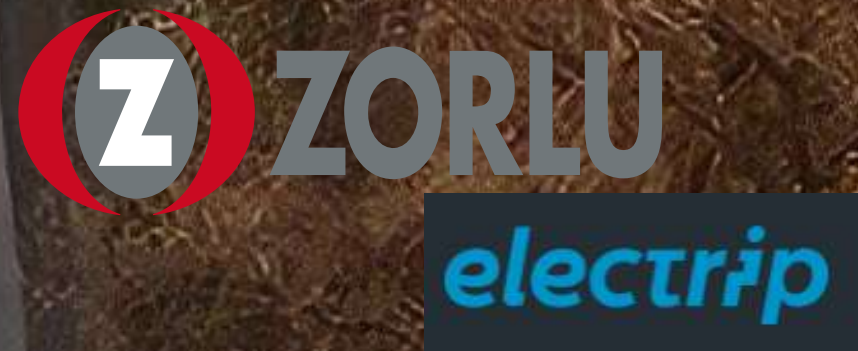


**ZORLU ENERGY**

**ELECTRIP HELLAS**

*Elcin TRAKADAS  
Country Manager*

*IENE: 26ο Εθνικό Συνέδριο «Ενέργεια & Ανάπτυξη 2022»  
23/11/2022*





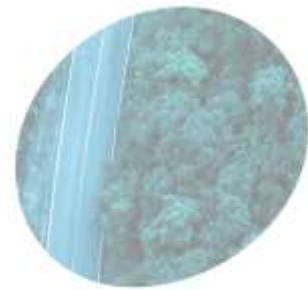


*electrip*

## Zorlu Energy Highlights

Electrip

EV Market in Greece and Europe



Among the top 3 groups in Turkey in terms of employment creation.  
One of Turkey's 7 biggest exporters.



**ZORLUENERJİ**

A balanced portfolio of **100% domestic** and **renewable energy production**



**Electrip Global B.V**

Based in Holland



**Electrip Hellas**



**VESTEL**

**Electronics, White Goods, Telecommunications**

Export champion in electronics industry **since 20 years.**



**ZORLUTEKS**

Zorlu Textiles Group is Europe's largest home textile producer with exports to **58 countries** in 5 continents.



**MINING AND METALLURGY**

Turkey's **first**, Europe's **unique** Nickel cobalt concentrate plant.



**Property**

Close to **500 thousand** visitors per annum.



One of Europe's and best equipped performing arts centers  
Nearly 500 thousands of visitors per year.

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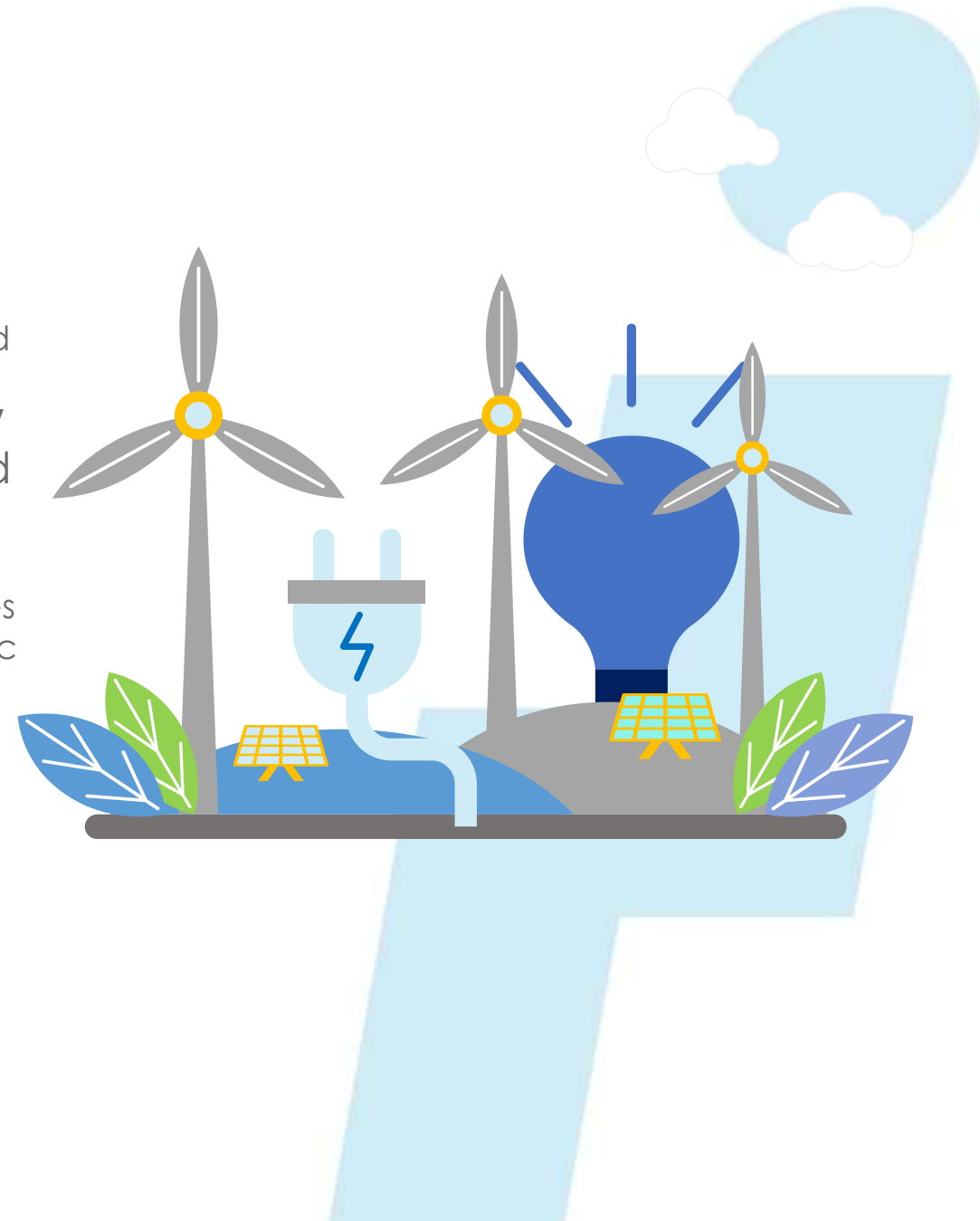
## GLANCE AT ZORLU

**Zorlu Energy** is an integrated utility which is involved in the **generation** and sale of **electricity** and **steam, electricity** and **natural gas supply and trade, electricity** and **natural gas distribution, installation, trade** and **sale** of **solar PV panels; design** and **turnkey construction** of **power plants, installation** and **sale** of **EV charging stations** and **electric car sharing**.

**As of 2018**, Zorlu Energy has gathered its new-generation technology activities under the ZES brand, which aims to facilitate the driving experience of electric vehicle owners in Turkey and near territories. **As of 2021**, Zorlu Energy has established several companies in Europe and Israel.

In line with the growth strategy; **"Electrip Hellas "** has been established in Greece under **100% ownership** of **Zorlu Energy** in order to pursue its activities and projects.

**Electrip** is an integrated operator for electric mobility committed to the deployment of charging infrastructures, from 22 kWh up to 180 kWh of power.





## Growth in Renewable Energy

- ▶ Invest in geothermal, wind and solar power projects in Turkey and abroad
- ▶ New feed-in tariff mechanism critical for new projects in Turkey
- ▶ Existing licenses or pre-licenses for pipeline projects



## New Business Areas: ZES and Electrip

- ▶ Capitalize on the energy transition in transport sector
- ▶ End-to-end public and private charging solutions
- ▶ Targeting to become a regional e-mobility provider in the mid-long term



## Electricity Distribution

- ▶ RAB growth via planned investments
- ▶ Network digitization and automation
- ▶ Opportunistic acquisitions



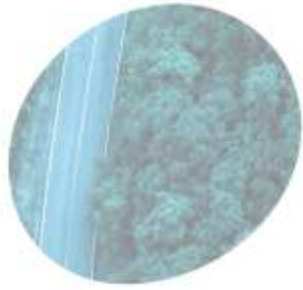


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Zorlu Company Highlights

**Electrip**

EV Market in Greece and Europe



## AT A GLANCE



Launched  
in Aug. 2018

Installed in Jan. 2020

ZES activity **in Israel** in Jan. 2020.  
**1000 stations** sold.

**All 81** cities of Turkey installed in Jan.  
2020.

ZES BV **launched** in Jul. 2020

**Fastest DC Charger**  
(180 kW)

**Zorlu Energy** made a  
partnership with **Wren  
House** Infrastructure LP  
(WH), a direct subsidiary  
of Kuwait Investment  
Authority (KIA).

**electrip**



### Smart Systems

Department  
established

### Local charging network

Established  
at HQ's in Dec. 2017

### New Mobile App.

Developed for best  
customer  
experience.

### 100th Charging Location

Installed in Dec. 2019



**ZES** started to  
expand in EU  
**Incorporations** in  
Italy, Bulgaria,  
**Greece (Electrip  
Hellas SINGLE  
MEMBER P.C)**,UK,  
France, Spain.

