



**AirNERGIZE**  
*Charge is in the Air*

## TEAM TARAMANI-THINKTANK



**Mane Pranav Pradip**



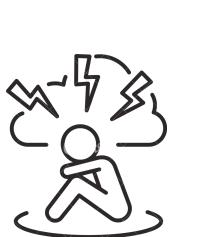
**Manvi Agarwal**



**Debankit Bhattacharya**

## E4W ADOPTION IS SIGNIFICANTLY SLOW IN INDIA!

**58%**<sup>[1]</sup> buyers get hindered due to **range anxiety**



Range Anxiety due to **Limited charging stations**

**4-7** required hours to **fully charge** the EV



High Charging Time due to **stationary chargers**

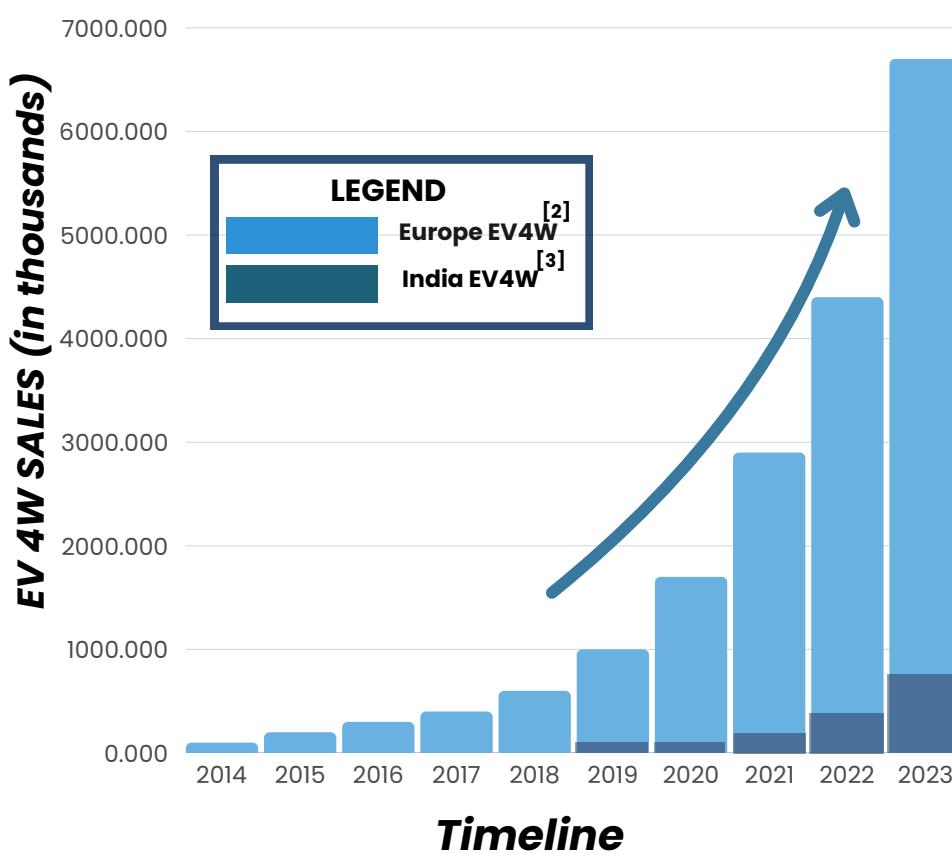
**25%** Battery **SOC loss** over repeated fast charges



