



# Creating a Used Market for EV's

An Update from Europe on Incentives for Used EV's

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Co-Founder

MA5 USED VEHICLE CONSULTING GROUP





## **MA5 Used Vehicle Consulting Group**



#### **Johan Verbois**

- Experience
  - Sales & marketing positions at Peugeot, Mercedes and Opel
  - Director Fleet, Remarketing & Network Development Toyota Motor Europe
- Now
  - Co-founder MA5 Used Vehicle Consulting Group
  - Board member CARA (European Car Remarketing Association)
  - Remarketing Expert for Global Fleet & Fleet Europe



## **Board member of Car Remarketing Association (CARA)**

ARVAL BNP PARIBAS GROUP

**AUTOROLA** 

CAR WX

• RV experts: Autovista, Autorola, ...









• Auction: BCA, Manheim, Adesa, ...

• Digital: Modix, Adevinta, ...

• Traders: Andex, carconnex, ...



**Adevinta** 













**ADESA** 













nterprise



Europcar

































carconnex

AUTO 1.com







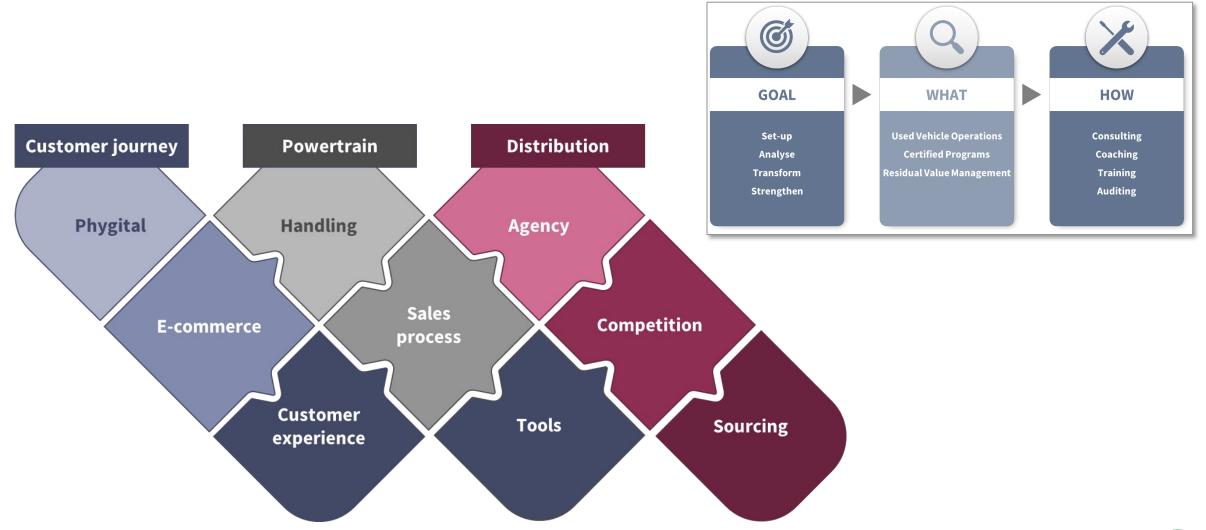








## Assist the transition in distribution, powertrain & customer journey



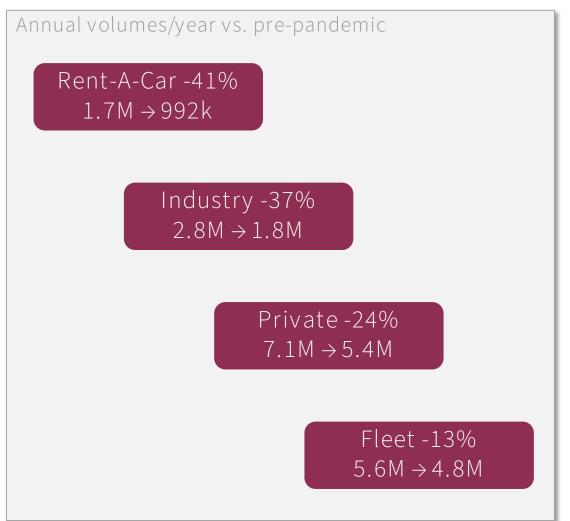


## The European market: electrifying through fleets



#### Lost 13Mio registrations in last three years







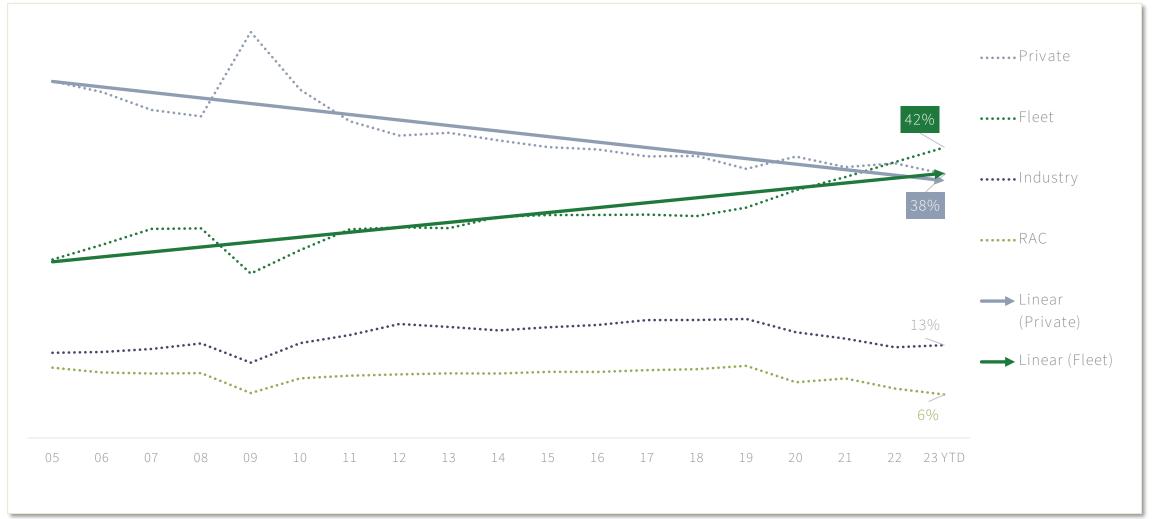


#### Price index grew with +20% to +30% vs. jan 2000





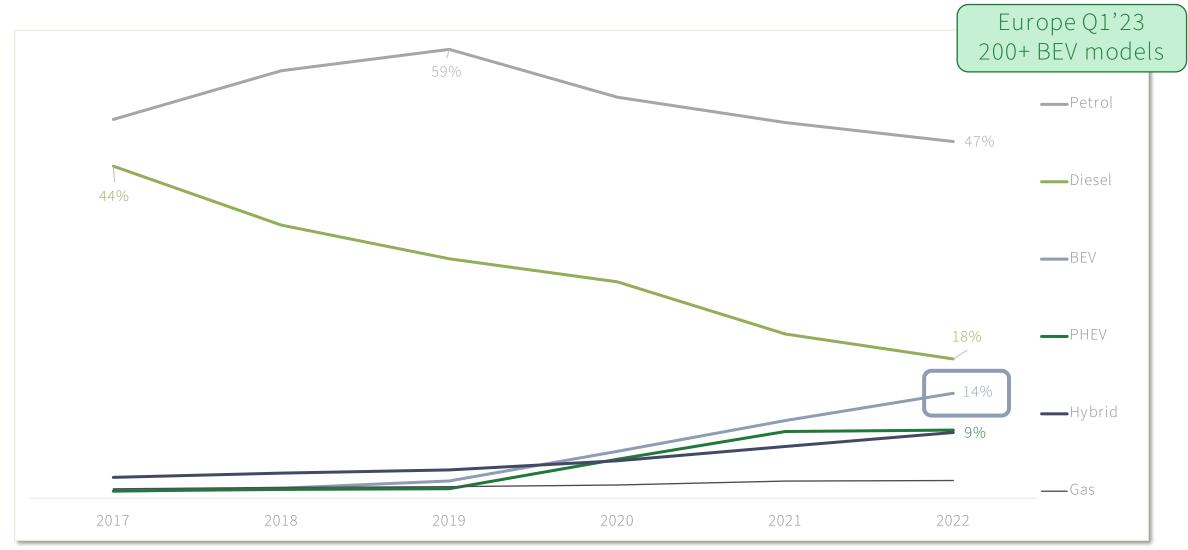
#### **Europe = fleet market (only 38% private registrations)**





