



Predicting the Future European Electromobility Market

Jayson Dong

Policy Officer – AVERE - The European Association for Electromobility

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GEOTAB[®]
management by measurement

The logo for AVERE, consisting of the word "AVERE" in a bold, white, sans-serif font, centered within a solid blue horizontal bar.

The European Association
for Electromobility

Predicting the future European electromobility market

By: Jayson Dong

About Us

History

AVERE – Passion to electrify since 1978

Vision

AVERE's electromobility vision for Europe is:

- A strong electromobility industry;
- Clean, quiet and healthy cities;
- Energy efficient transport;
- Independence of fossil fuels.

Members

Diverse Network across the Continent (including Turkey) : OEMs, CPOs, EV users, Public Institutions, Research & Development entities, and other relevant companies from across the entire e-mobility value chain.



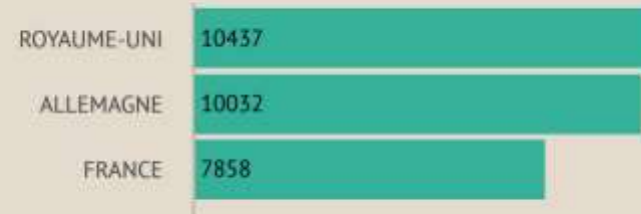
Market leaders v best in the East

TOP 3 IMMATRICULATIONS (03/07/2019)

VÉHICULES PARTICULIERS ÉLECTRIQUES



VÉHICULES HYBRIDES RECHARGEABLES



Source : Avere-France / EAFO

EV
6330

VEHICLES



Source: PSPA

Yesterday's barriers

Top 3 Barriers for EVs



High purchase cost



Limited driving range



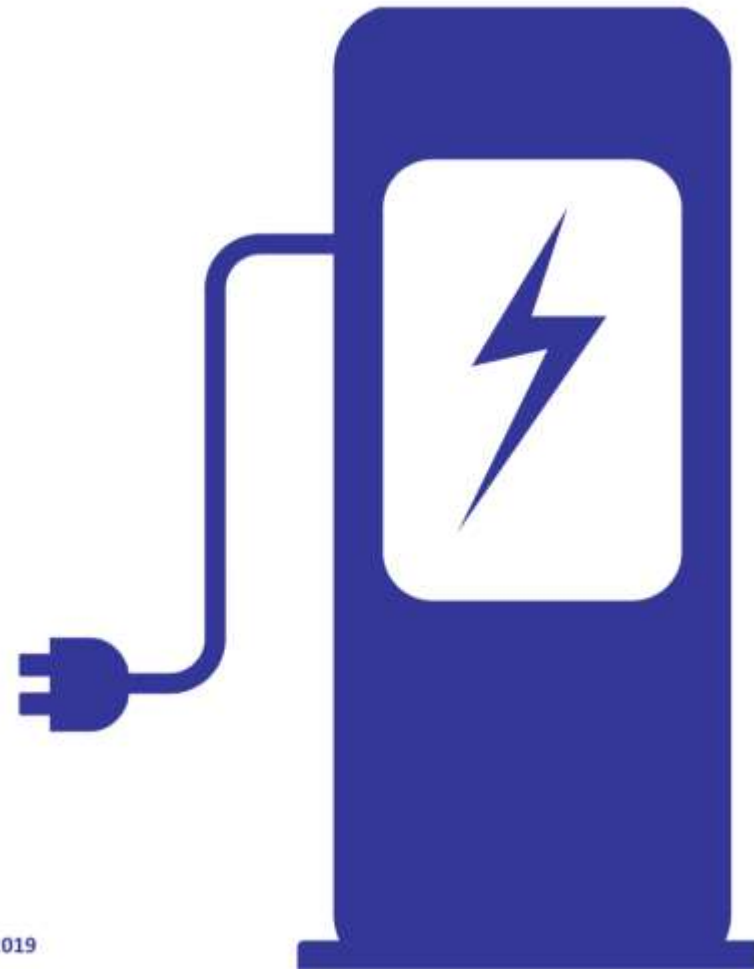
Limited charging infrastructure

Source: Joeri Van Mierlo, MOBI-VUB

Norway

85 %

USE FAST CHARGING



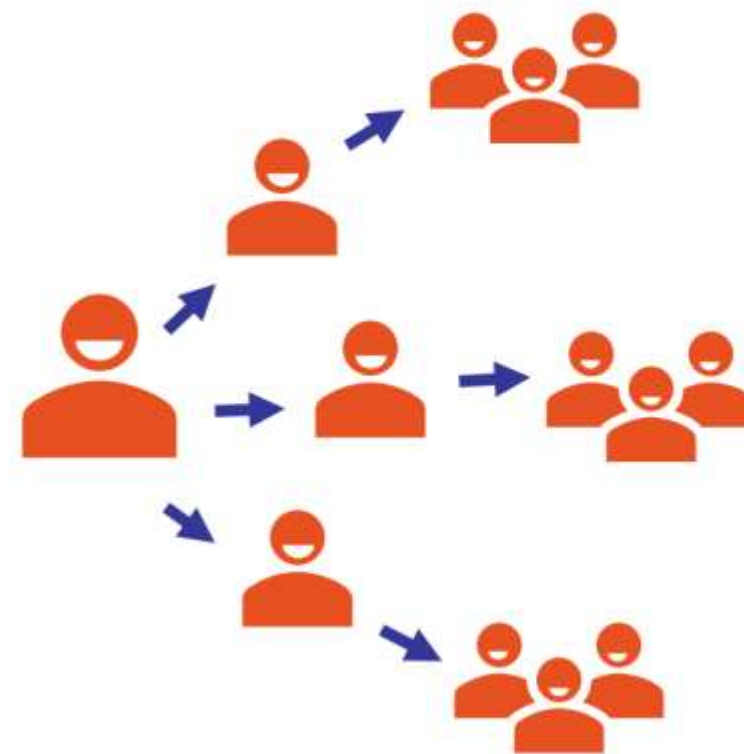
49 %

EXPERIENCE THAT THE FAST CHARGER
DOES NOT WORK OCCASIONALLY OR
MORE OFTEN



67 %

HAVE INSPIRED ONE OR MORE IN THEIR
SOCIAL CIRCLE TO BUY AN EV



But – East v West

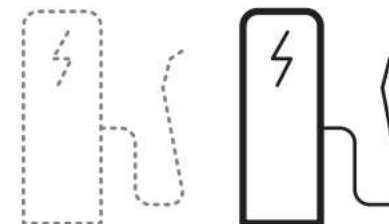


Eye opener:

