
- The Ministry of Heavy Industries has shortlisted 11 cities in the country for the introduction of EVs in their public transport

- systems under the FAME [Faster Adoption and Manufacturing of (Hybrid) and EVs in India] scheme. Approved the FAME-II scheme with a fund requirement \$1.39 billion for FY 2020–22.
- GOI will also set up incubation centres for start-ups working in EV space.
- The National Mission for Electric Mobility has launched the National Electric Mobility Mission Plan (NEMMP) - 2020 with an aim to invest INR 140 billion in the next 8 years for the development of electric infrastructure.
- The Electric Vehicle Policy 2019 was announced recently by the government. It offers to waive off - road taxes and registration charges till 2024 and provides hefty subsidies on charging equipment.
- To bolster the charging infrastructure, there is a de-licensed activity to set up a charging station and the electricity received from any company would be free of cost.
- Private charging stations are permitted at residential places, and any charging station can get electric power from any company through open access protocols.
- Introduction of FASTag, a reloadable cashless tag which enables automatic deduction of toll charges. FASTag is presently operational at 180 toll plazas across national and state highways.
- To promote sustainable mobility, India has built one lakh kilometres of roads in at least 11 states using discarded plastic.

Source: https://www.investindia.gov.in/team-india-blogs/future-mobility-india



Renewable Energy

- Sector at the forefront of growth in capacity addition
- India targets to add renewable energy capacity to 175 GW by 2022 and 275 GW by 2027
- India to reduce the emissions intensity of its GDP by 33 - 35% by 2030 from the 2005 level





Megatrends

- Energy efficiency is envisaged as an affordable imperative for sustainability
- India plans to shift to 100% of the car sales to Electric Vehicles by 2030

On the governance aspect, the policy framework increasingly leans towards empowering the states more and decentralizing the decision making for funding, etc. Urbanization coupled with dynamic and vibrant states competing with each other for resources, will result in an exponential economic growth and opportunities to participate in the growth process.

Smart InfrastructureTrends and Opportunities in India

The urban population is growing in India and because of this, opportunities are increasing as well. According to country data, the urbanization in India is mainly due to the expansion of cities and the migration of people. Investments are made in housing, road network, urban transport, water supply, power-related infrastructures, smart cities, and other forms of urban management. This is the bright future the Indian economy has in store for itself.

Opportunities in India's urban infrastructure

In order to face the challenges of urbanization, infrastructures need to be improved. Unfortunately, rapid population growth and a lack of adequate investment is making urban infrastructure growth slow.

Transport business opportunities in India

Private mode of transport is dominant in India. There is a heavy reliance on private transport that has led to the congestion of roads and increasing commuting time and pollution. Road networks therefore need to increase because of the influx of these vehicles.

In an effort to improve the urban transport situation in India, new metro rail networks are being developed.



Affordable Housing & Green Building

India is facing a house shortage in urban areas at the moment and more housing would be required in order to meet future demand. This demand comes from the economically weaker section due to lack of housing policies. Some parts in India have introduced public-private-partnership policies, which have led to the development of housing.

Water and wastewater management in India

The water supply in India faces several issues and the water and wastewater management in the country needs to be improved. The government though has made initiatives to improve water supplies establishing projects for selected areas.

Sewage and sanitation is also facing a dilemma in India at the moment. Nevertheless, projects to further improve this are currently a work in progress.

Power and power infrastructure requirements in India

Increasing urbanization has led to increasing demand in energy consumption. India greatly needs to increase their power-generating capacity and develop new ways of generating power.





Why Should You Attend the India Calling Conference

India is witnessing tremendous growth potential in two major sectors of global interests and offer unprecedented opportunities for global corporations and businesses.

The one is in areas of breakthrough green technologies (Sustainability and Mobility); and the other is Smart Infrastructure (Smart City / Smart Living).

Over 300 delegates from India and overseas comprising leading technology companies, Start-ups, stakeholders from relevant industry, exporters and importers, entrepreneurs, investors, diplomatic missions, government officials, academia, banks and financial institutions, think tanks and NGOs will participate in this Conference.

In the backdrop of huge potential for investment and collaboration in Green Technologies and Smart Infrastructure, INDIA CALLING CONFERENCE by IMC Chamber of Commerce and Industry is a platform for Indian and global players in these two industries to come together and debate, share insights and explore potential investment opportunities and collaborations, Indian and international experts from leading industry and Government would share insights into development of markets in India, policy inputs and opportunities for companies to invest and collaborate in these areas.

Discussion at the Conference

Smart Infrastructure



Smart Cities in Digital Era



Intelligent Transport networks for urban transport



Smart Mobility





Best practices from across India





Solid and water waste management



Smart **Parking**



Smart health and sanitation

Green Technology



Renewable Energy



Electric Vehicles and Batteries



Green buildings and lighting



Green composting

The sessions will include overview by Ministry of External Affairs, Invest India (National Investment Promotion and Facilitation Agency), projects for collaborations and policies by local authorities in select smart cities, industry perspective of smart infrastructure and policies that are conducive for foreign investment into PPP model, global case studies and NextGen vision on smart infrastructure and green technology.

Glimpses of **IMC** India **Calling** Conference 2019







Chamber of Commerce and Industry

Reboot • Reform • Resurge

Established in 1907 and having its headquarter in Mumbai, The IMC Chamber of Commerce and Industry Chamber (IMC) is an apex Chamber of commerce, trade and Industry in the western region with its membership base of 5000 members and over 150 trade associations affiliated to it. Together, it represents and advocates interests of over 400000 business and industry establishments from diverse sectors of industry. It has 26 industry-specific committees of experts through which the IMC provides policy inputs and recommendations at various levels of government authorities and organizes interactive dialogues, workshops, seminars, business conferences and other activities where eminent business and government leaders engage with its members on a wide range of issues to create conducive opinion and environment for sustainable economic development. The IMC's Young Leaders' Forum and Ladies' Wing are embodiment of youth enterprise, positivism, proactive thought leadership, and movement for women empowerment and entrepreneurship. The Chamber's expansive global network with formal understanding with over 150 chambers and government agencies, the IMC platform offers its members benefit of this network opportunities to explore and expand their operations. The Chamber's state-of-the-art International ADR Centre offers institutional arbitration of disputes in international standard facilities and established rules and panel of arbitrators. IMC's Library is equipped with rarest books and manuscripts, latest books on economics, politics, management, laws, banking, taxations, and other to enjoy in modern lounge seating atmosphere, a rarity today. On international trade area, the Chamber is in the forefront in promoting bilateral trade between Indian and countries around the world by providing networking platform to Indian and international business and industry community through interactive meetings, hosting international delegations as well as taking Indian business delegations to various countries around the world.

Contact: For further details & registration to participate

Ms. Vanita Ghuge, Assistant Director, IMC Chamber of Commerce and Industry. Email: vanita.ghuge@imcnet.org. IMC Building, IMC Marg, Churchgate, Mumbai – 400020 Tel (Board): +91 22 71226633 | Fax: 91 (22) 2204 8505 | Email: imc@imcnet.org | Website: www.imcnet.org