# Mobilitu Guide

**Green powertrains** EV maturity Local taxation & specificities

November 2023 edition

Better with every move.





# Wired for success: a country-by-country guide to **EV readiness**

Welcome to the 2023 Mobility Guide, your trusted compass in the dynamic landscape of global mobility. As we navigate the ever-evolving world of electric vehicles (EVs), sustainable practices, and international fleet management, this guide has been meticulously crafted to empower you with insights and strategies that will shape the future of your mobility.

#### Navigating EVs in a changing landscape

Over the past year, the sales growth of electric vehicles in 2022 and the first half of 2023 has accelerated compared with previous years confirming that electrification is a megatrend. The question isn't anymore if but how fast the electrification will happen. But, as we venture into the realm of EVs, we also recognise the challenges and uncertainties. Inflation and geopolitical factors affecting cars prices and electricity prices, and concerns about residual values, battery performance and recycling are issues that cannot be overlooked. The main critical concerns on the horizon are the building of a new EV supply chain for the automotive industry, our dependency on a few batteries suppliers, inflation on battery raw materials, particularly lithium, to meet the soaring demand for EVs. These challenges together with legislative and fiscal evolutions could potentially impact the trajectory of EV market share in the second half of this decade.

As we explore the data and trends per market within this guide, keep in mind the dynamic nature of the electric vehicle landscape. Our goal is to empower you with the knowledge and insights needed to navigate this transformative era in the automotive industry successfully and adapt your trajectory according to market maturity. These insights are crucial for businesses looking to navigate the electrified mobility landscape effectively.

Providing a one-stop-shop solution for electrification goes hand in hand with accompanying our clients in this journey, jointly supporting the achievement of their corporate climate goals. With this purpose in mind, we have developed a set of consulting tools that allow joint navigation through this complex environment, characterised by various taxation and incentive schemes, and by different regulations and country specificities.

#### **Global reach, unmatched value**

In 2023, the automotive industry witnessed a seismic shift as ALD Automotive joined forces with LeasePlan, creating an automotive juggernaut with unparalleled global reach. This combined group is positioned to be the global mobility player with the world's largest multibrand EV fleet with half a million of EVs on September 30th, 2023 in 44 countries and 16 partners countries. Think of it as your passport to a worldwide mobility partner, ensuring seamless operations and unparalleled customer value across borders. The synergy of these two giants opens doors to unprecedented possibilities for our valued international mobility managers.

#### Expanding horizons in Asia and beyond

Our commitment to providing you with a comprehensive view extends beyond traditional boundaries. In this year's Mobility Guide, we proudly incorporate Thailand into our scoring matrix and broaden our lens to encompass the United Arab Emirates (UAE). These additions reflect the ever-expanding landscape of electric vehicle readiness and maturity, offering you a more holistic perspective for your international mobility's strategic decisions.

# Client centric electrification

At the heart of our services lies a relentless client focus. We understand that electrification is not a one-size-fits-all endeavour. Our consulting services take centre stage in this edition. We've been hard at work in 2023, performing over 50 specific cases for international clients. Notably, our wellrecognised Net Zero Programme, tailored to individual clients, support your journey towards ambitious CO<sub>2</sub> emissions reduction goals and give you concrete outputs in term of CO<sub>2</sub> footprint baseline, trajectory and action plans. Our commitment to precision and sustainability is unwavering.

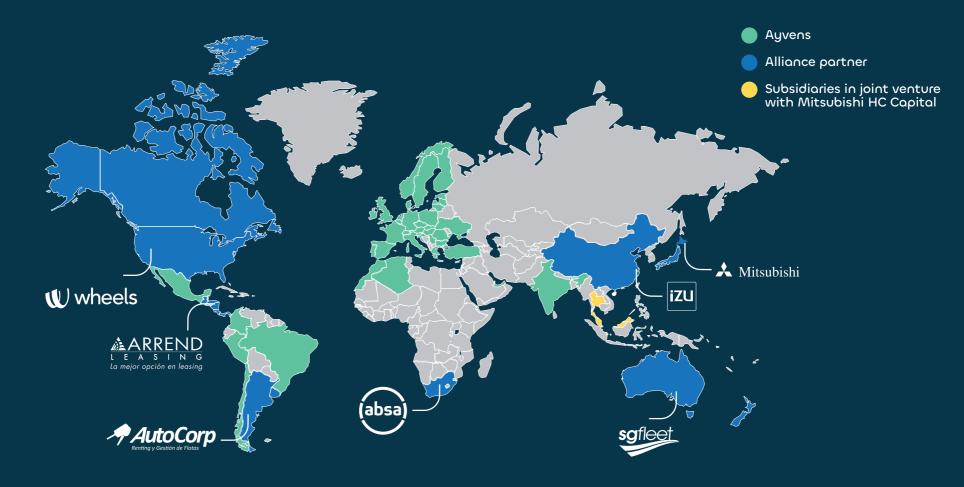
As you immerse yourself in the 2023 Mobility Guide, envision it as your compass in the pursuit of sustainable mobility strategy. It's not just a guide; it's your gateway to a greener future. Happy reading, and may your international fleets thrive in the era of electrification. "Veolia Group aims to be the benchmark company for ecological transformation. In this journey, our international partnership with Ayvens is key to bring value to our businesses, helping transform our sustainability goals into concrete actions and deliverables, regarding fleet as well as alternative mobility solutions."

#### Wilfried Duchez

Group Fleet & Mobility Deputy Director Veolia



# Supporting you wherever you need us



~3,4 million vehicles in44 subsidiaries

+ Alliance ~ 4,5 million vehicles in
Partners 61 countries

# EV maturity scoring

Our Mobility Guide scores countries according to their level of EV Maturity on an annual basis. Our aim is to support global fleet managers in their journey towards electrification, providing a snapshot of EV maturity for each country.

This scoring allows you to answer legitimate questions as where to start the energy transition and at which pace.



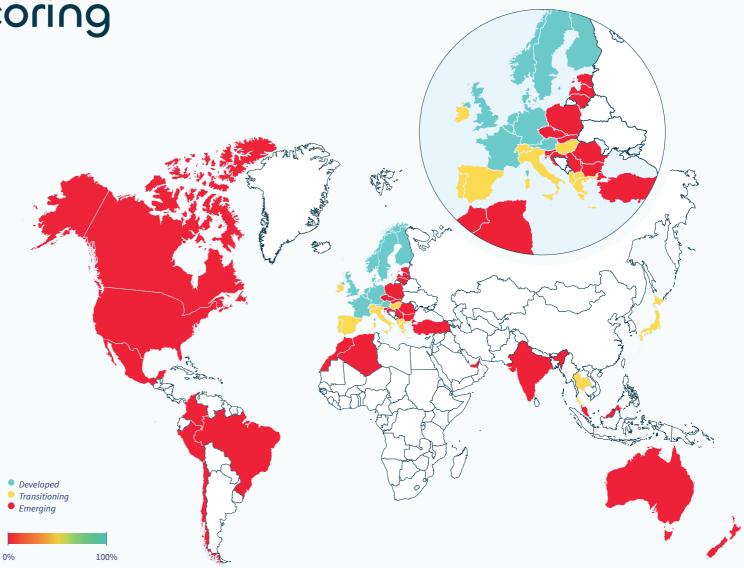
Austria, Belgium, Denmark, Finland, France, Germany, Luxembourg, Netherlands, Norway, Sweden, UK

#### Countries with scoring above 40 points

Greece, Hungary, Ireland, Italy, Japan, Portugal, Spain, Switzerland, Thailand

#### • Countries with scoring below 40 points

Algeria, Australia, Brazil, Bulgaria, Canada, Chile, Colombia, Croatia, Czech Republic, Estonia, India, Latvia, Lithuania, Malaysia, Mexico, Morocco, New Zealand, Peru, Poland, Romania, Serbia, Slovakia, Slovenia, Turkey, UAE, USA



Sources: EV Volumes - EAFO-European Alternative Fuels Observatory - ACEA - electricitymaps

# Our scoring rationale

The scoring methodology we have used for the 2023 edition of the Mobility Guide takes into consideration several **factors and hurdles when transitioning** to an electrified fleet.

The main barriers to BEV adoption are range anxiety, charging infrastructure complexity and affordability.

In this guide, our aim is to **provide an unbiased view of these barriers,** focusing on **6 pillars,** highlighted here with the **metrics taken into consideration.** 

The sum of these pillars produces the total country score.

#### 1. EV adoption

Assessment of the electrified sales volumes and market share versus the total industry volume. A greater weighting is added to the BEV share versus other electrified powertrains.

#### 2. Charging infrastructure

Metrics take into consideration the quality, quantity and complexity of public charging stations, relative to the number of electric cars that will need to charge and the relative coverage per 100 km.

#### 3. Taxation and regulation

Countries identified where the government or main cities apply subsidies and/or incentives to adopt greener powertrains.

#### 4. Green powertrain offering

Analysis and measurement on the breadth of BEV model choices available to customers. Consideration is applied to unique models sold over the past 12 months to ensure there is appetite in the market.

#### 5. BEV TCO parity

When measuring the competitiveness of operating a BEV, direct segment comparisons are completed, or when BEV alternatives are not available a basket of ICE competitors is used.

#### 6. Sustainability relevance

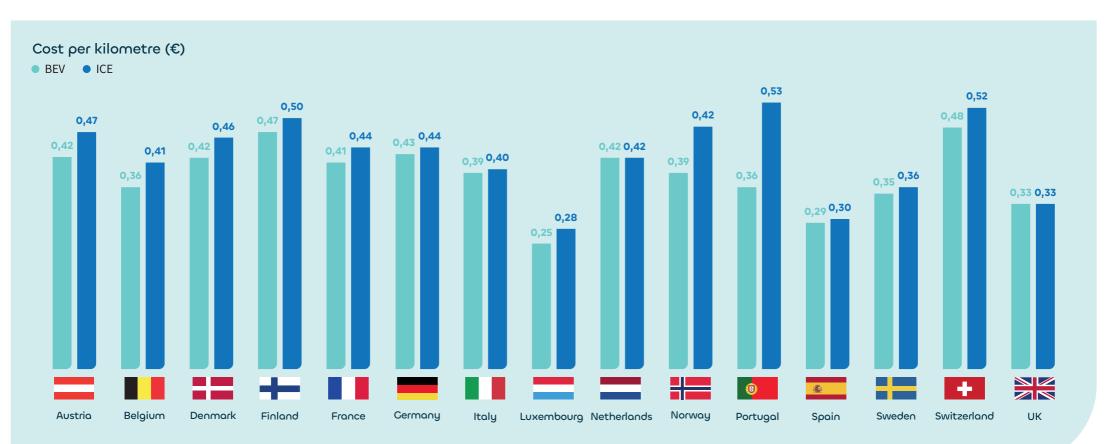
Measurement of carbon intensity at the grid. A greater weighting is added to the higher proportion of renewables sources and the share of low carbon.

2	5 <sup>%</sup> 15 <sup>%</sup> 25 <sup>%</sup> 0 <sup>%</sup> Weight of each KPI 20 <sup>%</sup>
KPI	Sub category
	<ul> <li>2022 EV registration / Running country fleet</li> <li>Powertrain mix passenger cars &amp; light commercial vehicles - all market</li> <li>Share of EVs / Total 2022 new car registrations</li> <li>Share of PHEVs / Total 2022 new EVs car registrations</li> <li>Share of BEVs / Total 2022 new EVs car registrations</li> </ul>
Charging	<ul> <li>Number of public chargers / EV Running country fleet</li> <li>Number of public chargers / EV 2022 registrations</li> <li>Number of normal, fast &amp; ultra fast chargers / Number of chargers</li> <li>Number of chargers per 100 km</li> <li>Number of chargers per 100.000 inhabitants</li> </ul>
Taxation and regulation	<ul> <li>Incentives on EV purchase or ownership</li> <li>Incentives on driver benefit-in-kind</li> <li>Low Emission Zones or Diesel ban</li> <li>Incentives on EV Infrastructure</li> </ul>
Green powertrain — offering	• Number of unique BEV models sold in the past 12 months
BEV TCO parity	<ul> <li>TCO comparison between a basket of BEV reference models and comparable models in ICE powertrain</li> </ul>
Sustainability relevance	Snapshot of: • Grid CO <sub>2</sub> Carbon intensity • Share of low carbon • Share of renewables

Sources: EV Volumes - EAFO-European Alternative Fuels Observatory - ACEA - electricity maps - ALD Automotive internal databases. Metrics highlighted in **bold** have been represented in the country individual scorecards.

# Operating a BEV is cheaper than ICE in many EU countries

Cost per km for 48 months/120.000 km, BEV VS ICE TCO Benchmark H2 2023 – all passenger car models in scope excluding Top Mgmt



# 3 levels of maturity across our global scope

#### Category 1: Developed

For the first category, we selected the TOP 11 countries where EVs have either established a strong presence or where there are favorable conditions towards their adoption in the coming future.

#### **Country Scoring above 60 points**



#### Category 2: Transitioning

Within this second category, we have countries that have shown a concrete interest in electrification. However, due to local challenges, we foresee the transition happening in the mid-term for these markets.

**Country scoring above 40 points** 

Thailand



### Category 3: Emerging

In the Emerging category, we included countries where the hurdles of charging, affordability and availability are still difficult to overcome.

#### Countries with scoring below 40 points



# Category 1: Developed

Country	SCORE 2023	EV Adoption (0-25)	Charging infrastructure (0-20)	Taxation & regulation (0-20)	Green powertrain offer (0-15)	Sustainability relevance (0-5)	BEV TCO Parity (0-15)	vs 2022
Norway	81	21	14	15	15	5	11	-1
Austria	69	14	10	15	11	5	14	2
Netherlands	68	18	17	15	14	1	3	-9
Belgium	65	12	10	14	12	3	14	3
Sweden	65	20	8	11	14	5	7	-2
Finland	62	16	13	11	10	3	9	-4
France	60	14	7	10	13	5	11	=
Luxembourg	60	14	10	10	11	1	14	=
Cermany	60	15	12	13	12	1	7	=
Denmark	60	15	8	9	12	3	13	=
United Kingdom	60	15	11	14	14	3	3	-1

Least EV ready

Most EV ready

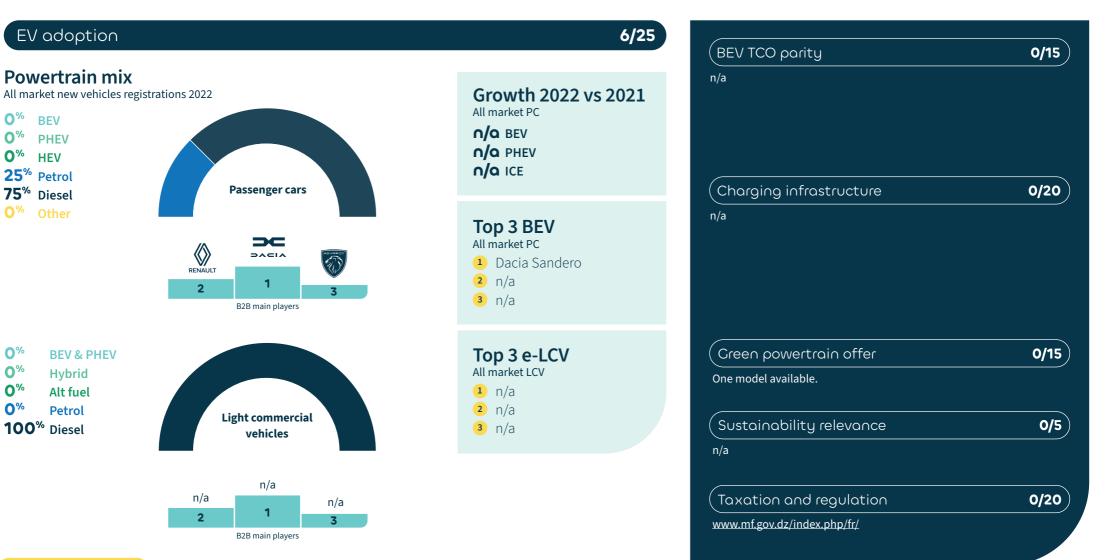
# Category 2: Transitioning

Country	SCORE 2023	EV Adoption (0-25)	Charging infrastructure (0-20)	Taxation & regulation (0-20)	Green powertrain offer (0-15)	Sustainability relevance (0-5)	BEV TCO Parity (0-15)	vs 2022
© Portugal	57	11	11	7	10	3	15	=
Switzerland	54	14	7	5	12	5	11	-1
Ireland	51	14	7	10	9	2	9	-5
Italy	48	9	10	9	11	1	8	3
Japan	48	9	9	9	6	1	14	5
Spain	45	9	8	7	11	3	7	6
Greece	43	8	9	8	8	1	9	3
Hungary	40	11	9	7	9	3	1	2
Thailand	40	8	8	4	6	1	13	N/A
Least EV ready	Most EV ready	)						





EV maturity scoring 6/100





EV adoption

**Powertrain mix** 

BEV

PHEV

Diesel

0.02<sup>%</sup> BEV & PHEV

alt fuel.

diesel

petrol and

**99,9**<sup>%</sup> Hybrid,

4,3%

0.7%

17%

10,5<sup>%</sup> HEV

67,5<sup>%</sup> Petrol

All market new vehicles registrations 2022

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HYUNDAI

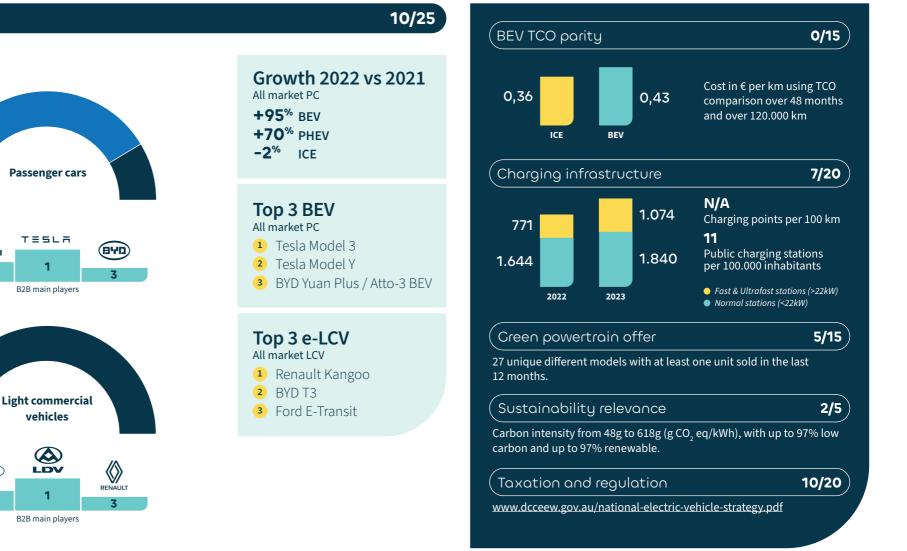
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Ford

2



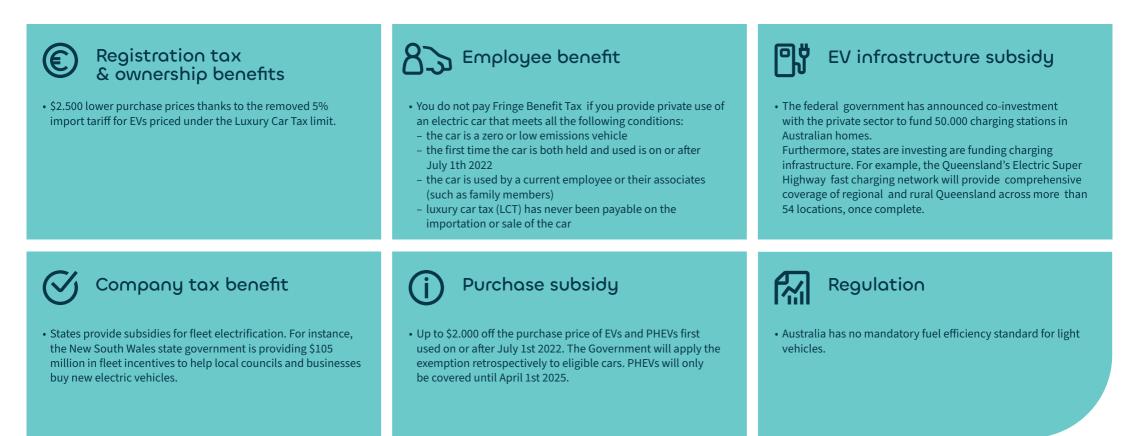
EV maturity scoring 34/100





### Taxation and regulation

# 10/20



Some exemptions might apply in specific business/operational context.

