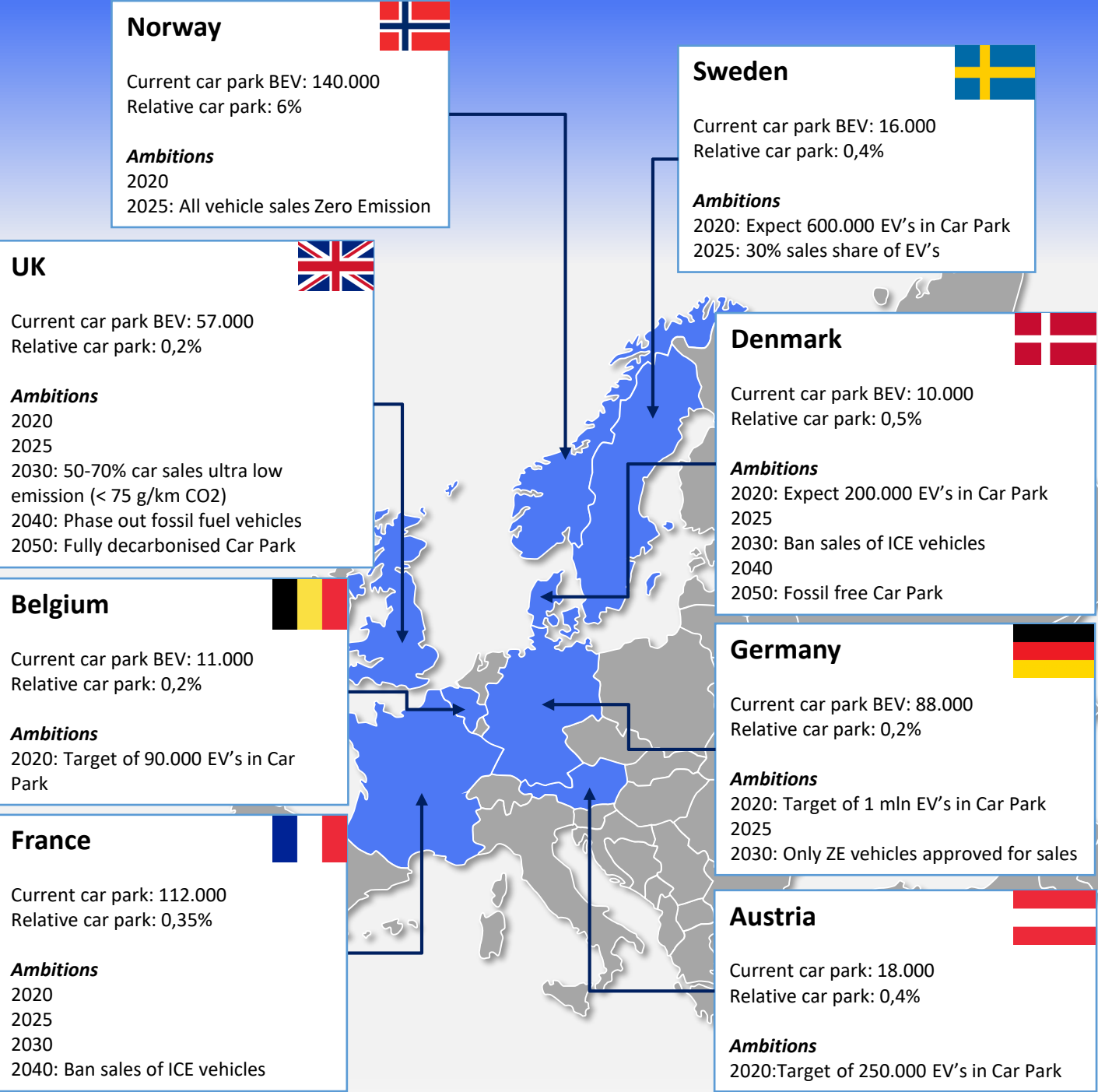




Dit is een achtergrondnotitie
ten behoeve van de sectortafel
Mobiliteit



Norway



Current car park BEV: 140.000
Relative car park: 6%

Ambitions

2020
2025: All vehicle sales Zero Emission

Sweden



Current car park BEV: 16.000
Relative car park: 0,4%

Ambitions

2020: Expect 600.000 EV's in Car Park
2025: 30% sales share of EV's

UK



Current car park BEV: 57.000
Relative car park: 0,2%

Ambitions

2020
2025
2030: 50-70% car sales ultra low emission (< 75 g/km CO2)
2040: Phase out fossil fuel vehicles
2050: Fully decarbonised Car Park

Denmark



Current car park BEV: 10.000
Relative car park: 0,5%

Ambitions

2020: Expect 200.000 EV's in Car Park
2025
2030: Ban sales of ICE vehicles
2040
2050: Fossil free Car Park

Belgium



Current car park BEV: 11.000
Relative car park: 0,2%

Ambitions

2020: Target of 90.000 EV's in Car Park

Germany



Current car park BEV: 88.000
Relative car park: 0,2%

Ambitions

2020: Target of 1 mln EV's in Car Park
2025
2030: Only ZE vehicles approved for sales

France



Current car park: 112.000
Relative car park: 0,35%

Ambitions

2020
2025
2030
2040: Ban sales of ICE vehicles

Austria



Current car park: 18.000
Relative car park: 0,4%

Ambitions

2020: Target of 250.000 EV's in Car Park

Other European countries with ambitions	BEV Car Park (Sept 2018)	Relative % BEV Car Park	2020	2030
Ireland	3022	0,15%		Phase out fossil fuelled cars (no sales), target of 500.000 EV's in Car Park
Slovenia	1063	0,10%		Phase out fossil fuelled cars (no sales)
Scotland				Phase out fossil fuelled cars (no sales) by 2032
Spain	13755	0,06%		Target of 2,5 mln EV's in Car Park
Portugal	6788	0,16%		Target of 200.000 EV's in Car Park
Finland	1838	0,06%		Target of 250.000 EV's in Car Park

Rest of world	2020	2030	2040
South Africa		Target of 20% EV's in Car Park in 2030	
China	Target of 2 mln EV's in Car Park	Roadmap towards 7 mln EV's in Car Park in 2025	
Sri Lanka			Phase out fossil (no sales) fuelled cars
India	Target of 1 mln EV's in Car Park	Every car sold will be electric, program towards more than 30% EV's in Car Park	
South Korea	Target of 200.000 EV's in Car Park.		