Battery gets degraded due to **fast chargers**

**W  
H  
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## EV CHARGING IN INDIA NEEDS A BREAKTHROUGH



**Europe FY 2023 : 6.7 Million EV4W**

**India FY 2023 : 0.1 Million EV4W**

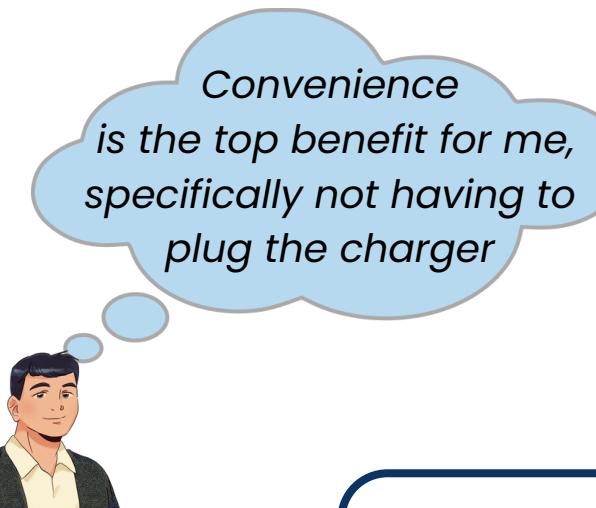
**India lags** behind **Europe's** EV market by **five years**. Despite being dominated by public transport, Europe leads in EV4W adoption due to robust charging infrastructure. With India's reliance on private transport, strengthening charging infrastructure can drive **exponential EV growth**.

## 96% EV USERS WANT ON-THE-GO WIRELESS CHARGING

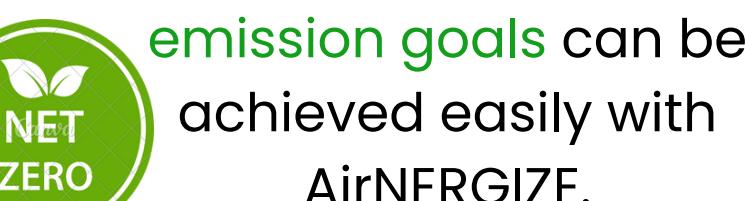
Wireless Charging is upto **95% efficient**, as good as wired charging<sup>[6]</sup>

For a range increase of **70km**, Dynamic Charging is <sup>[4]</sup>  
**3x Faster than a Level III Fast Charger**

### What's in it for user?



### What's in it for Government?

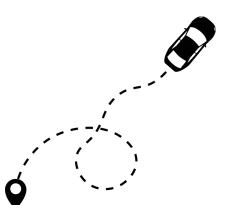


**68%**<sup>[5]</sup>

The **Electrification with AirNERGIZE** ensures not only convenience but also a healthy and longer battery life



**Save Time**



**Stress free Trips**



**Increased Range**

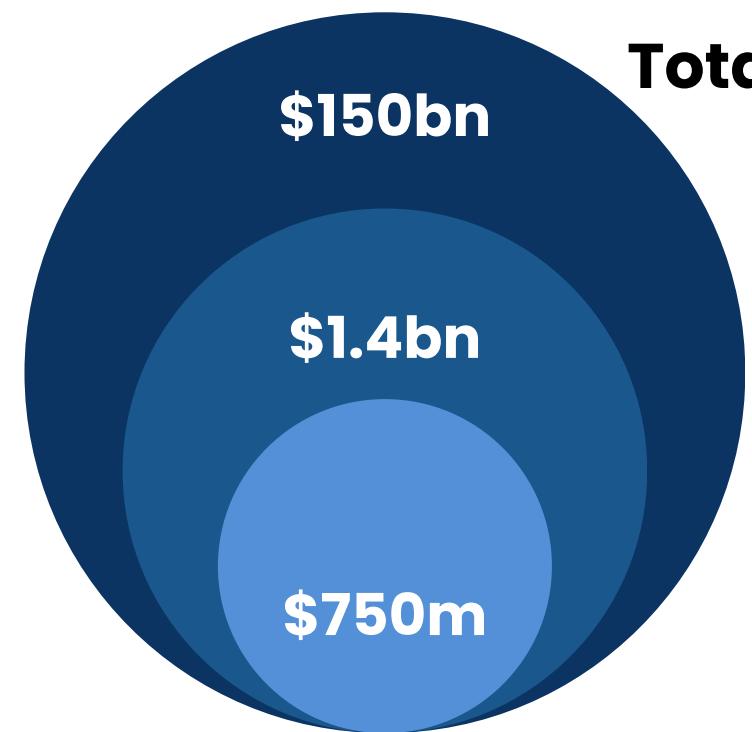


**Convenient**



**Reduce EV Cost**

## TOTAL MARKET



## Total Addressable Market

Amount of money spent on the fuel for the mobility of vehicles.

