



Recharging the batteries. How the electric vehicle revolution is affecting CESEE countries

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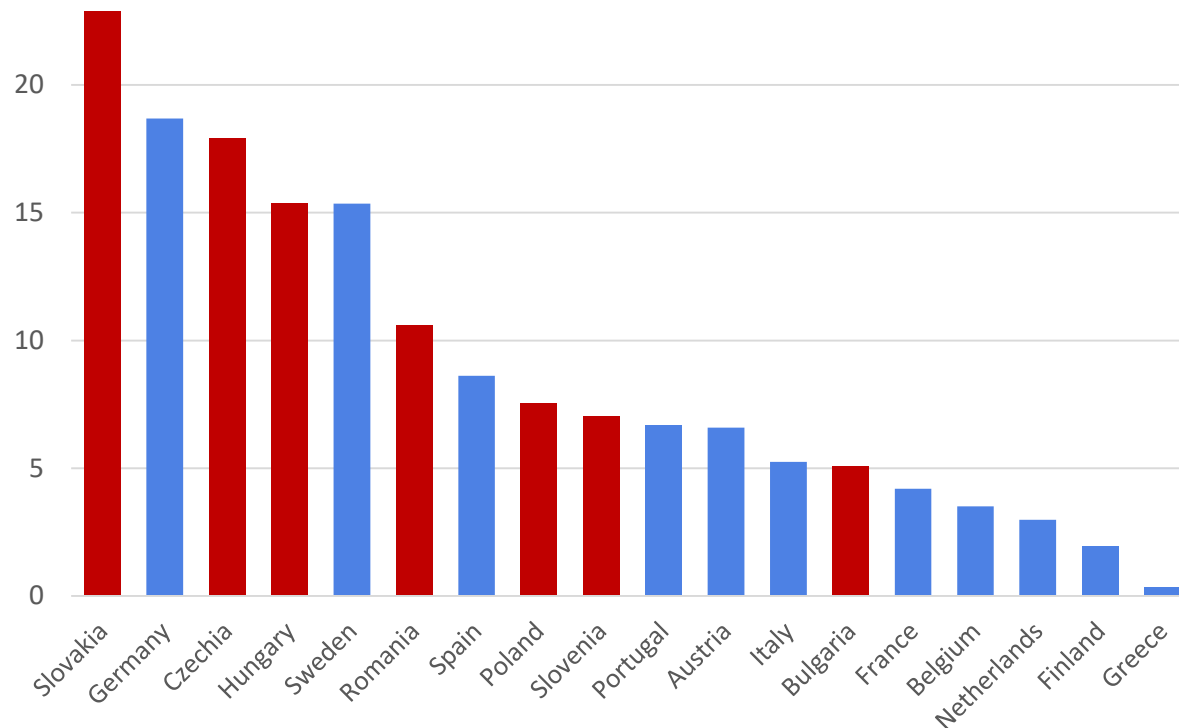
La transizione all'auto elettrica: passato, presente e futuro del settore automotive italiano - Banca d'Italia - Torino, 30 novembre 2023

A very important sector for CESEE

Automotive is relevant for CESEE economies ...

... and CESEE is relevant for automotive

Role of the automotive sector: automotive sector value added in % of manufacturing value added, 2021



26% of car produced in Europe are from CESEE countries (up from 7% in 2003)

All major global brands have production facilities in the region

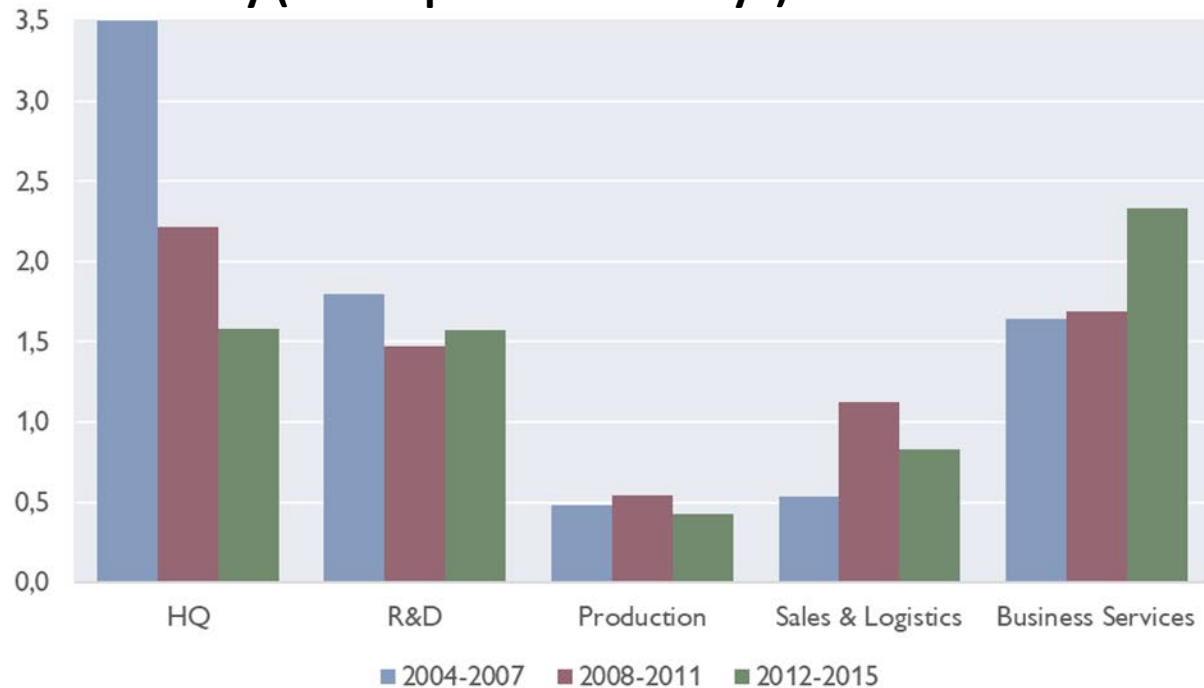
45% of current battery production capacity is in CESEE