Norway



No purchase grant

UK



Private: BEV € 3.950 PHEV € 0
Company: BEV € 3.950 PHEV € 0

Belgium



Private: BEV € 4.000 PHEV € 4.000
Company: BEV € 4.000
PHEV € 4.000

France



Private: BEV € 6.000 PHEV € 0
Company: BEV € 6.000 PHEV € 0
(+ scrappage fee BEV new € 2.000,
BEV 2nd hand € 1.000)

Sweden



Private: BEV € 3.850 PHEV € 1.925
Company: BEV € 3.850
PHEV € 1.925

Denmark



No purchase grant

Germany



Private: BEV € 4.000 PHEV € 3.000
Company: BEV € 3.000
PHEV € 3.000

Austria



Private: BEV € 4.000 PHEV € 1.500
Company: BEV € 3.000
PHEV € 1.500

Special case Purchase Grants: Malta

For individuals and NGOs Malta has different options including a purchase grant for EV's:

- Option A - 7,000 grant on the purchase of a new full electric vehicle in conjunction with an over ten year old ICE conventional vehicle.
- Option B - 4,000 grant on the purchase of a new electric vehicle without scrapping an older ICE vehicle.
- Option C - 4,000 grant for the purchase of a second hand electric vehicle which is not older than 12 months and not in conjunction with scrapping electric vehicles.
- Option D - 3,000 for the purchase of a hybrid electric vehicle.
- Option E - 2,000 grant for the purchase of an electric quadricycle. Other grants according to CO2 emission values and in association with scrapping an older ICE vehicle.



Norway

Infographics International Incentives



Purchase Grants

No purchase grant

Registration Tax

BEVs have been exempted from registration tax since 1990. The exemption from VAT and registration taxes is only granted to BEVs. In January 2017, the incentives for PHEVs were increased. In particular, the deduction on the total weight to be used for the determination of the taxation rate increased from 15% in 2015 to 26% in 2017. For large PHEVs this change leads to registration tax cuts of NOK 16 000-80 000 (€ 1 700-8.400) compared with similar ICE cars.

Company profit tax

No relevant incentives

Ownership / circulation tax

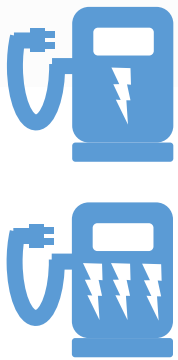
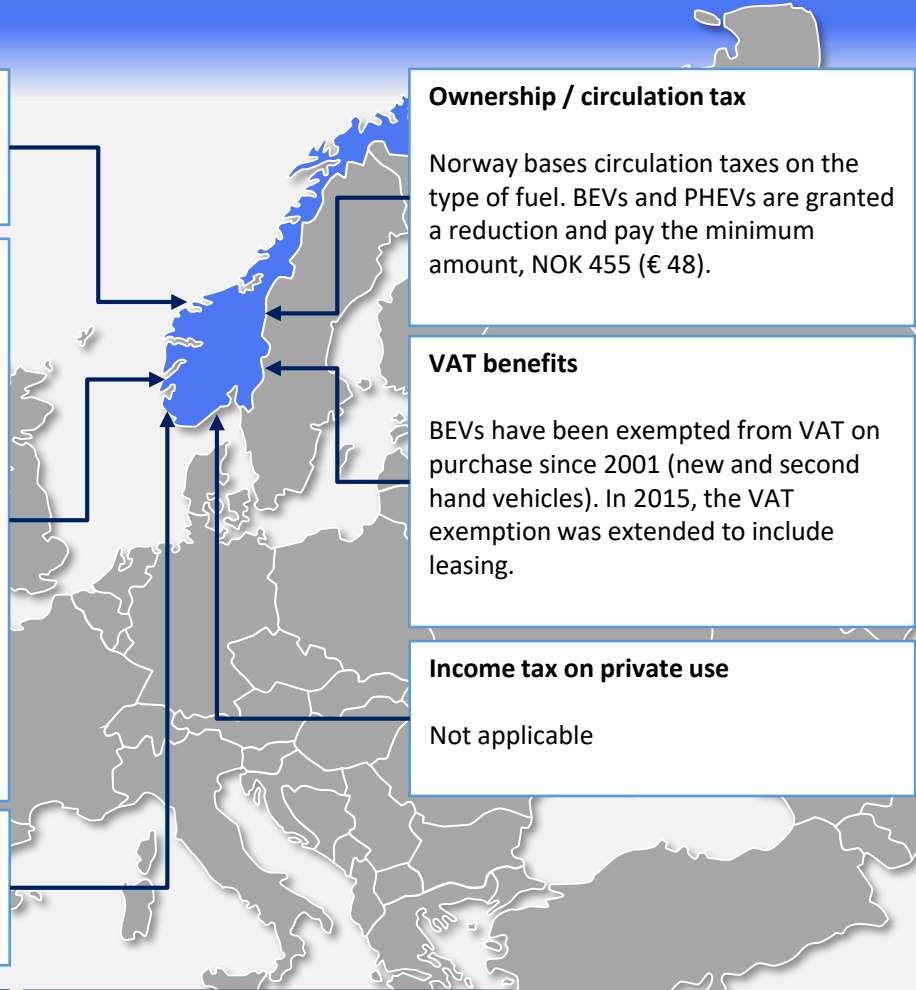
Norway bases circulation taxes on the type of fuel. BEVs and PHEVs are granted a reduction and pay the minimum amount, NOK 455 (€ 48).

VAT benefits

BEVs have been exempted from VAT on purchase since 2001 (new and second hand vehicles). In 2015, the VAT exemption was extended to include leasing.

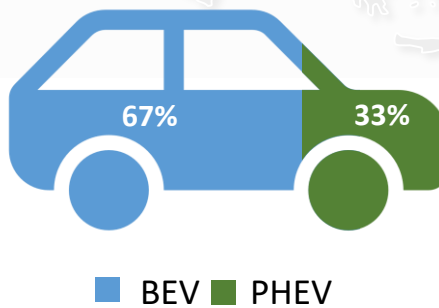
Income tax on private use

Not applicable

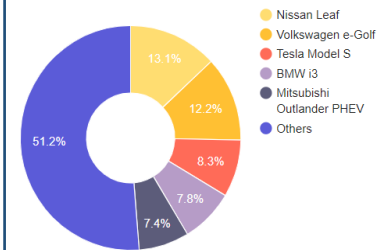


8.774
Public (slow)-
chargers

2.421
Fast chargers

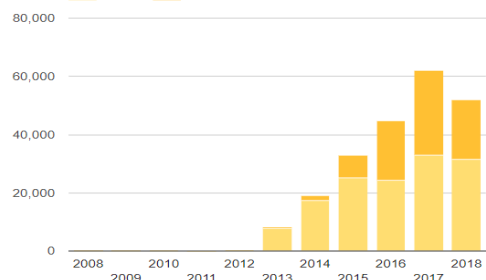
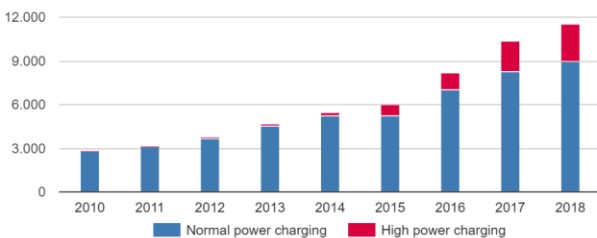


