

POLISH CHAMBER OF COMMERCE

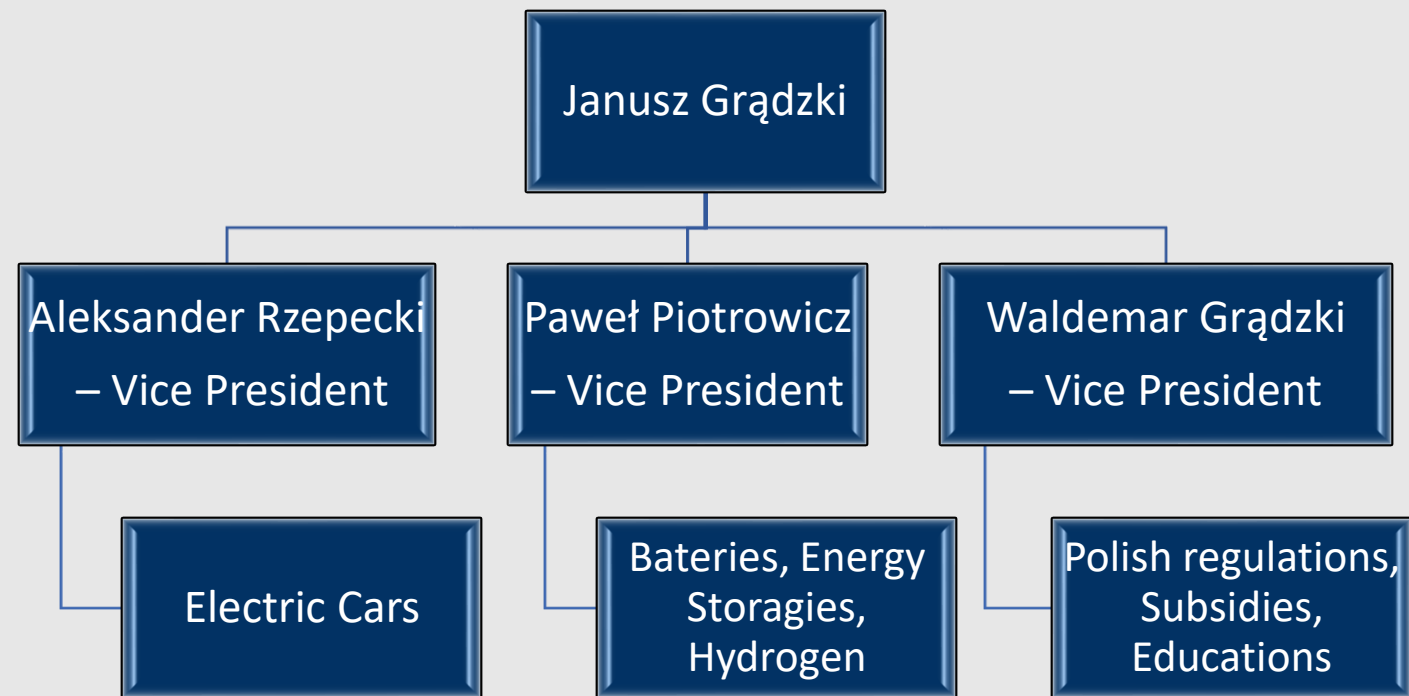
# E-mobility industry in Poland



**Janusz Grądzki**  
**Polish Chamber of Commerce**  
President – Electromobility Committee

# Polish Chamber of Commerce

## Electromobility Committee



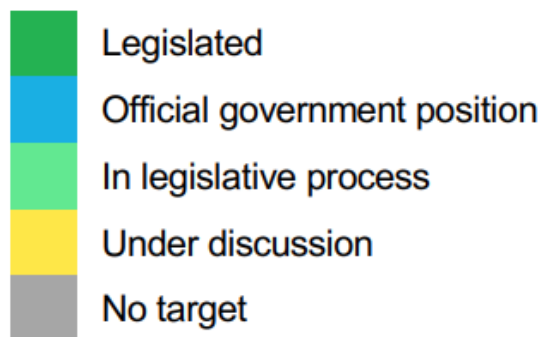
Net Zero Scenario

## Figure 224: Markets with net zero targets

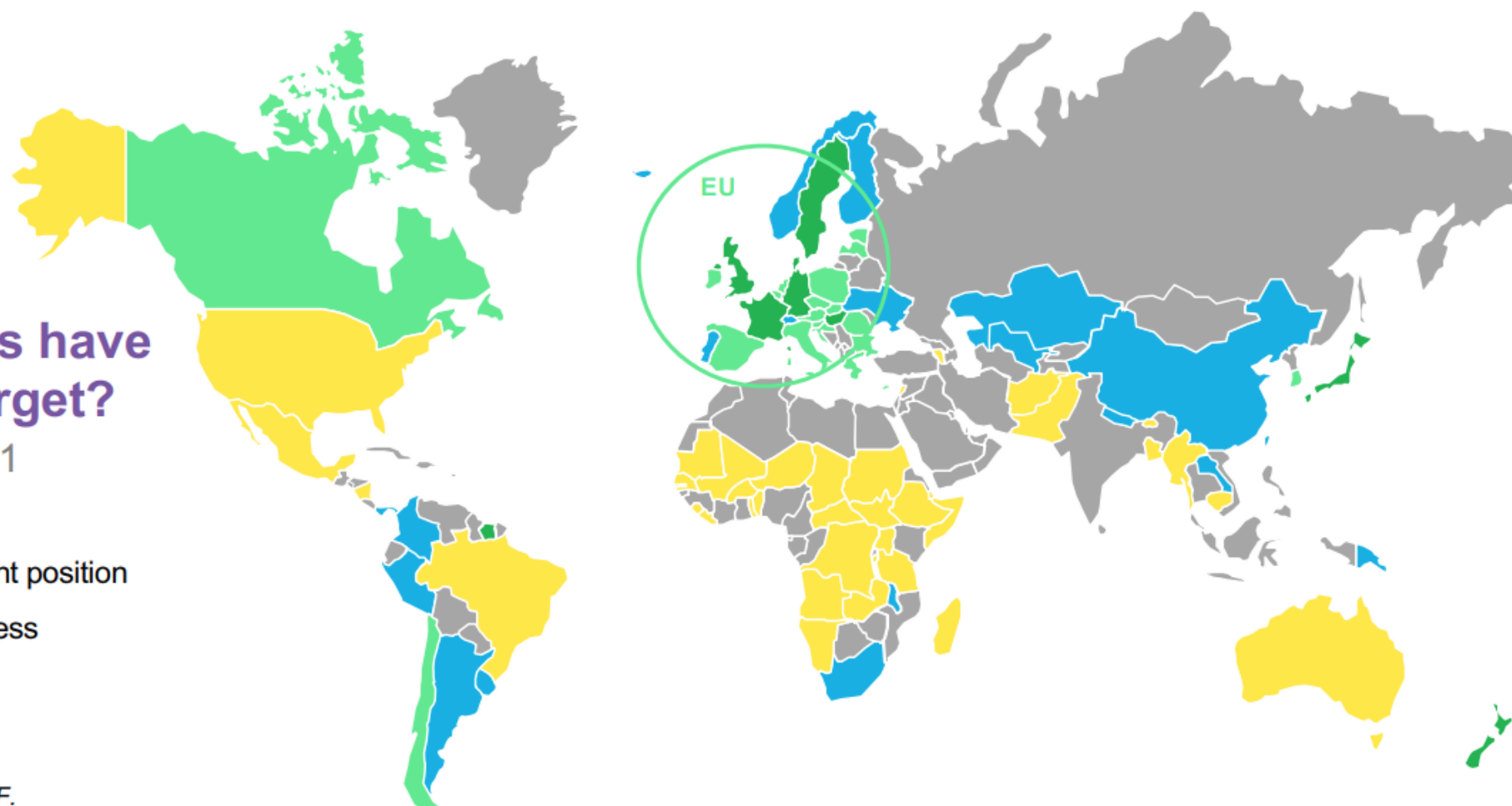


### Which parties have a net-zero target?

As at June 8, 2021



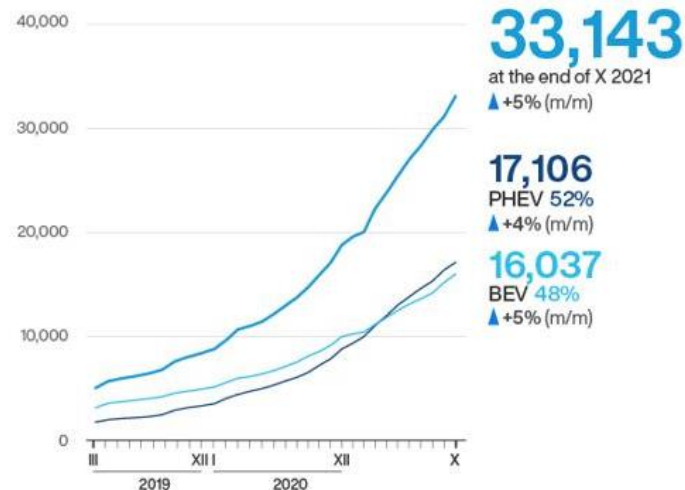