Note: Automotive sector is defined as NACE rev.2 C29 'Motor vehicles, trailers and semi-trailers'. Source: Eurostat National Accounts

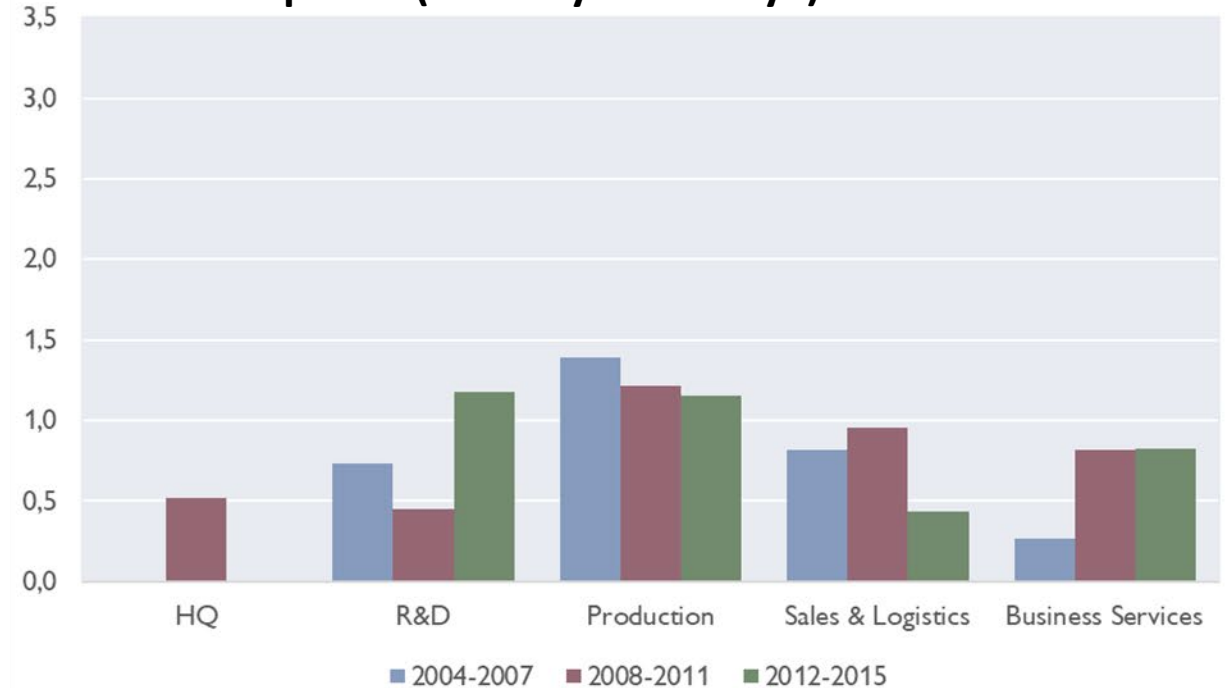
But CESEE countries risk to be trapped in the lower value added functions

Relative functional specialization of automotive

Germany (“headquarter economy”)



Czech Republic (“factory economy”)



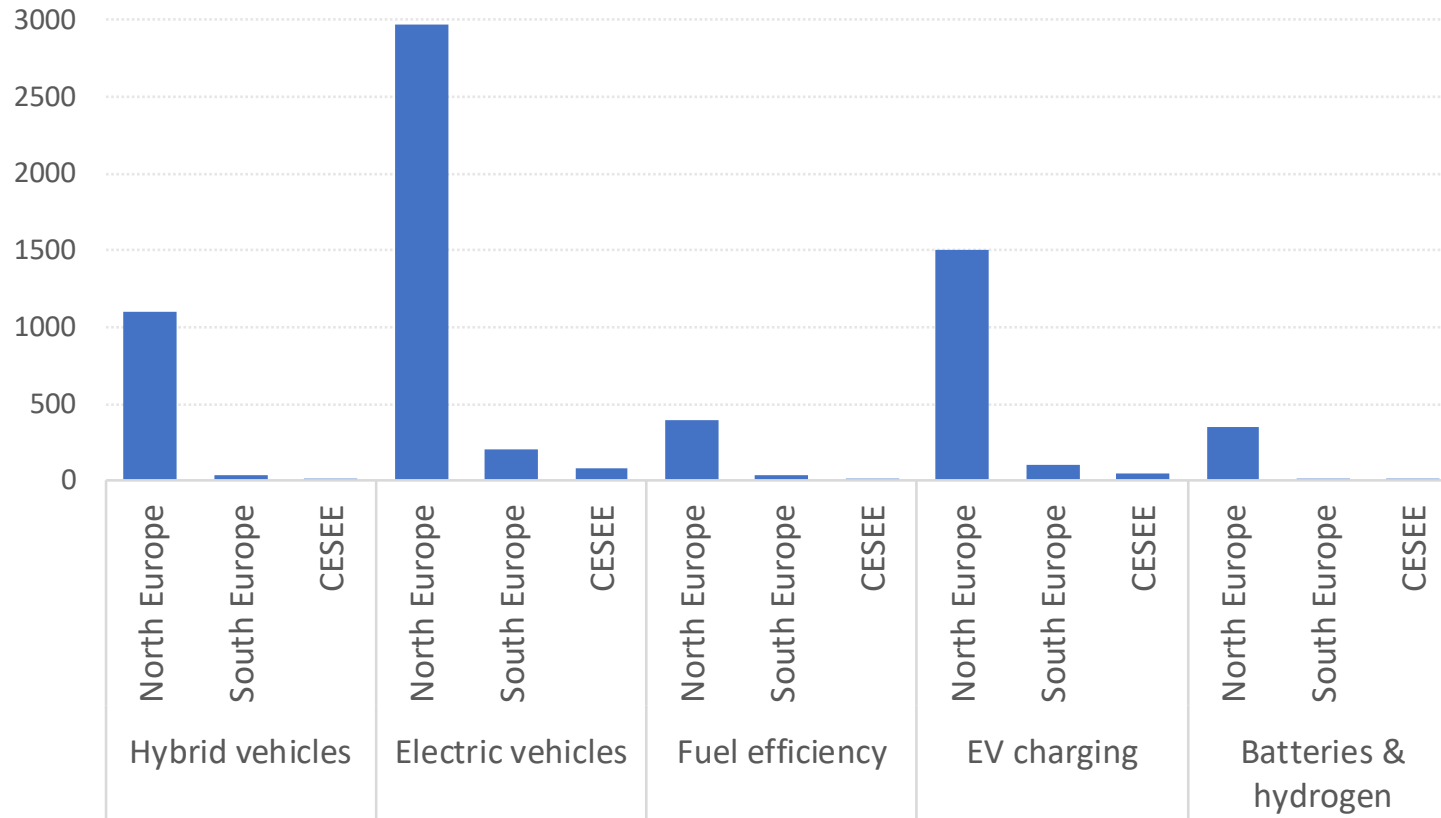
Data based on the FDI market database.

