

Good Tax Guide Tool

Session 1: How do systems of national car taxation compare?



The Tool: Background & Scope



What is the project background & scope?

- The project started with the first edition of *The Good Tax Guide* in October 2022. Although some automotive tax guides already existed, these guides offered descriptive text about each country. The Good Tax Guide contributes a **comparative** approach, a **numerical** approach, and an **evaluative** approach to car taxation. These descriptive guides are no longer being updated.
- By comparing car taxation across countries, we've noticed strong interest from finance ministries who can see the design of taxes that already exist and are **tried and tested** rather than dreamed up.
- **Comparison national car taxes of 31 countries** with a focus on the level of **differentiation** between high emission and zero emission vehicles and thus the **fiscal incentivisation of electromobility**.

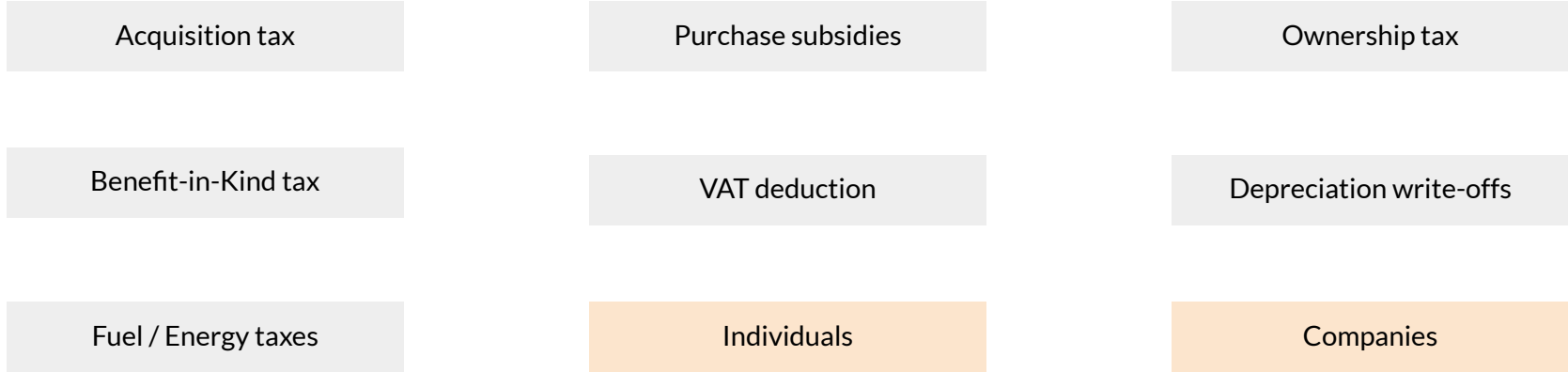


- The comparison is based on taxes in place as of **February 2024**.





What are the taxes analysed?



7 taxes - 2 user groups - 31 countries - 5 car models



1. What attributes are taxed

Taxable base, by country, for car acquisition taxation

SOURCE DATA

Country	CO ₂ emissions	Car price threshold	Engine power	Engine capacity	Euro standard	Air pollutants	Weight	Length	Fuel type	Fiat level	Distance	Age of car	Business use	Applied to car price	Buyer attributes
Austria	X													X	
Belgium			X						X			X			
Bulgaria														X	
Croatia	X								X					X	
Cyprus															
Czechia															
Denmark	X								X					X	
Estonia															
Finland	X													X	
France	X		X				X		X						
Germany															
Greece	X								X					X	
Hungary				X	X				X						
Iceland	X													X	
Ireland	X					X			X					X	
Italy			X						X						
Latvia															
Lithuania	X								X						
Luxembourg															
Malta	X							X						X	
Netherlands	X								X						
Norway	X					X	X								
Poland				X					X					X	
Portugal	X			X					X						
Romania															
Slovakia			X		X				X			X			
Slovenia	X				X				X						
Spain	X													X	
Sweden															
Switzerland														X	
UK	X								X						

Which countries have high/low tax rates?