## Serviceable Addressable Market

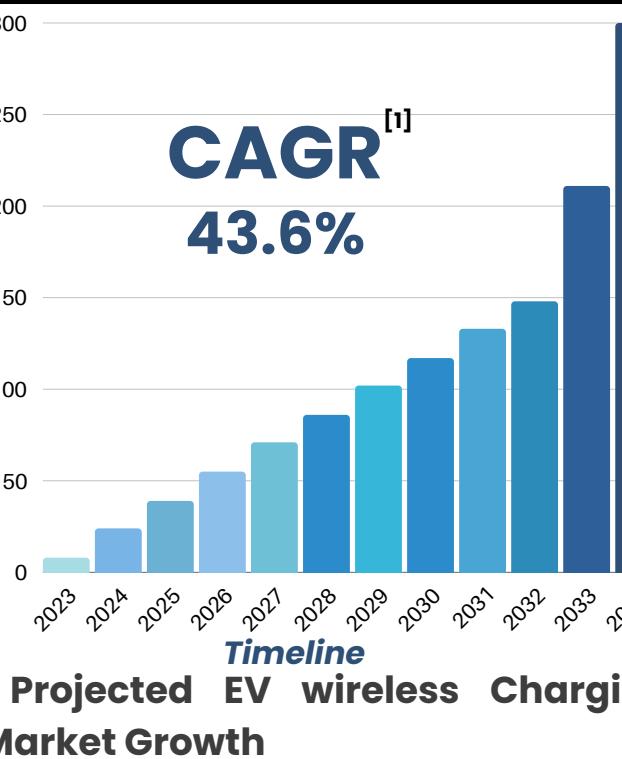
Money spent on the charging on all types of EV's

## Serviceable Obtainable Market

Amount spent on charging 4W EV's

Ref: Calculated based on data from Vaahan Dashboard. Numbers in USD for Indian Market in 2024

## GLOBAL GROWTH



## ENERGY REQUIREMENT

On average, a single tunnel would use **4.73 Million Kwh** per year to charge vehicles.

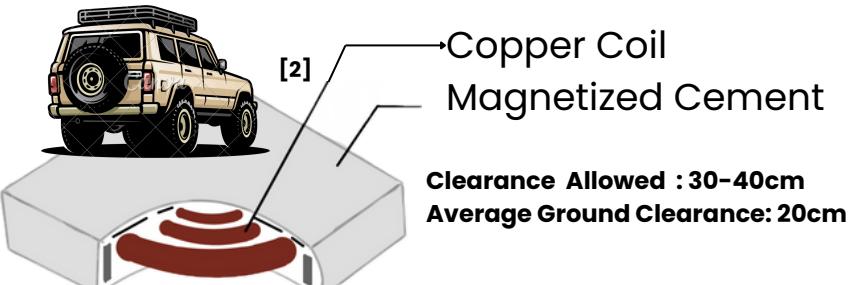
This raises the need for **proper optimization** of power.

An **AI model** trained on **historical** data of **grid load, traffic data** would be used to optimize the power requirements of the charger.

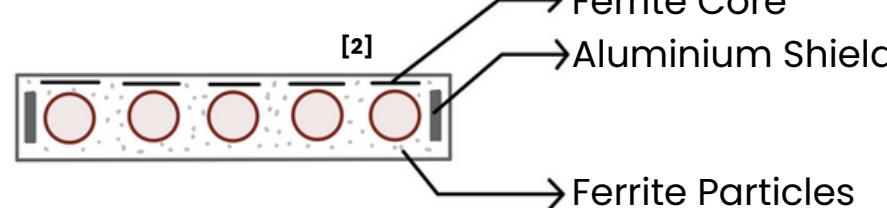
## Roof-Top Solar?

We plan on installing rooftop solar as an option to regain operational costs in the future.