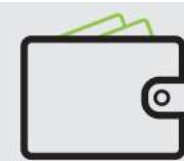
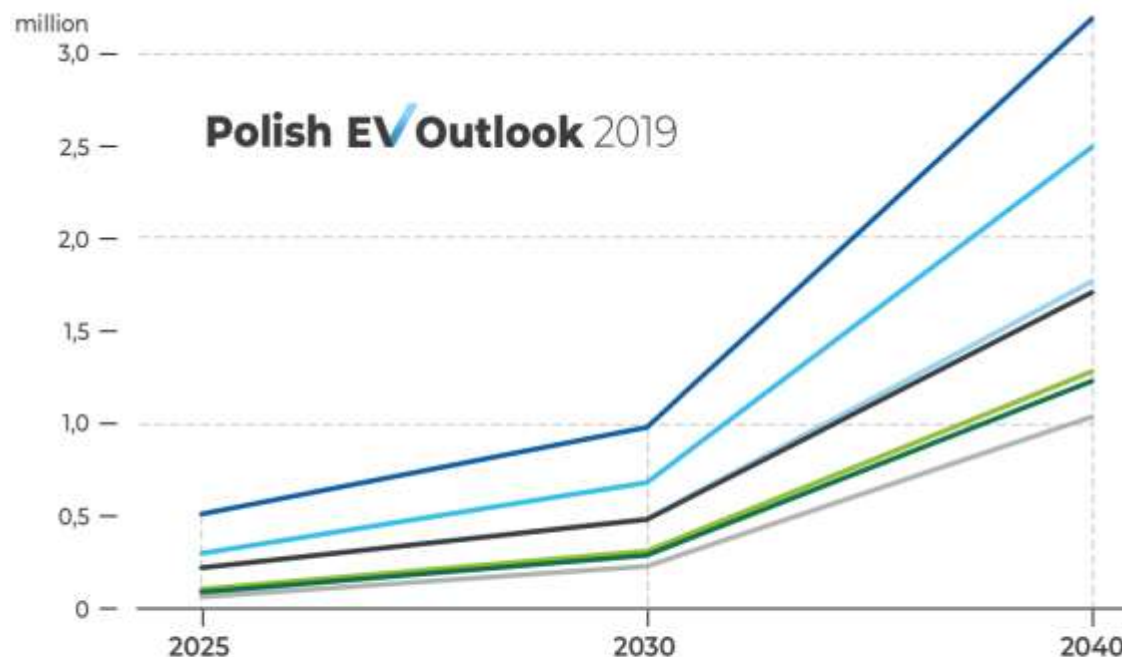
Many Slovak respondents do NOT see EVs as **enviro friendly**.

Conclusion:

More education needs to be done!



Perception of **insufficient chargers** is rampant even when people don't know how much/many



High prices



Charge time (length)



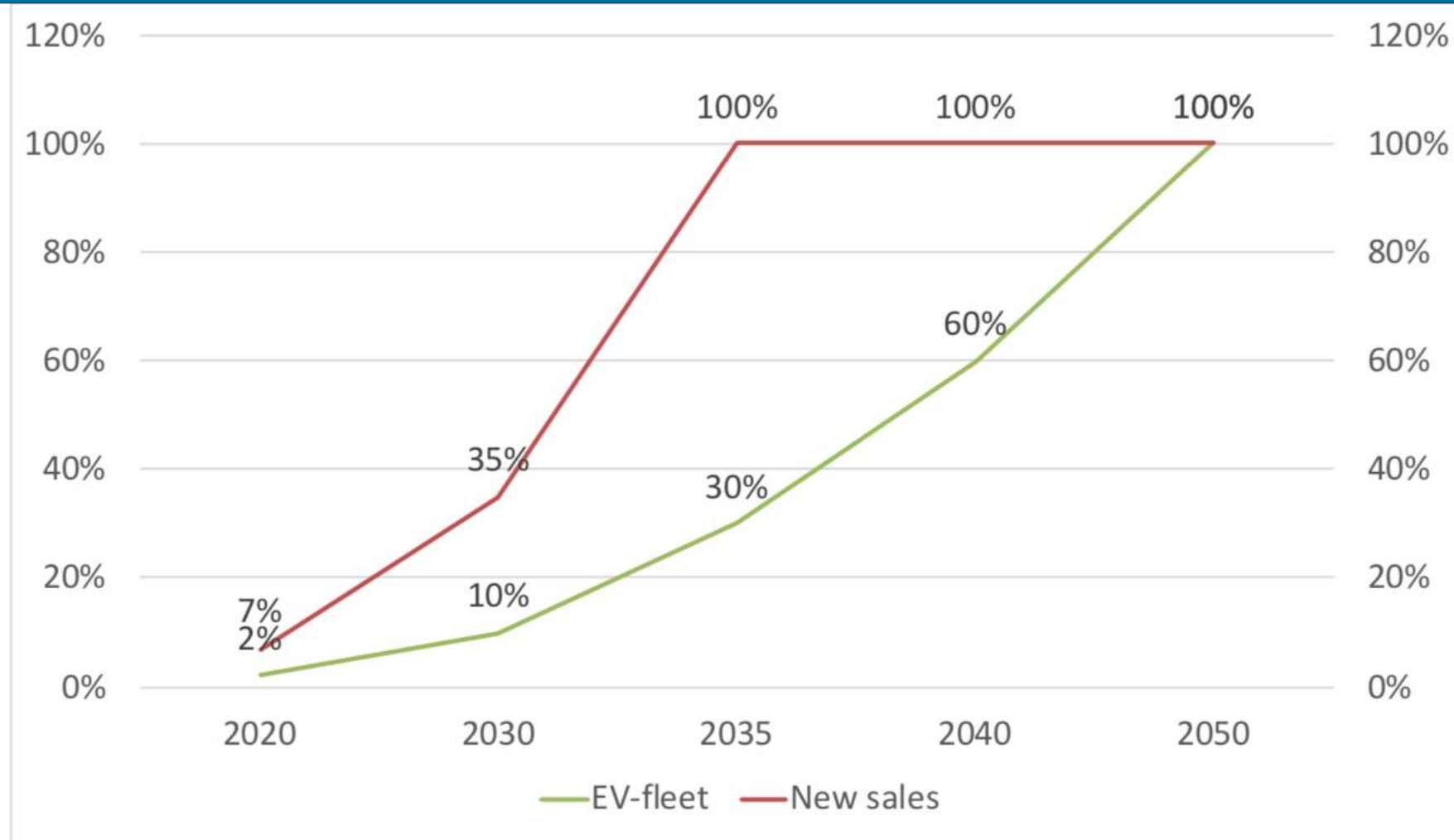
Insufficient infrastructure (perceived)



