Electric Vehicles Market in India 2017

Determining Pug-in Opportunity for Value Chain Players

E-REP Market Research Series

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Why enincon's report upon " Electric Vehicle Market in India 2017 "

FROM AN OIL FUELLED ROAD TO ELECTRICALLY CHARGED ONE : IS THE INDIAN AUTOMOBILE INDUSTRY READY FOR SUCH A TRANSFORMATION ??

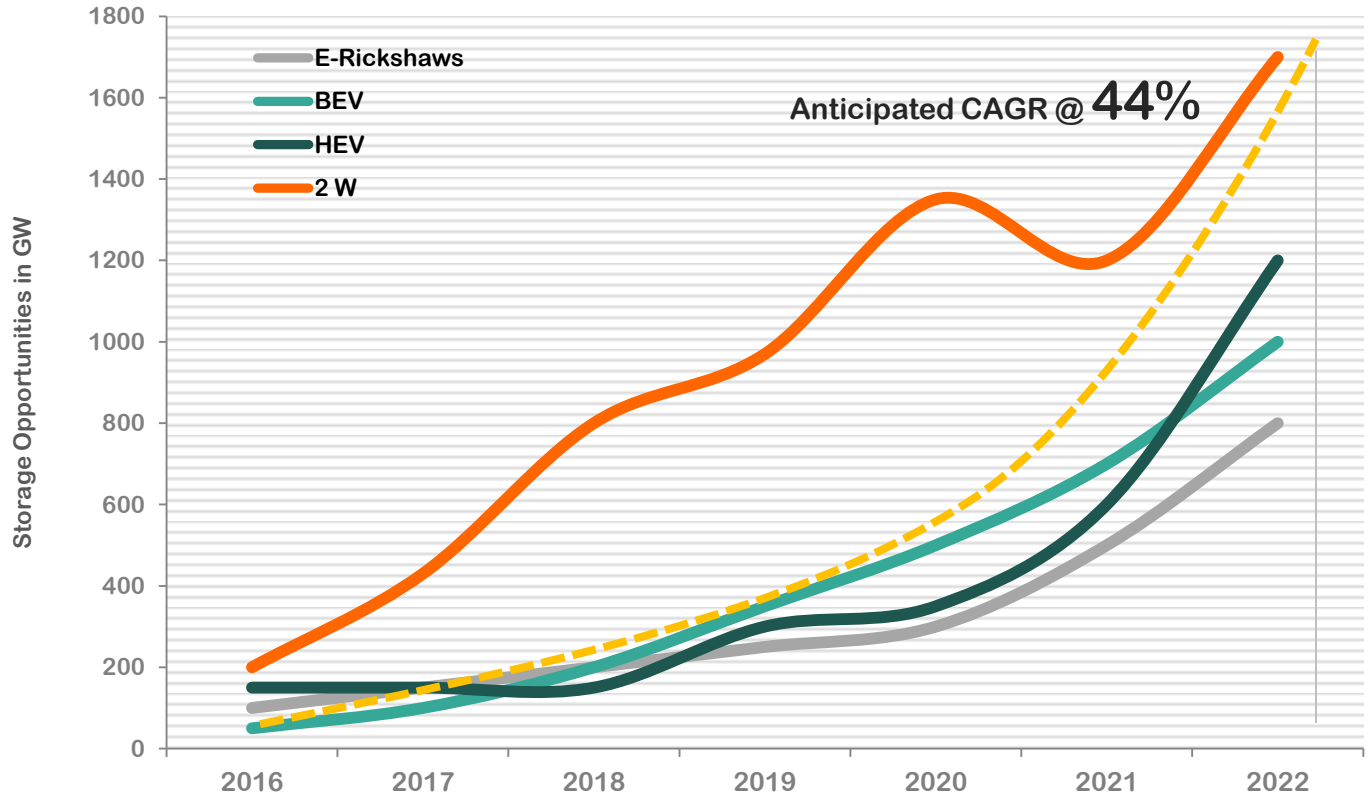
INDIA IS TARGETING TO ACHIEVE ABOUT 6-7 MILLION OF ELECTRIC EHICLES BY 2020 UNDER THE FASTER ADOPTION AND MANUFACTURING OF HYBRID & ELECTRIC VEHICLES (FAME) SCHEME

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 four-wheeler 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, one such being lack of lithium deposits.