Regulation and subsidy might be subject of modification from government with no prior notice. Get in touch with your Ayvens consultant to get an ad-hoc study.



All market new vehicles registrations 2022

**Passenger cars** 

W

B2B main players

vehicles

Ford

B2B main players

SKODA

2

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2

EV adoption

**Powertrain mix** 

16% BEV

**19%** HEV

37<sup>%</sup> Petrol

22<sup>%</sup> Diesel

PHEV

6%







7.5% BEV & PHEV

**1.0<sup>%</sup>** Hybrid

**0,3**<sup>%</sup> Alt fuel

4,4<sup>%</sup> Petrol

87<sup>%</sup> Diesel



# Taxation and regulation

# 15/20



#### Registration tax & ownership benefits

- All cars below 103gCO<sub>2</sub>/km (WLTP value) are registration tax-free, no VAT, no NoVa.
- On ownership tax, BEVs are 100% tax-exempt from all relevant federal taxes, except VAT.
- Circulation tax (motorbezogene Versicherungssteuer) is calculated on the basis of the engine's horsepower. PHEV's have to pay only for the ICE part.



• For employees, the private use of a zero-emission company car, and the electricity to charge it publicly, are exempted from taxation as benefit in kind.

For charging in private homes, the used electricity can be reimbursed tax free to a certain amount (amount is set by the energy regulatory agency once a year).

### EV infrastructure subsidy

Subsidy scheme supporting the installation and purchase of public charging stations. The subsidy to companies depends on the type of charging stations and its usage, ranging from as low as €900 (if AC and not publicly available) and can be up to €30.000 (DC ≥100 kW and publicly avilable). The scheme for private individuals grants €600 per charging station (non OCPP compliant and single or two-family dwellings), but can go up to €1.800 per smart charging station (OCPP compliant) and if in multi-use installation.

#### Company tax benefit

 Input tax reduction (Vorsteuerabzug) possible. It is possible for companies to reduce the input tax when purchasing a BEV. The purchase price limit for this (partial) reduction is €80.000 (including VAT).

From January 1st 2023, an investment allowance of 15 percent of the purchase costs can be claimed for tax purposes when purchasing electric cars for business.



#### Purchase subsidy

For private individuals, companies and municipalities, the subsidy amounts up to €5.000 per BEV & FCEV and up to €2.500 per PHEV on conditions that purchase price is below €60.000 (incl. VAT) & with a pure electric range of 60km or more. Diesel-Hybrids are not eligible.
 eLCVs (category N1) can get a grant of up to €12.500

(depending on permissible maximum weight).



• BEVs are exempt from paying parking fees in several cities.

• Some highways allows higher speed limits for BEV.

Some exemptions might apply in specific business/operational context.

Regulation and subsidy might be subject of modification from government with no prior notice. Get in touch with your Ayvens consultant to get an ad-hoc study.



EV adoption

**BEV** 

PHEV

**HEV** 

Diesel

**3,3**<sup>%</sup> BEV & PHEV

**0,1**<sup>%</sup> Hybrid

0,2<sup>%</sup> Alt fuel

5,9<sup>%</sup> Petrol

**90**<sup>%</sup> Diesel

53<sup>%</sup> Petrol

2%

3%

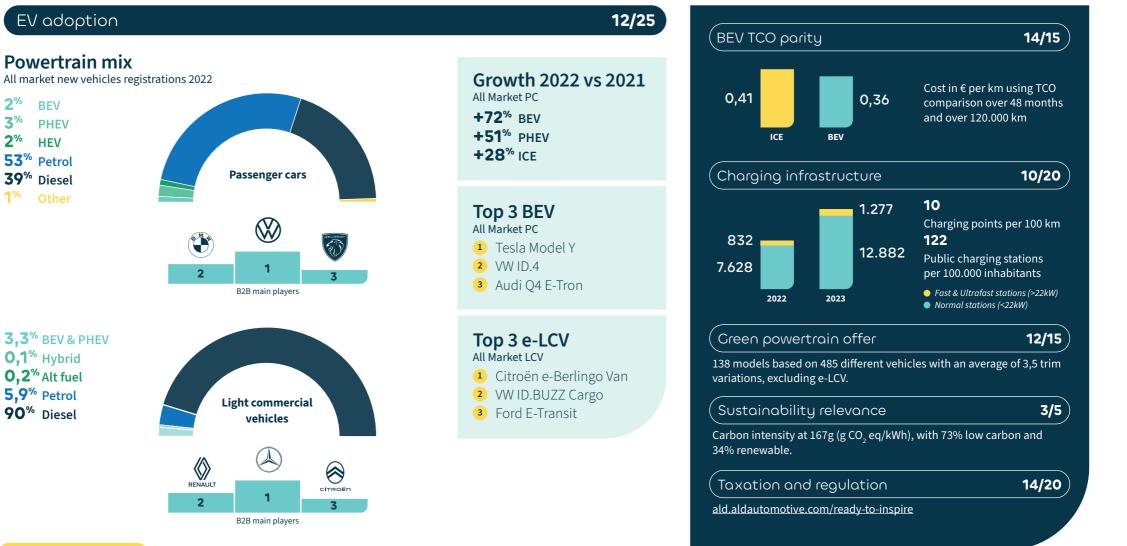
2%

**39**<sup>%</sup>

1%







# Belgium

# Taxation and regulation

# 14/20

<ul> <li>Registration tax &amp; ownership benefits</li> <li>Regional differences:</li> <li>Brussels: minimal rate of 61,50 for ZEV</li> <li>Flanders: exempted for ZEV</li> <li>Wallonia: minimal rate of 61,50 for ZEV</li> </ul>	8 Employee benefit • Minimal Benefit in Kind of €1.540 yearly or 4% of 6/7 of fiscal catalog value.	<ul> <li>For corporations: 150% deductibility (including different expenses such as installation and assessment) if installed between January 1st 2023 and August 31th 2024, and only if publically accessible and intelligent.</li> <li>Privately: tax benefit of 30% for a maximum €1.500 investment if installed between January 1st 2023 and December 31st 2023 and only if intelligent and providing green electricity.</li> </ul>
<ul> <li>Company tax benefit</li> <li>100% deductibility for ZEV.</li> <li>PHEV ordered between January 1st 2023 - June 31st 2023: <ul> <li>100% deductibility of the vehicle</li> <li>100% deductibility of the electricity cost</li> <li>50% deductibility of the fuel cost</li> </ul> </li> </ul>	Durchose subsidy	<ul> <li>Regulation</li> <li>Regional Low Emission Zones (LEZ.).Exclusion of most polluting vehicles in main cities. Brussels, Antwerp and Ghen based on the Euro standard.</li> <li>Regional obligations for companies in specific cities to draft a "Company Mobility Plan". Promotion of alternative means of transportation, if certain requirements are met.</li> </ul>

Some exemptions might apply in specific business/operational context.

Regulation and subsidy might be subject of modification from government with no prior notice. Get in touch with your Ayvens consultant to get an ad-hoc study.



EV adoption

**0,5**<sup>%</sup> BEV

**0,2**<sup>%</sup> PHEV

2,5% HEV

**2**<sup>%</sup>

4,8<sup>%</sup> Petrol

Diesel 90% Other

**0,03<sup>%</sup> BEV & PHEV** 

0.11<sup>%</sup> HYBRID

Petrol

45<sup>%</sup> Alt fuel

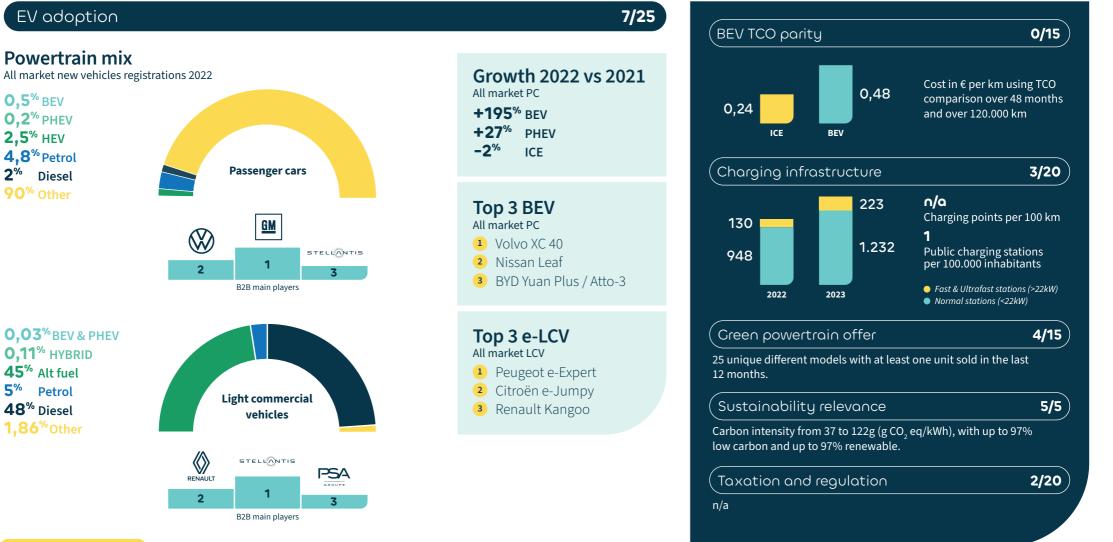
48<sup>%</sup> Diesel

1.86<sup>%</sup> Other

5%









EV adoption

**Powertrain mix** 

BEV

PHEV

Petrol

HEV

**0.2**<sup>%</sup> BEV & PHEV

Alt fuel

0,5<sup>%</sup> Hybrid

5,3<sup>%</sup> Petrol

94<sup>%</sup> Diesel

0%

20,1<sup>%</sup> Diesel

3.5%

0,5%

2,5%

73%

All market new vehicles registrations 2022

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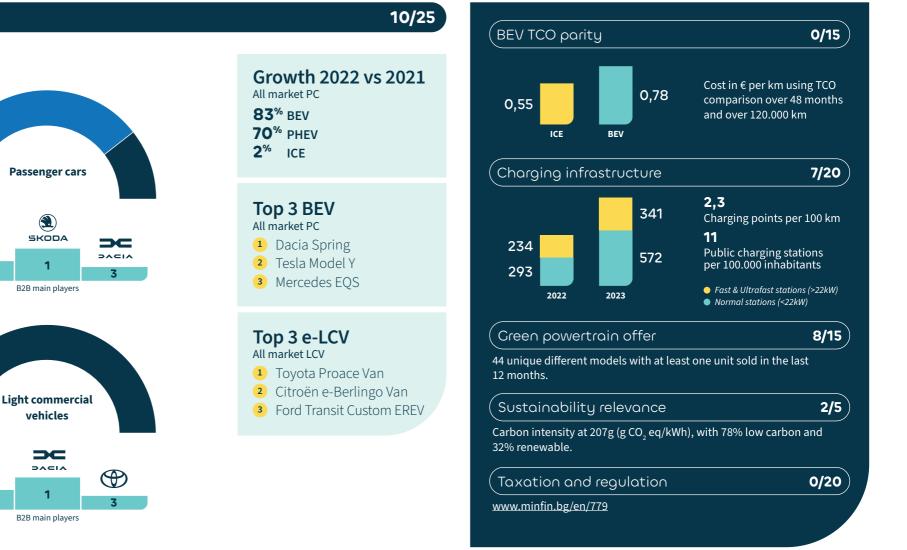
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RENAULT









All market new vehicles registrations 2022

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HYUNDAI

2

RIVIAN

2

EV adoption

**Powertrain mix** 

BEV

PHEV

Diesel

HEV

78<sup>%</sup> Petrol

15%

1%

0%

1%

**5**%

0%



EV maturity scoring 34/100

11/25 **BEV TCO** parity 3/15 Growth 2022 vs 2021 Cost in € per km using TCO All market PC 0,27 0,27 comparison over 48 months +68% BEV and over 120.000 km -1% PHEV ICE BEV -12% ICE Charging infrastructure 5/20 **Passenger cars** 2,3 4.528 Top 3 BEV Charging points per 100 km 3.670 All market PC TESLA 26 Tesla Model 3 20.057 Public charging stations 15.460 CHEVROLET 2 Tesla Model Y per 100.000 inhabitants 3 Ford Mustang Mach-E B2B main players Fast & Ultrafast stations (>22kW) 2022 2023 Normal stations (<22kW)</p> Green powertrain offer 5/15 Top 3 e-LCV All market LCV 50+ unique different models with at least one unit sold in the last Ford F150 Lightning 12 months. 2 Rivian R1T **Light commercial** Sustainability relevance 3/5 3 Ford e-Transit vehicles Carbon intensity from 31 to 428g (g  $CO_2$  eq/kWh), with up to 100% low carbon and up to 99% renewable. Ford Taxation and regulation 7/20 n/a 3 www.canada.ca B2B main players

< Back to the list of countries

**BEV & PHEV** 

Hybrid

Alt fuel

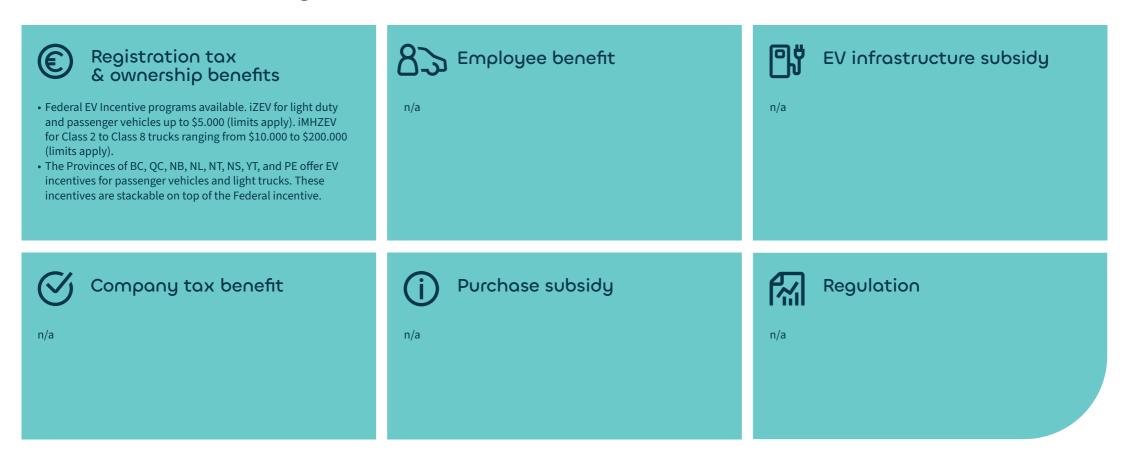
75<sup>%</sup> Petrol

18<sup>%</sup> Diesel

# Canada

# Taxation and regulation

### 7/20



Some exemptions might apply in specific business/operational context.

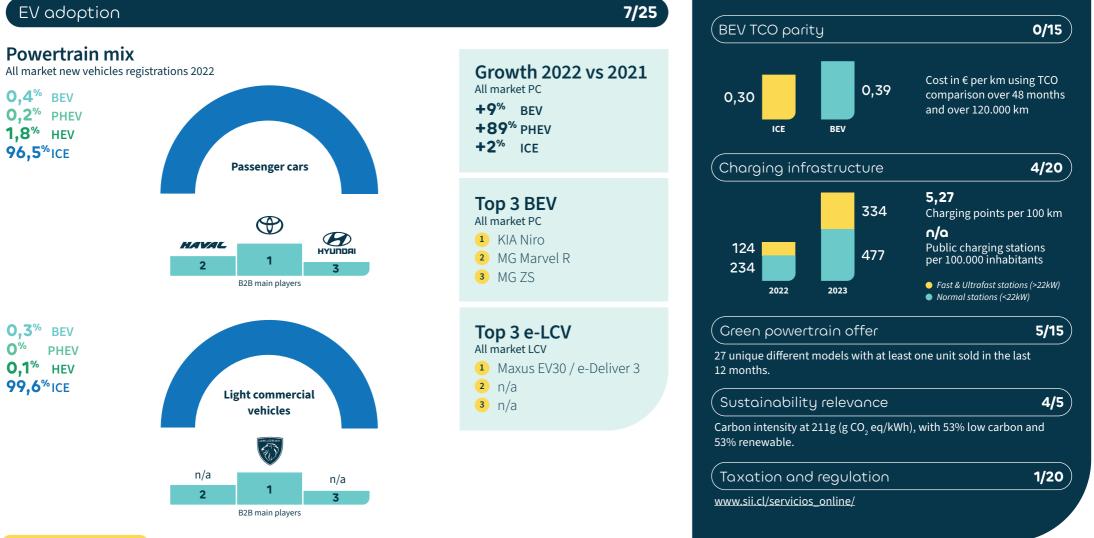
Regulation and subsidy might be subject of modification from government with no prior notice. Get in touch with your Ayvens consultant to get an ad-hoc study.



















**1,2**<sup>%</sup> BEV & PHEV **0,3**<sup>%</sup> Hybrid 9,2<sup>%</sup> Alt fuel 48<sup>%</sup> Petrol 42<sup>%</sup> Diesel

EV adoption

**Powertrain mix** 

**BEV** 

HEV

81<sup>%</sup> Petrol

PHEV

Diesel

1%

1%

11%

All market new vehicles registrations 2022



(BYD)

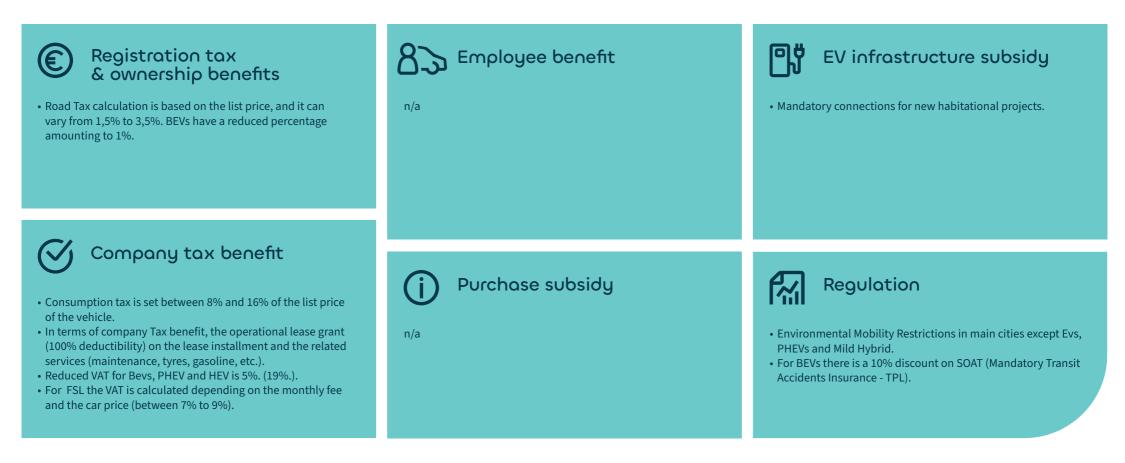
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B2B main players



# Taxation and regulation

## 9/20



Some exemptions might apply in specific business/operational context.

Regulation and subsidy might be subject of modification from government with no prior notice. Get in touch with your Ayvens consultant to get an ad-hoc study.



