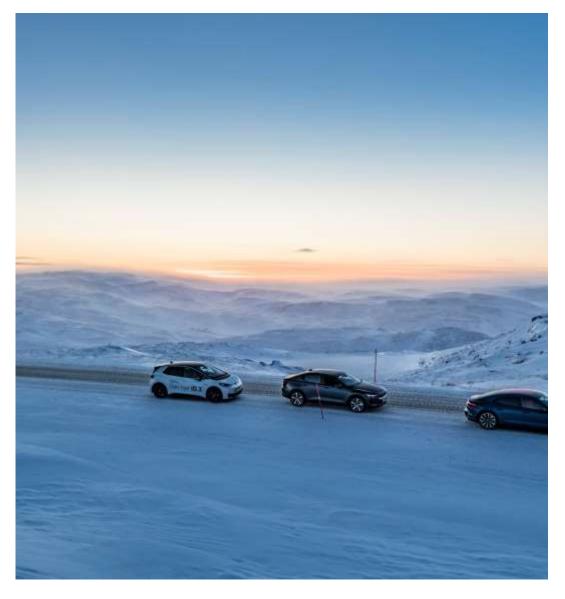
The Norwegian EV Experience

Helene Busengdal

Advisor, Analysis and Advisory Services







Agenda

- Norway's EV status, policy and development
- Charging and challenges
- Conclusion



Norwegian EV Association

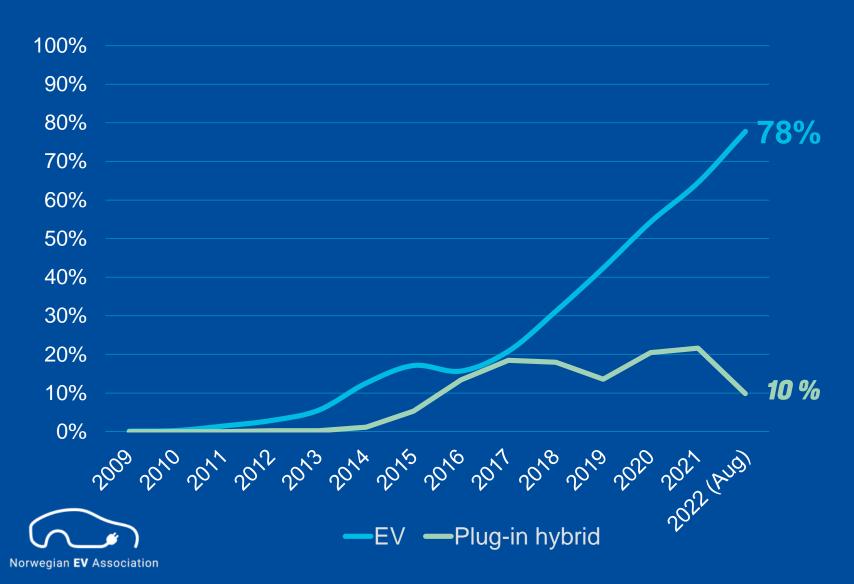
- Non-profit NGO
- Over 120,000 members (EV drivers)
- 50 employees

Our goal: Electrify transport as fast as possible!

