

Quick scan: New EU Import tariffs on BEV's produced in China

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1. Research questions and scope of the study
2. The regulation summarized
3. The dynamics of the Chinese automotive industry in the global market
4. eMobility policy and ambitions in the Netherlands
5. Market analysis
 - 5.1 Dutch BEV market registrations and availability of models
 - 5.2 Analysis of segments
 - 5.3 Analysis of prices
6. Scenario analysis
7. Conclusions
8. Attachments

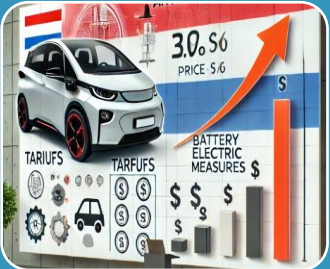
1. Research questions and scope of the study



How do the anti-subsidy measures affect the availability of BEVs in the Dutch market?

- This question investigates how the anti-subsidy measures imposed by the European Commission impact the supply chain and availability of BEVs in the Dutch market. It examines whether these measures could lead to a reduction in the variety or quantity of BEVs available to consumers.

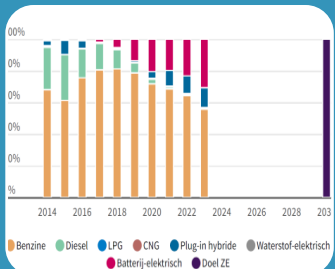
Tariffs on Chinese-made BEVs may **reduce their availability** in the Netherlands by disrupting supply chains or deterring exports. Ensuring a steady supply of BEVs is crucial for consumer choice.



What are the implications of anti-subsidy measures on the pricing of BEVs in the Netherlands?

- This question explores how the tariffs resulting from anti-subsidy measures might affect the cost structure of BEVs, potentially making them more expensive for Dutch consumers. It considers how these cost changes could influence consumer purchasing decisions.

Increased tariffs can **raise the cost of imported BEVs** from China, potentially making them less affordable for consumers. Monitoring costs is key to encouraging widespread adoption of BEVs.



To what extent do anti-subsidy measures influence the achievement of the Netherlands' fleet sustainability targets?

- This question analyzes the broader impact of anti-subsidy measures on the Netherlands' ability to meet its national sustainability targets, particularly the goal of achieving 100% BEV sales by 2030. It considers how increased costs, or reduced availability might hinder progress toward these targets.

Higher costs and reduced availability due to tariffs could **slow the adoption of BEVs**, jeopardizing the Netherlands' goal of reaching 100% ZE sales by 2030, which is essential for meeting broader climate objectives of 2050.

Notable scoping aspects of the report

Vehicle Type

The analysis is limited to passenger vehicles classified under the M1 category, with a specific focus on the A, B, C, and D segments.

Fuel Type

Only BEVs are considered in this report. Fuel cell electric vehicles (FCEVs) are excluded due to their negligible market share and limited growth prospects through 2030. While tariffs may influence other powertrains such as plug-in hybrid electric vehicles (PHEVs), these are not included in the analysis. The potential oversupply of PHEVs and its effect on BEV uptake is acknowledged but not explicitly modeled.

Geographic Focus

The report is centered on the Dutch market, with broader implications for the EU noted but not deeply analyzed.

Timeframe

The research covers data up until the first half of 2024. The analysis does not extend to potential effects of changes in the policy environment or other internal and external factors beyond this period.

Industrial and Market Dynamics

Complexities such as value chain integration and potential relocation of production are considered but not modeled in detail. The report does not attempt to project broader restructuring or reorganization of global value chains and OEM reactions, as these are outside the primary focus, also excluding potential benefits for European producers.

Report Limitations

- **Exclusion of Long-Term Policy Changes:** Future changes in domestic incentives or policy environments beyond the research period are not considered. These should be addressed in subsequent studies as they could significantly impact the findings.
- **Focus on BEVs Only:** While PHEVs and other alternative powertrains are acknowledged, the report solely focuses on BEVs due to their critical role in achieving the Netherlands' 2030 sustainability targets.
- **Omission of Speculative Market Behavior:** The report refrains from speculating on potential future market behaviors or changes in the global automotive industry, particularly post-2024, as this would require separate, more detailed modeling.
- **Limited Geographic Focus:** The report is centered on the Dutch market, with broader EU implications noted but not deeply analyzed. Expanding the geographic scope in future studies could provide a more comprehensive view of the EU-wide impact.
- **Data Cut-off:** All data and analysis are current as of mid-2024. Any developments after this period are not considered and should be evaluated in subsequent reports to maintain relevance.

2. The regulation summarized

Provisional countervailing duty on imports of new battery electric vehicles designed for the transport of persons originating in the People's Republic of China.

1. Reason for the investigation

The European Commission found that the **Chinese government was providing subsidies to its BEV manufacturers**, which allowed these vehicles to be sold at **lower prices in the EU market**.

These subsidies **distorted the market**, giving Chinese BEVs an unfair competitive advantage over EU-produced vehicles

The influx of subsidized Chinese BEVs caused **material injury to the EU's BEV industry**, which was unable to compete on equal terms due to the price disparity.

The **BEV sector is strategically important for the EU**, not only for its economic value but also for innovation and employment (automotive takes **7% of total employment**).

The Commission identified a risk that continued imports of subsidized BEVs from China would **further harm the EU's industry**, potentially leading to significant **job losses** and **stifling innovation**.

2. Evidence Unfolded by the Assessment of the Commission

Chinese BEVs **rapidly increased their market share** (from 3.9% in 2020 to 25.0% during the investigation period) in the EU, supported by subsidies.

The evidence showed that Chinese BEVs were sold at **significantly lower prices** (at **least 12,7%** undercutting margin) than EU-produced BEVs, primarily due to the subsidies.

The Commission's analysis indicated that the EU's **BEV industry was losing sales and market share**, with **declining profit margins** due to the **unfair competition**.

The Commission identified **specific Chinese government programs** that provided subsidies, such as grants, tax incentives, and cheap loans to BEV manufacturers.

The evidence suggested that **without intervention**, the EU BEV industry would face **unsustainable losses**, with a risk of severe economic impacts.

3. Method Used to Countervail Chinese BEV Products:

The EU imposed a **provisional countervailing duty** on imports of Chinese BEVs to neutralize the effect of the subsidies

The duties were **calculated based on the extent of the subsidy benefit** received by **Chinese manufacturers**, ensuring that the prices of imported BEVs reflected their **true market value**.

The Commission made imports of Chinese BEVs subject to registration to **monitor the volumes and prices of imports effectively**.

The Commission selected a **representative sample** of Chinese BEV producers to assess the level of subsidies and their impact on the EU market.

- **New passenger BEVs** (9 or less persons, excluding L6, L7), **originating (manufactured) from China**
- Countervailing duties would be added **on top of the ordinary import duty of 10%** levied on imports of battery electric vehicles
- Duty rates are exclusively applicable to imports of BEVs originating in China and produced by the **named (sampled) companies**. All other **non-sampled companies** have duty rates if they cooperated or not.
- Any differences in duty levels reflect the **varying levels of subsidization** among the different schemes. Tesla received an individual duty rate (9%), because it requested an **individual** examination to determine **subsidy received**.
- The Commission is confident of the **WTO-compatibility** of its investigation and provisional measures

Provisional countervailing duty rates per relevant companies and their products

OEM	Brands	Models of Dutch relevance	Import Tariff (on top of 10%)
Tesla (Shanghai) Co., Ltd	Tesla (production in China)	Tesla Model 3, Tesla Model Y	9.0%
BYD Group (sampled)	BYD	BYD Dolphin, BYD TANG, BYD HAN, BYD e6, BYD Seal, BYD Song Plus / Seal U, BYD Yuan Plus / Atto-3	17.0%
Geely (sampled)	Volvo, Polestar, Lynk&co, Geely, Zeekr, Livan, Lotus, Farizon, Radar, LEVC, Jidu auto, Proton, Smart	Polestar 2, Polestar 3, Polestar 4, Smart #1, Smart #3, Volvo EX30, Volvo EX40, Volvo EX90, Volvo EC40, Zeekr X, Zeekr 001	19.3%
SAIC (sampled)	IM, MG, Rising auto, Roewe, Maxus, SAIC, Hongyan, Sunwin, Najing	MG 4 / Mulan, MG 5, MG EZS, MG Marvel R, MG Cyberster	36.3%
Other not sampled (cooperating companies)	Aiways, BMW, Dongfeng Motor Group, Chongqing Changan Automobile Company, NIO, Great Wall Motors, XPeng	Aiways U5, Aiways U6, BMW iX3, Dacia Spring, JAC iEV7S, JAC iEVS4, NIO es6 / el6 NIO et5, Ora R3 / Good Cat, Seres SF3, SF5, Xpeng P5, P7, G6, G9	21.3%
Other not sampled (not cooperating)	Honda Motor	Honda e:Ny1	36.3%

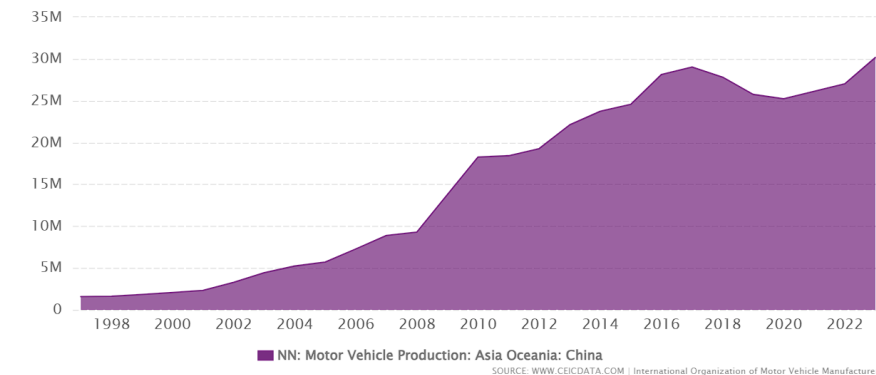
Note: These tariffs will apply as of 5 July 2024, for a maximum duration of 4 months. Within that timeframe, a final decision must be taken on definitive duties, through a vote by the EU Member States. When adopted, the decision would make the duties definitive for 5 years.

3. The dynamics of the Chinese automotive industry in the global market

Understanding the global automotive industry dynamics of the Chinese Automotive Market

- The Chinese car market has been growing tremendously and has become the **largest car market worldwide**. From a market size of 2 million cars in 2000 to a peak volume 21.7 million of sold cars in (2023).
- In a global perspective, China has become the automotive production powerhouse with 25 – 30 million cars annually, compared to 10,5 million cars produced in the EU (status 2023).
- This has resulted in “a flurry of new car makers and brands” (about 150 in 2023). Via obligatory join-Ventures (with often state-owned manufacturers), the local OEM's have **acquired their skills and knowledge from Western OEM's**.
- The Chinese OEM's have based their plans upon continuous growth. But the result is (with big variation between OEM's), **low-capacity utilization** of production plants, **cut-throat competition** on the Chinese market and **tremendous price-pressure** on the Chinese market.
- Currently there are about 135 NEV (New Energy Vehicle) manufacturers, and it is expected from these **only about 20 will continue to exist independently in 2030**.
- The huge size of the home market for cars in general and specific for BEV's, the fierce local competition (driving innovation), the tremendous pressure on **production efficiency**; the **need for international growth of sales**, has resulted in Chinese car makers **conquering market share in foreign markets**, worldwide. Starting with – in terms of product quality - less demanding markets like for example Taiwan, the Middle East and **Latin America** and since some years the more demanding markets **US** and the **EU**.

China's Motor Vehicle Production reached 30 million in 2023.

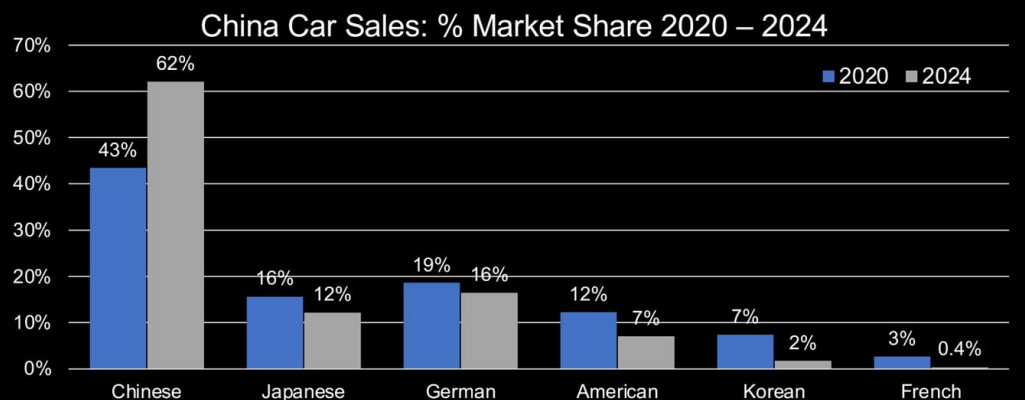


Source: CEIC (2024),

The importance of the Chinese market for European OEM's Automotive Market

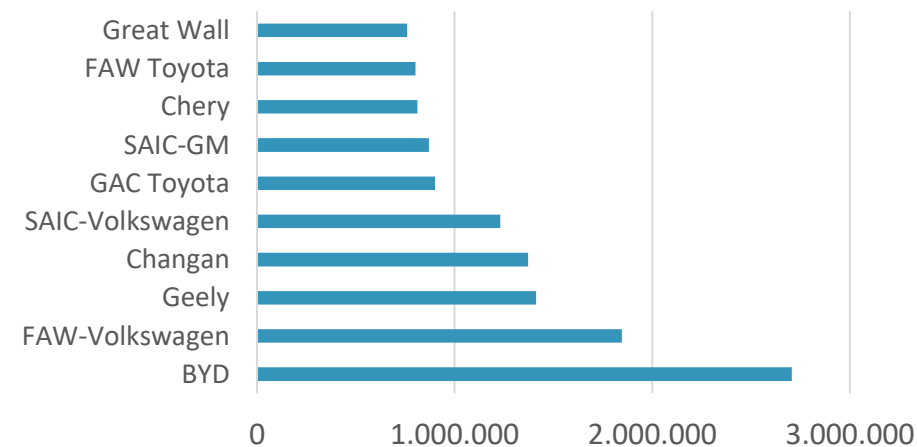
- The importance of the Chinese market varies significantly among European and American car manufacturers. German (VW, Mercedes-Benz, BMW) and Swedish (Volvo, owned by Geely Group) OEMs, as well as Tesla, have strong market positions in China, with substantial market shares and production volumes. For example, the VW Group holds a 15% market share and produces 3.2 million vehicles annually, many through Chinese joint ventures.
- In contrast, French manufacturers (Stellantis, Renault) have minimal presence, with a market share around 0.5%. Although Stellantis recently acquired Leap Motors and began production in Poland, their impact remains limited.
- China is a crucial export market for European OEMs, primarily for ICE vehicles, while EV exports from Europe to China are negligible. Overall, Western OEMs, except Tesla, have weaker positions in the Chinese BEV market, with European OEMs' market share dropping from 28.5% in 2019 to 24% in 2022. However, **Chinese production remains vital for supplying Europe with cost-effective vehicles**, as evidenced by Tesla's Shanghai plant producing 950,000 cars in 2023, exporting around 350,000

The Collapse of Global Brands in China



GM sales in China will fall from 2.9 million in 2020 to just 1.8 million in 2024

Car sales in China by OEM (2023)

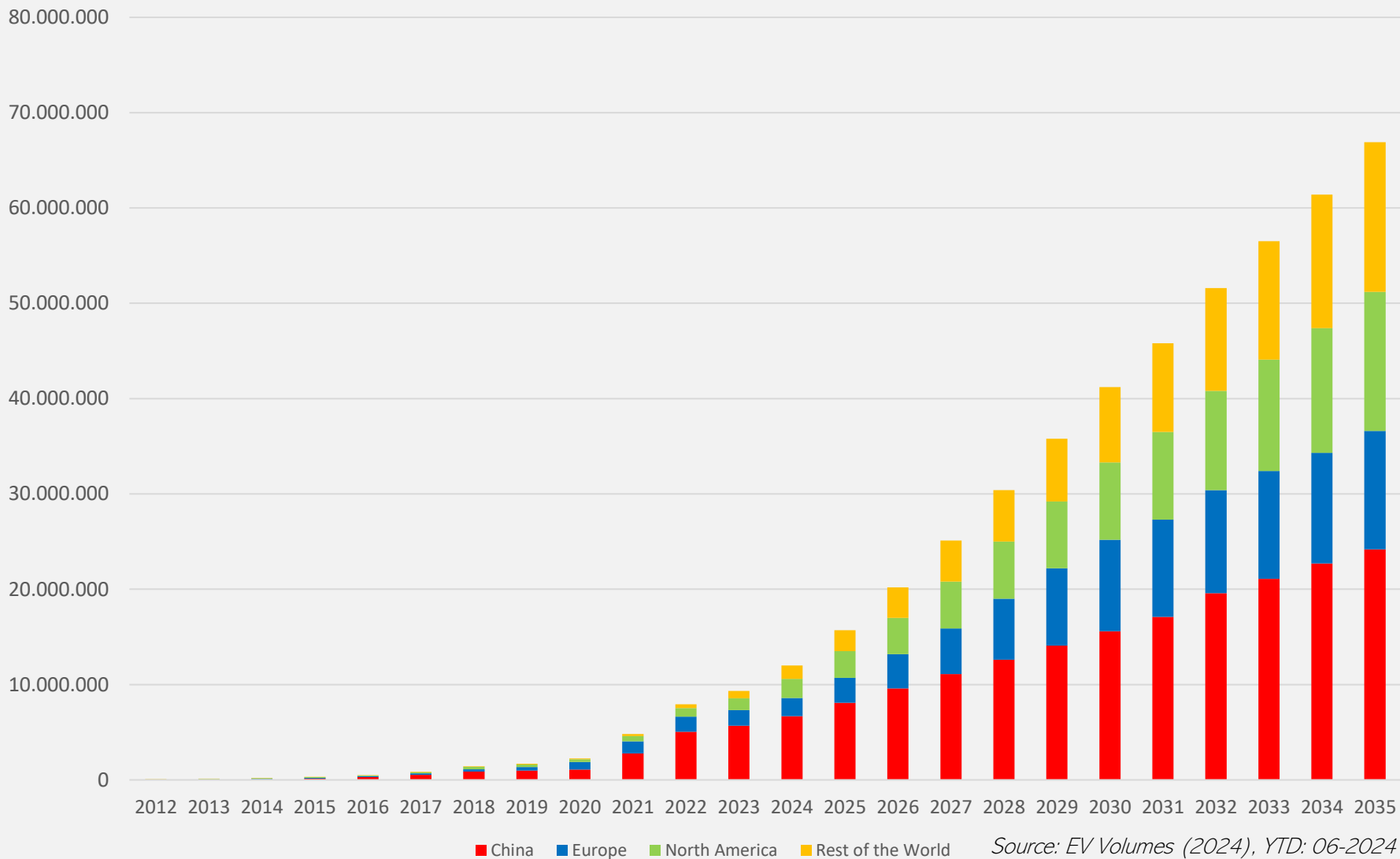


Source: CPCA(2024).