Note: Automotive defined as NACE rev. 2 C29 “Motor vehicles, trailers and semi-trailers”

Source: Stoelliger, 2021

... as they are decision-takers and innovation-takers

Number of green patents (cumulated 2016-2021)



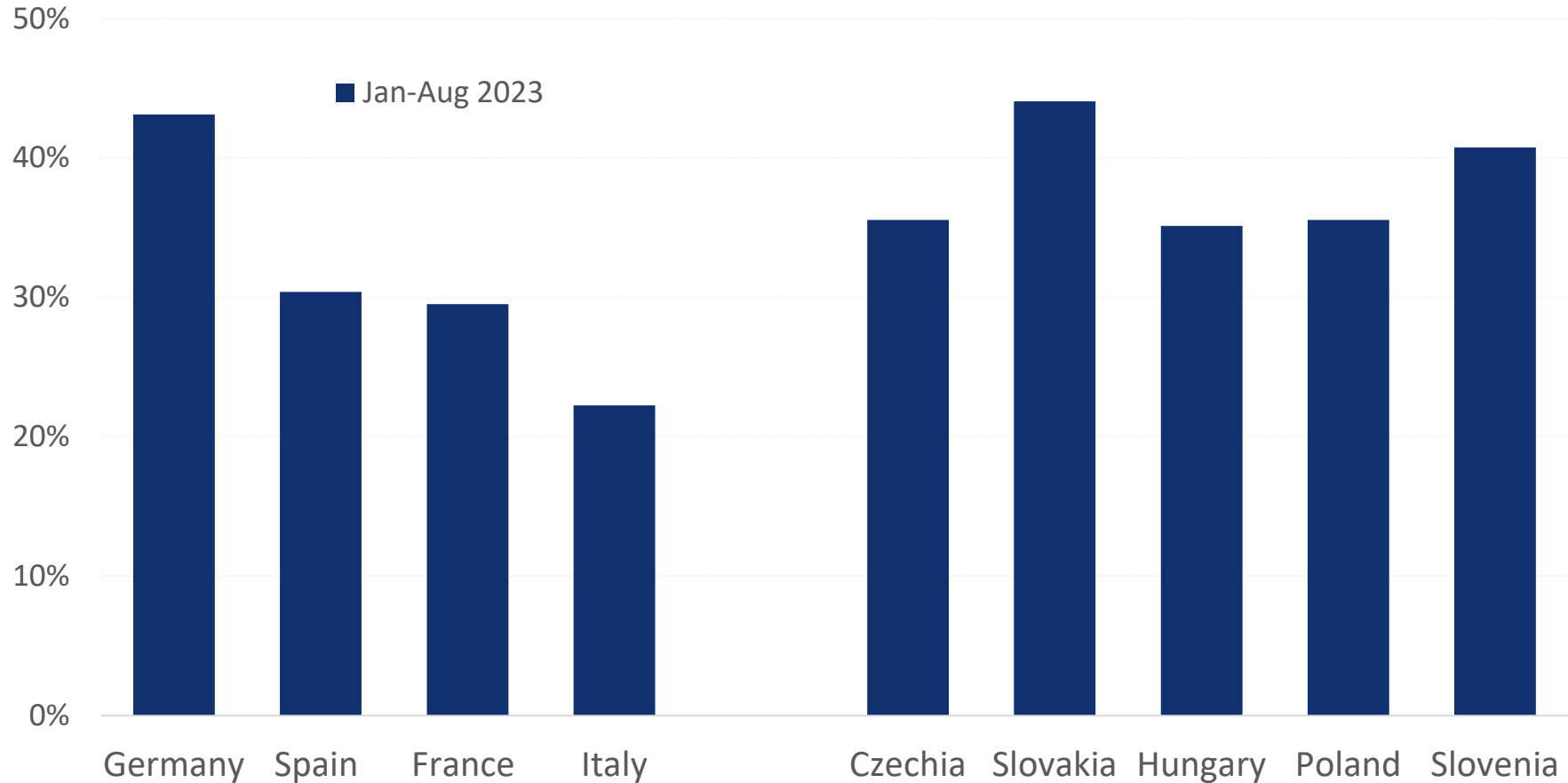
Source: Patstat; OeNB, EIB, wiiw, "Recharging the batteries", How the electric vehicle revolution is affecting Central, Eastern and South-Eastern Europe, March 2022

Car production and the electric revolution: is CEE ready?