Source: Governments, BNEF.



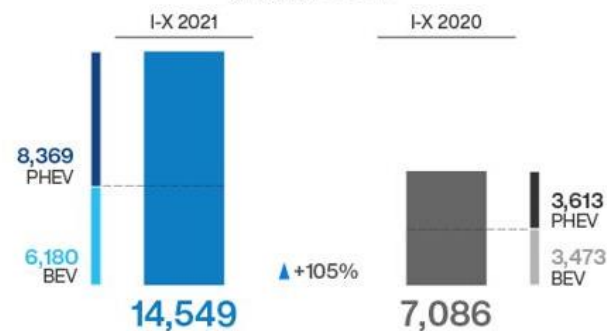
# E-mobility index - vehicles

## Vehicles

### ELECTRIC PASSENGER CARS



### NUMBER OF NEWLY REGISTERED ELECTRIC PASSENGER CARS (NEW AND USED)



### ELECTRIC VANS AND TRUCKS

#### FLEET

1,412

#### NUMBER OF REGISTRATIONS (new and used)

I-X 2021 I-X 2020  
600 301 ▲+99%

### ELECTRIC BUSES DMC > 3,5 t

#### FLEET

633

#### NUMBER OF REGISTRATIONS (new and used)

I-X 2021 I-X 2020  
202 154 ▲+31%

### ELECTRIC MOTORCYCLES AND MOPEDS

#### FLEET

10,601  
