

# BUSINESS OPPORTUNITIES ON EV

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PRESENTATION

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#### ABOUT

## **EV IN INDIA**

In India over the past year and half, electric mobility has become the most popular buzzword. It has been estimated that the mobility industry has remarkably outperformed other industries like data and big tech companies across the globe and we are starting to see the same in India.

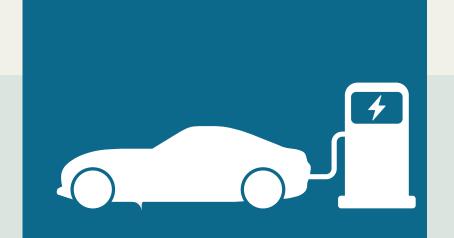
The electric vehicle industry in India is growing industry.

The central and state governments have launched schemes and incentives to promote electric mobility in the country.





## EV IN INDIA



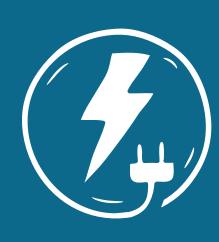
#### **CURRENT STATE**

The growth of electric mobility in India is recognizable with big difference in the sell per year.



#### **GOVT POLICIES**

Indian govt has made new policies regarding EV which will help in the growth of this sector.



#### **FUTURE OUTLOOK**

With all the developments and growth in this sector the EV industry in India will become one of the leading sectors.





EPC-R3220

## **ADVANTECH IN EV**

Advantech role in EV sector is also growing with time. Advantech contribution toward EV is recognizable.



Advantech partners with leading EV charging solution supplier to develop rapid chargers.

BATTERY PRODUCTION

Advantech vision and technologies unleash production capability for Lithium Ion battery.



## **OBSTACLES FOR EV IN INDIA**

#### LOAD ON THE ENVIRONMENT

Despite the furor about creating clean mobility solution like EVs, ironically, India depends on natural resources like coal to generate more than 70% of its electricity demands. In 2021, the overwhelming dependence on coal, gas, and petroleum for power amounted to 60%.

## INADEQUATE LITHIUM SOURCES

Recently discovered lithium reserves of 1600 tonnes in a small stretch of land in Karnataka's Mandya district. An aggressive mining operation has begun to extract lithium from this area. No matter where Lithium is mined its extraction destroys the soil and contributes to air pollution.

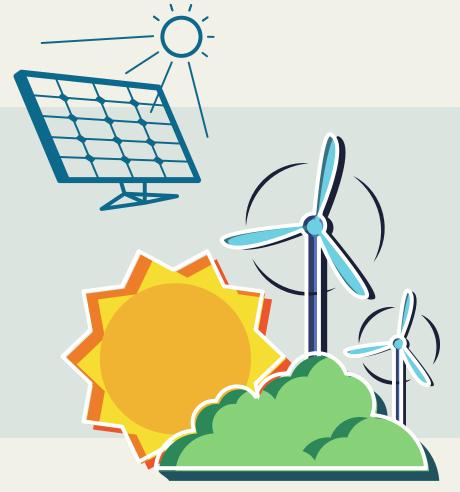
#### STAKEHOLDER NEEDS

Car manufacturers, charging station owners and potential car buyers are the direct stakeholders of electric vehicles. However the indirect stakeholders include the general public, government and the oil and gas industry. It is important to note that the adoption of electric vehicle will be favorable for all.



# HOW TO COUNTER THOSE OBSTACLES

POWERING EVS THROUGH RENEWABLE SOURCES OF ELECTRICITY







## FUTURE OPPURTUNITIES

The scope of the electric vehicle market is multidimensional, involving a wide array of stakeholders. It is imperative for India to pick up EV adoption at a mass level and fast. This is how over 3,30,000 EV units were sold in 2021, registering a growth of 168 % over 2020. An IVCA-EY-IndusLaw report suggests that this number will breach the 90 lakh mark by 2027. However, so far this surge in sale is led by two and four-wheelers.



IN ORDER TO HAVE CLEAN AIR IN CITIES, YOU HAVE TO GO ELECTRIC



#### CHARGING STATIONS

The report states that currently, there are only 1,742 charging station in the country and the number is expected to increase to 1000,000 units by 2027 to fulfill the demand put forth by 14 lakh million EVs that are anticipated to be running on the Indian roads by then.

In 2021, the industry had investments of some 6 billion dollar and this number is expected to swell to 20 billion dollar by 2030. One of the dimensions of the EV ecosystem is finance and investment, allowing stakeholders to capitalise on the growth.





