

Fair play?

Europe and China competition in the electric car market

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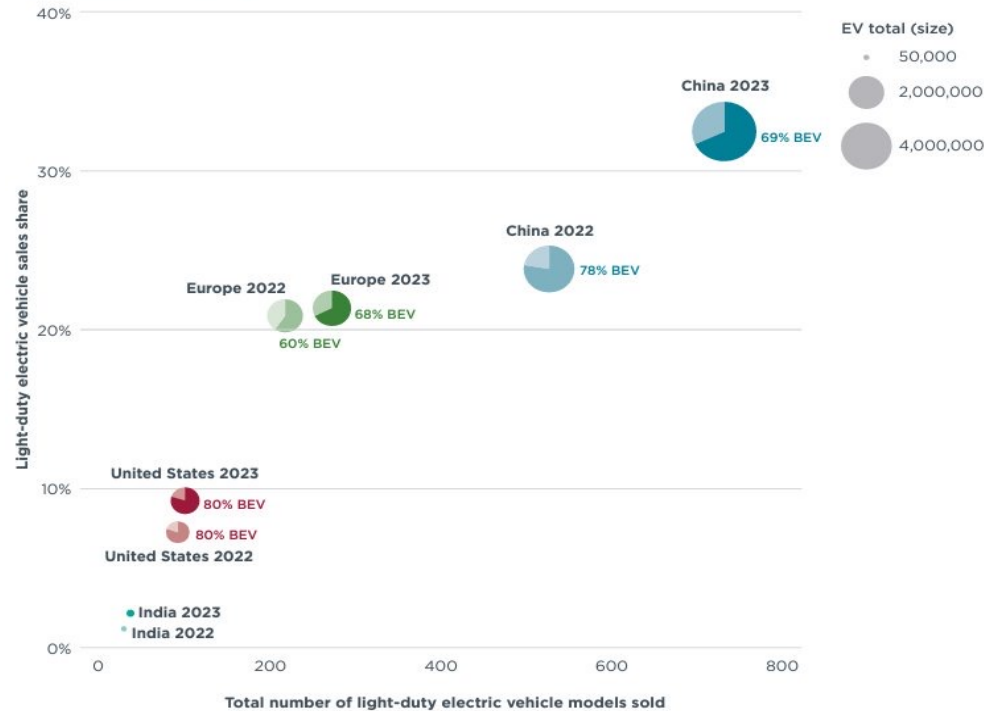


“Fair Play”?

– International market trends

In 2023, China and the U.S. showed greater uptake of battery electric and plug-in hybrid vehicles, compared to Europe

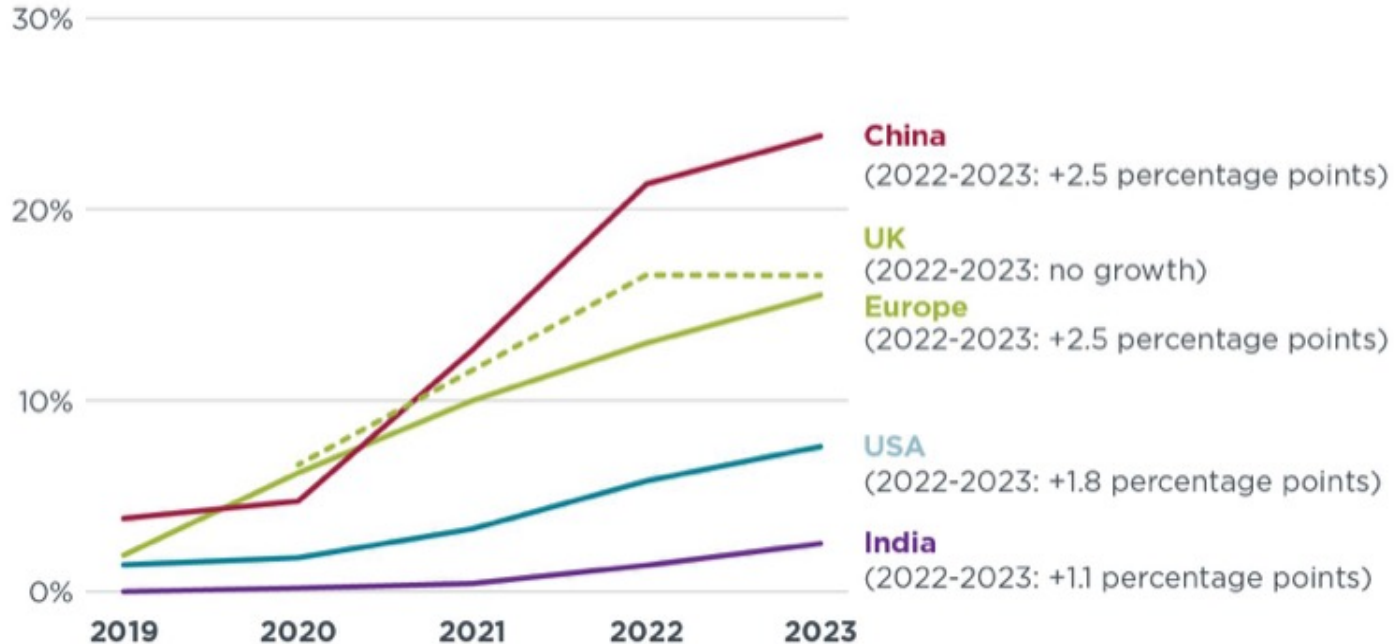
Light-duty EV sales share, number of EV models for sale, and mix of BEVs and PHEVs in the four markets, 2022 and 2023.¹