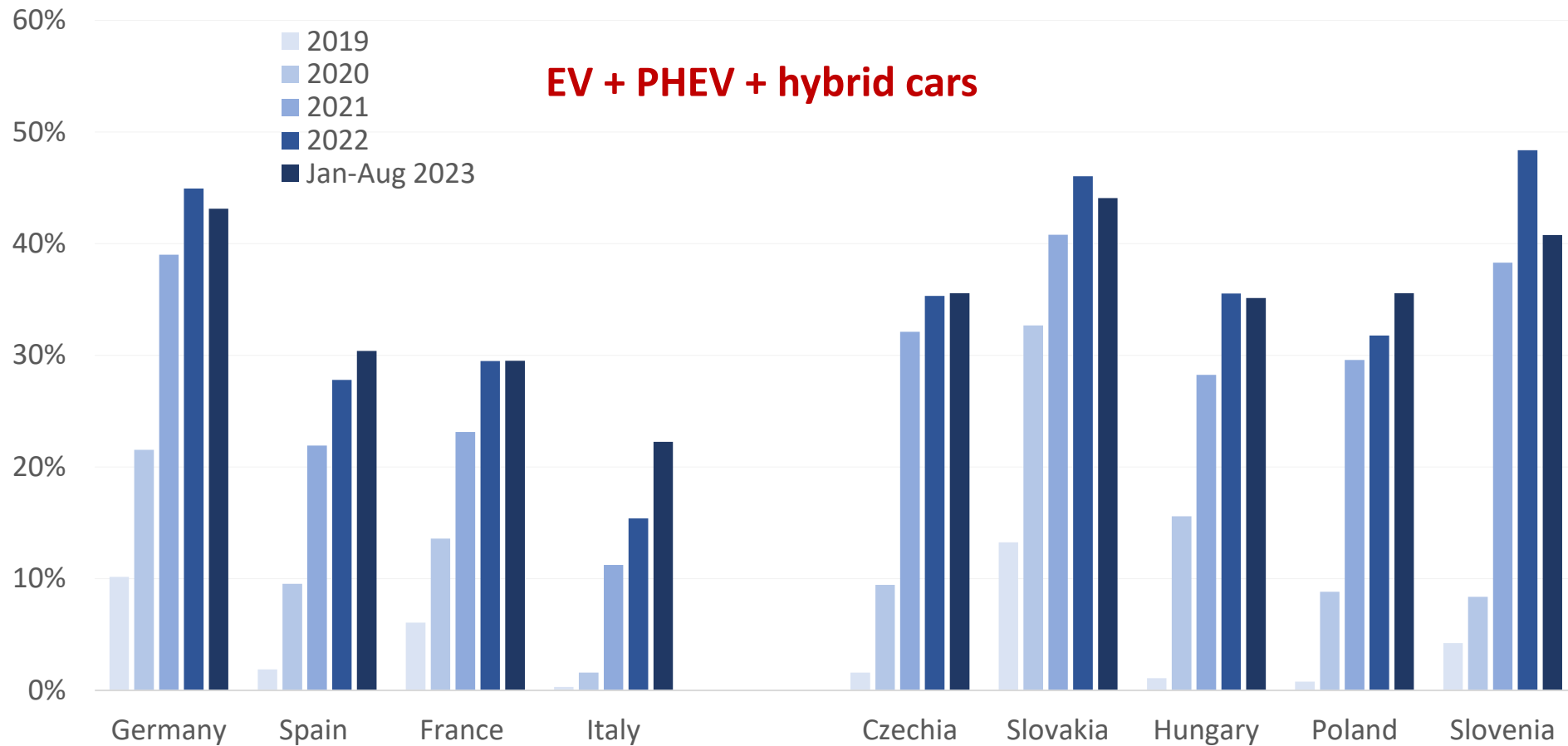
CESEE focus on electric and hybrid vehicles is high

Exports of EV and hybrid cars (% of total car export)