European OEMs (with joint ventures) are still having substantial market share in the Chinese ICE car market – e.g., FAW-Volkswagen. However, they are rapidly losing ground on the ever-growing BEV market.

China is the largest BEV market and is expected to remain the largest BEV market

Historical and forecasted new BEV sales by region



China remains the largest BEV market

According to the forecasts, the largest amount of BEVs will be sold in China, estimated to be around 25 million in 2035. The other regions, Europe, North America (Canada and the US), and the Rest of the World are predicted to be equaling around 15 million per region in 2035.

The car market in China is still developing and, therefore, growing fast.

In total, the global demand for BEVs is forecasted to be roughly 17 million in 2025, growing to 41 million in 2030 and 65 million in 2035.

Geely

- Geely experienced a **7,1% BEV market share**, in 2023, with **continued expansion** expected in 2024. Its **production capacity is strong**, and it primarily uses the standard dealer model, with significant involvement in large fleet sales and leveraging strategic partnerships globally.

BYD

- BYD held a **35.5% BEV market share in China** in 2023 and is expected to maintain strong dominance in 2024. The company has a **strong production capacity** exceeding 3 million vehicles and utilizes a **mix of standard dealer, agency, and online sales models** in **international markets**, adapting its approach based on regional demands.

SAIC

- SAIC, through its joint ventures like SAIC-GM, had a **significant BEV market presence (7,5%)** in 2023 and is projected to continue its **strong performance** in 2024. The company uses a variety of sales models, including **unrelated distributor, large fleet sales, and standard dealer models**, particularly in **emerging markets** and through its joint ventures.

Chery will open a site in Spain (2025) and UK (2027-2029)
Leapmotor partnered with Stallantis in Poland (2025)

Planned production outside China

- Hungary, Szeged (2025), 2nd one in EU not named (2026)
 - Thailand (2024), Indonesia (TBD)
 - Vietnam (TBD)
 - Brazil (2025), Mexico (TBD)
- Sweden, Belgium (already existing), Poland (2027)
 - Malaysia (2026)
- Spain announced
 - Other plant: Hungary or Czech Republic
 - Exports are planned from Thailand to Europe (from 2025)

On global markets, EU producers are already losing markets to Chinese OEMs.

Chinese OEMs with leading positions in the selected markets

Global markets outside China, EU and the US are battlefields for BEV producers, where Chinese producers of BEVs already leading the market. European OEMs have important markets globally – e.g., FIAT is selling most cars in the Brazil market, not in Europe. Therefore, there is a long run a negative effect on the EU producers, when EU OEM's loose out globally


Chinese OEMs with leading positions in the selected markets


Latin America

- Brazil (BYD, GWM, JAC)
- Colombia (BYD, Geely)
- Chile (BYD, SAIC, Geely)
- Mexico (BYD, Geely)
- Cost Rica (BYD, Geely, Chery)

Asia

- Thailand (BYD with local production)
- Malaysia (BYD)
- Indonesia (Wuling, BYD)

	RANKING	MODELO	FABRICANTE	JUL/24
	1º	I/BYD DOLPHIN MINI GS EV	BYD	1.305
	2º	I/BYD DOLPHIN GS 180EV	BYD	1.254
	3º	I/GWM ORA 03 SKIN BEV48	GWM	236
	4º	I/BYD SEAL AWD GS 590EV	BYD	221
	5º	I/BYD DOLPHIN PLUS 310EV	BYD	213
	6º	I/BYD DOLPHIN MINI GS5EV	BYD	183
	7º	I/GWM ORA 03 GT BEV63	GWM	162
	7º	I/VOLVO EX30 E60 ULTRA	VOLVO	162
	8º	I/BYD YUAN PLUS GL 310EV	BYD	151
	9º	I/JAC E JS1	JAC	103
	10º	I/VOLVO C40 8 ULTIMATE	VOLVO	81

	MARCA	2024	2024	VAR %	% MS 2024	% MS 2024	DIFF PP
	Byd	893	893	-100,0 %	28,1 %	28,1 %	0,0
	Volvo	475	475	-100,0 %	14,9 %	14,9 %	0,0
	Bmw	287	287	-100,0 %	9,0 %	9,0 %	0,0
	Renault	282	282	-100,0 %	8,9 %	8,9 %	0,0
	Kia	180	180	-100,0 %	5,7 %	5,7 %	0,0
	Mg	149	149	-100,0 %	4,7 %	4,7 %	0,0
	Chevrolet	138	138	-100,0 %	4,3 %	4,3 %	0,0
	Jac	117	117	-100,0 %	3,7 %	3,7 %	0,0
	Dongfeng	84	84	-100,0 %	2,6 %	2,6 %	0,0
	Jmc	79	79	-100,0 %	2,5 %	2,5 %	0,0
	Összesen	3 183	3 183	-100,0 %	100,0 %	100,0 %	

The impact of EU import tariffs on the behaviour of OEM's exporting from China

Some strong Chinese OEM's (like BYD) may speed-up their local manufacturing build-up in Europe (the earliest possible case is BYD in Hungary, starting to ramp up production from Q3-Q4 2025). But for making that competitive to export from China (even with import tariffs) they need large sales/production volumes, probably too large for most of the current Chinese brands in the EU.



Whereas the global manufacturers like Geely-Volvo-Polestar, have much more freedom to move products (both of established brands like Volvo as – for the EU - new Chinese brands like Zeekr, Geely etc.) to EU production plants.



The same is true for EU manufacturers which have their EV's currently produced in China in JV- and own-plants

OBSERVATION

It is impossible to exactly predict how the import tariffs will work-out, in the complex and capital-intensive automotive sector.

It is only possible to predict **indicative trends and possible scenario's**:

1. Reallocation production over the various plants in the automotive group, including **transferring production to the EU**;
2. **Establishing new plants in Europe**;
3. Model-introductions slow down and **brands retreating from the market or** slowing down their position build-up. Leading to reduced customer choice and potentially less supply volume;
4. Tariffs might not immediately cause price hikes, and any increases may be less than the tariffs themselves. However, some price rise is likely, depending on European market competition, especially if **European OEMs raise prices** due to higher production costs from shifting manufacturing back to Europe.

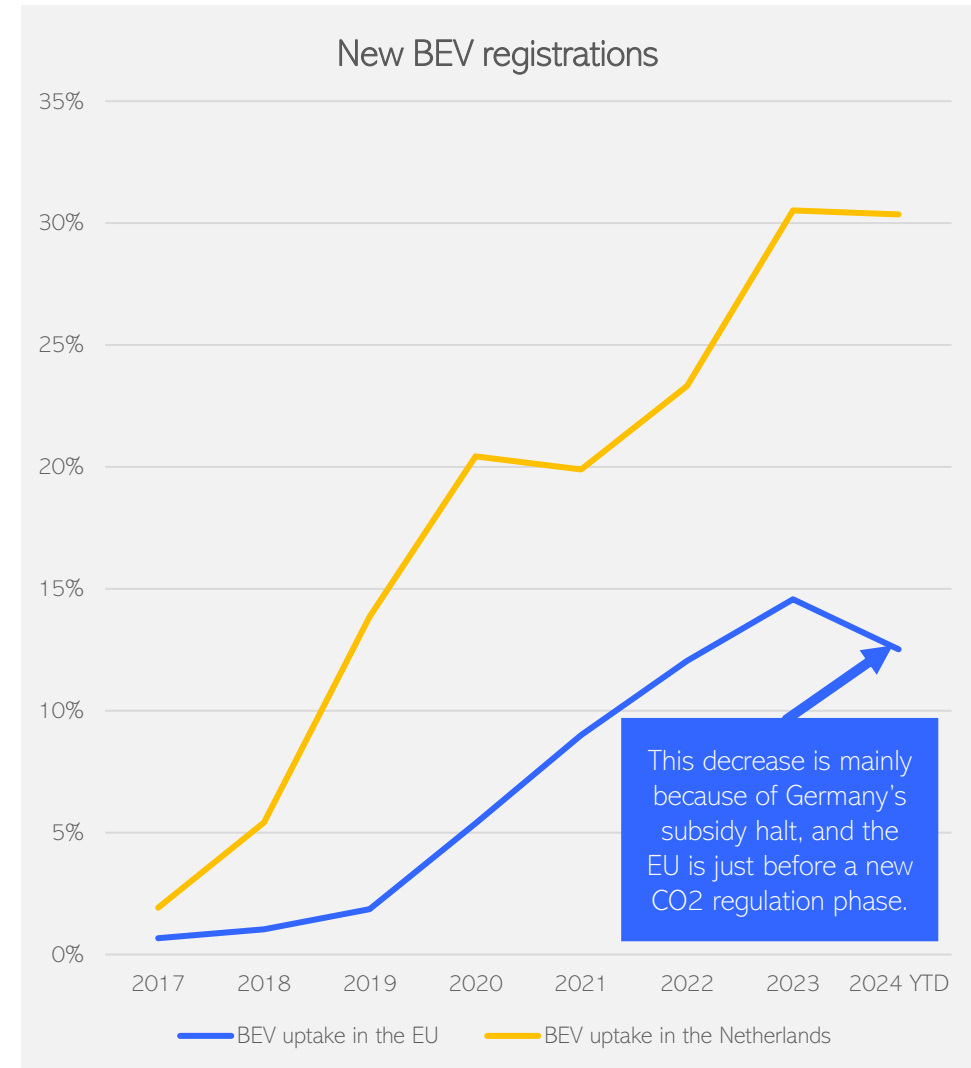
4. eMobility policy and ambitions in the Netherlands

Climate Strategy of The Netherlands and relation to the Commission's Countervailing import duties on BEVs produced in China

The Dutch government aims for **100% battery electric vehicle (BEV) sales by 2030** as part of its **Climate Agreement**, targeting a **55% reduction in greenhouse gas emissions** by that year. This goal is crucial for achieving zero emissions in the **mobility sector by 2050**, considering **vehicle lifecycles**. Recent projections suggest BEV sales might only reach **60% by 2030 under existing policies** (Climate and Energy Outlook, 2022), indicating the need for further measures.

The success of this transition depends on various factors, including the sufficient availability of BEVs, and their costs. Recent **anti-subsidy measures** by the European Commission, against BEVs produced in China, could affect these factors. By mitigating the impact of subsidized Chinese BEVs on the EU market, these duties are intended to **level the playing field for European manufacturers**, ensuring **fair competition** and **supporting the local industry's** ability to contribute to the climate targets, and **potential influx of Foreign Direct Investments (FDI)** to European countries ([BYD bridgehead assembly site](#) in Szeged, Hungary).

However, these measures also bring **potential risks**, such as **increased costs** and **reduced availability of BEVs**. While the **market share of Chinese BEVs in the Netherlands is still low** (1,65% in 2019, but rapidly growing to 27,1% in 2024 H1), additional countervailing duty **might raise costs**, potentially **further hindering** the attainment of 100% sales target for 2030.



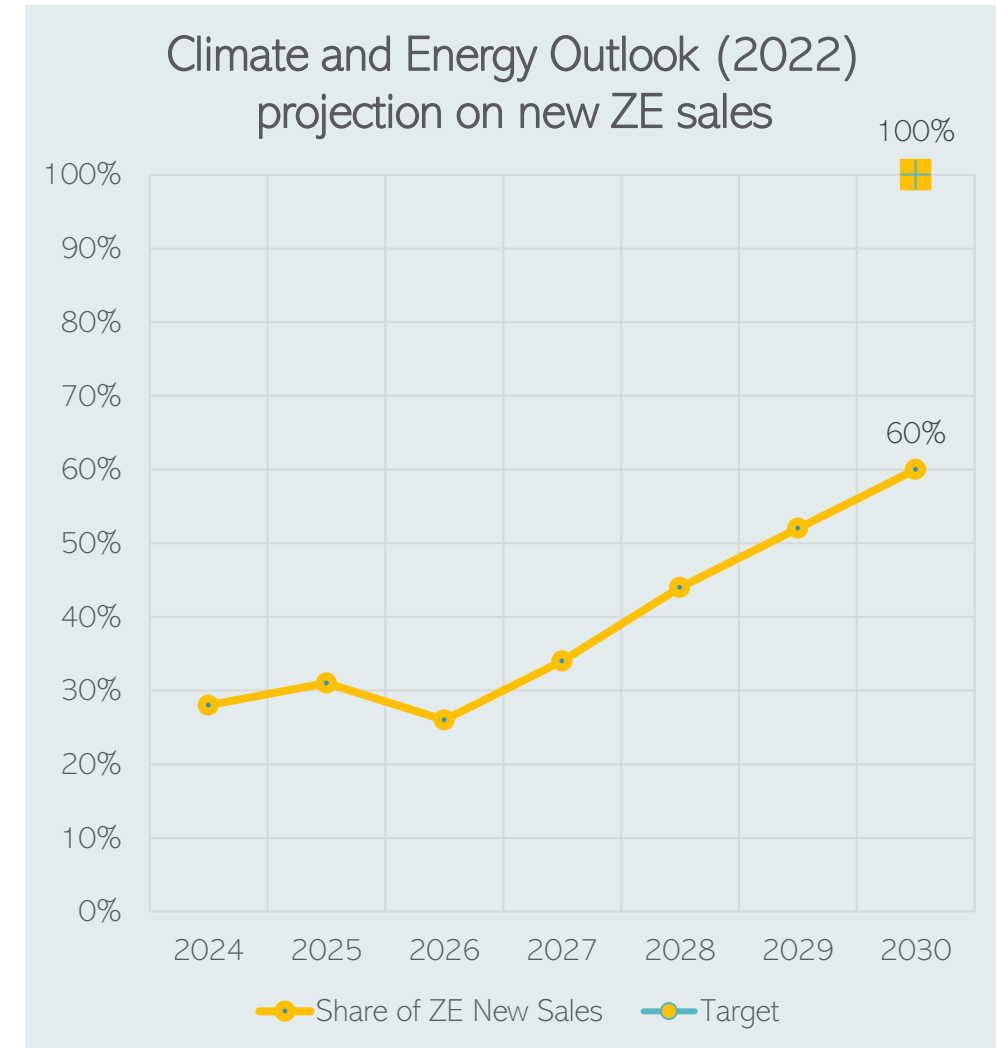
Source: EAFO (2024), YTD: 06-2024

Current outlook of the Netherlands Climate Agreement targets and the incentive environment

The attractiveness of BEVs to consumers and their market uptake is influenced by a **complex interplay of factors**. External elements such as **market trends, technological advancements, and EU regulations** are critical, but internal factors like the **domestic policy environment** also play a significant role in determining the availability of BEV models, their pricing, and ultimately the achievement of sales targets.

Currently, the Netherlands offers a **supportive incentive environment for electric cars**, including exemptions from BPM, MRB (motor vehicle tax), a purchase subsidy for new and used BEVs, lower additional tax rates for leased BEVs, and reduced energy tax for charging stations ([ANWB](#), 2024).

However, shifts in recent years as well as announced shifts in these factors have and will **significantly negatively impact** market uptake, with the potential for these influences on either **amplify** or **negate** each other's effects. This report focuses specifically on assessing the **impact of the EU tariffs on Chinese-made BEVs, without estimating the effects of other factors beyond the research period.**



Source: Achtergrondrapport modelactualisatie Carbondtax 2022 ([Revnext](#), 2022, page 20)

5. Market analysis

5.1 Dutch BEV market registrations and availability of models

Dutch BEV market registrations and availability of models

This section illustrates the changing composition of BEV sales shares among different production countries. It highlights the growing share of BEVs being produced in China. Additionally, the analysis provides an overview of how BEV sales are distributed across different tariff brackets.

5.2 Analysis of segments

Analysis of segments

This section focuses on the BEV sales share of each segment and their vulnerability to tariffs. The analysis covers the BEV sales share for each segment (A, B, C, D), considering whether the vehicles were produced in China or elsewhere in the world.

