ELECTREONN CHARGING THE WAY FORWARD

Mobility electrification revolution needs to advance quickly but has no optimal and holistic charging platform



Commercial fleets electrification is challenging but essential in order to reduce emissions for the world and costs for operators

duty vehicles

Marine

Aviation

Rail

Batteries are heavy and expensive

- Very high CAPEX for big fleets
- Less cargo/passengers carrying capacity
- Lower energy efficiency •
- Limited and unreliable driving range

Charging infrastructure is complicated

- High CAPEX and depot real estate requirements
- Electrical grid capacity is limited
- Operation is not continuous
- Charging time might require adding vehicles to the fleet and lost of driver time

Emissions from different mobility segments



Electreon is a global leader in developing and implementing Electric roads (ERS) – a shared platform for wirelessly charging EVs while driving

TAXI

HUN

THE FUTURE IS SMART AND SHARED ERS AUTONOMOUS

WIRELESS ELECTRIC ROAD SYSTEM THE WAY TO 100% ELECTRIC



SO, WHY WIRELESS? DYNAMIC CHARGING?

SHARED INFRASTRUCTURE

NO MOVING PARTS



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NO VISUAL IMPACT

AFTER

BEFORE



MINIMAL BATTERY SIZE AND WEIGHT-INCREASES ENERGY EFFICIENCY AND PASSENGER/CARGO CAPACITY









Electreon turns the road from an expense to an asset for road owners and fleet operators by deploying shared electric road platform for commercial fleets



- Cities
 - \circ Base user buses
 - Additional users Fleets of delivery trucks, shuttles, taxies, municipality service,
 - Highways/Toll roads/Ports
 base users long haul/drayage trucks
 Additional users-inter city buses, future range extending for passenger EV
- Integrated platform
 - Shared platform best solution for electrifying transportation of entire country/region
 - Optimal synergy with autonomous transportation

Optimal Charging as a service solution for commercial fleet operators Cost Effective - Continuous and simple operation - higher carrying capacity for cargo/passengers

- No need for each fleet operator to finance, build and operate complicated charging infrastructure
- No need for charging infrastructure real estate and zoning issues
- Lighter vehicles higher energy efficiency
- Eliminate range anxiety and dependency on battery performances
- Optimal combination of dynamic and static charging

Fleet operators can enjoy huge savings in batteries, infrastructure and operational costs Governments and municipalities can enjoy a new income source and minimal charging related visual impact





FEATURES All components are developed in-house and IP protected

INVERTER

Features:

Modular system 400v 3-phases •180 KW



STRIPE

Features:

Modular system

- Passive element
- 25KW per segment

RECEIVER

Features:

- •95x60 cm
- •25KW
- Stabilizing Sys
- Weight 27 kg



SYSTEM

Features:

- Efficiency: 87%
- Meets EMC/EMF standards



REAL TIME MANAGEMENT SYSTEM







DISTRIBUTED ARCHITECTURE

10 x 375 kW = 3,75 MW/km

Each section is independent and has its own connection to the grid



- Coils are passive, activated only by a signle from receiver
- Each segment is independent and has its own connection to the grid, making the system resilient
- Distributed grid connection, continuous charging and smart charging management decrease grid load
- System is dynamic but also can be used for static charging if required for optimization





Demo of City Application TEL AVIV PILOT completion Q4 2020 Shuttle between Tel Aviv University and train station

- Financed by Israeli Innovation Authority and ministry of Transportation
- Partners Tel Aviv Municipality, Dan buses, Ayalon Highways
- Bus HIGER



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L > Israel Innovation







Demo of Inter-City Application in Sweden

SMARTROAD GOTLAND

The world's first wireless ERS for cars, buses, and trucks on public roads

Financed by Swedish Government

ELECTR

FIFCTREON

Flvabussarna

ELECTROON

EITECH Matters Group

Completion Q4 2020







Europe Is leading ERS testing and Implementation

- Sweden is planning a pilot for about 30 KM ERS for long haul electric trucks on the way to commercial implementation
- Germany's transportation ministry issued a call for wireless ERS demo project
- ENBW, one of Germany's biggest energy companies will test wireless ERS with Electreon
- A research by a Danish university determined that the most cost effective way to electrify all transportation in Denmark and other countries is by wireless ERS
- Italy is planning to deploy ERS in the A35 toll road
- France joined an ERS research effort with Sweden and Germany and is planning two wireless ERS demo projects



ELECTRON COMPANY ID:

Date established- 2013

Public company in the Tel Aviv Stock Exchange







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A PARTY AND A PART