For the same tax base

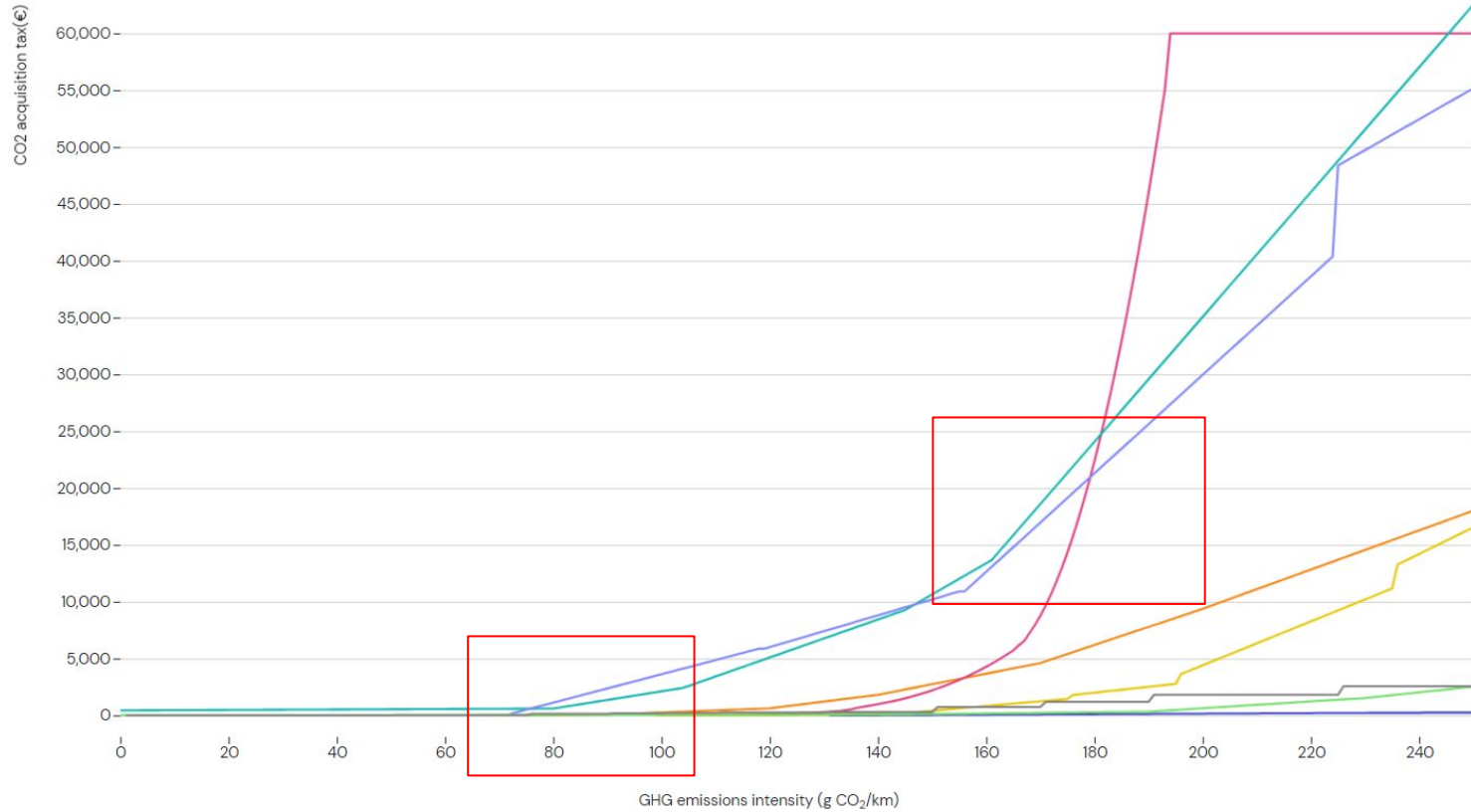


2. What rates are charged?

Acquisition tax by CO₂ emission intensity for each relevant European country

NOTES SOURCE DATA

- Croatia
- France
- Lithuania
- Netherlands
- Norway
- Portugal
- Slovenia
- UK



How can you compare different countries with different tax basis?