EV adoption

**Powertrain mix** 

BEV

PHEV

3.1%

1.9%

**4**%

0%

1,5%

2,1%

92,3<sup>%</sup> Diesel

18,6<sup>%</sup> HEV

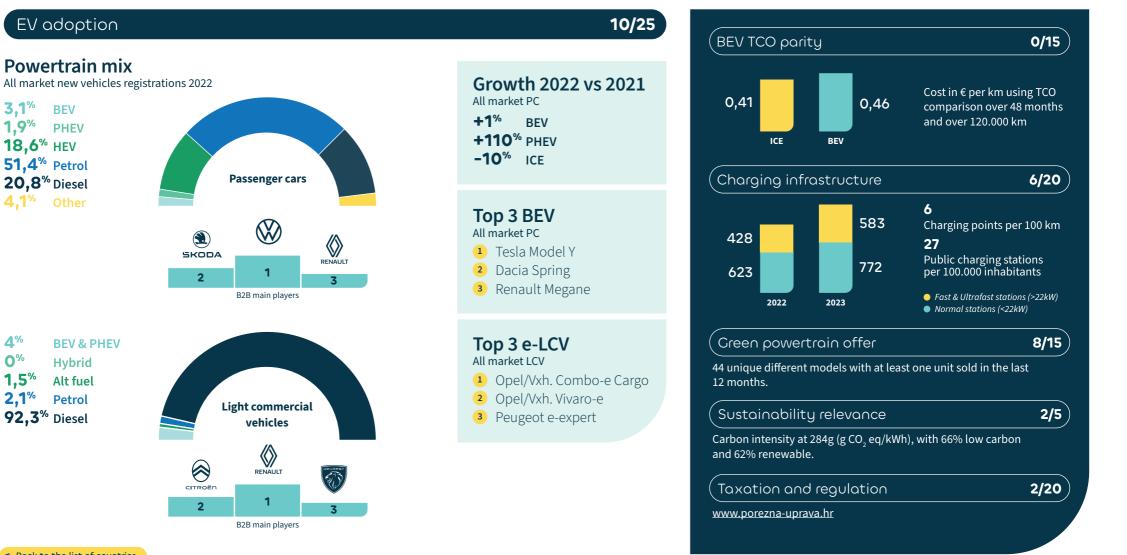
51,4<sup>%</sup> Petrol

20,8<sup>%</sup> Diesel

4.1<sup>%</sup> Other







**BEV & PHEV** 

Hybrid

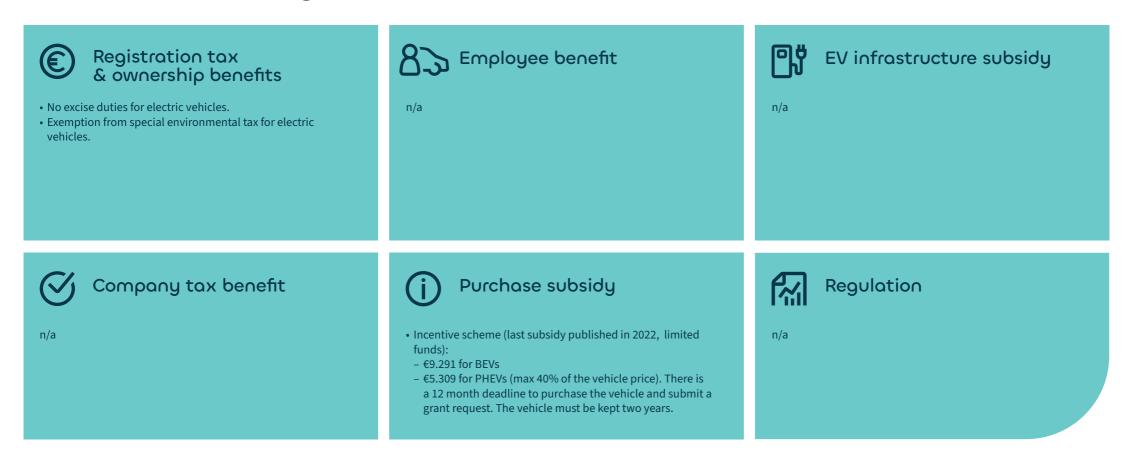
Alt fuel

Petrol



### Taxation and regulation

### 2/20



Some exemptions might apply in specific business/operational context.

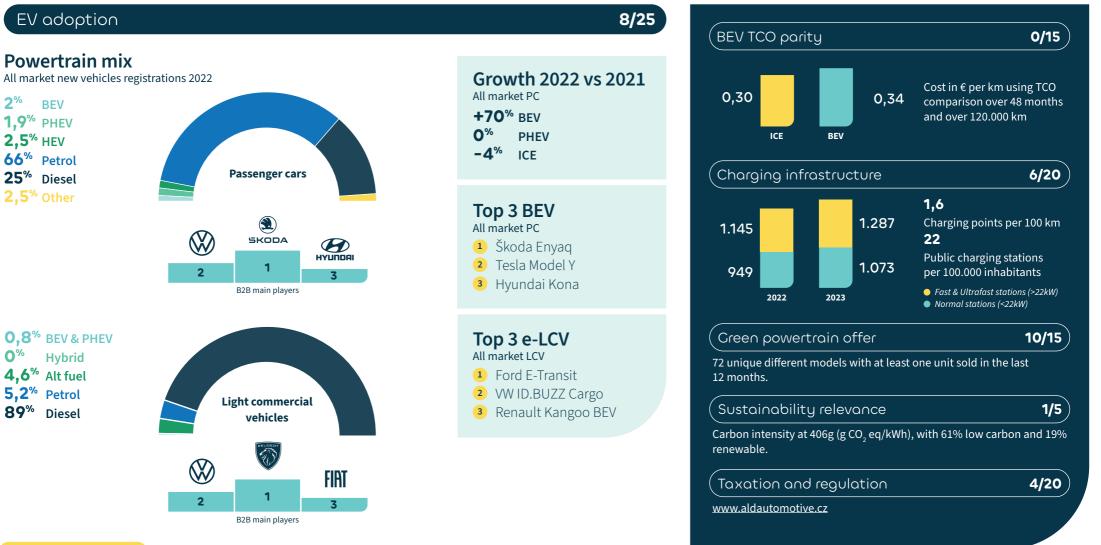
Regulation and subsidy might be subject of modification from government with no prior notice. Get in touch with your Ayvens consultant to get an ad-hoc study.





EV maturity scoring

29/100



# Czech Republic

# Taxation and regulation

# 4/20

<ul> <li>€ Construction tox</li> <li>E Registration tox</li> <li>BEVs and FCEVs emitting ≤ 50g CO₂/km exempt from registration charges (with a special number plate). BEVs and HEVs exempt from road tax. Vehicles emitting ≤ 50g CO₂/km exempt from road tax. Vehicles emitting ≤ 50g CO₂/km exempt from road toll.</li> <li>Reduction of the depreciation period for charging stations for electric vehicles from 10 to five years (wallboxes and standalone charging stations).</li> <li>Accelerated depreciation for BEVs and PHEVs below 50g CO₂/km.</li> </ul>	S Employee benefit • Tax reduction from 0,5-1% for BEVs and PHEVs used for private purposes.	EV infrostructure subsidy • Support from the Ministry of Transport for the development of charging infrastructure.
• Road tax exemption for alternatively powered vehicles (ie BEVs, HEVs, FCEVs, CNG, LPG, and E85).	Purchase subsidy     Purchase incentive for low- and zero-emission vehicles by state and local government bodies.	<ul> <li>Regulation</li> <li>The highway toll exemption for vehicles with CO<sub>2</sub> emission level lower than 50 g/km (In 2023: yearly ticket price 1.500 Kč).</li> <li>Vehicles with the special registration number (ELX XX XX) can park for free or with a reduction in the big cities.</li> </ul>

Some exemptions might apply in specific business/operational context.

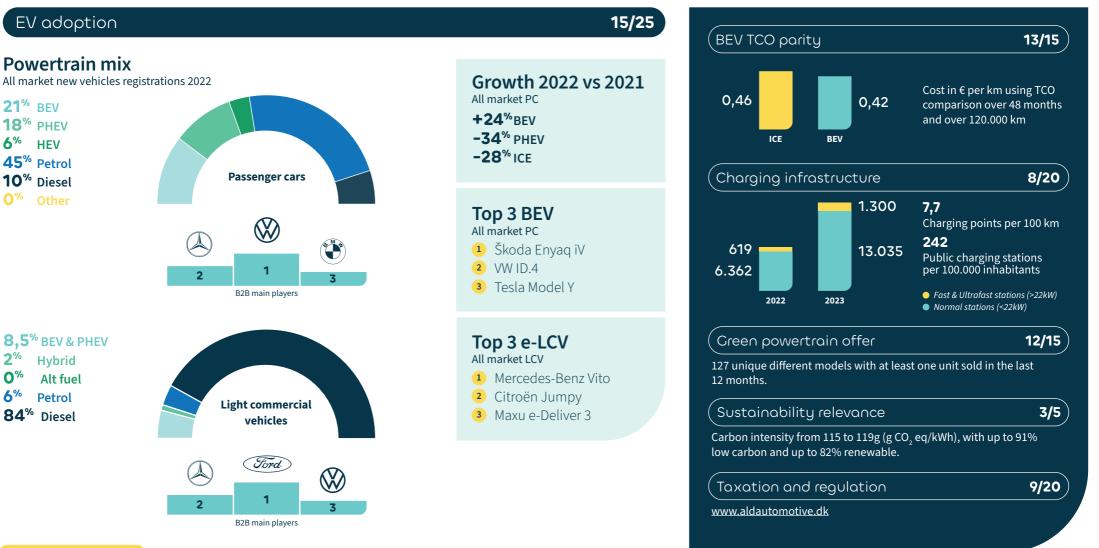
Regulation and subsidy might be subject of modification from government with no prior notice. Get in touch with your Ayvens consultant to get an ad-hoc study.







60/100



< Back to the list of countries

6%

2%

# **Denmark**

# Taxation and regulation

# 9/20



Some exemptions might apply in specific business/operational context.

Regulation and subsidy might be subject of modification from government with no prior notice. Get in touch with your Ayvens consultant to get an ad-hoc study.



EV adoption

**Powertrain mix** 

BEV

PHEV

HEV

**1.5**<sup>%</sup> BEV & PHEV

Alt fuel

Petrol

Diesel

0.9<sup>%</sup> Hybrid

0%

**5.1**<sup>%</sup>

**92**<sup>%</sup>

42<sup>%</sup> Petrol

15<sup>%</sup> Diesel 43<sup>%</sup> Other

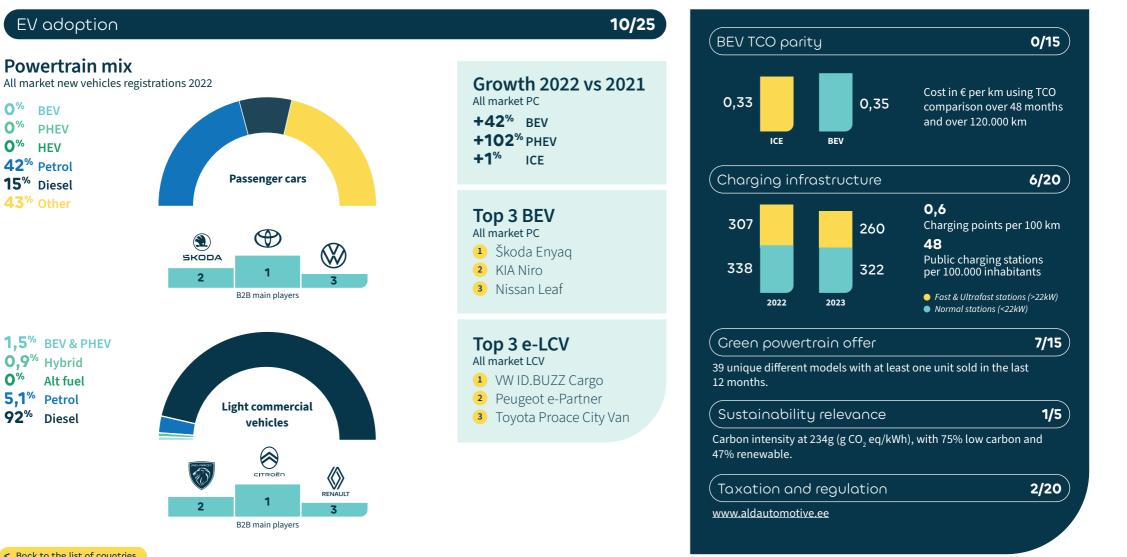
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0%



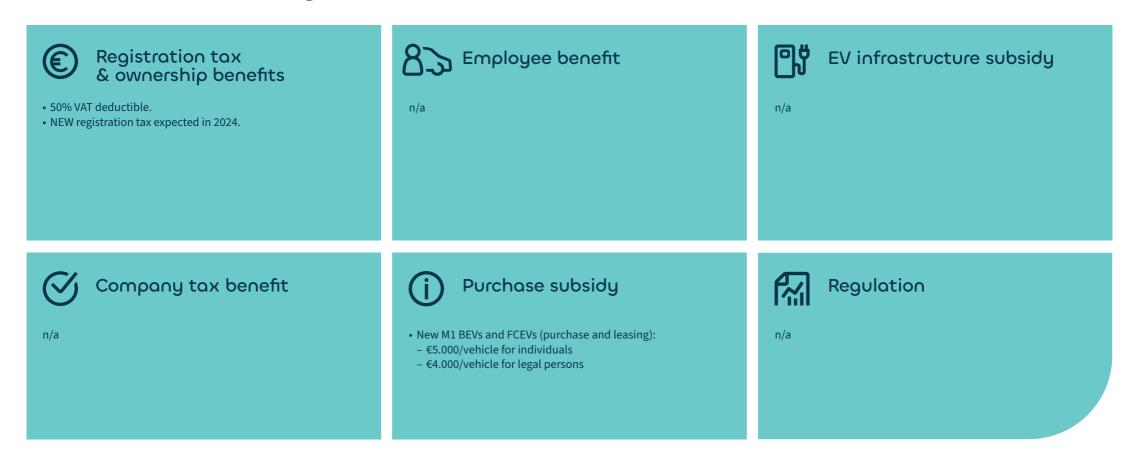






### Taxation and regulation

### 2/20



Some exemptions might apply in specific business/operational context.

Regulation and subsidy might be subject of modification from government with no prior notice. Get in touch with your Ayvens consultant to get an ad-hoc study.



14% BEV

25% HEV

5%

3%

16<sup>%</sup> PHEV

19<sup>%</sup> Petrol

Diesel 20<sup>%</sup> Other

Hybrid

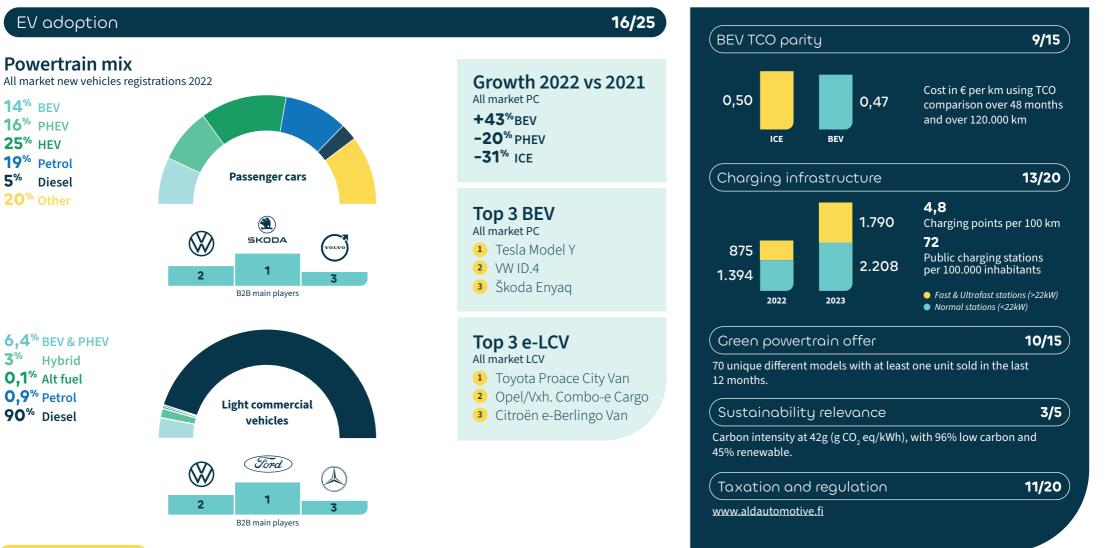
0,1<sup>%</sup> Alt fuel

0,9<sup>%</sup> Petrol

**90**<sup>%</sup> Diesel







# + Finland

# Taxation and regulation

## E

# Registration tax & ownership benefits

• Zero-emission passenger cars are exempt from registration tax as of October 1st 2021.

### 85 Employee benefit

- Users will be able to charge BEVs and PHEVs at the workplace and at public charging points tax-free. The tax value of on-the-job charging is currently €30 per month. This benefit will also be valid for a limited period, 2021-2023.
- BIK benefits for drivers will remain unchanged 2022 2025, being reduced for:
- BEV, unlimited benefit €290 per month
- BEV, limited benefit €170 per month
- PHEV or gas car < 100 g/km, unlimited benefit €145 per month
- PHEV or gas car < 100 g/km, limited benefit €85 per month
- PHEV or gas car > 100 g/km, unlimited benefit €60 per month
- HEV or MHEV, < 100 g/km unlimited or limited benefit €85 per month
- Hydrogen vehicle, 0 g/km, unlimited or limited benefit €170 per month



- Tax deduction of €170 per month from taxable value (income tax) for BEVs (2021-2025).
- Charging of electric vehicles at a workplace is exempt from income tax (2021-2025).

Purchase subsidy

for a BEV priced below €50.000 threshold.

lease per companies.

• Scheme dedicated to private individuals amounting to €2.000

• e-LCV subsidy scheme applies for both private individuals and

companies amount up to €6.000. Limit of 5 e-LCV purchase or

### **EV** infrastructure subsidy

- 30 % subsidy for building > 11 kW public charging stations and 35 % subsidy for building > 22 kW fast charging stations.
- Public charging is supported by €750 per operative charging station. Companies can apply between 2022-2023.
- With the Limited Car Benefit, employees driving a company car or their own car, can have their charging costs paid for by their employer, at the workplace or at public charging points.
- Charging at home is not paid for by the employer.
- It is tax free for the driver. The benefit depends on whether or not the employer wants to pay for it.



### Regulation

- Government is supporting companies to provide bikes as mobility solution to employee's.
- Employee can also be offered (limited value) tickets for public transportation, travels between home and work.
- Low-CO<sub>2</sub> emission cars can receive a 50% discount for parking in roadside places in Helsinki city.

Some exemptions might apply in specific business/operational context.

Regulation and subsidy might be subject of modification from government with no prior notice. Get in touch with your Ayvens consultant to get an ad-hoc study.