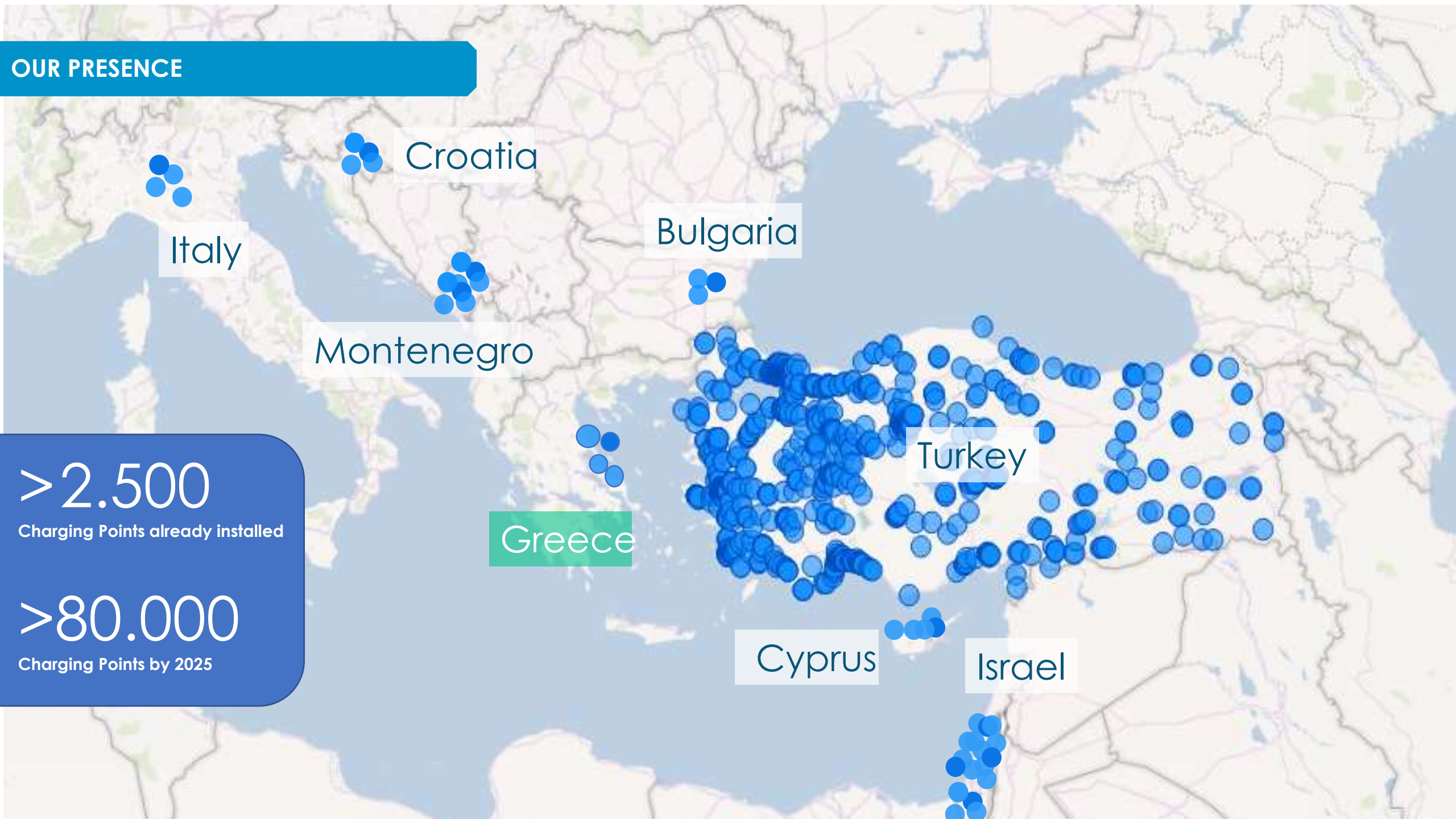
**Globalization Targets**  
Operates in **11 countries**

**Over 80.000** Charging Points

### Market share;

- +30% Greece
- 10% Italy
- 40% East Europe
- 3% ABD
- 50% Turkey
- 7% Others

# OUR PRESENCE



Italy

Croatia

Bulgaria

Montenegro

Greece

Turkey

Cyprus

Israel

>2.500  
Charging Points already installed

>80.000  
Charging Points by 2025





# Aiming To Cover All The Value Chain!

## GLOBAL | EXPANSION

As a CPO  
(Charge Point Operator)

As an eMSP  
(e-Mobility Service Provider)

As a Utility Provider  
(New Business Model Soon)

B2B/ C Sales



Energy Solution Provider  
(New Business Model Soon)



Greece



Italy



France



The Netherlands



Bulgaria



United Kingdom



Montenegro



Poland



Croatia

## Solutions for All Your Electric Vehicle Needs

### Hardware



- **International certificated** AC & DC charging station options
- Possibility **to update device features and exterior design** according to your needs
- R&D studies

### Application-Platform



- **Free End User Mobile Application**
- Charging Station Operation and Mobility Services integration
- Charging Station **Data Management**

### Installation



- Charging Station installation service & infrastructure support
- Provide **installation service on different branded devices**
- Procurement of balance of equipment

### Operation & Maintenance



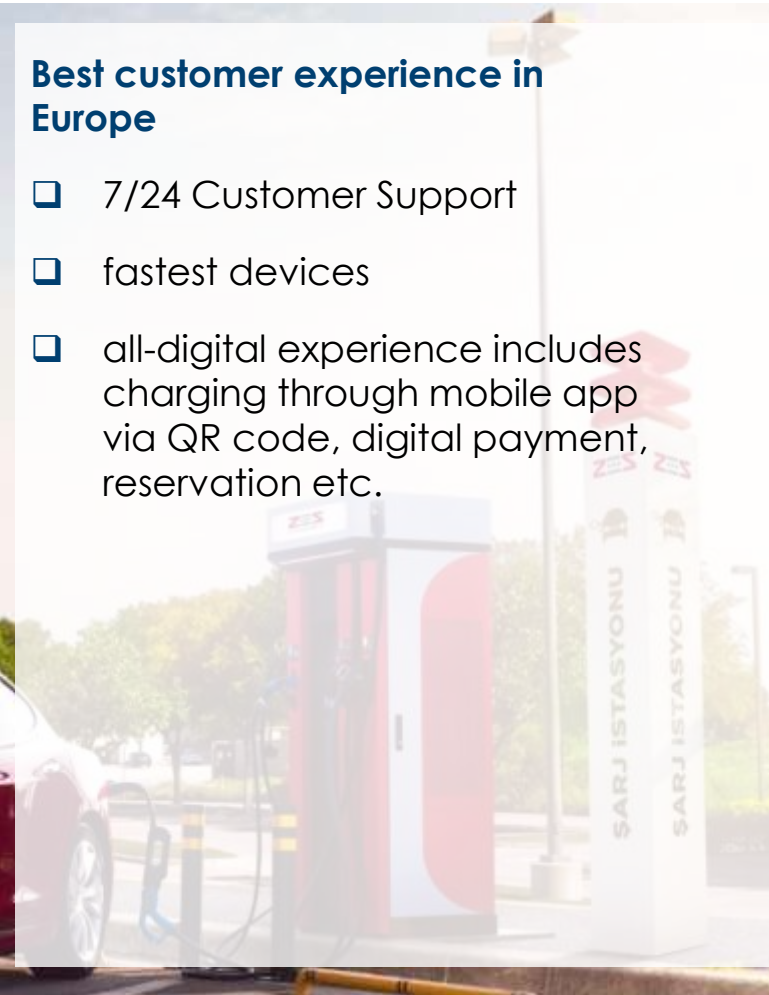
- Public Charging **Network Operation**
- **Maintenance**
- **Service in case of breakdown and relocation**
- **Call Center**

# EXAMPLE | CHARGING BUSINESS LINES OF ZES

## Public Charging (CPO & EMSP)

**Best customer experience in Europe**

- ❑ 7/24 Customer Support
- ❑ fastest devices
- ❑ all-digital experience includes charging through mobile app via QR code, digital payment, reservation etc.



## Fleet Charging

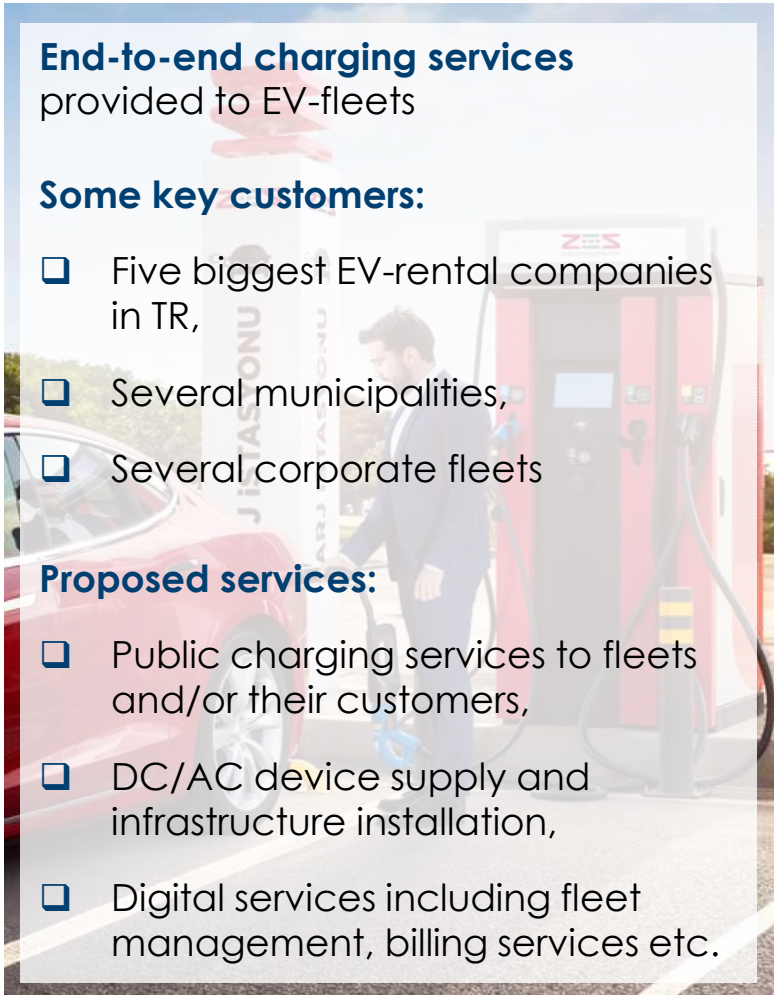
**End-to-end charging services** provided to EV-fleets

**Some key customers:**

- ❑ Five biggest EV-rental companies in TR,
- ❑ Several municipalities,
- ❑ Several corporate fleets

**Proposed services:**

- ❑ Public charging services to fleets and/or their customers,
- ❑ DC/AC device supply and infrastructure installation,
- ❑ Digital services including fleet management, billing services etc.