Top 5 electric models (2018)



Sales figures. Market share BEV + PHEV 2018 YTD: 46,6%

■ BEV ■ PHEV





UK



Purchase Grants

Private: BEV € 3.950 PHEV € 0
 Company: BEV € 3.950 PHEV € 0

Registration Tax

From April 2017, there is a tax exemption for zero emission vehicles valued £40,000 (€ 45.000) or less. Low emission vehicles pay reduced tax rates.

Company profit tax

EV's pay reduced company car tax rates.

Ownership / circulation tax

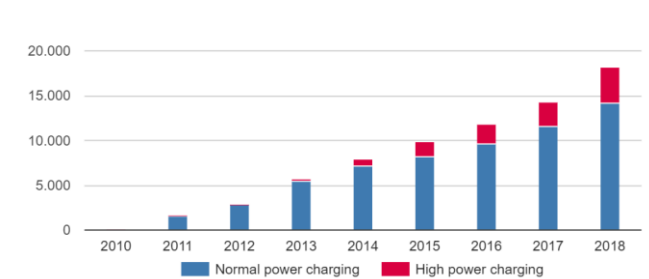
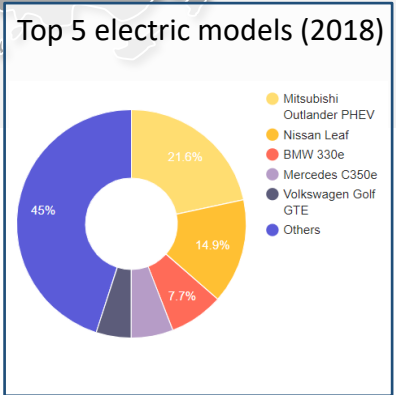
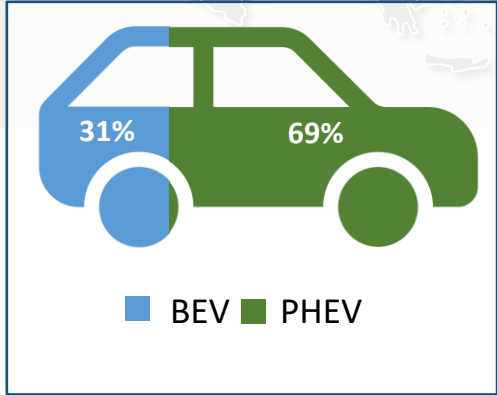
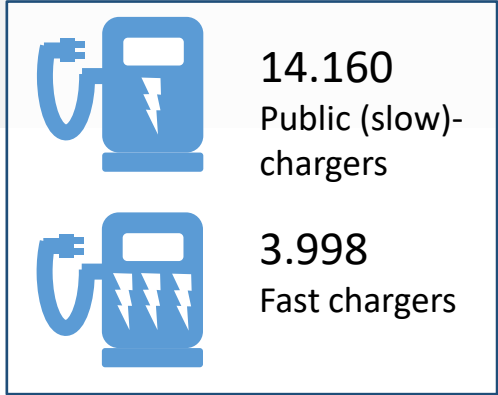
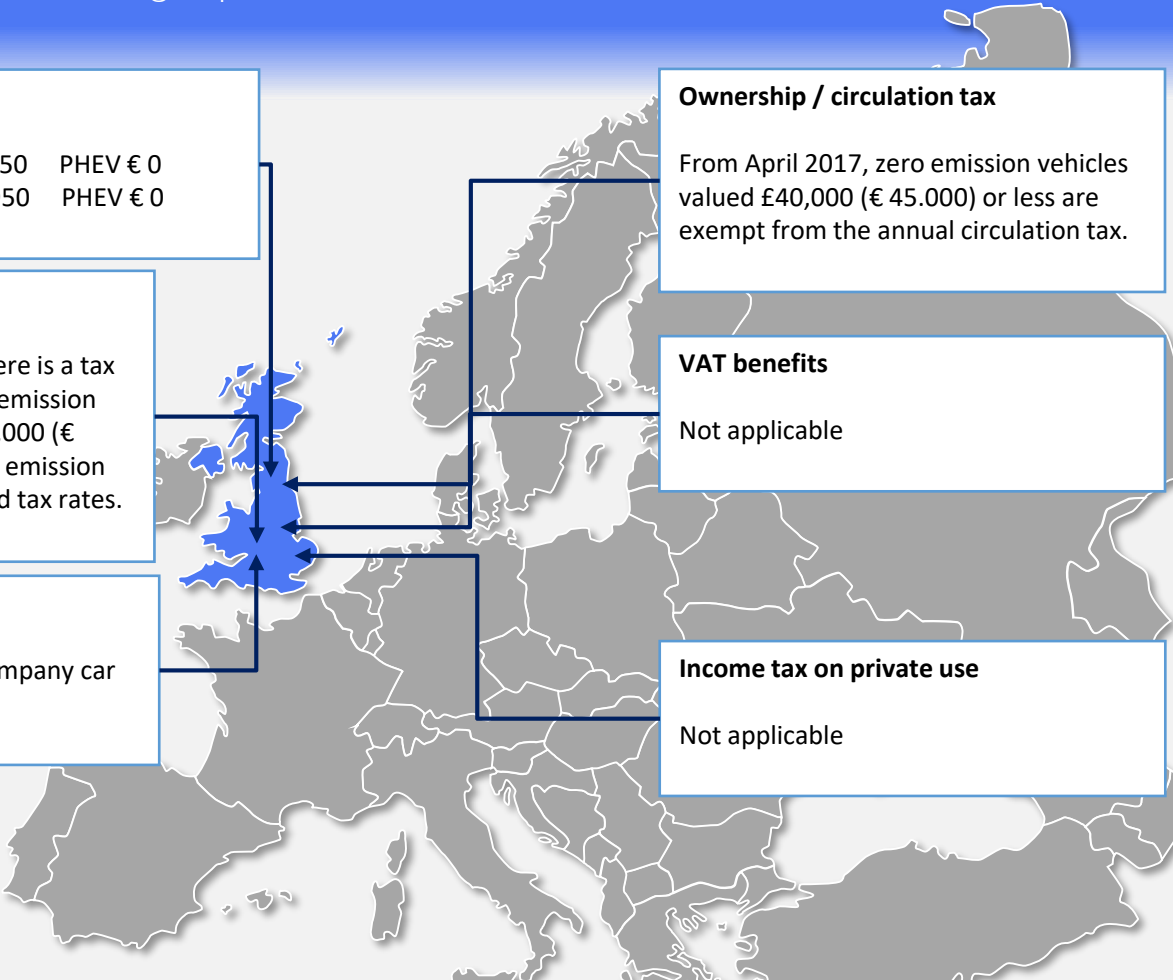
From April 2017, zero emission vehicles valued £40,000 (€ 45.000) or less are exempt from the annual circulation tax.