While this does present a challenge to setting up a viable battery manufacturing plant in India, it also means that companies must look for other options to power such vehicles. Although , currently the challenges seem to outweigh the opportunities in India but the right steps from government in sprucing up the support dynamics for EVs in India at distinct levels is anticipated to transform into a gripping opportunity galore in future. Consequently, we are witnessing initiatives on building infrastructure for EVs such as constructing charging stations and reducing the cost of batteries by facilitating technology transfer between the public and private sector. The Union Budget for FY 2017-18 has allocated INR 795 crore for developing EVs. India has in its hands a lifetime opportunity to make a remarkable contribution towards a sustainable future. With over 3 million passenger cars sold in the previous fiscal, the Indian passenger car segment is expected to scale new heights in the near term with EV in picture. To unearth the underlying opportunities for the electric vehicle market in India, enincon consulting llp has delve deep to identify business potential for such an unconventional industry segment. Key queries which shall be addressed in the report are opportunity assessment for battery manufacturers , market sizing for Hybrid EV , Plug-in EV and Battery EV, identifying growth barriers, domestic manufacturing potential of India w.r.t electric vehicles and many more.

Exhibit 01: Electric Vehicle Storage Opportunities (GW) in India till 2022 and the Anticipated Growth



Source: enincon research, IESA

BUSINESS CASE FOR ELECTRIC VEHICLE MARKET IN 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
- Delhi government launched a subsidy scheme of INR 30,000 for the E-Rickshaws in 2016
- 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

REPORT INSIGHTS

- Pocket opportunity identification under electric vehicle market
- Examining electric vehicle inclusive transportation matrix scenario
- Evaluating market dynamics and positioning of electric vehicle index
- Examining the sales preposition of electric vehicle market in India
- Identifying the city /state level wise incentivizing index for electric vehicles in India

KEY HIGHLIGHTS

- Identifying gains for energy storage market in India
- Evaluating the cost factor for both batteries and fuel
- Promoting energy storage – DER adaptability
- Opportunity assessment for value chain players
- Opportunity for smart grid player through electric vehicle market
- Scenario wise market assessment for high plug-in hybrid electric vehicle

PRESS EXCERPTS

100 battery charging stations are proposed to be set up in Delhi-NCR to be set up by BHEL & REIL has planned to set up 200 charging stations in Delhi, Jaipur and Chandigarh

ET Energy World

Indian government planning to spend nearly INR 1.8 lakh crores in electric vehicle infrastructure to meet the target till 2030

Ministry of Power

KEY QUERIES ADDRESSED

- What are the growth factors for EV market in India ?
- What is the current manufacturing ability for PEV, HEV & BEV in India ?
- What shall be the manufacturing status for PEV, HEV & BEV in India till 2030 ?
- What will be the state wise determination & benchmarks in India for electric vehicle adaptability till 2030 ?
- What will be the opportunities for smart grid players in electric vehicle market till 2030 ?
- What is regulatory and policy landscape for electric vehicles market in India?
- What will be the market size for HEV , PEV & BEV in India till 2030 ?

MUST BUY FOR

- Domestic Automobile Manufacturers in India
- International Automobile Manufactures
- OEMs for automobile industry
- Battery Suppliers
- Players into setting up charging infra facilities
- Government Agencies
- Research firms/ Institutes
- Project Consultants
- Industry Associations / Technical Consulting Group

WHAT YOU CAN LEARN ? A SNAPSHOT

- Examining electric vehicles business case in India
- Identifying growth factors for electric vehicles market in India
- Examining growth barriers in India for electric vehicles market
- Domestic manufacturing potential of India : Evaluating current & future market
- Scenario based future market assessment till 2030
- Opportunity assessment for electric vehicles/ automakers in India
- Scenario wise opportunity assessment for battery manufacturers
- Opportunity assessment for discoms for discoms and infra providers
- State wise determination and benchmarking in India for electric vehicles adaptability
- Incentivization index for electric vehicles in India
- Subsidy indexation for electric vehicles in India
- Potential adaptability for electric vehicles in India
- Power availability for electric vehicles in India
- Market sizing for electric vehicles in India as per scenarios