Creation of comparable car models

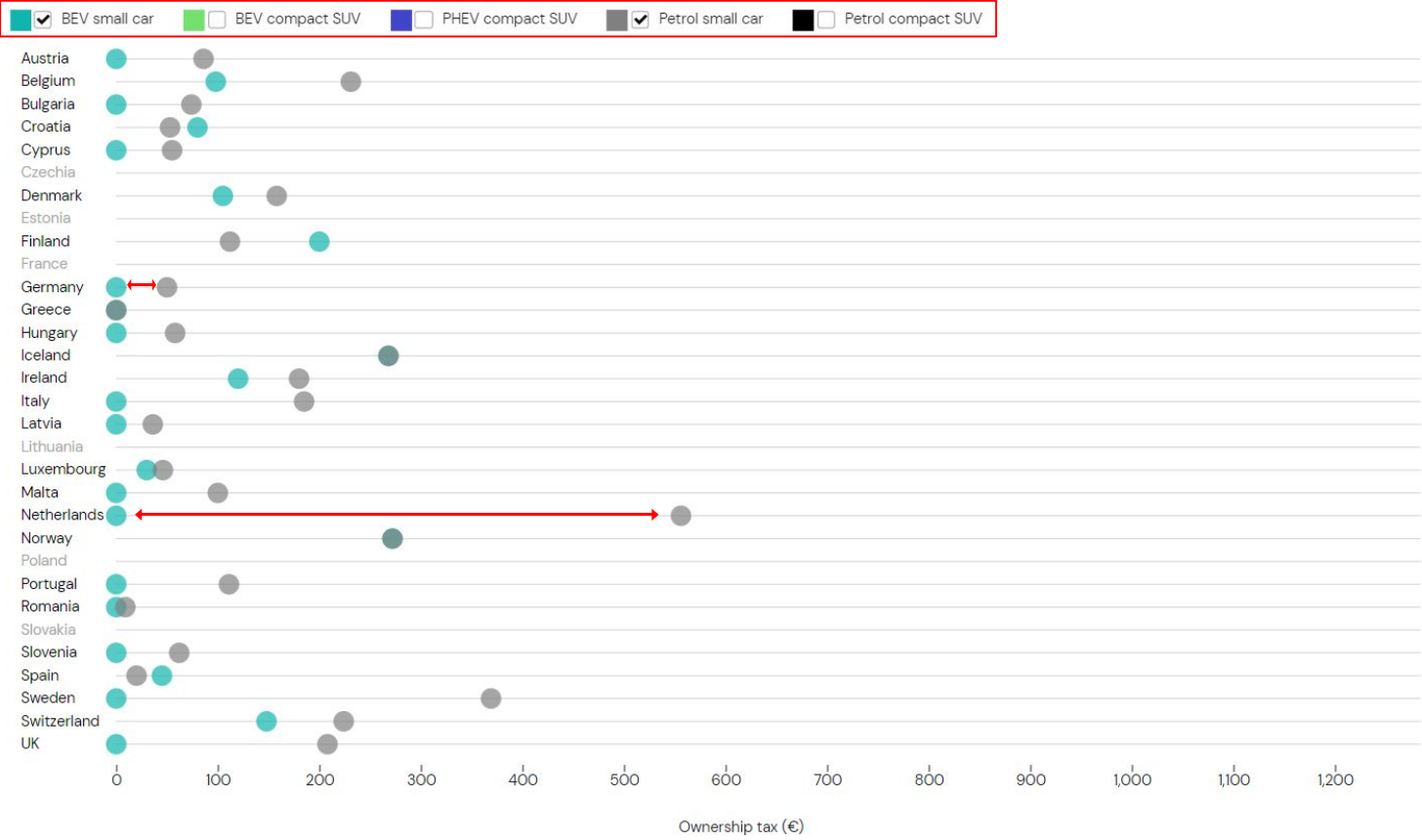
- The problem with choosing a particular car model is that in **each country it has different characteristics** (power, displacement, price).
- That is why **we have decided to create some models with average characteristics** per type of engine and the price of vehicle is linked to the VAT of each country.

	Vehicle characteristics	BEV (B PC)	BEV (C SUV)	PHEV (C SUV)	Petrol (B PC)	Petrol (C SUV)
Vehicle characteristics	<i>Fuel type</i>	BEV	BEV	PHEV	Petrol	Petrol
	<i>List price excluding VAT</i>	24,000	37,500	36,000	14,000	33,000
	<i>WLTP (g CO2/km)</i>	0	0	40	110	150
	<i>Engine capacity (cc)</i>	0	0	1,700	999	1,400
	<i>Engine power (kW)</i>	100	135	155	65	110
	<i>Weight (kg)</i>	1,500	1,700	1,800	1,100	1,600
	<i>NOx emissions (mg/km)</i>	0	0	50	70	90
	<i>Length (mm)</i>	4,050	4,500	4,450	4,050	4,500
	<i>Cylinders (number)</i>	-	-	4	3	4
	<i>Electric range (km)</i>	300	500	55	-	-
	<i>Electric time use private (%)</i>	-	-	45%	-	-
	<i>Electric time use corporate (%)</i>	-	-	12%	-	-
	<i>Consumption (l/100km)</i>			5.5	5.5	7.5
	<i>Consumption (Wh/km)</i>	165	185	200		
	<i>Battery capacity (kwh)</i>	50	80	11	0.0	0.0

