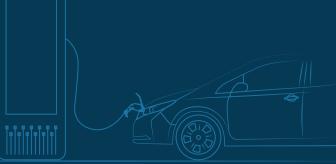
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# chargeNET

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**chargeNET (Pvt) Ltd**, is Sri Lanka's first and the largest smart Electric Vehicle (EV) charging solution, powered by IoT technology, fully automated, seamlessly networked operation. Ranging from Level 2 to fast charging solutions, with scalable load balancing mechanisms to facilitate green buildings, with smart access to data at all levels of the operation, across all users.

chargeNET is a fully owned subsidiary of CodeGen International, a leading travel software solution provider internationally and locally with offices in Sri Lanka, USA and Canada, facilitating cutting edge software technology for the largest players in the travel, tourism and theme park segments.chargeNET is an end-to-end platform with unique business models to support positive economic, social and environmental links. chargeNET mobile app and cloud-based web application, enables smart monitoring, smart payments and station management, with access to over 80 charging stations in Sri Lanka. With over 5000 existing users, chargeNET's focus is to expand its services, to offer futuristic regional and transborder infrastructure that is safe, inclusive and accessible to the public for EV/ PHEV charging, facilitating a greener environment.



# SINCE 2015

44,000 CHARGE TRANSACTIONS

48
MEGA WATTS DELIVERED

12,600 8
OUR MEMBERS YEARS OF OPERATION



# About us



CodeGen is a proven, agile and leading travel technology provider of next generation end-to-end software solutions and reservation systems for the global tourism industry, with an international client list that includes many of the world's largest travel organisations, including tour operators, airlines, bed banks, cruise companies, DMCs and OTAs. With offices spanning two continents and 15 years' experience, CodeGen is renowned and established in delivering innovative, fully scalable, high performance solutions to leading organisations worldwide. Using cutting-edge technology and pure web services, CodeGen prides itself on leading the market by using the latest emerging technologies to fully automate business processes.







Vega Innovations is an automobile manufacturer of electric super cars, based in Colombo, Sri Lanka. Vega also designs and manufactures electric vehicle (EV) components such as high-performance inverters, drivetrains and battery packs while providing EV research and development (R&D) services to clients worldwide.

Founded in 2013, Vega has developed South Asia's first electric super car, Vega EVX, which was unveiled at the Geneva International Motor Show in March 2020. Vega is also developing alternative, mass market, transportation vehicles with its international partners. Vega Innovations is a startup company which is part of CodeGen International.





Aigrow is a vertically integrated agriculture company in Sri Lanka. For the last 5 years we specialize in developing advance agriculture technologies to automate greenhouses and open fields.

Our technologies capture data from various sensors, and automate various controls to increase efficiency and yield. All the captured data is stored and analyzed in the cloud using Al based algorithms to optimize the water & fertilizer usage, temperature, humidity and various others factors that affects growth.

Aigrow also designs and builds complete turnkey greenhouses, and installs various technologies based on the customer needs. Our structures are designed for years of trouble free operations with service and maintenance to support the investment.

In addition we provide complete greenhouse operation and management services to take over greenhouses and run them as a service. We conduct transparent management practices to ensure that quality, reliability and efficiencies are maintained across the entire process.

# Cloud-based Charging Management System for Electric Vehicles



A complete end-to-end EV charging network with integrated payments, mobile app, smart card, remote monitoring, and accounting capabilities. Supporting multiple charging standards, with OCPP 2.0.1 capability. chargeNET's own in-house designed and manufactured EV chargers provide superior deep remote monitoring & access technology to simplify network management, enable remote preventive maintenance and reduce cost of operations.







**CHAdeMO** 



CCS TYPE 2



SAEJ1772 TYPE 1



IEC 62196-2 TYPE 2

#### **Payment Schemes**

Multiple payment schemes, including all major credit cards, payment integrators, and digital wallet services for ease of use. Capability to seamlessly integrate with any banking service for localization.















# **Charging Network Management**

Managing an EV charging network has never been easier, with chargeNET's management interface. From just a click of a button, network managers can find customer transactions, management payments, calculate revenue, and various other value-added features in real-time.