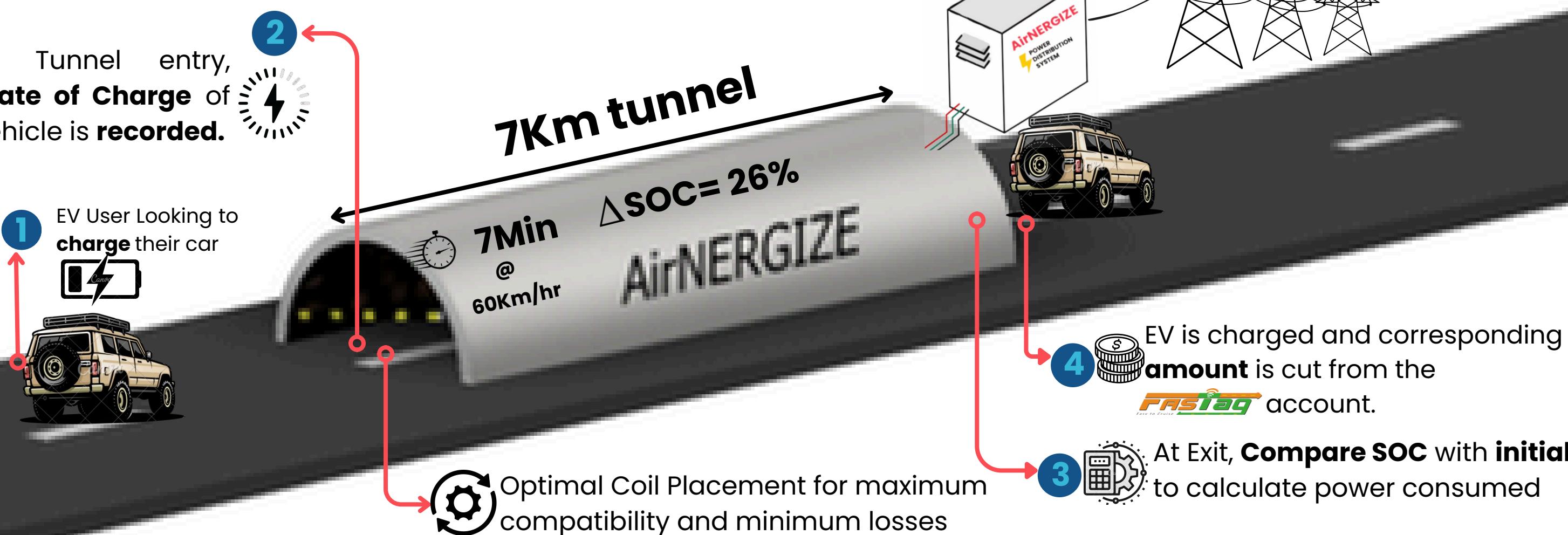
## AIRNERGIZE'S DYNAMIC WIRELESS CHARGING INFRASTRUCTURE



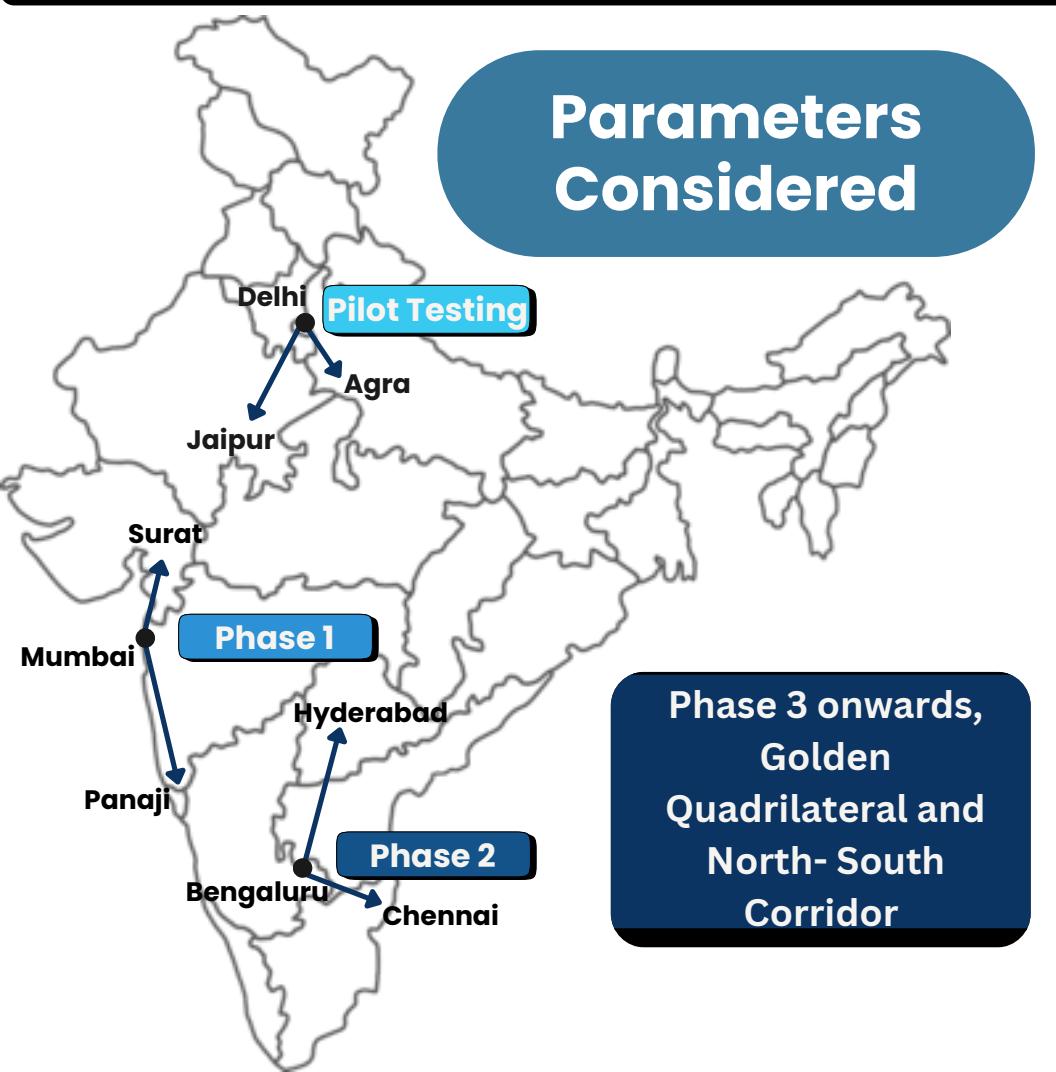
At Tunnel entry,  
**State of Charge** of vehicle is **recorded**.



The **magnetic cement coil tiles** will be used as the **transmitter**.



## PAN INDIA IMPLEMENTATION PHASE



## GO TO MARKET STRATEGY

2025 2026 2027 2028 2029 2030 2031 2032 2033

R&D and Testing

Pilot Testing 1

Partnership

Phase 1

Development

Phase 2

Advancement

Phase 3

PILOT TESTING

PHASE - I

PHASE - II

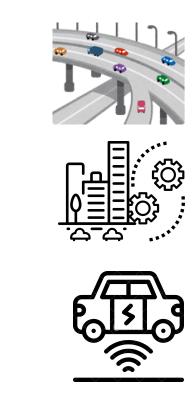
PHASE - III



R&D and Iterative Testing  
Technology Deployment  
Trial Run



Target Market Identification  
Partnerships with government Stakeholders



Strategic Location Infrastructure Development  
Launching wireless charging EVs

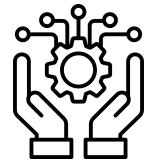


Enter the city markets  
Technological Advancements  
Global Expansion

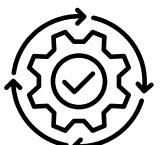
## CASE STUDY – Bombay to Panaji

Route Overview : Bombay To Panaji	Distance	559.3 km
	Terrain	Uneven and Rough
	Atmospheric Conditions	Equitorial Climate
EV Performance Considerations	Avg. Range ( Less due to terrain and weather )	213 km
	Charging Stations EN-Route	5

### Charging Tunnel Optimization



Factor of adoption = 0.8



Optimum Number of Charging Tunnels = 7

In a worst-case scenario where an EV sets out with only **10%** charge, the vehicle must reach a charging station within **30 km** to avoid depletion. Based on this constraint, a **minimum of 9 charging tunnels** is required to ensure uninterrupted travel across the route.