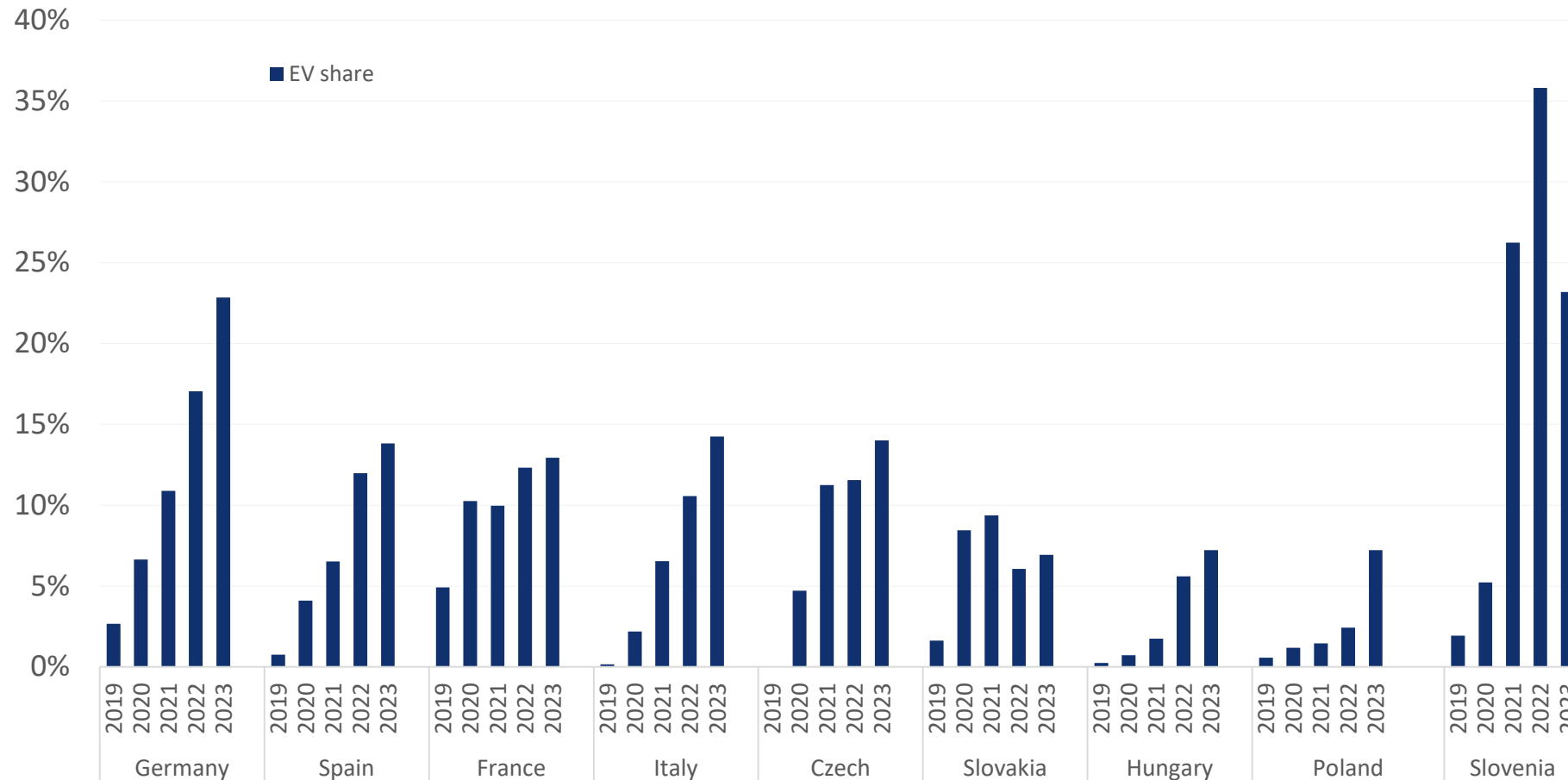
... and growing fast

Exports of EV and hybrid cars (% of total car export)



However, considering pure electric vehicles, the picture is partially different

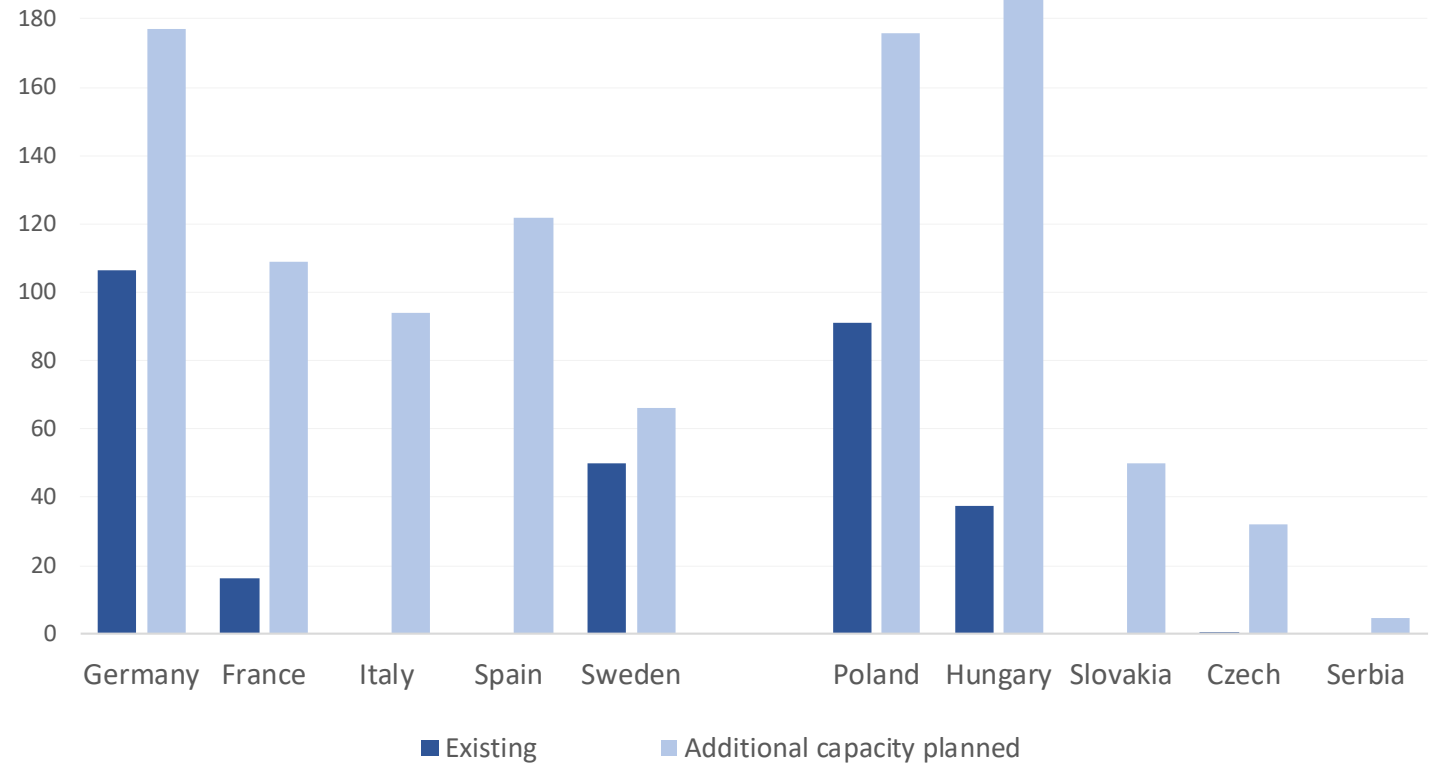
Exports of pure electric vehicle (% of total car export)