< Back to the list of countries

11/20



All market new vehicles registrations 2022

 $\langle\!\!\langle\rangle\!\!\rangle$ 

RENAULT

2

2

EV adoption

**Powertrain mix** 

13% BEV

22% HEV

37<sup>%</sup> Petrol

16<sup>%</sup> Diesel

PHEV

**5.8**<sup>%</sup> BEV & PHEV

2,7<sup>%</sup> Hybrid

0,8<sup>%</sup> Alt fuel

9,3<sup>%</sup> Petrol

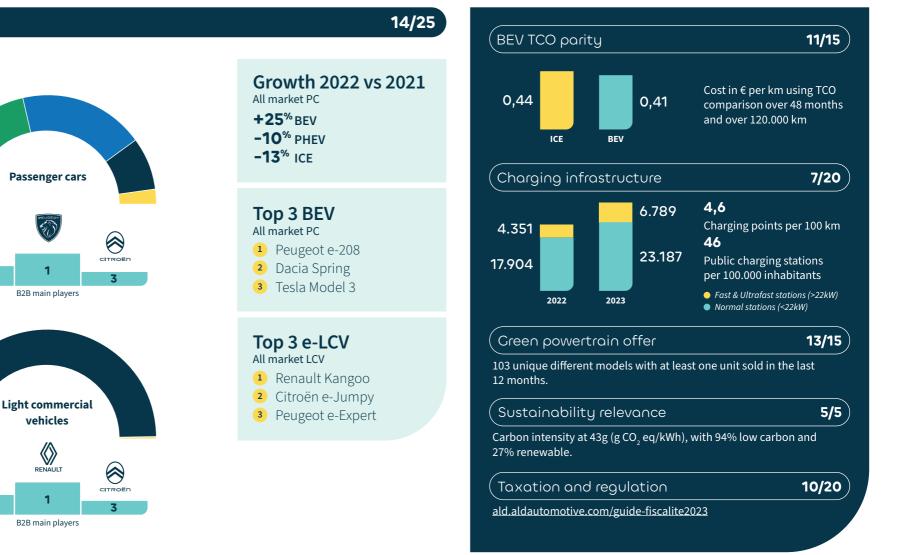
81<sup>%</sup> Diesel

8%

**4**%



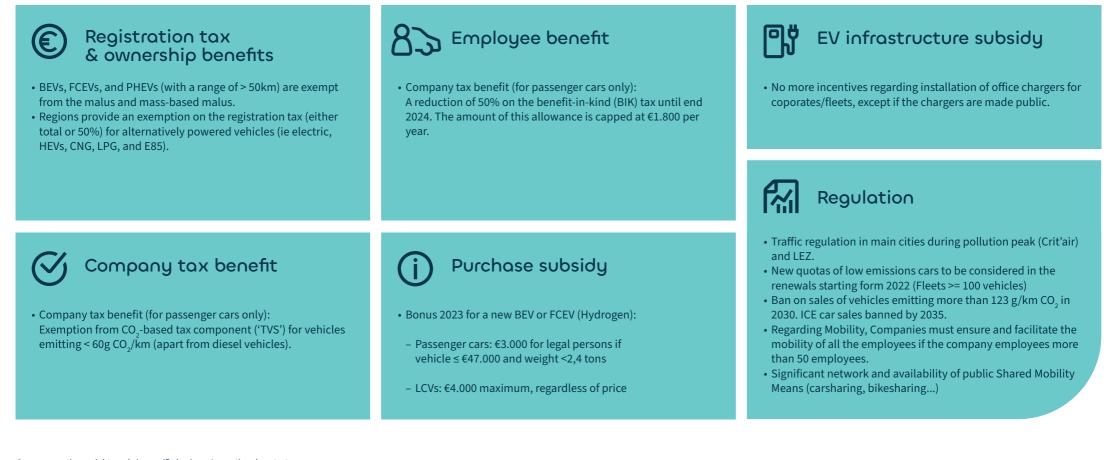




# France

# Taxation and regulation

# 10/20



Some exemptions might apply in specific business/operational context.

Regulation and subsidy might be subject of modification from government with no prior notice. Get in touch with your Ayvens consultant to get an ad-hoc study.







15/25 7/15 **BEV TCO parity** Growth 2022 vs 2021 Cost in € per km using TCO All market PC 0,44 0,43 comparison over 48 months +32% BEV and over 120.000 km +12<sup>%</sup> PHEV ICE BEV -11% ICE Charging infrastructure 12/20 **Passenger cars** 25,8 Top 3 BEV 8.393 Charging points per 100 km All market PC 5.397 55 Tesla Model Y Public charging stations per 100.000 inhabitants 37.803 24.754 2 VW ID.4 3 VW ID.3 Fast & Ultrafast stations (>22kW) 2022 2023 Normal stations (<22kW)</p> Green powertrain offer 12/15 Top 3 e-LCV All market LCV 94 unique different models with at least one unit sold in the last Mercedes eVito Van 12 months. 2 Mercedes eSprinter Van Sustainability relevance 1/5 3 VW ID.BUZZ Cargo vehicles Carbon intensity at 357g (g CO<sub>2</sub> eq/kWh), with 66% low carbon and 62% renewable. Ford Taxation and regulation 13/20 3 www.acea.be B2B main players

7.9% BEV & PHEV **0,7**<sup>%</sup> Hybrid 1,2<sup>%</sup> Alt fuel 4,5<sup>%</sup> Petrol 86<sup>%</sup> Diesel

EV adoption

**Powertrain mix** 

16% BEV

23% HEV

36<sup>%</sup> Petrol

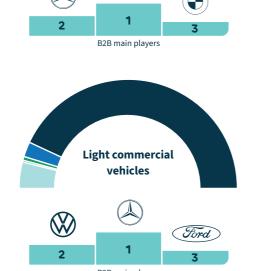
18<sup>%</sup> Diesel

PHEV

6%

1%

All market new vehicles registrations 2022





## 13/20

#### 85 Employee benefit

The car tax benefit is valid until 2030.

- For BEVs and PHEVs procured from January 2020 to December 2030, the monetary advantage should be reduced to 50% of the gross list price.
- BEVs with a list price below €60.000 receive an additional reduction to 25% of the gross list price.
- For PHEVs, there is the restriction that the car must have a range of 60 km, or the CO<sub>2</sub> emission is less than 50 g/km. Requirements are becoming more stringent over time.



#### Company tax benefit

- Reduction of the taxable amount for BEVs and PHEVs (from 0,5-1% of the gross catalogue price per month).PHEVs must meet further requirements, which become more stringent over time.
- Additional reduction of taxable amount for BEVs with a gross list price up to €60.000 (0,25-1% of the gross catalogue price per month).



#### Registration tax & ownership benefits

• 10 year exemption for BEVs and FCEVs registered until December 31st 2025. Exemption granted until December 31st 2030.

#### **EV** infrastructure subsidy

- Cost-free charging of privately driven electric vehicles at your employer is tax-exempt until 2030.
- There are local subsidies on a regional basis.
- A greenhouse gas reduction quota ("THG-Quote") can be applied for all BEV which means €100-300 per BEV per year.

#### Purchase subsidy

• The subsidy for new electric cars was stopped for companies. From September 1st 2023, only private individuals are able to apply for funding.



#### Regulation

- Significant amount of players in carsharing; ridesharing; ridehailing; e-scooter, focused on bigger cities > 100.000 inhabitants.
- Benefits such as reserved parking spots depending on region. Additional subsidies are possible in federal states and emissionpolluted cities and regions, but these subsidies cannot be combined with state subsidies.
- Support programmes for the e-LCVs of craftsmen in certain federal states.

Some exemptions might apply in specific business/operational context.

Regulation and subsidy might be subject of modification from government with no prior notice. Get in touch with your Ayvens consultant to get an ad-hoc study.







EV adoption	8/25	(BEV TCO parity	9/15
Powertrain mix Il market new vehicles registrations 2022 BEV PHEV PMEV Petrol 1 <sup>%</sup> Diesel Passenger cars	Growth 2022 vs 2021 All market PC +40 <sup>%</sup> BEV +11 <sup>%</sup> PHEV -7 <sup>%</sup> ICE	0,50 LEE BEV 0,47	Cost in € per km using TCO comparison over 48 months and over 120.000 km 9/20
2% Other 2 1 B2B main players	Top 3 BEVAll market PC1Tesla Model Y2Tesla Model 33Volvo XC40	456 180 759 2022 2023	O,4 Charging points per 100 km 12 Public charging stations per 100.000 inhabitants • Fast & Ultrafast stations (>22kW) • Normal stations (<22kW)
7% BEV & PHEV 6% Hybrid 4% Alt fuel 2% Petrol 1% Diesel Light commercial vehicles	<ul> <li>Top 3 e-LCV</li> <li>All market LCV</li> <li>Mercedes eVito Van</li> <li>Ford E-Transit</li> <li>Maxus EV30 / e-Deliver 3</li> </ul>	Green powertrain offer 55 unique different models with at least 12 months. Sustainability relevance Carbon intensity at 360g (g CO <sub>2</sub> eq/kWh) 45% renewable.	1/5
CITROED 2 1 FIAT		(Taxation and regulation	8/20

# 

## Taxation and regulation

#### E

#### Registration tax & ownership benefits

- 75% reduction in registration tax (RT) for PHEVs up to 50g  $\rm CO_2/km.$
- 50% reduction in RT for HEVs and PHEVs emitting  $\geq$  50g CO<sub>2</sub>/km.
- HEVs with an engine capacity ≤ 1.549cc and registered before October 31st 2010 are exempt from circulation tax.
- 60% of the circulation tax for HEVs with engine capacity
   ≥ 1.550cc registered before October 31st 2010.
- Exemption for cars emitting  $\leq$  90g CO<sub>2</sub>/km (NEDC) or 122g (WLTP).
- BEVs are exempt from the personal income presumption system.

#### Company tax benefit

 Deductible of €40.000 in the NRP for BEVs and PHEVs up to 50g CO<sub>2</sub>/km with higher NRP value.



- Companies will are be able to be subsidized for the purchase and installation of smart chargers, provided that they serve purely the company's purposes.
- €500 incentive for installing charging infrastructure for individuals and €400 for companies.
- Additional corporate incentives for the installation of charging infrastructure.

#### Purchase subsidy

- 30% cashback on NRP for BEVs, with a max cashback of €8.000.Extra €1.000 if a car of ≥ 10 years is scrapped, or the buyer is ≤ 29 years old.
- 40% cashback on NRP for BEV taxis, with a max cashback of €17.500. Extra €5.000 for scrapping the old taxi, which is mandatory.



• Exemption of the benefit-in-kind tax for BEVs and PHEVs emitting ≤ 50g CO<sub>2</sub>/km(NEDC or WLTP) with a net retail price (NRP) ≤ €40.000.



#### Regulation

- Free circulation to the centre of Athens and free pass to priority bus lane for BEVs and PHEVs with  $CO_2$  below 50 g/km.
- BEV benefits:
- Free parking.
- Reserved parking spots.
- No parking fees and free entrance to the citycentre.
- New regulation for business fleets:
- January 1st, 2024 and onwards: 25% of new PC registrations has to be PHEV or BEV.
- January 1st, 2026 and onwards: 1/3 of new PC registrations need to be BEV.
- January 1st, 2035 and onwards: All new PC and LCV registrations need to be BEV.

Some exemptions might apply in specific business/operational context.

Regulation and subsidy might be subject of modification from government with no prior notice. Get in touch with your Ayvens consultant to get an ad-hoc study.





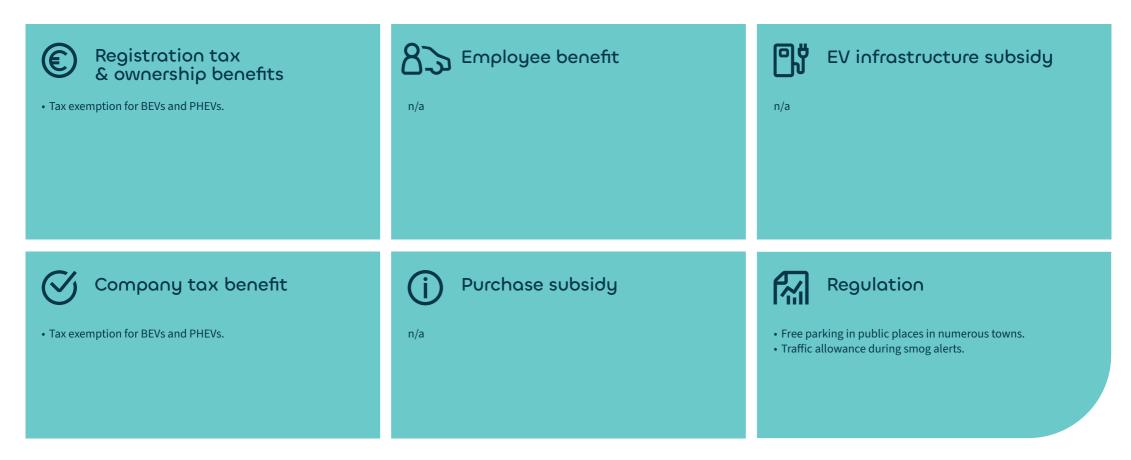




EV adoption		<b>11/25</b> BEV TCO parit	y	1/15
owertrain mix       market new vehicles registrations 2022       BEV       PHEV       PHEV       Petrol       Passenger ca	All market PC +22% BEV +16% PHE -21% ICE	2022 vs 2021 0,31	BEV 0,37	Cost in € per km using TCO comparison over 48 months and over 120.000 km 9/20
9 <sup>%</sup> Other	Top 3 BE All market PC	V 670	885	<b>1.1</b> Charging points per 100 km <b>38</b>
Torici     2     1     B2B main player	<ul> <li>Tesla Mo</li> <li>Tesla Mo</li> <li>Tesla Mo</li> <li>Volvo XO</li> </ul>	odel 3 2.048	3.189 2023	Public charging stations per 100.000 inhabitants • Fast & Ultrafast stations (>22kW) • Normal stations (<22kW)
<b>2</b> <sup>%</sup> BEV & PHEV	Top 3 e-L	_CV Green powerti	rain offer	9/15
7 <sup>%</sup> Hybrid 3 <sup>%</sup> Alt fuel		h. Vivaro-e BEV 12 months.	nodels with at leas	t one unit sold in the last
<sup>%</sup> Petrol <sup>%</sup> Diesel Light commer vehicles	cial 2 Mercede 3 Fiat E-Du	es eSprinter Van ucato BEV Sustainability	relevance	3/5
		Carbon intensity at 2 33% renewable.	223g (g CO <sub>2</sub> eq/kWh	n), with 74% low carbon and
RENAULT	$\bigotimes$	(Taxation and	regulation	7/20
2 1 B2B main player	3	ACEA_Tax_Guide_20	022.pdf	



#### 7/20



Some exemptions might apply in specific business/operational context.

Regulation and subsidy might be subject of modification from government with no prior notice. Get in touch with your Ayvens consultant to get an ad-hoc study.





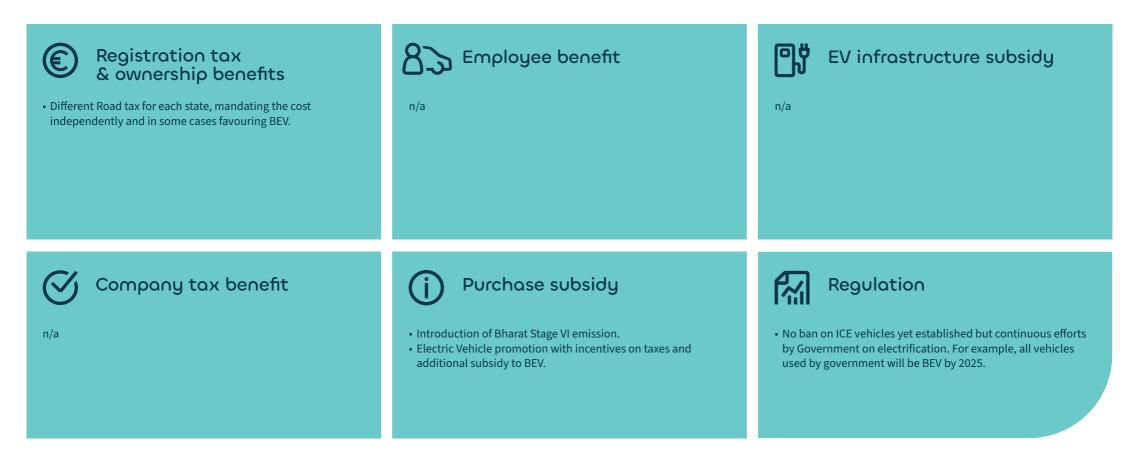




EV adoption		6/25	(BEV TCO parity	8/15
Powertrain mix All market new vehicles reg 2 <sup>%</sup> BEV 0 <sup>%</sup> PHEV 0 <sup>%</sup> HEV 68 <sup>%</sup> Petrol 30 <sup>%</sup> Diesel	istrations 2022	Growth 2022 vs 2021 All market PC +82 <sup>%</sup> BEV +76 <sup>%</sup> PHEV +12 <sup>%</sup> ICE	0,22 0,20 cor	st in € per km using TCO nparison over 48 months d over 120.000 km <b>0/20</b>
<b>0</b> <sup>%</sup> Other	e Suzuk HYLINDERI 2 1 B2B main players	<ul> <li>Top 3 BEV</li> <li>All market PC</li> <li>1 Tata Nexon</li> <li>2 MG EZS</li> <li>3 Mahindra XUV400</li> </ul>	n/a	
0,0 <sup>%</sup> BEV & PHEV 0,0 <sup>%</sup> Hybrid n/a Alt fuel n/a Petrol n/a Diesel	Light commercial vehicles	Top 3 e-LCV All market LCV 1 TATA ACE EV 2 Jupiter JEM TEZ 3 Omega Seiki	Creen powertrain offer 13 unique different models with at least one u 12 months. Sustainability relevance	0/5
	Mahindra     Ø       2     1       3       B2B main players		Carbon intensity from 346 to 664g (g CO2 eq/k low carbon and 45% renewable. Taxation and regulation morth.nic.in/Motor-Vehicle-Legislation	7/20



### 7/20



Some exemptions might apply in specific business/operational context.

Regulation and subsidy might be subject of modification from government with no prior notice. Get in touch with your Ayvens consultant to get an ad-hoc study.

# Ireland





EV adoption	14/25	BEV TCO parity	9/15
Powertrain mix All market new vehicles registrations 2022 11 <sup>%</sup> BEV 6 <sup>%</sup> PHEV 15 <sup>%</sup> HEV 23 <sup>%</sup> Petrol 20 <sup>%</sup> Diesel Passenger cars	Growth 2022 vs 2021 All market PC +75 <sup>%</sup> BEV -2 <sup>%</sup> PHEV -19 <sup>%</sup> ICE	0,52 ICE BEV 0,49 (Charging infrastructure	Cost in € per km using TCO comparison over 48 months and over 120.000 km 7/20
2 1 B2B main players	Top 3 BEVAll market PC11VW ID.422Hyundai Ioniq 53Tesla Model Y	318 1.237 2022 2023 550 1.388	<ul> <li>1</li> <li>Charging points per 100 km</li> <li>35</li> <li>Public charging stations per 100.000 inhabitants</li> <li>Fast &amp; Ultrafast stations (&gt;22kW)</li> <li>Normal stations (&lt;22kW)</li> </ul>
2% BEV & PHEV 3% Hybrid 3% Petrol 3% Diesel Use for the set of	<ul> <li><b>Top 3 e-LCV</b></li> <li>All market LCV</li> <li>Ford E-Transit</li> <li>Peugeot e-Expert</li> <li>Opel/Vxh. Vivaro-e</li> </ul>	Creen powertrain offer 76 unique different models with at lea 12 months. Sustainability relevance Carbon intensity at 410g (g CO <sub>2</sub> eq/kW 27% renewable. Taxation and regulation www.revenue.ie/en/	2/5

# Ireland

## Taxation and regulation

## 10/20

#### 

#### Registration tax & ownership benefits

- VRT relief all purchasers:
- The government has continued the reduction in VRT (Vehicle Registration Tax) of up to €5.000 per vehicle, extended until the end of 2025.
- EV's qualify for VRT relief's (purchase tax) of up to €5.000 where the original market value (OMV) of the vehicle is under €40.000, over this amount reliefs are still available but at reduced rates to an upper ceiling of €49.999. Any vehicle with an OMV above this amount does NOT qualify for VRT relief.
- Reduced motor tax rates based on CO<sub>2</sub> emissions table for passenger cars.

#### Company tax benefit

• There are none for leased vehicles. For company purchased vehicles, there are accelerated capital allowances available.

#### B Employee benefit

- 0% BIK (benefit in kind) for EV's extended beyond 2023, with new bands in play.
- Considering all supports relating to BIK the 0% threshold will now be;
- €45.000 in 2024 (same as presently in 2023)
- €35.000 in 2025
- €20.000 in 2026
- €10.000 in 2027

#### Purchase subsidy

- €5.000 grant for private buyers issued via the SEAI (Sustainable Energy Authority of Ireland). This is reduced to €3.500 from July 1st 2023.
- There is no longer any additional SEAI grant for corporate buyers of passenger vehicles.
- New Commercial Vehicles can obtain SEAI grants of between €3.800 and €7.600, but this is subject to a rolling 3 year / €200.000 (de minimis state aid) per company.



- A €600 SEAI grant is available towards purchasing and installing a home charger. Now available to any homeowner regardless of if they have an EV or not.
- Introduction of a grant scheme tapered specifically to Apartment owners/management companies, previously apartments were excluded from the €600 grant funding.



• Low-emission-zoned proposed for major cities and should to be implemented by 2026. Reduced by 50% tolls for BEV.