VAT benefits

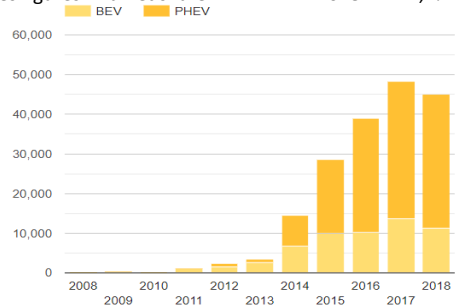
Not applicable

Income tax on private use

Not applicable



Sales figures. Market share BEV + PHEV 2018 YTD: 2,4%



Purchase Grants

Private: BEV € 6.000 PHEV € 0
 Company: BEV € 6.000 PHEV € 0
 (+ scrappage fee BEV new € 2.000, BEV 2nd hand € 1.000)

Registration Tax

An environmental penalty is enforced as a registration tax, starting from 120g CO2/km. The tax is calculated staggered increasing with increasing emissions. All vehicles under 120g CO2/km are exempt from this tax

Ownership / circulation tax

Not applicable

VAT benefits

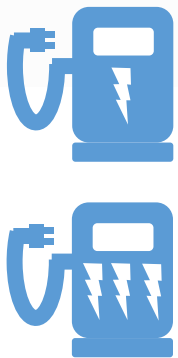
VAT recovered 100% on electricity

Income tax on private use

Not applicable

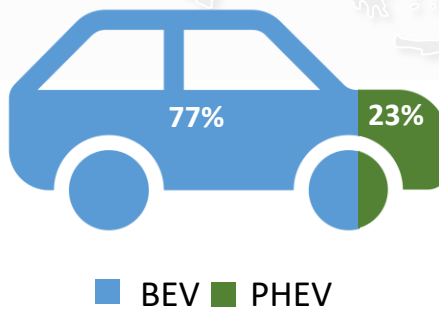
Company profit tax

TVS Tax (Taxe sur les véhicules de société) is applicable to company (passenger) cars. The first component is based on CO2 Emissions (or Horse Power for older vehicles), is calculated with a staggered approach and is exempted for vehicles <60g CO2 / km. The second component is based on environmental impact and is also staggered, and much higher for (older) diesel vehicles. New EV's pay € 20 per year.

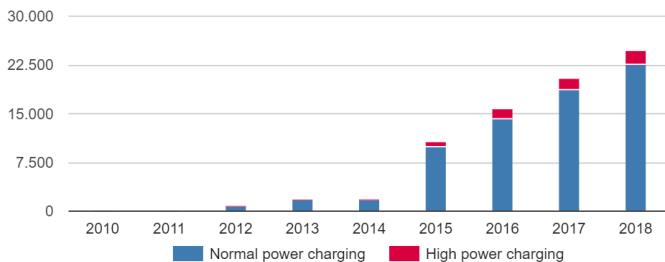
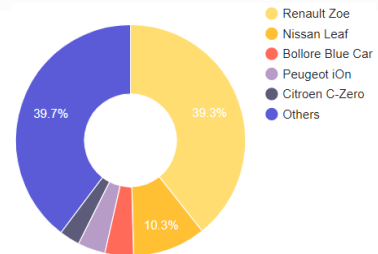


22.507
Public (slow)-
chargers

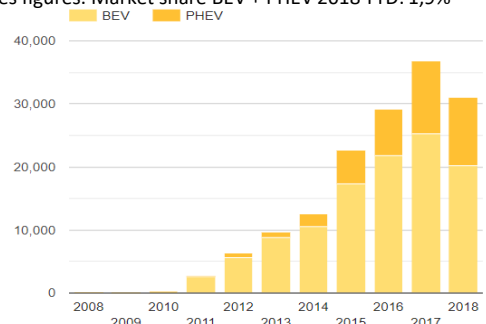
2.253
Fast chargers



Top 5 electric models (2018)



Sales figures. Market share BEV + PHEV 2018 YTD: 1,9%



Purchase Grants

Private: BEV € 4.000 PHEV € 4.000
 Company: BEV € 4.000 PHEV € 4.000

Registration Tax

BEV is free from Registration Tax (Flanders) or € 61,50 (Wallonia and Brussels)

Company profit tax

BEV are 120% deductible from Company Tax until end of 2019. From 2020 onwards 100%. Applicable for companies and ZZP

Ownership / circulation tax

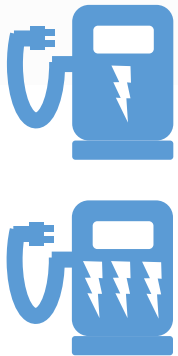
BEV ownership tax is € 0 or € 77,35 (Wallonia, Brussel) (comp: diesel car € 1.900)

VAT benefits

Not applicable

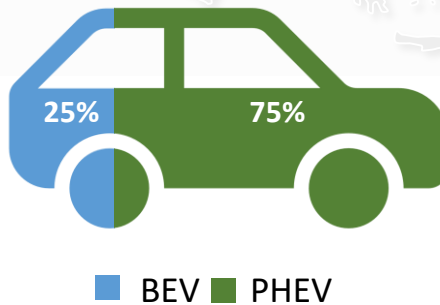
Income tax on private use

Not applicable

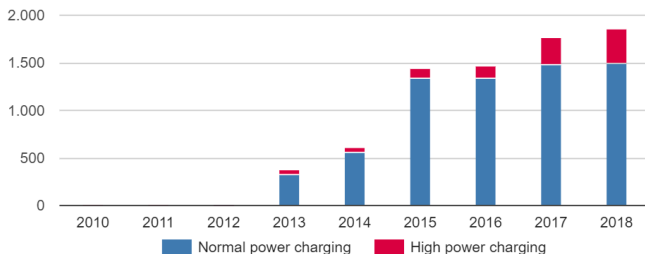
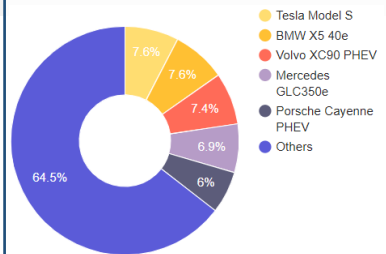


