A STEP TOWARDS SUSTAINABILITY

Development of EV infrastructure

PROBLEMS :

- Insufficient charging stations
- Quite long duration for charging batteries
- Higher prices of EVs compared to fuel vehicles
- Low Mileage
- Improper management of space in existing charging station

SOLUTIONS :

- **Swapping AC chargers with the DC ones:**

  This will speed up charging speed of the batteries.

- **Establishing connections with malls and petrol pumps:**

  We will be converting some part of mall parking space into charging station. This would help connecting our company with a wider range of customers.

- **Use of Government Subsidies:**

  Government is offering subsidies of about 70 percent to establish a charging station.Using these will help us manage our investment capitals.

❑. Proper Space Management:

Changing the existing style of infrastructure to a way which would allow more number of vehicles to access the charging station at the instant.

❑ Use of SOLAR resources:

We will cover the top of our charging station with solar plates providing a sustainable method for developing power.

❑. Provide Charge And Chill Stations:

An EV battery cannot be charged quickly.People could be having a coffee chilling out in a lounge reading a book or having a snack or a meal, or in some cases even watching a movie.This would encourage more people to use EVs.

❑ Last Mile Connectivity

You could simply use public transport for longer trips, and once you get to your destination, hop onto an electric scooter or bike for that last mile connectivity.These 2-wheelers can be geo-fenced so that they can only be operated in a particular area.This ensures vehicles are not misused and they don't run out of range.This concept could also be applied in big campuses like the one of **IIT-BOMBAY**.

1. Swipe in with your public transport card/company ID card
2. Enjoy your ride.
3. Find a nearby station and park your vehicle
4. Swipe out
5. Your miles and time will get recorded on your account
6. Pay

COST STRUCTURE

INSTALLATION CHARGES:

- Civil Work & Electricity connection : 9 Lakhs
- EVSE Management Software & Integration : 0.5 Lakhs

TOTAL :9.5 Lakhs

Deducting Government subsidy(70%)

TOTAL INSTALLATION CHARGES = 2.9 Lakhs

- Land Lease per year :6 Lakhs (if the land is at lease)
- Technicians, Manpower, Maintenance per year : 3.5 Lakhs
- Advertising and Promotion :0.5 Lakhs

- **ANNUAL MAINTENANCE CHARGES = 10 Lakhs**

REVENUE

- **Market Size :**

(Customers)*(Cost of charging)

- Average number of cars /per day : **35**
- Average rate of charging : **₹ 120**
- Total income per year : **35*120*365**

= **15.3 lakhs**

- Expecting an increase in the average number of vehicles being charged per day, we can expect the yearly income to gradually go up to **20 lakhs**.

INVESTMENTS

- Installation Charges : 2.9 Lakhs
- Annual Maintenance Charges :10 Lakhs

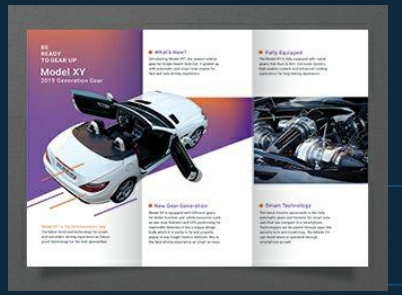
This sums up to an initial investment of 13 Lakhs

POSSIBLE RETURNS :

Assuming everything goes right then we will be able to compensate the money in about **1 year .**

MARKETING STRATEGIES

- **Collaboration with Google Maps** to provide information for the location of the charging stations
- Professional & mobile-friendly **website and search engine optimization**
- **Social media**
- **Email marketing**, through weekly or monthly articles on eco-friendly practices that will appeal to EV owners
- Provision of comprehensive **information booklets on EV** usage and charging at car dealerships

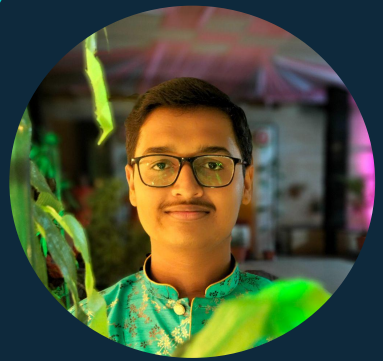


AIM OF THE PROJECT :

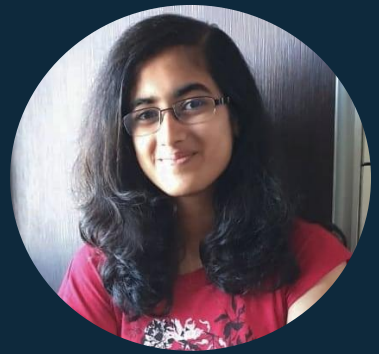
- To make EV charging stations more easily accessible
- To provide an incentive to vehicle owners to switch to more sustainable options for the good of the environment
- To create more awareness about the opportunities in the EV sector
- To collaborate with corporations to make commuting across campus easy and eco-friendly
- To eventually expand to the public transport sector to reduce the carbon footprint of urban areas

THANK YOU !

TRAUM



Vipul Patil



Aayushi Barve

Krishna Baldwa

Business Model Canvas

Designed for : TRAUM

Designed by : Krishna , Aayushi , Vipul

Date : 24/12/2021

Version : 1

Key Partners

- Government (for subsidies)
- Property Holder (for land at lease)
- Suppliers of Electrical machinery & Electricity
- Installers & Maintenance personnel
- E-bike leasing companies (for last mile connectivity)
- Certification Authorities

Key Activities

- Maintenance
- Construction
- Sales & Marketing

Key Resources

- Power
- Equipments
- E-bikes(for last mile connectivity)
- Solar Panels

Value Propositions

- Increased network for charging stations.
- Improving charging speed to save time.
- Providing an alternate source of energy through solar power in case of fluctuating electricity .
- Last mile connectivity- alternate, quicker mode of transport for short distances.
- Vehicle accountability- E-bikes are easier to keep track of.
- Reduction of pollution

Customer Relationships

- Best in Service-A happy Customer-owner relation.
- Low cost charging station network.

Channels

Customers will have access to regular information and updates regarding our charging stations from our social media pages and will also receive emails regarding other eco-friendly initiatives. We will also provide information booklets right at your car dealerships on purchase of a vehicle, or on demand. Locations of charging stations will be available on Google Maps.

Customer Segments

EV owners:
Customers those who will be using charging station.

Travellers:
Those will be the users of the last mile connectivity concept

Green community:
These would encourage more and more people to switch to EV.

Cost Structure

- Manufacturing Infrastructure
- Electricity
- Advertisement
- Employees
- Dealerships
- Maintenance of lounge

Revenue stream

- Services
- Last mile connectivity
- Energy Production
- Charge and chill Station
- Government Grants