3. Tax burden for each individual tax

The ownership tax burden on a new car by typical model over one year

NOTES SOURCE DATA

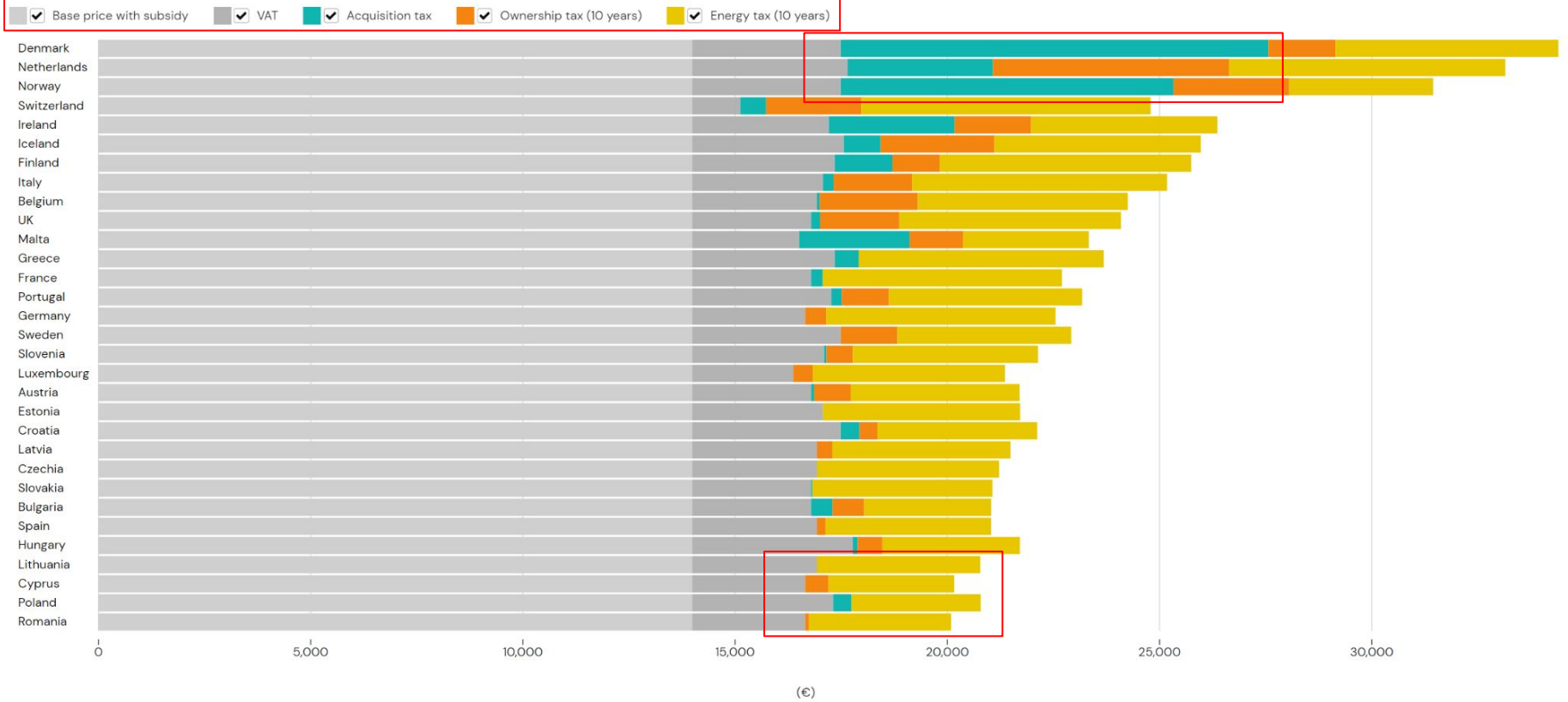




4. The composition of total tax burden

Total tax burden for a small car over ten years of private ownership

NOTES SOURCE DATA



Which countries have high/low incentivisation?