1.493
Public (slow)-chargers

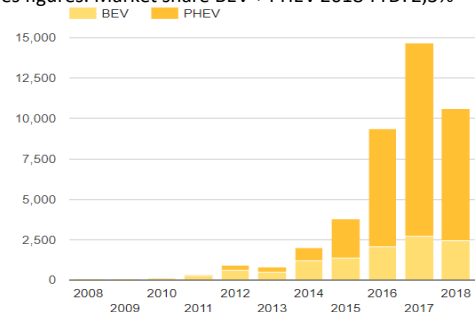
365
Fast chargers



Top 5 electric models (2018)



Sales figures. Market share BEV + PHEV 2018 YTD: 2,3%





Purchase Grants

Private: BEV € 3.850 PHEV € 1.925
 Company: BEV € 3.850 PHEV € 1.925

Registration Tax

“Super green” cars are exempt for the first five-years after registration. This corresponds, on average, to an annual tax relief of about SEK 1 760 (€ 170).

Company profit tax

Not applicable

Ownership / circulation tax

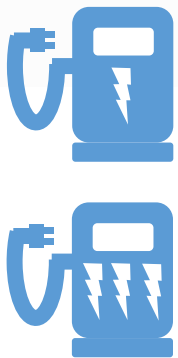
Not applicable

VAT benefits

Not applicable

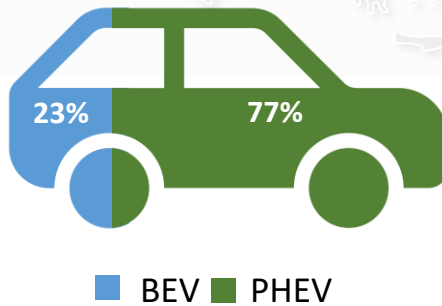
Income tax on private use

The Swedish legislation allows reducing the value of the benefit represented by the private use of company cars if they are electric*, and therefore reduces the amount of income taxes that needs to be paid on it.

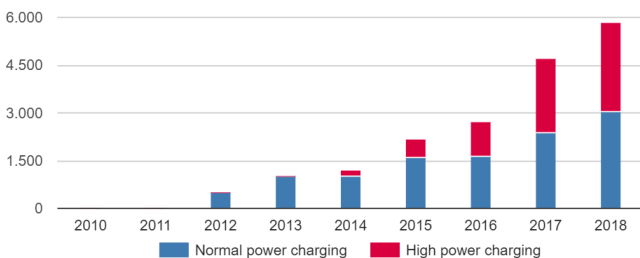
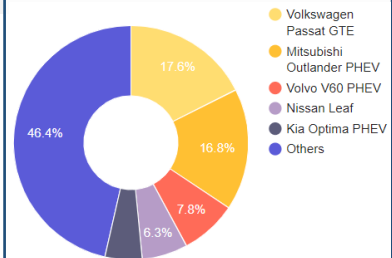


3.026
Public (slow)-
chargers

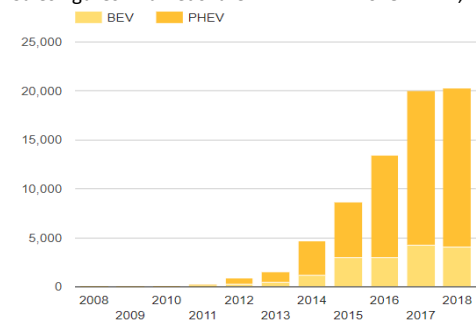
2.807
Fast chargers

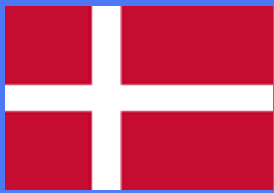


Top 5 electric models (2018)



Sales figures. Market share BEV + PHEV 2018 YTD: 7,2%





Denmark

Infographics International Incentives



Purchase Grants

Not applicable

Registration Tax

Until the end of 2015, BEV cars were exempt from paying the (very significant) registration tax. Phasing in a registration tax from 2016 paralysed the BEV sales. In 2017 a new reduced registration tax for BEV was introduced.

Company profit tax

Not applicable

Ownership / circulation tax

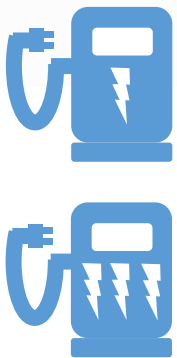
In Denmark, circulation taxes are differentiated based on fuel consumption and weight. BEVs pay the minimum amount

VAT benefits

Not applicable

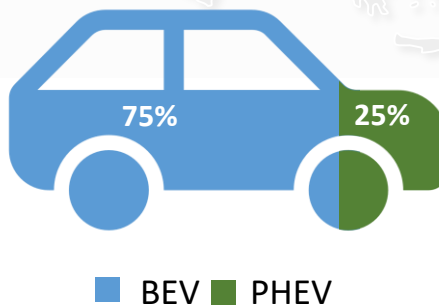
Income tax on private use

Not applicable

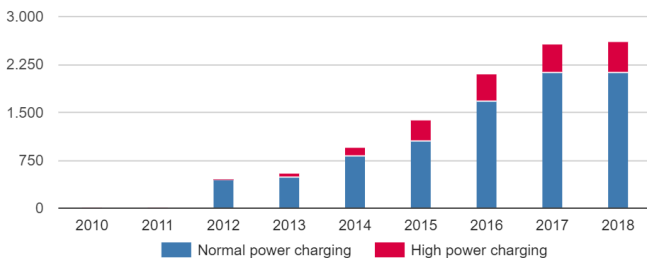
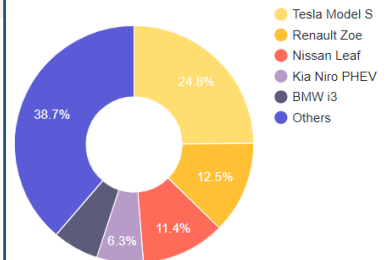