Some exemptions might apply in specific business/operational context.

Regulation and subsidy might be subject of modification from government with no prior notice. Get in touch with your Ayvens consultant to get an ad-hoc study.







EV adoption		9/25	(BEV TCO parity	8/15
Powertrain mix All market new vehicles reg 3,7 <sup>%</sup> BEV 5,1 <sup>%</sup> PHEV 34 <sup>%</sup> HEV* 28 <sup>%</sup> Petrol 20 <sup>%</sup> Diesel	gistrations 2022	Growth 2022 vs 2021 All market PC -27 <sup>%</sup> BEV -3 <sup>%</sup> PHEV -16 <sup>%</sup> ICE	0,40 0,39 ICE BEV 0,39 (Charging infrastructure	Cost in € per km using TCO comparison over 48 months and over 120.000 km <b>10/20</b>
9,6 <sup>%</sup> Other	2 FIN 2 1 3 B2B main players	Top 3 BEV All market PC 1 Fiat 500E 2 Smart fortwo 3 Tesla Model Y	5.865 1.605 7.131 2022 2023	<ul> <li>9,2</li> <li>Charging points per 100 km</li> <li>22</li> <li>Public charging stations per 100.000 inhabitants</li> <li>Fast &amp; Ultrafast stations (&gt;22kW)</li> <li>Normal stations (&gt;22kW)</li> </ul>
3%         BEV & PHEV           10,9%         Hybrid           4,2%         Alt fuel           5,4%         Petrol           77%         Diesel	Light commercial vehicles	Top 3 e-LCV All market LCV Fiat E-Ducato Toyota Proace City Fiat Scudo	Green powertrain offer 104 unique different models with at leas 12 months. Sustainability relevance Carbon intensity from 265 to 662g (g CO	1/5
	FINTTord213B2B main players		60% low-carbon and up to 57% renewal (Taxation and regulation <u>ACEA_Tax_Guide_2022.pdf</u>	9/20

# Italy

## Taxation and regulation

#### E

Registration tax & ownership benefits

- BEVs: five-year exemption from the date of first registration. After this period, 75% reduction of the tax rate applied to equivalent petrol vehicles.
- HEVs: Application of a minimum flat rate (€2,58/kW). Some regions apply discounts on the tax ownership.

#### Employee benefit

- Starting from 2020, fringe benefit cars emitting up to 60 g/km CO<sub>2</sub> are taxed at a lower rate (25% on conventional parameters related to an average journey and cost per km) compared to the previous taxation (30% applied to all vehicles on the basis of the abovementioned parameters). At the same time, the new legislation introduces different rates based on car emissions.
- Benefit in kind is based on CO<sub>2</sub> emissions' level, to encourage lower CO<sub>2</sub> emissions vehicles as BEVs and PHEVs.
- Specific BIK calculation for vehicles with higher emission levels (between 161-190 g and >190 g CO<sub>2</sub>/km).

## 8.3 Company tax benefit

n/a

#### j Purchase subsidy

- 190 million for category M1 vehicles with emissions in the range 0-20g of CO<sub>2</sub>/Km (electric) with list price limit of €42.700 (VAT and optional included)\*
- 235 million for M1 vehicles with emissions in the range 21-60g of CO<sub>2</sub>/Km (plug-in hybrids), with a list price limit of €54.900 (VAT and optional included)\*
- 150 million for M1 category vehicles with emissions in the 61-135g of CO<sub>2</sub>/Km (low-emission), the list price limit of €42.700 (VAT and optional included).
- \* 5% of these amounts are reserved for purchases made by legal entities for commercial car sharing or rental activities.

#### **EV** infrastructure subsidy

- For domestic users, a contribution of €1.500 for the purchase and installation price of standard power infrastructures for recharging electric vehicles.
- For condominium Building a contribution of 8.000.



- No parking fee for EV and hybrid vehicles in several cities.
- Free entry in LTZ for EV & Hybrid vehicles.
- Companies with more than 100 employees located in cities with more than 50.000 inhabitants must draw up a mobility plan for employees in order to reduce the use of personal/ company cars for the home-office journey.

Some exemptions might apply in specific business/operational context.

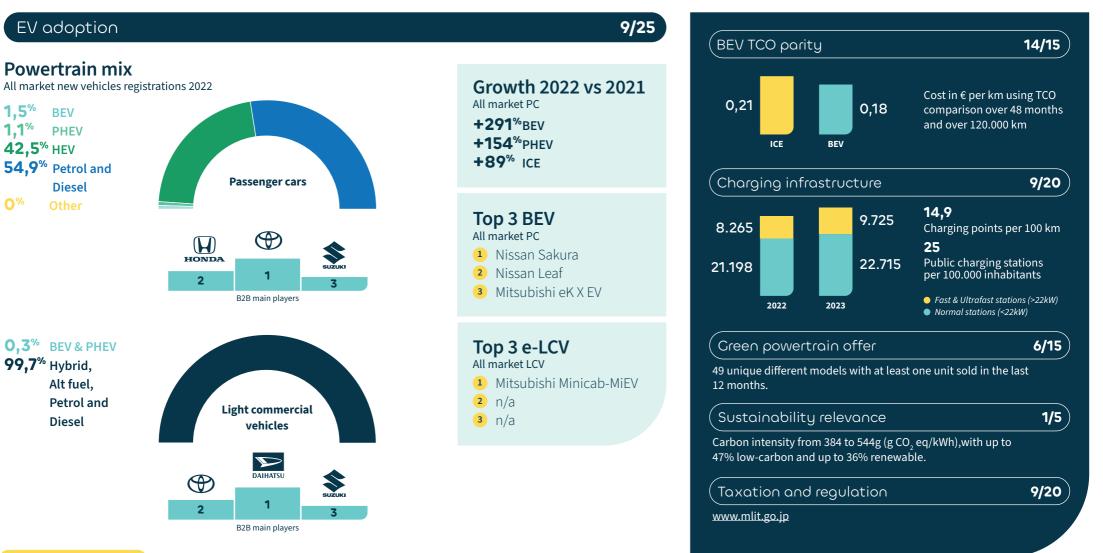
Regulation and subsidy might be subject of modification from government with no prior notice. Get in touch with your Ayvens consultant to get an ad-hoc study.







48/100





EV adoption

**Powertrain mix** 

**BEV** 

HEV

PHEV

Petrol

Diesel

**1.4**<sup>%</sup> BEV & PHEV

0,3<sup>%</sup> Alt fuel

4,6<sup>%</sup> Petrol

94<sup>%</sup> Diesel

Hybrid

0%

0%

0%

**42**<sup>%</sup>

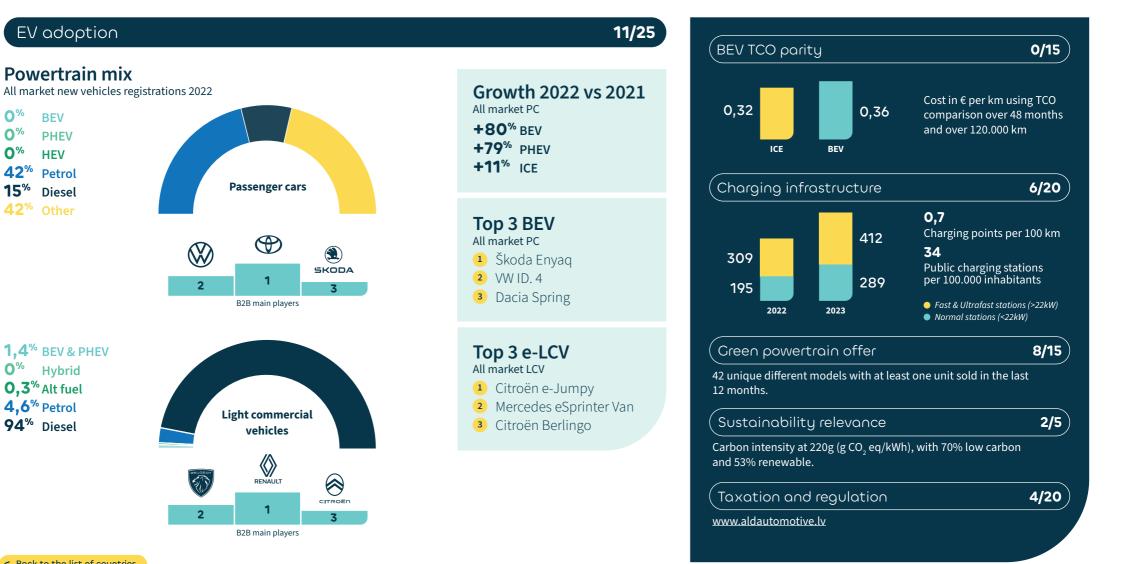
**15<sup>%</sup>** 

42%

0%

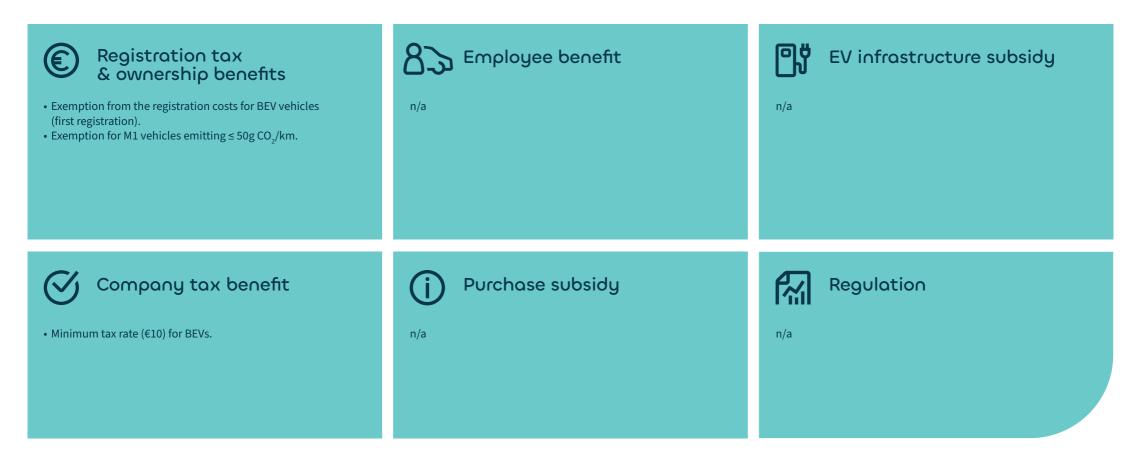








#### 4/20



Some exemptions might apply in specific business/operational context.

Regulation and subsidy might be subject of modification from government with no prior notice. Get in touch with your Ayvens consultant to get an ad-hoc study.



EV adoption

**Powertrain mix** 

**BEV** 

PHEV

Diesel 37<sup>%</sup> Other

3%

2%

9%

2%

0

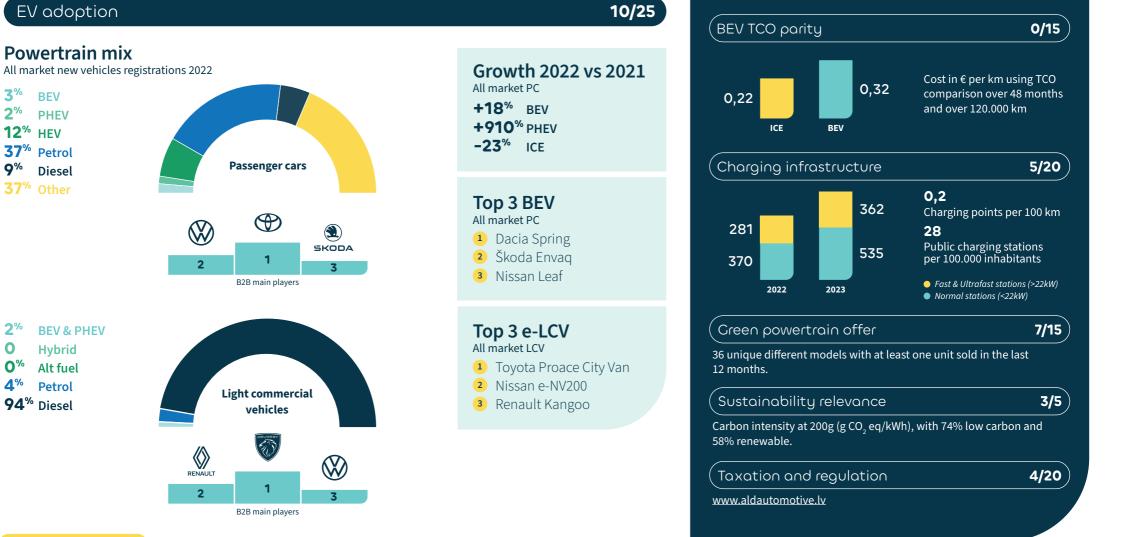
0%

12% HEV

37<sup>%</sup> Petrol







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**BEV & PHEV** 

Hybrid

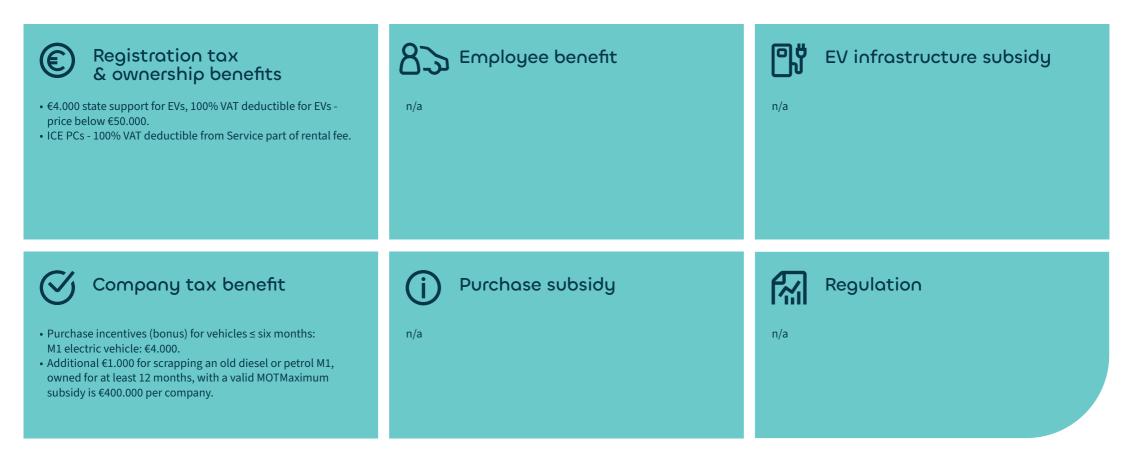
Alt fuel

Petrol

94<sup>%</sup> Diesel



#### 4/20



Some exemptions might apply in specific business/operational context.

Regulation and subsidy might be subject of modification from government with no prior notice. Get in touch with your Ayvens consultant to get an ad-hoc study.

EV adoption

**Powertrain mix** 

11%

7%

BEV

14% HEV

26<sup>%</sup> Petrol

16<sup>%</sup> Diesel

26<sup>%</sup> Other

4.3%

0,1%

0,1%

2,4%

93,1<sup>%</sup> Diesel

PHEV

All market new vehicles registrations 2022

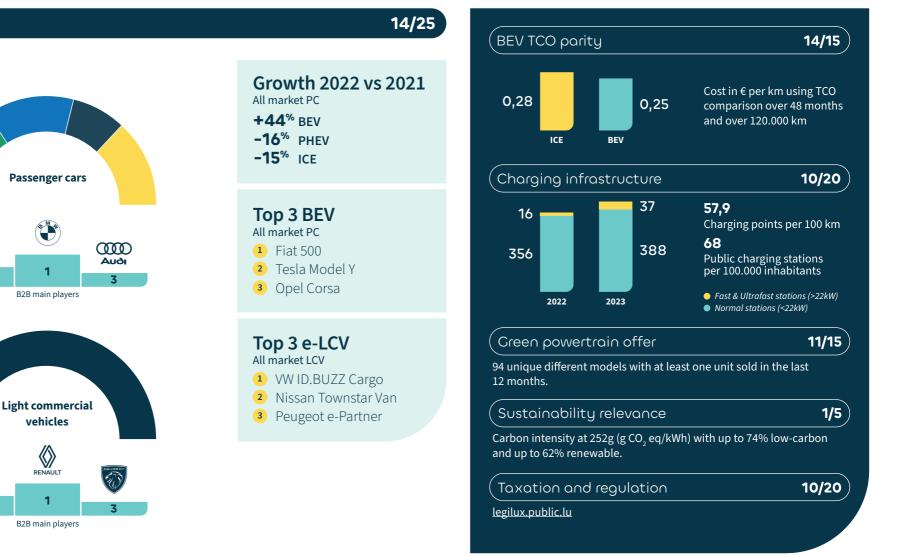


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2







< Back to the list of countries

**BEV & PHEV** 

Hybrid

Alt fuel

Petrol

# **E**Luxembourg

## Taxation and regulation

## 10/20

#### E

#### Registration tax & ownership benefits

- Only 50% of administrative tax.
- Minimum taxe rate of €30 per year for zero-emission vehicles. Government subsidy to the owner of the car (individuals and legal entities of private law-residents or non-residents) of €8.000 for fully electric vehicles: premium included in the quote. The vehicle must be subject to a leasing contract of a minimum duration of 12 months.

Company tax benefit

n/a

## 83 Employee benefit

- Monthly benefit in kind from 0.5-1.8% depending on  $\text{CO}_2$  emissions.
- The calculation of the benefit in kind for the driver is taxed based on the powertrain type and CO<sub>2</sub> emissions. With an electric vehicle, the driver takes advantage of a benefit in kind calculated at only 0.5% of the net value of the new vehicle.
- For gasoline vehicles from 1% to 1.7% (depending on CO<sub>2</sub> emissions)
- For diesel vehicles from 1% to 1.8 (depending on CO<sub>2</sub>emissions)
- There will be changes in the calculation of the benefit in kind for 2022 (to be confirmed): currently, the highest BIK is applied for vehicles with CO<sub>2</sub> emissions over 150 g/km this will be decreased by 20 g to 130 g/km from January 1st 2022 on (new orders).

#### Purchase subsidy

- BEVs: ≤ 18 kWh: €8.000> 18 kWh: €3.000.
- PHEVs: ≤ 50g CO<sub>2</sub>/km: €2.500.



- SMEs can benefit from a subsidy of up to 50% of the costs related to charging stations and up to 60% of the costs related to the connection to the electricity grid. €60.000 for grid connection costs and €40.000 for the other costs related to the deployment per company.
- Subsidy up to €1.200 for the installation of a private charge point (purchase between July 1st 2020 and June 30th 2023) and only for private individuals.

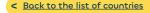


#### Regulation

- New Tramway for city center. Free public transports. New park & rides to avoid traffic to the city center.
- Regarding Electromobility, 800 public double charging stations (currently 700).

Some exemptions might apply in specific business/operational context.

Regulation and subsidy might be subject of modification from government with no prior notice. Get in touch with your Ayvens consultant to get an ad-hoc study.

