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The implications of EU policies for the affordability of car use in the future

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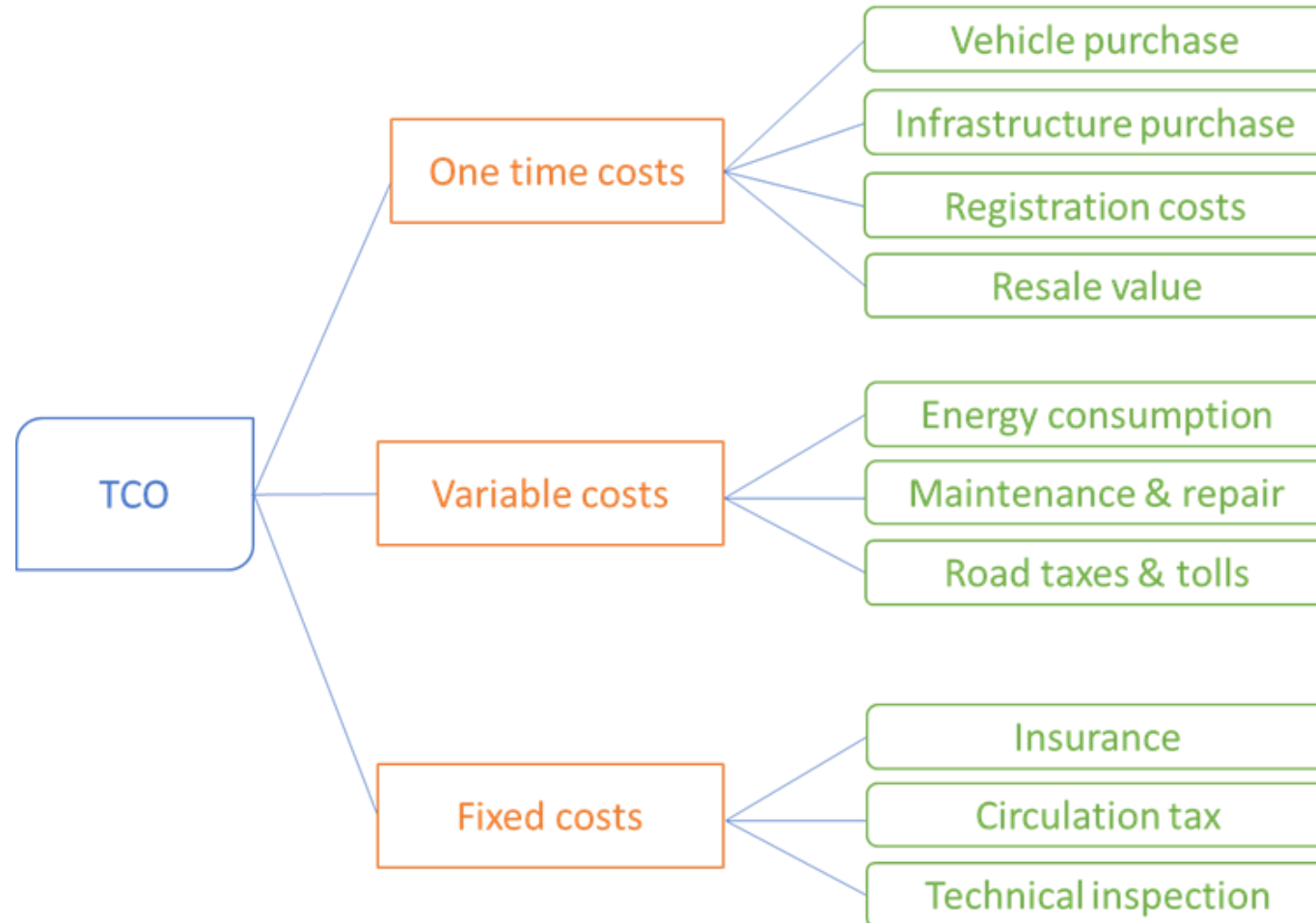
The implications of EU policies for the affordability of car use in the future



Aims of the study

- Affordability of car ownership and car use in Europe
- Context:
 - EU, national and local policy
 - Energy crisis
- Comparison of the Total Cost of Ownership (TCO) of fossil fuel (ICEV) and battery electric (BEV) passenger cars
- Determinants of affordability and equity
- TML-study for FIA European Bureau conducted in November 2022