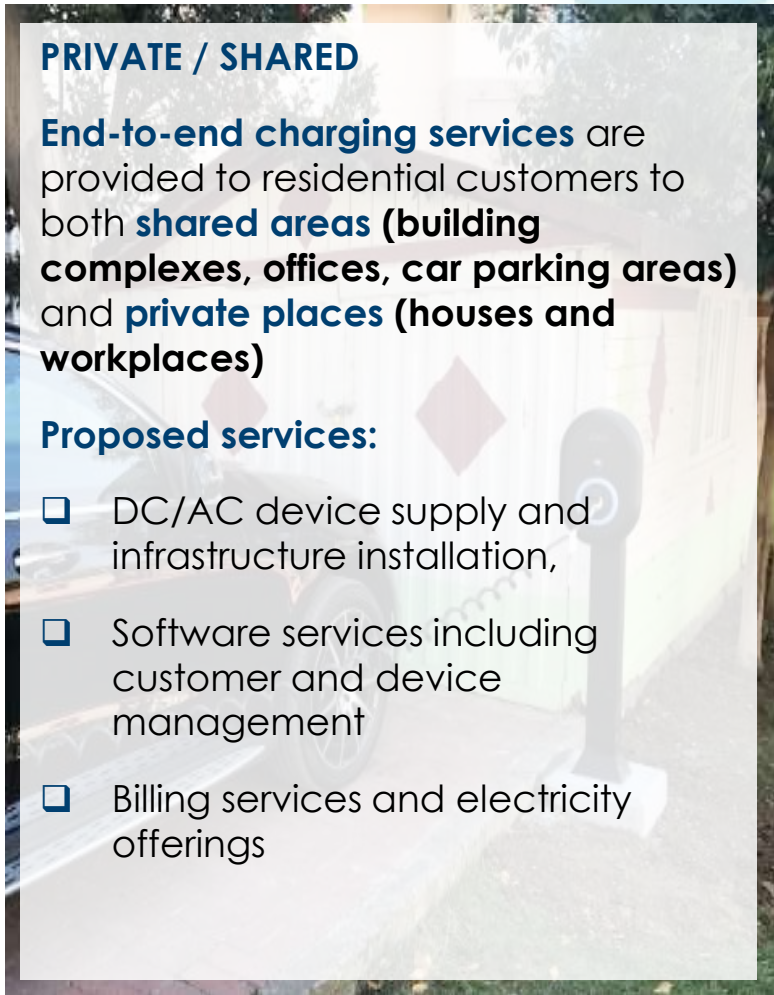
## Residential Charging

**PRIVATE / SHARED**

**End-to-end charging services** are provided to residential customers to both **shared areas (building complexes, offices, car parking areas)** and **private places (houses and workplaces)**

**Proposed services:**

- ❑ DC/AC device supply and infrastructure installation,
- ❑ Software services including customer and device management
- ❑ Billing services and electricity offerings





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PRODUCTS & SERVICES

## electrip Hardware Systems

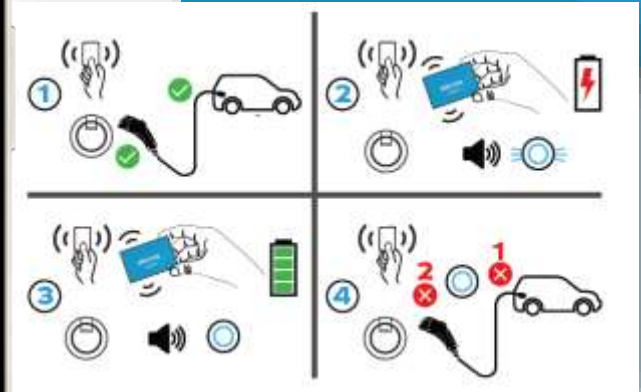
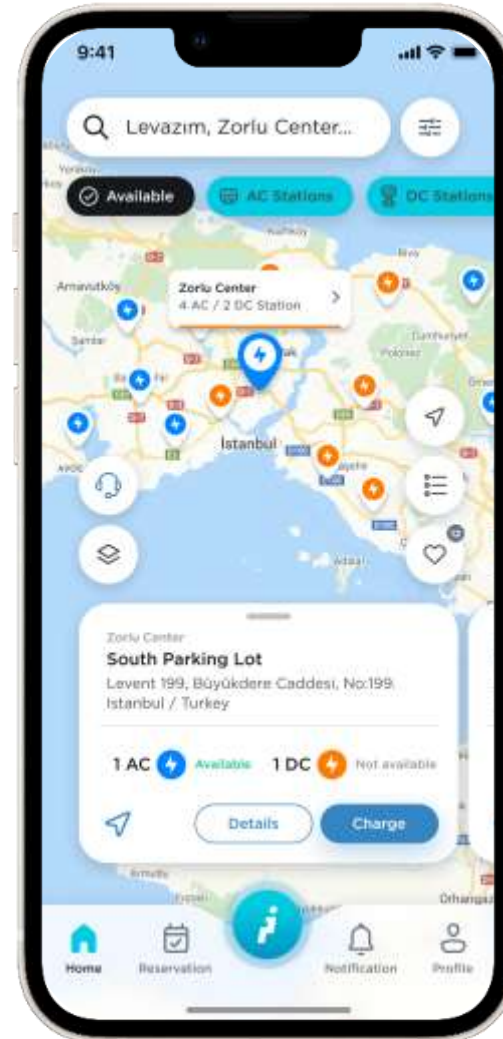
CHARGING STATIONS (AC & DC)



## electrip Software Systems

ELECTRIP CARD & MOBILE APP

INHOUSE SOFTWARE



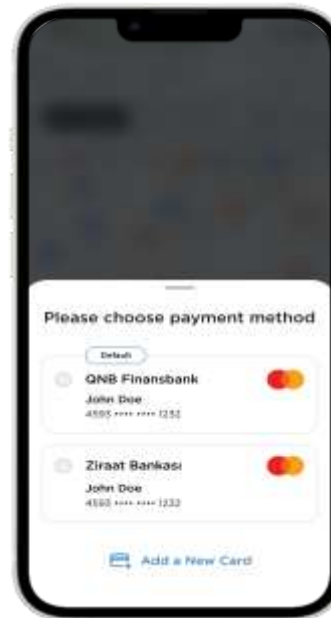
## Simple | Catchy | Useful | User- friendly Mobile App



View **nearest charging stations** to you



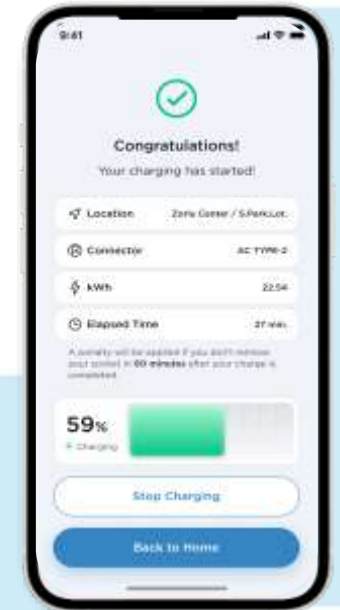
Make **reservation before charging**



Add credit / debit cards to make **digital payment**



Review **charging history** and take notifications



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## SERVICES | INSTALLATION & MAINTENANCE TEAMS

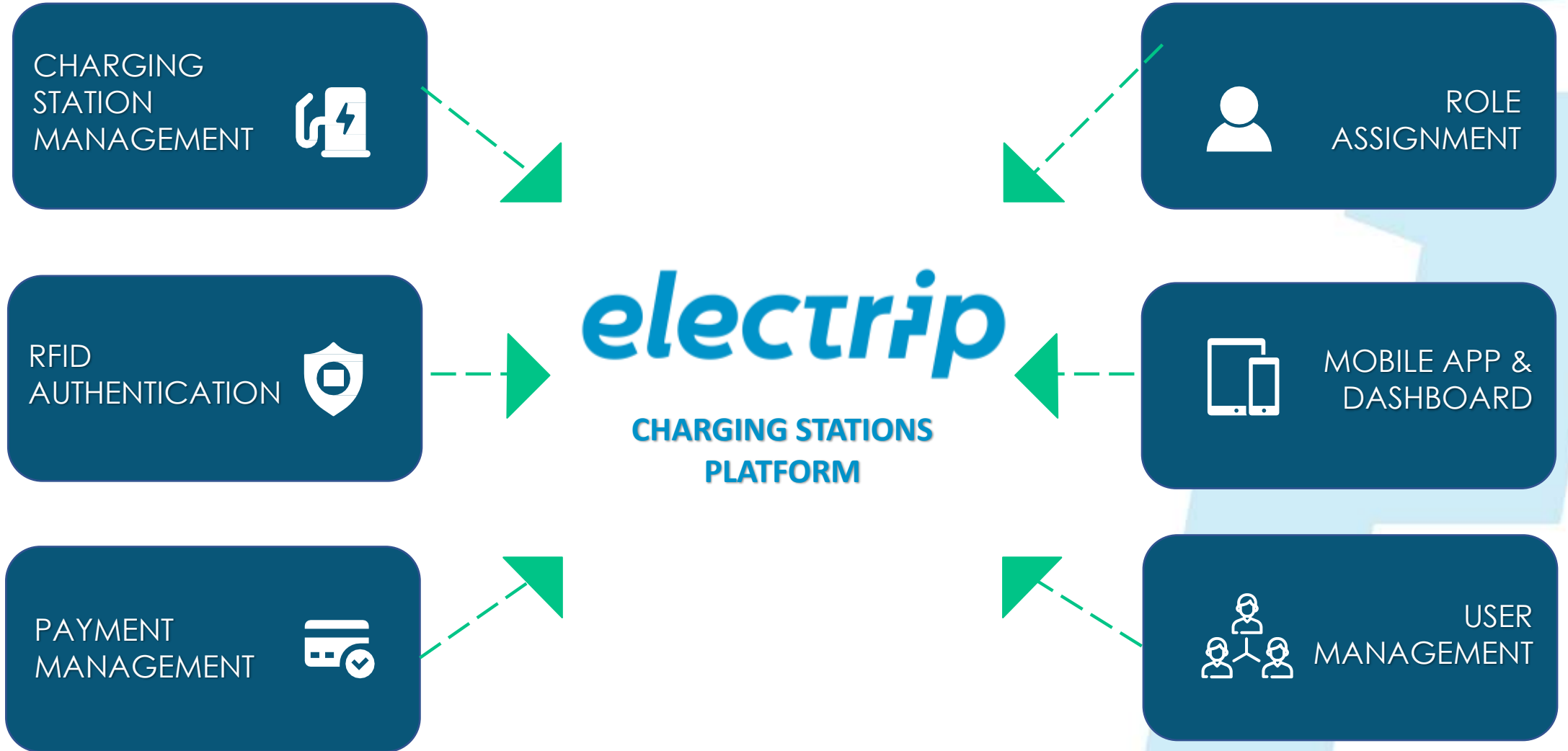
- ❑ Personal use of electric vehicle owners
- ❑ Free technical inspection service
- ❑ Free installation if the customer prepares the infrastructure
- ❑ Technical inspection & turnkey service both same day
- ❑ Technical support in case of breakdown & relocation
- ❑ Installation of not only electrip, but also different branded devices
- ❑ Possibility of safely store devices in electrip warehouses