Insufficient range (perceived)

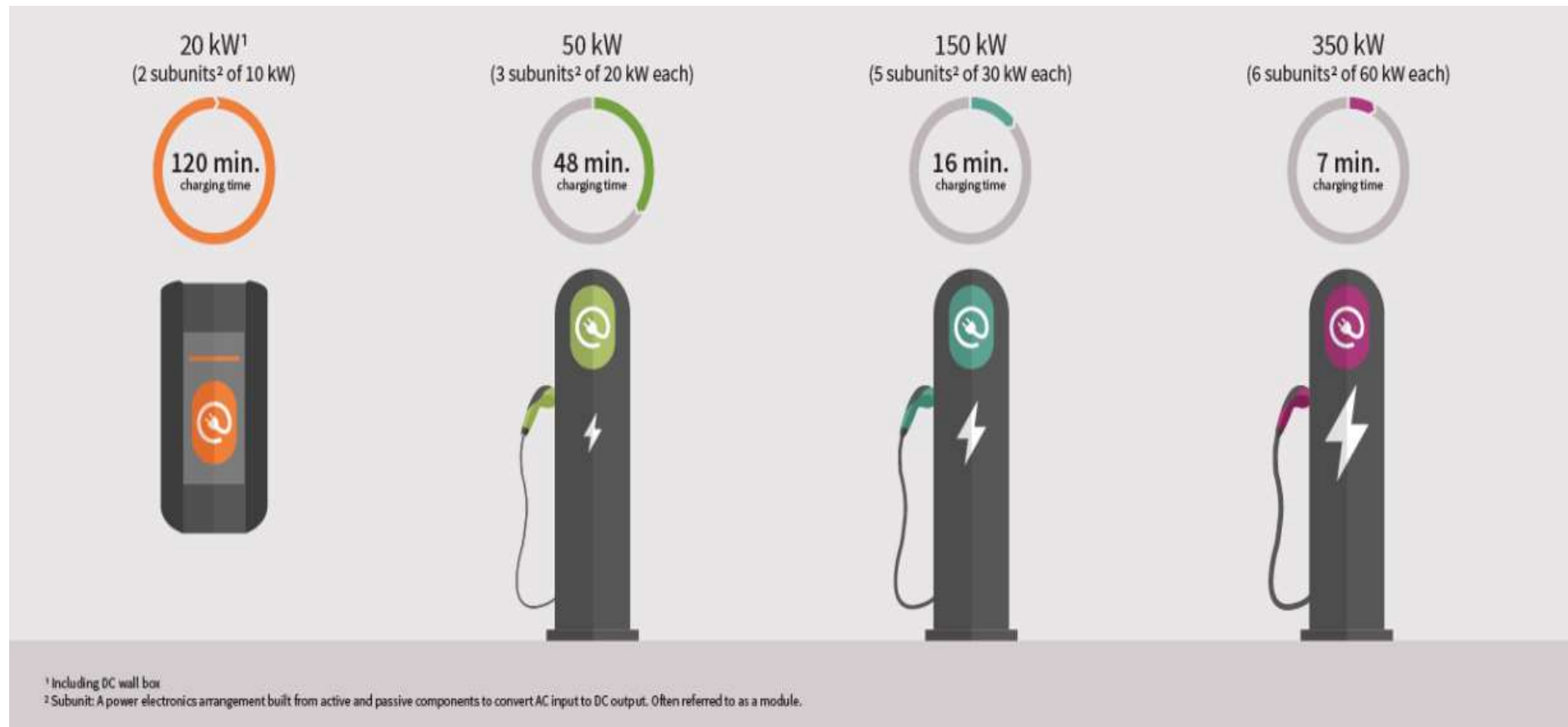
Source: Greenway

2050: 100% EV Sales



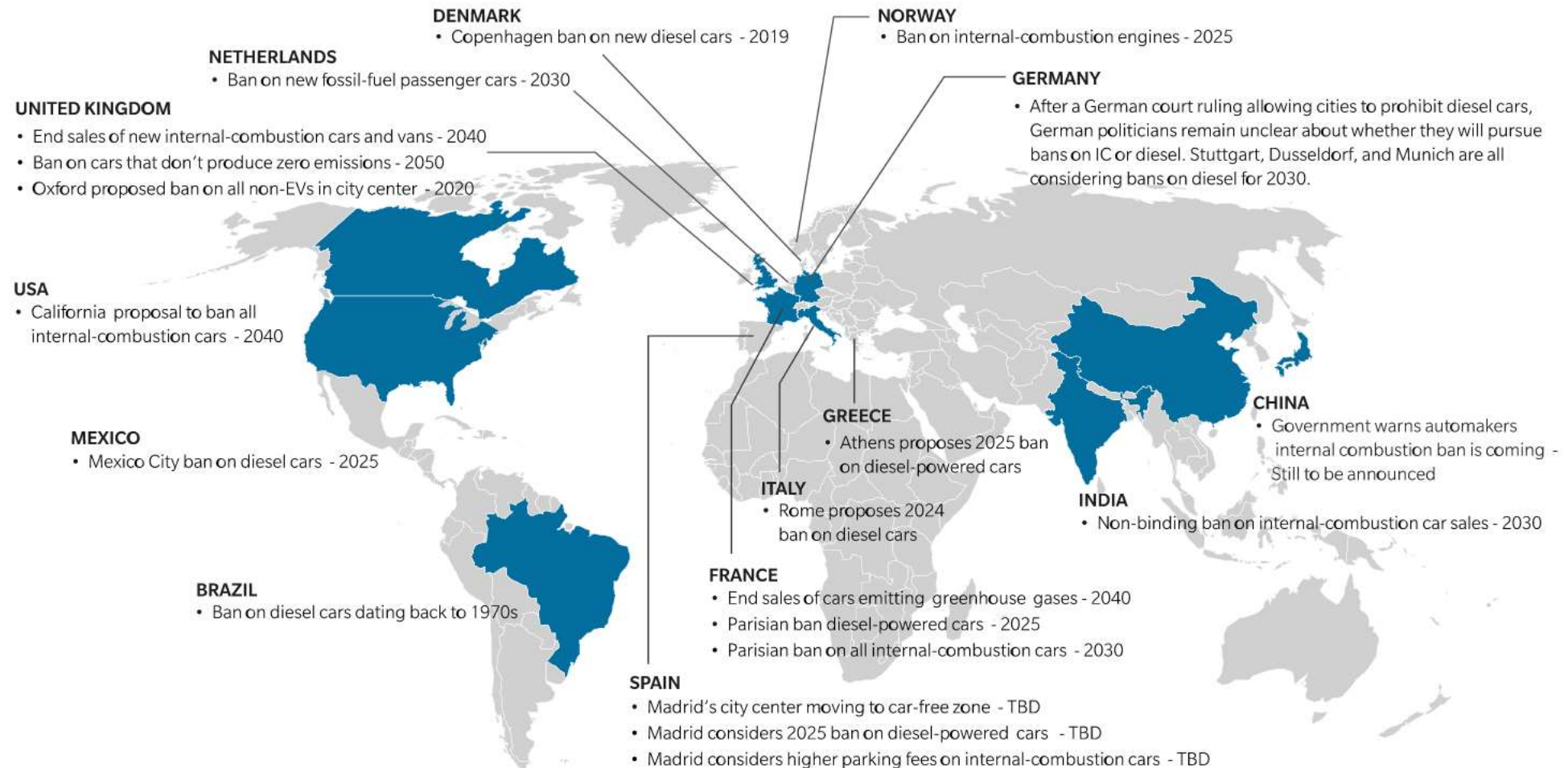
Source: Joeri Van Mierlo, MOBI-VUB

Trends: shorter charging times



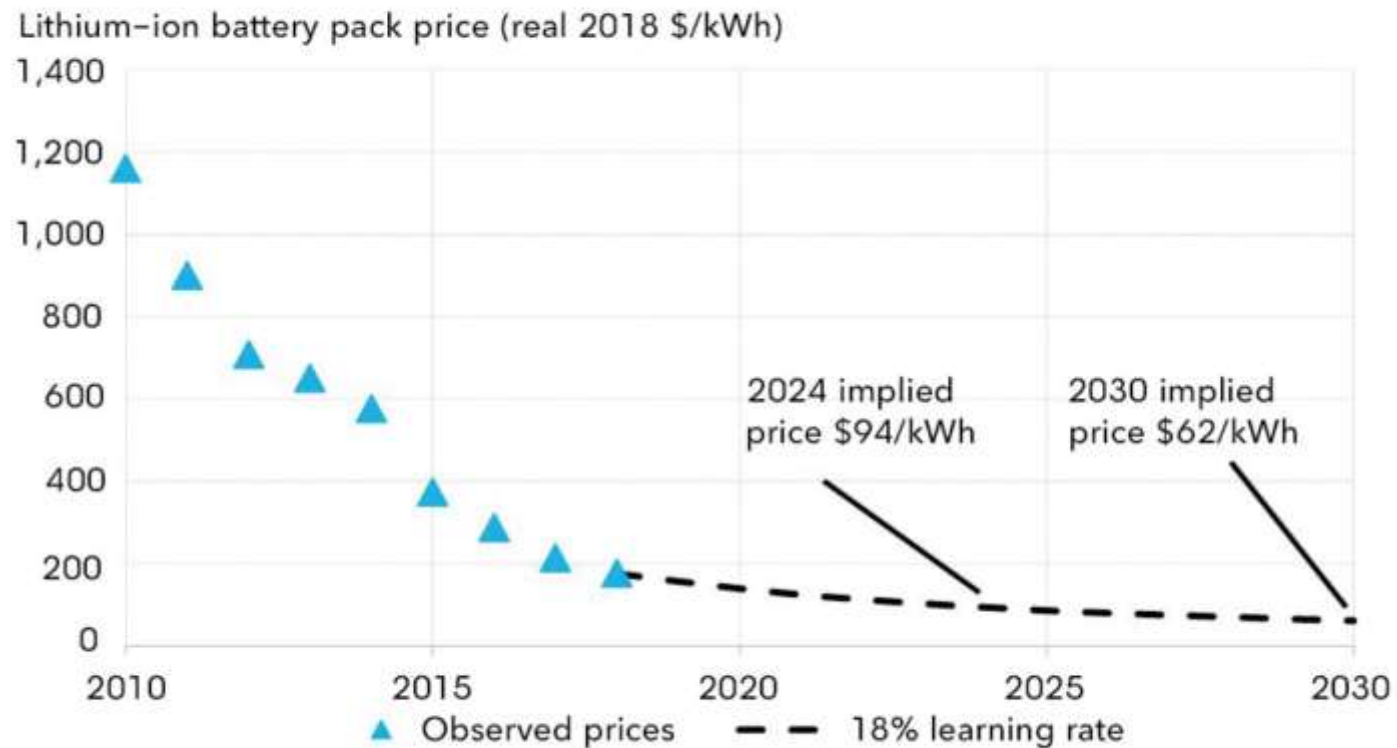