5.3 Price analysis

Price analysis

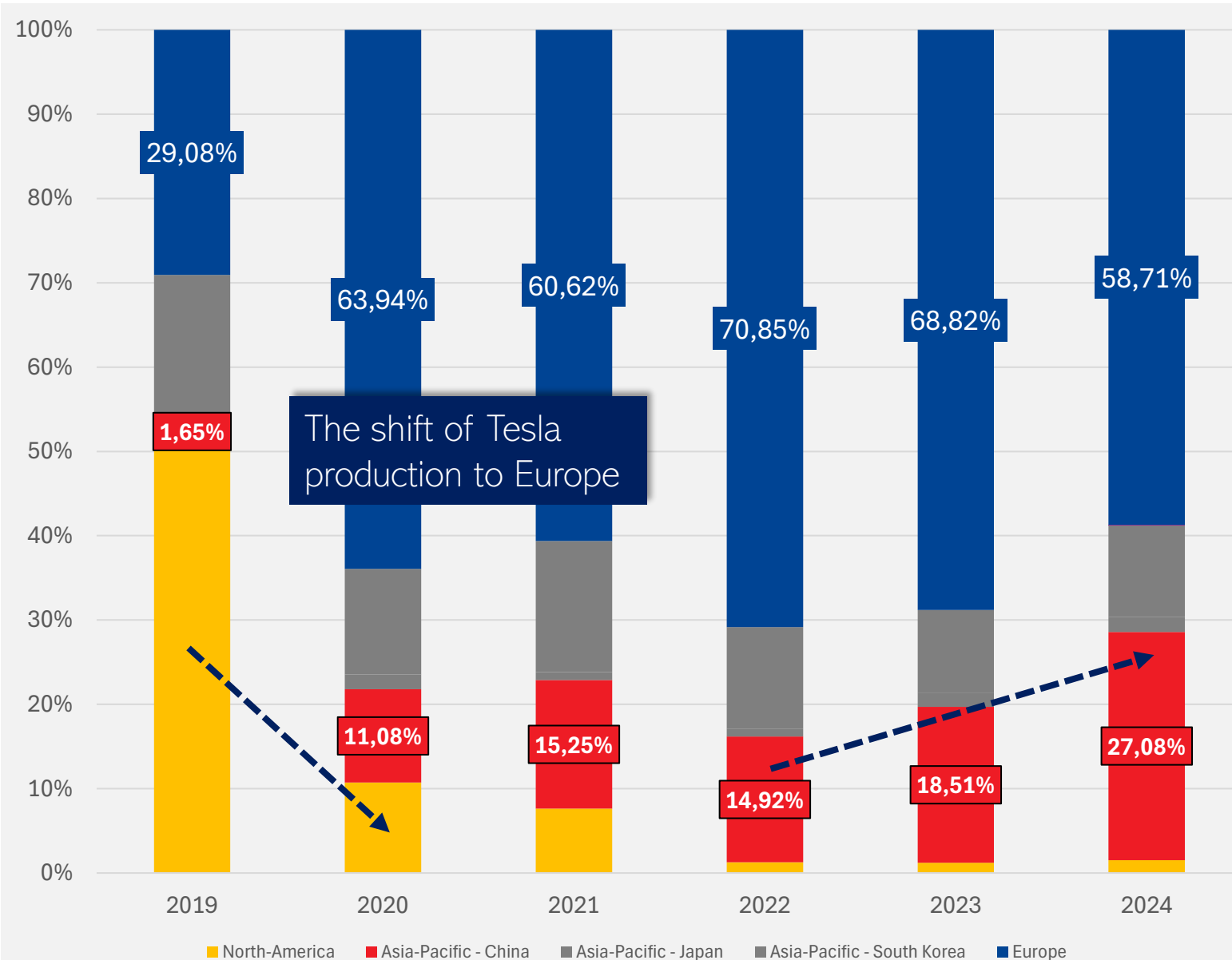
The price analysis includes example calculations for different scenarios, illustrating how OEMs might respond to the introduction of tariffs.

5.1 Dutch BEV market registrations and availability of models

5.2 Analysis of segments

5.3 Analysis of prices

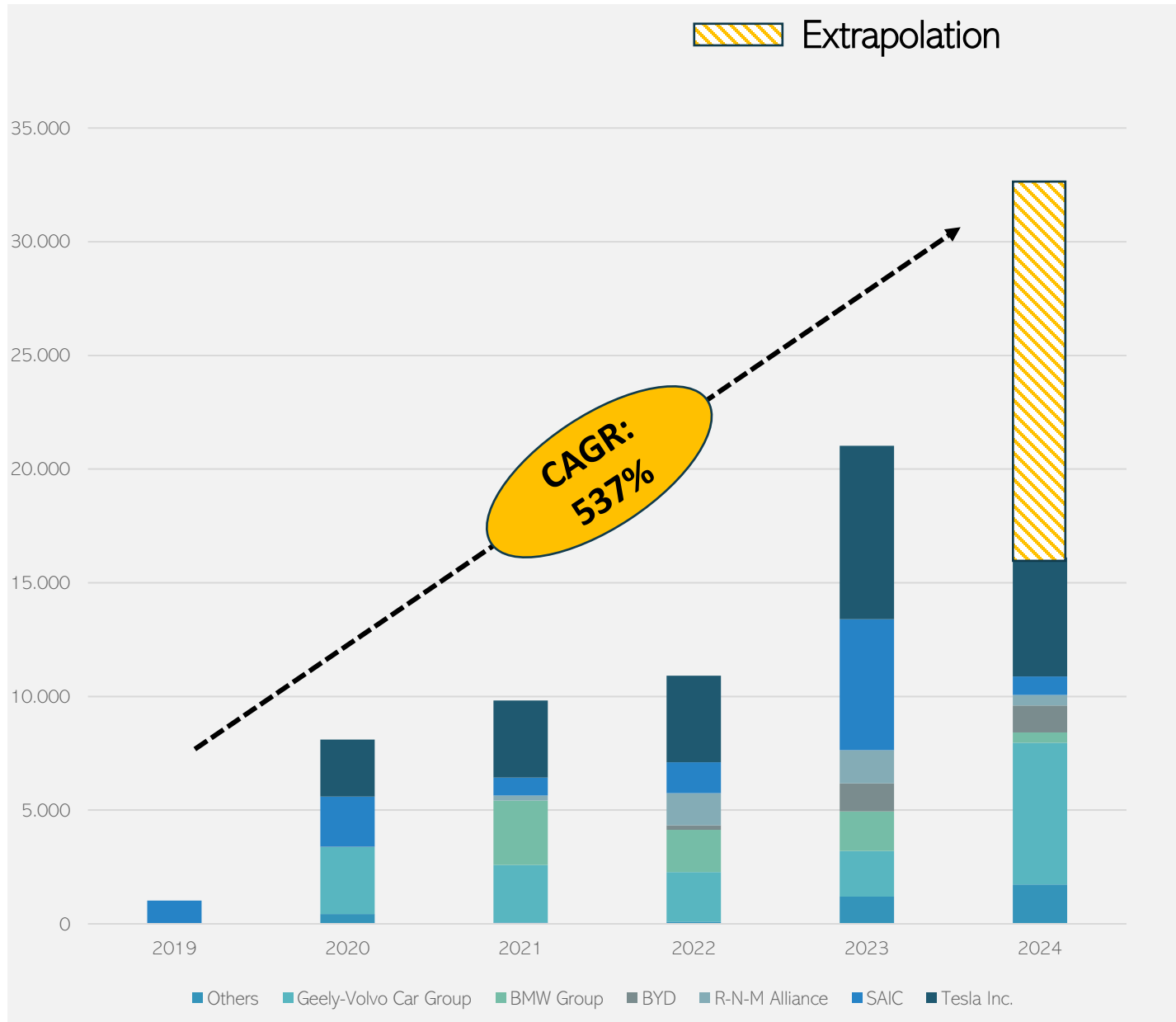
European made BEV share is shrinking since 2021, while Chinese models are rapidly increasing in the Netherlands, reaching **27%** in 2024 H1.



Observations

- The market share of EU+ made BEVs has been shrinking from 70,85% in 2022 to 58,71% in 2024 H1.
- The market share of BEV models produced in China, witnessed rapid growth, from 1,65% in 2019, to 27% in 2024 H1.
- There is a proportionate decrease of EU sales and increase of Chinese sales, as Korean and US sales stagnated.
- OEM decisions on shifting manufacturing location has substantial effect on car sales share per region (Tesla to Europe since 2020).

The volume of Chinese made BEVs have also been growing, expected to reach **33.000 units by 2024**, from a marginal 1019 units in 2019.

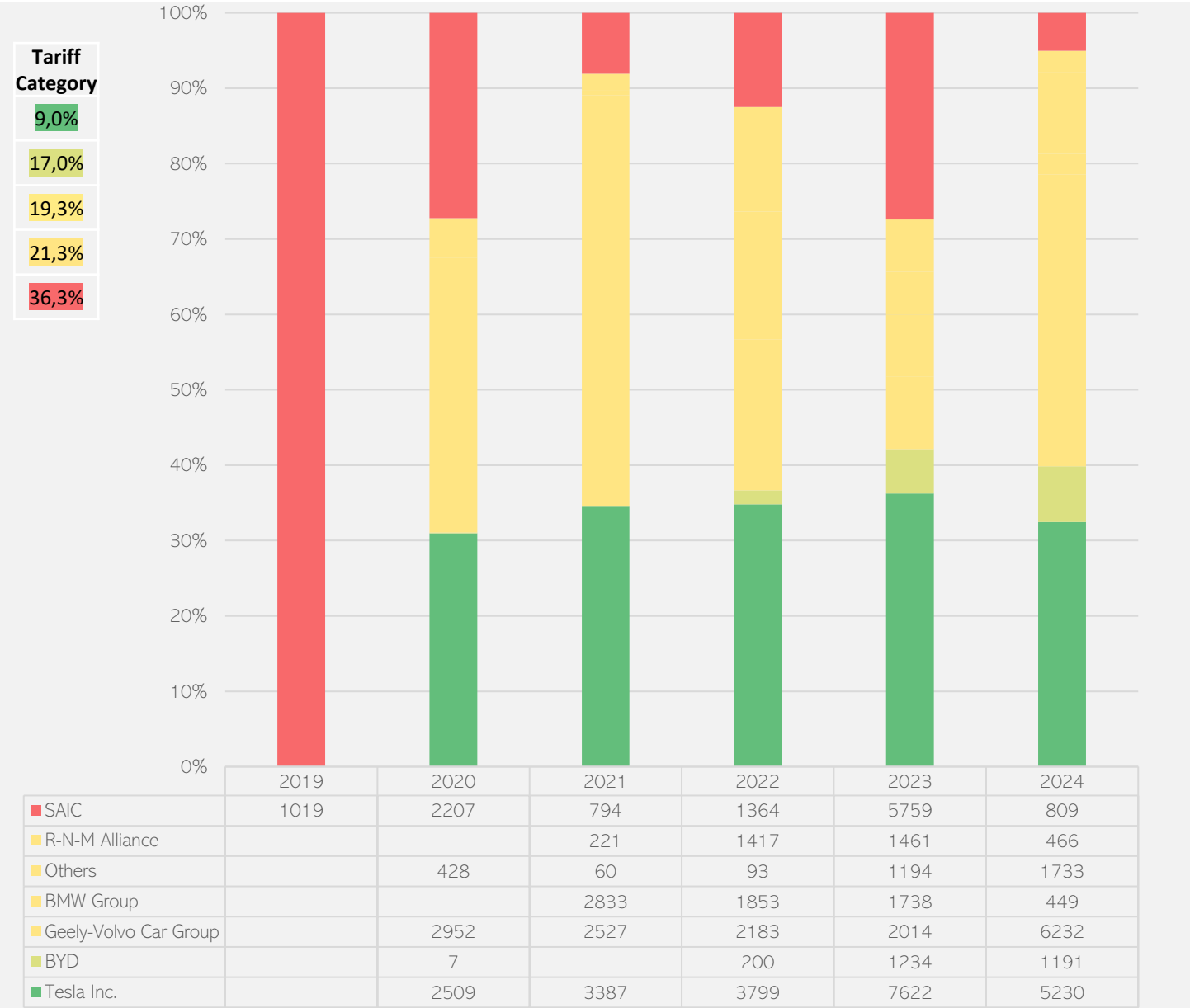


Observations

- Besides the relative share of BEVs produced in China, the volumes of sales are growing in a similar rapid way, with a CAGR of 537% since 2019.
- Sales grew from a marginal 1019 units in 2019, to an expected volumes of 33.000 units in 2024.
- Geely-Volvo group and Tesla are market leaders, with BYD also a fast grower, yet with lower volumes.

Source: EV Volumes (2024), YTD: 06-2024

Most of the market share (58% in 2023) are affected by the higher tariff rate categories.



Observations

- Tesla having a high market share (36% in 2023 and 32% in 2024 H1), and BYD increasing market share, lessens exposure to tariffs with the current model availability.
- Geely with the success of Volvo EX30 is a worrying trend for the future.
- SAIC with the highest tariffs, lost momentum in 2024 after a successful 2023.

Source: EV Volumes (2024), YTD: 06-2024

Most of the sales (12.166 in 2023) are affected by the higher tariff rate categories (21,3-36,3%).



Observations

- Tesla having a high market share (36% in 2023 and 32% in 2024 H1), and BYD increasing market share, lessens exposure to tariffs with the current model availability.
- Geely with the success of Volvo EX30 is a worrying trend for the future.
- SAIC with the highest tariffs, lost momentum in 2024 after a successful 2023.

Source: EV Volumes (2024), YTD: 06-2024

The Netherlands has been one of the most attractive markets to sell BEVs in Europe

Factors of market attractiveness

For successful BEV adoption in a country, there must be a sufficient supply of BEVs in the number of available models and total volumes. The supply of BEVs is determined by the attractiveness of the market from the supplier's point of view. The attractiveness is, amongst others, determined by:

- The demand in the market
- The price level in the market

Historic attractiveness Dutch BEV market

The Dutch market has always been attractive for OEMs to sell BEVs. The graph below shows the total number of models introduced in Europe, determined by the first registration of a new model in a country. Norway has always been the most attractive BEV market. The Netherlands was a close second. Based on the last two years we see now that The Netherlands is the market with the most introduced BEV's within Europe

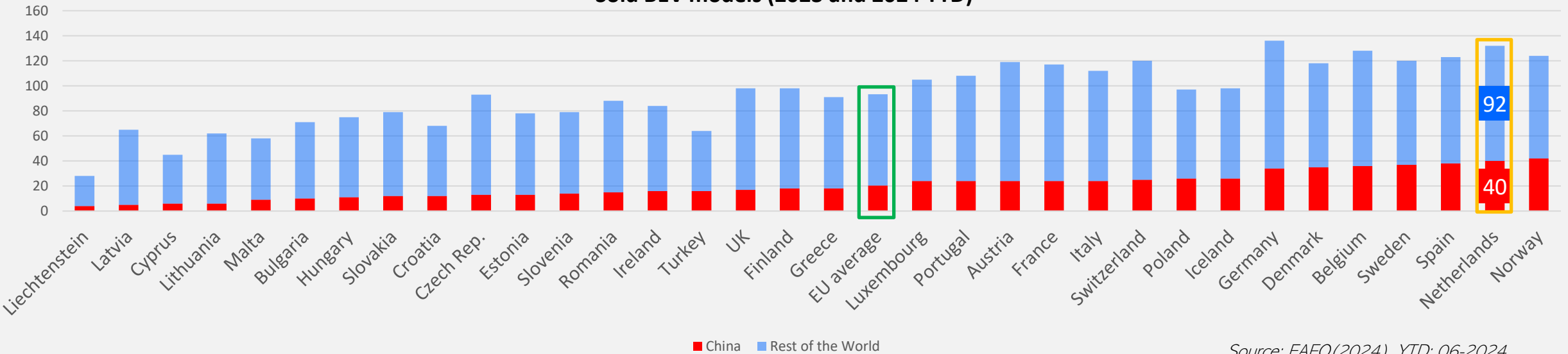
Future attractiveness Dutch BEV market

Historic results are no guarantee for future results, meaning that the attractiveness of the market in the future needs to be a priority.

Observations

- 30% of models originating from China.
- 40 Chinese made models, and 92 non-China made models

Sold BEV models (2023 and 2024 YTD)



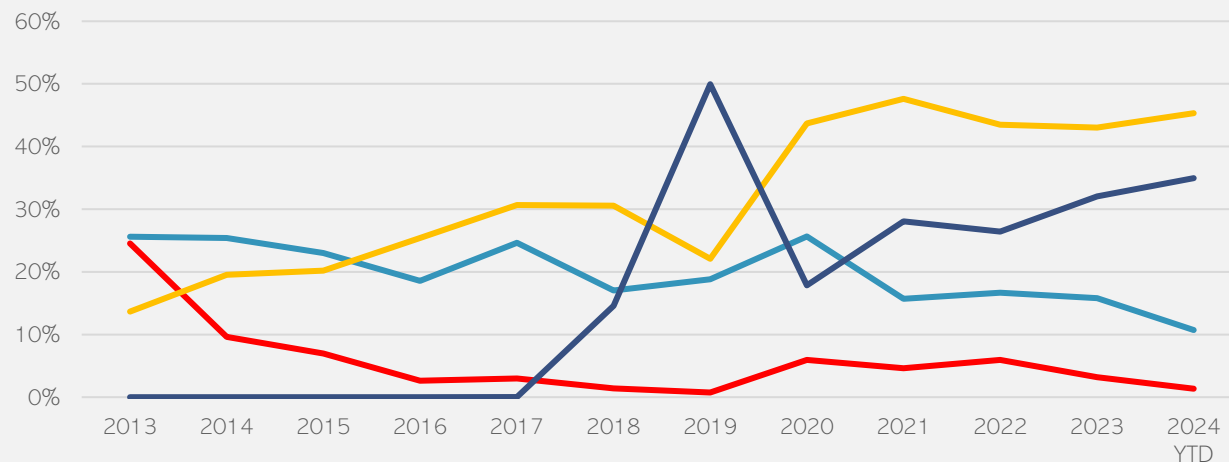
The Netherlands has been reducing the attractiveness to sell BEVs in recent years

The Netherlands is no longer an absolute frontrunner in BEV uptake

The uptake of BEVs in the Netherlands has long been at the forefront of Europe, only behind Norway and number 1 in EU. However, in recent years other European countries (Sweden, Denmark) have had steeper growth and are ahead in BEV sales %. The graph on the right shows the somewhat stagnating BEV uptake in the Netherlands. The supply will likely flow towards the most attractive markets. The Netherlands has lost some market. The direct relation between incentives and BEV uptake is also visible in Germany and Sweden, in both countries the purchase subsidies recently stopped, and both show a steep downfall in registrations. To prevent the continuation of this downward trend, the BEV market must be made attractive again.

