PRESS RELEASE
Chennai, April 4, 2024

Tamil Nadu emerges as an electric 2W hub, a shift towards clean and sustainable mobility

- iFOREST compiled a comprehensive research study titled "ICE to EV: Just Transition Roadmap for India's Automobile Sector". This national study is supplemented by six in-depth research reports on components, enterprises, clusters and workforce.
- iFOREST analysis highlights that depending on vehicle type, 45-84% of parts of the internal combustion engine (ICE) vehicle, primarily powertrain components, will become obsolete due to the electric vehicle (EV) transition, impacting the manufacturers of such components.
- Overall, the number of job roles in the EV ecosystem is about 5% higher than in the ICE vehicle ecosystem, but these jobs will require more educated and skilled workers.
- In terms of absolute job numbers, the results will be positive too. While the number of jobs per EV car is lower than the ICE car, due to massive EV penetration in the coming years, there will be a net increase in the number of jobs. India-level modelling by iFOREST shows that in passenger car manufacturing alone the number of jobs will double from 1.7 million in 2023-24 to 3.3-3.7 million in 2036-37.
- Further, to give a regional representation, a detailed primary survey in one of the auto clusters in Tamil Nadu – Hosur – was conducted to deep dive into the challenges and the opportunities of transition to EVs for businesses, workers, and the environment at large.
- An analysis of 759 auto component manufacturers in the Hosur cluster shows that about 20% of them will be highly or moderately impacted by the transition. Most of these enterprises produce parts for ICE powertrain sub-assemblies. Further, of the 759 enterprises, MSMEs constitute 95%. These enterprises remain particularly vulnerable, given their limited financial resources and capacity for technology adoption.

Chennai, April 4, 2024: The International Forum for Environment, Sustainability and Technology (iFOREST), a non-profit environmental think tank, brought out the first comprehensive study of the impacts of the EV transition on India's automobile businesses, workers, and the environment. Based on the prospective impacts, the report outlines a comprehensive roadmap for a just transition of the automobile sector, which can deliver positive environmental and socio-economic outcomes.

Alongside, the national report, the think tank also developed a compendium of six separate studies to cover a spectrum of issues including the impacts on the auto component manufacturers, the impacts on auto clusters which are the manufacturing and employment hubs, and finally the impacts on jobs.

The iFOREST shared its findings at a public event in Chennai which brought together various stakeholders, including the government, government agencies, the industry, industry associations, civil society, auto cluster representatives, skilling agencies, and think tanks.

While inaugurating the event, Thiru V. Arun Roy, IAS, Secretary Industries, Government of Tamil Nadu, said that they are actively developing a strategy to cater to the increasing electricity demand not only from the mobility sector but also related to the greater development of Tamil Nadu; focusing on the conventional power sources, green power sources as well as importing power to compliment the domestic generation.

Thiru Srinivasan, Senior Advisor, EV, FaMe TN, Government of Tamil Nadu said that through the EV taskforce, the first of its kind, we want to orchestrate various stakeholders within the government, quasi-government, finance centers, and others, bringing all government activities under one umbrella.

Mr. Srivats Ram, Chairman, CII Tamil Nadu & Managing Director, Wheels India Ltd. said that awareness and communication is the key to bridge the gap between policy formulation and its implementation.

Mr. Sriram Viji, Chairman, Southern Region, ACMA & Managing Director, Brakes India Pvt. Ltd. said that the government is looking at value localisation and it is an important consideration for EV production.

Mr. T.R. Kesavan, President, The Madras Chamber of Commerce and Industry & Group President, TAFE said that MCCI has been acted as a bridge between the government and the MSMEs to sensitise and support the implementation of the targeted policies.

Key Findings and Recommendations

1. Modelling projections by iFOREST show that under various policy scenarios, India is poised for a massive EV penetration in total vehicle manufacturing in the next 10-12 years.
2. Tamil Nadu, India's EV automobile hub, remains a front-runner in the EV transition given supportive State EV Policy, conducive business enviroment and MSME focus.
3. The transition from ICE to EV will make about 90-100% of parts of the powertrain of an ICE vehicle obsolete depending on the vehicle type. Thus, there will be a significant impact on the business of auto component manufacturers as they will have to supply fewer parts.
4. The impact on MSMEs will also impact a large number of contractual and informal workers associated with these enterprises.
5. There will be a significant impact on traditional job roles in the auto sector due to EV transition, involving various workers. About 31% of the job roles will be affected- 14% will become obsolete and 17% will require reskilling. Maximum job roles will

be affected in the manufacturing segment.

6. However, the overall impact on jobs will be positive. Firstly, the EV ecosystem while will replace traditional jobs, but will overall create 5% new job roles. Secondly, while the number of jobs supported by EVs is slightly lower than ICE vehicles, there will be a net increase in jobs in the automobile sector due to the penetration of EVs.

Considering the prospective impacts, the iFOREST report proposes a comprehensive 'Just Transition Policy Framework for the Automobile Sector highlighting 8 key inter-related policy aspects. Some of the key policies that the Framework highlights include:

- Policies and investments to make Tamil Nadu an electronic and electrical hub.
- Fiscal policies to support OEMs and ACMs for adopting green manufacturing practices.
- Policies to strengthen skilling and reskilling measures aligned to the EV ecosystem.
- Developing a dedicated "Skill Development Fund" to support informal workers and low-skilled workers.
- Mandating the development of a Workforce Transition Plan by OEMs to strengthen enterprise-level action.
- Instituting a Right to Repair and Servicing Policy to reduce the vulnerability of workers engaged in servicing and repairing.
- A Cluster Plan will be essential for each auto cluster to reduce its vulnerability and support a well-coordinated transition.
- Cooperative efforts by the state government, district administration and agencies, industry bodies, skilling agencies, and research institutions towards a clean mobility transition.