Trends: ICE bans

COUNTRIES BANNING OR CONSIDERING A BAN ON INTERNAL-COMBUSTION (IC) VEHICLES



Trends: Battery Technology

Lithium-ion battery price outlook



Source: BloombergNEF

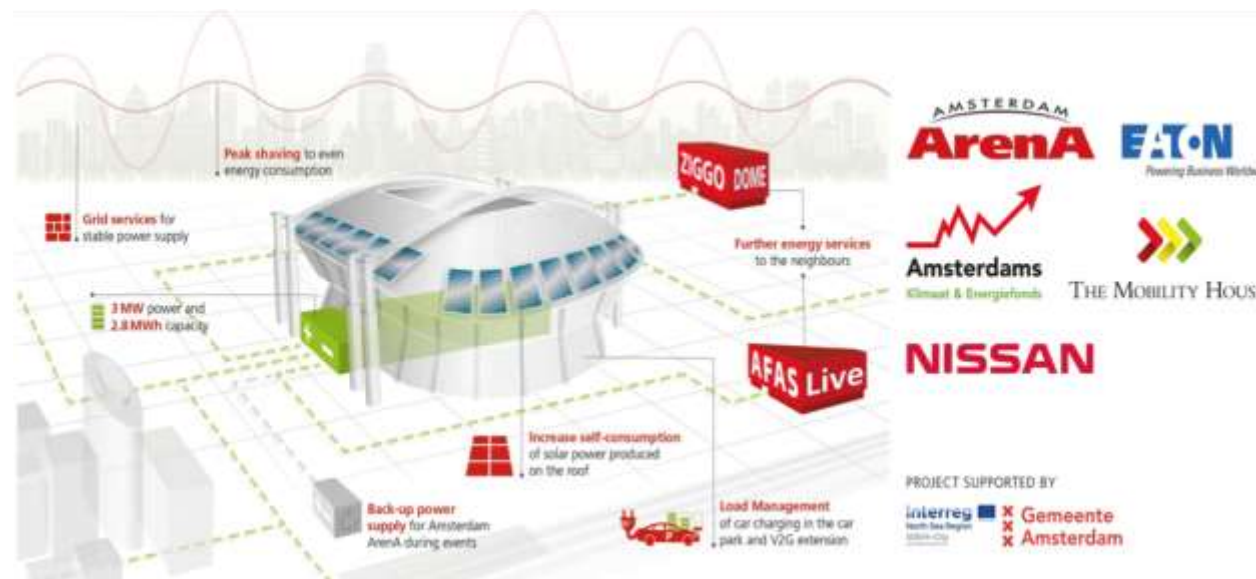