BEV registrations per segment NL
(% of BEV sales)

YTD: 06-2024

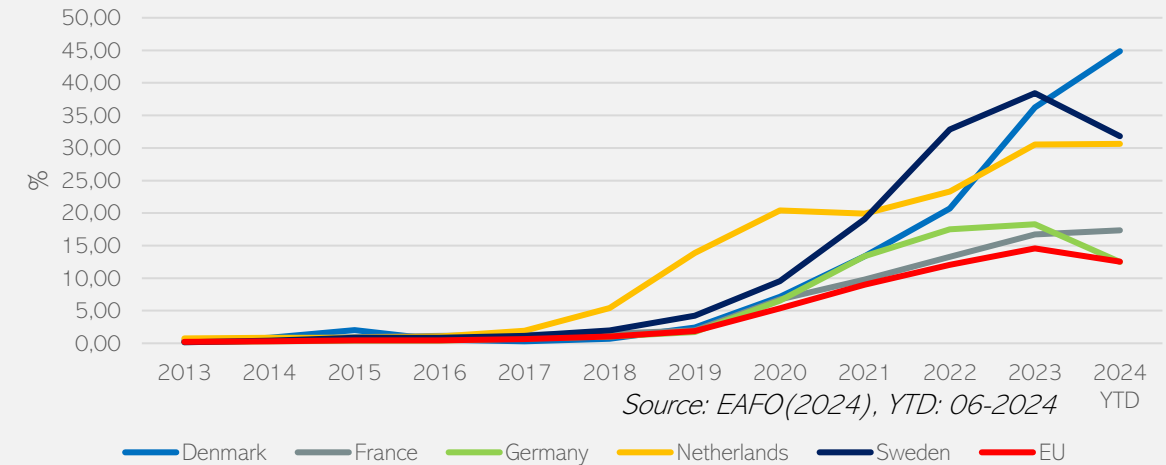


Source: EAFO(2024), YTD: 06-2024

— A — B — C — D

BEV sales per country and in Europe
(% of total sales)

YTD: 06-2024



Source: EAFO(2024), YTD: 06-2024

— Denmark — France — Germany — Netherlands — Sweden — EU

Reducing BiK tax advantages likely caused stagnation in the BEV uptake

The most important BEV incentive in the Netherlands has been the benefit-in-kind (BiK) tax rate for BEVs. In steps, this advantage has been reduced. The BiK taxation has gone up from 4% to 16% and the cap of this discount has been lowered. This has likely caused a sales drop in the E segment after '18, the D segment after '19, and the C and B segments after '21.

Stimulating BEV sales is still needed

To keep the Dutch market attractive, it is advised to keep stimulating new BEV sales. After the downfall, the graphs show an uptake of the BEV's in the C and D segment, likely due to the purchase subsidies for private customers combined with a decent number of available BEV-models. The A- and B-segment BEVs didn't show a higher uptake due to the low availability of models with a competitive price.

5.1 Dutch BEV market registrations and availability of models

5.2 Analysis of segments

5.3 Analysis of prices

The aim of this part of the study is to analyse what happens within the relevant car segments in The Netherlands if the higher import tariffs of BEV's produced in China will be into force.

The relevant car segments are defined by the Dutch RAI Association which will be used in this report:

- **A-segment:** This segment includes the smallest cars designed primarily for urban driving, offering compact size and easy maneuverability. Examples: Kia Picanto, Toyota Aygo.
- **B-segment:** This category covers small, versatile cars ideal for city and suburban use, providing more space and features than A-segment vehicles. It also includes subcategories like city MPVs and city SUVs/CUVs for more specific needs. Examples: Volkswagen Polo, Ford Fiesta, Kia Soul, Hyundai Kona, Renault Captur.
- **C-segment:** C-segment vehicles are typically small family cars, offering more space and versatility than B-segment models. This includes both traditional hatchbacks and sedans as well as family-oriented MPVs and SUVs/CUVs. Examples: Ford Focus, Volkswagen Golf, BMW 2-Series Gran Tourer, Renault Grand Scenic, Kia Niro, Volvo XC40.
- **D-segment:** The D-segment includes mid-size vehicles with greater focus on performance, comfort, and luxury. These cars are larger and more premium, suitable for families or individuals looking for more space and features. This segment also includes larger MPVs and SUVs/CUVs. Examples: Tesla Model 3, BMW 3-Series, Mercedes EQV, Renault Espace, Audi E-tron, Skoda Kodiaq.

Please note, that this segment categorization is based on examples and no clear definitions (such as length or height). We categorize the vehicles in the segments based on EV-Volumes data.

There are more segments than the above, but for the BEV-uptake they are not relevant as they have a very small role in the Dutch sales and fleet.

It is essential to analyze sales figures up to 2024 for various models across different car segments, as well as the number of available models within those segments. To forecast future trends, having an overview of both current and announced models from OEMs is invaluable. While in the past, open sources like EV-Database allowed for such analysis, the rapid influx of new (particularly Chinese) OEMs into the BEV market has made tracking and incorporating new model announcements increasingly challenging.

Models by countervailing duty and their respective segments

Segment	9%	17%	19,3-21,3%	36,3%
A segment		BYD Dolphin Mini (2025)	Dacia Spring Ora R1 / Black Cat (2025) Smart #2 (2026)	
B segment		BYD Atto 2 (2025)	JAC iEV7S Smart #3	
C segment		BYD Dolphin BYD Yuan Plus / Atto-3 JAC iEVS4 BYD Seal GT (2025)	Smart #1 Zeekr 001 Zeekr X Geely-Volvo Car Group Volvo EC40 Volvo EX30 Volvo EX40 Seres SF3 Firefly Car-C (2025) Xpeng G3 (2025) Xpeng Mona M03 (2025) Lynk & Co SUV-C (2025) BMW 3-series (2025)	MG 4 / Mulan MG 5 Honda e:Ny1 MG EZS MG SUV-C (2025)
D segment	Tesla Model 3 Tesla Model Y	BYD Seal BYD Song Plus / Seal U BYD Sea Lion (2025)	Polestar 2 NIO et5 Xpeng P5, G6 Aiyas U5 Aiyas U6 BMW iX3 NIO es6 / el6 DS-6 (2025) ONVO L60 (2025) Smart #5 (2025) Zeekr SUV-D (2025) Lynk & Co SUV-D (2026)	MG Marvel R IM L6 (2025) IM LS6 (2025) MG SUV-D (2025) Honda e:N Coupé (2026)

Observations

Price Sensitivity: The A and B segments, where price is a significant factor, are the most vulnerable to tariffs. Any models that are heavily dependent on competitive pricing, especially those from China, are at risk of being priced out of the market, reducing their availability and delaying their introduction.

C and D Segments: While the C and D segments are less price-sensitive, Chinese-produced models like BYD's and Xpeng's offerings are still likely to see reduced market share as European OEMs, such as VW, focus on ramping up their competitive offerings like the ID.2 series.

Backlog Depletion: Some manufacturers, particularly in the C and D segments, might be able to weather the initial tariff impacts by relying on existing stockpiles of Chinese-manufactured vehicles, but over time, the tariffs will create significant hurdles for maintaining a steady flow of new models.

Models with **bold** letters have at least 1,000 sales, models in *italic* are models that can be pre-ordered already.

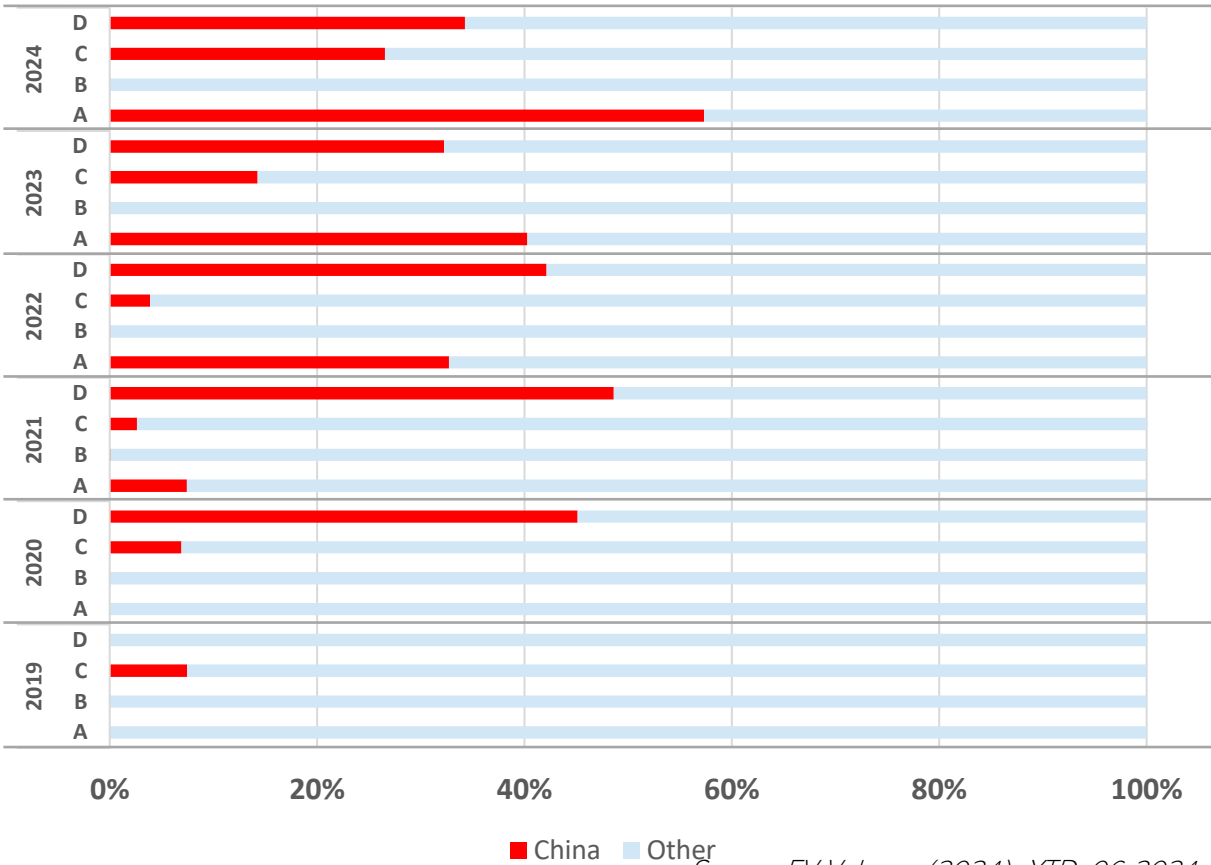
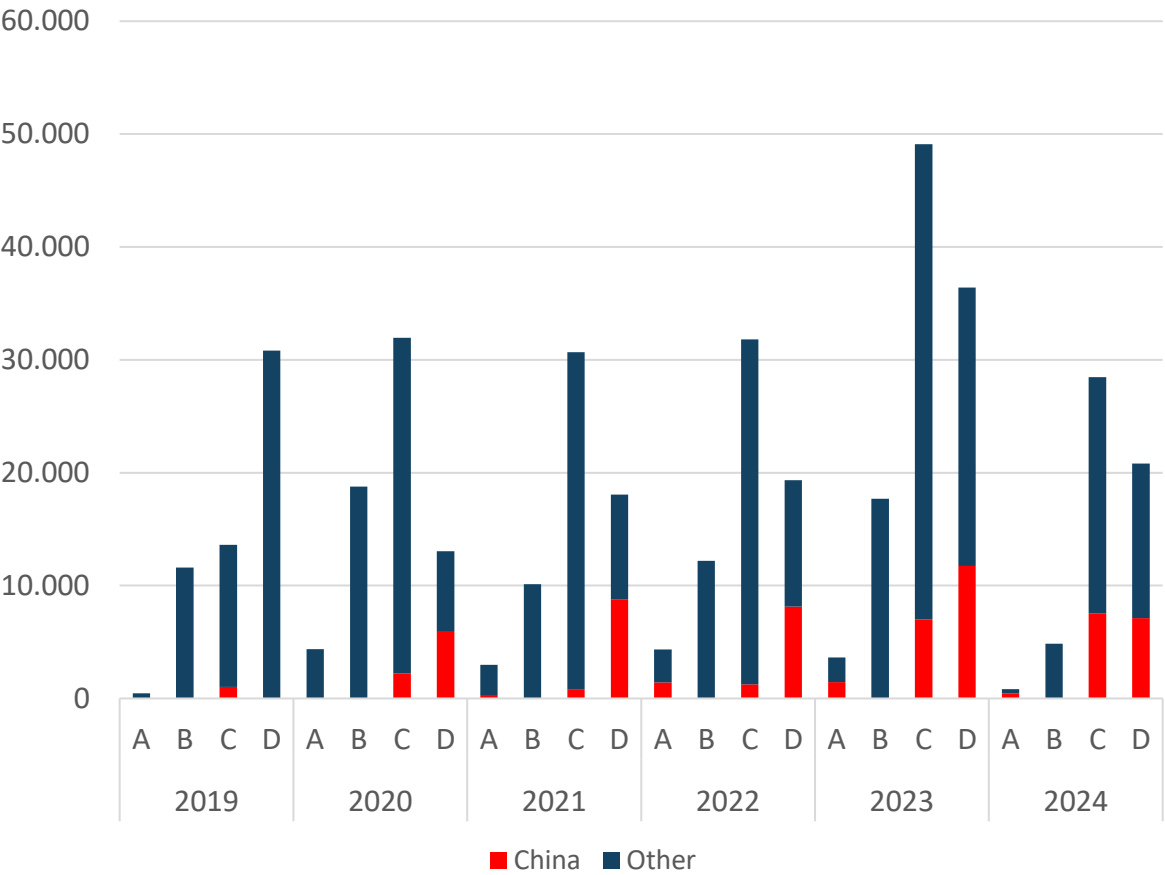
* In **red** are the expected future models those that are produced in China (Expected introduction year)

Source: EV Volumes, FIER(2024), YTD: 06-2024

A segment is highest in share (45%) but lowest in volume. C segment is rapidly growing in share and volume, while D segment has constantly high share.

Observations

- Volumes of Chinese made BEVs have increased in all segments (A, B, C, D) since 2019.
- In terms of market share, A segment shows the steepest growth, amounting to 64% in 2024 H1.
- BEVs market share in Segment D was constantly above 40% since 2020.
- Segment C is a quick grower in market share and volume in 2023, and already suppressing sales in H1 2024.



Source: EV Volumes(2024), YTD: 06-2024

Segment A: low volumes so far, but high exposure to increased tariffs

Underrepresented segment, low model availability, medium attractiveness

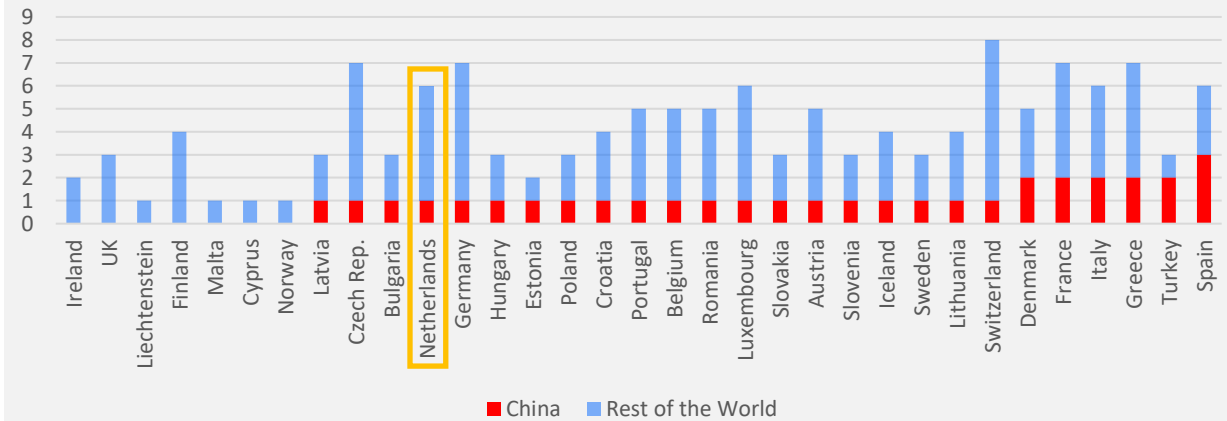
- Low number of BEV models available (6)
- The availability of BEV models produced in China is very low (1 currently available and 3 extra expected)

The previous slides showed that the Netherlands has overall been an attractive market for BEVs, shown by the BEV model introductions thus far, compared to other European countries.

Analysis of model introductions show that the Netherlands is an important market for the A segment, but some other countries already have more available models.

