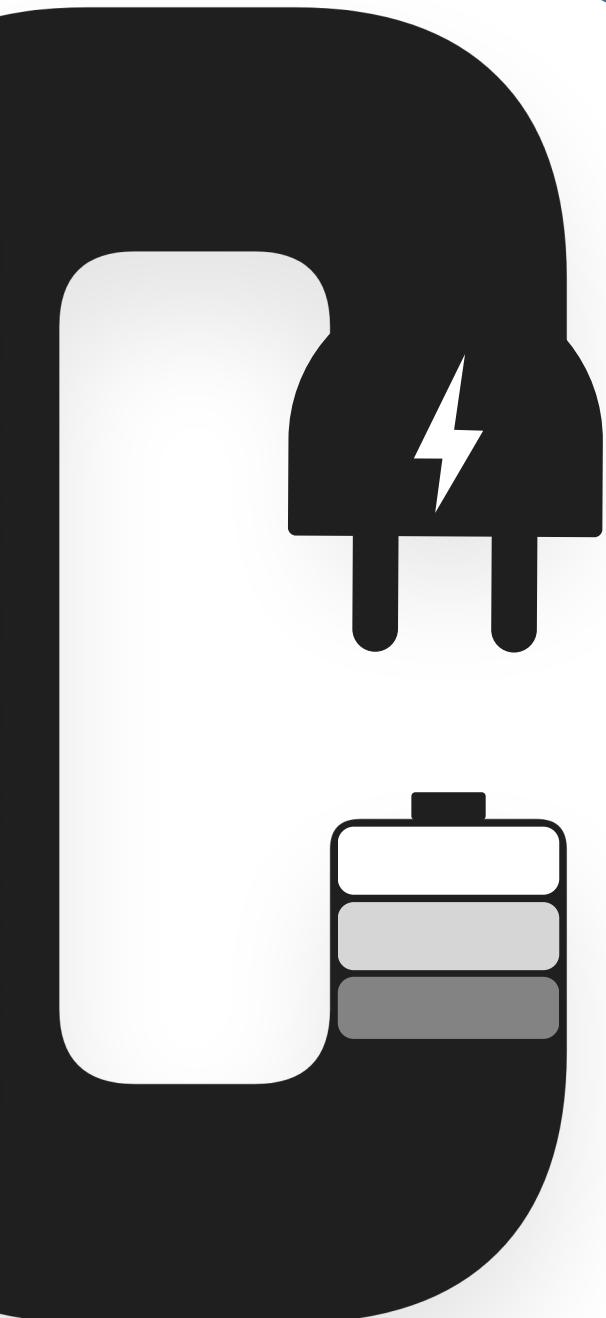


CHARGEWISE



THE ROAD TO CONVENIENT EV

THE TEAM



A smartphone screen interface featuring a circular profile picture of a young man with dark hair and glasses, wearing a light-colored shirt. The background of the card is white with a black border.

Garv Baweja
Team Lead

A smartphone screen interface featuring a circular profile picture of a young woman with long dark hair, smiling. The background of the card is white with a black border.

Riya
Team Member

A smartphone screen interface featuring a circular profile picture of a young man with dark hair and glasses, looking upwards. The background of the card is white with a black border.

Sarthak Jain
Team Member

STORIES

SERVICE

SUPPORT

Electric Adventure



KEEP THE WORLD
ADVENTUROUS FOREVER.

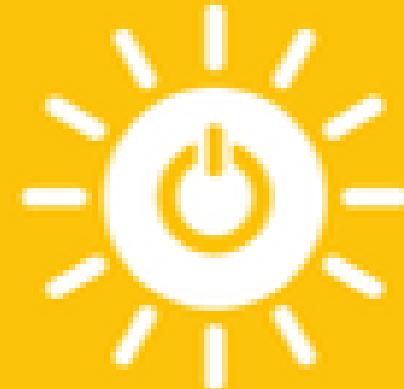
EXPLORE



EV INDUSTRY X SDGS



7 AFFORDABLE AND CLEAN ENERGY



9 INDUSTRY, INNOVATION
AND INFRASTRUCTURE



11 SUSTAINABLE CITIES
AND COMMUNITIES



12 RESPONSIBLE
CONSUMPTION
AND PRODUCTION



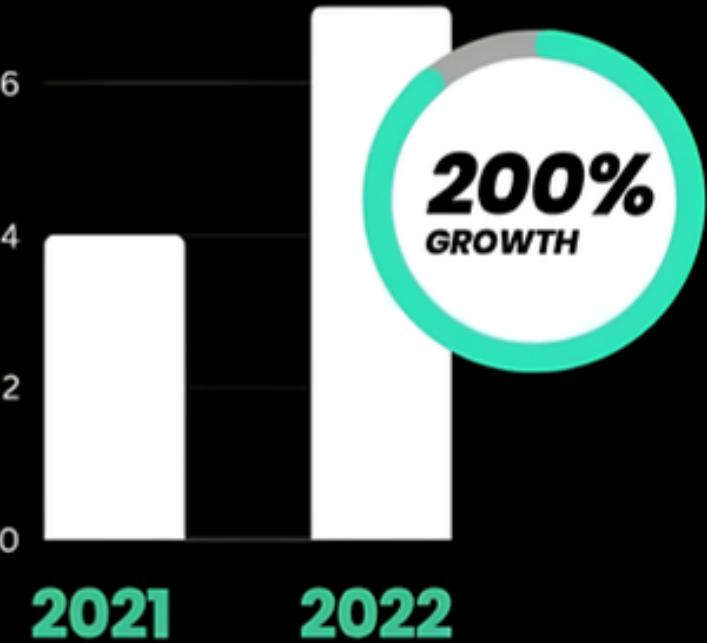
THE EV BOOM IN INDIA



- A remarkable surge in electric vehicle (EV) adoption- **growth rate of over 150%** in last year alone (Society of Indian Automobile Manufacturers)
- In 2023, the number of registered EVs in India crossed the **“2 million mark”** (Central Statistics Office, Government of India)
- The Government's **incentives, subsidies, and tax breaks** have played a pivotal role in promoting eco-friendly transportation, making electric vehicles more accessible and affordable
(Ministry of Heavy Industries and Public Enterprises)