2.124
Public (slow)-
chargers

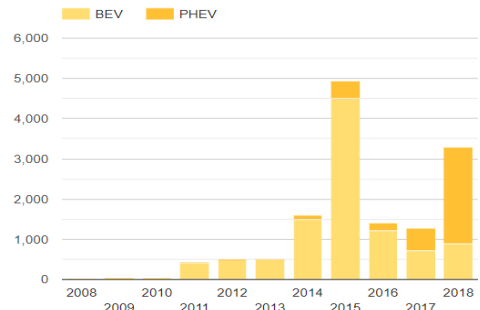
492
Fast chargers



Top 5 electric models (2018)



Sales figures. Market share BEV + PHEV 2018 YTD: 3,1%





Germany

Infographics International Incentives



Purchase Grants

Private: BEV € 4.000 PHEV € 3.000
Company: BEV € 3.000 PHEV € 3.000

Registration Tax

Not applicable

Company profit tax

Not applicable

Ownership / circulation tax

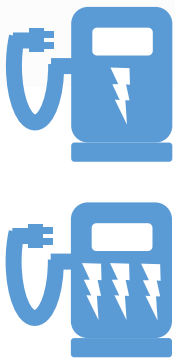
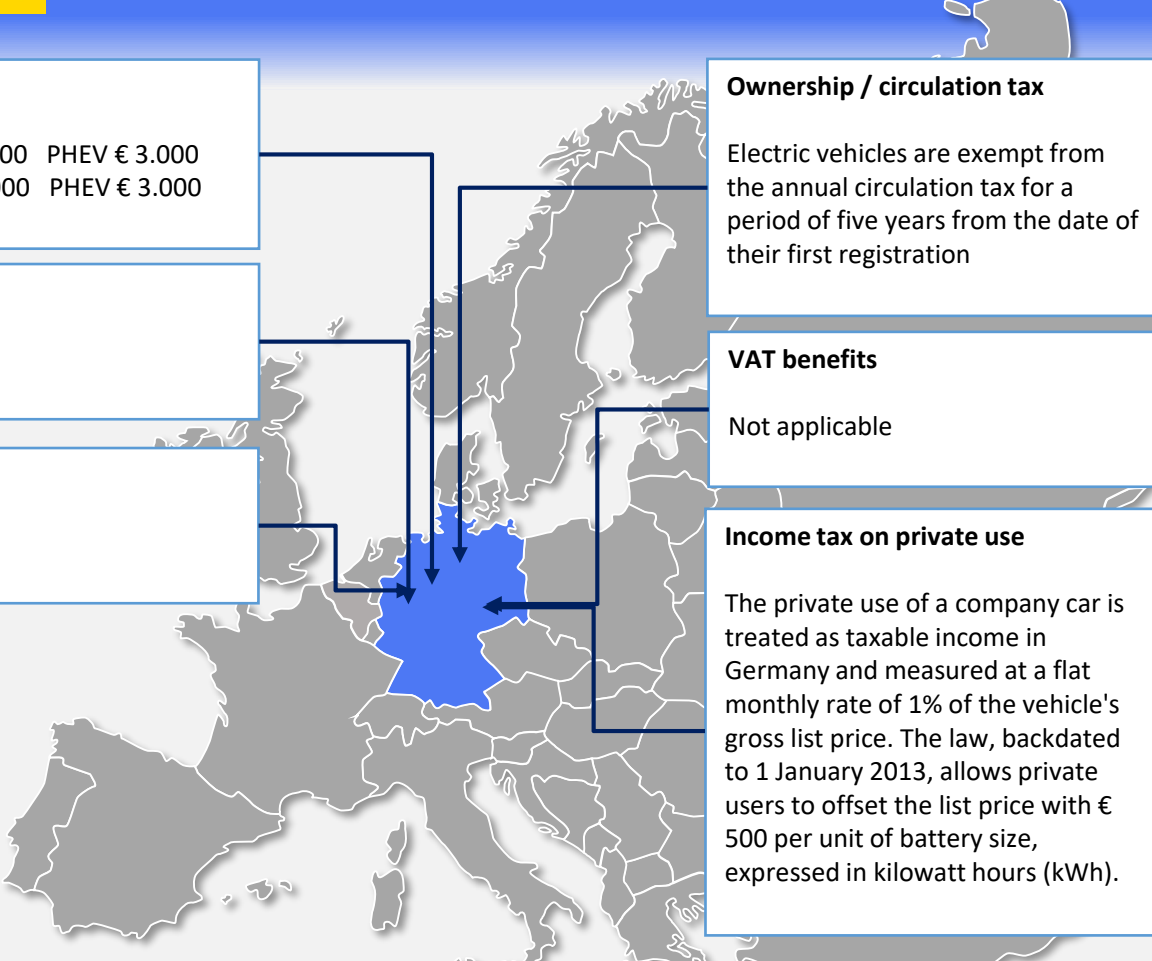
Electric vehicles are exempt from the annual circulation tax for a period of five years from the date of their first registration

VAT benefits

Not applicable

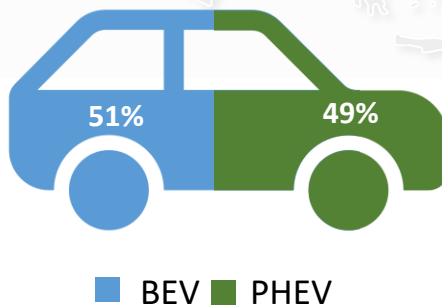
Income tax on private use

The private use of a company car is treated as taxable income in Germany and measured at a flat monthly rate of 1% of the vehicle's gross list price. The law, backdated to 1 January 2013, allows private users to offset the list price with € 500 per unit of battery size, expressed in kilowatt hours (kWh).

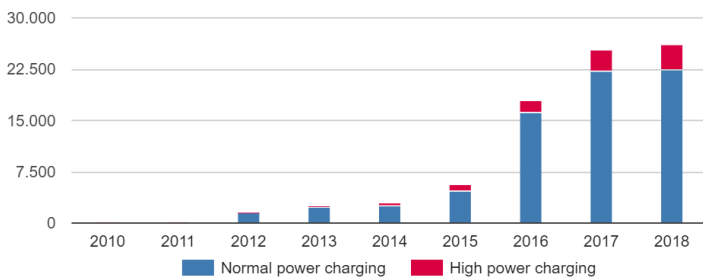
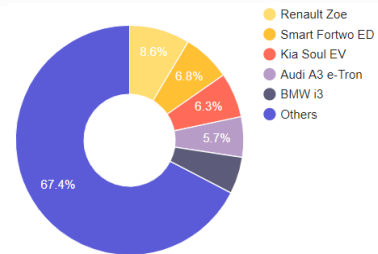