**Total introduced BEV models in the A segment
(2023-2024 YTD)**

YTD: 06-2024

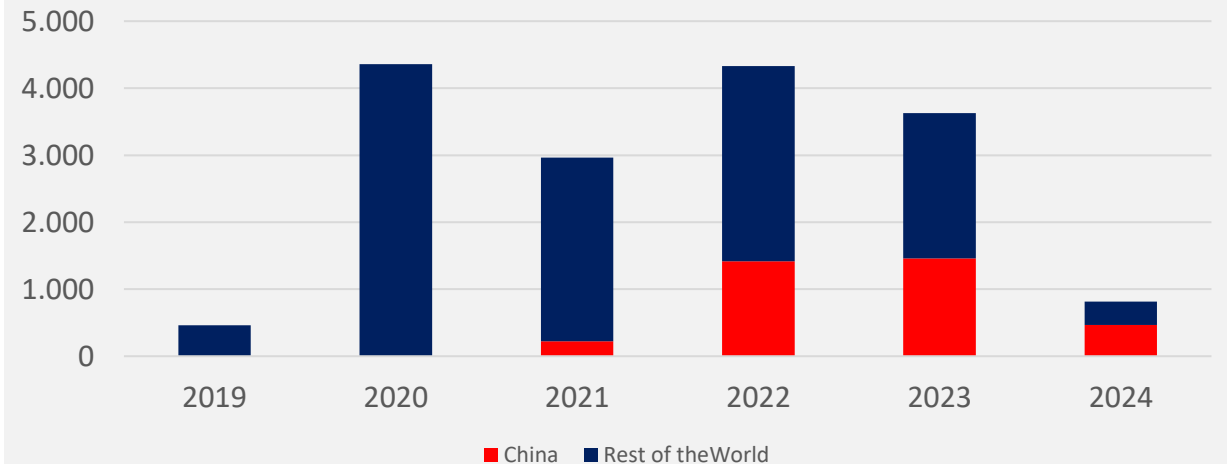


A segment will likely remain attractive for Dutch citizens

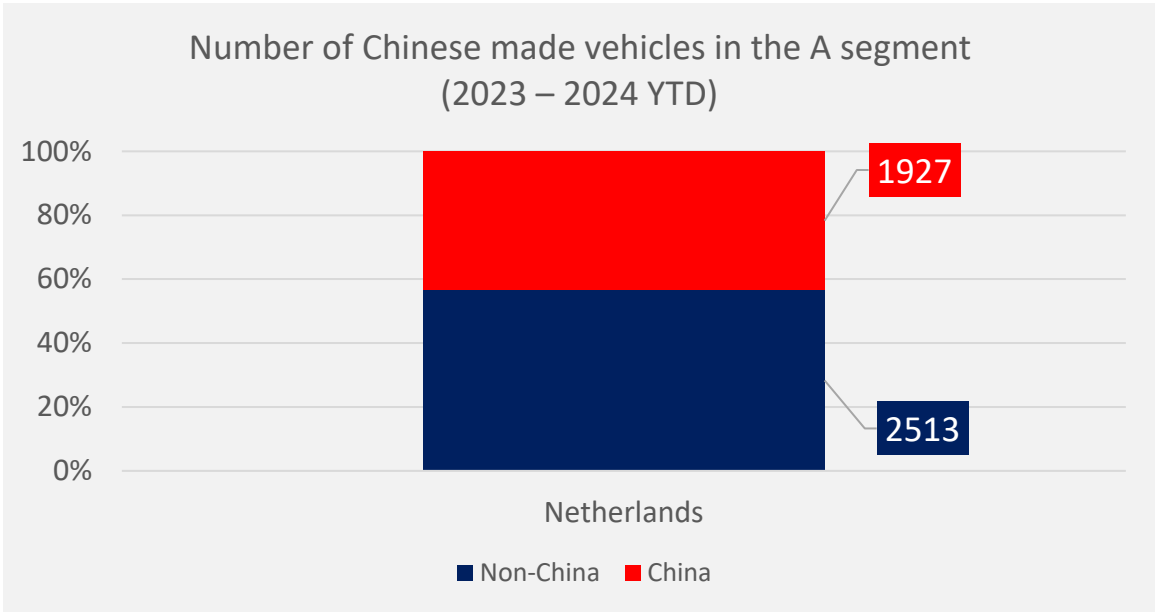
- The Netherlands has stimulated the uptake of BEV's by purchase subsidies since 2020. In the A segment that caused a sudden high number of sales compared to the earlier years.
- The share of the A segment in the total BEV sales grew from less than 1 % in 2019 to 7% in 2022. Since 2023 this share fell to 3% in 2024 YTD.

Source: EV Volumes, FIER(2024), YTD: 06-2024

BEV registrations in the A segment



Segment A: low volumes so far, but high exposure to increased tariffs.



The Dutch BEV market for cheap and small A segment cars have the highest exposure to the increased import tariffs.

- 45% of BEVs sold was originating from China (Dacia Spring) in the period of 2023 – 2024 YTD.
- Volume is low until now, BUT high share in total registrations.
- The segment is **already underrepresented**, only 1 model is available, while other globally popular models (e.g., BYD Seagull) are not marketed yet.
- Considering the same consumer preferences, a **much higher and variety of cheap A segment BEV models are necessary** for a 100% market share.
- Low number additional models expected to be launched in this segment in the next year.

Substantially high impact expected by import tariffs.

- Tariffs are expected to have a **Substantially Impact** on the availability and price of A segment models. Notable **price increases** and **potential demand reduction**.
- Segment A is represented by cheaper cars, under 30.000 EUR, and tariffs will be an additional 21,3% (on top of 10%).
- Cheaper, wider variety of A segment cars are necessary for volume and target attainment.

Source: EV Volumes, FIER(2024), YTD: 06-2024

		Countervailing duty category			
		9%	17%	19.3-21.3%	36.3-36.6%
Price category per model	Under 30.000€			1927	
	30.000€-50.000€				
	50.000€-60.000€				
	More than 60.000€				



BYD Dolphin Mini / Seagull (2025)

Price: 8.750 EUR (In China) / 20.000 EUR announced in Europe even with new tariff

This future model, expected to be introduced in 2025 and produced in China, could face availability risk, due to tariffs, but BYD still wants to sale in for 20.000 EUR in Europe. The Dolphin Mini is a budget, compact urban BEV, and any tariff would disproportionately affect its pricing competitiveness, making it less attractive in the European market. Given that it operates in a highly price-sensitive segment, its availability and sales might be under risk for 2025-2026. From 2026, it is expected to be produced in Hungary.



Ora R1 / Black Cat (2025)

Price: 13.400 EUR (In China)

These models, also in the A segment and produced in China, could experience similar challenges, particularly as Chinese manufacturers dominate this low-cost market.

The Netherlands has been a less attractive market for the B segment until now, due to low model availability and prices.



Market attractiveness can be segment specific

- Medium number of BEV models available (11)
- Lowest number of BEV models produced in China (0 available and 2 are on pre-order and 1 is expected)

Analysis of model introductions show that currently, the Netherlands is a less important market for the B segment. In this segment The Netherlands is somewhere in the middle of the European markets.

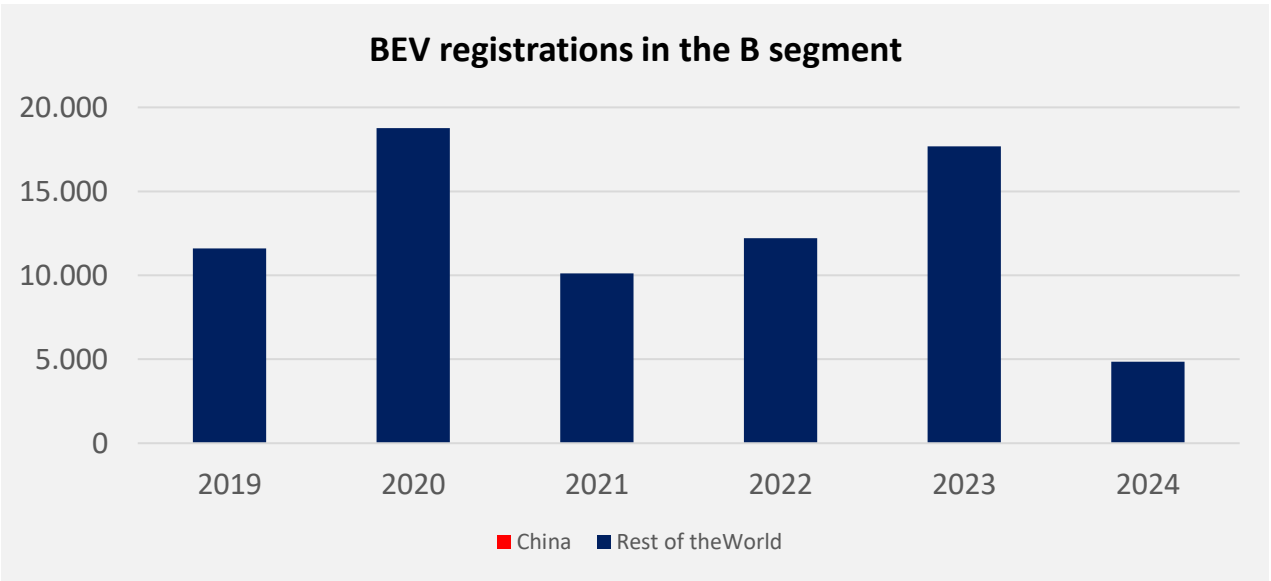
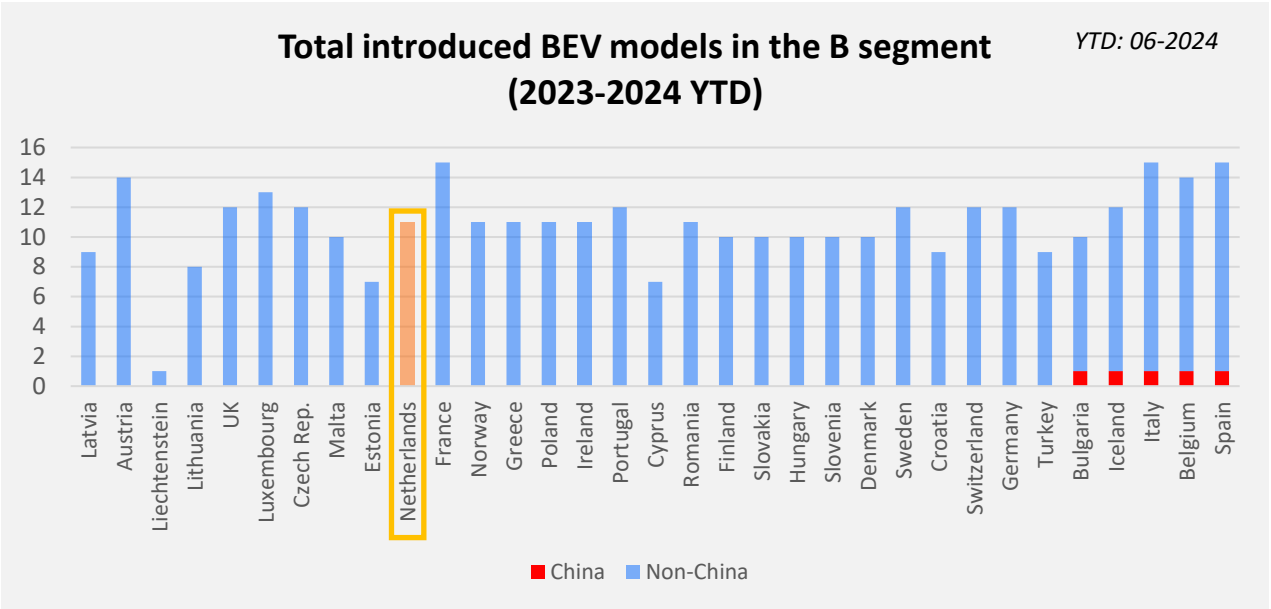
However, this is because it is a yet undeveloped segment. Not a lot of models are available, supply volumes are low, and prices are high.

As total registrations in segment B are high, this segment is expected to grow until 2030.

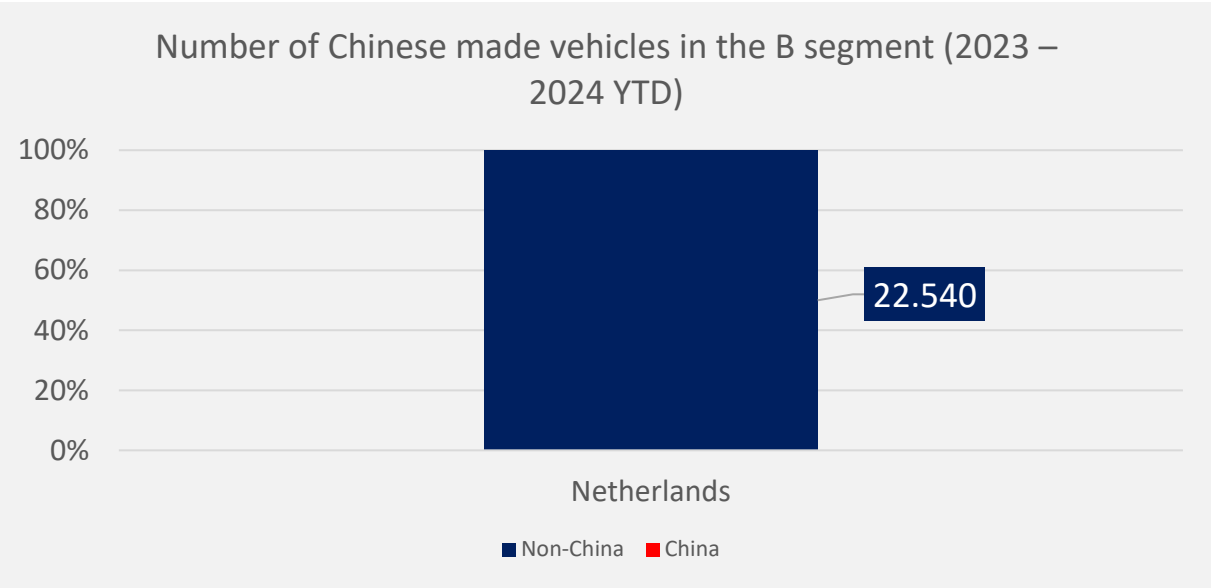
B segments attractiveness seems to be uncertain will likely remain attractive for OEMs

The sales of BEV's in the B segment in The Netherlands has been changing every year. The long-term trend of the B segment share within the BEV sales show a downfall. It is expected, that the future of B segment will be growing in sales and sales share, because Dutch consumers purchase a high share of B segment ICE cars.

Source: EV Volumes, FIER(2024), YTD: 06-2024



Segment B: no volumes so far, future exposure could be high due to high Segment B registrations in total registrations (33% in 2022).



Segment B has no exposure to the tariffs so far, but with new models entering the market, it can quickly change

- No Chinese made BEVs were sold in the segment, it is currently highly underrepresented due to the unavailability of BEV models and higher prices to ICE vehicles.
- B segment represented 33% sales for the total market in 2022, which shows a preference from consumers.

Segment B has no exposure to the tariffs so far due to model unavailability

- No Chinese made BEVs were sold in the segment

Source: EV Volumes, FIER(2024), YTD: 06-2024

		Countervailing duty category			
		9%	17%	19.3-21.3%	36.3-36.6%
Price category per model	Under 30.000€				
	30.000€-50.000€				
	50.000€-60.000€				
	More than 60.000€				



BYD Atto 2 (2025)

Price: 12.100 EUR (In China)

This model, also produced in China and set for introduction in 2025, would be subject to tariffs, which might lead to price increase, reducing its attractiveness in the price-sensitive B segment. Given that this segment is key to increasing BEV adoption, but the availability of B segment BEVs is limited, and BYD has strong market objectives of sales in Europe, therefore the Atto 2 is at low risk of becoming less competitive.

The Netherlands has been a very attractive market for the C segment



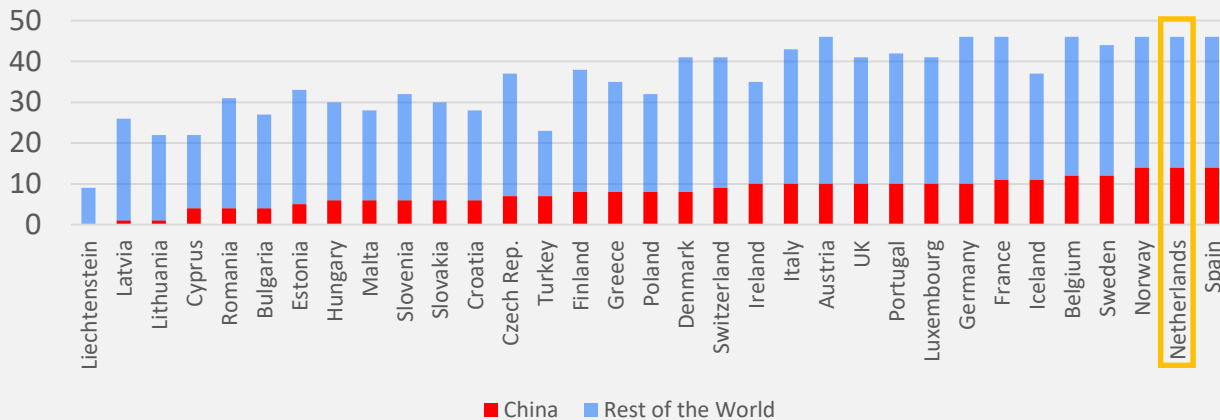
Leading country of Europe in C segment model availability

- Highest number of BEV models available (46)
- Highest number of BEV models produced in China (14 currently, 3 are on pre-order and 10 extra are expected)

The Netherlands for C segment models is the most attractive market for global OEMs, in Europe. This might change with the changes in the policy environment, but not substantially.