Revolution in Indian Auto Market

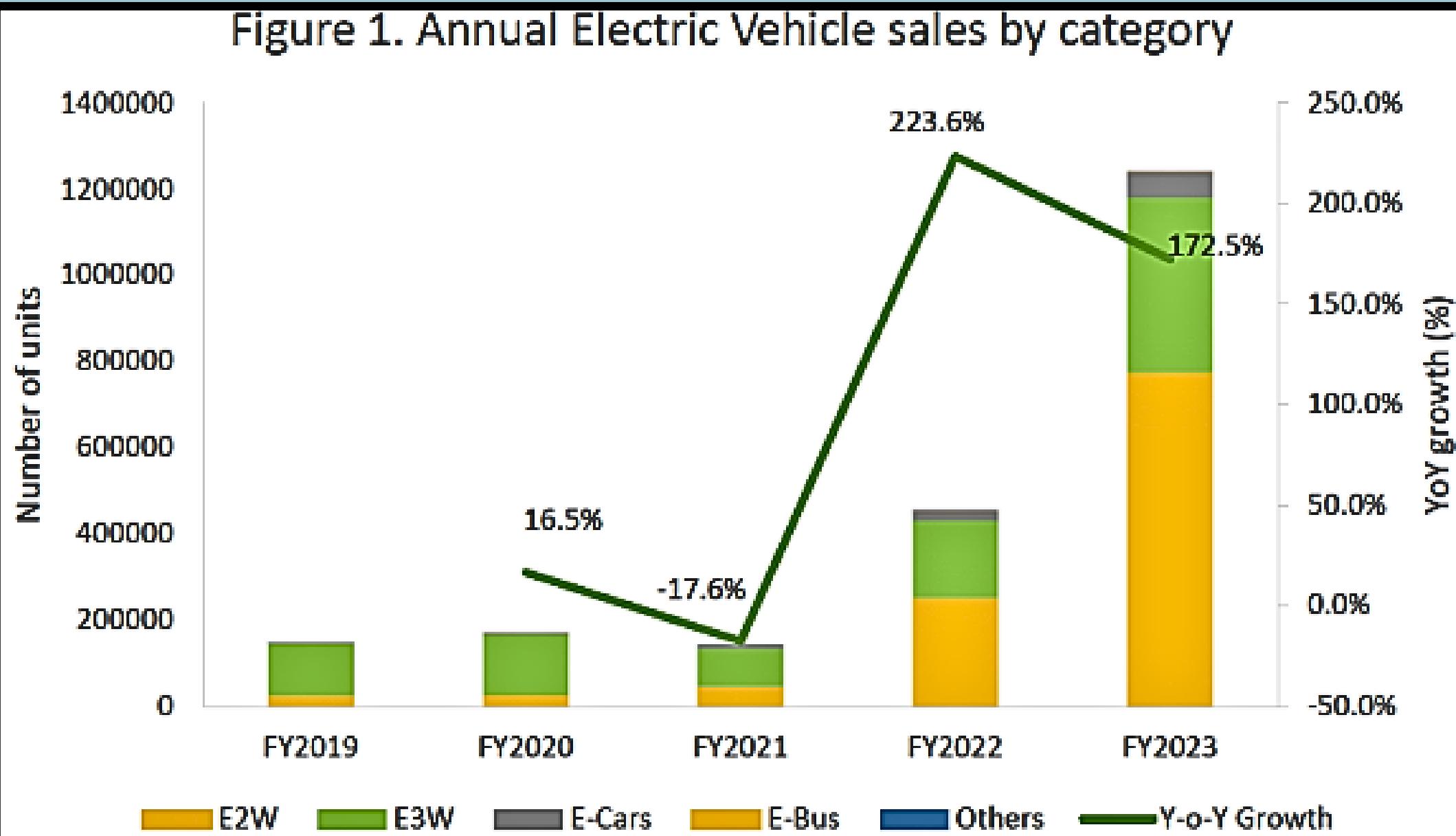
8



2-Wheelers	2,31,357	53.89%
3-Wheelers	1,77,874	41.43%
4-Wheelers	16,853	3.93%

CHARTS DEPICTING EV BOOM IN INDIA

Figure 1. Annual Electric Vehicle sales by category



CHALLENGES IN EV CHARGING INFRASTRUCTURE

- Despite initial EV adoption, **India's charging infrastructure faces challenges.**
- An estimated need for **2,800 additional EV charging stations** (NITI Aayog)
- **Non-standardized charging jacks** lead to compatibility problems, limiting options for EV owners (CleanTechnica)



- Different charging speeds
- Existing infrastructure
- Regional differences(Globally)
- Technological advancements
- Diverse Market Players
- Regulatory hurdles

Charging Standards Used By India's Automakers

Automakers using Japanese CHAdeMO



Hyundai Kona



Suzuki & Toyota



Honda

Automakers using European CCS



Volkswagen



Hyundai



Ford Motors



Renault



BMW



Audi



CHEVROLET

Automakers Using Bharat Standard



TATA



Mahindra



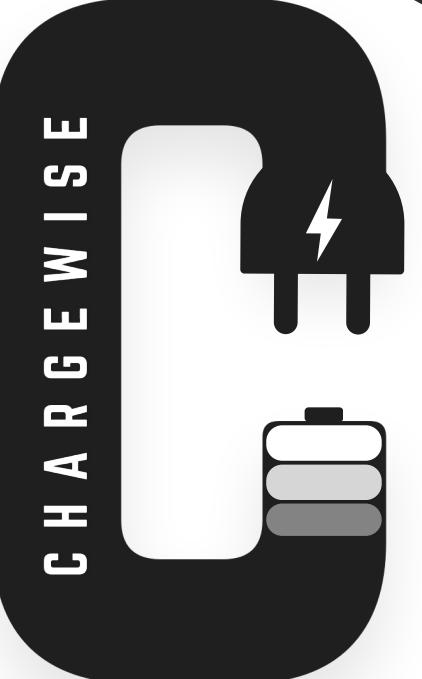
THE LINKER-X SERIES



- An adapter serving as a **bridge between varying charging standards**.
- Designed to make charging accessible, efficient, and hassle-free for every EV owner.