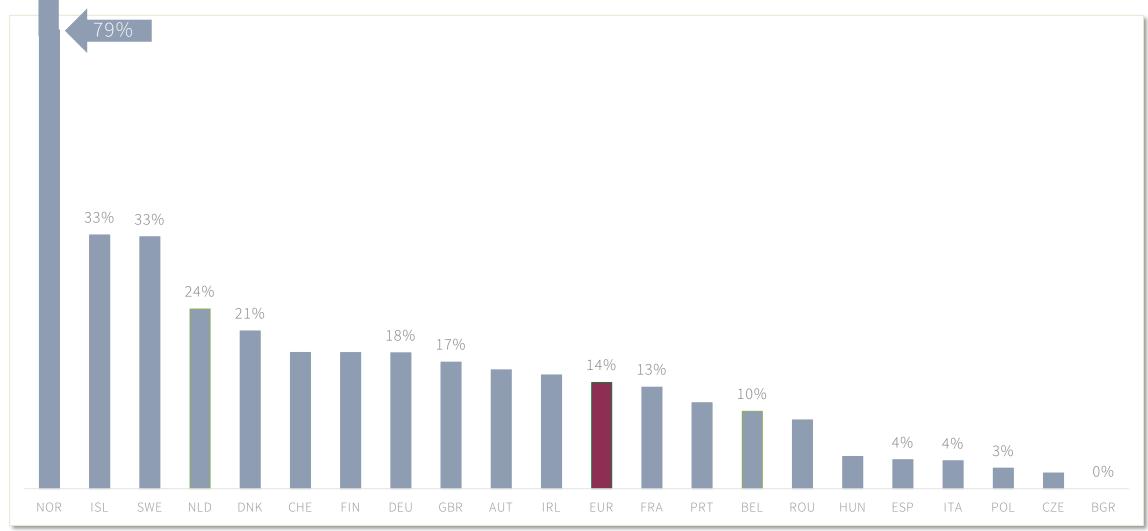
#### BEV gradually increases to 14% of European PC market

Australia Q1'23 ±40 BEV models



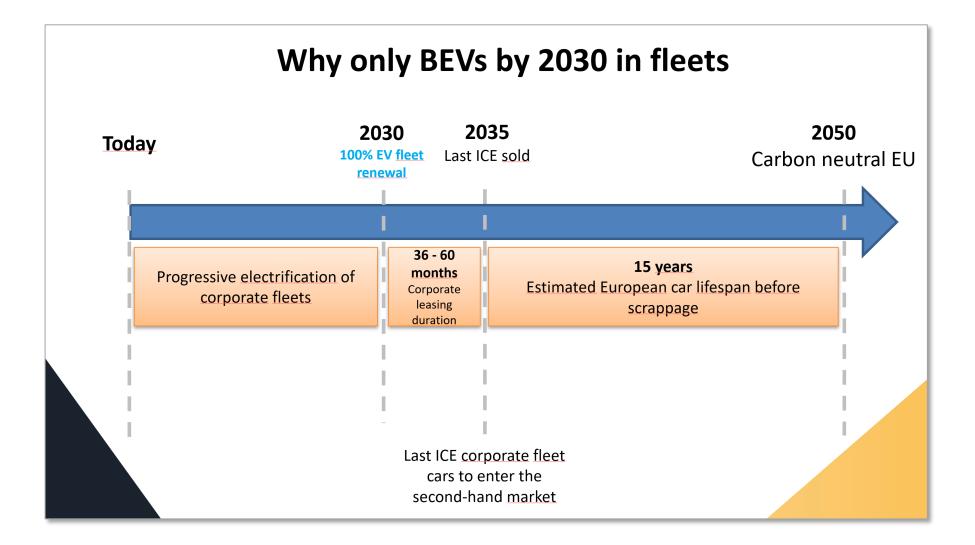


## Very different view per market







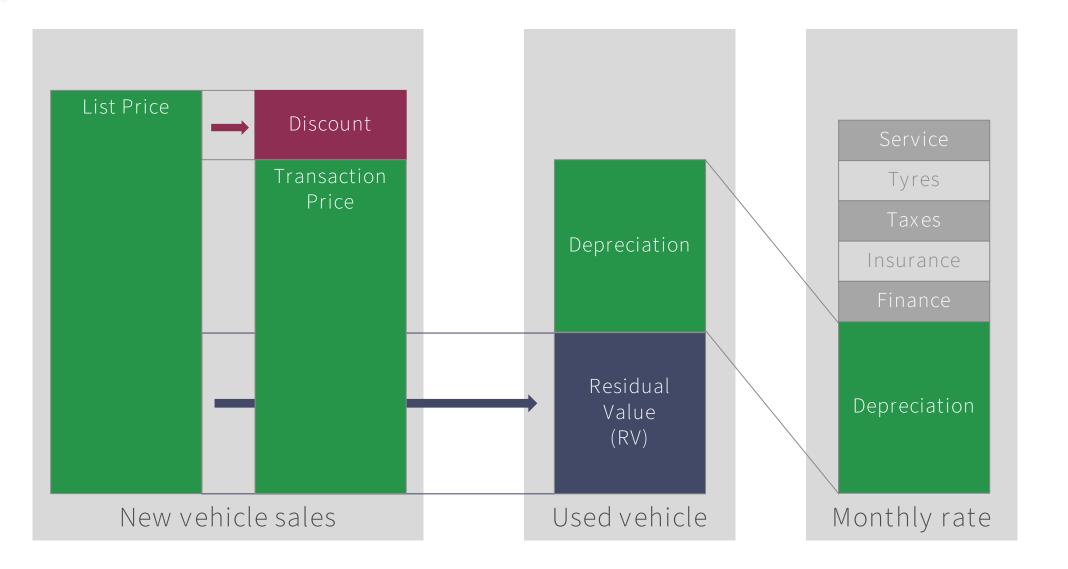




## We need to take ownership and prepare the future, now!!!

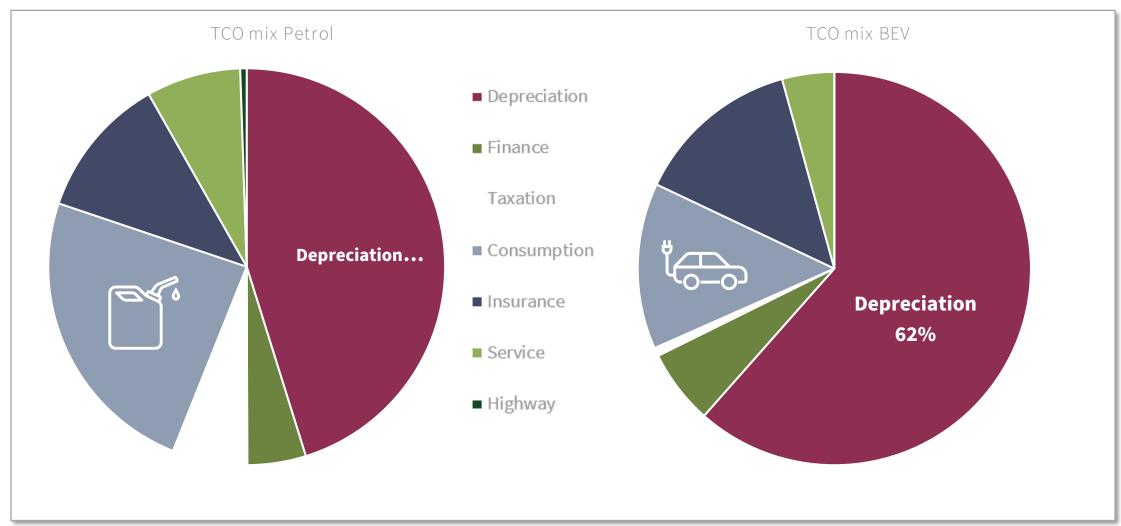


#### Residual value's higher importance for BEVs





#### Residual Value is even more critical for BEVs





#### So what about Residual Values?





#### The experts











#### BEV residual values struggle in UK used-car market

18 May 2023



#### Monthly Market Update: Pressure mounts on RVs as supply outweighs demand in March

03 April 2023



In absolute terms, residual values (RVs) of three-year-old used cars rose year-on-year across European markets last month. While values represented as a retained percentage of the original list price (%RV) also grew, it was to a lesser extent across the board.