Total introduced BEV models in the C segment
(2023-2024 YTD)

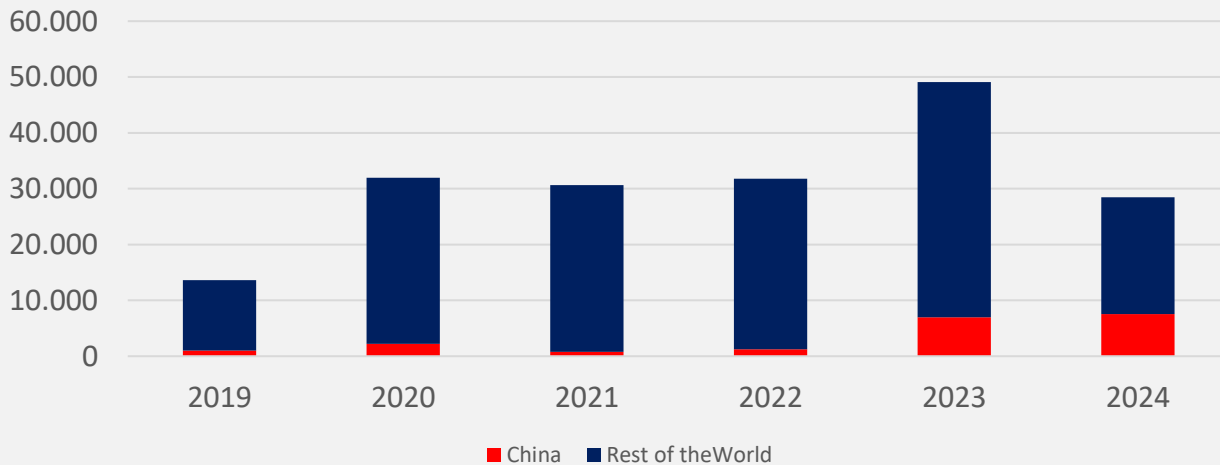
YTD: 06-2024



C segment will likely remain attractive for Dutch citizens

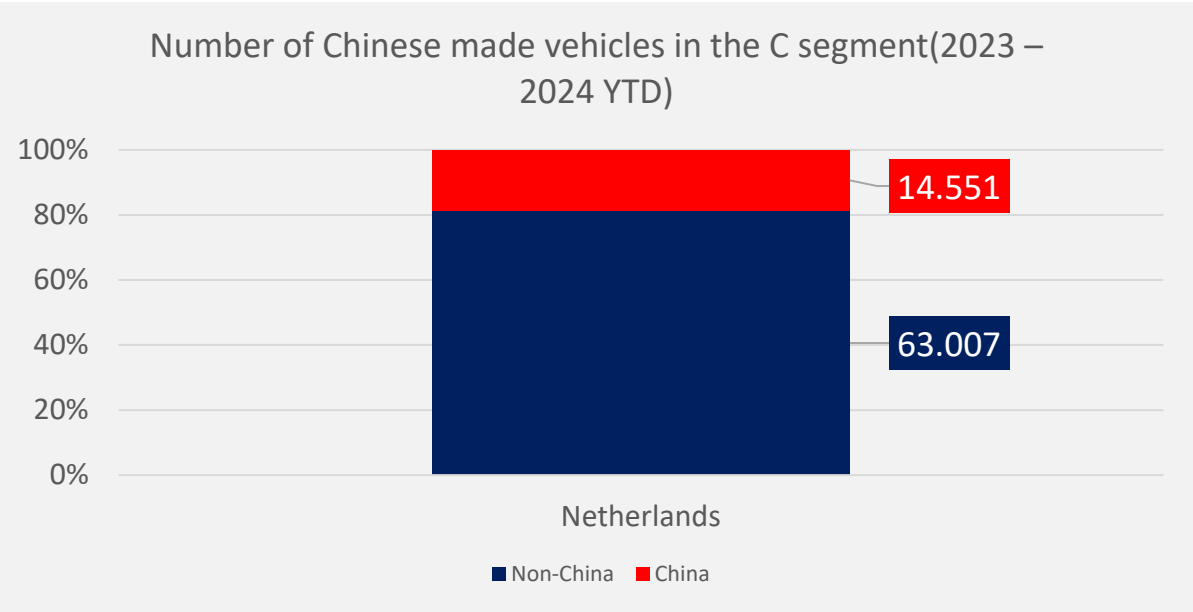
The Netherlands has a high amount of BEV sales in the C segment and the long-term trend of segment share is a steep rise.

BEV registrations in the C segment



Source: EV Volumes, FIER(2024), YTD: 06-2024

Segment C: high volumes, medium market share, 17% of all BEV sales from China.
Moderately high exposure to increased tariffs.



Market attractiveness can be segment specific

- 17% of BEVs sold was originating from China in the period of 2023 – 2024 YTD.
- Volume is the 2nd highest among all segments (14.551 since 2023)
- The segment is the 2nd most popular with Chinese made models in Europe
- Additional models expected to be launched in this segment in the next few years.

Source: EV Volumes, FIER(2024), YTD: 06-2024

Segment C has a moderately high exposure to the tariffs, due to low prices

- Models are in the range of 30-50.000 EUR, making it for OEMs to absorb costs difficult.
- It is likely to cause some price increases (or reduced-price decrease) and moderate demand reduction.
- The highest share of models is in the highest tariff category; 86% of sales originating from China are exposed to the higher range tariffs.
- New models are expected in the 30-50.000 EUR price range, under the 19.3-21.3% tariff category (Geely).

		Countervailing duty category			
		9%	17%	19.3-21.3%	36.3-36.6%
Price category per model	Under 30.000€				
	30.000€-50.000€		2042	5993	6512
	50.000€-60.000€				
	More than 60.000€				



BYD Seal GT (2025)

Price: 19.400 EUR (in China)

While positioned in the higher-end C segment, the Seal GT could face challenges if tariffs lead to significant price increases. Given its expected launch in 2025, the tariffs could limit its competitive edge in a market where European OEMs are increasing their presence. Although the C segment is less price-sensitive than the A and B segments, and the Seal is estimated to have a high EU premium, not much competitive downfall is expected for this model.



Firefly Car-C (2025) and Xpeng G3 (2025):

Xpeng G3 Price: 20.600 EUR (in China)

Both Chinese-produced and upcoming models in 2025, they would likely see increased prices due to tariffs. The Firefly Car-C, in particular, aims for affordability, and any tariff imposition would diminish its competitive pricing advantage. For the Xpeng G3, the combination of tariffs and the existing competitive landscape in the C segment could delay its market introduction or reduce its attractiveness.

The Netherlands has been a very attractive market for the D segment

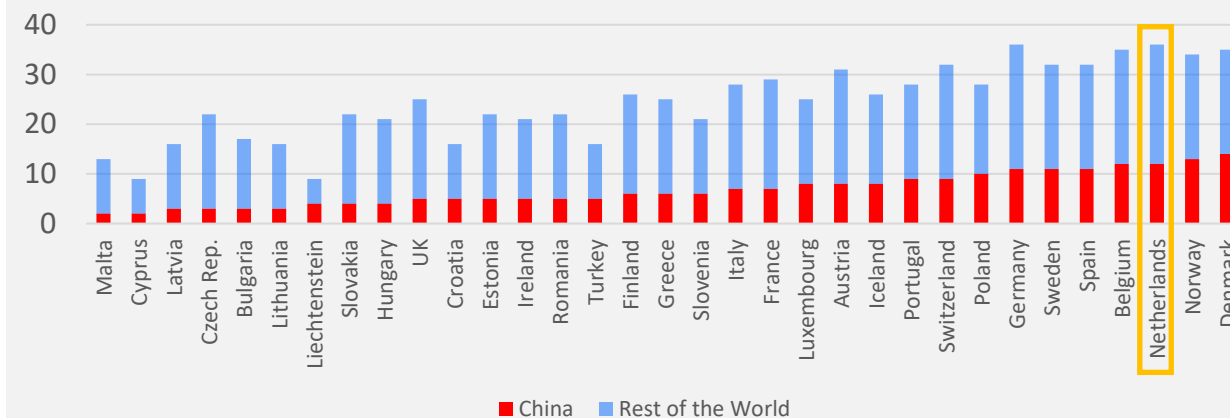
Market attractiveness can be segment specific

- High number of BEV models available (36)
- High number of BEV models produced in China (12 currently, 1 is on pre-order and 10 extra is expected)

Analysis of model introductions show that the Netherlands is an important market for the D segment, having the most model introductions in Europe.

**Total introduced BEV models in the D segment
(2023-2024 YTD)**

YTD: 06-2024

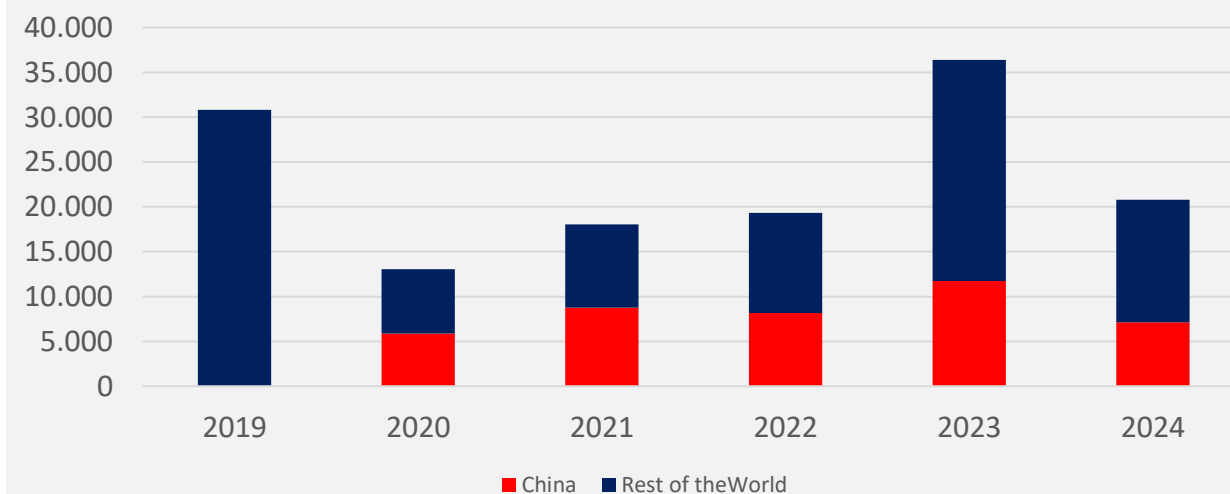


D segment will likely remain attractive for Dutch citizens

The Netherlands has a high amount of BEV sales in the D segment and the long-term trend of segment share since 2018 is a steep rise.

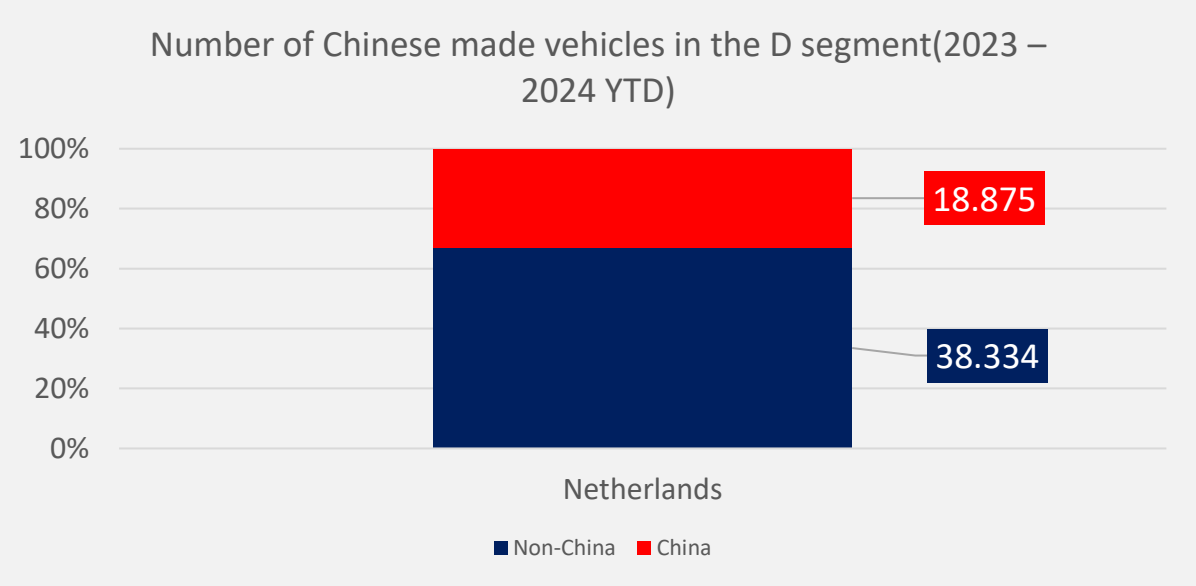
2023 saw a significant increase of BEV sales, produced in Europe.

BEV registrations in the D segment



Source: EV Volumes, FIER(2024), YTD: 06-2024

Segment D: high volumes, medium market share, 33,3% of all BEV sales from China. Moderately low exposure to increased tariffs.



Market attractiveness can be segment specific

- 33,3% of BEVs sold was originating from China in the period of 2023 – 2024 YTD.
- Volume is the highest among all segments (18.875 since 2023)
- The segment is the most popular with Chinese made models in Europe
- 2 additional models (Airways U6, Xpeng G6) expected to be launched in this segment in 2024 and 2025.

Segment D has a moderately low exposure to the tariffs, due to high prices

- Models are in the range of 50-60.000 EUR, making it for OEMs to absorb costs manageable.
- Some price increases can happen, but large changes are not expected (reduced price decrease more likely).
- The highest share of models is in the lowest tariff category; 68% of sales originating from China are exposed to the higher range tariffs.

Source: EV Volumes, FIER(2024), YTD: 06-2024

		Countervailing duty category			
		9%	17%	19.3-21.3%	36.3-36.6%
Price category per model	Under 30.000€				
	30.000€-50.000€		279	328	154
	50.000€-60.000€	12852		2869	
	More than 60.000€			2383	



BYD Sea Lion (2025):

Price: 27.300 EUR (in China)

The Sea Lion, a high-performance model expected in 2025, may still find buyers in the D segment despite price increases, as higher-end BEVs are generally less price-sensitive. However, tariffs would still impact its market positioning, and buyers may turn to European alternatives such as the Tesla Model 3 or BMW iX3 if the price differential becomes too significant.



MG SUV-D (2025):

Price: n/a

Although MG has been a strong player in Europe, the MG SUV-D, produced in China, would face challenges in maintaining its competitive pricing if tariffs are introduced. The D segment may be less sensitive to price hikes, but the new, highest tariff category could still deter consumers from opting for this model over European or other alternatives.

5.1 Dutch BEV market registrations and availability of models

5.2 Analysis of segments

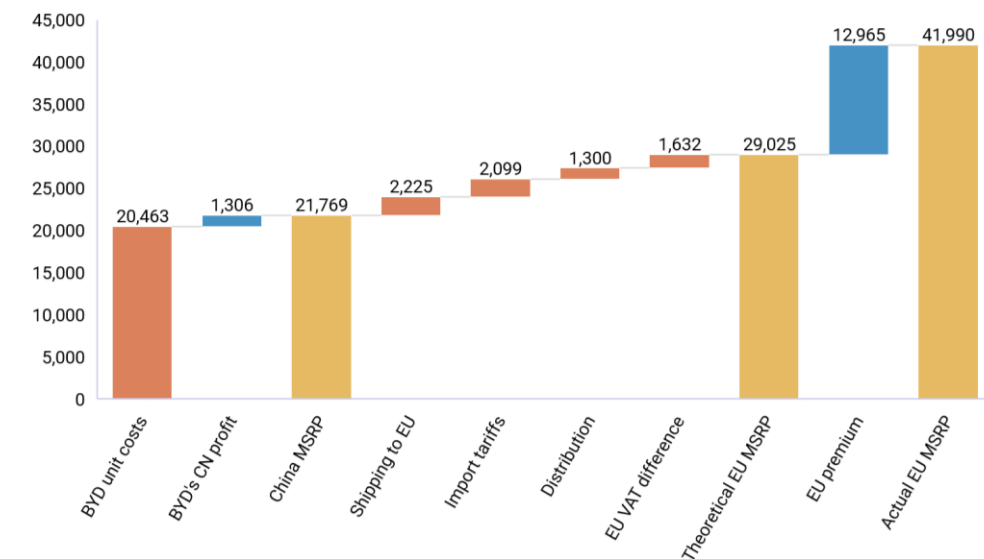
5.3 Analysis of prices

The impact of EU import tariffs on the behaviour of OEM's exporting from China

Volkswagen and BYD EV model comparison in Germany and China
Prices in euro

OEM	Model	Price in Germany	Price in China	German price premium relative to China	Battery kWh	Horsepower
Volkswagen	ID.4	46,335	31,011	49.4%	77	204
BYD	Seal U Comfort	41,990	21,769	92.9%	72	218
Volkswagen	ID.3	32,975	21,011	56.9%	58 (CN: 52.8)	204 (CN:170)
BYD	Atto 3 Comfort	37,990	17,923	112.0%	60.5	204

Estimated cost and profit structure for BYD's Seal U in the EU market
Euros



Source: Rhodium Group(2024).

Based upon our knowledge and the expert interviews of EV volumes, we would like to include some considerations:

- The **strong (price) competition in the Chinese home market** may make it very difficult for Chinese OEM's, to compensate for margin loss and/or sales volume loss in the EU, by raising prices and or expanding sales volume in China. They need the export, for realizing profitability, volume growth and high levels of capacity utilizations of their production plants (which is one of the key success factors for profitability);
- For building and growing their position in Europe (and the US) fast, they need to **substantially undercut prices of established OEM's** (buying market share). So, it is questionable to what extend Chinese OEM's have room for substantially increasing their prices in Europe. Unless the tariffs lead to a general increase of prices in the European market;
- Likely is that the **manufacturers will just have to sacrifice on margin in the EU and accept the higher loss or lower profit**. Some large manufacturers (like BYD) may be able to sustain lower margins, but others (smaller) may need to reduce their presence in the EU market, by reducing model range, postponing market introductions, leave / not enter the market etc.

Despite exporting costs of overall 5.624 EUR, a 12.965 EU premium can be achieved on the sale of BYD Seal U.

Category	Cost/Profit (Euros)
BYD Unit Costs	20,463
BYD's China Profit	1,306
China MSRP	21,769
Shipping to EU	2,225
Import Tariffs	2,099
Distribution	1,300
EU VAT Difference	1,632
Theoretical EU MSRP	29,025
EU Premium	12,965
Actual EU MSRP	41,990

- The price structure for BYD's Seal U in the EU market highlights significant markups driven by export costs and strategic pricing.
- The base manufacturing cost in China is €20,463, with the China MSRP set at €21,769, including a modest profit.
- Exporting to Europe adds €5,624 in costs (shipping, tariffs, distribution), leading to a theoretical EU MSRP of €29,025
- However, BYD leverages its cost advantages to add a substantial EU premium of €12,965, resulting in an actual EU MSRP of €41,990.
- This pricing strategy allows BYD to capitalize on lower production costs in China while maintaining high profitability in the European market.