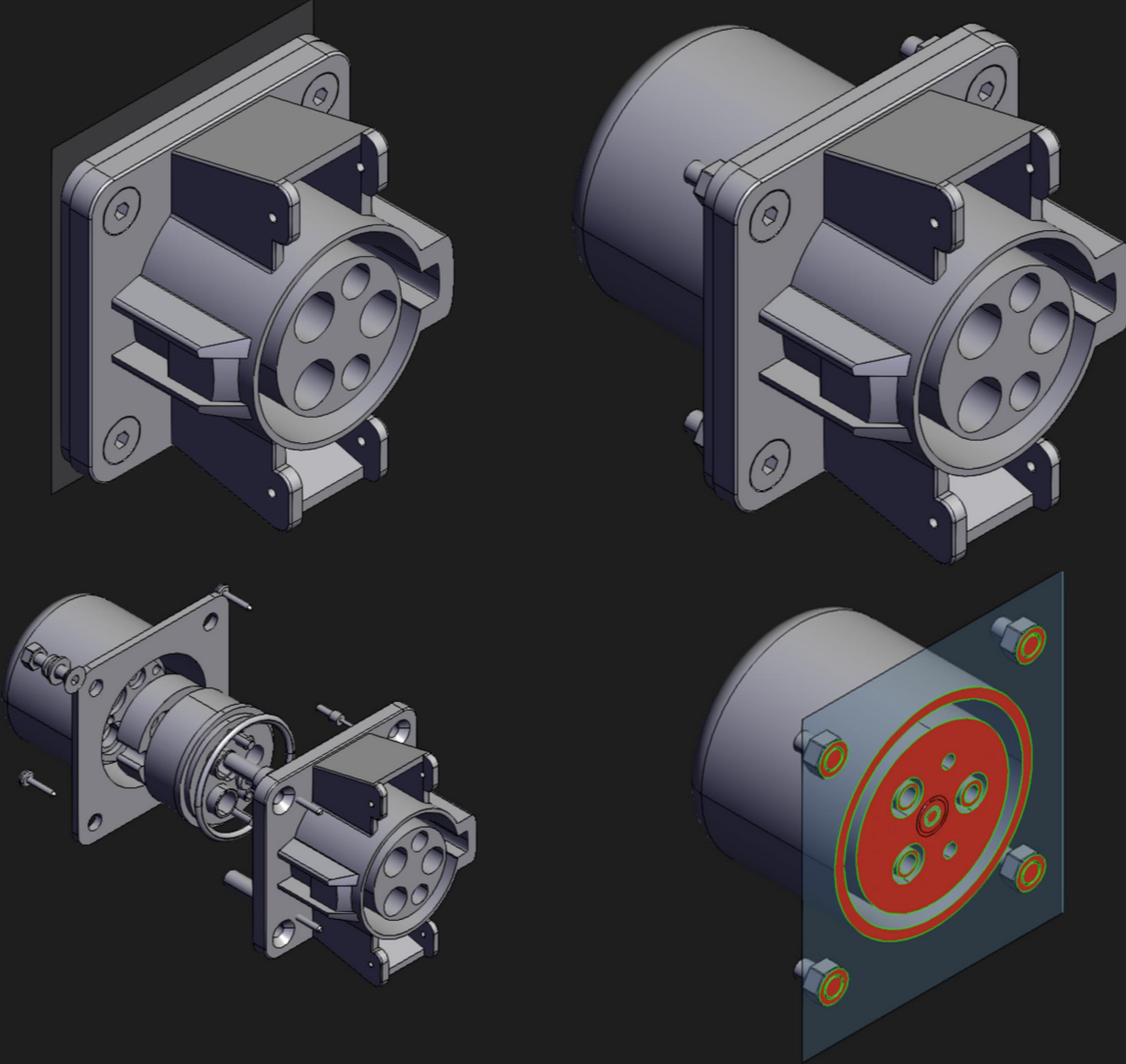
Adapter Compatibility

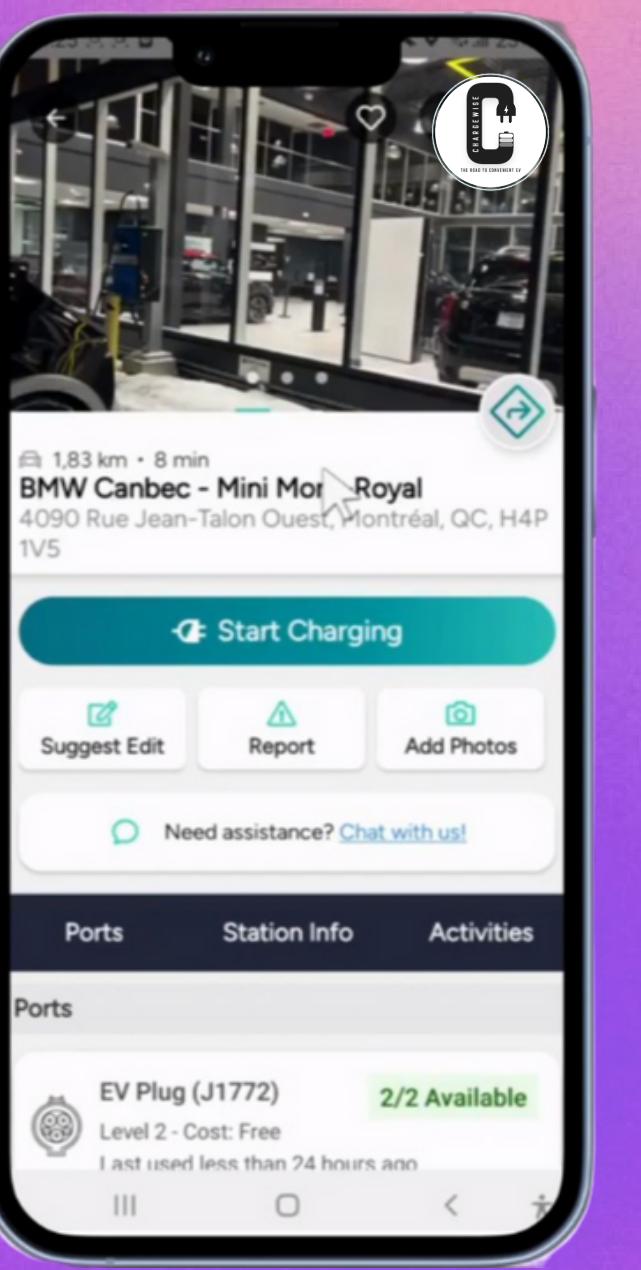
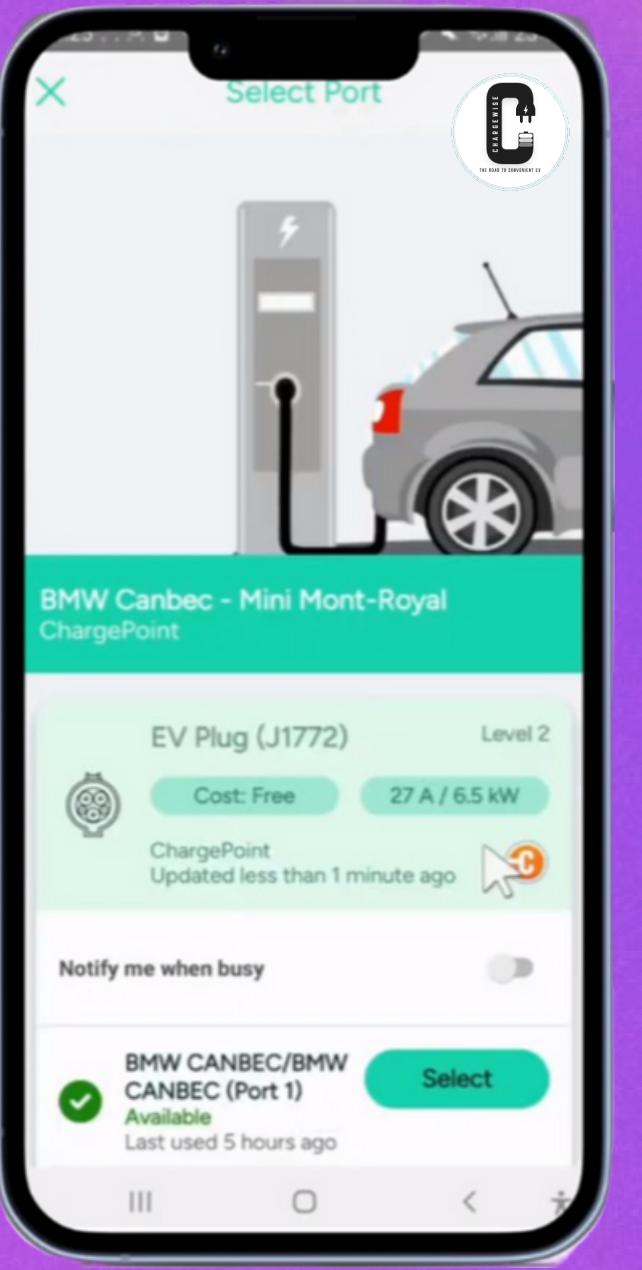
- Engineered to work seamlessly with a wide range of charger types, including:
 - CHAdeMO
 - CCS (Combined Charging System)
 - Type 2 (Mennekes)
- Offers compatibility with the majority of electric vehicle models.