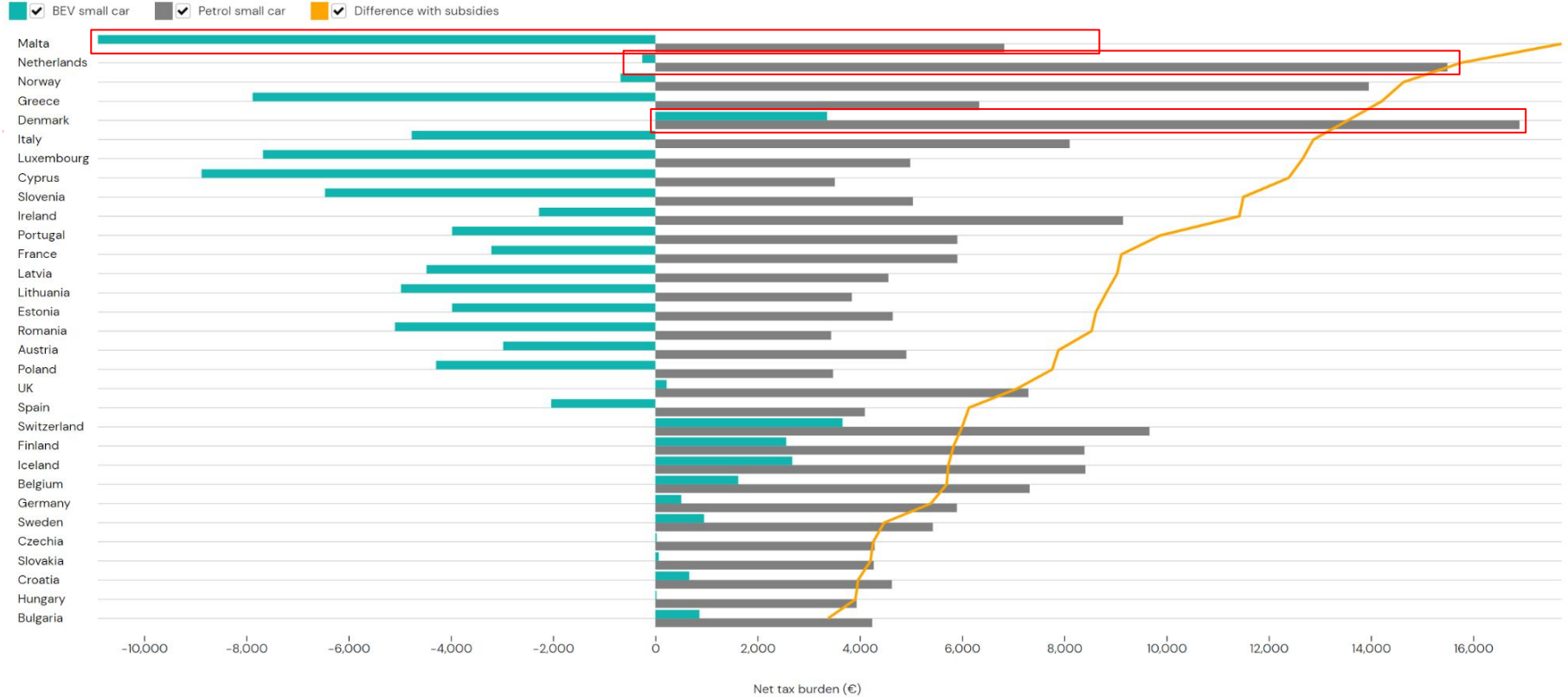
Comparing different models and fuel types



5. Net tax differential

Tax differential (with subsidies) for a small car over ten years of ownership: BEV vs petrol