Austria saw the greatest increase in %RV at 13.6%, with Italy and Germany following closely behind, posting 11.4% and 10.7% respectively. Meanwhile, the UK was the outlier with a growth of just 0.5% in %RV terms compared to March 2022.

This was not the only instance where the UK went against a larger market trend. Alongside Italy, both countries saw demand outstrip supply. Other European markets experienced the reverse with a greater number of used-car adverts than sales, putting more pressure on RVs.

The %RV of battery-electric vehicles (BEVs) increased across markets, except in the UK where a 9.6% decline was recorded. However, some carmakers recently lowered new-BEV prices to attract consumers outside the early-adopter sphere.

This will most heavily impact the absolute RVs of directly comparable used cars, including very-young used models, demonstrators, and rental vehicles. While older models will also be affected, it will take longer for this effect to cascade.

#### Recent Tesla Price Cut Will Have A Negative Effect On Resale Prices

If you bought a Tesla before the January price drop, your car's resale value will still be affected



Jan 19, 2023 at 10:43am ET 28 9



By: Andrei Nedele

Tesla cut the price of all its models in many markets by as much as 20 percent in January and while it did spur sales and make inventories drop, it also had a negative effect. All the people who bought one before the price was dropped say they feel cheated, especially since the new price affects the the value of their vehicle.

Automotive News quotes Marianne Simmons, a self-confessed "Tesla fan girl" from Naples, Florida who bought a brand new Model Y Performance in September of 2022, for which she paid over \$77,000. Now that exact same vehicle would cost around \$13,000 less and she says

> I feel like I got duped. I feel like a got taken advantage of as a consumer. Right off the bat, I'm out \$13,306. It's such a large reduction that it's going to affect a lot of people who just bought a vehicle.

I would not buy a Tesla again. That's saying a lot for me. I was a huge Tesla fan girl. I'd go with a competitor like Lucid or Rivian

Another Tesla buyer who is upset is 46 year-old Jack Bradham from Charlotte, North Carolina, who ordered his Model Y Long Range late last year and was initially expecting to take delivery in early 2023. However, he got a call from Tesla that he could get his car around Christmas, which he did, paying \$69,000 for a vehicle that literally a few days later would have cost about \$12,000 less.



## **Key performance drivers (5 mentioned today)**









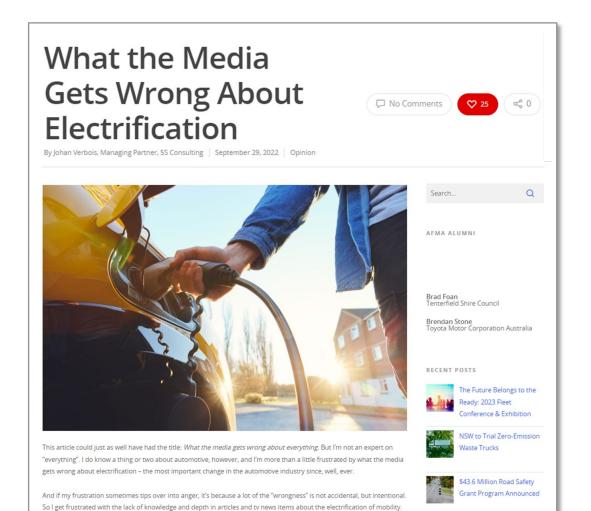


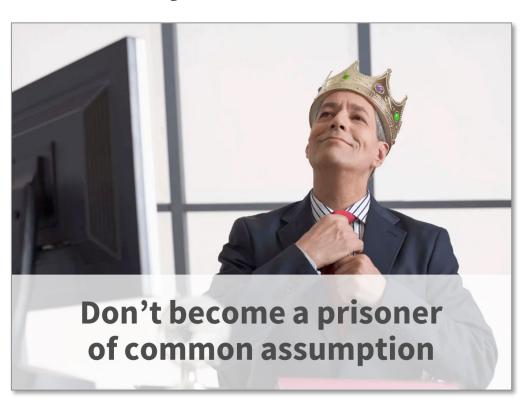


## **Focus on facts**



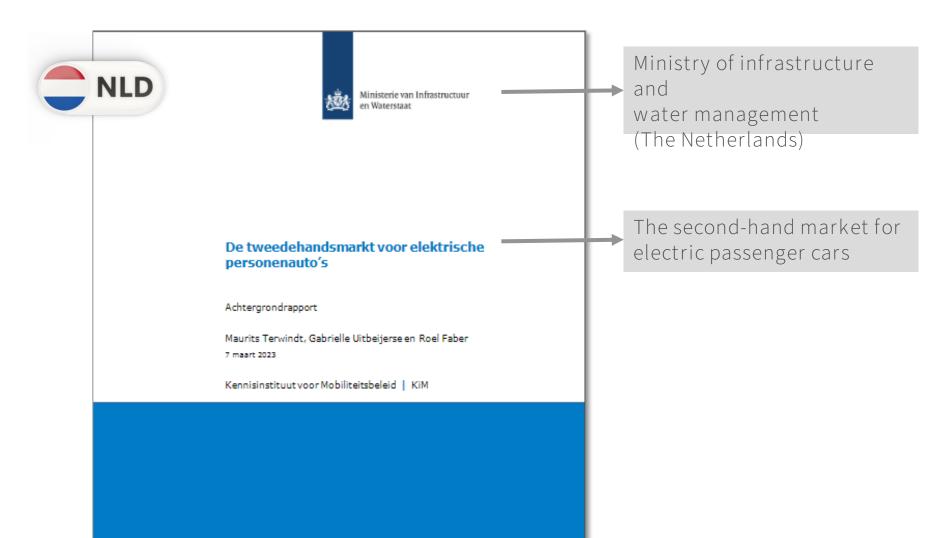
#### Build knowledge and support future used BEV buyers