THE ROAD TO CONVENIENT EV

Product Design: Linker-X





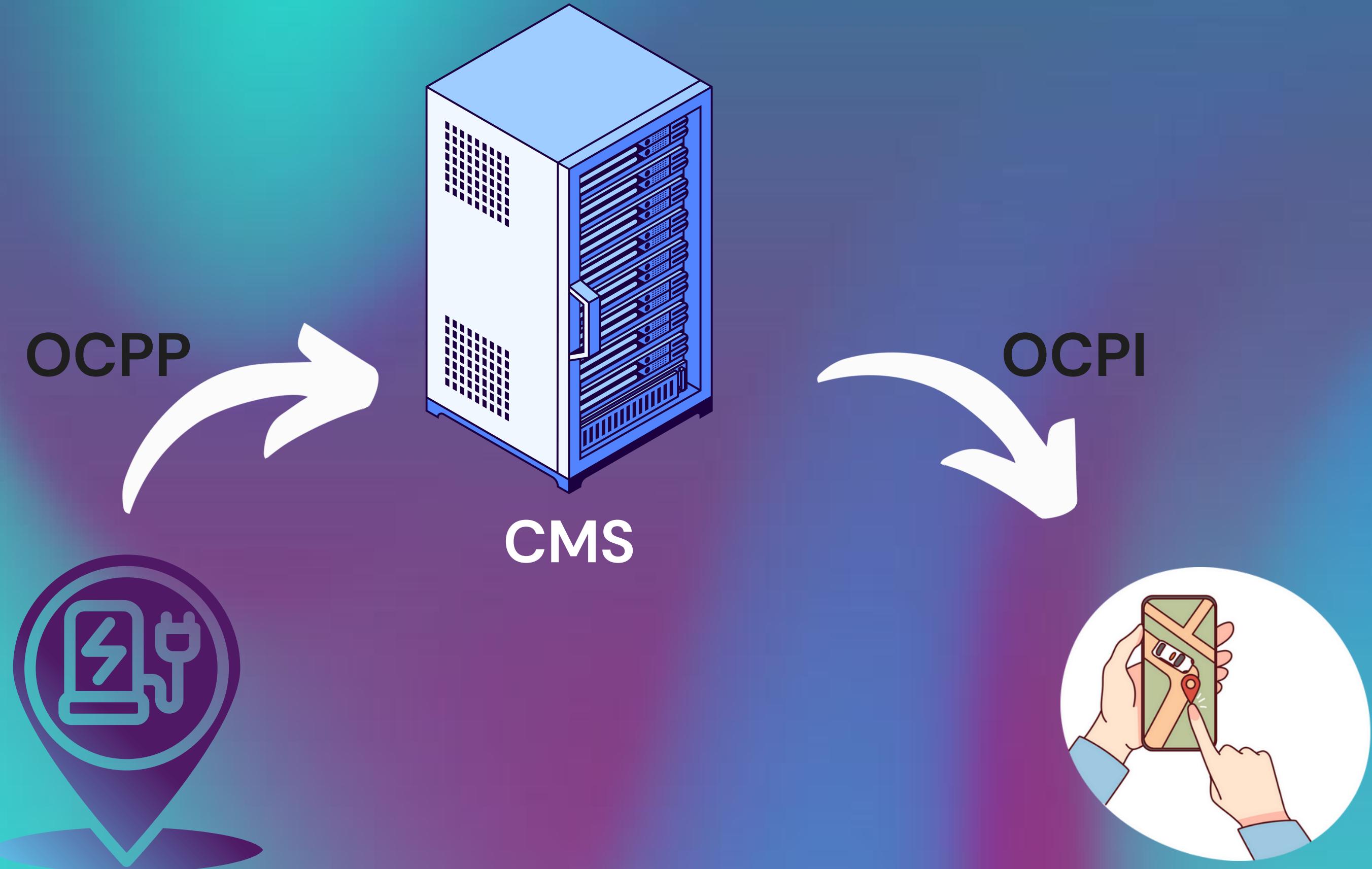
The All-In-One ChargeWise App

Introducing an all-in-one **ChargeWise** app that complements our [Linker-A](#).

Key Features:

- **Find Supported Chargers:** Discover suitable charging stations suggested by your EV-make or the ones which support the adapters you have seamlessly.
- **Navigate to Charging Station:** Easily navigate to charging stations with **real-time availability** and **user reviews**.
- **Explore Nearby Amenities:** Discover dining, shopping, and services while your EV charges.
- **EV Maintenance Tips:** Access expert advice for a longer EV lifespan
- **Charge State Monitoring:** Keep track of your charging progress and receive notifications.
- **Connect with the ChargeWise EV Community:** Share experiences, tips, and foster an EV-centric network.

O
C
P
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Charging Station(CSMS)

