

# Solis

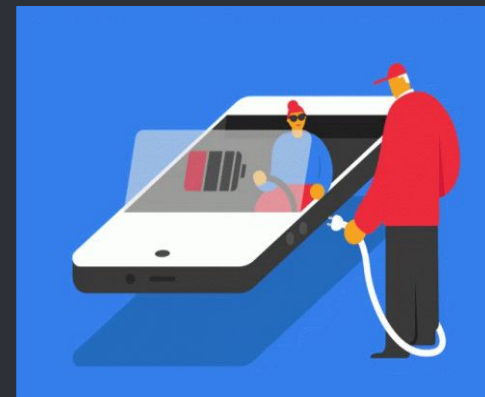
The sunshine your car needs...





# Solis

- India's EV market to grow at CAGR of 44% Between 2020-2027
- FAME -II Scheme
  - 1500 crore outlay in 2019-20
  - 5000 crore outlay in 2020-21
  - 3500 crore outlay in 2021-22
- Increasing awareness to stop Climate change.
- EV vehicles produce 0 direct Emission.
- Generate revenue through selling electricity.



**Our Offer - 20 Cr. for 10% stake**



# Problem Statement



- With the rise in pollution we need to shift from fossil fuels to renewable energy.
- India has a very large road network of 54,72,144 kilometers.
- In order to push electric vehicles the country needs nation wide network of charging stations for electric vehicles.