SOURCE DATA



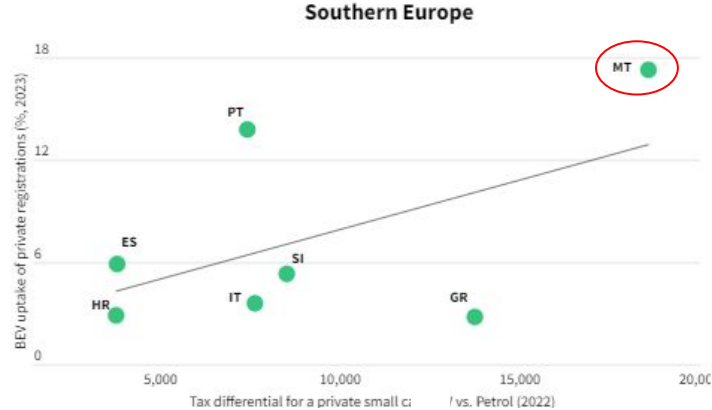
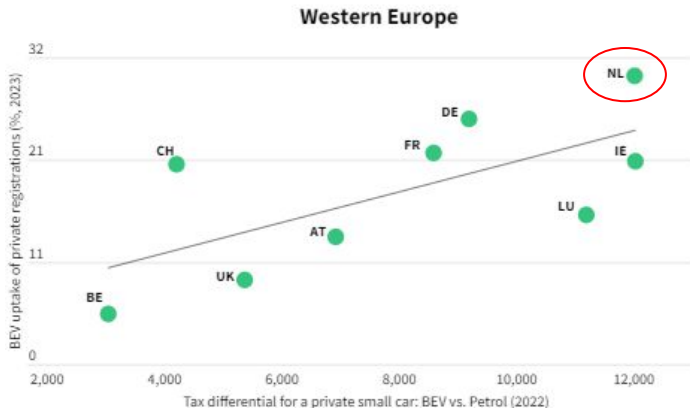
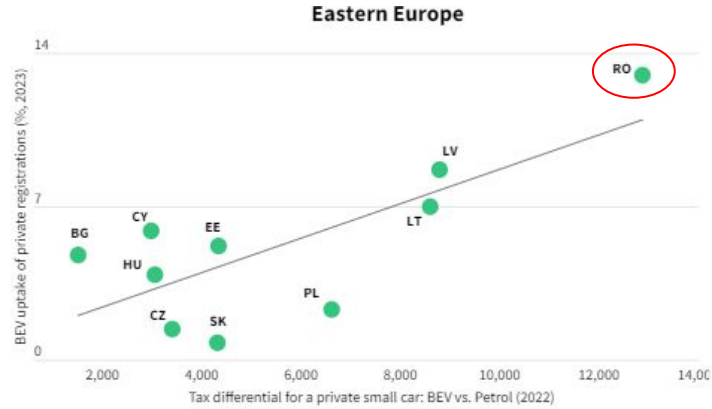
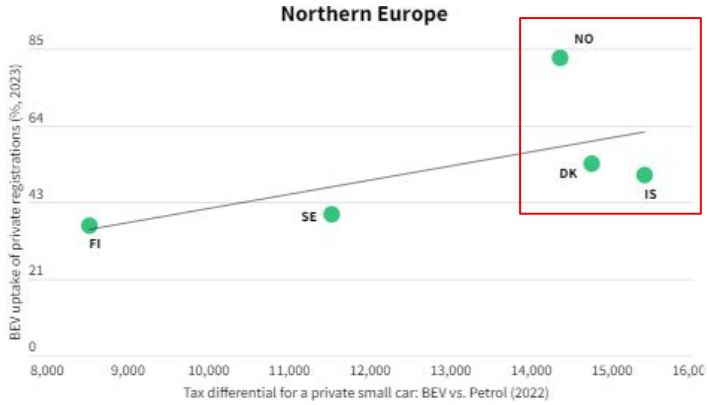