22.314
Public (slow)-
chargers

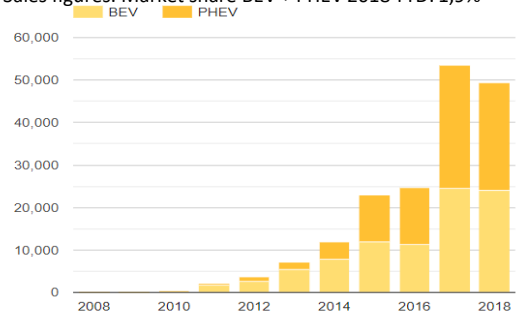
3.848
Fast chargers



Top 5 electric models (2018)



Sales figures. Market share BEV + PHEV 2018 YTD: 1,9%





Austria

Infographics International Incentives



Purchase Grants

Private: BEV € 4.000 PHEV € 1.500
Company: BEV € 3.000 PHEV € 1.500

Registration Tax

< 90g/km CO2, registration tax-free

Company profit tax

Not applicable

Ownership / circulation tax

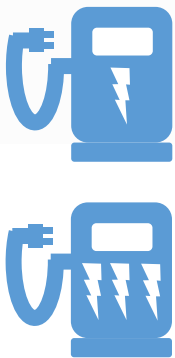
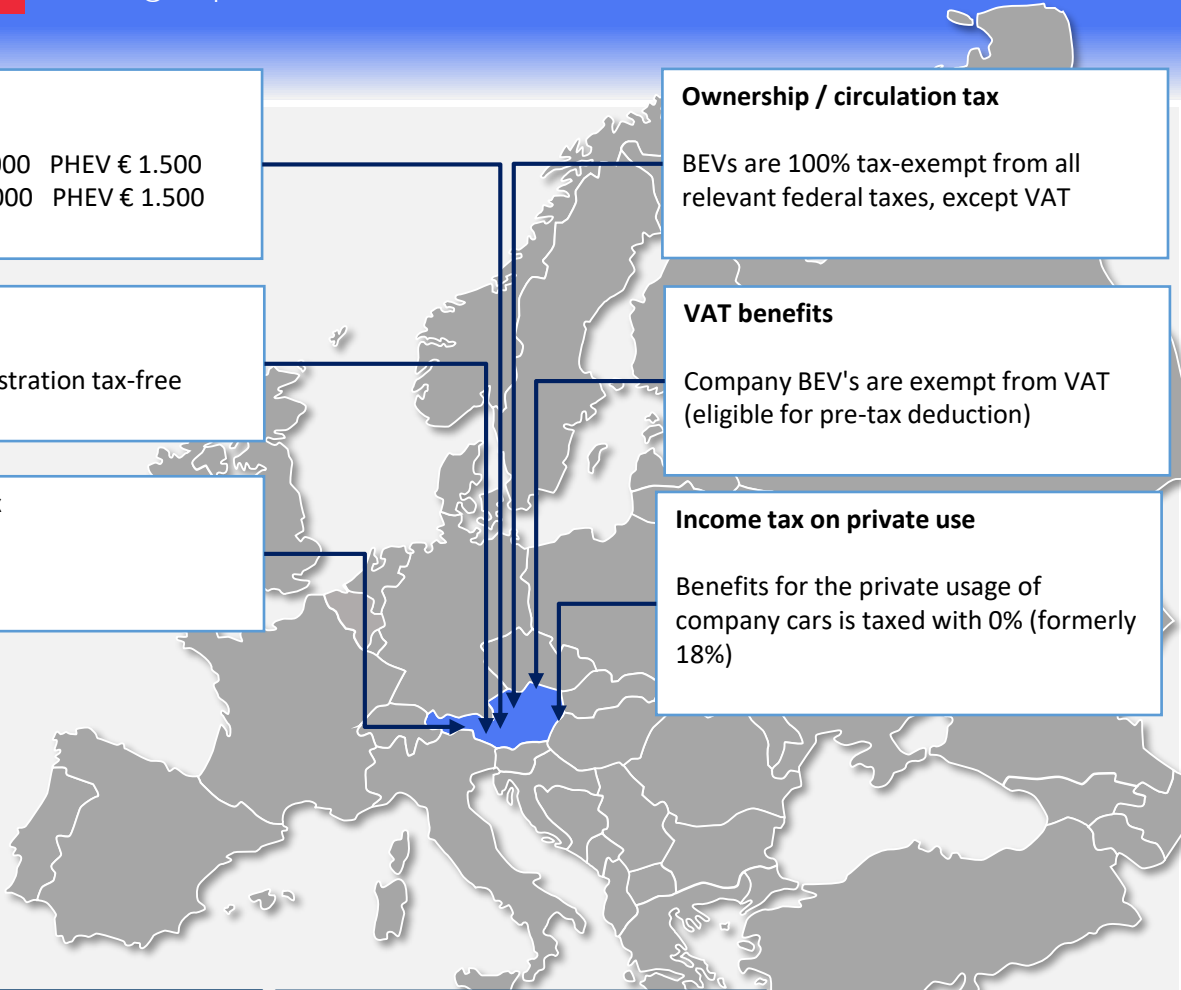
BEVs are 100% tax-exempt from all relevant federal taxes, except VAT

VAT benefits

Company BEV's are exempt from VAT (eligible for pre-tax deduction)

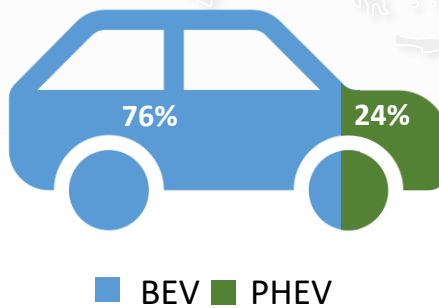
Income tax on private use

Benefits for the private usage of company cars is taxed with 0% (formerly 18%)

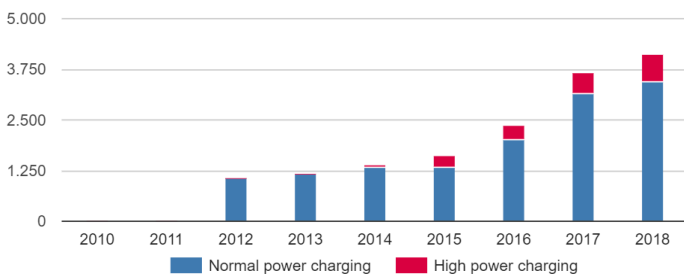
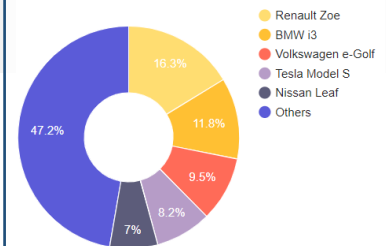


