



# Business Insights

*Understanding  
Driving Patterns  
from Battery Data*

*Vol 4,  
Feb 02, 2022*

 +91 99207 19205

 [arjun@irasus.com](mailto:arjun@irasus.com)

 Gurgaon, India

 <http://irasus.com/>

# Battery Data and Driving Patterns

Electric vehicles now contribute to over 5% of the global light-duty vehicle market. As with any new technology, there is a need to understand the driving patterns and their impact on electric vehicles' batteries. Although it's hard to fully predict how well an EV will perform based on battery data alone, it can tell us a lot about the behavior of drivers. Knowing a driver's driving patterns can help electric vehicle manufacturers improve their product lines and come up with new features that will make EV use more efficient and convenient.

This would be an interesting insights on how you can use data to improve your business. Plus, if you're looking to enter the electric vehicle market or expand your current offerings into this growing market, this could give you some great ideas and data points on what to consider going forward.

## Decoding the data

- The data is collected through an electric vehicle battery management system (BMS) which is used to monitor the state of charge (SOC). Data from the BMS is exported through a standard communication port called CANBus. Some electric vehicles have this data available from the vehicle itself and others have to get it from the battery pack.
- By combining GPS location data with electric vehicle charging station data and plotting it on a map, you can get a very good idea of regional usage & charging behavior - Heat maps could very well help you fixate your next charging hub location.
- Manufacturers can also create Interesting dashboards by combining GPS and Electrical data, which can be used for different purposes:
  - View driving patterns and the number of miles driven in a day, week or month
  - Predict how many charging cycles are needed to perform from one location to another in a day, week or month
  - View the total cost of charging
  - Predict the amount of money saved by owning an electric vehicle
  - Compare electric cars model with each other (how many miles they can drive on a single charge)
- Understand usage patterns will help manufacturers get better insights to create better marketing campaigns towards certain types of customers, which will help them gain market share.
- EV manufacturers can also use data from energy usage models to predict possible future growth scenarios. For example, if sales slow down due to economic factors or competition from other car brands, then it may be smart to reposition itself in the market

Data visualization tools like this give manufacturers better insights into how people use their cars, which helps them create products that meet customer needs. In other words, it helps them create better cars for everyone.





# About Us

iRasus is an Energy Analytics startup working in the Clean Tech sector. Our AI based Analytics Platform Preksha, works on creating digital Twins of Infrastructure Assets such as Electric Vehicle Batteries, Stationery Battery Systems, Charging Infrastructure Platforms, for optimizing Operations, better monetize their energy assets and add new tangible business value.

Contact us for a smarter energy future:



[https://calendly.com/irasus\\_tech/30min](https://calendly.com/irasus_tech/30min)





Follow us and Keep Tuned –  
for smart business insights on

Batteries  
Electric Vehicles  
Charging Infrastructure &  
Stationary Battery Storage Systems



**Thank  
You.**