ChargeWise Application

INSIDE THE ADAPTER

Physical Connection



Communication Protocol



Data Exchange → CAN-BUS

Charging initiation



Charging Control



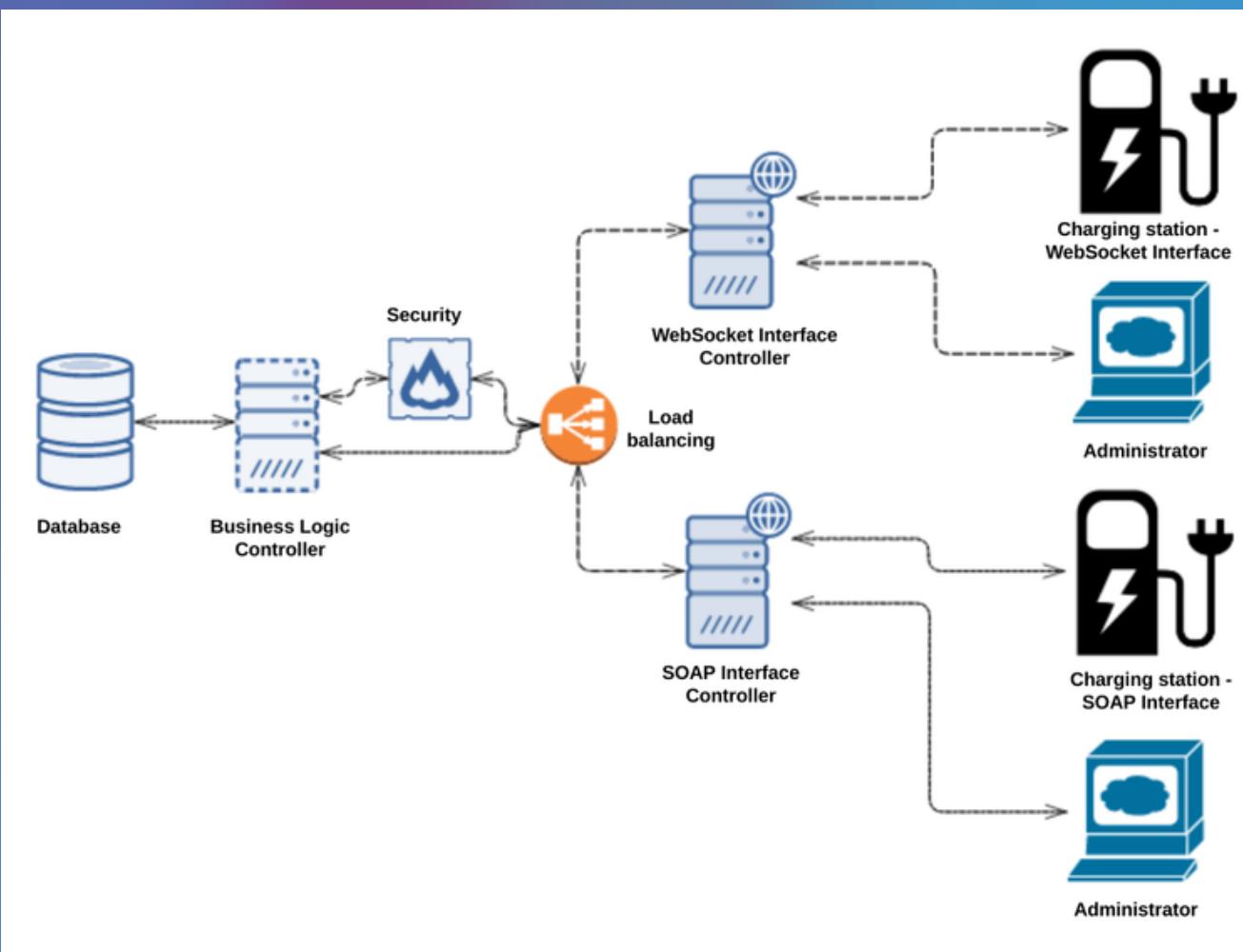
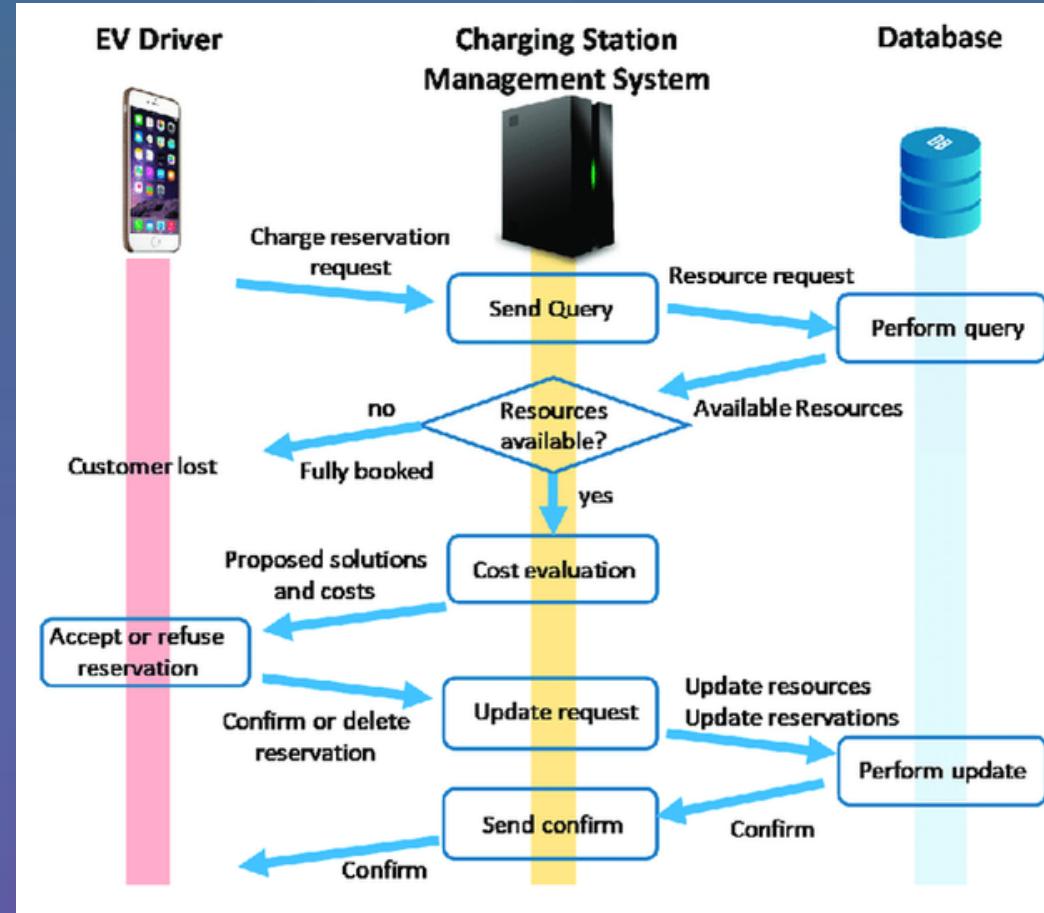
Feedback

Format- ISO 15118

Supports 2 message formats-

- Standard(11 BIT)
- Extended(29 BIT)

Manages Pulse Width Modulation(PWM)



OUR REVENUE MODEL

Product Sales

D2C

Wholesale

OEM Partnerships Gover...

Application Revenue System

Ad Revenue

Anonymised Dat...

Others

Consultancy

Fleet Services

Product Sales (B2B and B2C):

- **Direct Sales to EV Owners**
- **Wholesale** in bulk to resellers, charging station manufacturers(Delta, Execom), and installation service providers.
- **OEM PARTNERSHIPS (B2B)**
- **GOVERNMENT CONTRACTS AND GRANTS (B2B)**

Application Revenue System

- **Anonymized Data Sales** to government agencies, research institutions for analysing trends & infrastructure planning.
- **ADVERTISING REVENUE**

- **Consultancy:** Offer expert advice on EV charging infrastructure.
- **Fleet Services:** Provide tailored solutions for businesses with EV fleets.

Marketing & Sales

- **Targeting EV Owners:** Engage directly with EV owners through various channels.
- **Digital Marketing:** Leverage online platforms and social media for audience outreach.
- **Partnerships:** Collaborate with EV manufacturers and charging station providers.
- **Distribution Channels:** Ensure multi-channel product availability.
- **Government Tie-ups:** Forge strategic alliances with government agencies to promote sustainable transportation initiatives.