The future of e-mobility

Connected

Autonomous

Sharing

Electric

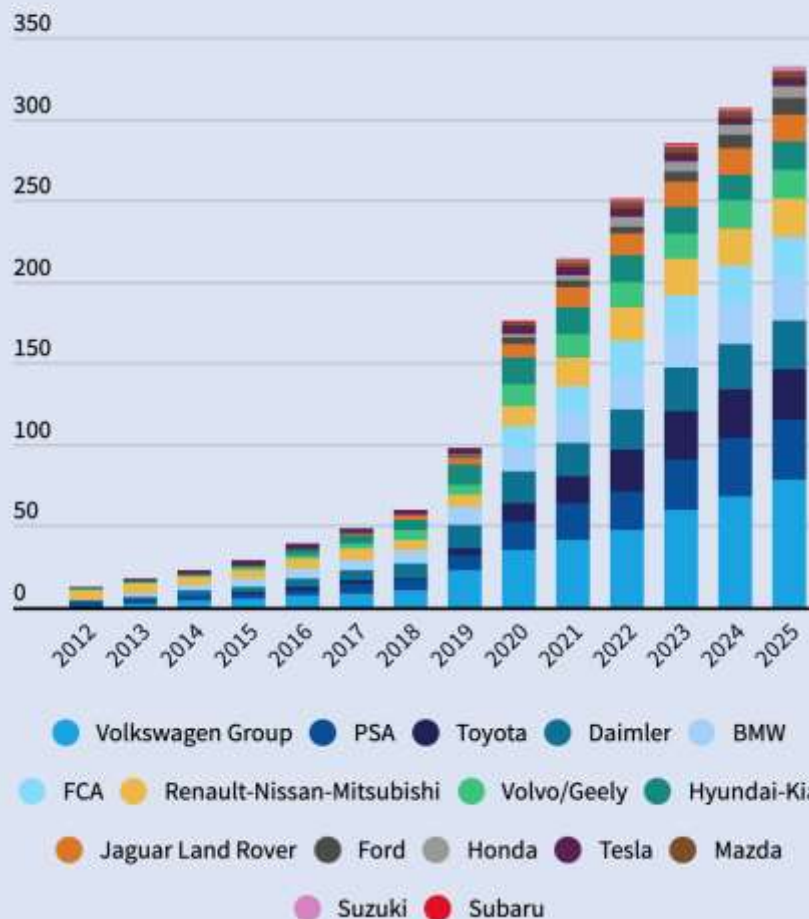


Development of the electric vehicle and electrical system: A serene feasibility and a virtuous economic and ecological contribution by 2035