Source: Rhodium Group(2024).

Key Considerations:

- Segment Sensitivity:** Lower-priced BEVs, typically within the mass-market segments, are highly sensitive to tariff increases. Consumers in these segments are more price-sensitive, and manufacturers have less margin flexibility to absorb the costs of tariffs, leading to a more substantial impact on vehicle prices.
- Premium Segment Resilience:** Higher-priced, premium BEVs are less affected by tariff increases. These vehicles generally have higher profit margins, allowing manufacturers to absorb tariff costs more easily without significantly increasing prices for consumers, who are also less price sensitive.
- Tariff Impact Correlation:** The analysis assumes a direct correlation between the tariff percentage and its impact on different vehicle segments. As tariffs increase, the impact on lower-priced vehicles becomes disproportionately higher, while the impact on more expensive models remains moderate.

		Countervailing duty category			
		9%	17%	19.3-21.3%	36.3-36.6%
Price category per model	Under 30.000€	High Impact	Moderately High Impact	Substantially High Impact	Very High Impact
	30.000€-50.000€	Low Impact	High Impact	Moderately High Impact	Substantially High Impact
	50.000€-60.000€	Moderately Low Impact	Low Impact	High Impact	Moderately High Impact
	More than 60.000€	Very Low Impact	Moderately Low Impact	Low Impact	High Impact

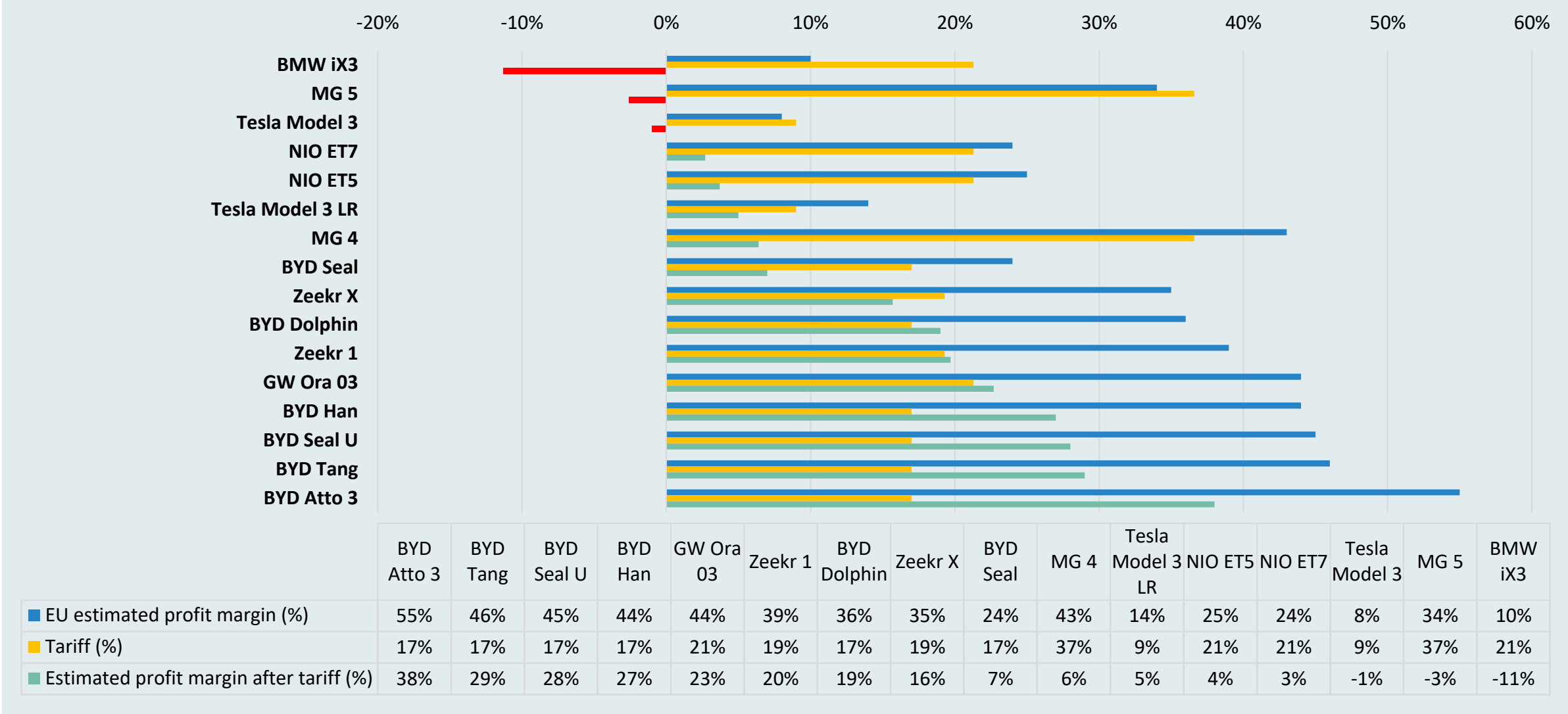
Impact Scale: To clearly communicate the varying levels of impact based on tariff rates and vehicle segments, we use the following scale:

- Very High Impact:** Most significant impact, likely to drastically reduce sales in the affected segment.
- Substantially High Impact:** Severe impact, causing notable price increases and potential demand reduction.
- Moderately High Impact:** Significant impact, likely to cause some price increases and moderate demand reduction.
- High Impact:** Noticeable impact, likely to cause minor price increases and limited demand reduction.
- Low Impact:** Minimal impact, with little to no effect on pricing or demand.
- Moderately Low Impact:** Slight impact, likely to be absorbed by manufacturers with minimal consumer effect.
- Very Low Impact:** Negligible impact, unlikely to affect pricing or demand.

Most sold models, affected by the countervailing duty and their price categories

Segment	9%	17%	19,3-21,3%	36,3%
Under 30.000 EUR			Dacia Spring	
30-50.000 EUR		BYD Dolphin BYD Yuan Plus / Atto-3 BYD Song Plus / Seal U BYD Seal	Volvo EX30 Smart #1	MG Marvel R MG EZS MG 4 / Mulan MG 5 Honda e:Ny1
50-60.000 EUR	Tesla Model 3 Tesla Model Y		Polestar 2	
More than 60.000 EUR			BMW iX3 NIO et5 NIO es6 / el6	

Only BMW iX3, MG5 and Tesla Model 3 (standard) will have negative profit margin after applying the tariffs.



Source: Rhodium Group(2024).

Consumer price calculations – example Segment D (BYD Seal U)

Category	10% Tariffs	New Tariffs No change	New Tariffs (slight absorb / 50%)	New Tariffs (total absorb)
China Unit Costs	20463	20463	20463	20463
China Profit	1306	1306	1306	1306
China MSRP	21769	21769	21769	21769
Shipping to EU	2225	2225	2225	2225
CIF Union border price	23994	23994	23994	23994
Regular EU duty	2177	2177	2177	2177
Provisional countervailing duty	0	4079	4079	4079
CIF Union border price + import duties	26393	30250	30250	30250
Distribution	1300	1300	1300	1300
Bruto catalogusprijs excl. btw incl. bpm	27693	31550	31550	31550
BTW difference to China (8%)	1637	1637	1637	1637
Theoretical EU MSRP	29330	33187	33187	33187
EU Premium	13099	13099	11171	9242
Fiscale waarde incl. btw incl. Bpm	42429	46286	44358	42429
Total additional costs	1000	1000	1000	1000
Consumenten adviesprijs incl. btw incl. bpm	43429	47286	45358	43429

- There are 3 OEM reactions calculated for the BYD Seal U, one is where EU premium not lowered, one is when price increase is absorbed 50% in the EU premium and one where price increase due to tariffs absorbed fully in EU premium.
- 8,9% consumer price increase is expected if the OEM does not decrease EU premium.
- In case of slight absorb, 4,4% increase in consumer price and 15% decrease of EU premium.
- In case of total absorb, the EU premium would be 30% lower.

Consumer price calculations – Segment C (MG 5 - SAIC)

Category	10% Tariffs	New Tariffs No change	New Tariffs (slight absorb / 50%)	New Tariffs (total absorb)
China Unit Costs	16555	16555	16555	16555
China Profit	3200	3200	3200	3200
China MSRP	19755	19755	19755	19755
Shipping to EU	2225	2225	2225	2225
CIF Union border price	21980	21980	21980	21980
Regular EU duty	1976	1976	1976	1976
Provisional countervailing duty	0	7979	7979	7979
CIF Union border price + import duties	24178	32157	32157	32157
Distribution	2400	2400	2400	2400
Bruto catalogusprijs excl. btw incl. bpm	26578	34557	34557	34557
BTW difference to China (8%)	1580	1580	1580	1580
Theoretical EU MSRP	28158	36137	36137	36137
EU Premium	6827	6827	2837	-1152
Fiscale waarde incl. btw incl. bpm	34985	42964	38974	34985
Total additional costs	1000	1000	1000	1000
Consumenten adviesprijs incl. btw incl. bpm	35985	43964	39974	35985

- There are 3 OEM reactions calculated for the MG5, one is where EU premium not lowered, one is when price increase is absorbed 50% in the EU premium and one where price increase due to tariffs absorbed fully in EU premium.
- 22,2% consumer price increase is expected if the OEM does not decrease EU premium.
- In case of slight absorb, 11,1% increase in consumer price and 51% decrease of EU premium.
- In case of total absorb, the EU premium would be 103% lower, being negative.

There are 3 key OEM reactions that can be expected

- EU Premium is not lowered, and the OEM passes over the increased tariffs directly to the consumers by increasing prices.
- To slightly decrease the impact of the price increase, the OEM absorbs some impact of the increased tariff in their EU premium, and therefore the consumer price slightly increases.
- To completely avoid price increase, and losing the competitive advantage, the OEM fully absorbs the price increase and lowers its EU premium margin accordingly.

Most likely scenario

There are a myriad of other alternative reactions, and options to mitigate the tariffs, which are not included in the analysis. These could be cost cuts in distribution, production. Distributing profits and losses between different models in the portfolio.

6. Scenario analysis

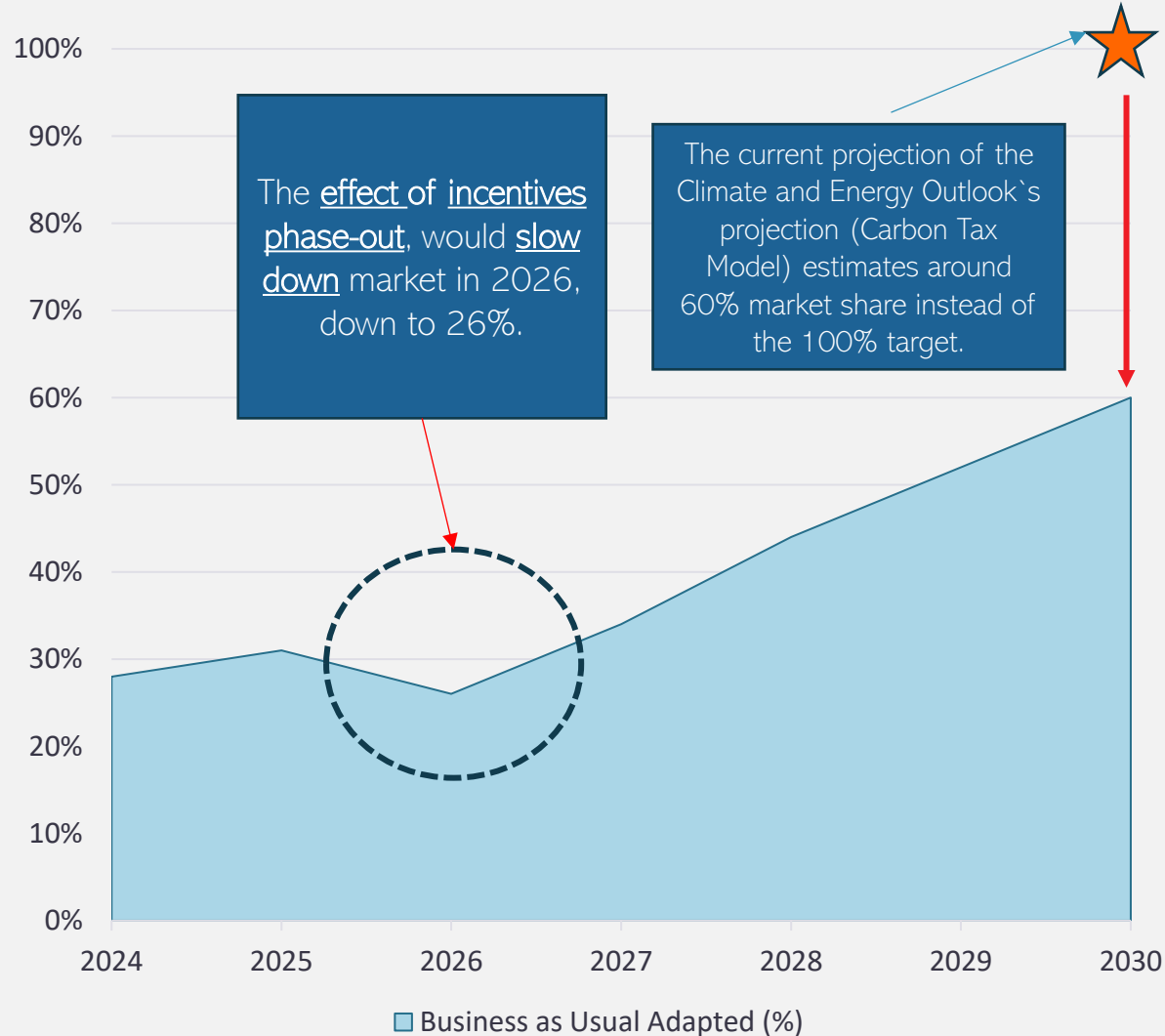
Impact of tariffs on the targets of the
Dutch Climate Agreement

Scenario Analysis Approach – Variables, assumptions

Variables	Scenario A: 10% Tariffs	Scenario B: Current Tariffs	Scenario C: Escalated Trade Measures
EU Import Tariffs	No new tariffs; pre-July 2024 conditions.	Tariffs on BEVs introduced starting July 2024.	Escalated tariffs, effectively closing the EU market to Chinese-made BEVs.
Vehicle Prices	Prices remain stable with no additional tariff impact.	Temporary price increase, or reduced price decrease for BEVs due to tariffs, with a buffer for European automakers.	Significant price increases, or fully absorbed price decrease, particularly affecting lower-cost models.
Market and Industry Changes	No significant shifts; continuation of the existing market and production environment.	European automakers gain time to catch up with production and pricing.	Reliance on non-Chinese automakers.
Prevalence of Other Powertrains (Notably PHEVs)	BEVs continue to dominate new registrations with minimal PHEV market impact.	Slight increase in PHEV adoption as consumers seek alternatives to tariff-impacted BEVs.	Increased adoption of PHEVs due to limited BEV availability.
Dutch Policy Environment	Continuation of existing incentives and supportive policy environment.	Continuation of existing incentives and supportive policy environment.	Continuation of existing incentives and supportive policy environment.
Vehicle Supply Backlog	Steady supply chain with no significant disruptions.	Initial backlog of BEVs already in Europe, with gradual depletion due to tariffs, from 2025.	Severe supply chain disruptions, particularly for BEVs sourced from China.
Chinese FDI to Europe (Shifting Production)	Limited or no significant shift in production from China to Europe.	Significant FDI to Europe as Chinese OEMs shift production to avoid high tariffs.	Chinese FDI is restricted to Europe.
Mergers, Acquisitions, JVs, and Partnerships	Normal pace of M&As and partnerships between European and Chinese OEMs.	Intensified M&As, JVs, and partnerships to navigate new tariff environments.	Cooled down M&As and partnerships due to heightened geopolitical tensions and high tariffs, measures.

The „10% Tariffs” scenario is projected to reach BEV market share of 60% in 2030 (the ambition is 100%).