Competitive Advantage

- **First Mover Advantage**
- **Economical Excellence**
- **Adapter Advisor**
- **Comprehensive Ecosystem**
- **User-Centric Approach**
- **Global Vision**
- **Data-Driven Innovation**
- **Strategic Partnerships**
- **Advertising Revenue**



1 PHASE

Idea Refinement: In the initial **seeding phase**, we'll further refine the idea. This will involve **fine-tuning, & laying the foundation:**

App Development: Developing the ChargeWise app which will be **launched ahead of the physical product** with more features rolling out later. This strategic step will allow us to build brand awareness, gather user feedback, and create a community of EV enthusiasts.

- **Manufacturing Setup:**

Collaboration with manufacturing companies to source components while focusing on our role as an assembly plant. This ensures efficient production and quality control.

- **Product Development:** After the successful launch of the app and collecting valuable user insights, we will proceed with the **development of our EV Charging Adapter**

(Linker-A)

PHASE 2

3 PHASE

- **Initial Market Penetration:**
Focusing on penetrating the **domestic market**, we will target **key cities and regions where EV adoption is high**.
- **Expanding Product Line:**
Expanding our product line to **address additional EV charging challenges** including the development of **more advanced adapters** and the integration of **new features** into our app.

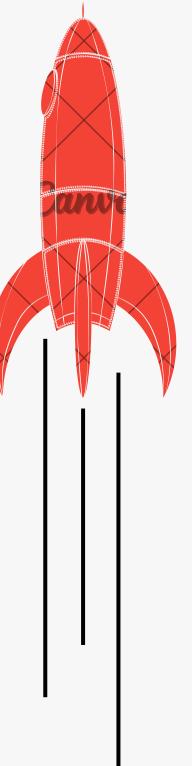
International Market Exploration:

This will involve establishing international manufacturing units, **strategic partnerships**, and adapting our products to suit them.

Global EV Charging Ecosystem:

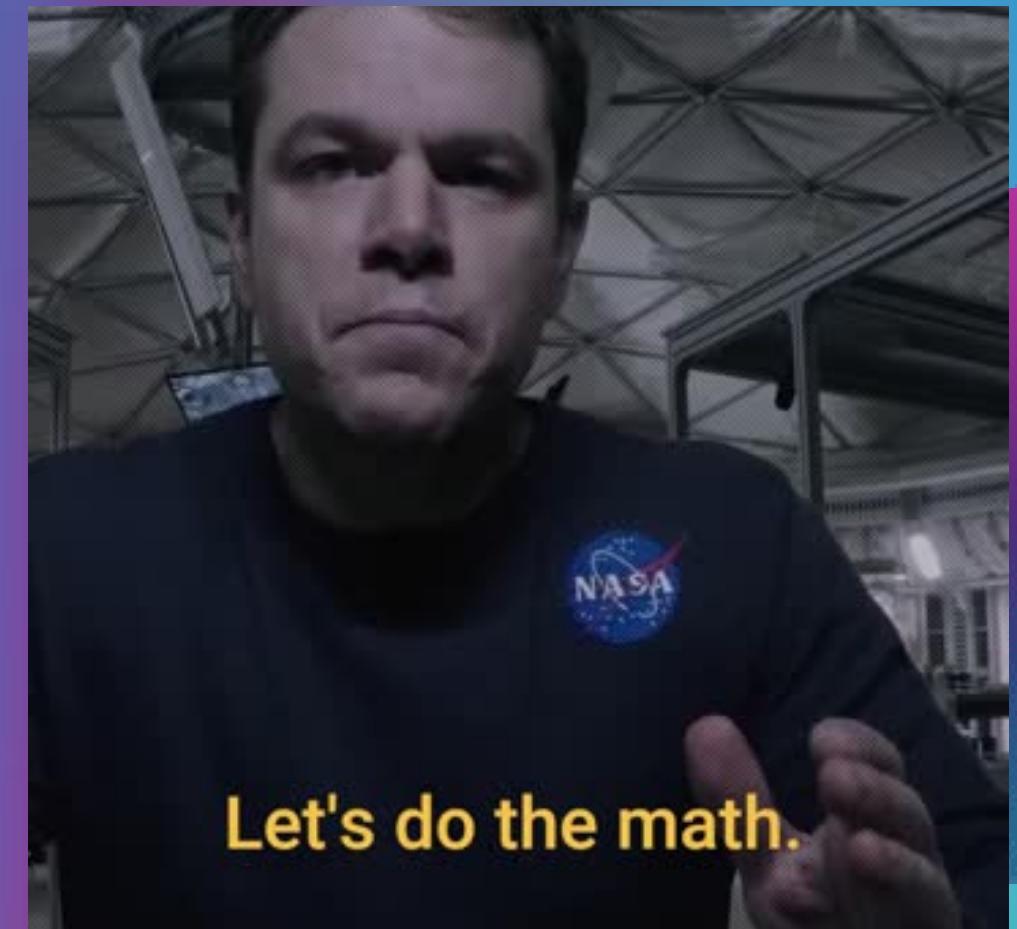
Ultimate long-term vision is to become a **key player** in the global EV charging ecosystem. We aim to establish a strong presence in **multiple countries**.

PHASE 4



LET'S TALK NUMBERS

Ready to spark our
startup's success with an
electrifying investment?



Let's do the math.

Indian EV market size was valued at **USD 8,674.45 million** in 2022 and is projected to reach a value of **USD 23,514.54 million** by 2031, registering a CAGR of 23.47% during the forecast period 2023-2031.

"The India EV charging market size reached a volume of approximately 1.05 million units in 2023. The market is further expected to grow at a CAGR of 22.20% between 2024 and 2032, reaching a volume of 3.86 million units by 2032"

"India requires 1.32 mn EV charging stations by 2030" - Mint

MANUFACTURING COST: 250-360(INR)

Material Used	Quantity	Price	Part
Thermoplastics(ABS, Polycarbonate, Polypropylene)	350-400 grams	70-350/kg	Shell
Elastomers	2-8 gram	140-500/kg	Gasket
Flame Retardant Material	5-15 gram	70-200/kg	Shell Resistance
Copper Alloy	40-60 gram	1000/kg	Connecting Pins

1) The listed prices are for basic model of Linker-X product

2)The Prices and quantity are based on estimations

Takeaways



Our project simplifies EV charging in India, eliminating obstacles hindering EV adoption.