#### **Understand the second hand market**

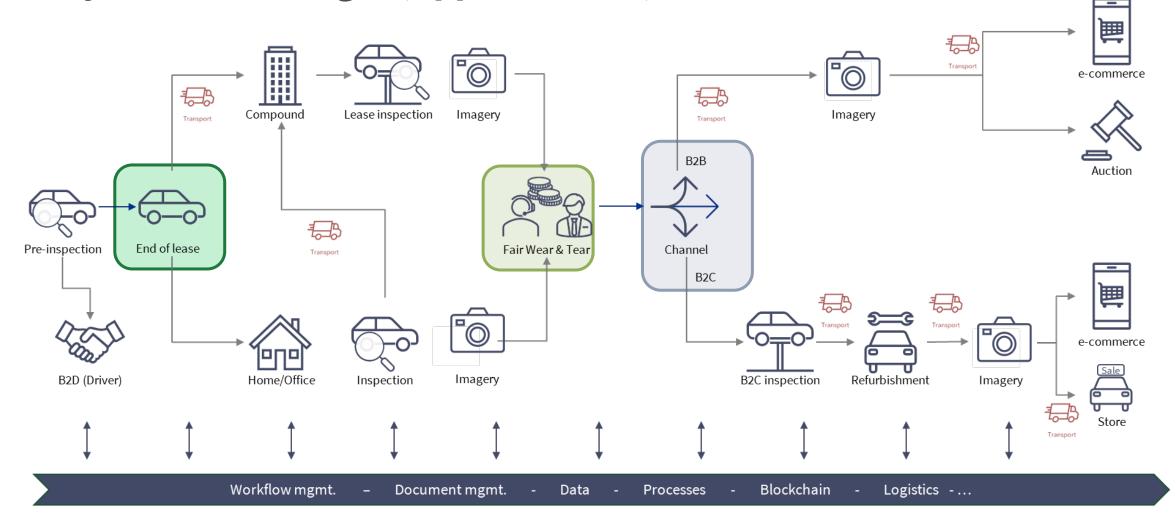




## **Optimise remarketing processes**

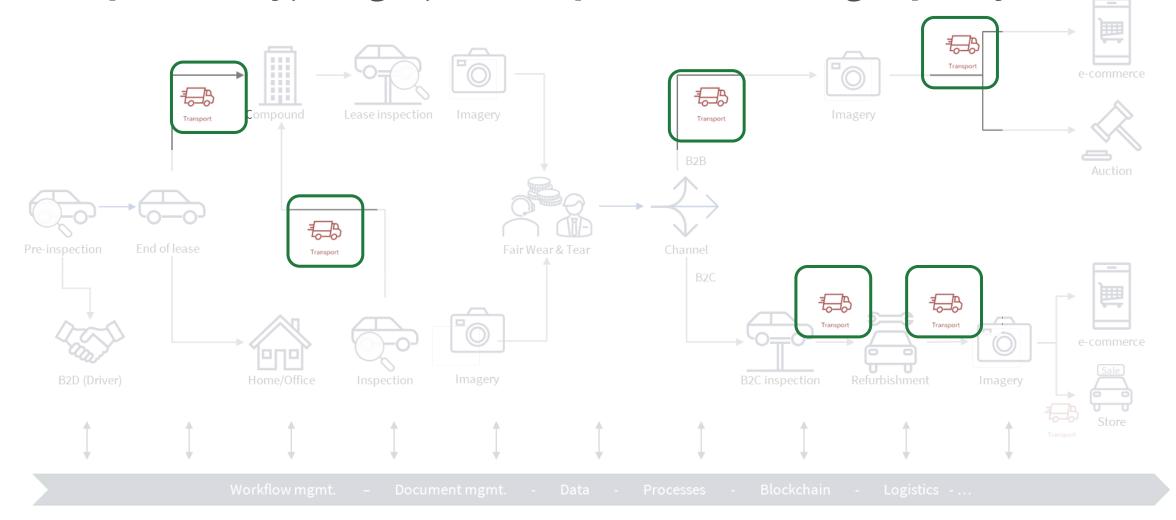


#### Many of the challenges (opportunities) will increase cost



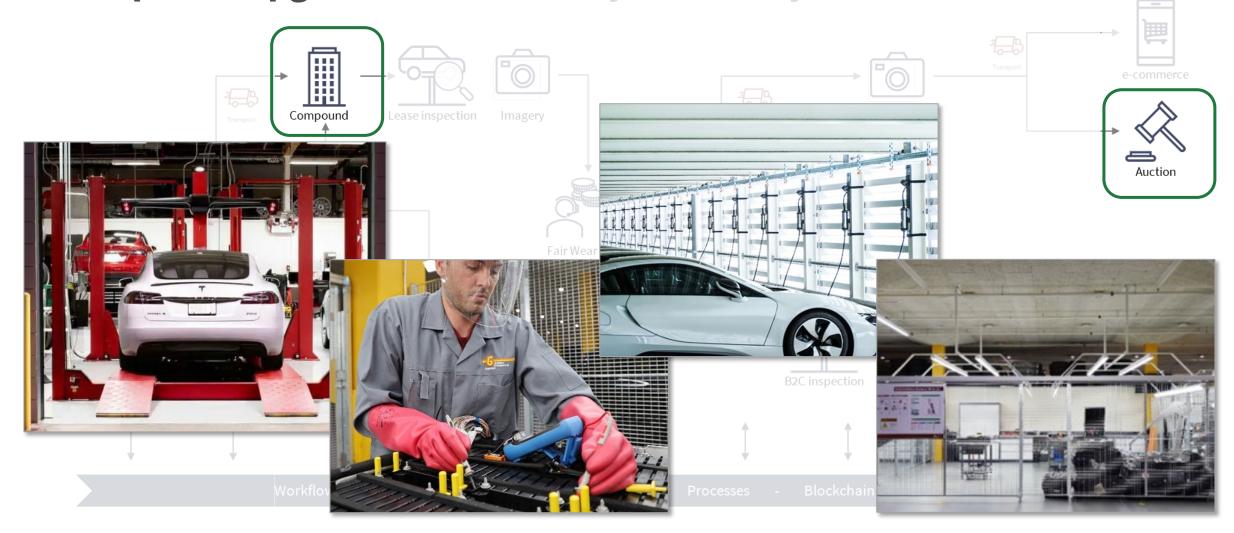


## Transport safety, weight, consumption and loading capacity



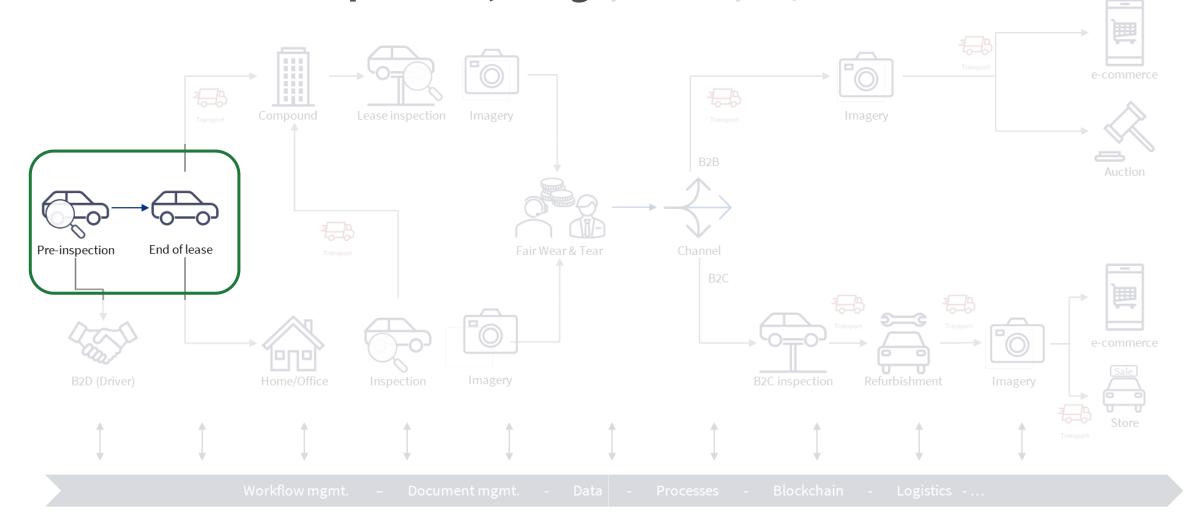


## **Compound upgrades for efficiency and safety**



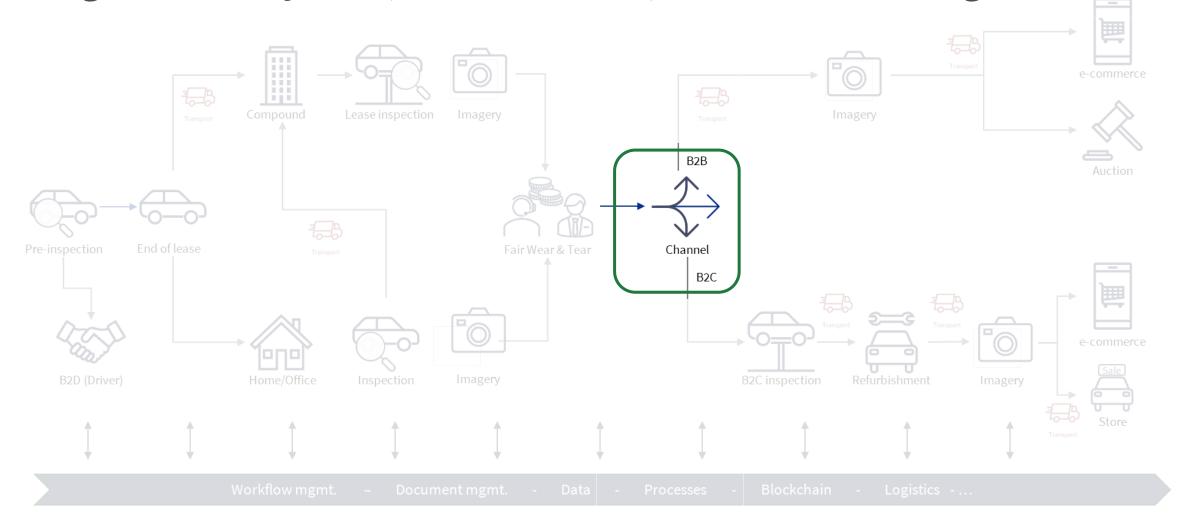


#### New vehicle return policies (charge, cables, ...)



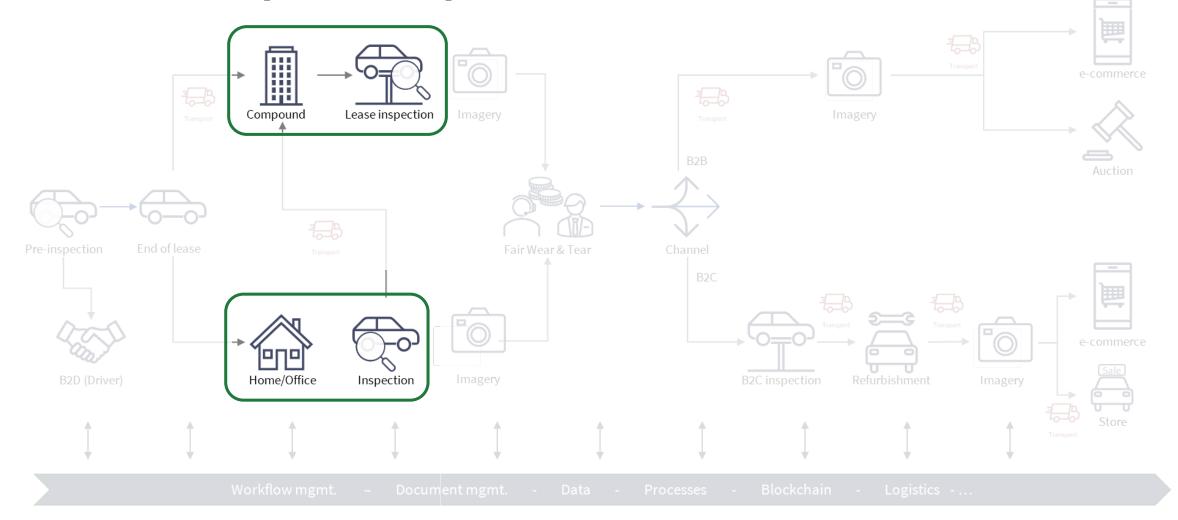


#### Integrate battery SoH (State of Health) in channel steering



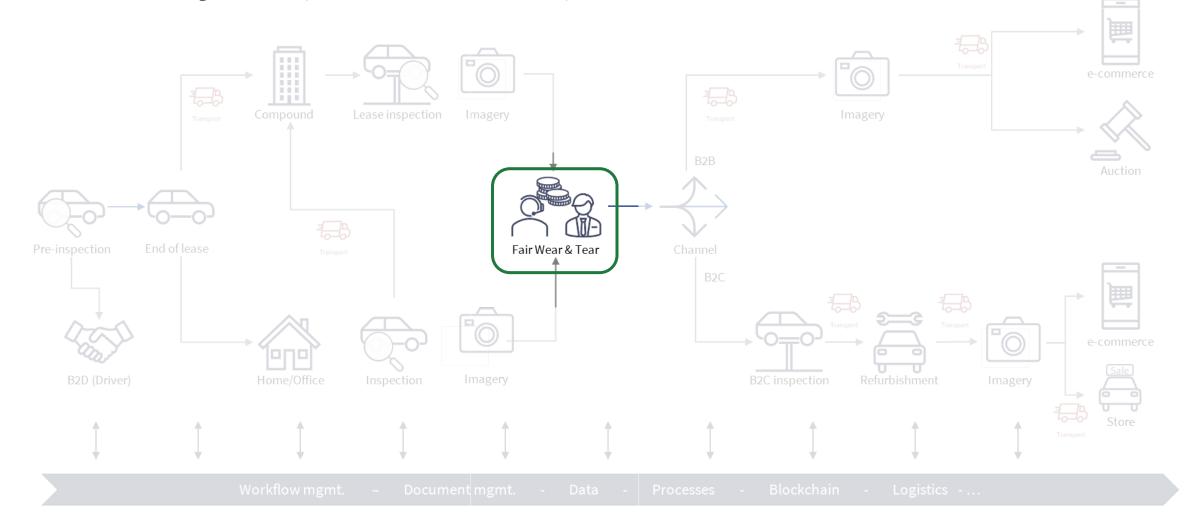


#### Will remote inspection be possible or cost effective



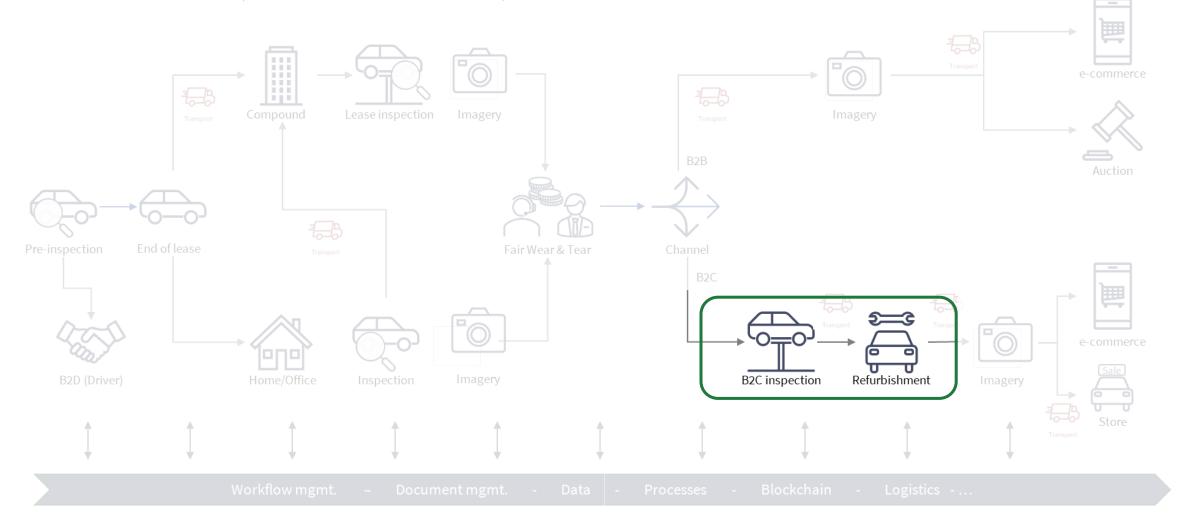