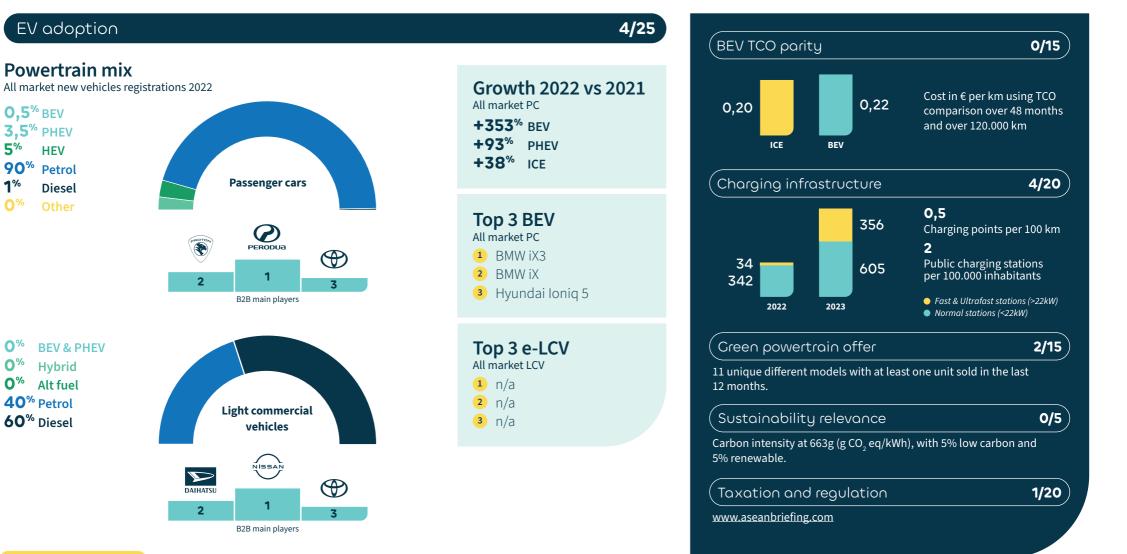






EV maturity scoring





**BEV & PHEV** 

Hybrid

Alt fuel

40<sup>%</sup> Petrol

60<sup>%</sup> Diesel

0,5<sup>%</sup> BEV

5%

1%

0%

0%

0%

90%

**3.5**<sup>%</sup> PHEV

HEV

Petrol

Diesel



All market new vehicles registrations 2022

B2B main players

vehicles

 $\bigotimes$ 

B2B main players

 $\bigotimes$ 

2

NISSAN

2

EV adoption

**Powertrain mix** 

PHEV

Petrol

Diesel

**n/a** Other

HEV

0.3<sup>%</sup> BEV

1%

16%

**82**<sup>%</sup>

1%

1%

2%

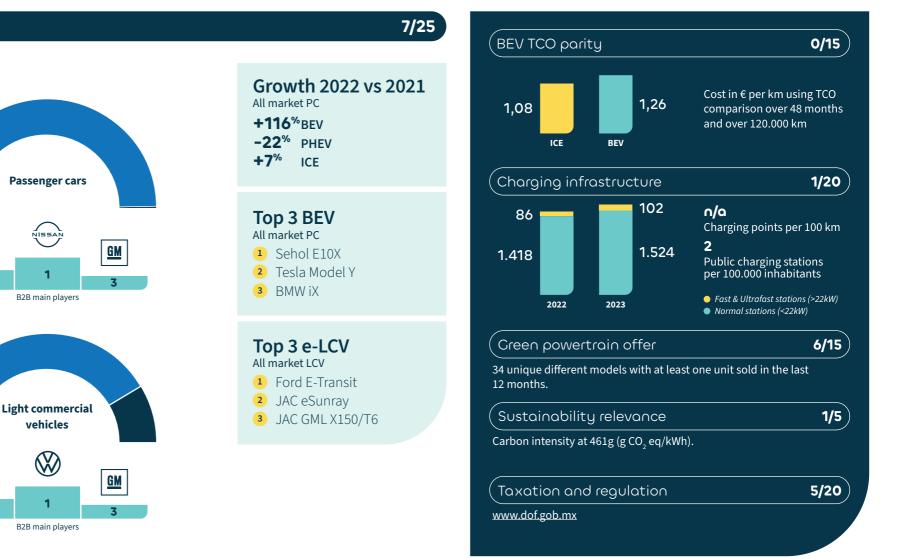
80%

17%

0,03<sup>%</sup> Hybrid







< Back to the list of countries

**BEV & PHEV** 

Alt fuel

Petrol

Diesel

# Mexico

## Taxation and regulation

### 5/20

Registration tax & ownership benefits • Road taxes and Ownership tax exemmptions on hybrids and BEVs.	Some roads offers discounts on payments to EV vehicles.	<b>EV infrostructure subsidy</b> • Supporing scheme vary depending on the regoin, the scheme rules set by the Comisión Federal de Electricidad (CFE).
<ul> <li>Company tax benefit</li> <li>Incentives for BEV, operational lease grant tax benefits taking full monthly rental as a basis for calculation.</li> <li>For alternative powertrains (BEV/PHEV/FCEV/HEV), higher deductable amount to \$250.000.</li> <li>Following the latest stimulus law, "Ley de Ingresos de la Federación", the BEV and FCEV are exempted from the new vehicle TAX (ISAN, impuesto sobre automóviles nuevos).</li> </ul>	Purchose subsidy     Vehicles are not required to do periodic technical controls about pollution.	<ul> <li>Regulation</li> <li>HEV/BEV/PHEV are able to transit daily in Mexico city, even if a pollution phase applies.</li> <li>For HEV, PHEVs a and BEVs 20% discounts in urban tools.</li> </ul>

Some exemptions might apply in specific business/operational context.

Regulation and subsidy might be subject of modification from government with no prior notice. Get in touch with your Ayvens consultant to get an ad-hoc study.



EV adoption

**Powertrain mix** 

**BEV** 

HEV

11<sup>%</sup> Petrol

89<sup>%</sup> Diesel

PHEV

0%

0%

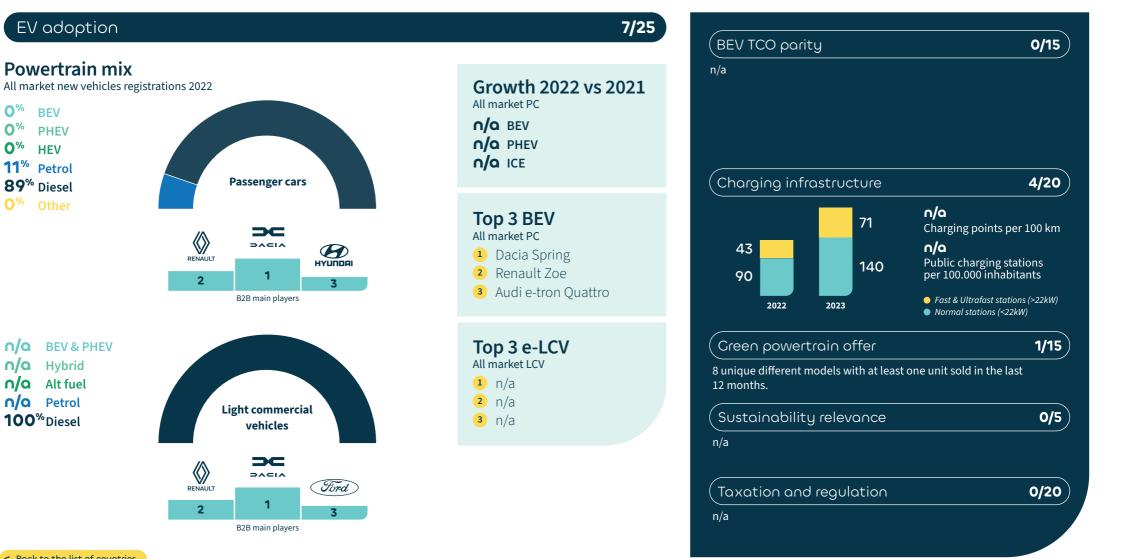
0%

n/a

n/a







**BEV & PHEV** 

Hybrid

∩∕a Alt fuel

n/a Petrol

100<sup>%</sup>Diesel

EV adoption

**Powertrain mix** 

17%

8%

1%

18% HEV

28<sup>%</sup> Petrol

BEV

PHEV

Diesel 28<sup>%</sup> Other

**0.9<sup>%</sup> BEV & PHEV** 

Petrol

Diesel

**0,5**<sup>%</sup> Hybrid

1.6<sup>%</sup> Alt fuel

2%

95%

All market new vehicles registrations 2022



**Passenger cars** 

Ŵ

B2B main players

**Light commercial** 

vehicles

 $\bigotimes$ 

B2B main players

(KIA)

2

Ford

2



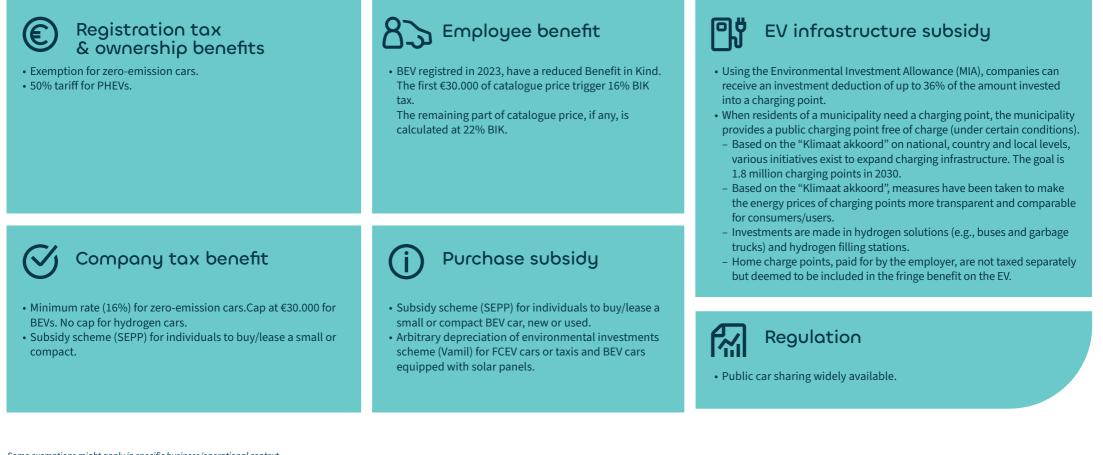


18/25 **BEV TCO** parity 3/15 Growth 2022 vs 2021 Cost in € per km using TCO All market PC 0,42 0,42 comparison over 48 months +15<sup>%</sup> BEV and over 120.000 km +11<sup>%</sup> PHEV ICE BEV -17% ICE Charging infrastructure 17/20 3.378 64,3 Top 3 BEV Charging points per 100 km 1.739 All market PC 155 74.091 1 Tesla Model Y ( )Public charging stations 52.524 2 Volvo XC40 per 100.000 inhabitants 3 3 Renault Megane Fast & Ultrafast stations (>22kW) 2022 2023 Normal stations (<22kW)</p> Green powertrain offer Top 3 e-LCV 14/15 All market LCV More than 100 unique different models with at least one unit sold in 1 Renault Kangoo the last 12 months. 2 Opel/Vxh. Vivaro-e Sustainability relevance 1/5 3 Mercedes eVito Van Carbon intensity at 244g (g CO, eq/kWh), with 63% low carbon and 57% renewable.  $\langle\!\!\langle\rangle$ Taxation and regulation 15/20 RENAULT 3 www.aldautomotive.nl

# Netherlands

## Taxation and regulation

## 15/20



Some exemptions might apply in specific business/operational context.

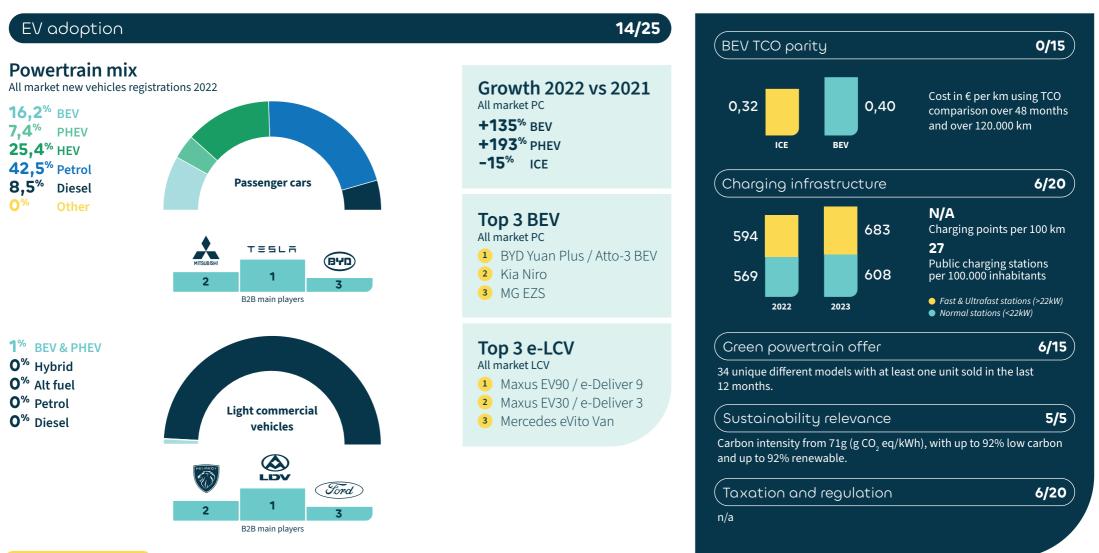
Regulation and subsidy might be subject of modification from government with no prior notice. Get in touch with your Ayvens consultant to get an ad-hoc study.

< <u>Back to the list of countries</u>





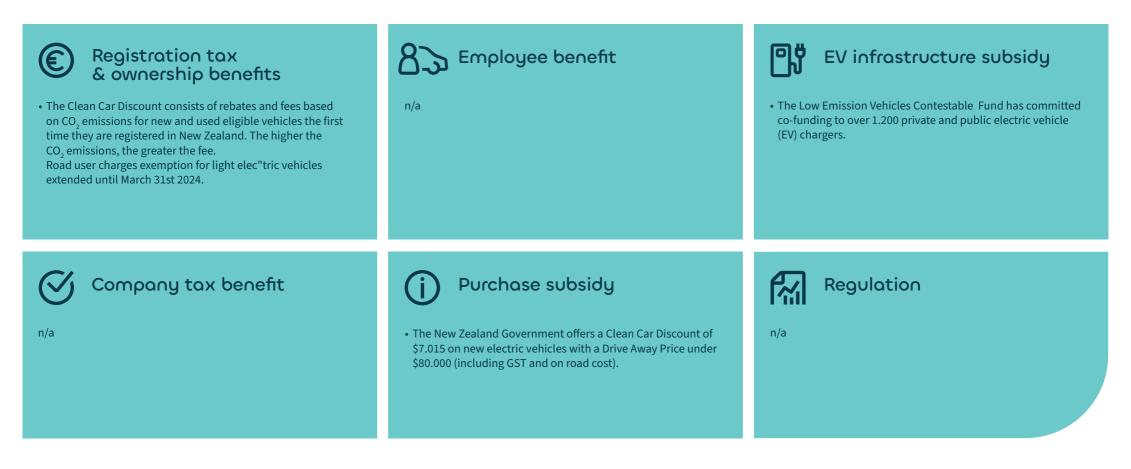




## New Zealand

### Taxation and regulation

#### 6/20



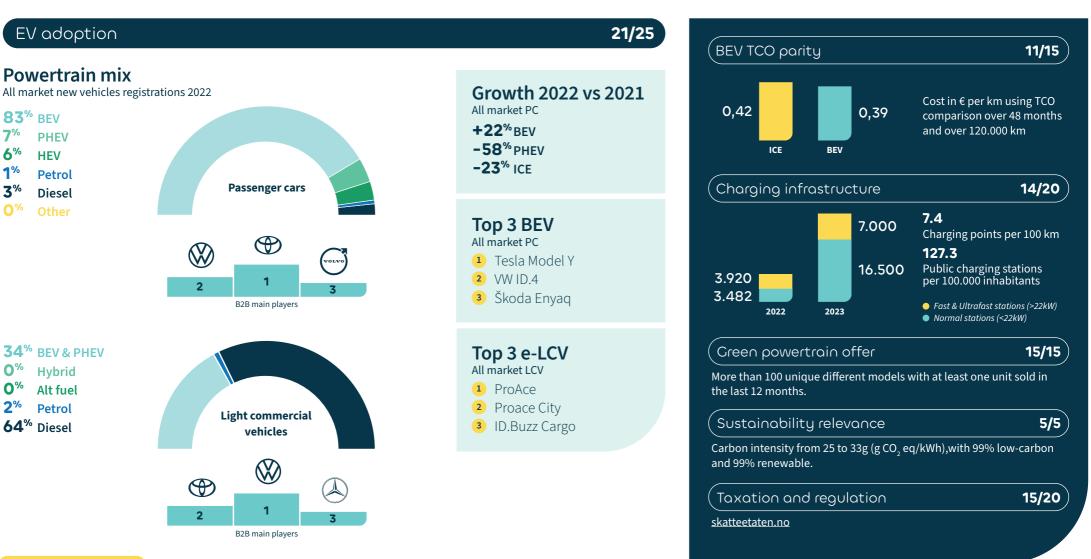
Some exemptions might apply in specific business/operational context.

Regulation and subsidy might be subject of modification from government with no prior notice. Get in touch with your Ayvens consultant to get an ad-hoc study.











### 15/20

<ul> <li><b>Registration tax</b> <b>a conversion benefits</b></li> <li>BEVs are now subject to a weight related registration tax of 12,50 kr per kg exceeding 500kg.</li> <li>Wreckage fee of 2.400 kr.</li> <li>Lower road tax for BEVs.</li> </ul>	8 Employee benefit • No company car benefits for employers driving BEVs any more.	<b>EV infrostructure subsidy</b> • Local subsidies scheme are in place supporting charging installation. The range is between 5.000 kr to 10.000 kr.
Company tax benefit	• VAT exemption for BEV purchase, but only for the amount up to 500.000 kr. The amount exceeding 500.000 kr sees 25% VAT.	Regulation • The scheme that has been granting urban toll exemption in some cities will be gradually phase-out. However BEV will not pay more than 50% of comparable ICE toll. • Target from government is to sell only zero emission vehicles from 2025.

Some exemptions might apply in specific business/operational context.

Regulation and subsidy might be subject of modification from government with no prior notice. Get in touch with your Ayvens consultant to get an ad-hoc study.



EV adoption

**Powertrain mix** 

**BEV** 

PHEV

HEV

58<sup>%</sup> Petrol

29<sup>%</sup> Diesel

11<sup>%</sup> Other

1%

0%

1%

0%

0%

0%

**∆**%

All market new vehicles registrations 2022

( )

1

E.

HYUNDAI

2

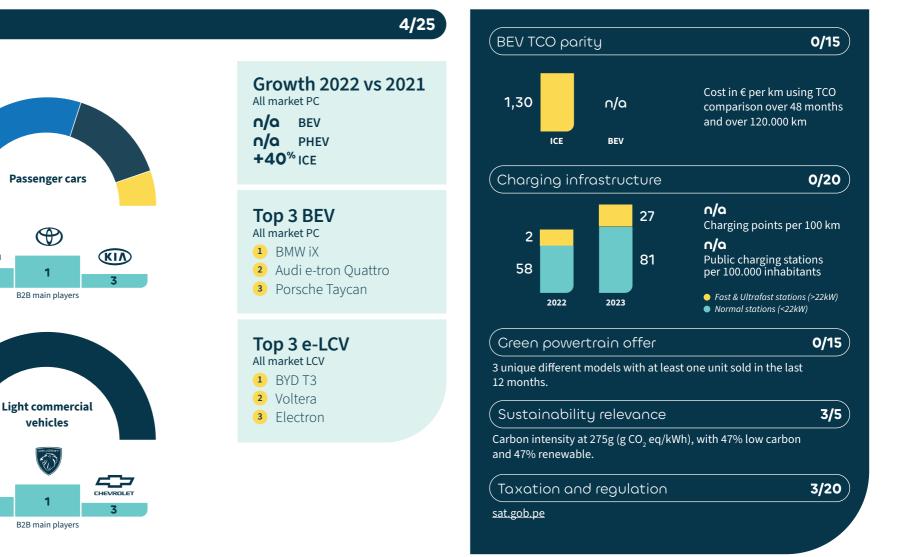
**R**7

RĂM

2







**BEV & PHEV** 

Hybrid

Alt fuel

Petrol

96<sup>%</sup> Diesel







EV adoption	9/25 (BEV TCO parity	13/15
Powertrain mix All market new vehicles registrations 2022 2% BEV 2% PHEV 22% HEV 33% Petrol	Growth 2022 vs 2021 All market PC +72 <sup>%</sup> BEV +22 <sup>%</sup> PHEV -19 <sup>%</sup> ICE Growth 2022 vs 2021 0,45 0,45 0,45 0,45 BEV 0,41 Cost in € per comparison of and over 120	km using TCO over 48 months 0.000 km
8 <sup>%</sup> Diesel 33 <sup>%</sup> Other Passenger cars	All market PC1.261101 Tesla Model 31.2613.1972 Tesla Model Y1.9113 KIA EV6	nhabitants st stations (>22kW)
2,3% BEV & PHEV 0,2% Hybrid 0,3% Alt fuel 5,6% Petrol 92% Diesel Light commercial vehicles ENAULT Tord 1	<ul> <li>Top 3 e-LCV</li> <li>All market LCV</li> <li>Mercedes eSprinter Van</li> <li>Opel/Vxh. Vivaro-e</li> <li>Ford E-Transit</li> <li>Creen powertrain offer</li> <li>Sunique different models with at least one unit sold in 12 months.</li> <li>Sustainability relevance</li> <li>Carbon intensity at 715g (g CO<sub>2</sub> eq/kWh), with 33% low of 31% renewable.</li> </ul>	7/15 In the last 0/5



### 4/20

Registration tax & ownership benefits	83 Employee benefit	EV infrastructure subsidy
<ul> <li>Excise tax exemption for BEVs.</li> <li>Excise tax exemption for PHEVs up to 2.000cc until end 2029.</li> <li>Depreciation: <ul> <li>up to zł225.000 for BEVs and FCEVs</li> <li>up to zł150.000 for vehicles emitting 0-50g CO<sub>2</sub>/km</li> <li>up to zł100.000 for vehicles emitting &gt; 50g CO<sub>2</sub>/km</li> </ul> </li> </ul>	• Benefit in kind calculation is based on engine power for ICE and can vary from zł250 to zł400 monthly. For BEV and FCEV it is fixed at level of zł250 monthly.	• Entire budget of scheme supporting the installation of EV public charge infrastructure has been utilized. Up to 50% of the eligible costs for hydrogen stations.
Company tax benefit	Durchase subsidy	Regulation

Some exemptions might apply in specific business/operational context.