#### Connectivity

Cloud enabled, secure connectivity with OCCP, https, MQTT and Web Socket interfaces



#### **Network Management**

Managing interface with notifications and real-time dashboards to centrally manage an EV charging network



#### Maintenance

Reduce operating costs by using the real time health of chargers to schedule preventive maintenance

## More ways to charge

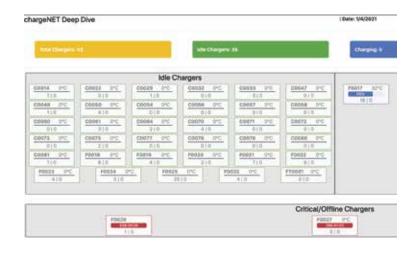
Many ways to simplify EV charging for customers. Securely start a charging session using smart cards, mobile apps and remote access features. A versatile platform to easily integrate other local services that would seamlessly operate with chargeNET's own EV chargers.





## **Remote Monitoring**

Remotely monitor every charger under your network from anywhere in the world. Instant-Connect to remote connect and troubleshoot chargers. Deep-Dive technology to gather electronic level health information to the forefront.

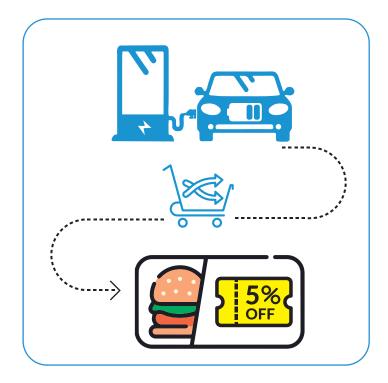


## **Cross sell**

- Use the EV charging service to promote your business and charging station location.
- Use the integrated coupons and discounts features to cross sell and value add
- For example
  - o 25% discount of EV charging with \$50 or more purchase from the store.
  - o Charge three times and receive 10% off your next vehicle service
  - o Buy two large coffees and get \$3 off your EV charge session
  - o Charge your vehicle for more than \$50 and receive \$10 off your in-store bill.

# **Invoicing & Accounting**

- Integrated billing feature simplifies operations and management
- Provide customer invoices for charging stations
- View latest revenues, profits and electricity usage of each charger with a click of a button
- Monthly reimbursement of charging fees streamlined and automated
- Print monthly statements for audits and accounting
- Integrate with other 3rd party back-office solutions to managing an EV charging network even more simpler





# chargeNET Mobile App



Simplified, secure mobile app to use chargeNET's revolutionary features with ease. Customizable to localize the app to help customers in any region of the world.

- Start/ Stop charging sessions securely
- Top-up and recharge account with integrated payment schemes
- Find out customer balance and costs incurred
- Realtime status of the chargers around you to help find the quickest, closest charging station available
- Map view with directions to get to your charging location with ease
- Track time, energy usage, and account balance in real-time
- Promote your business with coupons, discounts and push notifications









# **EV Chargers**

Designed, developed and manufactured by chargeNET, our own EV chargers bring a unique value addition to our EV charging solution. We can customize the chargers to match the client's needs. Branding, electronics, user interfaces, and even advance features like communication and access control methodologies can be customized. Our vertically integrated approach to EV charging gives us a unique value proposition to bring truly customized solutions to client markets from around the globe.

#### Fast Charger - Single Port



- Communication protocol CHAdeMO or CCS (ISO 15118/ DIN70121)
- General Specifications
  - Enclosure Rating: IP54/K10
  - Enclosure Material: Zinc Allum/Powder Coated
  - Operating Temperature: <55°C</li>
  - Operating Humidity: 30% to 90% RH non condensing
  - RFID System: MIFARE Classic 13.56Mhz
  - Display: 10"TFT
  - Weight: 180kg
  - DC Cable Length: 4m
  - Number of Ports: 1
  - Hardware Warranty: 1 year
  - Software warranty: 5 years
- 30 kW to 75 kW scalable
- Charging time 20 to 40 mins
- 3Phase 60A supply (30kW)
- Cloud connected
- Remote Diagnosis capability
- Remote software update capability
- Weather and dust protection suitable for tropical & desert climates.
- Advertising screen for additional revenue

# Fast Charger - **Dual Port**



Best of both worlds with CCS and CHAdeMO capability in one charger for convenience, and can be used for EV charging simultaneously with split power.

- Communication protocol options :(CHAdeMO + CHAdeMO) or (CHAdeMO +
- CCS2) or (CCS2 +CCS2)
- Power per charging port -30kW
- Ability to operate both ports simultaneously.