#### Can battery SoH (State of Health) become an unfair wear & tear



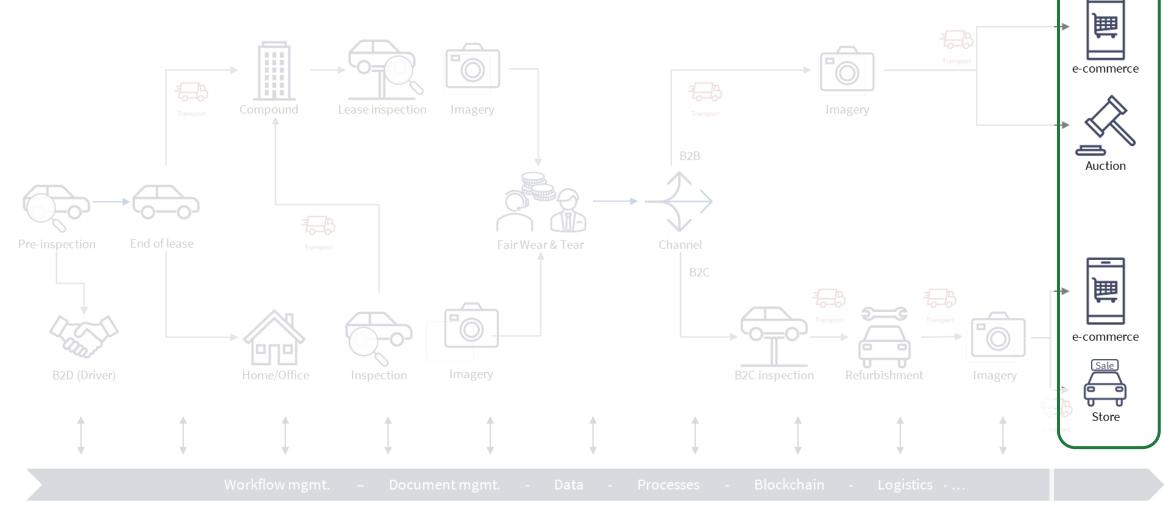


#### **Detailed SoH (State of Health) & refurbishment for B2C**





## Adjusting the sales processes







#### Incentivise usage versus ownership

#### Germany to reduce electric car subsidies in 2023

Reuters



Tesla cars are seen parked at the construction site of the new Tesla Gigafactory for electric cars in Gruenheide, Germany, March 20, 2022. REUTERS/Hannibal Hanschke/

BERLIN, July 26 (Reuters) - Germany will reduce financial incentives to buy electric cars next year after an agreement within the governing coalition, as the vehicles' growing popularity makes government subsidies unnecessary, Germany's economy ministry said on Tuesday.