15-05-2019

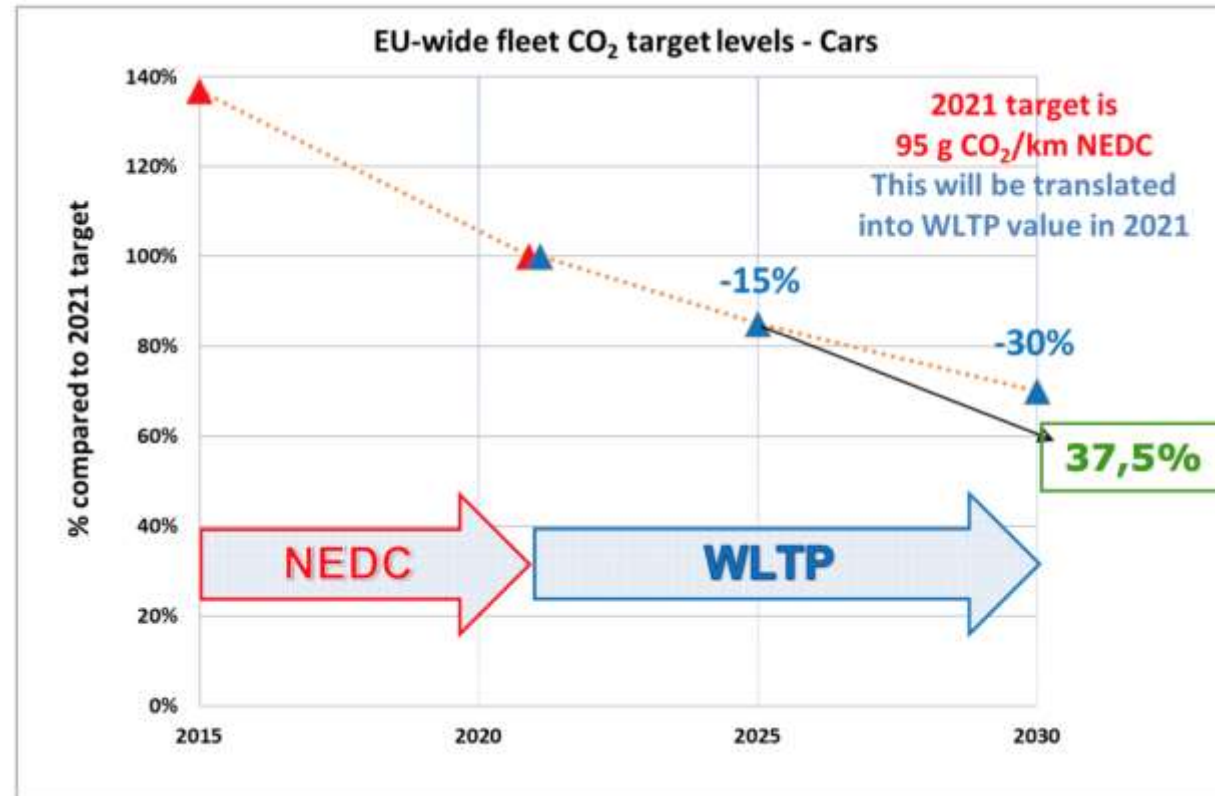
EV models

Electric car models coming to market in Europe 2019 - 2025



Stricter EU-wide Co2 emission limits

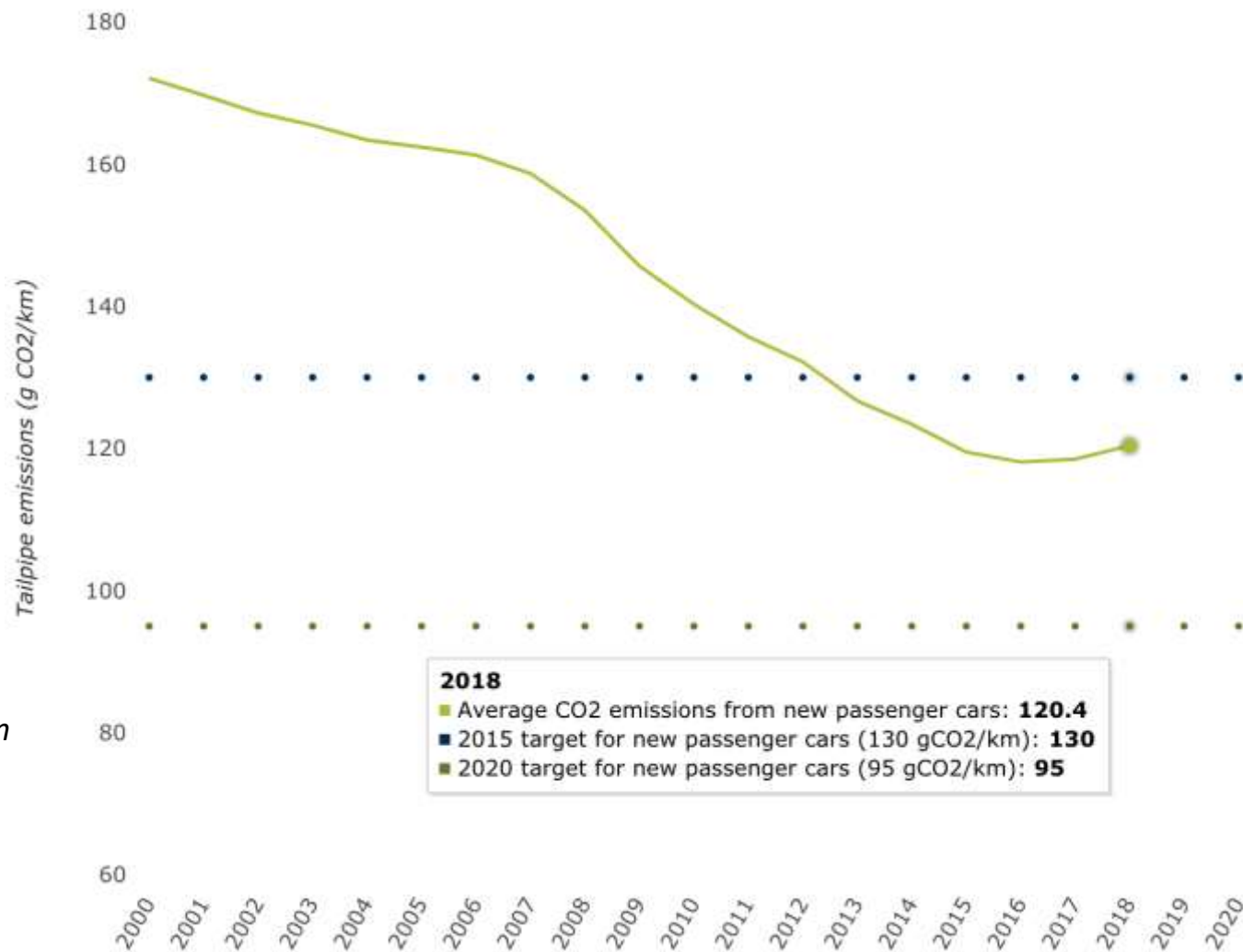
New EU fleet-wide 2025 and 2030 targets - cars