Regulation and subsidy might be subject of modification from government with no prior notice. Get in touch with your Ayvens consultant to get an ad-hoc study.





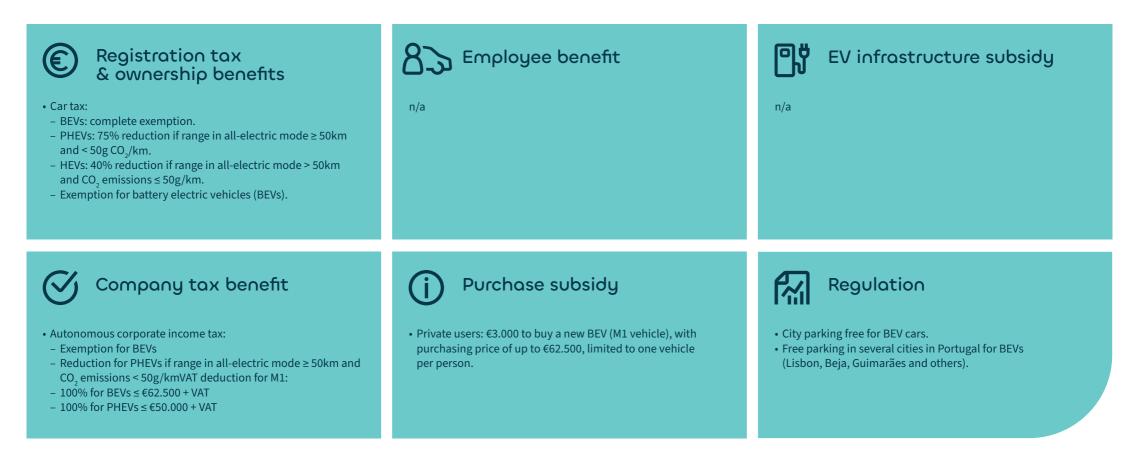


EV adoption		11/25	BEV TCO parity	15/15
Powertrain mix All market new vehicles registratio 10 <sup>%</sup> BEV 10 <sup>%</sup> PHEV 16 <sup>%</sup> HEV 43 <sup>%</sup> Petrol 18 <sup>%</sup> Diesel	ns 2022 Passenger cars	Growth 2022 vs 2021 All market PC +69 <sup>%</sup> BEV +32 <sup>%</sup> PHEV -15 <sup>%</sup> ICE	0,53 ICE BEV 0,36 Charging infrastructure	Cost in € per km using TCO comparison over 48 months and over 120.000 km <b>11/20</b>
% Other	RENAULT 2 1 3 B2B main players	Top 3 BEV All market PC 1 Renault Zoe 2 Tesla Model 3 3 Tesla Model Y	3.334 1.226 3.130 2022 2023 2023	<ul> <li>14,9</li> <li>Charging points per 100 km</li> <li>46</li> <li>Public charging stations per 100.000 inhabitants</li> <li>Fast &amp; Ultrafast stations (&gt;22kW)</li> <li>Normal stations (&lt;22kW)</li> </ul>
<ul> <li>,6% BEV &amp; PHEV</li> <li>,1% Hybrid</li> <li>,2% Alt fuel</li> <li>,4% Petrol</li> <li>5,7% Diesel</li> </ul>	Light commercial vehicles	<ul> <li>Top 3 e-LCV</li> <li>All market LCV</li> <li>Peugeot e-Partner</li> <li>Renault Kangoo</li> <li>Mercedes Sprinter</li> </ul>	Creen powertrain offer 115 unique different models with at lea 12 months. Sustainability relevance Carbon intensity at 203g (g CO <sub>2</sub> eq/kWh 60% renewable. Taxation and regulation ACEA_Tax_Guide_2022.pdf	3/5

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### 7/20



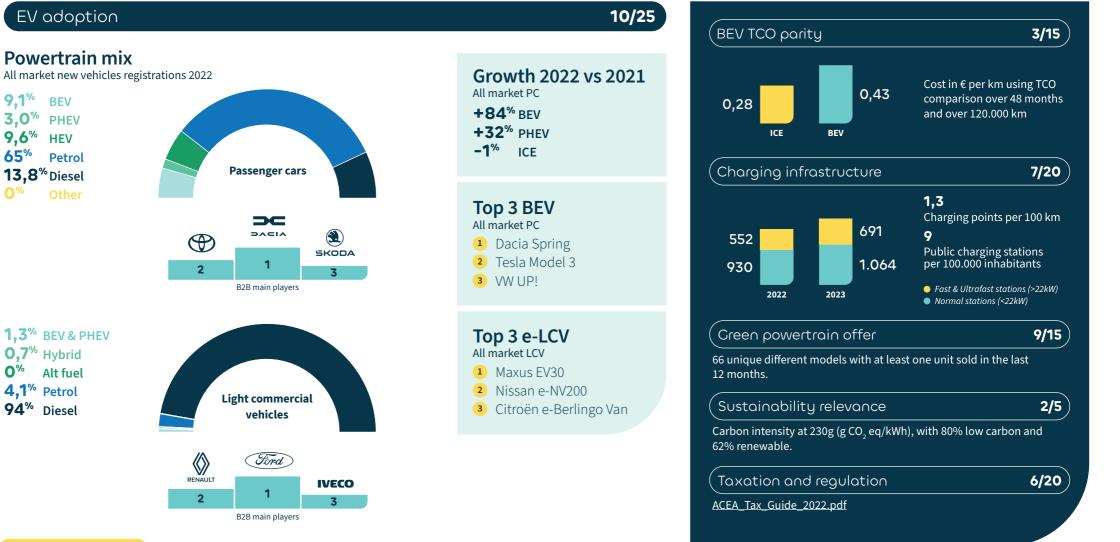
Some exemptions might apply in specific business/operational context.

Regulation and subsidy might be subject of modification from government with no prior notice. Get in touch with your Ayvens consultant to get an ad-hoc study.





EV maturity scoring 33/100



< Back to the list of countries

9,1%

3.0%

**65**<sup>%</sup>

**9,6**<sup>%</sup> HEV

13,8<sup>%</sup> Diesel

0.7<sup>%</sup> Hybrid

4,1<sup>%</sup> Petrol

94<sup>%</sup> Diesel

Alt fuel

0%

BEV

PHEV

Petrol

# Romania

## Taxation and regulation

#### E

#### Registration tax & ownership benefits

• Electric or hybrid cars have a special taxation status. According to the Fiscal Code, in the case of hybrida, the taxation is reduced by at least 50%, according to the decision of the local council of each municipality, and electric vehicles are exempt from paying the tax. The 50% tax reduction established by the Fiscal Code is the minimum. For example, for hybrid vehicles registered in Bucharest, the discount is 95%.

#### Company tax benefit

n/a



n/a

#### Purchase subsidy

- An eco-voucher of RON 26,000 (€5.200) for the purchase of a plug-in hybrid electric car with CO<sub>2</sub> emissions of 80g or less CO<sub>2</sub>/km WLTP; the scrappage of an old car is mandatory.
- An eco-voucher of RON 29.000 (€5,800) for the purchase of a plug-in hybrid electric car with CO<sub>2</sub> emissions of 78g CO<sub>2</sub>/km WTLP; the scrappage of two old cars is mandatory.
- An eco-voucher of RON 51,000 (€10.200) for the purchase of a pure electric vehicle; the scrappage of an old car is mandatory. The value of the incentive cannot be more than 50% of the total value of the vehicle.
- An eco-voucher of RON 54.000 (€10.800) for the purchase of a pure electric vehicle; the scrappage of two old cars is mandatory. The value of the incentive cannot be more than 50% of the total value of the vehicle.



• Grants up to €100.000 for the creation of photovoltaic parks and the purchase of electric charging stations.

#### Regulation

• BEVs, PHEVs and HEVs benefit of free parking in public parkings in the main cities, including Bucharest; Online easy procedure to obtain the digital parking vignette;

Some exemptions might apply in specific business/operational context.

Regulation and subsidy might be subject of modification from government with no prior notice. Get in touch with your Ayvens consultant to get an ad-hoc study.









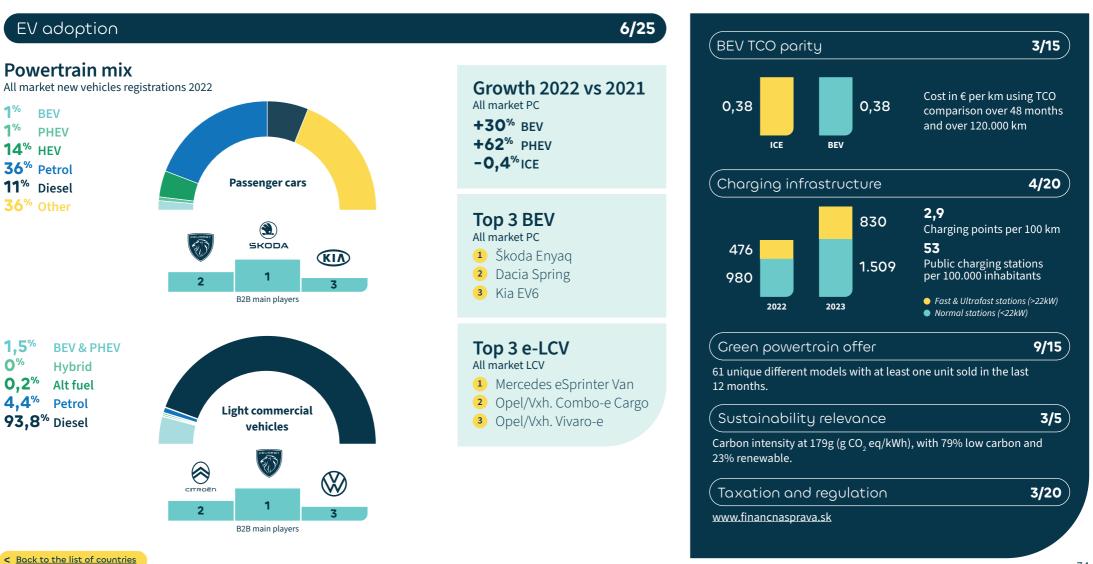
EV adoption	4/25	BEV TCO parity	0/15
Powertrain mix All market new vehicles registrations 2022 1% BEV 2% PHEV 5% HEV 5% HEV 59% Petrol 20% Diesel Passenger cars	Growth 2022 vs 2021 All market PC 0% BEV 0% PHEV +4% ICE	n/a (Charging infrastructure	4/20
13% Other	Top 3 BEVAll market PC11921941111111111111111111112111 </td <td>45 90 2022 2023 178 Pub per • Fa</td> <td>/</td>	45 90 2022 2023 178 Pub per • Fa	/
0% BEV & PHEV 0% Hybrid 12,2% Alt fuel 11,5% Petrol 76% Diesel Light commercial vehicles ENAULT 2 1 3 B2B main players	<ul> <li><b>Top 3 e-LCV</b></li> <li>All market LCV</li> <li>Peugeot Expert</li> <li>Renault Kangoo</li> <li>SAIC Motor Maxus EV80</li> </ul>	Creen powertrain offer 35 unique different models with at least one un 12 months. Sustainability relevance Carbon intensity at 398g (g CO <sub>2</sub> eq/kWh), with 9 and 52% renewable. Taxation and regulation www.srbija.gov.rs	1/5





EV maturity scoring

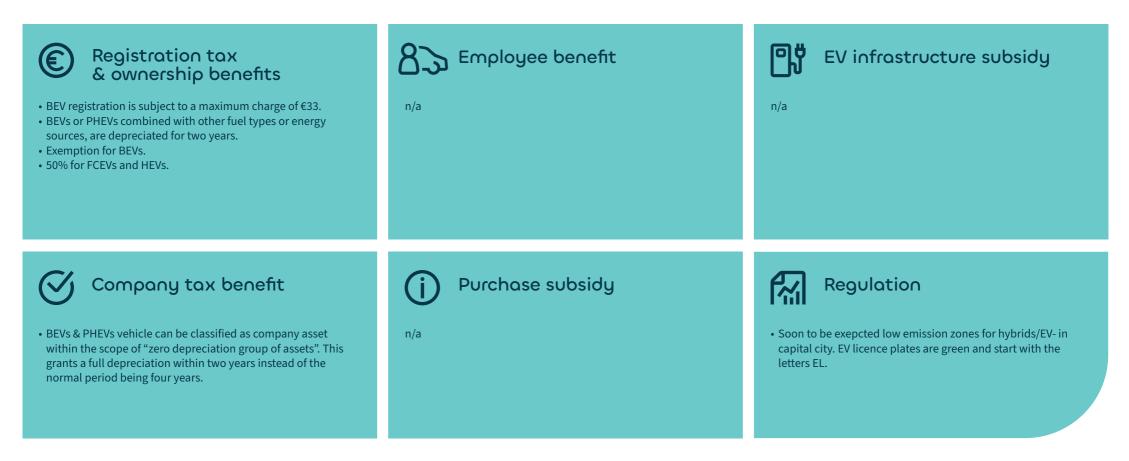




74



### 3/20



Some exemptions might apply in specific business/operational context.

Regulation and subsidy might be subject of modification from government with no prior notice. Get in touch with your Ayvens consultant to get an ad-hoc study.



3%

1%

8%

**BEV** 

HEV

38<sup>%</sup> Petrol

12<sup>%</sup> Diesel

38<sup>%</sup> Other

8.4%

0,9%

0,3%

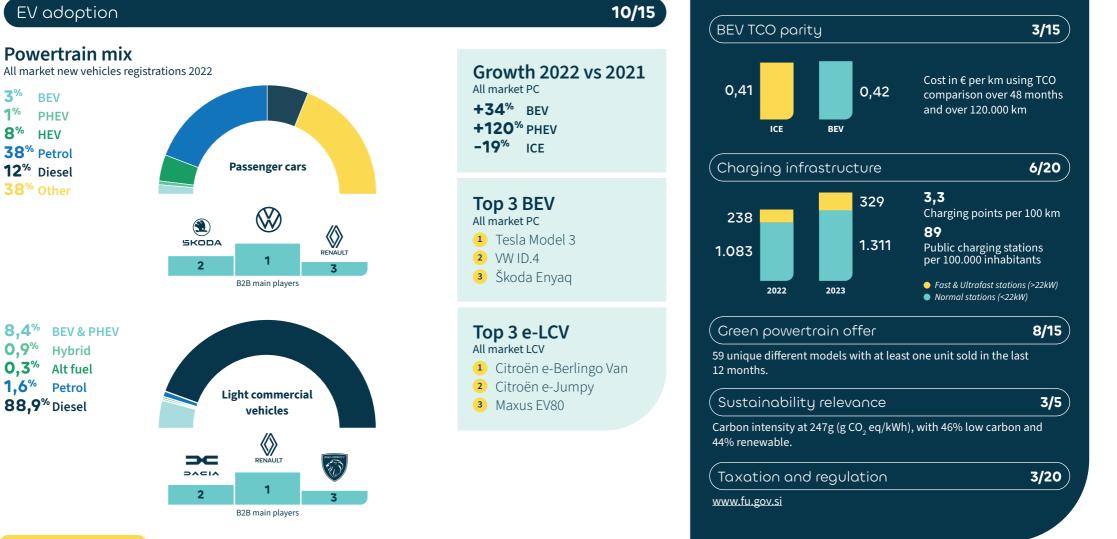
1,6%

88,9<sup>%</sup> Diesel

PHEV







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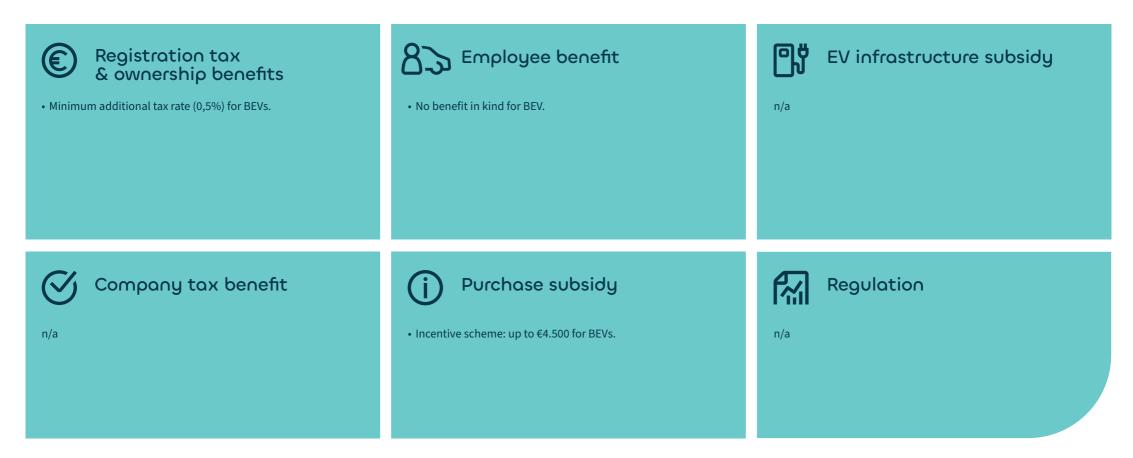
Hvbrid

Alt fuel

Petrol



### 3/20



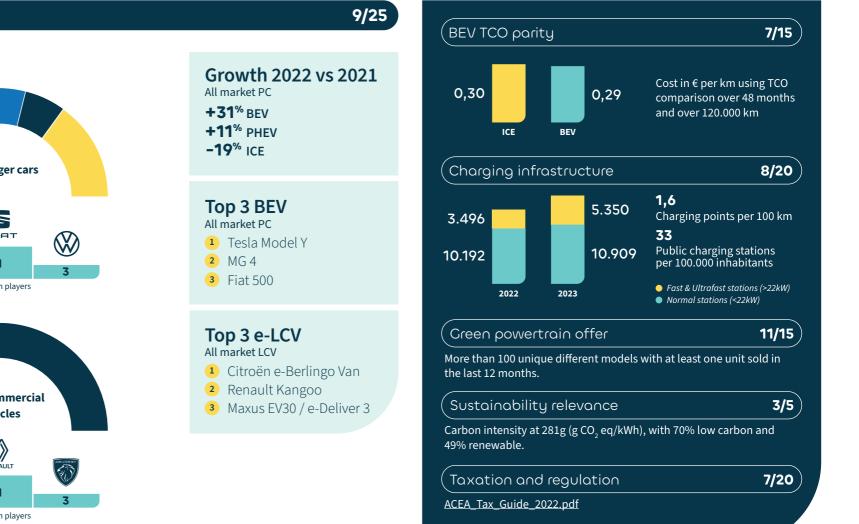
Some exemptions might apply in specific business/operational context.