"E-vehicles are becoming more and more popular and will no longer need government subsidies in the foreseeable future," Economy Minister Robert Habeck said in a statement.



#### France will target state aid for EVs, batteries made in Europe

President Emmanuel Macron says EV credits should be reserved for cars and batteries made with a small carbon footprint, effectively excluding many Chinese brands.

Staff and wire reports





#### Incentives: volatility, sustainability, effectiveness, ...

#### **Sweden ends EV incentives** without warning





The government of Sweden has announced that effective tomorrow, November 8th, the government will no longer incentivize the purchase of electric vehicles.

The Swedish government has decided to abruptly end EV incentives, as they argue that the vehicles have reached price parity with gas and diesel alternatives. The decision was announced today and will come into effect tomorrow (November 8th). Similar policies have been pursued in other European countries as the rate of EV purchases has rapidly increased in recent months.

In the post on the Swedish government's website, the announcement begins by stating (translated from Swedish):

"The cost of owning and driving a climate bonus car is starting to be comparable to the cost of owning and driving a petrol or diesel car. Therefore, the climate bonus is abolished. This means that anyone who buys or orders a climate bonus car after November 8th 2022 will not receive a climate bonus."

The announcement stipulates that if citizens can prove the purchase was made before the deadline, they will be eligible for the incentive for up to 6 months after purchase.

As numerous European countries approach ever-higher sales numbers of electric vehicles, they too have begun to shrink or remove EV incentives; most recently in Germany, EV incentives have been slashed for the coming year. In the case of Sweden, according to the government's announcement, "climate bonus cars today make up around half of new car sales of passenger cars and are available in most price ranges." Hence the government's lack of apprehension in removing the incentives.

Bedrijfswagens: alles over de fiscaliteit in 2023



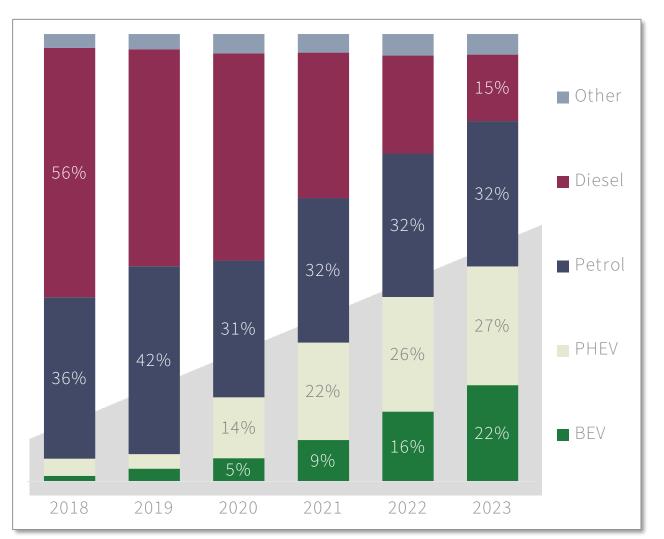
Hoe bereken je de aftrekbaarheid, het VAA en de CO2-bijdrage? Op basis van welke CO2-waarden? Hoe kan ik er zeker van zijn dat mijn plug-in hybride auto niet als een "fake" hybride wordt beschouwd? In dit artikel komt u (bijna) alles te weten over de fiscaliteit van uw bedrijfswagen in 2023.

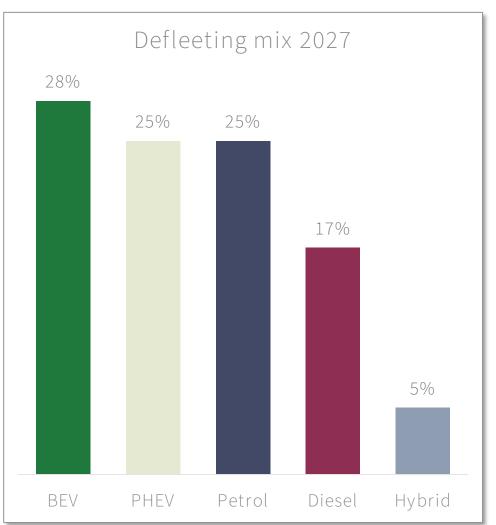
#### Inhoudsopgave [verberg]

- 1. Welke CO2-waarde moet gebruikt worden voor de fiscaliteit van bedrijfswagens?
- 2. Hoe de aftrekbaarheid berekenen van een bedrijfswagen?
- 3. Hoe werkt de fiscaliteit van plug-in hybrides en zelfladende hybrides in 2023?
- 4. Wat verstaat men onder fake hybrid?
- 5. Kan een full hybrid beschouwd worden als een "fake" hybrid?
- 6. Wat is de aftrekbaarheid van een elektrische bedrijfswagen?
- 7. Wat is de maximale aftrekbaarheid van bedrijfswagen?
- 8. Hoe zullen de uitgaven (met name de brandstofkosten) fiscaal worden behandeld?
- 9. De bedrijfswagen is een tweedehandswagen of werd vóór 2020 ingeschreven. Ontloopt deze de nog geldende belastingregeling?
- 10. Als ik mijn auto (nieuw of tweedehands) in 2023 bestel, hoe wordt deze dan fiscaal behandeld in 2023 en de daaropvolgende jaren?



## Belgium: 100% deductability purely on BEV as from July 1<sup>st</sup> (< July 1<sup>st</sup> also on PHEV)







#### **Used Car incentives**



## Grants for electric vehicles in Scotland

Making the switch to an electric vehicle is the best choice for the environment, and it feels even better when you can get some help with the costs

#### Used Electric Vehicle Loan

The <u>Used Electric Vehicle Loan</u> offers an interest-free loan to eligible drivers that can be used to cover the costs of purchasing a used electric vehicle.

This loan is funded by Transport Scotland, an agency of the Scottish Government, and has a repayment term of up to five years.

The funding offers:

- An interest-free loan up to £30,000 for the purchase of a used car or van
- An interest-free loan up to £5,000 for the purchase of a used motorcycle or moped

Vehicles over these costs are not eligible for the loan, and you cannot get the loan for a hybrid vehicle or if you are already the owner of a fully-electric model.

The vehicle should also be purchased from a dealership, whether that's online or in person.

All of this funding is only available in Scotland, so you'll need to check out the grants and funds offered to UK residents here.

## Subsidie op elektrische auto's: alle voorwaarden op een rij

NL

Wanneer je een volledig elektrische auto nieuw of tweedehands koopt kun je aanspraak maken op subsidie. Ook het private leasen van een elektrische auto valt onder de subsidieregeling. Er zitten wel wat voorwaarden aan de recelling.



Om het gebruik van elektrische auto's onder particulieren te stimuleren, is er een subsidieregeling ontworpen om de aanschaf of lease van een nieuwe of tweedehands elektrische auto interessanter te maken. Sinds 10 januari 2023 is inschrijven weer mogelijk voor nieuwe en gebruikte elektrische auto's waarvan de koopovereenkomst is afgesloten op of na 1 januari 2023.