3.429
Public (slow)-
chargers

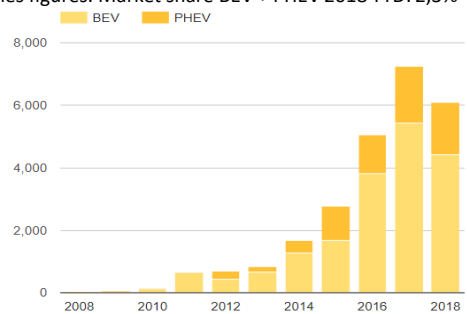
699
Fast chargers



Top 5 electric models (2018)



Sales figures. Market share BEV + PHEV 2018 YTD: 2,3%



Norway



Norway introduced a special E-Number plate for Electric Vehicles which gives authorities the possibility to choose local incentives such as free parking, using bus lanes, toll free based on these E-Number plates. It also helps increasing awareness of clean vehicles on the roads.

UK



From April 2019 the City center of London is a Ultra Low Emission Zone, diesel cars older than Euro 6 and ICE older than Euro 4 pay EUR 13 penalty per day

Belgium



75% from Cost of charging can be deducted from Income Tax

France



With a green card (eligible for EVs) up to two hours of free parking in certain municipalities

Austria



Several bigger cities have already exemptions from parking charges in place for BEV's
Government announced higher speed limits of 130 km/h for BEV's where ICE vehicles only have speed limits of 110km/h

Sweden



No specific other benefits

Denmark



Exempting electric cars from parking fees for up to DKK 5 000 (EUR 670) per year

Germany



Private owners of plug-in electric vehicles that charge their cars in their employer premises are exempted from declaring this perk as a cash benefit in their income tax return. Employers who provide this perk are allowed to discount from their income tax a 25% of the lump sum value of the cash benefit.

	Special cases other benefits
Iceland	Free parking in the two big cities up to two hours for BEV's. Iceland exempts vehicles emitting up to 80 g CO2/km from import excise duties, which can reach 65% of the vehicle's customs value if emissions exceed 250 g CO2/km
Ireland	Free charging at normal and high power public recharging points. Free on-street parking while charging in some local authorities. Regulations made to provide for distinct marking of on-street space for charging of EV's.
Lithuania	Reduced parking fees for EV's and possibility to use buslanes in Vilnius
Malta	Use of priority lanes in Valetta by EV's possible. No Valetta CVA charge



Special case: Norway TCO including other benefits



Price examples (2018)

Renault Clio	Renault ZOE
Price before tax: 12 758 Euro	Price before tax: 24 122 Euro
CO ₂ tax: 2 314	CO ₂ tax: 0
Nox tax: 209	Nox tax: 0
Weight tax: 1 512	Weight tax: 0
Scrapping fee: 249	Scrapping fee: 249
25% VAT: 3 189	VAT: 0
Retail price: 20 231 Euro	Retail price: 24 371 Euro

Source: Norwegian EV Association

Price example (2018)

Volkswagen Golf	Volkswagen e-Golf
Price before tax: 20 077 Euro	Price before tax: 32 741 Euro
CO ₂ tax: 3 919	CO ₂ tax: 0
Nox tax: 238	Nox tax: 0
Weight tax: 1 715	Weight tax: 0
Scrapping fee: 249	Scrapping fee: 249
25% VAT: 5 019	VAT: 0
Retail price: 31 236 Euro	Retail price: 32 990 Euro

Source: Norwegian EV Association

Price example (2018)

Audi A7	Tesla Model S
Price before tax: 38 445 Euro	Price before tax: 66 597 Euro
CO ₂ tax: 13 116	CO ₂ tax: 0
Nox tax: 160	Nox tax: 0
Weight tax: 11 434	Weight tax: 0
Scrapping fee: 251	Scrapping fee: 251
25% VAT: 9 611	VAT: 0
Retail price: 73 017 Euro	Retail price: 66 849 Euro

Source: Norwegian EV Association

TCO, 4 years, 10.000 km/yr	Renault Clio	Renault Zoe
Purchase price	€20.231	€ 24.122
Residual value	66% = € 13.352	54% = € 13.026
Yearly costs:		
Traffic Insurance Fee	€ 293	€ 0
Insurance	€ 615	€ 615
Service, Repair, Maintenance	€ 615	€ 512
Cleaning	€ 308	€ 308
Parkingcosts	€ 308	€ 0
Tollroads	€ 513	€ 0
Total yearly costs	€ 2.551	€ 1.435
Energy(totaal)	€ 4.022	€ 820
Depreciation (totaal)	€ 6.879	€ 11.096
Total cost of ownership (TCO) 4 years	€ 21.105	€ 17.656
TCO per year	€ 5.276	€ 4.414
TCO per month	€ 440	€ 368

TCO, 4 years, 20.000 km/yr	VW Golf	VW e-Golf
Purchase price	€31.236	€ 32.990
Residual value	66% = € 20.615	54% = € 17.815
Yearly costs:		
Traffic Insurance Fee	€ 293	€ 0
Insurance	€ 615	€ 615
Service, Repair, Maintenance	€ 615	€ 512
Cleaning	€ 308	€ 308
Parkingcosts	€ 308	€ 0
Tollroads	€ 513	€ 0
Total yearly costs	€ 2.652	€ 1.435
Energy(totaal)	€ 8.044	€ 1.640
Depreciation (totaal)	€ 10.620	€ 15.175
Total cost of ownership (TCO) 4 years	€ 32.063	€ 25.692
TCO per year	€ 8.016	€ 6.423
TCO per month	€ 668	€ 535

TCO, 4 years, 40.000 km/yr	Audi A7	Tesla Model S
Purchase price	€73.017	€ 66.849
Residual value	66% = € 48.191	54% = € 36.098
Yearly costs:		
Traffic Insurance Fee	€ 293	€ 0
Insurance	€ 615	€ 615
Service, Repair, Maintenance	€ 615	€ 512
Cleaning	€ 308	€ 308
Parkingcosts	€ 308	€ 0
Tollroads	€ 513	€ 0
Total yearly costs (incl 4% interest)	€ 4.411	€ 3.011
Energy(totaal)	€ 16.087	€ 3.283
Depreciation (totaal)	€ 24.826	€ 30.751
Total cost of ownership (TCO) 4 years	€ 58.560	€ 46.080
TCO per year	€ 14.640	€ 11.520
TCO per month	€ 1.220	€ 960