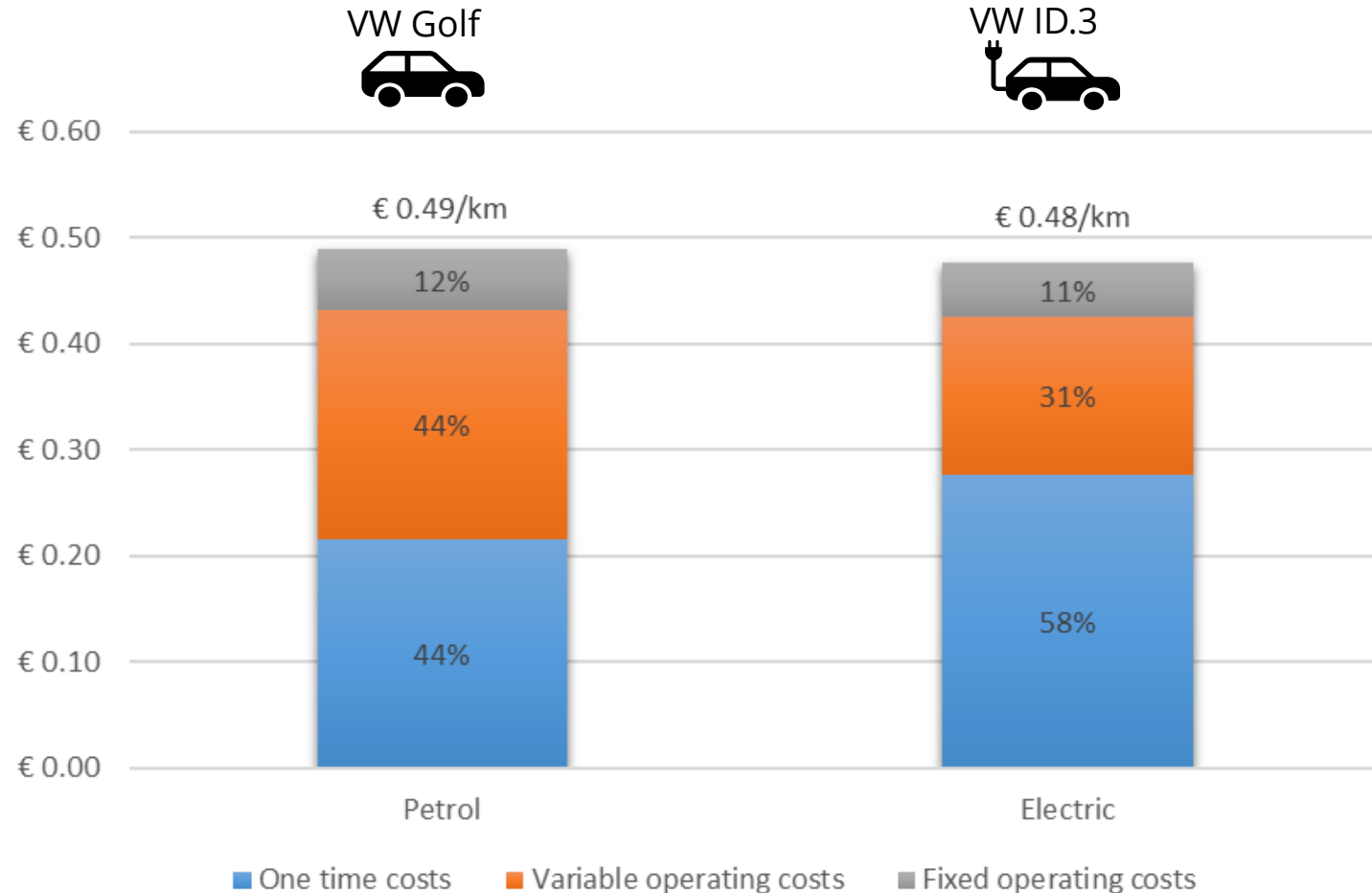
Total Cost of Ownership (TCO)



VW Golf vs VW ID.3

Profile user:

- 15 000 km/year
- First owner
- Holding period 5y
- Charging profile:
 - 90% private charging
 - 10% public charging



Affordability & equity

- Purchase cost is main barrier
 - Purchase subsidies are not sufficient for lower income households
 - Purchase subsidies mainly targeted to new cars
- Purchase cost second hand remains high
 - Strong demand
 - High resale value

Source: <https://www.tmleuven.be/en/project/affordability-car-use>

Electric vehicle subsidies: Inefficient & Inequitable

By Joe Cortright | 5.6.2019



OPINION

Taxpayers are subsidizing rich electric-vehicle owners — to the tune of billions

By E. J. Antoni and Anthony F. Esposito

Published Nov. 7, 2023, 8:41 p.m. ET



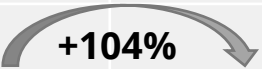
The stark reality is the average electric vehicle costs at least \$53,000 more over 10 years than conventional vehicles.

Getty Images/iStockphoto

Affordability & equity

- Charging costs and infrastructure
 - Low income households rely more on public charging infrastructure
 - Public charging points across EU mainly developed in more affluent areas
 - Significantly higher use costs for public charging!

	Private charging	Public charging
Charging cost	€ 0.34/kWh	€ 0.69/kWh



Source: Eurostat, plugnet, VAB, Testaankoop

Use cost 10 000 km per year increases from € 680/y to € 1 380/y
(consumption 20 kWh/100 km)



Conclusions

- A “single user profile” comparison of TCO leads to false conclusions about the affordability of EVs
- Dense, accessible and affordable public charging network is main driver for EV uptake
- Support to lower income households
 - Focus should be on 2nd hand market
- Alternatives for car purchase
 - Strong potential for EV sharing in urbanized areas



**Thank you for
your attention!**



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