Op de <u>website van de overheid</u> lees je meer over de subsidie. Ook kun je de subsidie via deze pagina aanvragen. Let wel op: de subsidiepot raakt vrij snel leeg. Op de overheidspagina kun je zien hoeveel geld er nog voor de subsidie van een nieuwe elektrische auto of een elektrische occasion beschikbaar is.

#### Voorwaarden voor subsidie op een elektrische auto:

- · De auto is volledig elektrisch (dus geen plug-in hybride)
- . De auto is aangeschaft door een particulier.
- De auto is aangeschaft in het jaar waarin subsidie wordt aangevraagd. Ook moet er nog subsidiebudget beschikbaar zijn, want op = op.
- De auto staat minimaal 3 jaar onafgebroken op naam van de aanvrager. Voor private lease is dit 4 jaar.
- De catalogusprijs van de elektrische auto is minimaal € 12.000 en maximaal € 45.000. Ook is de actieradius minimaal 120 kilometer.
- Een gebruikte elektrische auto is gekocht bij een autobedrijf.

#### Subsidiebedragen

Omdat elektrische auto's naar verwachting steeds betaalbaarder worden, neemt het subsidiebedrag voor nieuwe elektrische auto's jaarlijks wat af tot € 2550 in 2024. Daarna is er (vooralsnog) geen subsidie meer mogelijk. De aanschafsubsidie voor gebruikte elektrische auto's geldt ook tot 2024, maar blijft hetzelfde.

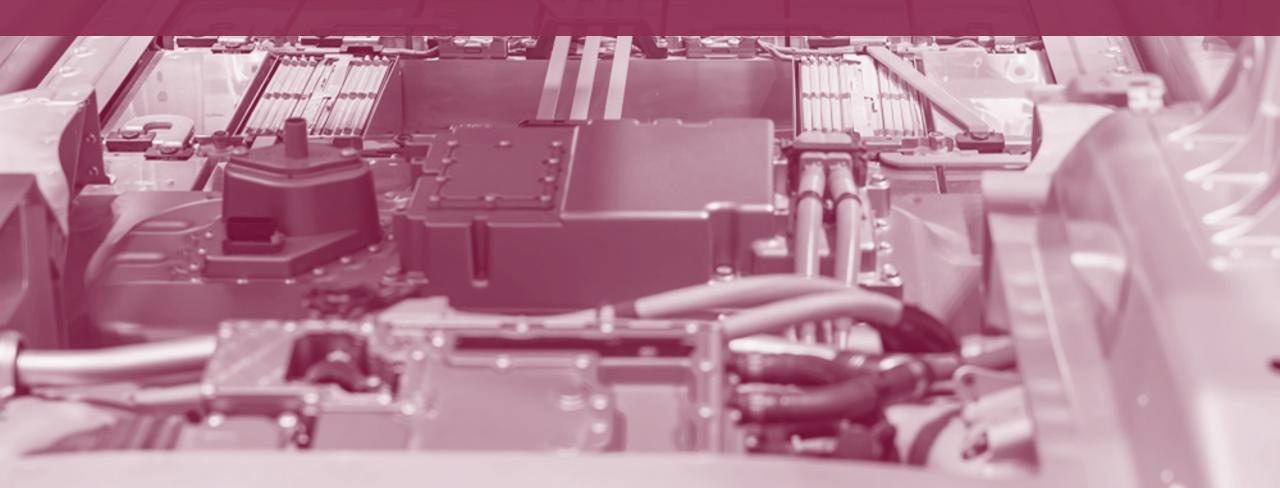
#### Bedragen aanschafsubsidie nieuwe en tweedehands elektrische auto's

Jaar	Nieuwe auto	Tweedehands auto
2023	€ 2.950	€ 2.000
2024	€ 2.550	€ 2.000
2025	-	-



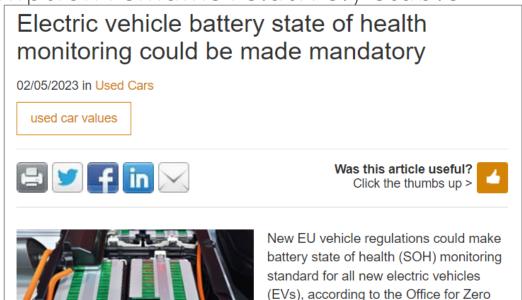






#### **Starting point**

- Right after price (69%), the second most important subject for used EV buyers is battery
- Battery deterioration is technically unavoidable
- Range deteriorates & impacted by temperature (16-30%)
- Consumption remains relatively stable







Ari Nyyssönen, a Finnish taxi driver, has racked up an impressive 400,000 kilometers (250,000 miles) in his Tesla Model S and is confident that the car could last until 1 million kilometers or over 621,000 miles.

Nyyssönen's experience sings a different tune from the consistent upkeep and maintenance required by internal combustion engine vehicles. ICE vehicles can sometimes rack up thousands of dollars in repair costs over the course of a 100,000 mile life cycle due to the complexity of the countless number of moving parts. By contrast, Tesla's minimalistic design approach – siding with software-based features over hardware – combined with the simplified nature of electric cars makes their true cost of ownership far cheaper than that of an ICE car.

Juha Pyrhonen, a professor of electrical power and engineering at Lappeenranta University of Technology, said that Tesla has been successful in creating a long-lasting, reliable electric motor.

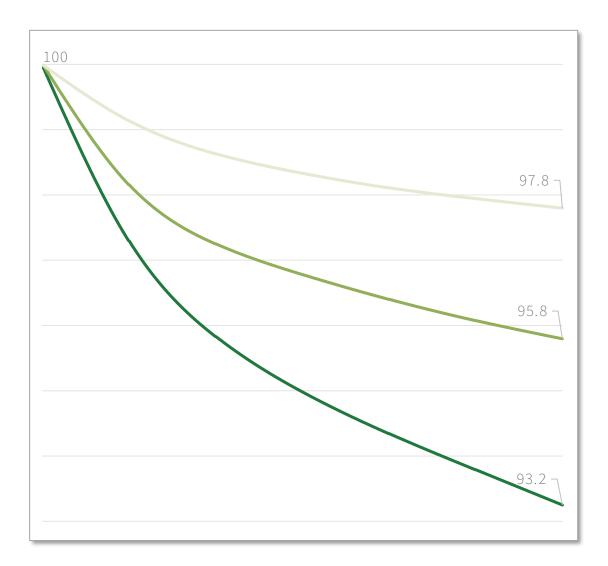
Having logged over 400,000 kilometers of taxi service in his 2014 Model S with 85 kWh battery pack, Nyyssönen had the vehicle's motor replaced and battery pack serviced under warranty. "They are the biggest worries," Nyyssönen said, "but they are not very bad because the most important defects have been repaired according to the guarantee."

Arguably the most important component in a Tesla is its battery pack. After 400k km (250k mi), Nyyssönen notes that the battery was still able to maintain roughly 93% of its original driving range and showed little signs of degradation. Nyyssönen's story can be considered a testament to the reliability and durability of Tesla's lithium ion battery cells, but also the maintenance and service plans the company offers.



Last month, Tesla pledged to add 350 new service vans to its maintenance fleet, and

#### **Driver impact on battery SoH (36 months)**



	Worse Treatment	Average treatment	Better treatment
Driving style	Aggressive	Average	Anticipatory
Motorway use	Regularly	Sometimes	Rarely
Fast charging	Frequently	Occasionally	Never
Charging >90%	Frequently	Sometimes	Rarely
Avg. depth charging	High	Medium	Low
Avg. charge @storage	80-100%	50-80%	30-50%

Source: Twaice



#### State of Health certificate standard set by Remarketing association

#### <u>Objective</u>

Facilitate remarketing & support residual values of used BEVs through trust in the battery,
 easy to communicate to buyers,
 independently assessed and certified.

