Date: 20/06/2020

**Report on Webinar Titled "**Vision 2030, Challenges and Opportunities in Realizing Transition to Full EVs"

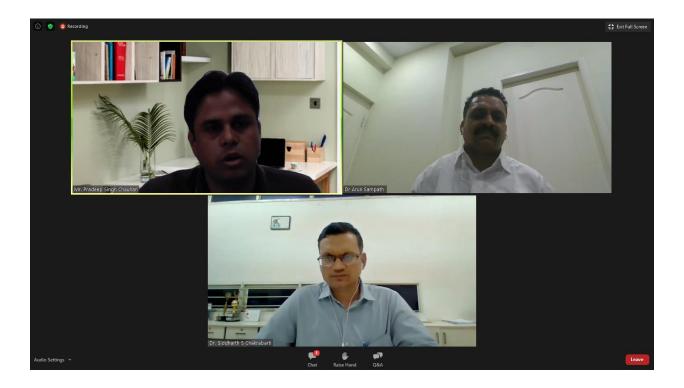
The focus on e-mobility is much stronger and is happening at a faster pace. The government is facilitating a move towards EVs, supporting it not only with various policies and norms, but also with favorable tax incentives and subsidies. The country also relies heavily on public modes of transport, which the government wants to leverage with increased electrification in the shift towards e-mobility. Harping on India's aspiration to become a \$10 trillion economy in the next decade, Finance Minister Piyush Goyal laid out the 10 "most importunate dimensions" of the Modi government's "Vision 2030". Clean and Green India is the third dimension - "an India that drives electric vehicles, with renewables becoming major source of energy, bringing down import dependence and increasing energy security for our people".

In order to understand the strength, oppurtunities and challenges to adopt the EV technology and further push to make India Atamnirbhar Bharat (Self- Reliant India), Department of Mechanical Engineering in association with Centre for Industry-Academia Collaboration, Atal Community Innovation Centre(ACIC) of OP Jindal University, Raigarh organized a webinar on "Vision 2030, Challenges and Opportunities in Realizing Transition to Full EVs"-20th June,2020 and was attended by more than 100 participants. Participants were both from the field of academia and industry. Dr. Arun Kumar , Mahindra Electric as Chief Engineer & Head, Innovation & Global EV Tech Center – Bengaluru, was the invited as the key speaker. Dr Sidharth S Chakrabarti, Professor & Head-Department of Mechanical welcomed the speaker and discussed the importance of Electric vehicle-sustainable transport system and the key objectives behind organizing the webinar.

Dr Arun K Sampath gave a detailed presentation and emphasized that in Post Covid-19 world, social distancing, healthy mix of work from Office (WFO) and Work from Home (WFH) will be the new normal. Also, the current transformation of the Automotive industry in India will usher in disruption, new players, new norms and new customer demands. He pressed upon the fact that the India has a large pool of Engineering talent in 25-35 years age group and reverse drain from abroad is benefitting to adopt global technologies to Indian market. Also, well developed software and IT industry has taken the lead on startups-pave the way for mobility. He also discussed the phased manufacturing program (PMP) and the efforts put in to make vocal for the local products in EV segment. He discussed the way of promotion of charging infrastructure development and informed that Government of India(GOI) has allotted Rs 1000 crores for its development across India. He also pointed out the challenge in Battery Technology, and highlighted the technology transfer of Lithium-ion cell by ISRO to Indian industries. Discussing Vision 2030, he also discussed the disruption of EV component manufacture and supplies due to new agile startups with technologically innovative business models. He also advocated the initiative of Society of Automotive Engineers (SAE) to promote startup India and Skilling India. At the end he gave a detailed picture of contribution of Mahindra Electric and also gave a brief overview of NEMO-Cloud based platform- A unique next generation mobility platform.

Answering to the one of the questions related to challenges of sharing the data, he said that the challenge for startups will remain in the field of AI and ML since OEM's would be reluctant to share the data which is useful for their revenue generation. In an query related to consumer point of view for battery swapping or charging battery at home, he suggested to have the concept of range extender in the vehicle giving an analogy with power bank of charging mobiles. This would also decrease the range anxiety in the customer. He also expressed that testing and accreditation is the basic need for the vehicles generated by Startups in India. At the end he congratulated and appreciated the efforts of the management of OP Jindal University for getting an approval to establish **Atal Innovation Community Centre** which will also foster research and innovation in the field of EV.

At the end, Moderator of the session, Prof Pradeep S Chauhan, Assistant Professor, EE proposed vote of thanks to the panelists and participants for being part of fruitful and informative panel discussion.



## Vision 2030 -- Opportunities & Challer in Realizing Transition to Full EVs



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## Dr. Arunkumar Sampath June 19, 2020