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## SERVICES | SOFTWARE & PLATFORM OVERVIEW



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AWARD WINNING SERVICE

**2** International

**1** National Awards Winner



Awards in 2021



- Sustainable Service of the Year
- Best Sustainable Product and Process
- Low Carbon Heroes

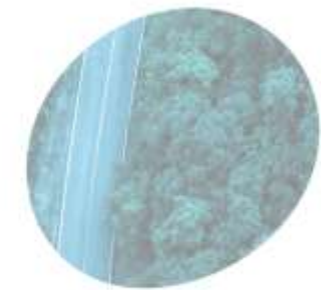


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Zorlu Company Highlights

Electrip

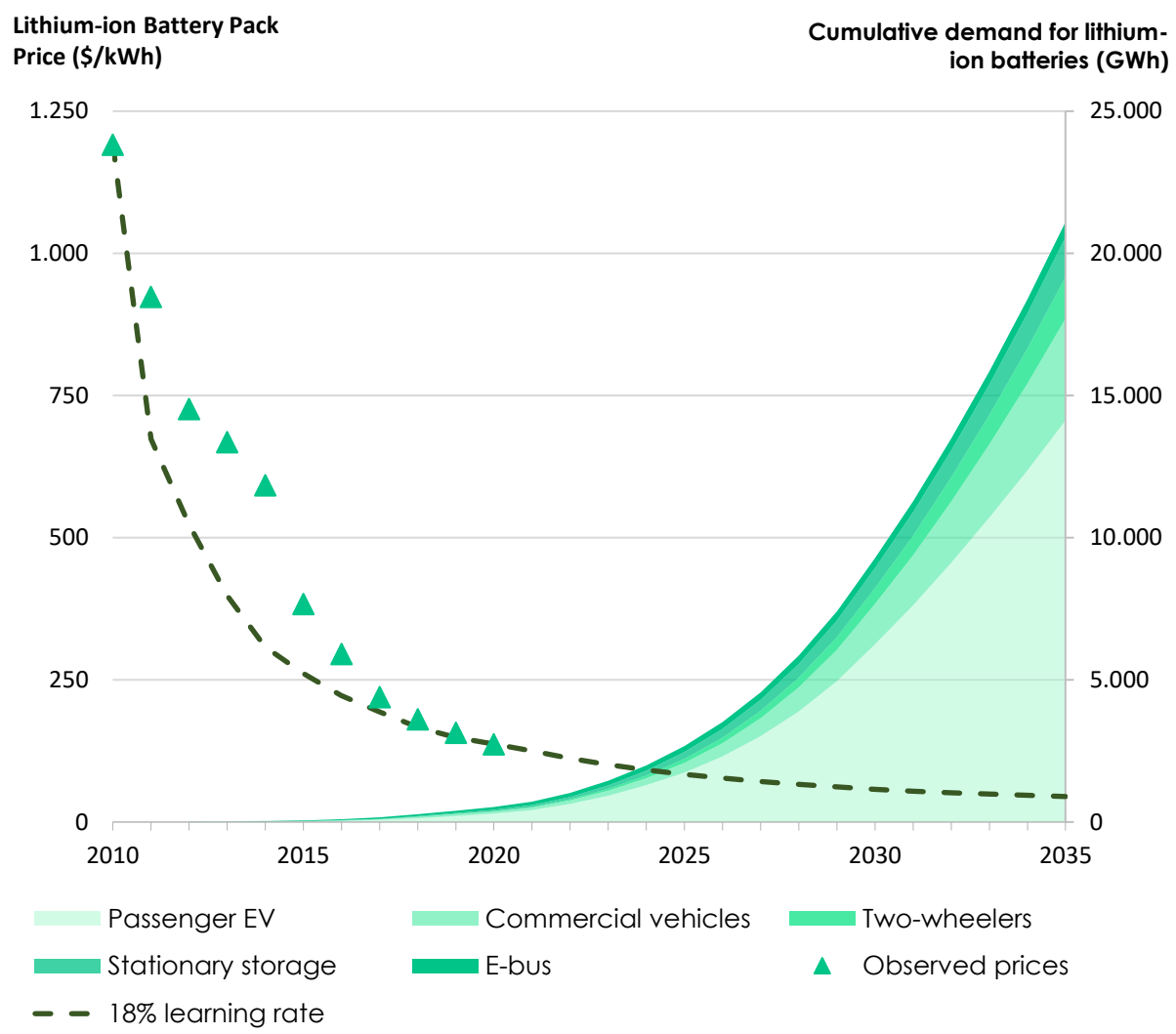
EV Market in Greece and Europe



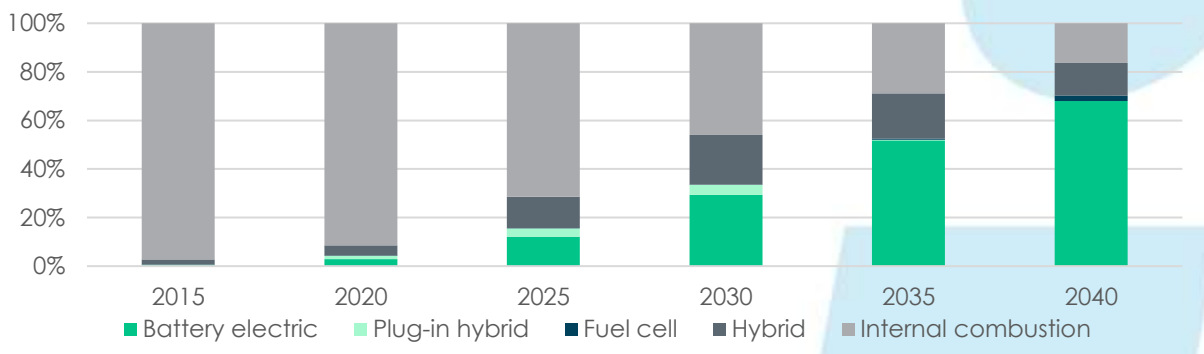


# LONG TERM GROWTH OF EV MARKET

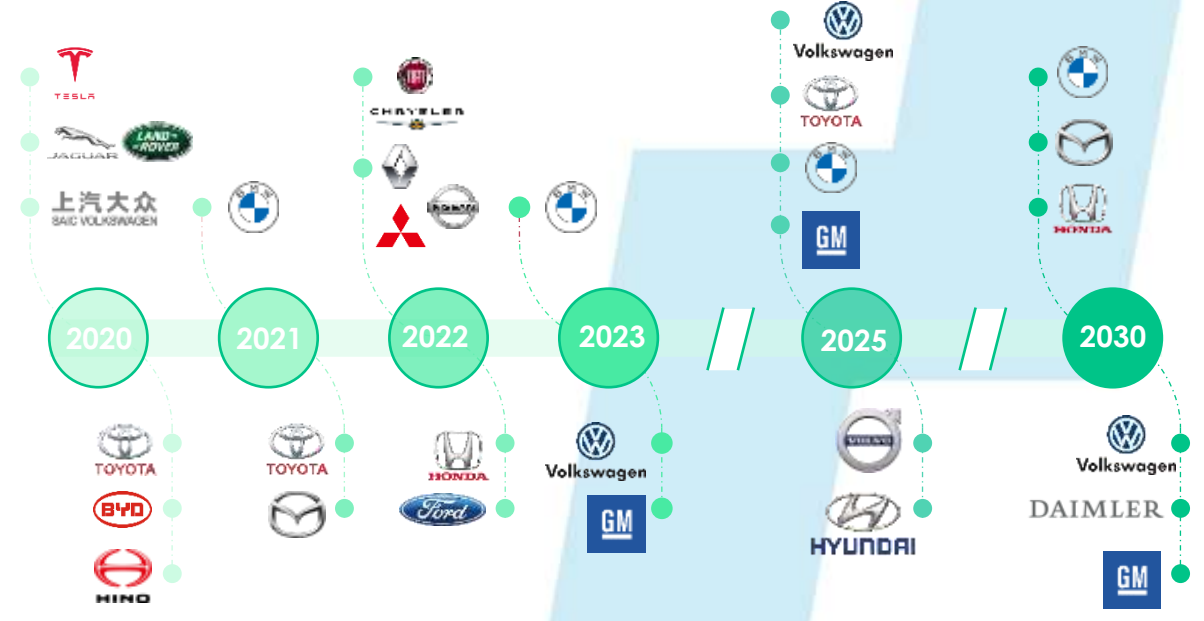
## EV Battery Price / Cumulative Battery Demand (1)