Battery production in Europe is ramping up. CESEE is playing a role (Hungary #2)



Battery production capacity in Europe (GWh): existing and planned



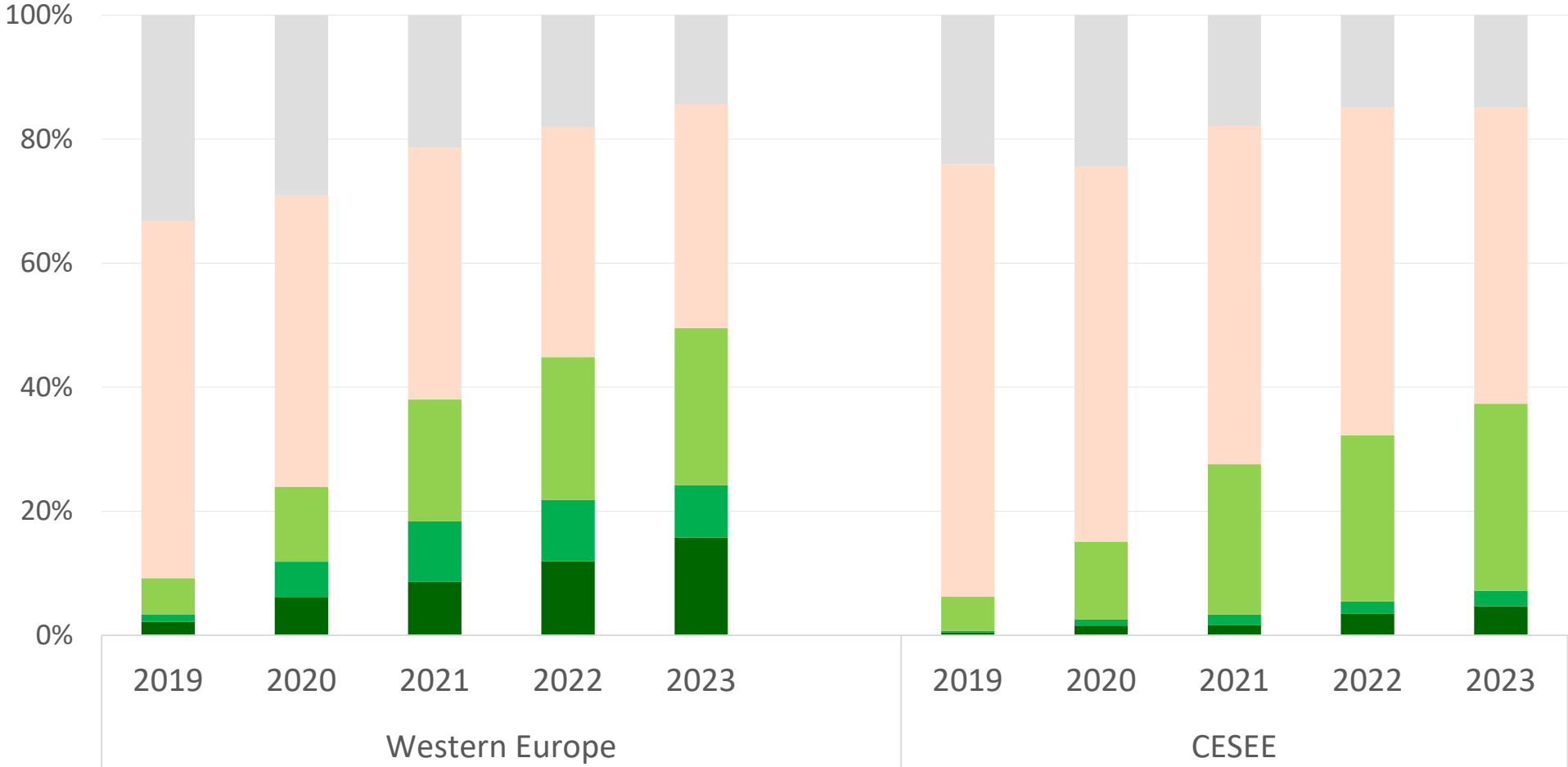
Source: Company sources, EV Markets Reports (September 2023)