MOPEDS 9,939  
MOTORCYCLES 662

#### NUMBER OF REGISTRATIONS (new and used)

I-X 2021 I-X 2020  
3,137 2,444 ▲+28%

### ELECTRIC MICRO VEHICLES AND OTHERS

#### FLEET

424

#### NUMBER OF REGISTRATIONS (new and used)

I-X 2021 I-X 2020  
67 39 ▲+72%

### HYDROGEN PASSENGER CARS (FCEV)

#### FLEET

65

#### NUMBER OF REGISTRATIONS (new and used)

I-X 2021 I-X 2020  
64 0

### HYBRID PASSENGER CARS AND VANS

#### FLEET

303,393

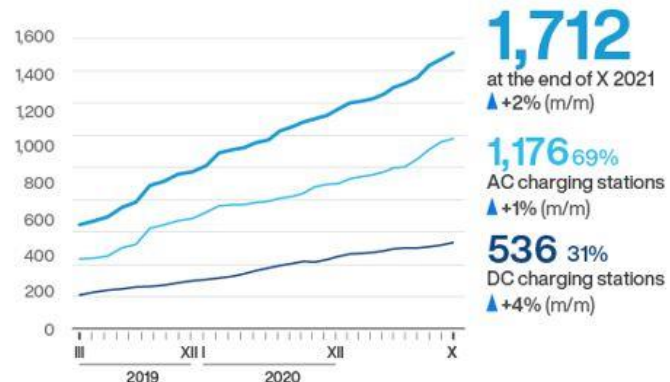
#### NUMBER OF REGISTRATIONS (new and used)

