

#### CEBEVs 2019

## <u>National Electric Mobility</u> Plan (NEMMP) 2020

Target of deploying 5 to 7 million electric vehicles in the country by 2020

•Emphasizes importance of government incentives and coordination between industry and academia

•Target of 400,000 passenger battery electric cars (BEVs) by 2020 ~ avoiding 120 million barrels of oil and 4 million tons of CO2

•Lowering of vehicular emissions by 1.3 percent by 2020

•Total investment required –INR 20,000 – 23,000 cr (approx 3 billion USD) <u>Challenges and barriers to</u> growth of Electric Vehicles in India:

India does not have Lithium ion reserves to support a large domestic market for electric vehicles Lack of clear policies for supporting the growth of supply, manufacturing and recycling of batteries India's electricity mix is dominated by fossil fuels – low carbon benefits sil fuels – low carbon benefits Need to be rationalized Safety concerns / perceptions around electric vehicles.

Rollback of previous subsidies with delay in implementing NMEMP highly detrimental to industry

•Number of electric twowheeler makers has fallen (75%) from 28 in 2011-12 to seven in 2014-15

•Total electric vehicles sold in 2014-2015 has decreased (84%) from 100,000 in 2011-12 to approx 16,000 in 2014-15

•Infrastructure and market development cost for EVs (hybrid) vehicles estimated at Rs 23,000 crore (\$3 Billion) over 8 years.









**IEEE GUJARAT SECTION** 

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# Competitions & Exhibitions of Batteries & EVs

## CEBEVs 2019



Registration Open for the Competition—Model making and Poster Presentation 8TH, 9TH & 10TH FEBRUARY, 2019



#### Competitions & Exhibitions of Batteries, EVs 2019

#### **NEED OF THE EXHIBITION**

The Indian automobile industry is one of the largest growing markets of the world, and contributes highly in the country's manufacturing facilities. Not only this, the automotive industry in India is further expected to pull up the share of manufacturing in India's GDP to 25% by 2022 from 15% currently, with production of Electric Vehicles being new talk of the town. However, India's electric vehicle industry is a newly born baby when compared with the other international markets such as US, China & Europe etc. which are way too matured. China, being the leader holds nearly 50% share of the global electric vehicle market during 2016, with India accounting to be an invisible industry participant having a share of 0.1% However a face change is definitely anticipated for India's EV industry with major thrust given by the government . To boost the manufacturing of hybrid and electric vehicles in India, the FAME scheme has been launched by the central government, which targets to achieve production of ~ 7 Million EV's by 2020. Like China, however India is also planning to spend largely on subsidising local companies, pushing them at the forefront of electric mobility technologies. But best part of the scheme FAME is that it is weighted more towards the consumer incentives rather than incentivizing the R&D, which makes sense the country stands to gain from the technological advances already made globally. It is significant to note that to a two-wheeler EV buyer, INR 22000 of subsidy is freezed, for buying a three-wheeler EV about INR 25000

subsidy is freezed and for the purchase of fourwheeler buyer about INR 1.87 Lakhs of subsidy is planned. Although, the India's EV market is at very nascent stage as of now, but the enablers given by the government are quite enough for it to grow for taking its first step. Glimpse of which can be very clearly seen with Tata's of the world all set to reveal its first ever EV for Indian market during 2017 itself. However, with all the glaring opportunities, there still exist certain challenges for the growth of Indian EV market.

**Coordinators:** 

Dr. C. D. Upadhyay

Mobile No-9428218822

This exhibition will make EV market more opportune to grow for vision 2020. the competition will allow industrial growth with student creativity and make academia industry interface. It will also create job opportunities alongwith market of 2W, 3W and 4W.

### ELECTRIC VEHICLES INDIA:

The overall electric vehicle market for storage in India is likely to be 4.7 GW in 2022.

Over 50% of the market in 2022 will be driven by e-rickshaw batteries 200 charging stations are proposed to be set up in Delhi, Jaipur & Chandigarh.

Government is targeting of 6-7 Million electric and hybrid vehicle on road by 2020.

Smart charging company , new motion announced to invest INR 1000 crore in India on charging infra development . Lalbhai Dalpatbhai College of Engineering, Ahmedabad is a premier engineering institute in Gujarat State set with the objectives of imparting higher education, research and training in various fields of engineering & technology. The institute is affiliated to Gujarat Technological University, Ahmedabad and administrated by Department of Technical education, Gujarat State, Gandhinagar.

Jay Prajapati—7698631284

Tirth Mehta—9974041893

Jeet Dhoriyani —9427601304

Renison Macwan—987061510

The institute was established in June 1948 with a generous donation of Rs. 25 lacs and 31.2 Hectres of land by the textile magnate Sheth Shri Kasturbhai Lalbhai. Hence College is named as Lalbhai Dalpatbhai College of Engineering. It is situated adjacent to Gujarat University building and is located at the nucleus of various national level institutes such as PRL, ATIRA, IIM etc. The campus is having buildings for various departments, offices, hostels, residences for Principal, rector and wardens. The plinth area of college and hostel buildings admeasures 45,220 sq.m. and 12,556 sq.m. respectively.



#### 8TH, 9TH & 10TH FEBRUARY, 2019

**IEEE Gujarat Section:** IEEE Gujarat Section (registered u/s 80G) comes under Asia-Pacific Region, the Region 10 of IEEE. The Gujarat Section, a sub section of Bombay Section, was upgraded to full fledged section on 15th August 1990. In 2004 Gujarat Section was adjudged the Outstanding Small Section of Region 10. The section has emphasis on quality programmes and such programmes are regular feature for professional development of its members. The section's participative philosophy allows students to make programmes as per their own need.

**SAE Western Division:** SAEINDIA is India's leading resource for mobility technology. As an individual member-driven society of mobility practitioners the ownership of SAEIN-DIA wrestswith its members who are Individuals from the mobility community, which includes Engineers Executives from Industry, Government Officials, Academics and Students

**GUJCOST:** The Gujarat Council on Science and Technology (GUJCOST) was established in September, 1986, to play a catalytic role in promoting the use of Science and Technology in the development process of the State. The S&T Council was constituted with a view to develop technologies appropriate to and in harmony with present condi-