## Global Passenger Vehicle Sales (1)



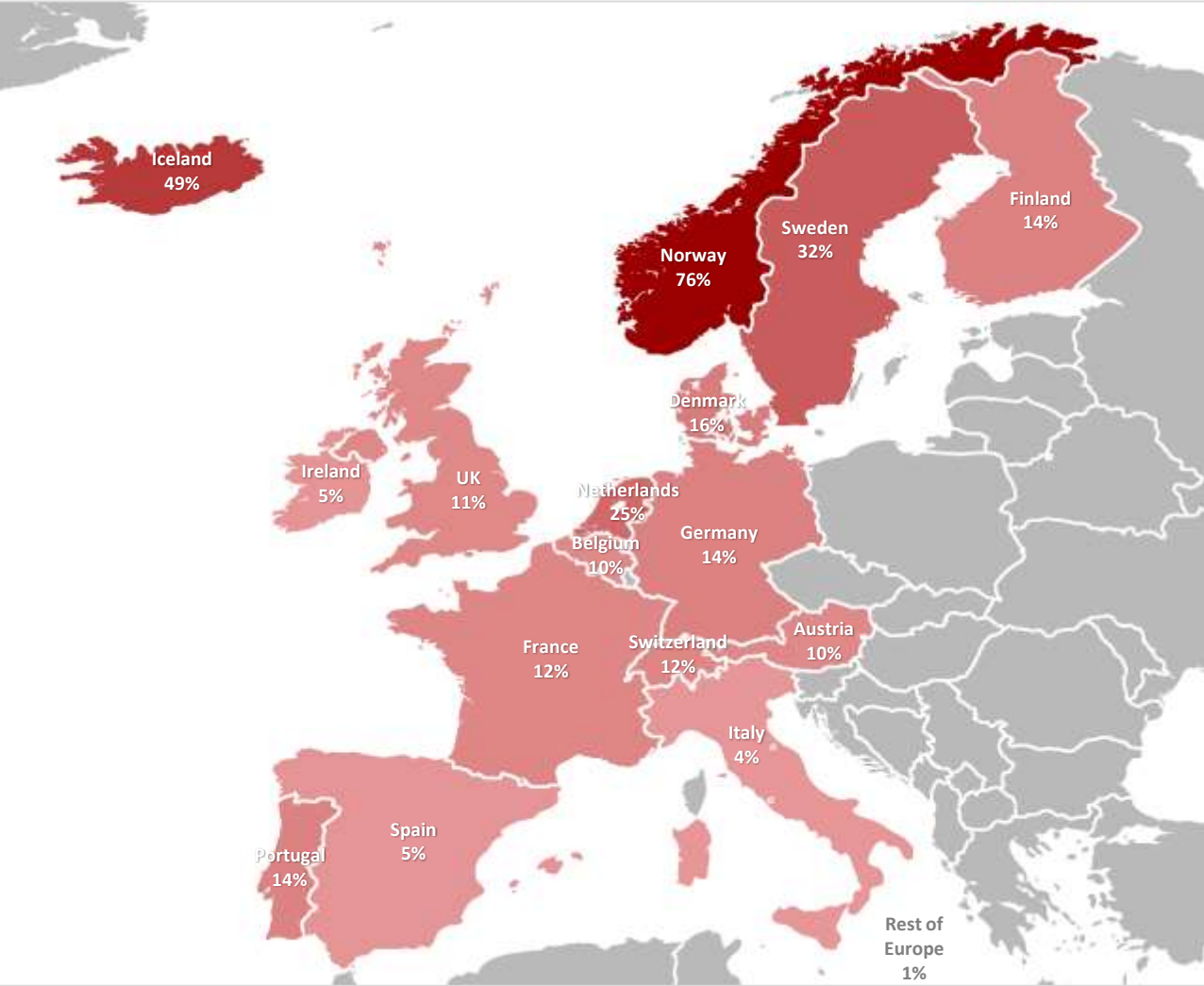
## Strategic OEM Targets for EVs (2)



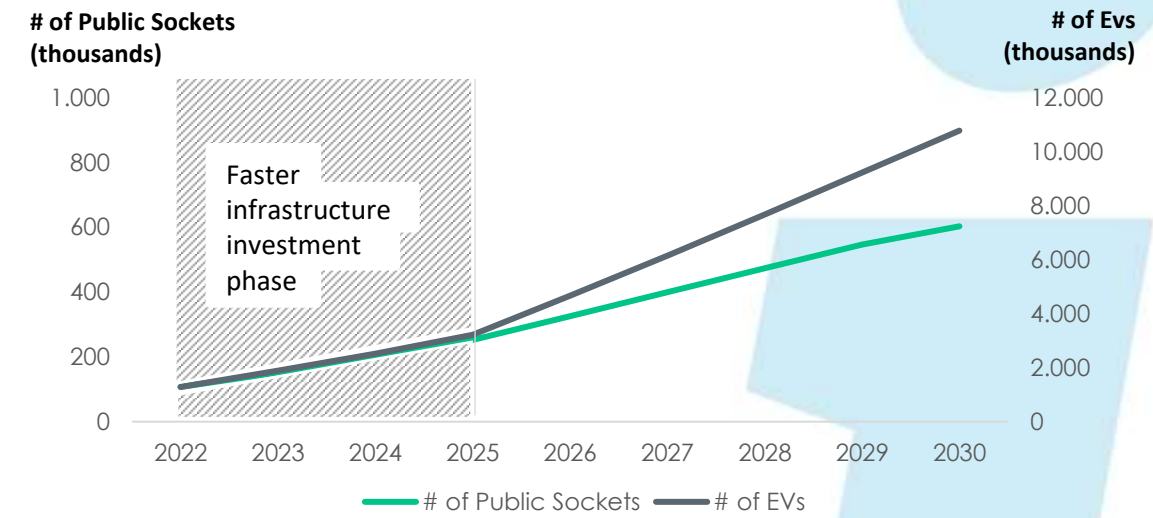
(1) BNEF, 2021  
(2) Deloitte, 2021

# CHARGING INFRA. IN THE HEARTH OF EV TRANSFORMATION

## EV Penetration in Europe(1)



## Infrastructure investments will trigger a faster EV transformation(2)



Cumulated values for Bosnia and Herzegovina, Bulgaria, Croatia, Czechia, Greece, Hungary, Italy, Montenegro, Poland, Romania, Serbia, Slovakia, Slovenia and Turkey.

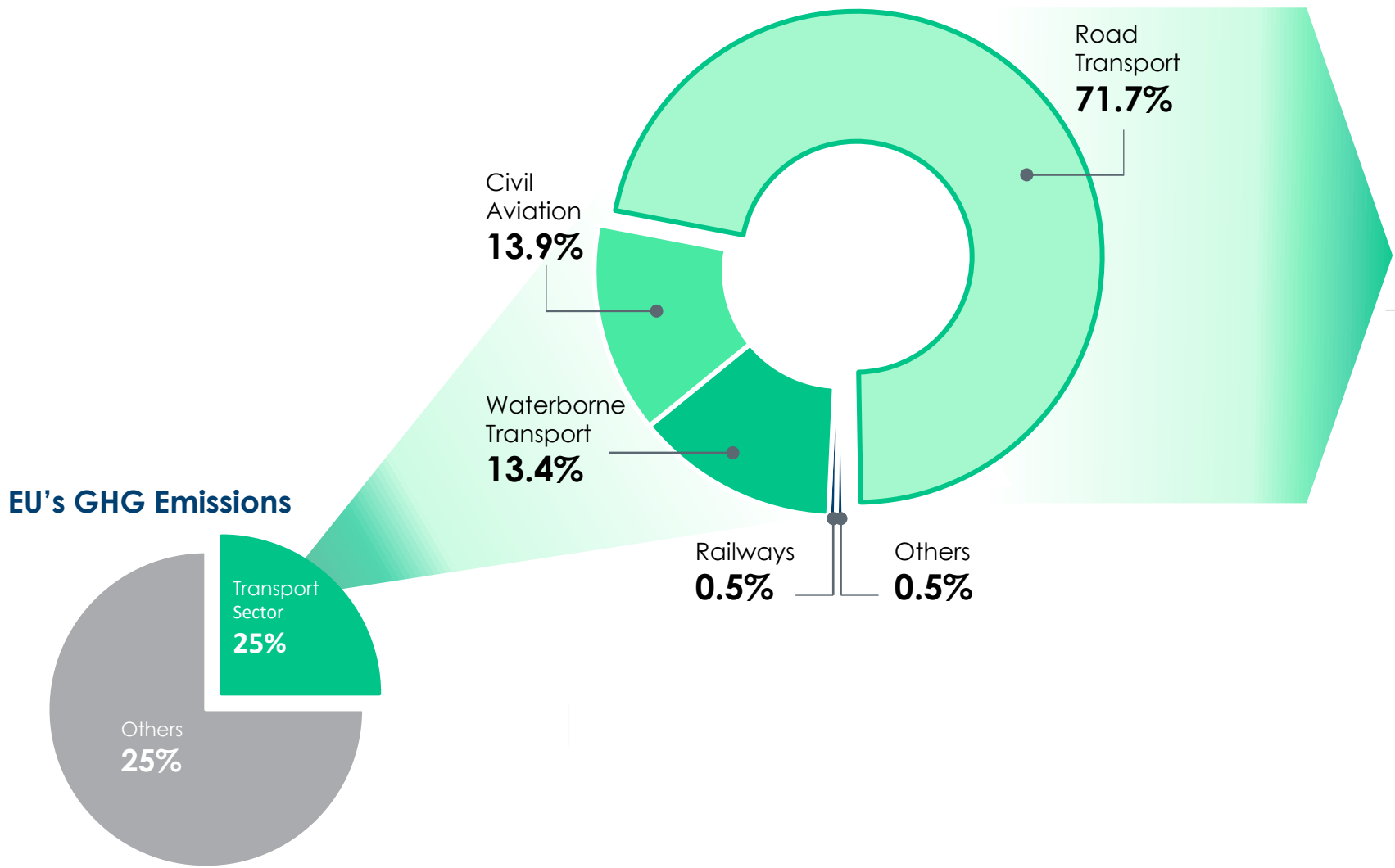
## National Targets for Phase Out Internal Combustion Engines(1)