I-X 2021 I-X 2020  
111,218 53,201 ▲+109%

# E-mobility index; infrastructure

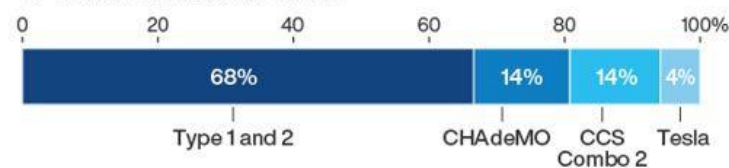
## Infrastructure

### CHARGING STATIONS

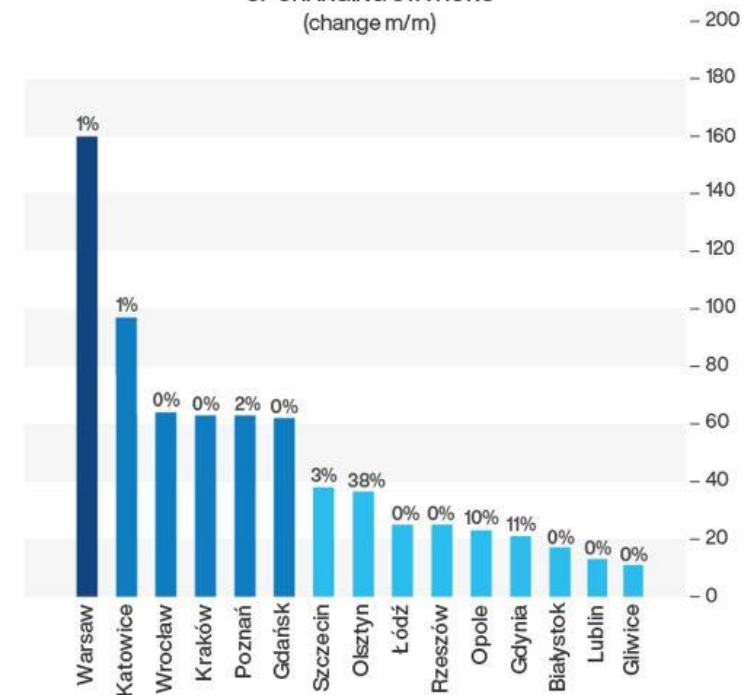


NUMBER OF  
PUBLIC CHARGING POINTS  
3,337  
▲+2% (m/m)

### STRUCTURE OF PUBLIC CHARGING POINTS



### CITIES WITH THE BIGGEST NUMBER OF CHARGING STATIONS (change m/m)







# Battery Production

**Li-Ion cell production in Europe in 2019 - 20 GWh.**

**By 2023, this number is expected to increase to 200 GWh (3.5 million Volkswagen ID.3).**

**Interestingly, the production capacity of plants located in China is expected to reach 800 GWh in the same year...**

<https://polska-org.pl/8964863,foto.html>





The largest factories producing batteries in Poland.



# Mercedes - Benz Manufacturing Poland Jawor

## Production

Batteries for BEV (target: 100,000 batteries per annum)

Diesel engines...

and gasoline engines for PHEV's and ICE

- **Operator: Mercedes-Benz Manufacturing Polska**
- **Value of Daimler investment in Jawor – ca. EUR 600 mln**
- **Over 1.000 new, highly qualified jobs**
- **Industry 4.0 factory**
- **Construction started in 2017**
- **100% renewable energy**







**LG Energy Solution  
Wrocław is the largest in  
Europe and the world's  
leading producer of  
lithium-ion batteries for  
the automotive industry.**

## LG Energy Solution Wrocław

- The LG Energy Solution Wrocław team consists of about 10,000. employees.
- Plant covers an area of approximately 100 hectares with several dozen production lines.
- Production: 6 GWh (target: 100 GWh).
- The total cost of the investment in Biskupice Podgórne is over EUR 3.2 billion.

An architectural rendering of a large, modern industrial building, the Northvolt production plant in Gdańsk. The building features a dark, angular design with a prominent glass facade on the right side. The 'northvolt' logo is visible on the building's exterior. The scene is set at dusk, with a dark sky and some trees in the foreground. The text 'Northvolt, Gdańsk 2022' is overlaid on the left side of the image.