#### Basic test 2023

- Generated by BMS (Battery Management System)
- Refers to OEM data

#### Premium test in 2024

- External independent test method
- Stresses the battery
- Requirements defined in 2023





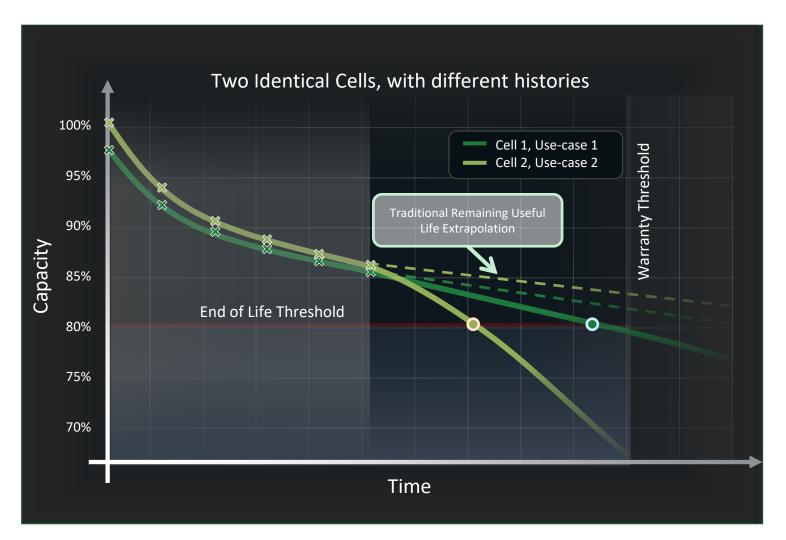
#### Impressive developments enables forecasting SoH

Two cells cycled to the same capacity

may have very different prognoses, depending on

how they got to this point (the use-case),

even if they are treated equally from this point forward.







# Is the used BEV customer ready to buy? Are we ready to sell?



#### A client type that creates a bigger opportunity online

- Early adopters
- Business people
- Disposable income
- Trendsetters
- Convenience
- Service level





#### We benchmark five main consumer needs

#### **Convenience**

Support my online journey with a very easy experience, smooth and seamless.

#### **Security**

Give me peace of mind that whenever something would go wrong, there is a safety net.



## "My" car = choice

Facilitate my search to find the best choice for me personally supported by filters, favorits and comparisons. I need to check all details to be sure.

#### **Trust vehicle**

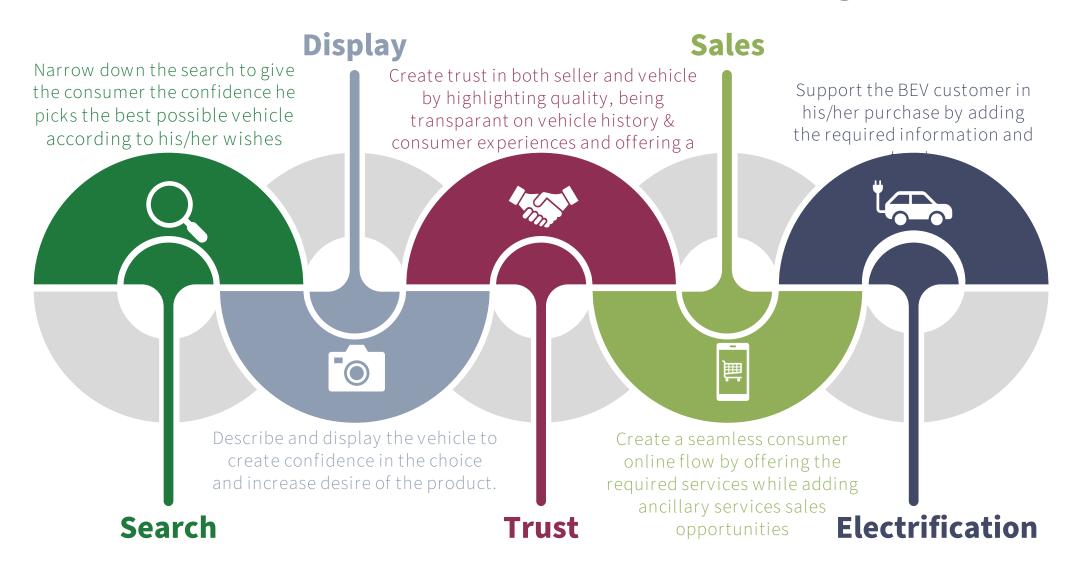
Help me to be confident that the vehicle is in line with expectations by a transparent view without hiding any details.

#### **Trust seller**

Support my need for reassurance that I can trust the vendor.

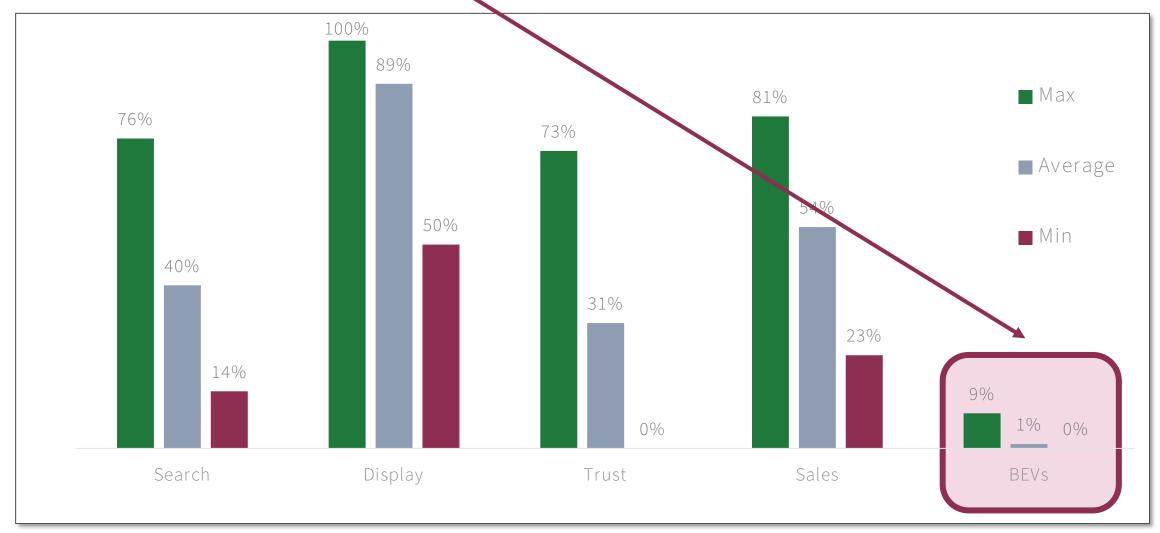


#### Research of used car customer websites reviewing 240+ fields





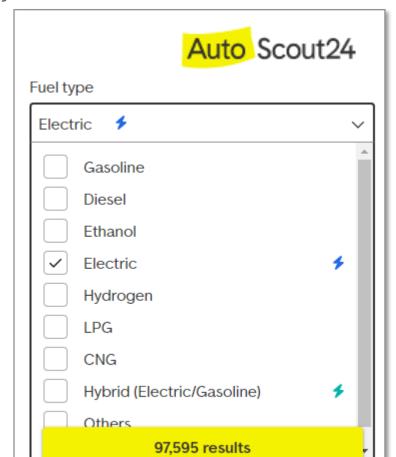
### Results not encouraging

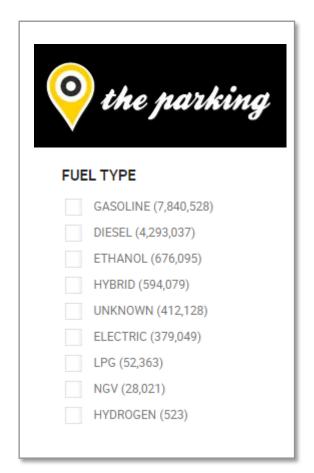




#### 100,000 used BEVs online today but

- 30% cannot compare BEV versus ICE vehicles
- 95% have no technical EV details
- No "State of Health" details yet
- No support on affordability
- No support on feasibility







#### Prepare now and focus on the right things

- The industry needs to take ownership and steer the electrification roadmap
- Sensible **policy** approach to gradually integrate BEVs
- Focus on supporting running cost
- Educate to have a professional 1to1 customer interaction
- Communication based on **facts** supporting customer acceptance
- Nurture the second hand buyer by building trust, adapt the customer journey and optimise UX



### Happy to discuss, support, connect, share, ...

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