Some interesting findings



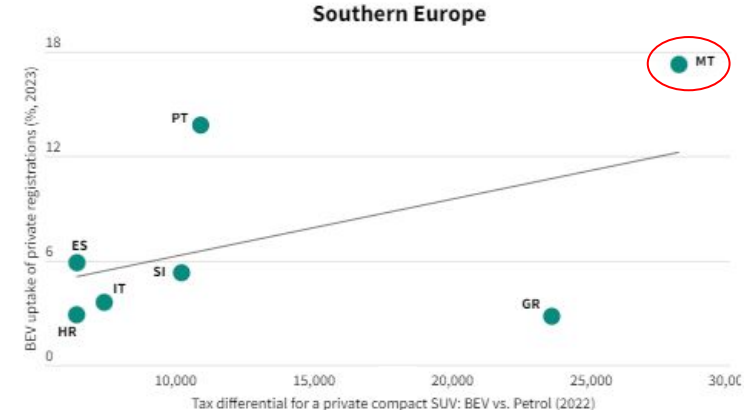
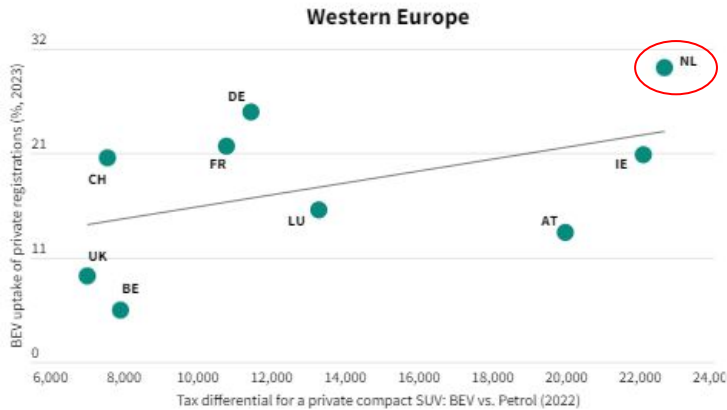
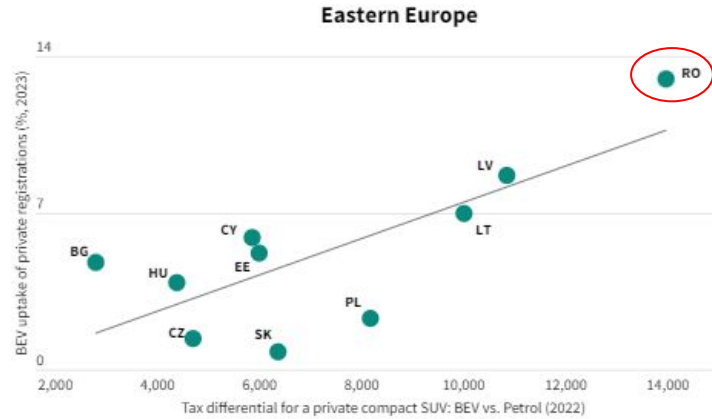
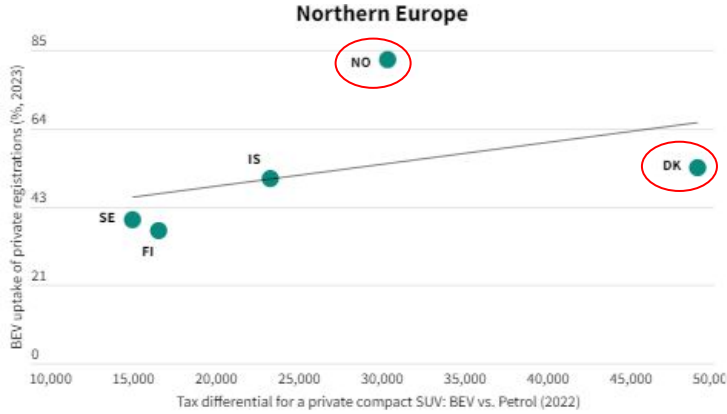
Is tax linked to uptake?

Correlations between private tax differential (2022) and private BEV uptake (2023) by region: small cars (B segment)



Is tax linked to uptake?

Correlations between private tax differential (2022) and private BEV uptake (2023) by region: medium SUV (C segment)



Some interesting findings

- **Purchase subsidies** are the main contributor to the differential given their high financial value (MT, CY, GR). **Fuel taxes** are the second largest contributor (IT).
- Countries with high BEV uptake are **removing BEV subsidies** and in some cases levying new taxes on BEVs (SE, IS, NO).
- Countries are **jumping ship on PHEV subsidies** (only 5 countries left: AT, ES, IT, LV, RO).
- Some countries are **focusing on corporate car tax to incentivise BEV uptake** (depreciation in BE; VAT deduction in SI, AT; benefit-in-kind in UK and IE, ownership tax in FR).
- **Few countries tax based on weight** to tackle SUVisation (FR, NL, NO, FI, CH) and **only one country has a tax based on car size** (length in MT; no countries use width, height, volume, or wheelbase). **Few countries use means-testing** for their policies, including purchase subsidies.
- Some countries use **small tax design elements to increase tax burden and incentivisation**, e.g. the order in which taxes are applied (VAT on top of acquisition tax) or an announced schedule of annual increases.
- Some countries are **leapfrogging in their tax design** (EE moving from KW to CO2 and weight).
- Some countries are **introducing innovative taxes** (road charging in IS).