## STRATEGIC PARTNERSHIPS

Addition of wireless charging technology into cars  
**EV Manufacturers**



**Construction Companies**

Construction of wireless charging hubs



**EV Charging Providers**

To optimize and strategically place wireless charging hubs

Collaboration with NHAI for seamless payments using Fastag  
**Government of India**



**MOEFCC**

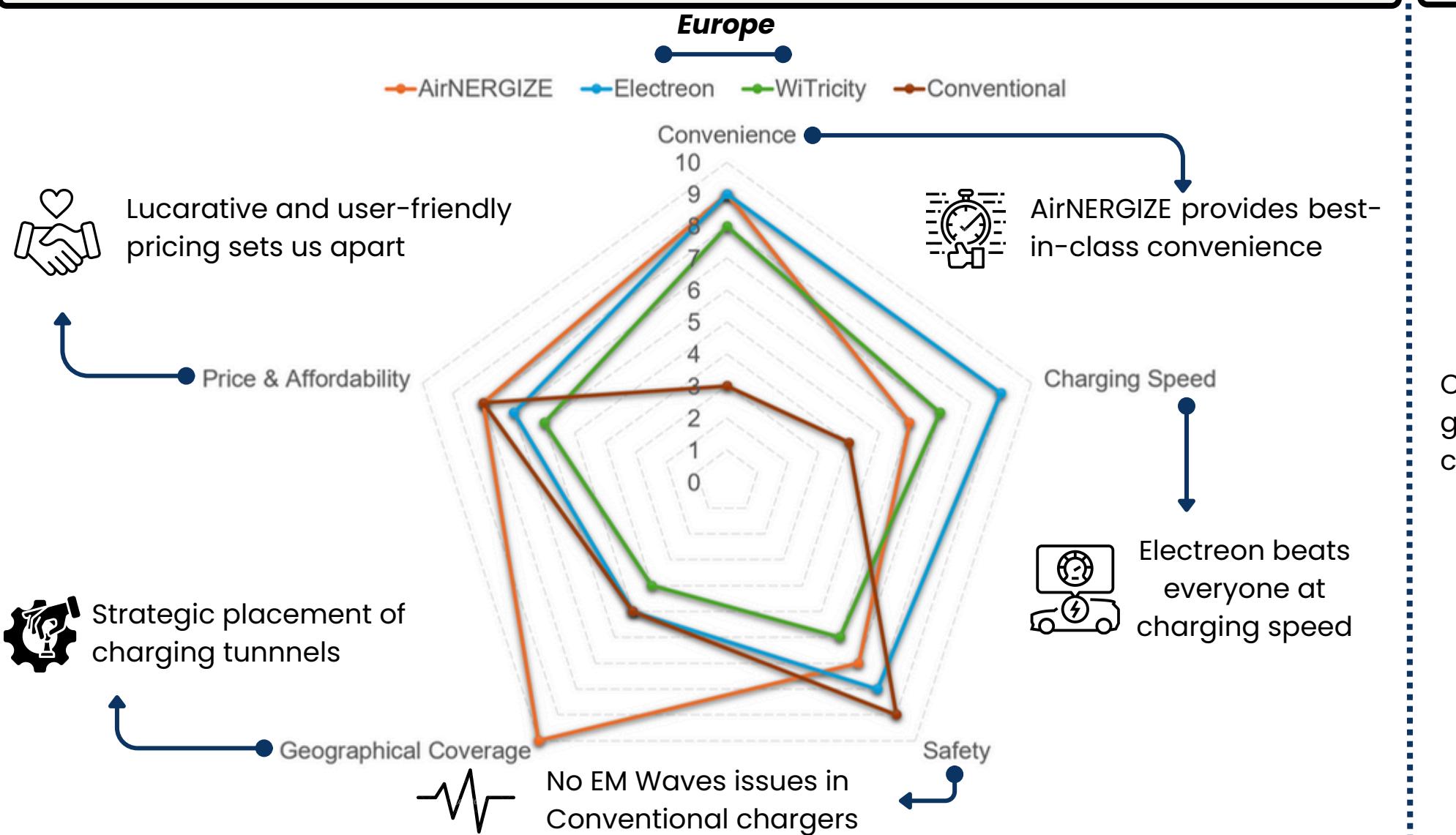
Monitoring the health and environmental impact of AirNERGIZE

Cheap and reliable energy supply

**Power Grid**



## COMPETITOR ANALYSIS



## CAPEX BREAKDOWN