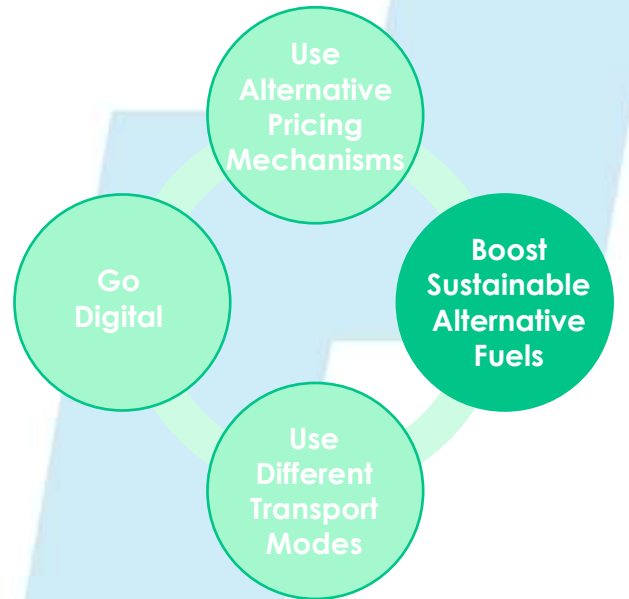
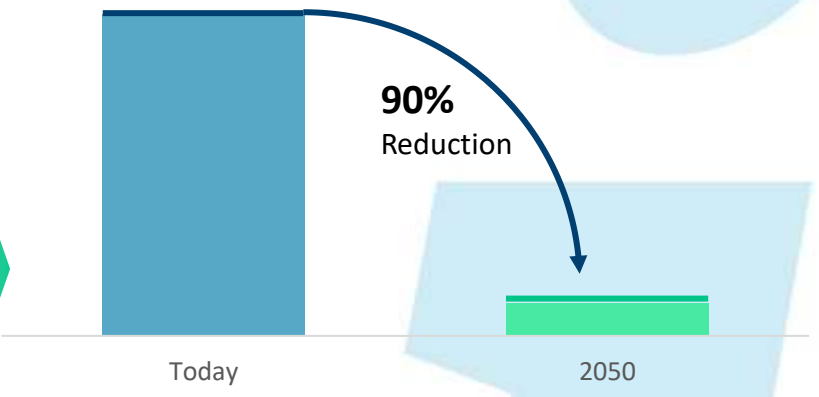
(1) BNEF, 2020  
 (2) ZES Internal Analysis based on Transport Environment 2Zero & McKinsey, 2020

# EV CHARGING FOR SUSTAINABILITY

## Share of Greenhouse Gas Emissions by Mode of Transport(1)



## EU Green Deal Emission Reduction Target(2)



Source: European Commission



# MAJOR INDUSTRIES ARE POSITIONING IN TRANSITION

### FLEETS & COURIERS

FedEx  
DHL  
ups  
Fleet Alliance  
verizon connect  
Uber  
Amazon Flex

### E-COMMERCE

eBay  
MediaMarkt  
amazon  
Walmart

### OIL & GAS

eni  
REPSOL  
Shell  
ExxonMobil  
bp  
Chevron  
TOTAL

## FAST FOLLOWERS

### ENERGY

enel x  
fortum  
Exelon.  
endesa  
SPgroup  
SCOTTISHPOWER  
edp  
EDF

### UTILITIES

Statkraft  
EnBW  
TEPCO  
ENGIE  
VATTENFALL  
IBERDROLA  
e.on

### TECHNOLOGY

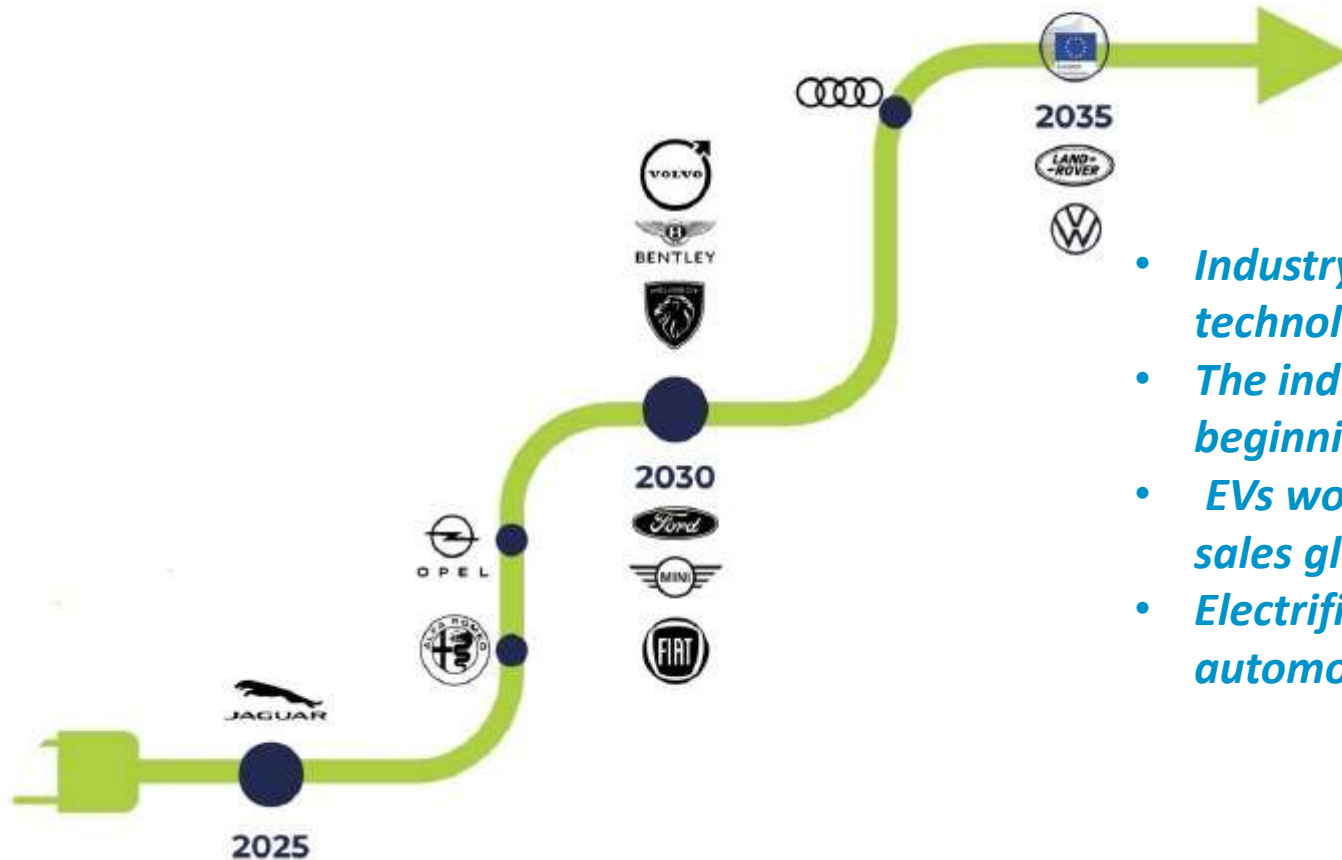
Apple CarPlay  
android auto  
amazon  
Alphabet

### AUTOMOTIVE

TOYOTA  
HONDA  
HYUNDAI  
Ford  
DAIMLER  
Volkswagen  
polestar  
smart  
BYD  
JAGUAR  
BMW  
VOLVO  
TESLA  
SKODA  
TATA  
GM  
NISSAN  
MITSUBISHI  
CAT  
ACCIVAL  
SEAT  
RIVIAN  
HONGQI

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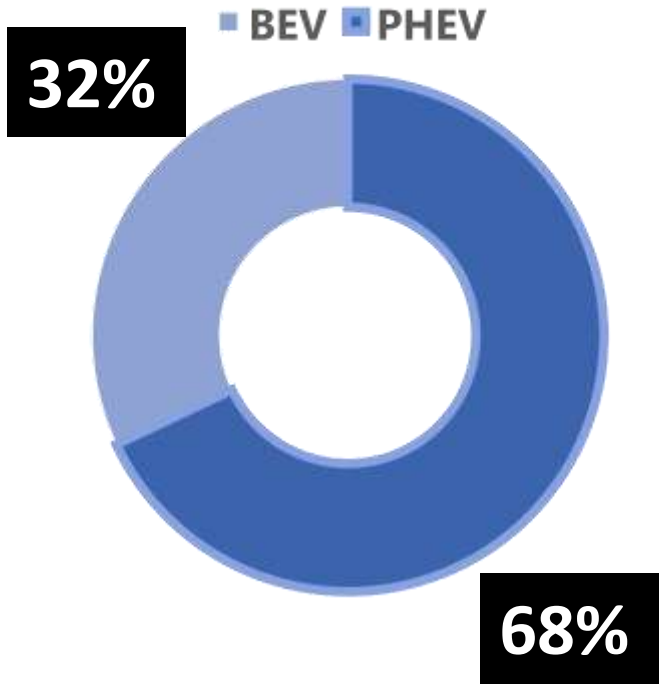
## AUTOMOTIVE GOING ELECTRIC



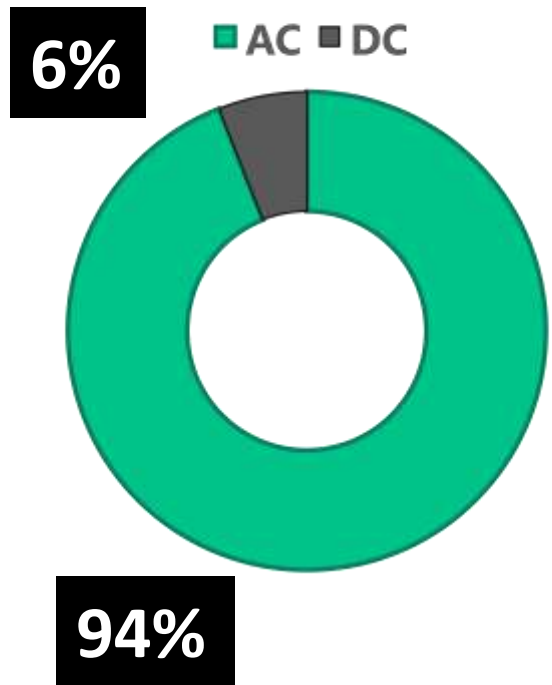
- *Industry players are accelerating the speed of automotive technology innovation*
- *The industry has attracted more than \$100 billion at the beginning of 2020.*
- *EVs would need to account for 75 percent of passenger car sales globally by 2030.*
- *Electrification will cause a major shift in the entire automotive supply chain*