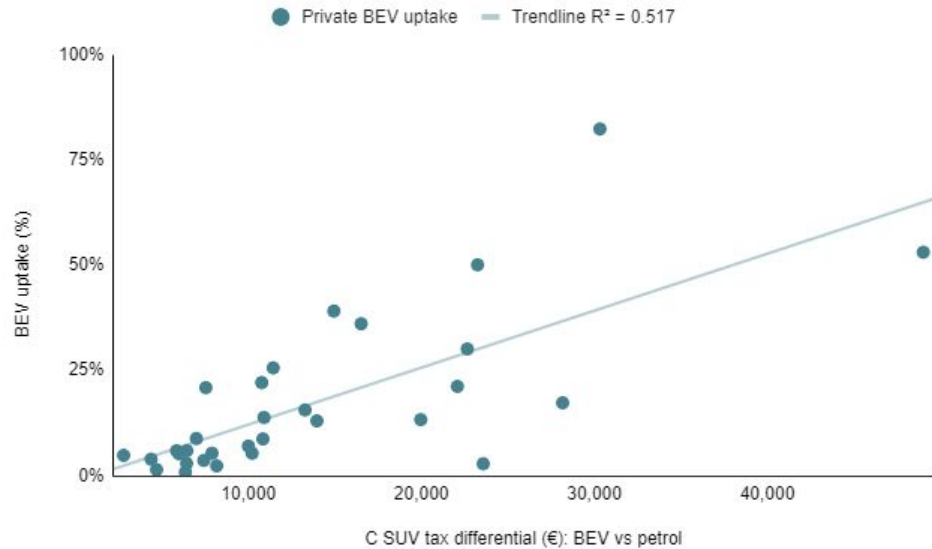
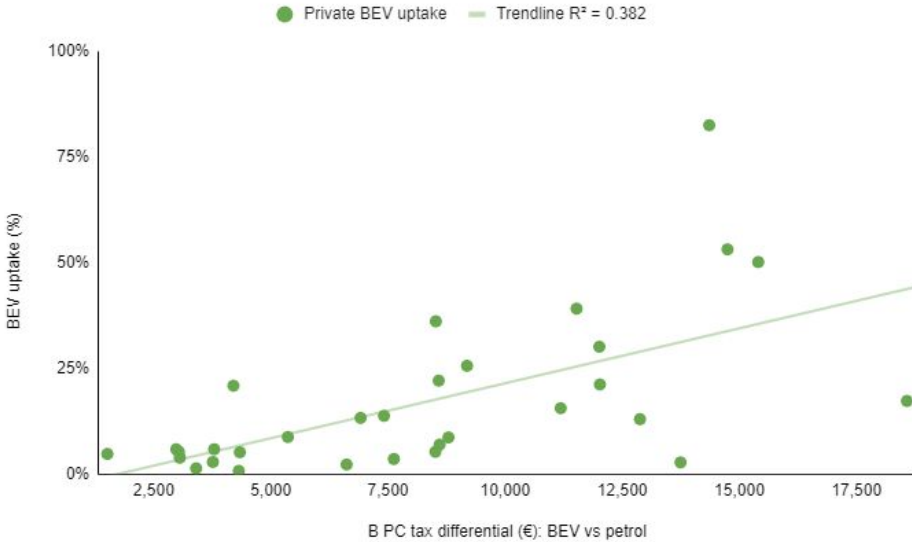


Thanks



Is tax linked to uptake?

Correlations between private tax differential and private BEV uptake



Lessons to learn

Main lessons

- You don't need to be **rich** (*to have good policy: MT, CY, GR*)
- You don't need to **subsidise** (*taxes are an option: DK, NL, NO*)
- You don't need to **target consumers** (*business taxes: BE - depreciation, SI - VAT, UK - BiK, FR - ownership*)
- You don't need **a tax overhaul** (*small changes like tax order: AT, FR*)
- You can **dream big** (*some countries leapfrogging: EE*)