<https://theicct.org/publication/ev-ldv-major-markets-monitor-2023-may24/>

The uptake rate for battery-electric vehicles in China slowed down in 2023, with a 2.5 percentage point increase compared to 2022

Market share battery electric vehicles



<https://theicct.org/german-car-market-amid-increasing-competition-from-china-based-manufacturers-apr24/>

The top-10 vehicle models dominate nearly 50% of market share in China and Europe, even more so in the U.S. and India

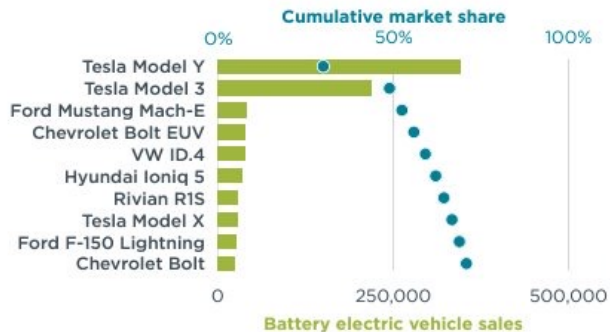
China



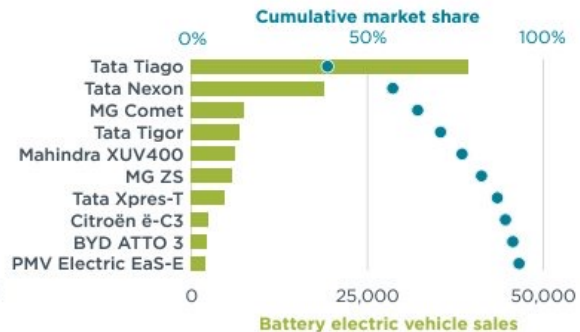
Europe