## EV MARKET IN GREECE

ACTUAL EV MARKET IN GREECE  
(CAR PARC EN OF 2021)

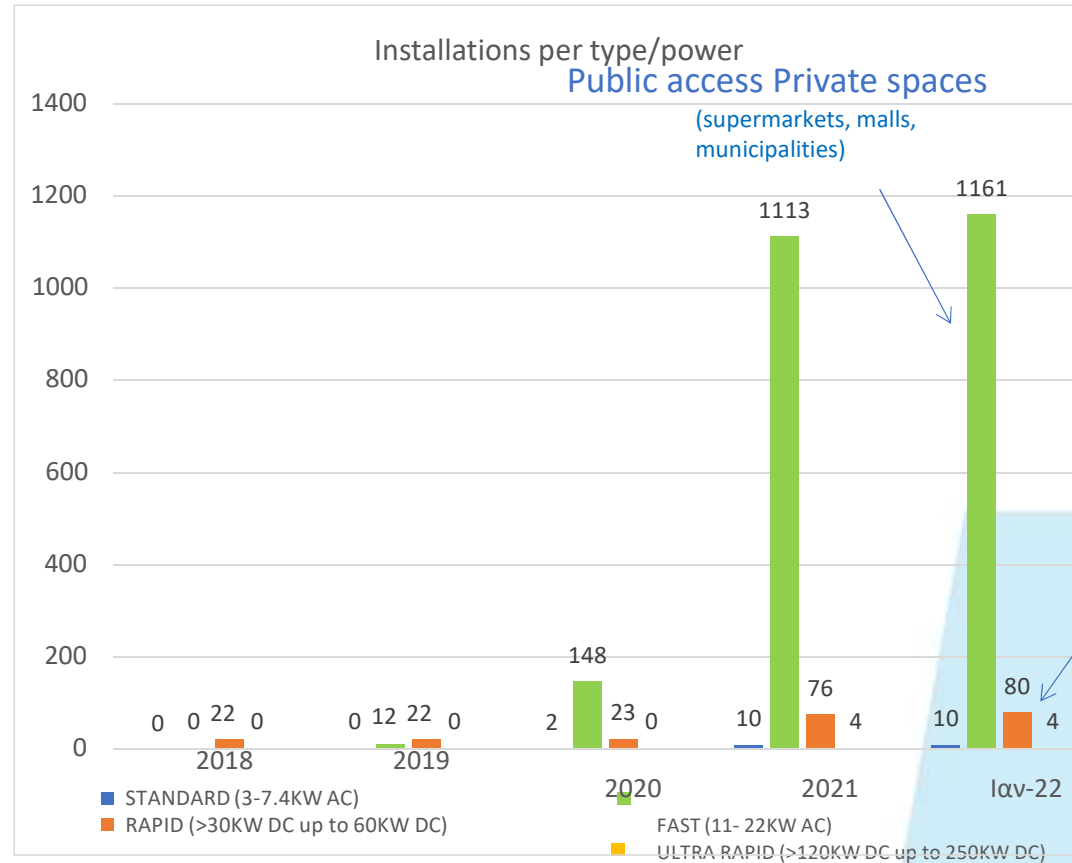
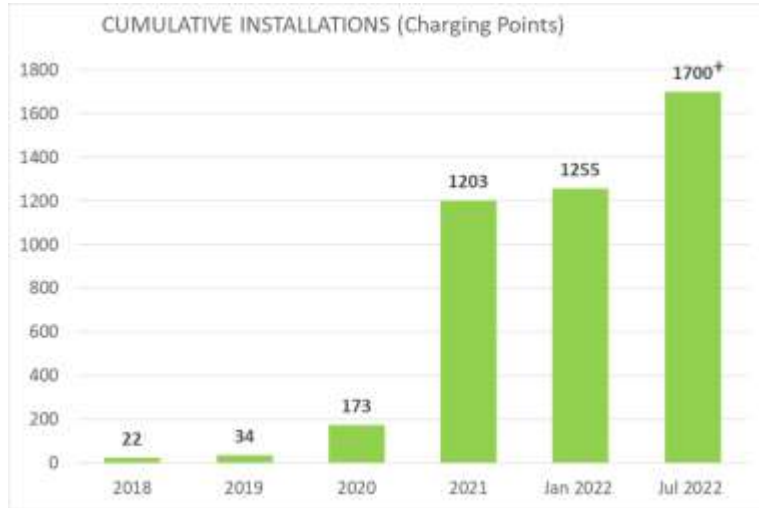


ACTUAL PUBLIC SOCKETS IN  
GREECE  
(END OF 2021)

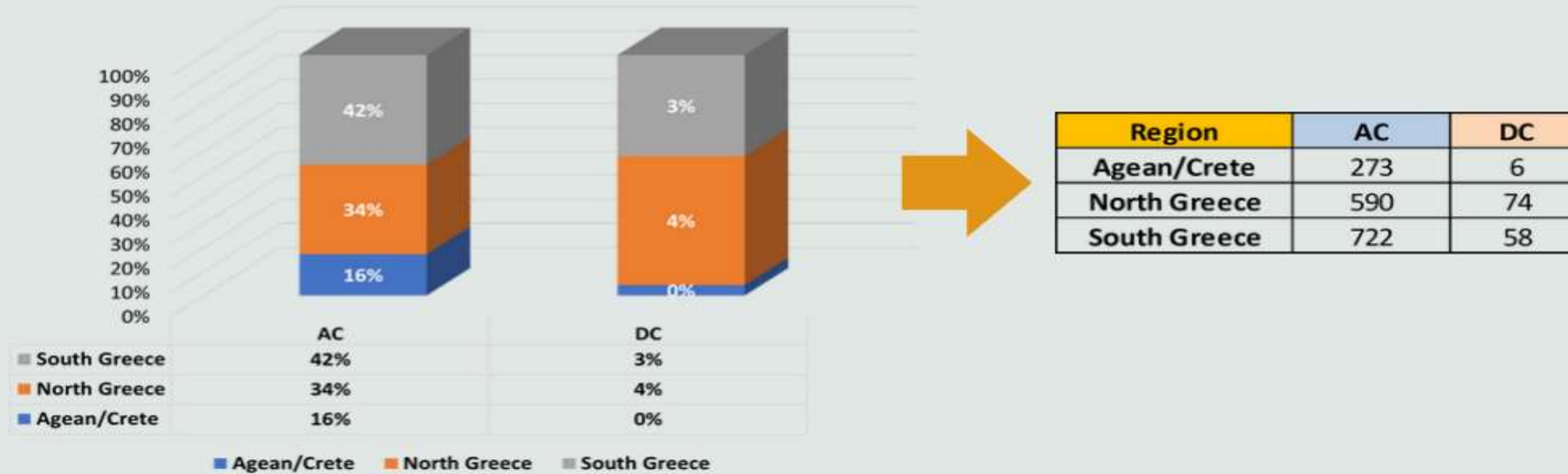


- *Greece has more than 1585 AC charging stations .*
- *Also has more than 150 DC fast charging stations.*
- *As of 2022 year end, there will be more than 2000 sokets*





- [REGISTRY OF INFRASTRUCTURE & ELECTRIC MOBILE MARKET AGENCIES Initial phase of operation \(from 6/6/2022, registration of agencies\).http://electrokinisi.yme.gov.gr](http://electrokinisi.yme.gov.gr)



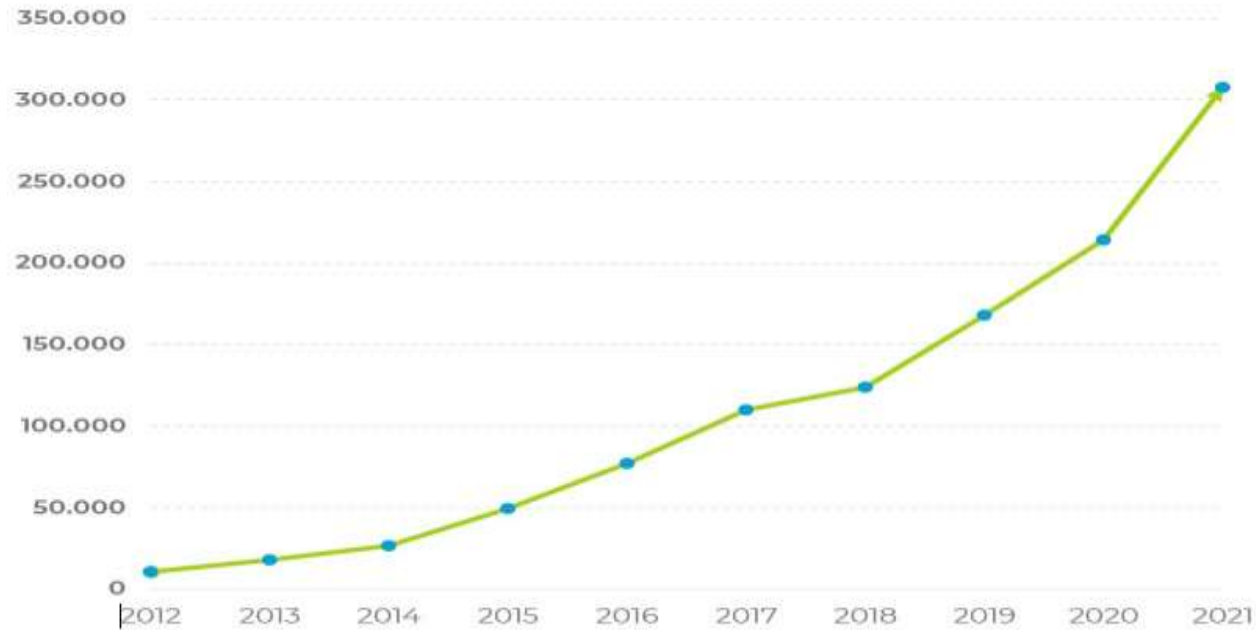
*Percentages by region-based Power Types*