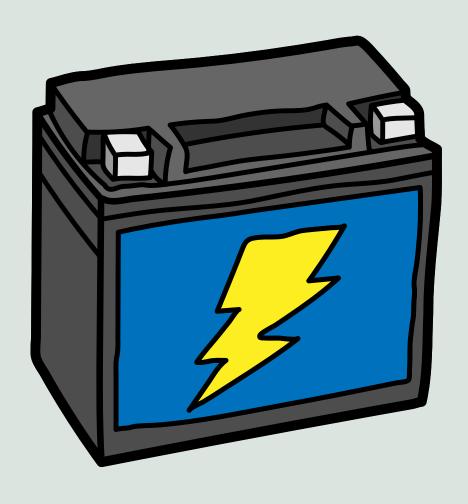
#### BATTERY FOR THE EV INDUSTRY

With the growth of electric mobility industry, the energy supply and assembly sector will play a important role.

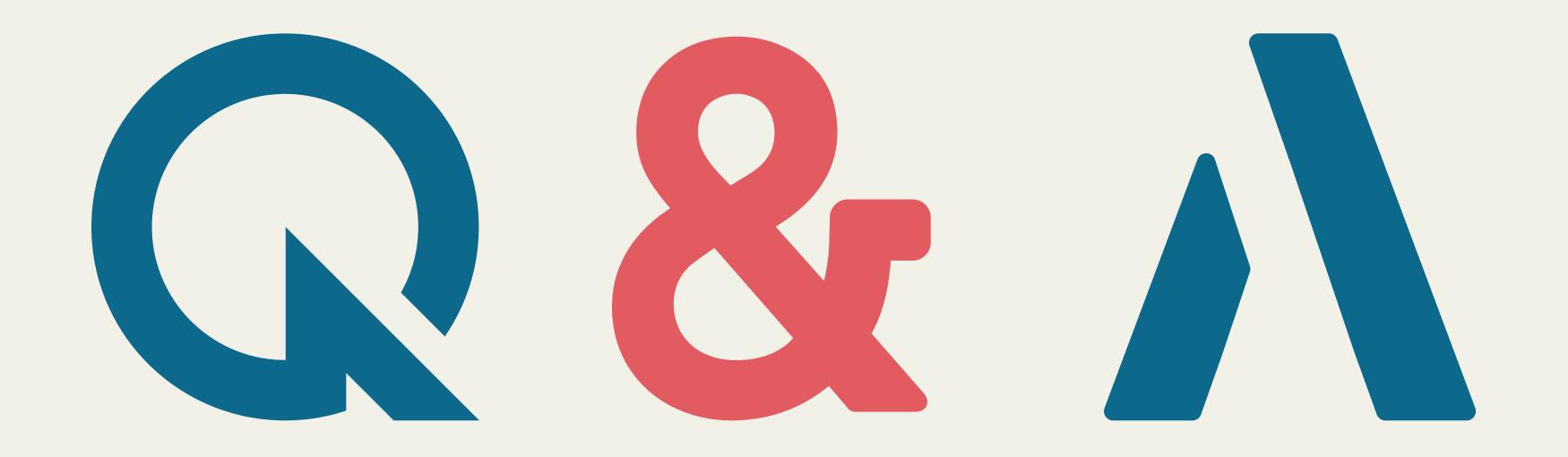
Demand of batteries for electric vehicle will increase with time and the development in the quality or the production of battery will be important.

India's Lithium-ion battery demand is currently 3 GWh and is set to grow to 20 GWh by 2026 and 70 GWh by 2030, as per the report by management consulting firm Arthur D Little.

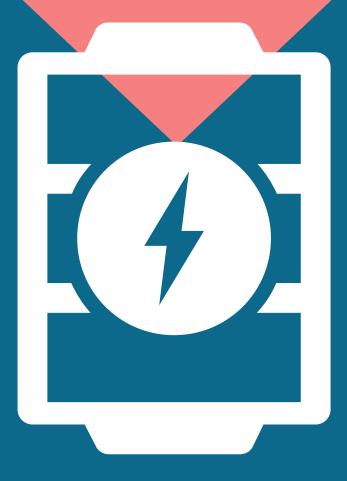
In future the electric vehicle batteries will be made less complicated and easy to charge as well as easy to use. The BMS is improving slowly and steadily which will save energy and accelerate the performance.











THANK YOU