Source: European Commission

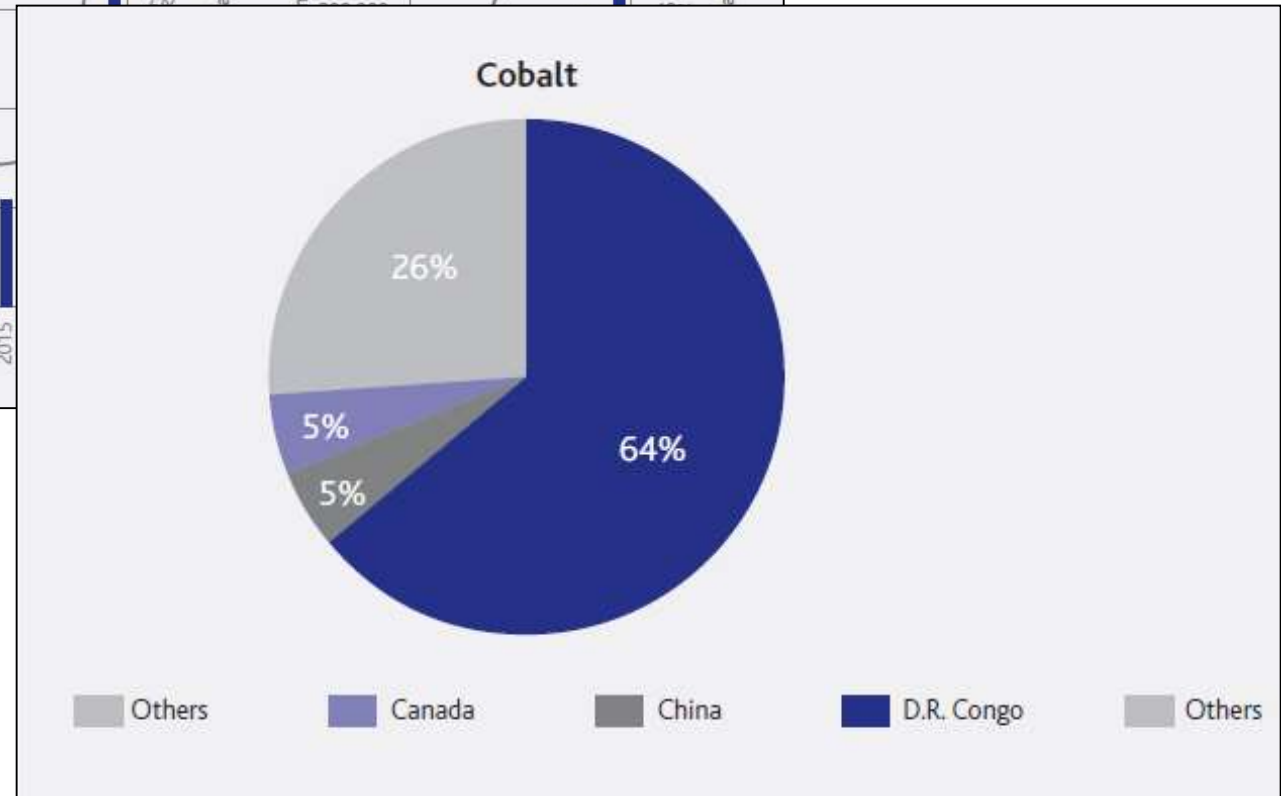
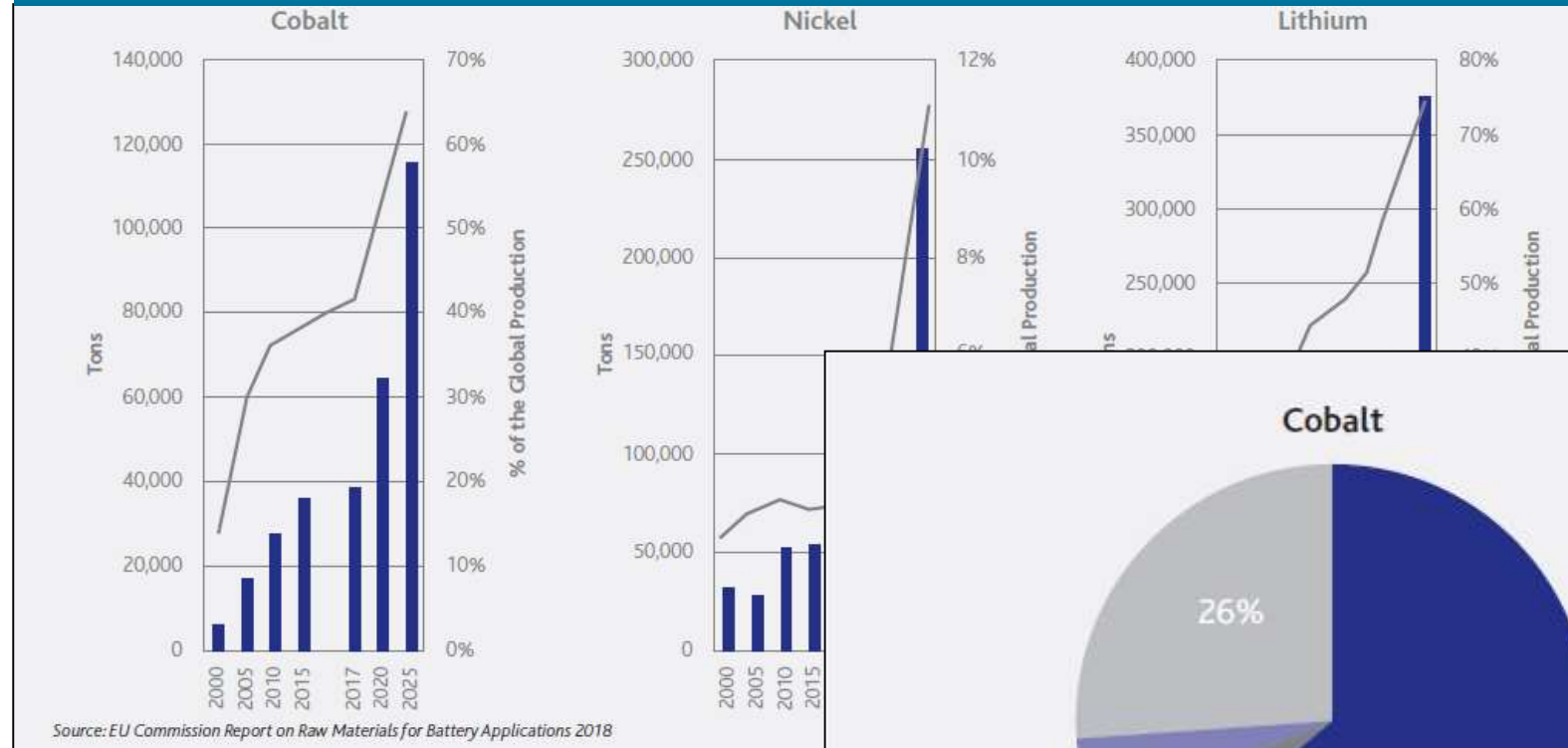
Increasing Co2 emissions