**Demand: are CEE
customers
accelerating the
uptake of electric
vehicles?**



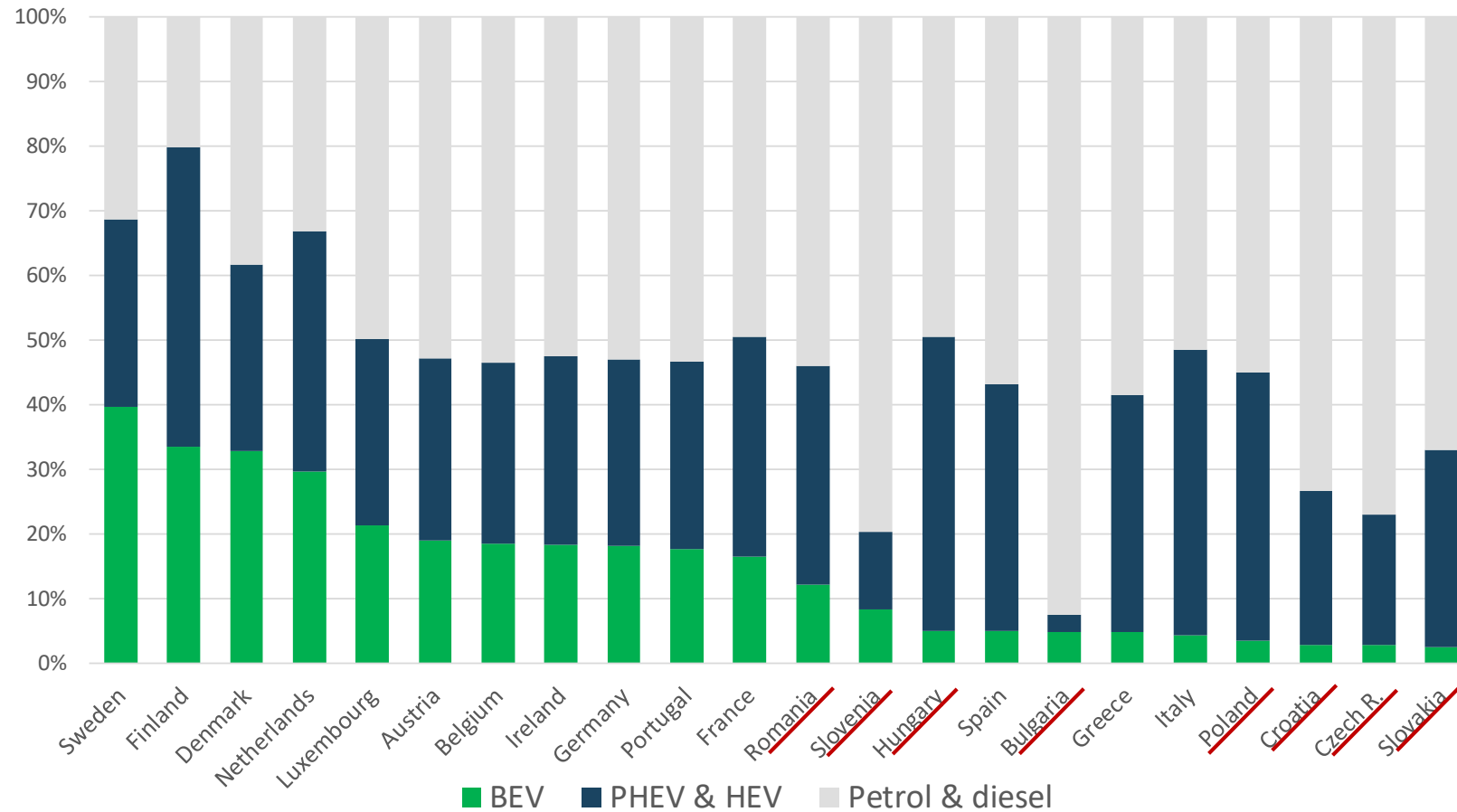
The local market in CESEE is developing slowly

Sales of new cars (share on total, %)