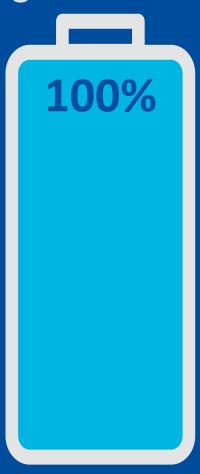




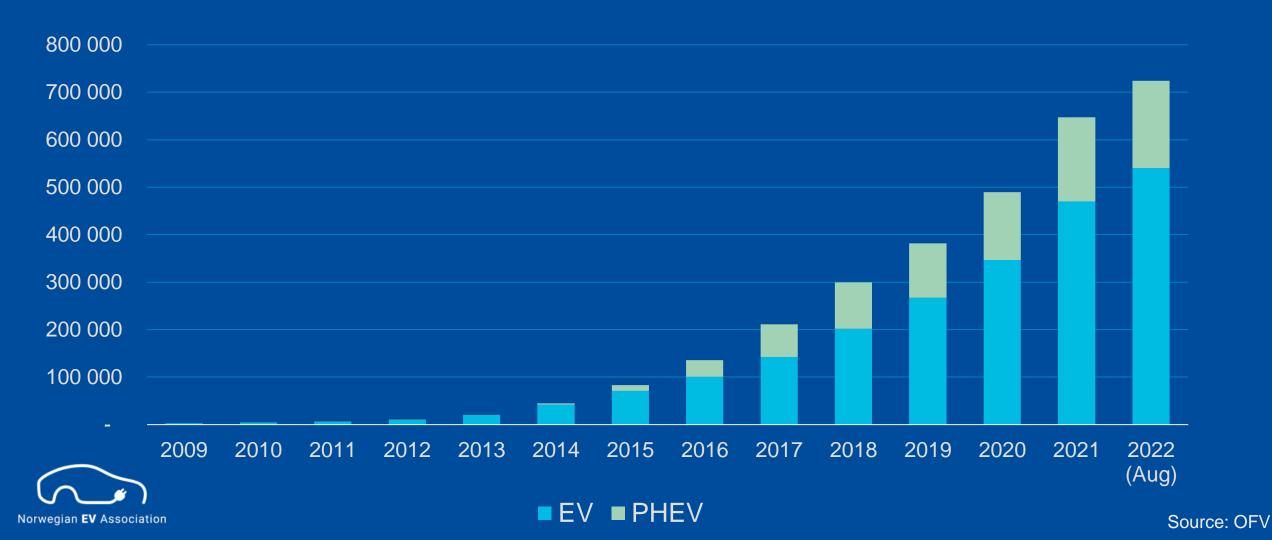
Market share new sales



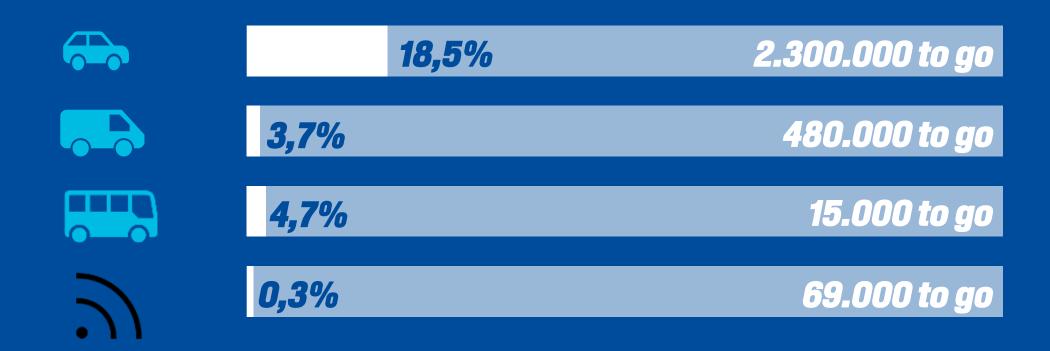
Target for 2025:



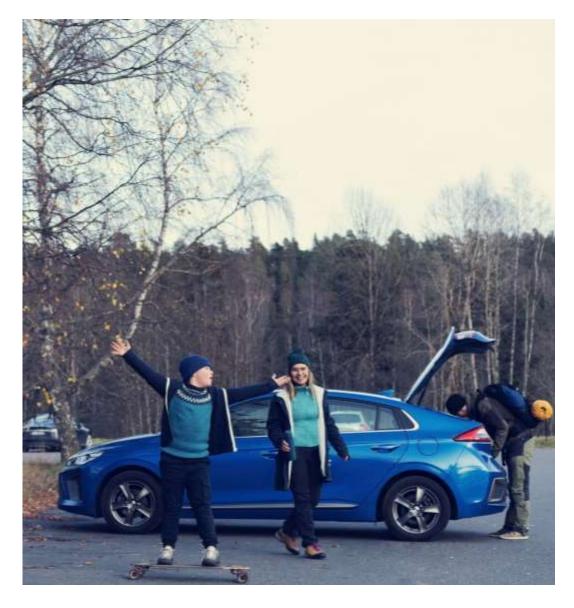
525 000 EVs in Norway (+180 000 PHEVs)



Are we there yet?







Support is key

Buying or leasing:

- No purchase tax
- Zero VAT from 2023 VAT will be introduced after the first NOK 500 000 of the purchase price
- LCV and LEV support schemes

Owning:

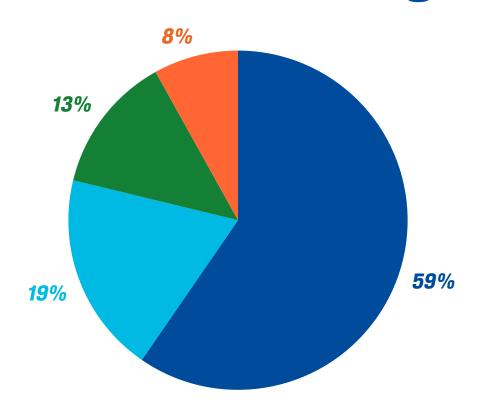
- 70% annual road tax, 100% from 2022
- 60% company car tax, 80% from 2022

Using:

- Toll roads, ferries, parking max 50%
- Regulated access to bus lanes



What was most important to you in your decision to start driving an EV?