# Northvolt, Gdańsk 2022

- The Swedish company Northvolt will build a modern production plant in Gdańsk and a research and development center in the field of battery modules and energy storage systems.
- The investment will amount to \$ 200 million.
- The company will employ 500 people.
- The area of the facility will be 50,000 square metres.
- The potential future capacity of the plant will be 12 GWh.

**EKO** SMART ENERGY SYSTEMS  
**ENERGETYKA**



**PRE**  
**EDWARD BIEL**

The largest EV chargers'  
producers in Poland





## Ekoenergetyka-Polska:

- Big Polish player in the BUS chargers market.
- Established in 2009 in Zielona Góra.
- Over the decade, Ekoenergetyka has grown from 2 to over 300 employees and gained clients all over Europe
- In 2020, Ekoenergetyka-Polska produced nearly 700 charging stations, won 68 tenders for a total of PLN 75 million, closing the previous year with revenues of over PLN 100 million.



### **Enelion:**

producer of electric car chargers and ecosystem management software for e-mobility.

Designing electronics and producing devices in Poland since 2016

Several thousand chargers to customers in Poland and abroad delivered.



## Pre Biel:

Energy infrastructure producer

25 years of experience

EV chargers' brand

Complex offer (chargers, infrastructure, software, accessories)

Pre Biel chargers popular as public infrastructure in several Polish cities



# Factory of Polish electric cars - IZERA

- New e-mobility brand from Poland
- Developed by Electromobility Poland sp. z o.o.
- Shareholders: public Energy companies (Tauron, Energa, PGE) and Polish Government.
- 55 M EUR invested; several billions expected from new investors
- Future factory located in (118 hectares), 15.000 new jobs
- Plant construction scheduled in Q3 2022.
- Production to start in 2024.
- Planned capacity: 200.000 cars.
- Car platform bought from another car manufacturer (to be announced in January 2022).
- Two prototypes have been presented; 5 models planned.



# Some facts about the IZERA:

- City cars and small SUV's
- Battery capacity: 40 kWh -60 kWh.
- Range of 350-420 km
- 0-100km/h in 8 seconds
- No detailed info energy recovery system or modern driver assistance systems.
- The charging time: 30 minutes 0-80%





# Polish electric cars

The producers of the above-mentioned cars presented themselves very well during the shows.

They have knowledge, know-how, but are still looking for investors and specific production solutions.

Melex N.Truck



Triggo



iXAR



FSO Syrena Vosco S106EV





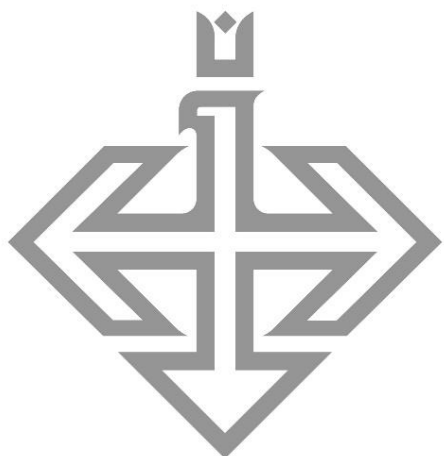
## Summary

- At the end of 2020, the value of exports of lithium-ion batteries reached approx. EUR 400 million per month,
- Batteries for EV equals to 2% of all Polish exports

Poland addresses all branches of electromobility:

- Infrastructure for charging electric cars.
- Passenger cars and buses - 190 models of plug-in cars available for purchase on the Polish market.
- Producing batteries for electric vehicles.
- Car and bus manufacturing (MB, Toyota, Opel, VW, Ford, Solaris and more)

Bloomberg New Energy Finance (BNEF): Poland currently ranks first in Europe and fifth in the world among the countries particularly involved in the construction of the European and global value chain of the battery sector and has a chance to maintain a leading position in this area at least until 2025 . In 2020, the value of exports in this sector amounted to approx. EUR 2.9 billion. Poland is the third largest market in number of enterprises in this industry (61 entities)



POLISH CHAMBER OF COMMERCE

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