Chart — Average carbon dioxide emissions from new passenger cars

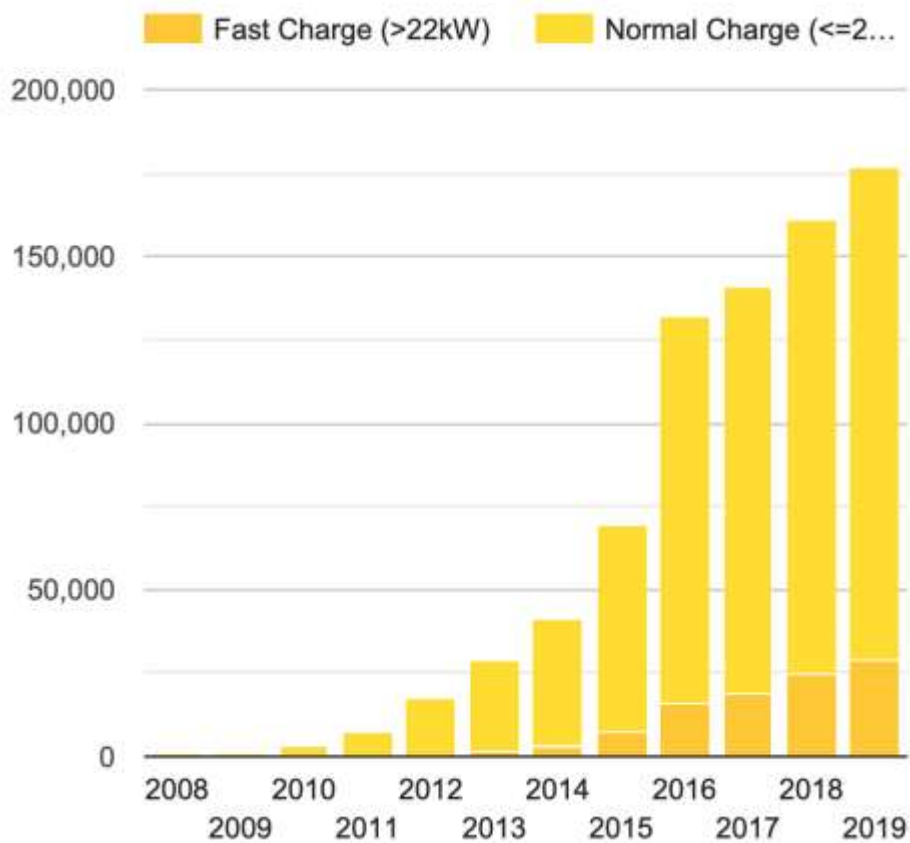


Source: European
Environmental
Agency

Raw Materials & Recycling



Playing catch up

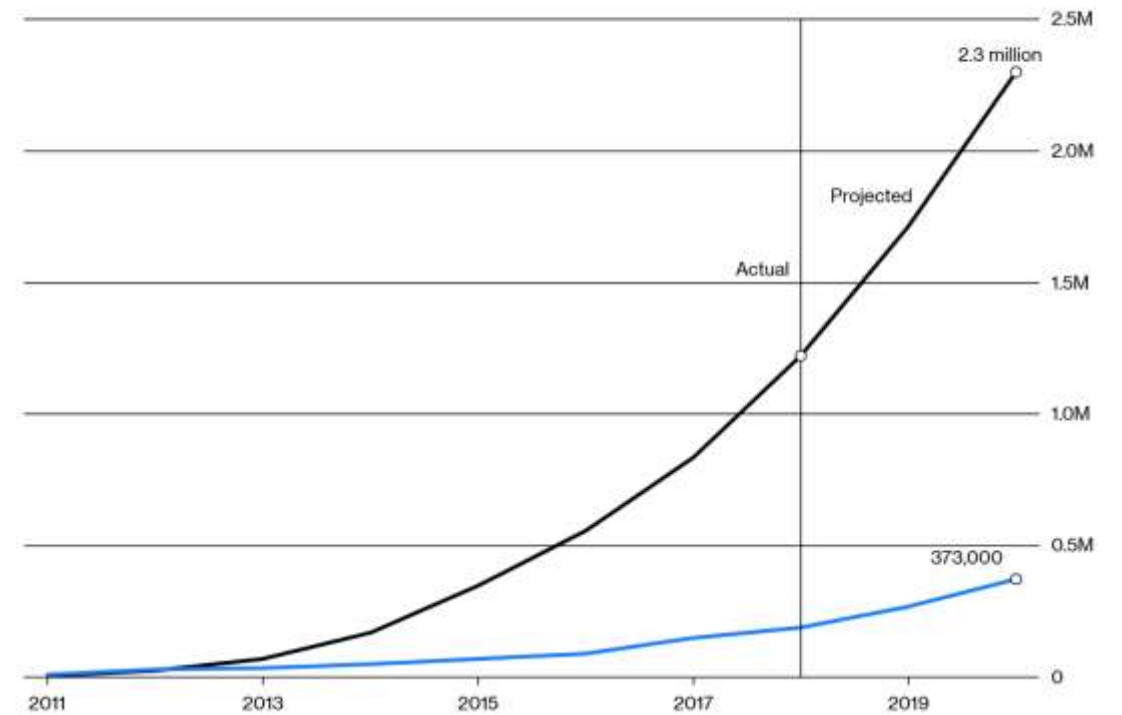


Source: EAFO

Europe Shifting to EVs

Charging network improves as EU's compatibility standards take hold

EV fleet size / Charging stations



Source: Bloomberg New Energy Finance

In conclusion

The question of sustainable transport is complex and lot will change, but:

The future belongs to those who recognize the **opportunities** brought forward by change.

‘Not taking risk’ is also very risky