Technology and innovation

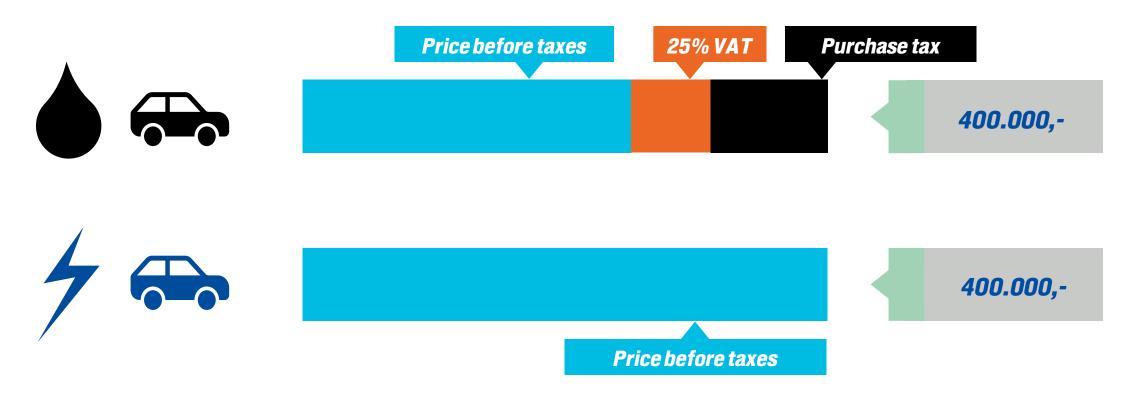
Environmental considerations





The car's driving characteristics and comfort

Purchase taxes





How the purchase tax works:







Skoda Kodiaq (diesel)

2021: 163 808 NOK

2022: 184 387 NOK

Toyota RAV4

(plug-in hybrid)

2021: 0 NOK

2022: 43 865 NOK

Ford Mustang

(BEV)