Regulation and subsidy might be subject of modification from government with no prior notice. Get in touch with your Ayvens consultant to get an ad-hoc study.









Powertrain mix

All market new vehicles registrations 2022

EV adoption

 3%
 BEV

 4%
 PHEV

 21%
 HEV

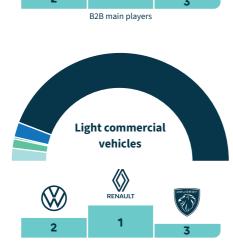
 30%
 Petrol

 12%
 Diesel

**30%** Other



4,2<sup>%</sup> BEV & PHEV 2,9<sup>%</sup> Hybrid 0,4<sup>%</sup> Alt fuel 4,3<sup>%</sup> Petrol 88<sup>%</sup> Diesel



B2B main players





#### Registration tax & ownership benefits

- Exemption from 'special tax' for vehicles emitting  $\leq 120 \text{g CO}_2/\text{km}$ .
- Canary Islands: VAT exemption for alternatively powered vehicles (eg BEVs, FCEVs, PHEVs, EREVs, and HEVs) emitting ≤ 110g CO,/km.
- 75% reduction for BEVs in main cities (eg Barcelona, Madrid, Valencia, Zaragoza, etc).



#### Company tax benefit

The use of a company car for private purposes is regarded as a payment in kind and included in the calculation of personal income tax:

- 30% reduction for BEVs and PHEVs ≤ €40.000
- 20% reduction for HEVs  $\leq$  €35.000



#### Employee benefit

n/a

#### Purchase subsidy

Incentive scheme (MOVES III) in 2021-2023:

- Cars (M1): €4.500-€7.000 for BEVs and FCEVs, and €2.500-€5.000 for PHEVs, for private individuals, depending on whether a vehicle is being scrapped.
- Different incentives for SMEs and large companies (+ MOVES FLOTAS)For more details:
- <u>www.idae.es/ayudas-y-financiacion/para-movilidad-y-vehiculos/programa-moves-iii</u>
- <u>www.idae.es/ayudas-y-financiacion/para-movilidad-y-</u> vehiculos/programa-moves-flotas



Incentive scheme (MOVES III) in 2021-2023:

- Self-employed, individuals, neighbouring communities, and administration: 70% of the eligible cost.
- Companies and public charging points (power ≤ 50 kW): 35% of the eligible cost for a large, 45% for a medium, and 55% for a small company.
- Companies and public charging points (power > 50 kW):
   30% of the eligible costs. These amounts are increased if the location is in municipalities with less than 5.000 inhabitants.



Free parking for BEV in some cities.

- BEV can use reserved traffic lanes in some cities.
- Regulation of traffic in main cities during pollution peak. Restricted traffic areas in main cities, except EV i.e. Madrid 360 & Barcelona ZBE.

Some exemptions might apply in specific business/operational context.

Regulation and subsidy might be subject of modification from government with no prior notice. Get in touch with your Ayvens consultant to get an ad-hoc study.

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7/20



27% BEV

HEV

7%

0%

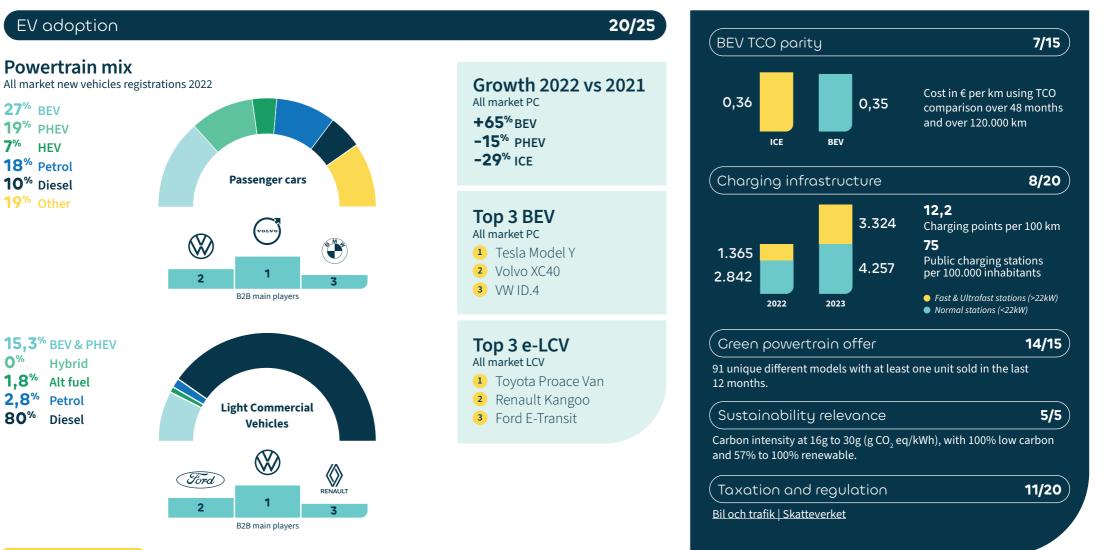
1.8%

2,8%

80%









## 11/20

### E

#### Registration tax & ownership benefits

• Low annual road tax (360 kr) for zero-emission vehicles and PHEVs.

### Employee benefit

- The private use of a company car is taxed on benefits. For some cars, there is a permanent tax reduction of the benefit value.The reduction is a fixed amount based on the environmental technology:
- BEVs and FCEVs: 350.000 kr
- PHEVs: 140.000 kr

The taxable benefit value is based on the new car price and reduced by the relevant amount. The discount may not exceed 50% of the car price.

### Company tax benefit

- The lower road tax and reduction in taxable list price described above for EVs/PHEVs/CNG
- Vehicles benefits the company through lower employer taxes on drivers, BIK compared to diesel/petrol vehicles.



Since November 2022 no Subsidy amount from the Government for Electric vehicles.



- 50% tax deduction (max 15.000 kr) for households installing a charging box at home for an electric car.
- *Ladda bilen* grant for the installation of AC charging for residents in apartment buildings.

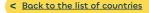


### Regulation

 As of 2020, municipalities can exempt vehicles with high emissions from specific areas. Only pre-EU5 vehicles are so far denied from certain streets in Stockholm. Furthermore, there are plans to expand this so that only EVs/fuel cell/CNG vehicles are allowed to enter. The regulations will be gradually implemented between 2024 and 2026.

Some exemptions might apply in specific business/operational context.

Regulation and subsidy might be subject of modification from government with no prior notice. Get in touch with your Ayvens consultant to get an ad-hoc study.







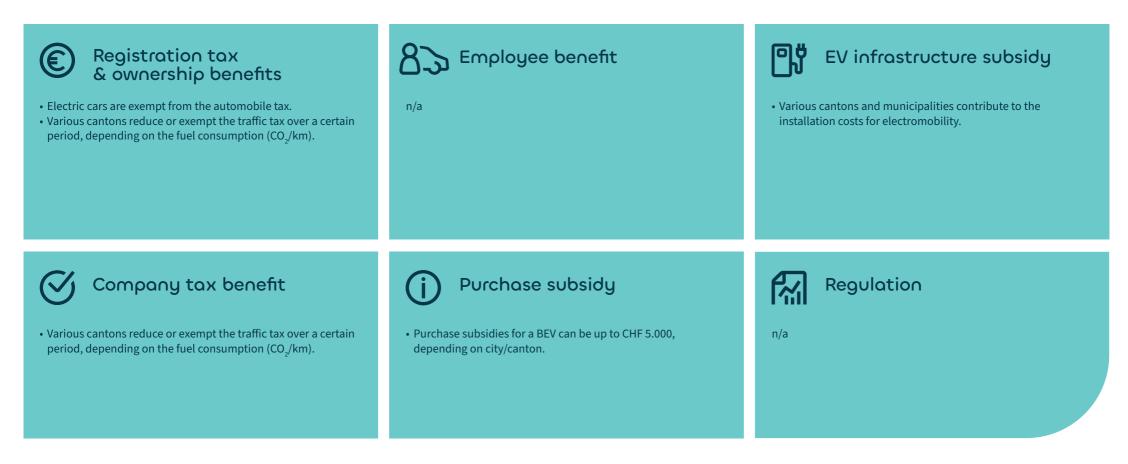


EV adoption	14/25	BEV TCO parity	11/15
Powertrain mix All market new vehicles registrations 2022 16 <sup>%</sup> BEV 9 <sup>%</sup> PHEV 25 <sup>%</sup> HEV 38 <sup>%</sup> Petrol 12 <sup>%</sup> Diesel Passenger cars	Growth 2022 vs 2021 All market PC +4% BEV -1% PHEV -7% ICE	0,52 ICE BEV 0,48 (Charging infrastructure	Cost in € per km using TCO comparison over 48 months and over 120.000 km 7/20
% Other       Image: Second secon	Top 3 BEVAll market PC1Tesla Model Y2Tesla Model 33Škoda Enyaq	2.032 1.506 3.241 2022 2023	<ul> <li>5,6</li> <li>Charging points per 100 km</li> <li>69</li> <li>Public charging stations per 100.000 inhabitants</li> <li>Fast &amp; Ultrafast stations (&gt;22kW)</li> <li>Normal stations (&gt;22kW)</li> </ul>
5,4% BEV & PHEV 0,3% Hybrid 1,2% Alt fuel 5,2% Petrol 38% Diesel Uight commercial vehicles Corel 2 1 32 B2B main players	<ul> <li><b>Top 3 e-LCV</b></li> <li>All market LCV</li> <li>Renault Master Z.E</li> <li>Renault Kangoo Z.E.</li> <li>Ford Transit</li> </ul>	Creen powertrain offer 95 unique different models with at least 12 months. Sustainability relevance Carbon intensity at 83g (g CO <sub>2</sub> eq/kWh), 63% renewable. Taxation and regulation www.ch.ch	5/5

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### 5/20



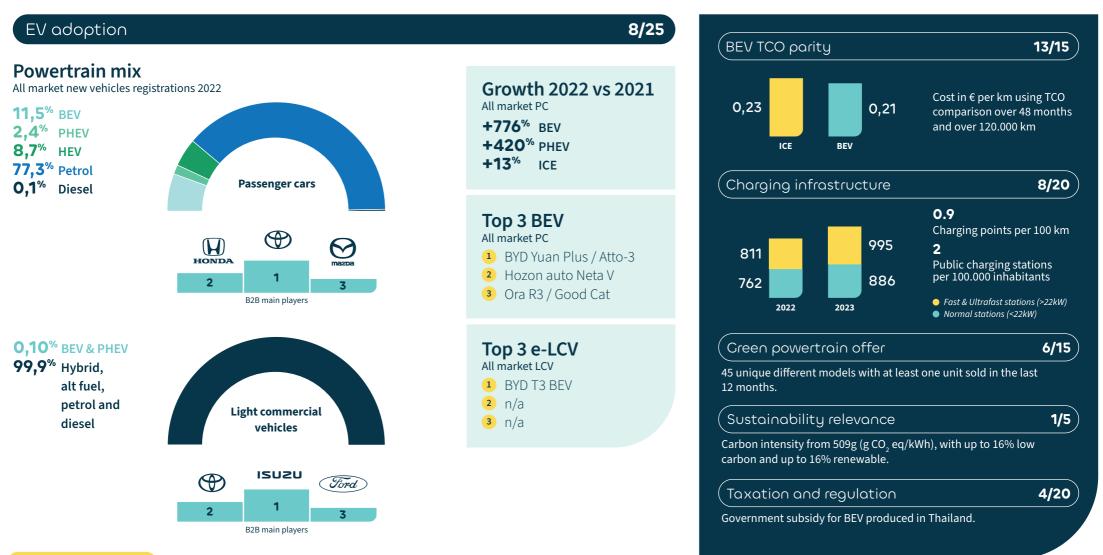
Some exemptions might apply in specific business/operational context.

Regulation and subsidy might be subject of modification from government with no prior notice. Get in touch with your Ayvens consultant to get an ad-hoc study.











All market new vehicles registrations 2022

 $\langle \rangle$ 

RENAULT

1

Ford

 $\bigotimes$ 

2

 $\bigotimes$ 

2

EV adoption

**Powertrain mix** 

BEV

**10,9%** HEV & PHEV

Petrol

Diesel

**n/a** BEV & PHEV

n/a Hybrid

**n/a** Alt fuel

**n/a** Petrol

n/a Diesel

1.5%

69%

17%

1.2%





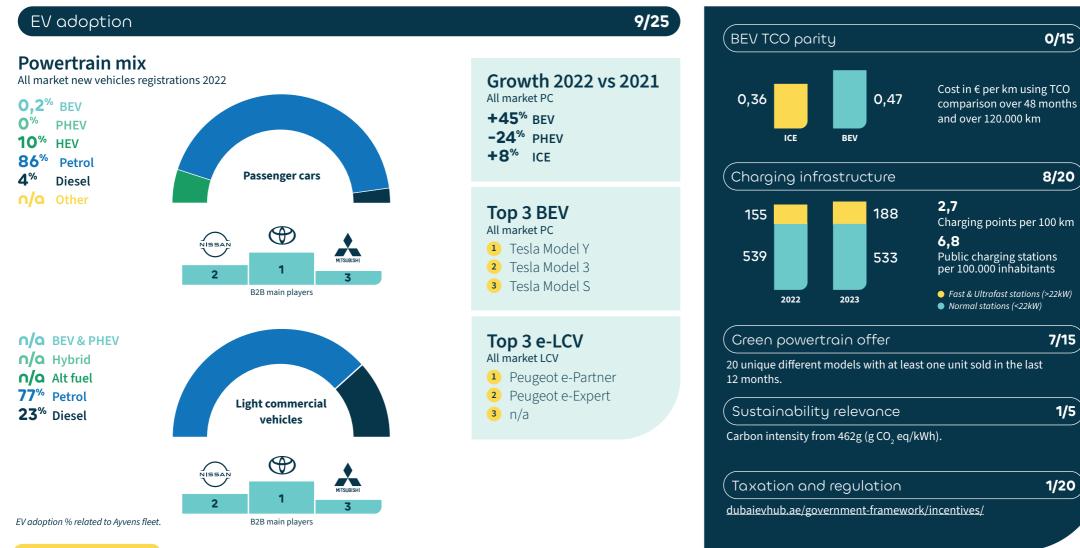


# **C** United Arab Emirates









0/15

8/20

7/15

1/5

1/20

EV adoption

**Powertrain mix** 

12% BEV

21% HEV

**30<sup>%</sup>** Petrol

PHEV

Diesel **30**<sup>%</sup> Other

6.7<sup>%</sup> BEV & PHEV

Alt fuel

**1.7<sup>%</sup>** Hybrid

1.6<sup>%</sup> Petrol

**90**<sup>%</sup> Diesel

0%

**1**%

4%

**United Kingdom** 



EV maturity scoring 60/100

15/25 **BEV TCO parity** 3/15 All market new vehicles registrations 2022 Growth 2022 vs 2021 Cost in € per km using TCO All market PC 0,33 0,33 comparison over 48 months +39% BEV and over 120.000 km -16<sup>%</sup> PHEV BEV ICE -17% ICE Charging infrastructure 11/20 **Passenger cars** 3,1 Top 3 BEV 13.576 Charging points per 100 km All market PC  $\infty$ 9.187 58 1 Tesla Model 3 Auði Public charging stations per 100.000 inhabitants 25.525 2 Audi Q4 E-Tron 17.897 2 3 VW ID.3 B2B main players Fast & Ultrafast stations (>22kW) 2022 2023 Normal stations (<22kW)</p> Green powertrain offer 14/15 Top 3 e-LCV All market LCV 85 unique different models with at least one unit sold in the last 1 Opel/Vxh. Vivaro-e 12 months. 2 Peugeot e-Partner **Light commercial** Sustainability relevance 3/5 3 Peugeot e-Expert vehicles Carbon intensity at 213g (g CO, eq/kWh), with 61% low carbon and 39% renewable. Ford  $\langle\!\!\langle\rangle\!\!\rangle$ Taxation and regulation 14/20 RENAULT 2 3 aldtaxguide.co.uk B2B main players

# **W** United Kingdom

## Taxation and regulation

## 14/20

### E

#### Registration tax & ownership benefits

• BEV costing less than £40.000 are exempt from payment of annual circulation tax (Vehicle excise duty) until April 1st 2025 where all BEVs (inlcuding vehicles registered hisotrically) will be required to pay road tax.

### B Employee benefit

• Benefit In Kind taxation is currently at 2% for BEV, between 2025/26 and 2027/28 this will increase by one percentage point each year, reaching 5% in the year from April 2028.

#### Purchase subsidy

- Company tax benefit
- Preferential tax rates for electric and ultralow emission cars (< 75g CO<sub>2</sub>/km). For more details: <u>www.gov.uk/tax-company-benefits/tax-on-company-cars</u>.
- Company cars are taxed on 2% of list price. Between 2025/26 and 2027/28 this will increase by one percentage point each year, reaching 5% in the year from April 2028.
- Employers pay Class 1 A National Insurance contirbutions on benefits provided to employees at the above rates.

- Additional grants for different vehicle types e.g. wheelchair accessible vehicles (MAVs), taxis, motorbikes etc - <u>https://</u> www.gov.uk/plug-in-vehicle-grants
- No purchase subsidies for passenger cars but there are purchase subsidies for eLCVS:
- Purchase subsidies for cars have been withdrawn.
- > Small vans < 2.500, < 50 g/km CO $_{\rm 2}$  and travel at least 60 miles with zero emissions = 35% of the purchase price up to £2,500
- > Large Vans >2.500 to 4.250, < 50 g/km CO<sub>2</sub> and travel at least 60 miles with zero emissions = 35% of the purchase price up to £5.000. This is capped at 1.000 grants per end user.



- There are different schemes for workplace charging, landlord owned property and local authorities, details can be found here: <u>https://www.gov.uk/government/collections/</u> government-grants-for-low-emission-vehicles
- There are no longer grants for owner occupied dwellings.
- From 2023, all new build propery has an associated parking space is required to have acccess to EV charging.



- EVs get a 100% "cleaner vehicle discount" in the London Congestion Charge zone. It will continue to be available until at least December 25th 2025.
- A green licence plate is now available, making it easier for local authorities to provide incentives such as reduced parking fees or the use of bus lanes.

Some exemptions might apply in specific business/operational context.

Regulation and subsidy might be subject of modification from government with no prior notice. Get in touch with your Ayvens consultant to get an ad-hoc study.

EV adoption

**Powertrain mix** 

BEV

PHEV

HEV

Diesel

80,5<sup>%</sup> Petrol

**n/a** BEV & PHEV

**n/a** Hybrid

**n/a** Alt fuel

n/a Petrol

**n/a** Diesel

7,6%

3.4%

5%

**4**%

# United States of America



EV maturity scoring 32/100

11/25 **BEV TCO parity** 0/15 Growth 2022 vs 2021 All market new vehicles registrations 2022 Cost in € per km using TCO 0,31 All market PC comparison over 48 months 0,22 +66%BEV and over 120.000 km +6<sup>%</sup> PHEV BEV ICE -11% ICE Charging infrastructure 4/20 **Passenger cars** 0,9 12.676 Top 3 BEV 10.608 Charging points per 100 km GM All market PC 18 Ford 1 Tesla Model Y ( )47.838 43.340 Public charging stations 2 Tesla Model 3 per 100.000 inhabitants 2 3 Ford Mustang Mach-E B2B main players Fast & Ultrafast stations (>22kW) 2022 2023 Normal stations (<22kW)</p> Green powertrain offer 10/15 Top 3 e-LCV All market LCV 41 unique different models with at least one unit sold in the last Rivian FDV 12 months. 2 Ford E-Transit **Light commercial** Sustainability relevance 2/5 3 Brightdrop EV600 vehicles Carbon intensity from 24g to 671g (g CO<sub>2</sub> eq/kWh), with up to 100% low carbon and up to 100% renewable. Ford Q79 5/20 Taxation and regulation RAM 2 home.treasury.gov B2B main players

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