General Specifications

- Enclosure Rating: IP54/K10
- Enclosure Material : Zinc Allum/Powder Coated
- Operating Temperature : <55°C
- Operating Humidity: 30% to 90% RH non condensing
- RFID System: MIFARE Classic 13.56Mhz
- Display : 10" TFT
- Weight: 210kg
- DC Cable Length: 4m
- Number of Ports: 2
- Hardware Warranty: 1 year
- Software warranty : 5 years
- Charging time 20 to 40 mins
- 3Phase 100A supply (60kW)
- Cloud connected.
- Remote Diagnosis capability
- Remote software update capability
- Weather and dust protection suitable for tropical & desert climates.
- Advertising screen for additional revenue

# AC0001 Charger - Commercial



AC0001 Charger can charge three vehicles simultaneously. This is commercially uses for car parks, business locations, apartments, street parking locations and more.

- IEC 60309 standard outlet
- 3x3.3 kW triple port compatibility
- Three phase 15A supply
- Cloud connected
- OCCP compatible
- Plan to deploy in end of 2020
- Designed and manufactured in Sri Lanka
- Weather and dust protection suitable for tropical & desert climates.
- Back-office reporting system
- Remote Diagnosis capability
- Remote software update capability
- Hardware access: RFID, APP
- Mounting: Single outlet wall mounted/ pedesta
- Warranty Period : One year



# Level 2 Charger - Commercial



Commercial L2 chargers for car parks, business locations, apartments, street parking locations and more. Get additional customers to your location, and add value to your existing businesses.

- J1772 worldwide Type 1 and Type 2 standard
- 6.6kW and 3.3kW Compatibility
- Cloud connected
- Deployed for more than 5 years
- Installed over 100 chargers island wide
- Designed and manufactured in Sri Lanka
- Weather and dust protection suitable for tropical & desert climates.
- Back-office reporting system
- Remote Diagnosis capability
- Remote software update capability
- Hardware access: RFID
- Mounting: Single outlet wall mounted/ pedestal
- Warranty Period: 3 Year / 1 Year for Connector



# Level 2 Charger - Home



The basic charger version of our commercial product with out the smart card and cloud connectivity. Install in your home garage, for simple plug and play operation.

- J1772 (Type 1)/ IEC 62196-2 (Type 2) standards
- 6.6kW and 3.3kW Compatibility
- Weather and dust protection suitable for tropical & desert climates.
- Hardware access: RFID
- Mounting: Single outlet wall mounted
- Plug and play

**General Specifications** 

- Enclosure material Composite
- Operating temperature: <55°C</li>
- Operating humidity: 30% to 90% RH non-condensing
- RFID system: MIFARE Classic 13.56MHz
- Display: LCD
- Cable length: 5 meters
- Lights for status indication: AC Out, Plug off, Fault
- Dimensions (D x W x H): 120mm x 180mm x 470mm
- Weight: 12.5kg
- Hardware Warranty: 3 Year (Connecter 1 year)
- Software warranty: lifetime



# Level 1 Charger



Level 1 EV charger is a replacement mobile charger for your vehicle.

A charger on the go, simply plug at any available power socket and charger.

- J1772 worldwide Type 1 and Type 2 standard
- 5M Cable Length
- 2.4kW/10A Rating
- 1 Year Warranty

# Level 2 EV Converters



With so many different charging sockets and protocols, it's always best to carry a L2 EV converter, to increase your flexibility to charge at any charging location.

- Type 1 to Type 2 and Type 2 to Type 1 Converters
- 30A Capability
- 1 Year Warranty

## Research & Development



#### Level 2 Charger - GEN 2

The basic charger version of our commercial product with out the smart card and cloud connectivity. Install in your home garage, for simple plug and play operation.

- J1772 worldwide Type 1 and Type 2 standard
- Currently in Field test
- 3 Phase compatibility.
- Designed and manufactured in Sri Lanka
- Weather and dust protection suitable for tropical & desert climates.
- Plug & play charger.
- Mounting: Single outlet wall mounted
- Warranty Period: 3 Year / 1 Year for Connector