2021: 0 NOK

2022: 0 NOK



Bonus Malus system – polluter pays



Tax polluting cars Use revenue to subsidize EVs

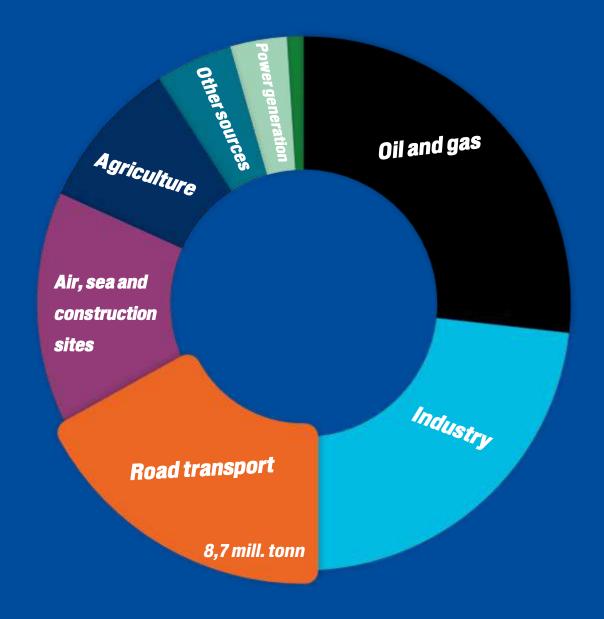




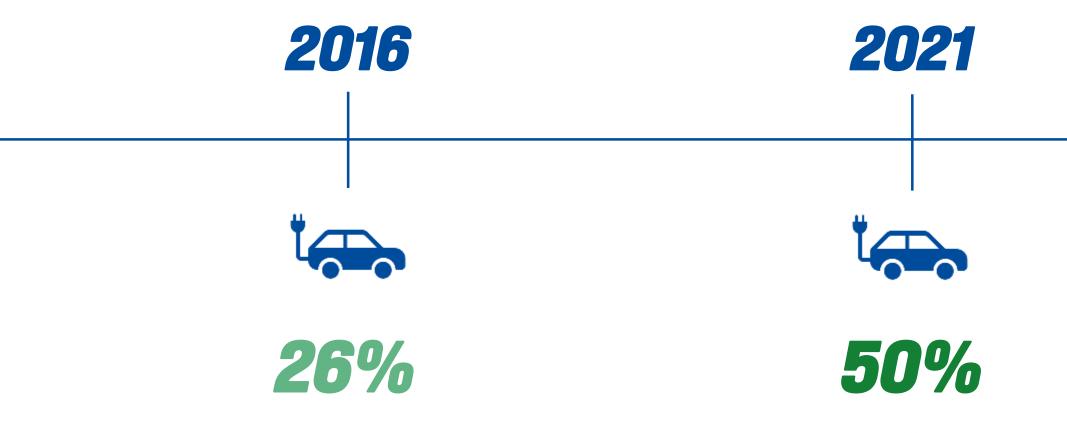


Norwegian Emissions

- Road transport 17%
- Up 13% since 1990
- Reduced by 4,7 % from 2019-2020



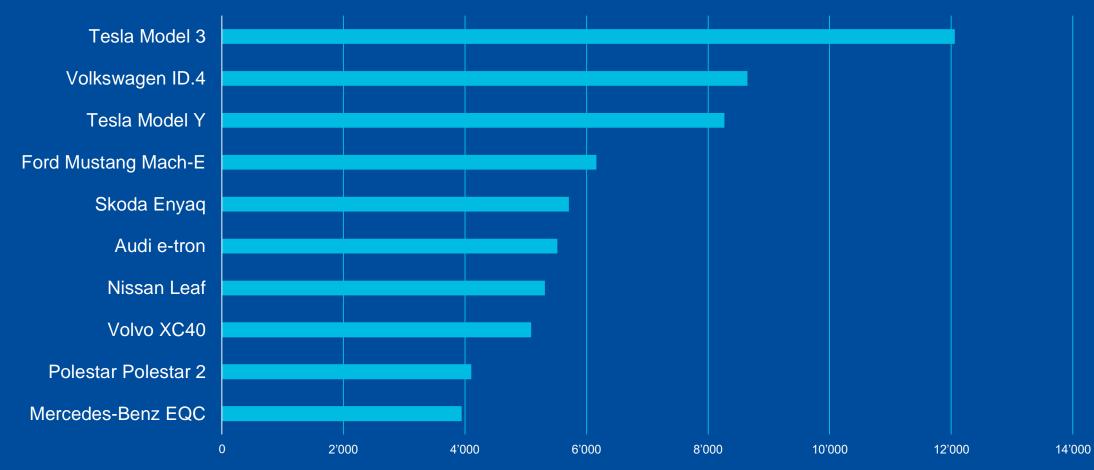




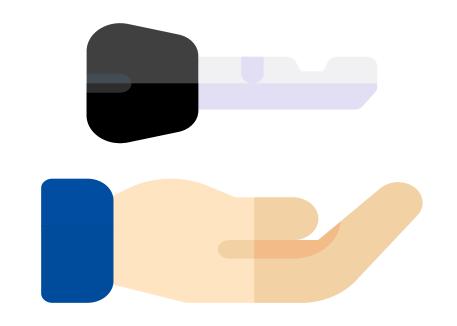
Only have EV's in their household



Top 10 selling EVs 2021







69%

ARE FIRST TIME EV
OWNERS



97%

have their own parking spot

80%

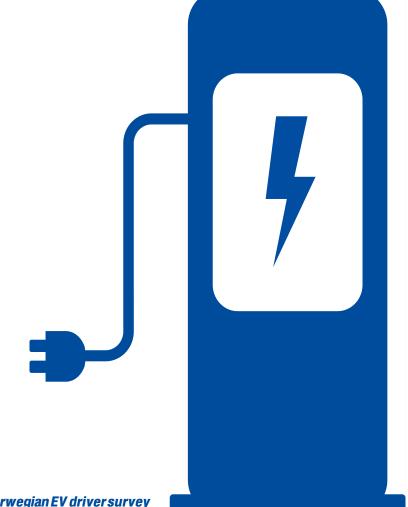
of charging at home





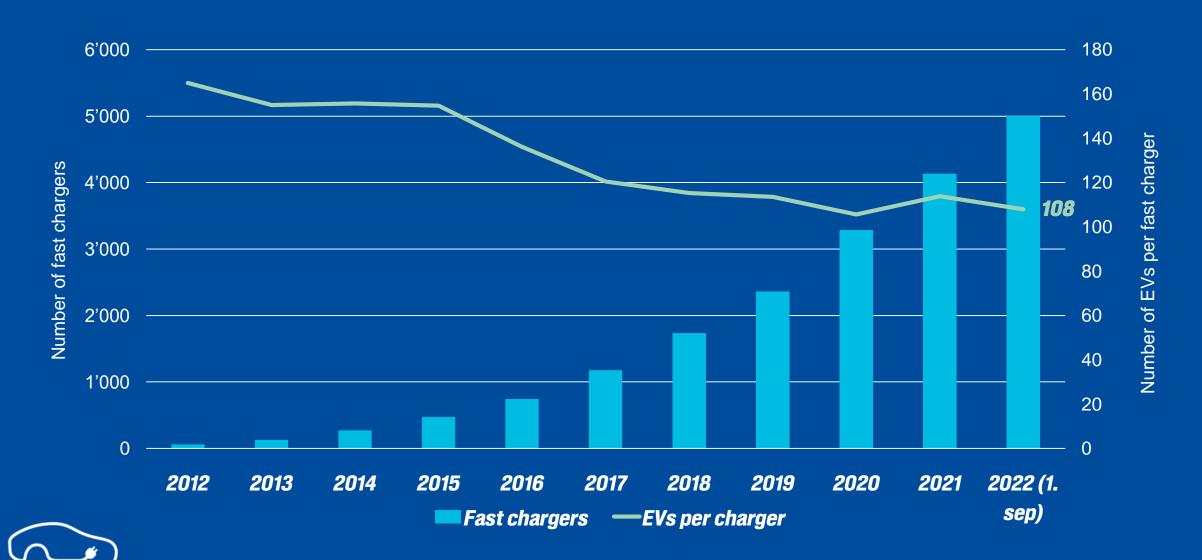
87%

use fast charging





Number of fast chargers and EVs per fast charger



Norwegian EV Association





Fast charging

 48 percent has experienced ques sometimes or often