*The Indian* **EXPRESS**



**100% electric vehicle mobility by 2030: Is India really prepared for it?**

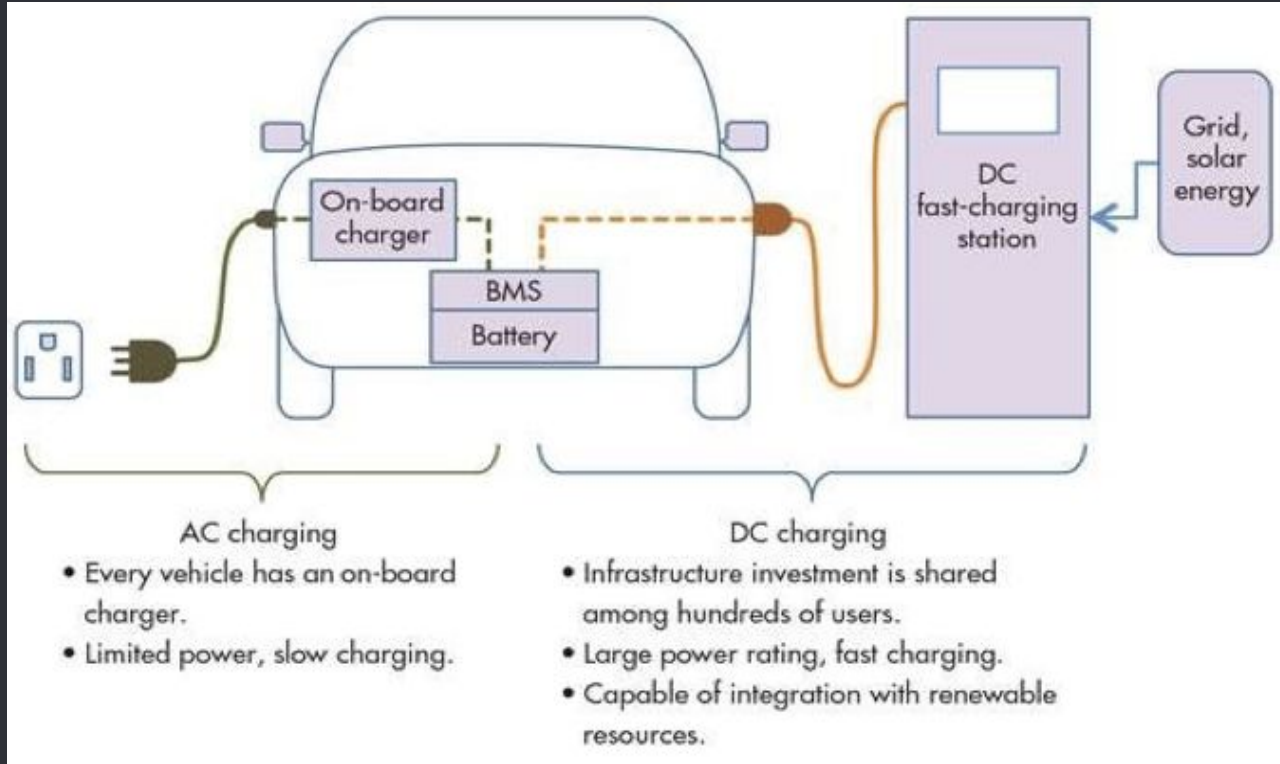


# Our Solution

- An app using IOT which will be connected with our charging stations.
- Using data analytics and cloud services, we will provide services to our clients.
- Online payment, instant booking of charging slots.
- We will connect the app with google maps so that clients can easily locate the nearest charging hotspots.



# Prototype

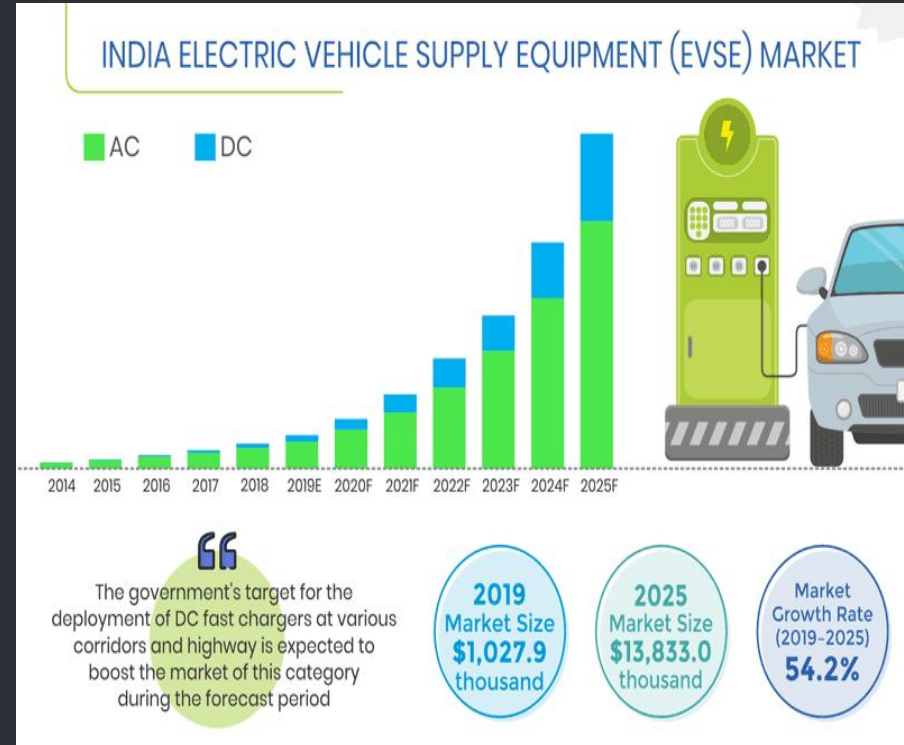




# Existing Industry and Positioning

The EV market in India has gained significant momentum after the implementation of FAME India scheme.

- The electric vehicle (EV) market in India is expected to hit over 63 lakh unit mark per annum by 2027.
- the EV market is expected to grow at CAGR of 44 per cent between 2020-2027 and is expected to hit 6.34-million-unit annual sales by 2027.





# Market and Positioning

## Early adopters

- Environment conscious people
- Tech savvy
- People who can afford
- Good mileage to cost ratio

## Projections

A report by bloomberg believes that by 2040 EV will constitute 40% of the total passenger fleet in india. 3.8 lakh units sales(2019).

## Go To Market Strategy

- Reinvent brand positioning
- Shaping the charging ecosystem
- Effective after service customer centricity and readiness.