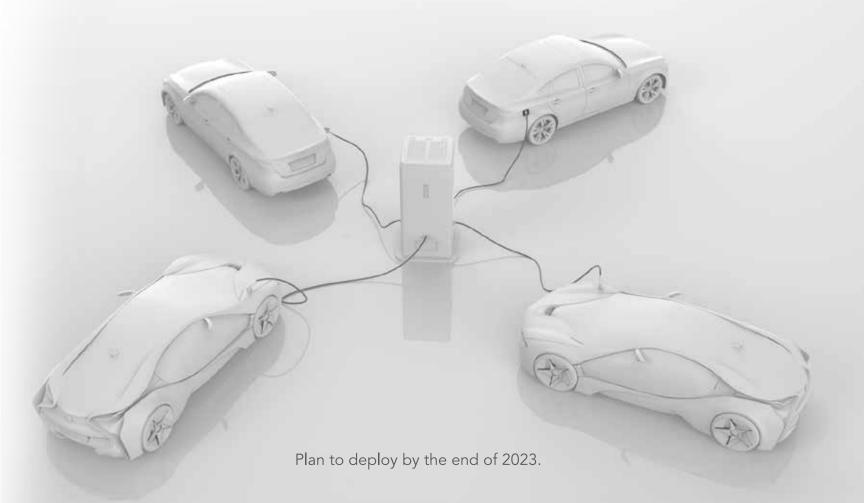
## **Upcoming Development**

# Super charger

The 4-port supercharger is a high-power charging station designed to provide fast and efficient charging for up to four electric vehicles simultaneously. With its multiple ports, this supercharger is ideal for high-traffic areas such as shopping centers, airports, and business districts. Its fast-charging capability ensures that EV drivers can quickly recharge their vehicles and continue their journeys with minimal downtime.

- Charging power per port up to 360 kW.
- Separate power cabinet and charging post design.
- Dynamic load balancing capability

- Supports both CCS (ISO 15118/ DIN 70121) and CHAdeMO protocols.
- Port can be made for any configuration.



# Awards



Winner - Slasscom Awards 2018



Winner - E-Swabhimani 2018



World Summit Award 2017

United Nations World Summit Award Winner for High Impact Digital Innovations, purpose built for a future that is smart, connected and intuitive. Leveraging on IoT and advanced technologies, we designed one of the most comprehensive end-to-end solutions for the Automobile and Transportation sector.









# Milestones



#### 2021

We are proud to announce that chargeNET Pvt Ltd is joining hands with EV COSMOS in India to provide smart and efficient electric vehicle charging solutions in India.



## 2019

Successful installation of fast charger and L2 charger in a large shopping complex for the first time in in Sri Lanka at Colombo City Center.



#### 2017

The first ever dynamic load balancing apartment solution for EV charging. New design, new solution for green buildings; installed at Clearpoint Residencies.

## 2020

**150<sup>th</sup>** L2 Charger for Range Rover customers installed at Mr.Sudesh Madushan's residence.

Installed **200<sup>th</sup>** Level 2 Home Charger at Kandy City Center Car Park.



#### 2018

The chargeNET EV Fast Charging Station - Wattala was declared open by Mr. Ranjan Kumar Mohapatra, Chairman, Lanka IOC.



#### 2015

Initiated Sri Lanka's first and largest smart EV charging solution from our own premises at Trace Expert City, Maradana.





# Overseas

#### India

chargeNET has surpassed the international boundaries and is now ready, to power up the EVs around the world.

chargeNET has partnered with EVCOSMOS from India in 2020, to provide modern, efficient EV charging solutions through out subcontinent of India. EVCOSMOS is reputed as an EV charging brand in the Indian Market and chargeNET takes the pride of providing them with the latest charging technology and the inbuilt end to end solution.

The combines synergies of the two companies are now fully equipped to serve the ever growing market of EV charging in India and Technology of ChargeNET together with the experience and customer service oriented work culture of EV COSMOS will provide the best-in-class, end-to-end EV charging solution for the Indian Customers.









#### Kenya

chargeNET initiated its presence at African continent by partnering with Mayleen Corporation, a Kenyan-based group specializing in Power & Energy, Manufacturing, Electro-Mechanical works, and automobiles. In 2021 chargeNET





The latest destination in chargeNET international presence is Georgia in Eastern Europe. We have partnered with GreenCharge from Georgia that is following the global sustainable transportation, trends with chrageNET chargers





#### **Dedicated Manufacturing Facility**

chargeNET is now equipped with the own commercial scale manufacturing facility at Rajagiriya, Sri Lanka and ready for the international shipments of chargers to power up EVS around the world. With a growing employee number and machineries to facilitate the steady production of the chargers, the engineers at chargeNET ensures that all the manufacturing processes are done up to the global standards and quality assurances





# Our Partners





















