 80 percent have experienced that the chargers do not work





Pricing and payment systems

- Increasing number of operators
- Price per kWh is finally taking over
- Payment by RFID tags, apps, SMS,
 QR (bank card in browser)













---- VATTENFALL



Charging is difficult

 3 out of 4 find the number of charging operators and apps complicated

75 percent want card payment





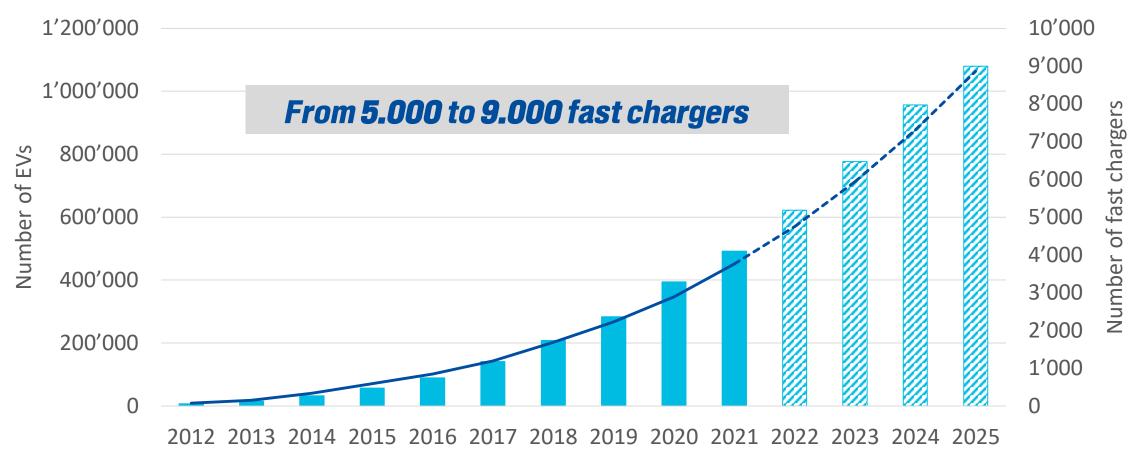
Card payment

- ✓ Charging is vital infrastructure
- ✓ Known, easy and privacy
- ✓ Does not demand a customer relationship





From 500.000 EVs to over 1.000.000





Fast chargers

Happy EV drivers

93%

are satisfied or very satisfied with being an EV driver





Conclusion





Strong incentives still necessary
Top priority: purchase incentives

On track for 2025-target: only selling ZEVs

EV drivers are happy











Thank you!