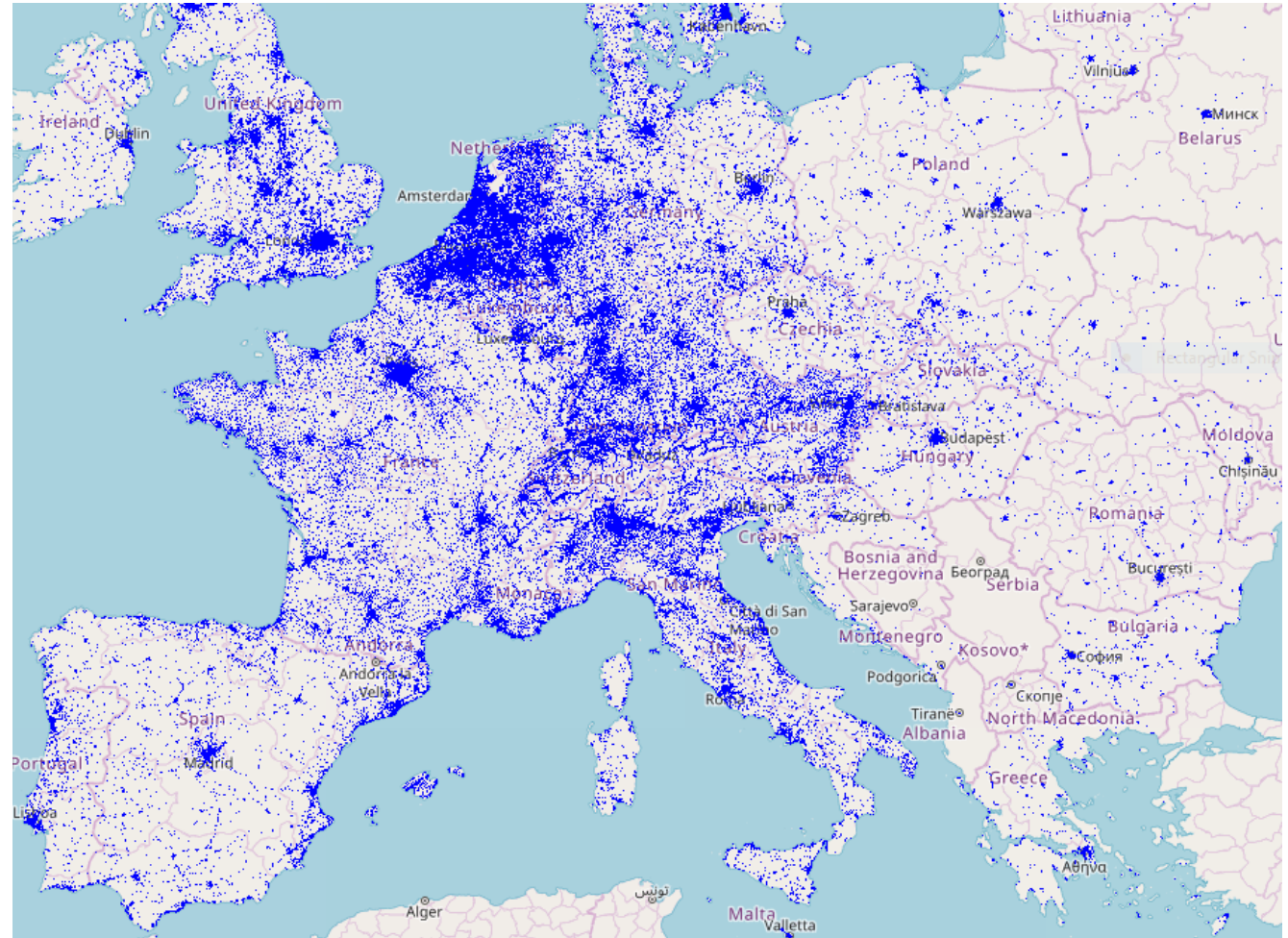
EV acceptance in CESEE

Sales of new cars in Europe (share on total, %; Jan-Sept 2023)



Source: ACEA

Charging points: there is a stark disparity in Europe

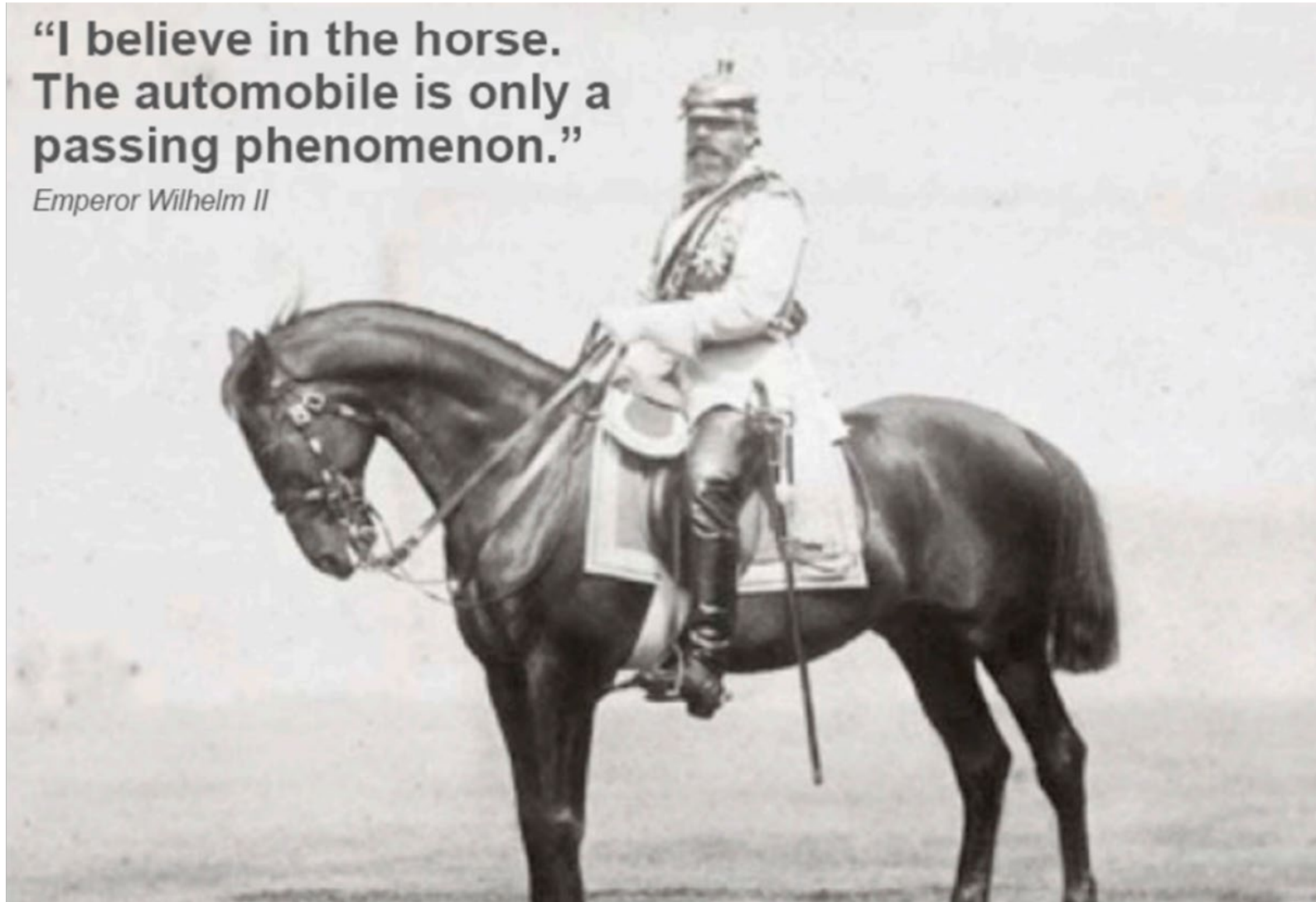


In summary

- The automotive sector is relevant for Central Eastern European countries.
And vice versa
- But there are structural barriers to be addressed
- CESEE countries are ramping up production and export of electric vehicles, in some cases mirroring the (good) performance of Germany
- However, on the demand side still a long road for the diffusion of electric vehicles, with large opportunities for further developments

**“I believe in the horse.
The automobile is only a
passing phenomenon.”**

Emperor Wilhelm II



THANK YOU

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