# PESTEL Analysis

	POLITICAL	ECONOMIC	SOCIAL	TECHNICAL	ENVIRONMENTAL	LEGAL
FAVOURABLE	100% FDI allowed, various schemes such as FAME I, FAME II	Acceptability for new technologies is increasing at a good rate.	Low carbon footprint.  Lucrative market in rural india.	Credible local suppliers of high quality components.	EV's help to reduce carbon emissions in the market.  Government initiatives for attaining sustainable development	Weighted tax deduction upto 150% on in house R&D
UNFAVOURABLE	Insatiable political backing	Economic incentives by local and state govt are not easily available.	-	Rural population is not technically sound. Due to which acceptability can be an issue	Although it helps in reducing pollution but till now we haven't found any way of disposing batteries	Relatively high import duties





# Competitor Analysis

	Delta Electronics	EXICOM	MAGENTA CHARGEGRID	SOLIS
STRENGTHS	More than 40 years of exp in power technologies. Certifications like UL, IEC, CHAdeMO.	JV between India and Australia, thus technologically advanced.	A trusted name in EV charging, catering to many fortune 500 companies	IoT Integrated application
WEAKNESSES	Relatively new in the field of EV Charging. Thus less experience	Not available in all the states of the country.	Does not have much presence in home EV charging solutions.	Less prior experience in EV Industry
PRICE POINT	NA	NA	NA	4/kWh
UVP	Charging solution available for almost all the companies as well as connection types.	Always at the forefront of innovation. Also have excellent corporate governance framework.	Specializes in public access EV charging solutions for places like Airports, Malls etc	Moving Electric van



# Operational Plan

## Key Resources

- Charging Stations
- Batteries
- Solar Energy
- IOT App

## Key Activities

- Providing Charging
- Reducing Carbon Footprint
- Increasing Awareness
- R & D
- Charge point Infra.



# Milestones

Fund raise - 20Cr  
Set up of 50  
charging stations

Annual turnover  
of 50 Cr. from  
third year.

Annual Turnover  
of 150 crore in 5  
Years

1

3

5

2

4

Set up of next 50  
stations

Over 200  
Charging stations  
in 4 metros



# Implementation Plan

## Implementation

- Highly feasible
- No technological and policy barriers
- Main Challenge - Fund Raising

## Milestone Achieved

- Patent of working station model
- Two Ev Power stations functional in Delhi

## Targets

- Big cities -> Tier 2 Cities
- Movable Power stations
- Power stations at Parking Area



# Organizational Plan - Team



CEO



Chairperson



Corporate Legal Manager



Supply & Distribution  
Manager



Admin. & Commercial  
Manager



Operations &  
Technical Manager



Planning & Financial  
Manager



# Legal Identity

Date of incorporation - 15 November 2020

Type of company - Pvt. Ltd Company registered under Companies Act 2013.

No. of Directors - 3

No. of members in the company - 200

Paid up share capital - Rs. 1 crore.

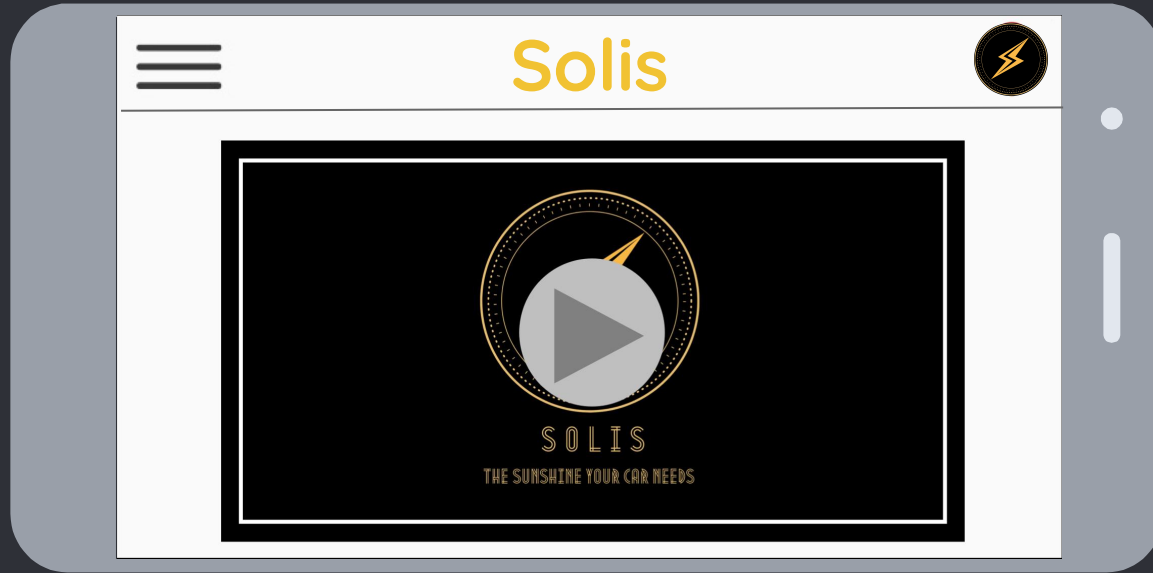


# Risk analysis

- Financial risk
  - Expansion cost
  - Maintenance cost
- Strategic risk
  - Require infrastructure
  - Use of the power stations
  - Regular maintenance required
  - Time duration
  - Power derivation from grid
- Operational risk
  - Require assistance at each station
  - Breakdown of charging & solar equipments