Adapted “10% Tariffs” model to the Carbon Tax Model

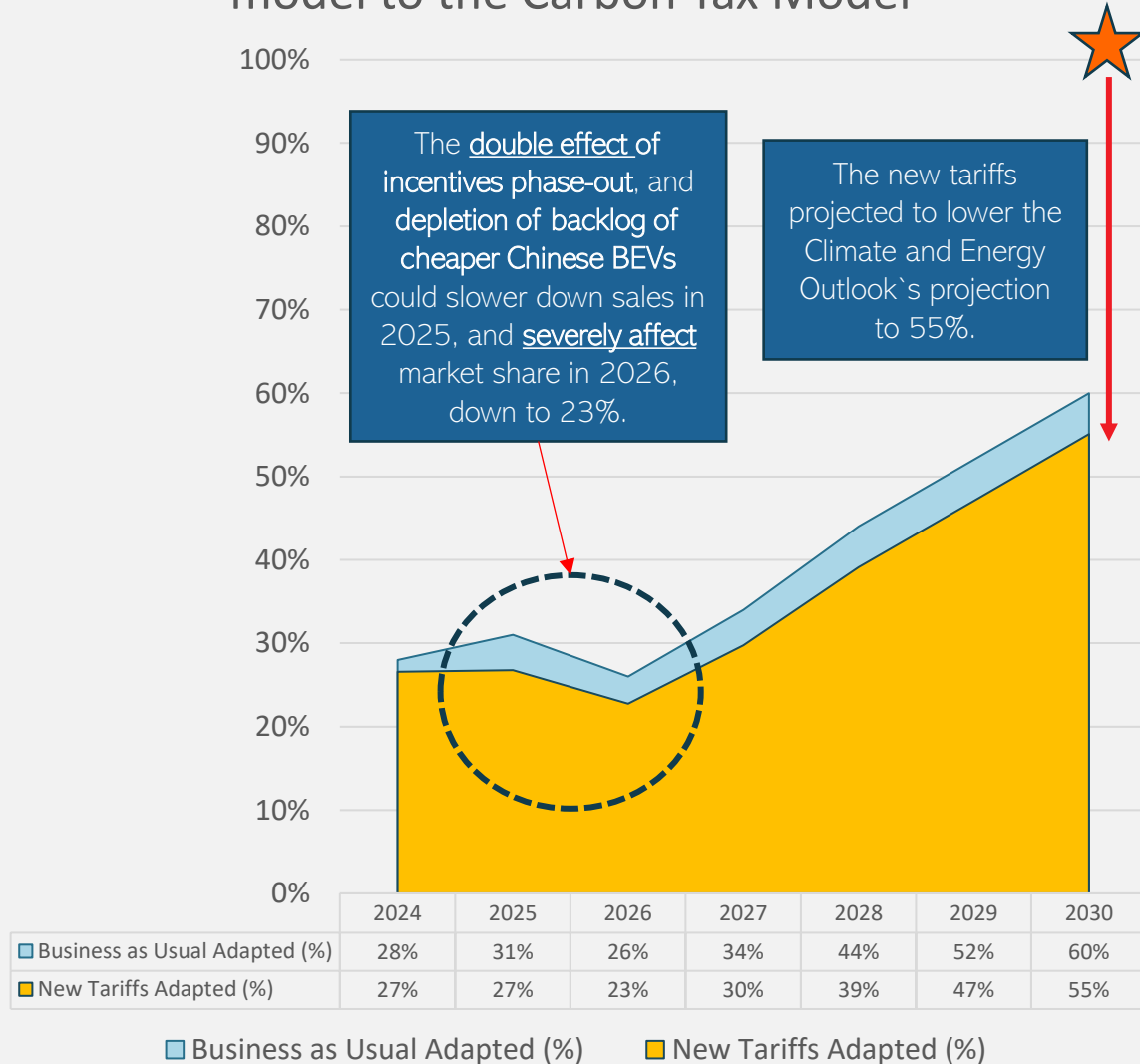


Observations

- The Business-as-Usual scenario is the projection of the Climate and Energy Outlook's projection from 2022 (Carbon Tax Model).
- The impact of the newly imposed tariffs are calculated based on the assumptions of this model (including the carbon tax scheme and the phase-out of domestic incentives from 2026).
- The projection is showing only the effect of the tariffs on the baseline scenario, and not altering anything regarding the original assumptions of the model (e.g., incentives, battery prices, energy prices, etc.)

The tariffs adopted is projected could downgrade the BEV sales, by appr 5%, to 55% in 2030.

Adapted “10% Tariffs” and “New Tariffs” model to the Carbon Tax Model

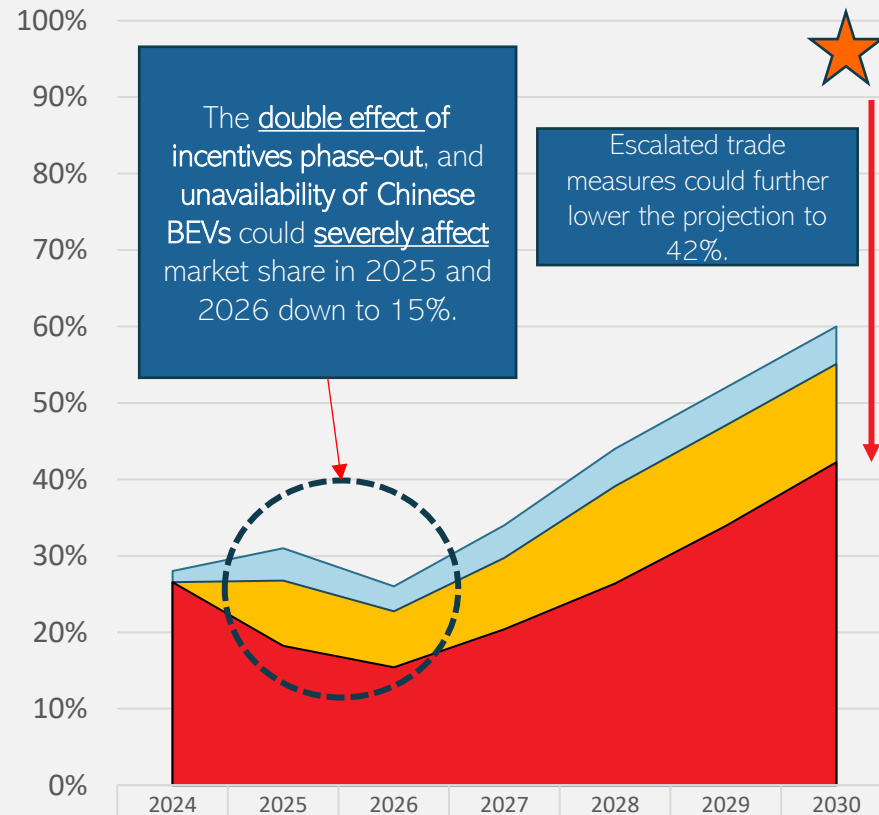


Observations

- The “New Tariffs” scenario projects a steep decline for 2026, decreasing the baseline scenario by 4% to 27% in 2025 and down by 3% to 23% in 2026.
- From 2027 a steeper growth is projected, with an average of 5% less market share than the baseline scenario, reaching 55% in 2030.
- The double effect of the tariff introduction, including the depletion on cheaper backlogs, the reactions of OEMs, and the phase out of incentives would amplify their impacts even more than separately.
- Even when not considering price increase, but price stagnation or less decrease of prices due to the substantial fall in battery prices, and the lack of cheap small models would downgrade the market share expectations. Additionally, the reaction and plans of European OEMs of introducing or postponing their announced cheap models (e.g., VW ID.2) and the time while Chinese production would ramp up in Europe will take its toll in the next 2 years.

The escalated Trade measures scenario is projected to potentially downgrade the BEV sales to appr. 40% in 2030.

Adapted “10% Tariffs”, “New Tariffs” and “Escalated Trade Measures” model to the Carbon Tax Model



	2024	2025	2026	2027	2028	2029	2030
Business as Usual Adapted (%)	28%	31%	26%	34%	44%	52%	60%
New Tariffs Adapted (%)	27%	27%	23%	30%	39%	47%	55%
Escalated Trade measures Adapted (%)	27%	18%	15%	20%	26%	34%	42%

■ Business as Usual Adapted (%)
 ■ New Tariffs Adapted (%)
 ■ Escalated Trade measures Adapted (%)

Observations

Very unlikely scenario, with a hostile environment for production by EU OEMs in China and Chinese production in EU. Affecting not just product flow but capital flow.

- The “Escalated trade measures” scenario projects an even steeper decline for 2025, decreasing the baseline scenario by 13% to 18% in 2025 and down by 11% to 15% in 2026.
- From 2027 a steeper growth is projected, with an average of 18% less market share than the baseline scenario, reaching 42% in 2030.

Explanation of the 3 scenarios

Scenario A – „10% tariffs”

- It is based on the **tariffs and general business environment with 10% tariffs, that existed before July 4th, 2024**. And it is also the scenario that many wish to return to, because it would be the fastest way to increase the EV adoption in the EU, and it wouldn't hurt automotive exports to China, from European OEMs.

Without the tariffs, Chinese made cars would be diverted also to Europe from the US, further increasing supply.

Scenario B – „New Tariffs”

- In July 2024, tariffs were introduced, affecting only Battery Electric Vehicles (BEVs) and creating a **temporary price buffer** that allows European automakers to **develop and launch lower-cost EVs without immediate competition from China**. However, Chinese manufacturers plan to start **producing vehicles in Europe** within a few years, making this a temporary reprieve. BEV adoption faces a **slight delay**, balanced by **increased adoption of PHEVs**, which are not subject to the tariffs. This scenario **benefits both the EU and China** by providing **short-term advantages** to each side.

With the tariffs, European OEMs have some advantage on the European market, but not on the global scale.

Most likely scenario

Scenario C – „Escalated trade measures”

- This highly unlikely scenario **envisions a geopolitical conflict** where the EU, like the USA, directly competes with China, **effectively closing its market to Chinese EVs**. The EU would then **rely on non-China automakers** and models not made in China, **delaying EV adoption**. Unlike the USA, batteries would not be included in this trade conflict due to Europe's reliance on Chinese supplies. While this scenario would protect European automakers from Chinese competition, it would also result in **losing China as export market for EU OEMs**, and possibly driving out their joint ventures from China.

The European market would be safeguarded, but the Chinese market would be completely lost for European OEM's.

7. Conclusions

Answers on research questions

The impact of EU import tariffs on the behaviour of OEM's exporting from China

Some strong Chinese OEM's (like BYD) may speed-up their local manufacturing build-up in Europe (the earliest possible case is BYD in Hungary, starting to ramp up production from Q3-Q4 2025). But for making that competitive to export from China (even with import tariffs) they need large sales/production volumes, probably too large for most of the current Chinese brands in the EU.



Whereas the global manufacturers like Geely-Volvo-Polestar, have much more freedom to move products (both of established brands like Volvo as – for the EU - new Chinese brands like Zeekr, Geely etc.) to EU production plants.



The same is true for EU manufacturers which have their EV's currently produced in China in JV- and own-plants

OBSERVATION

It is impossible to exactly predict how the import tariffs will work-out, in the complex and capital-intensive automotive sector.

It is only possible to predict **indicative trends and possible scenario's**:

1. Reallocation production over the various plants in the automotive group, including **transferring production to the EU**;
2. **Establishing new plants in Europe**;
3. Model-introductions slow down and **brands retreating from the market or** slowing down their position build-up. Leading to reduced customer choice and potentially less supply volume;
4. Tariffs might not immediately cause price hikes, and any increases may be less than the tariffs themselves. However, some price rise is likely, depending on European market competition, especially if **European OEMs raise prices** due to higher production costs from shifting manufacturing back to Europe.

How do the anti-subsidy measures affect the availability of BEVs in the Dutch market?

- **Reduced Import Volumes:** Anti-subsidy tariffs on Chinese BEVs could reduce the number of these vehicles available in the Dutch market, or deter the introduction of new, affordable models. With Chinese manufacturers accounting for a significant portion of BEV imports (27% market share within BEV-market in early 2024), tariffs could lead to a plateauing of available models.
- **Segment-Specific Impact:** The A and B segments, which are critical for mass adoption due to their affordability, will be affected. There is already a low availability of (Chinese) BEV-models in these segments and not a lot of new models expected in the next years. However, the China-produced Dacia Spring (A-segment) has an important role and would be affected with a 21% higher Import Tariff. Tariffs may result in limited options for consumers, particularly those looking for affordable, entry-level electric vehicles.
- **Supply Chain Adjustments:** Some Chinese OEMs may attempt to mitigate the impact by increasing local production in Europe, or exporting for other countries than China, but this shift would take time and may not fully compensate for the immediate reduction in imports. Consequently, short-term availability in the Dutch market could suffer.

There are 3 key OEM reactions that can be expected

- EU Premium is not lowered, and the OEM passes over the increased tariffs directly to the consumers by increasing prices.
- To slightly decrease the impact of the price increase, the OEM absorbs some impact of the increased tariff in their EU premium, and therefore the consumer price slightly increases.
- To completely avoid price increase, and losing the competitive advantage, the OEM fully absorbs the price increase and lowers its EU premium margin accordingly.

Most likely scenario

There are a myriad of other alternative reactions, and options to mitigate the tariffs, which are not included in the analysis. These could be cost cuts in distribution, production. Distributing profits and losses between different models in the portfolio.

To what extent do anti-subsidy measures influence the achievement of the Netherlands' fleet sustainability targets?

1.10% Tariffs Scenario (baseline):

Under the current policy trajectory without any additional tariffs, the BEV market share in the Netherlands is projected to reach only 60% by 2030, far short of the 100% target. This scenario assumes a phase-out of domestic incentives starting in 2026, which would slow down BEV market penetration significantly, reducing market share to just 26% by 2026 before recovering slightly.

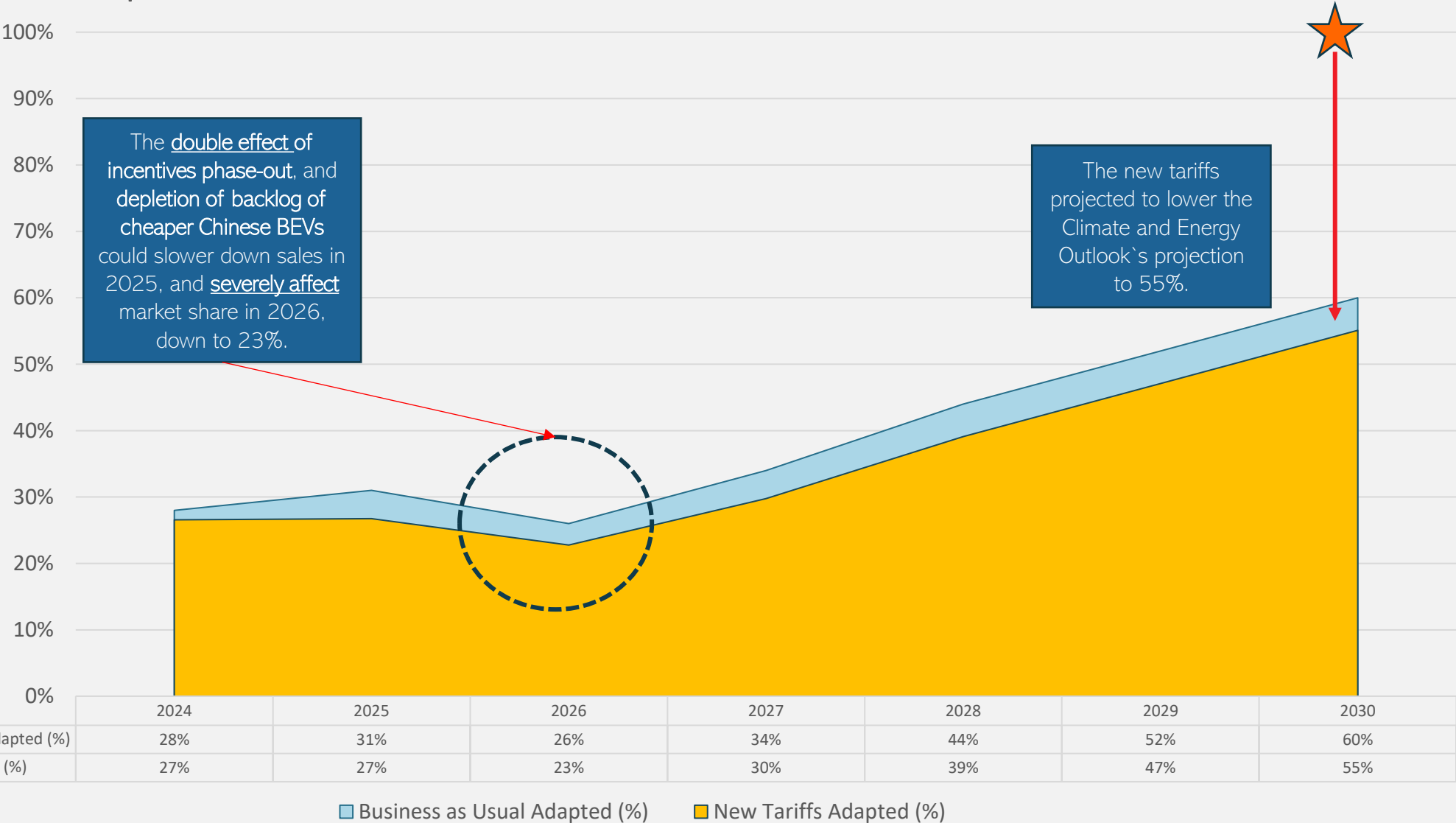
2.New Tariffs Scenario (most likely scenario):

Introducing new tariffs could **exacerbate the slowdown**, leading to a further reduction in BEV market share, projecting a **decline to 20 - 25% in 2026** and **reaching only 52 - 57% by 2030**. The dual impact of tariff-induced price increases and the depletion of cheaper Chinese BEV backlogs would severely hinder the Netherlands' progress toward its sustainability targets. Even if battery prices stabilize, the lack of affordable models could stall market growth.

3.Escalated Trade Measures Scenario:

In the unlikely most severe scenario, escalated trade measures could reduce BEV market share to just 40 - 45% by 2030. This scenario envisions a hostile trade environment that not only disrupts Chinese imports but also affects European OEMs that rely on Chinese production. The compounded effect of tariffs, unavailability of Chinese BEVs, and delayed introduction of affordable models by European OEMs would drastically slow the Netherlands' transition to a fully electric fleet.

Adapted “10% Tariffs” and “New Tariffs” model to the Carbon Tax Model





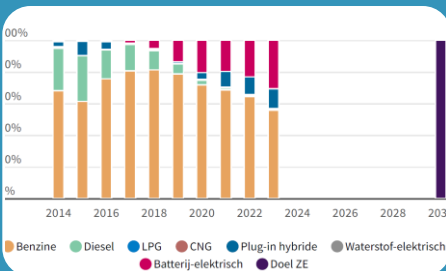
How do the anti-subsidy measures affect the availability of BEVs in the Dutch market?

We expect availability of BEV models not to be affected so much if the most likely New Tariffs adoption scenario will happen. Shifts of production to Europe is already happening, Chinese OEM's eager to be present in European market. However, in the important smaller A- and B-segments there is already a low number of models available. The higher import tariffs will lead to even less attractiveness for Chinese OEMs to introduce small BEV's in Europe



What are the implications of anti-subsidy measures on the pricing of BEVs in the Netherlands?

Increased tariffs will raise the cost of imported BEVs from China, but in a lot of cases it can and will be absorbed and will not have a high impact causing price raises.



To what extent do anti-subsidy measures influence the achievement of the Netherlands' fleet sustainability targets?

If the most likely New Tariff adoption will happen a bandwidth of between 3% – 8% lower market share will be expected related to the new tariffs.

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