**According to the forecast graph, the average number of stations in Greece at the end of the year will be "2246".**



## GROWTH OF CHARGING INFRASTRUCTURE IN EUROPE



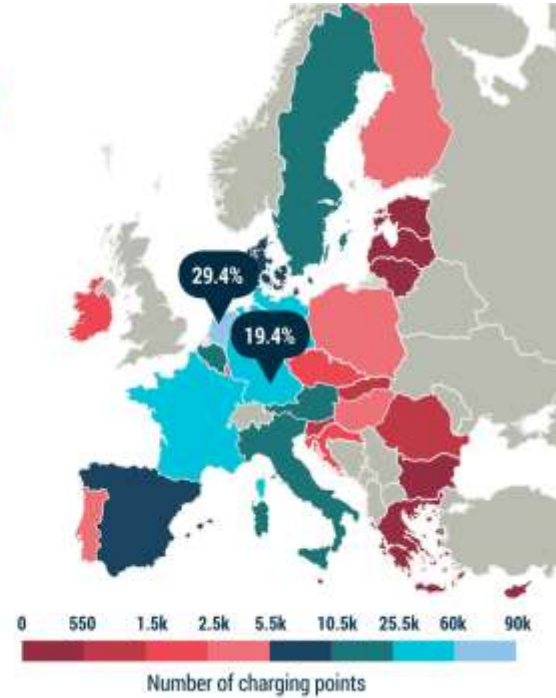
## DISTRIBUTION OF ELECTRIC CAR CHARGING POINTS ACROSS THE EU

Some 50% of all charging points:  
Concentrated in just 2 EU countries

29.4% Netherlands      19.4% Germany

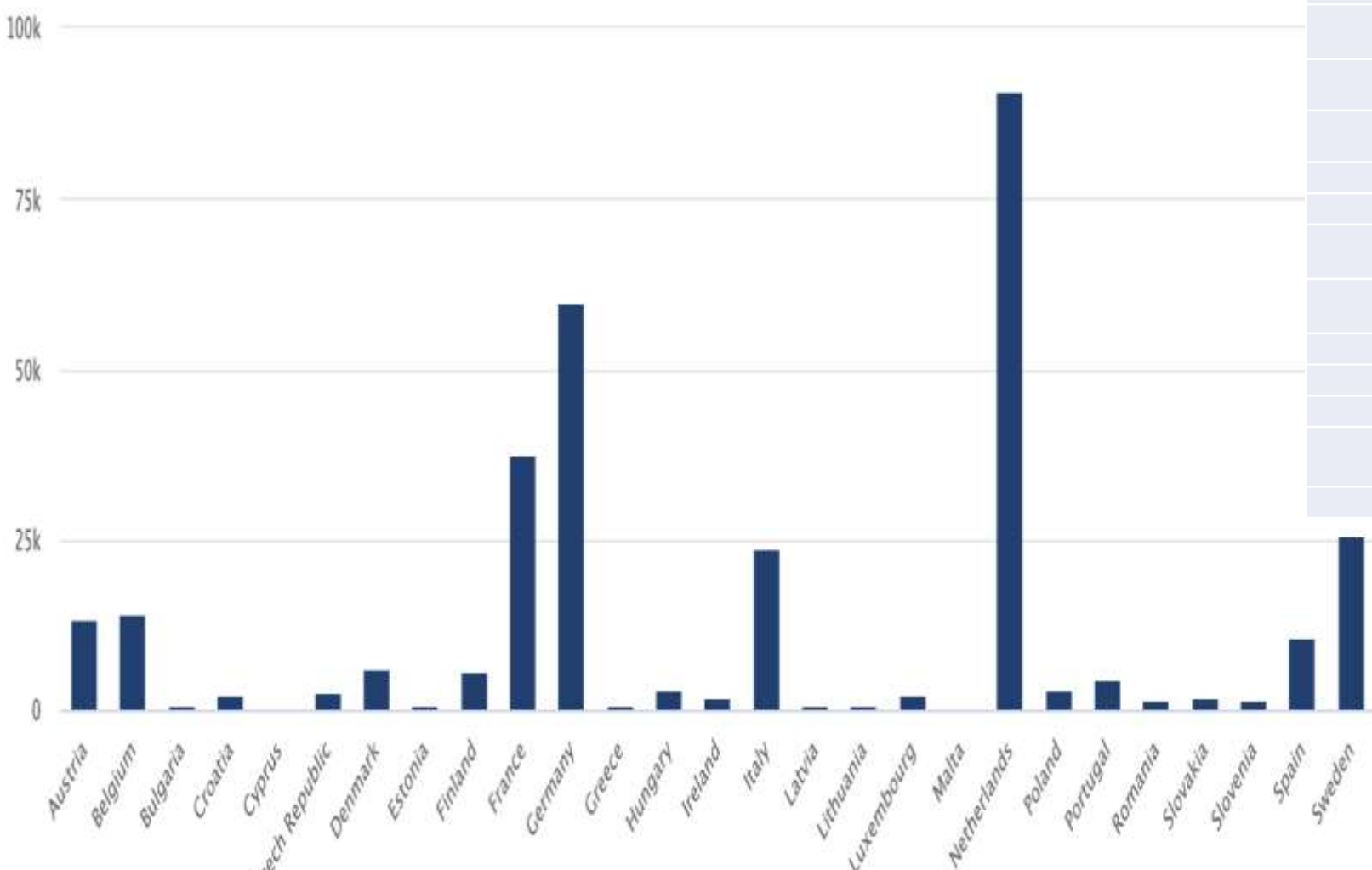
### Top 5: Fewest charging points in 2021

Cyprus	Malta	Lithuania
57	98	207
Estonia	Latvia	
385	420	





# CHARGING INFRASTRUCTURE PER COUNTRY

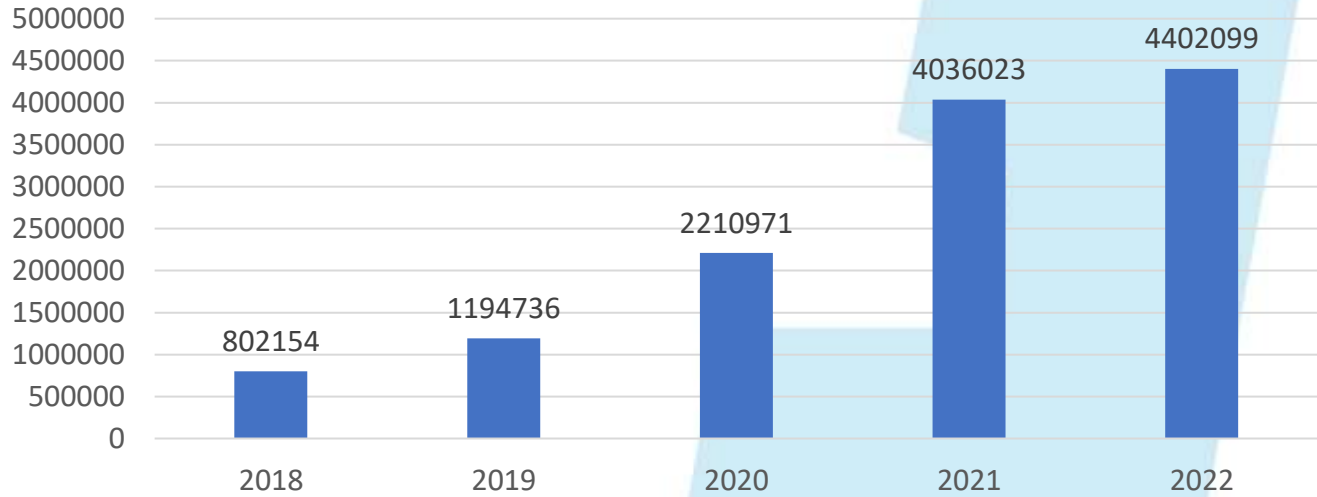


Charging Points per 100km of Road					
Top 10 "Most" Charging Points per 100 km			Top 10 "Least" Charging Points per 100 km		
1.	Netherlands	64.3	1.	Lithuania	0.2
2.	Luxembourg	57.9	2.	Cyprus	0.4
3.	Germany	25.8	3.	Greece	0.4
4.	Portugal	24.9	4.	Estonia	0.6
5.	Sweden	12.2	5.	Poland	0.7
6.	Austria	9.9	6.	Latvia	0.7
7.	Italy	9.2	7.	Hungary	1.1
8.	Belgium	8.8	8.	Romania	1.3
9.	Denmark	7.7	9.	Spain	1.6
10.	Croatia	4.1	10.	Ireland	1.6
Source: <a href="#">ACEA</a> end of 2021			Source: <a href="#">ACEA</a>		

## GROWTH OF EVs IN EUROPE

EV Numbers by Country			
Country	PHEV	BEV	Total
France	332,967	611,570	944,537
Spain	126,159	118,862	245,020
Portugal	50,334	59,889	110,222
Italy	138,060	149,112	287,172
Croatia	1,285	3,615	4,900
Poland	21,720	19,556	41,276
UK	431,212	592,044	1,023,256
Greece	11,289	5,278	16,567
Bulgaria	1,961	3,189	5,150
Germany	247,111	308,254	555,365
Netherlands	174,906	315,443	490,349
Source:	2020-2025 ZES Market Tahmini & EAFO		
	<a href="#">ZAP-MAP</a>		

### EU EV Development



- *electric car sales continued to increase in 2021 by more than 65% year-on-year to 2.3 million*
- *2016-2021 period, EV sales in Europe increased by a compound annual growth rate (CAGR) of 61%, the world's highest*

Source: <https://www.iea.org/reports/global-ev-outlook-2022/trends-in-electric-light-duty-vehicles>



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*Thank You!*



**THAT'S THE  
POWER**



We are in **Europe!**