# Risk Management Plan





# Thank You!

## ANY QUESTIONS?



### Group 2:

Janav Arora (20DM278)

Saksham Chawla (20DM256)

Utkarsh Mishra (20DM230)

Utkarsh Singh (20DM231)

Vicky Parmar (20DM242)

Vidisha Verma (20DM243)

Yogesh Sharma (20DM254)



# Annexure



# Business Model Canvas

## Key Partners

Charging point partners  
Insurance companies  
Government bodies  
Solar panel manufacturers  
Software development companies

## Key Activities

Providing charging  
Reducing carbon footprint  
Increasing awareness of E-vehicle  
Charge point infrastructure  
R&D

## Key Resources

Charging stations  
Batteries  
Solar Energy  
IOT Aap

## Value Propositions

Movable charging station  
Energy efficiency  
Promoting Renewables & sustainable development  
Charging station at every 5 Km  
Charging at parking premises to utilise idle time

## Customer Relationships

Direct to customer  
Personal assistance

## Channels

Social Media Advertising  
Retail Stores Banners  
Website  
IOT Integrated App

## Customer Segments

Ev vehicles Customers  
Early adopters -  
Tech Savvy  
Environment Conscious  
Mileage driven

## Cost Structure

Cost of Land & setup cost  
Charging stations & solar panel cost  
Human resource  
Research & Development Cost  
Marketing & Advertising cost

## Revenue Streams

Revenue through Charging  
Revenue through advertising on Aap & posters at charging stations.



# Genesis of the Idea

With the increase in popularity of EV's in India many people are wanting switch to the environmentally friendly vehicles. However, the infrastructure for the same in India is not yet available, especially for charging these vehicles. When it comes to charging an EV in India today, one either needs to charge it at home or find a charging station (which are available in very few locations in India).

We plan to reduce this issue but increase the number of charging stations by starting with all the places that have petrol stations and for ease of finding these stations we provide an IoT application available in those 7 inch car screens and Android and IOS applications.

# Feedback & Review

## Customer Feedback

- ❑ This will really help in solving the problem of charging and i believe that this will also influence people to buy an EV.
- ❑ It is always hard charging the car at home and worrying about the battery of the car throughout the journey. Will be amazing if there is at least one charging station along side the petrol stations.

## Expert Review

Going forward, the industry believes that the market will grow very rapidly in the upcoming years as many state governments are planning to convert the existing fleet of autos into electric under their EV policies.



# FINAL PROJECTION

## Pricing strategy

- The electricity tariff margin is considered to be Rs 5/kwh for now.
- Our electricity tariff will be Rs 4/Kwh
- Electricity rates may increase in the future for EVs.



# COST OF OPENING A STATION

## COST OF CHARGERS -

2 chargers = 2 X 2,47,000 = 4,94,000

Bharat DC-001 = 1 X 65000 = 65000

Charger type	Output power	Cost of charger
Bharat AC-001	3.3kW	65,000
Bharat DC-001	15kW	2,47,000
Type 2 AC	22kW	1,20,000
CHAdemo	50kW	13,50,000
CCS	50kW	14,00,000



## • Other infrastructure costs of 1 EV charging station

New connection, transformer, cables	6,00,000
Civil works for EV charging station	2,00,000
Brand building and promotion	50,000
Technical team, manpower and maintenance	2,40,000/yr
Location rental for EV charging station	60,000/yr
Insurance	50,000





# FINAL PROJECTION

Total startup & fixed cost	186900000
Total variable cost	235400000
Total Revenue	466800000
Profit 1st year	44500000
Profit 2nd year (exclude one time startup cost)	187400000
Payback period	1.75 years

Detailed excel with all calculation is attached.



# Exit Strategy

Distributor:-

- Charging Equipments
- Solar Panels