The EV adapter and mobile app make charging accessible and alleviate range anxiety.

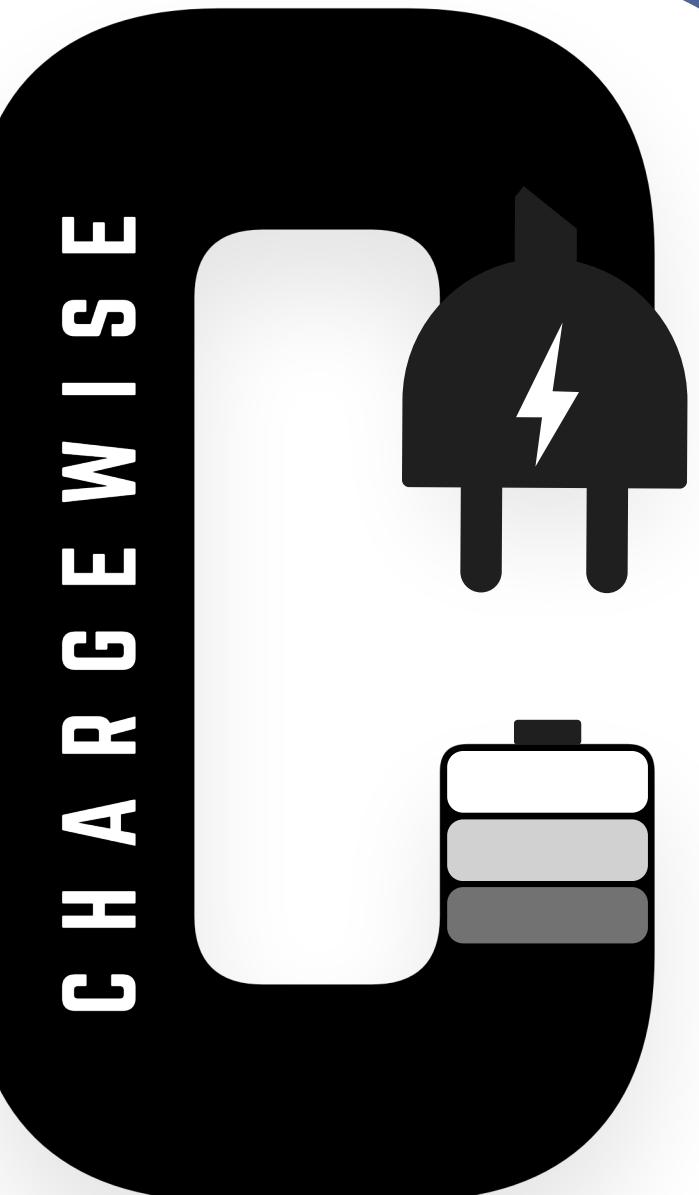


Strategic partnerships, staying updated on tech and regulations, and prioritizing data security are key to our success.



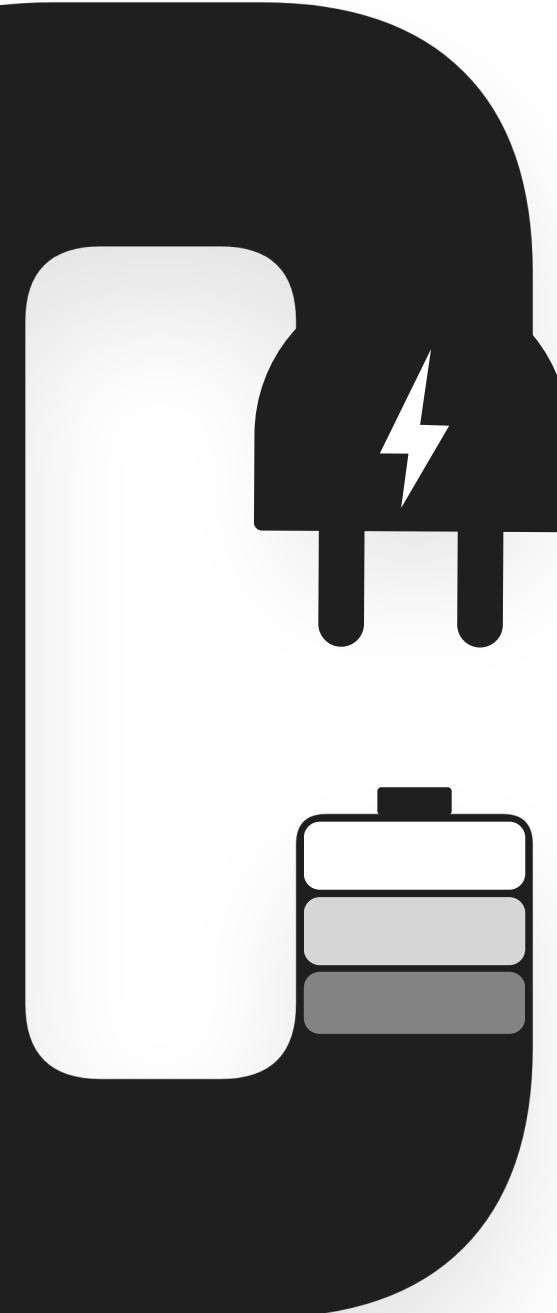
We are committed to making EV ownership easier and more convenient, contributing to India's evolving electric vehicle ecosystem.

THANK
YOU



THE ROAD TO CONVENIENT EV

CHARGEWISE



THE ROAD TO CONVENIENT EV