United States

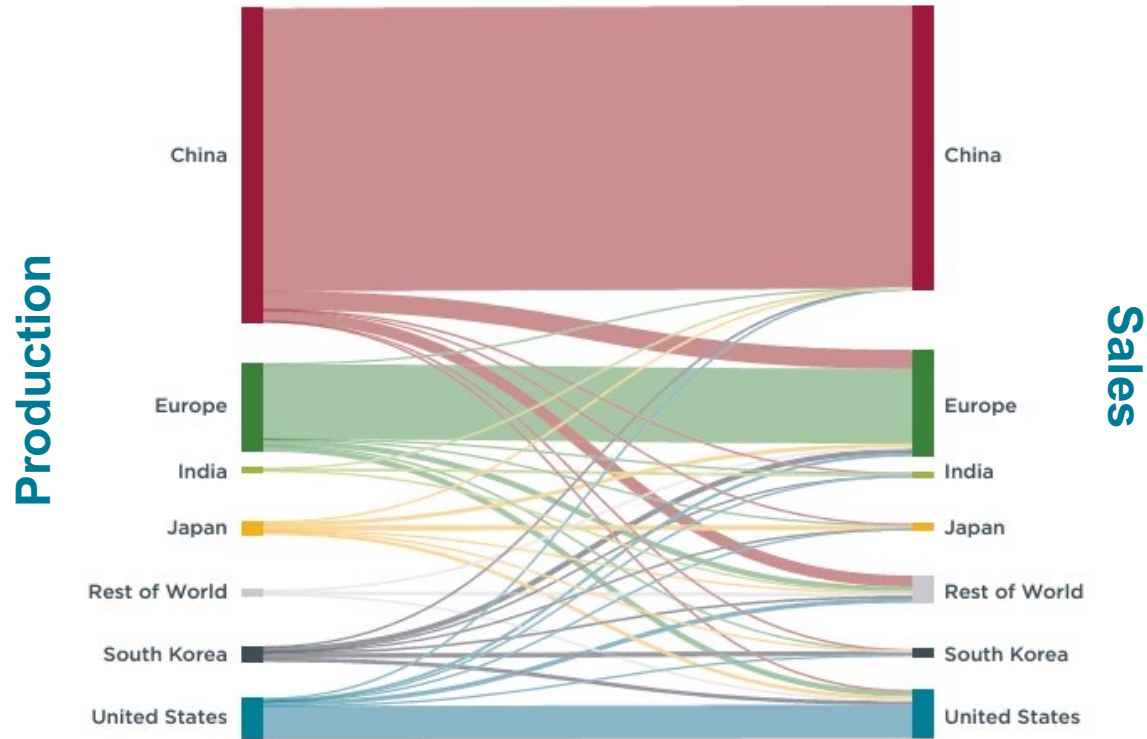


India



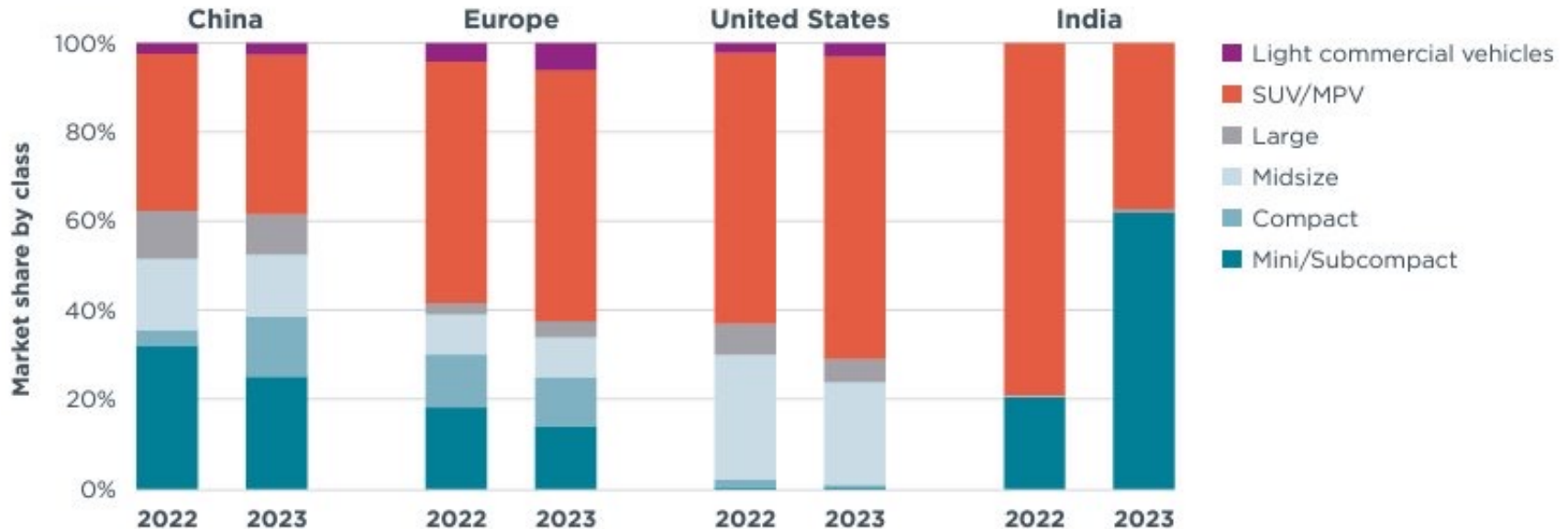
<https://theicct.org/publication/ev-ldv-major-markets-monitor-2023-may24/>

China is the world's largest electric vehicles exporter,
but at the same time sells the vast majority of its EVs within China



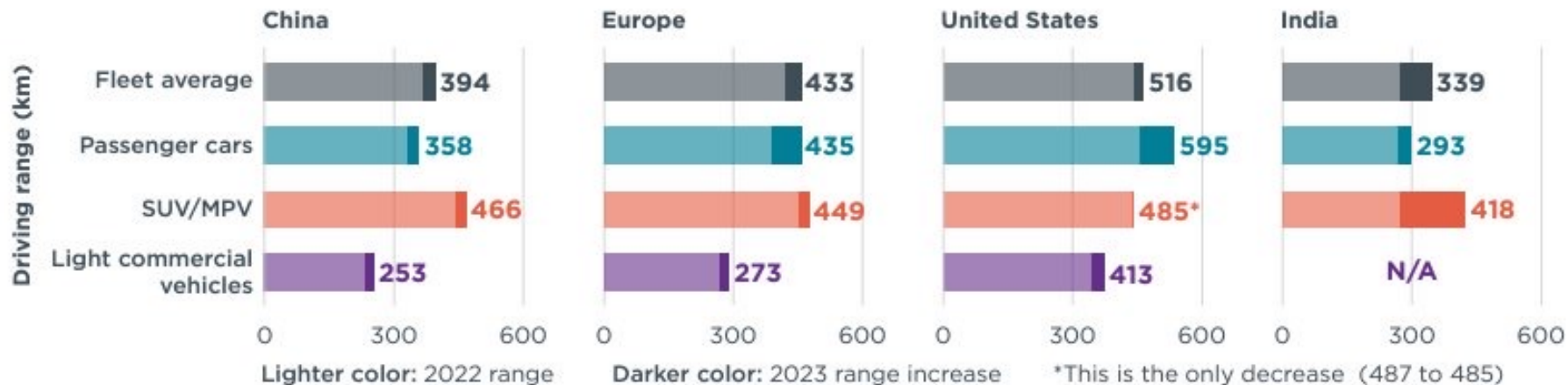
<https://theicct.org/publication/ev-ldv-major-markets-monitor-2023-may24/>

SUVs remain the most popular segment, also for electric vehicles, but China is stronger on Mini/Subcompact/Compact vehicles than Europe



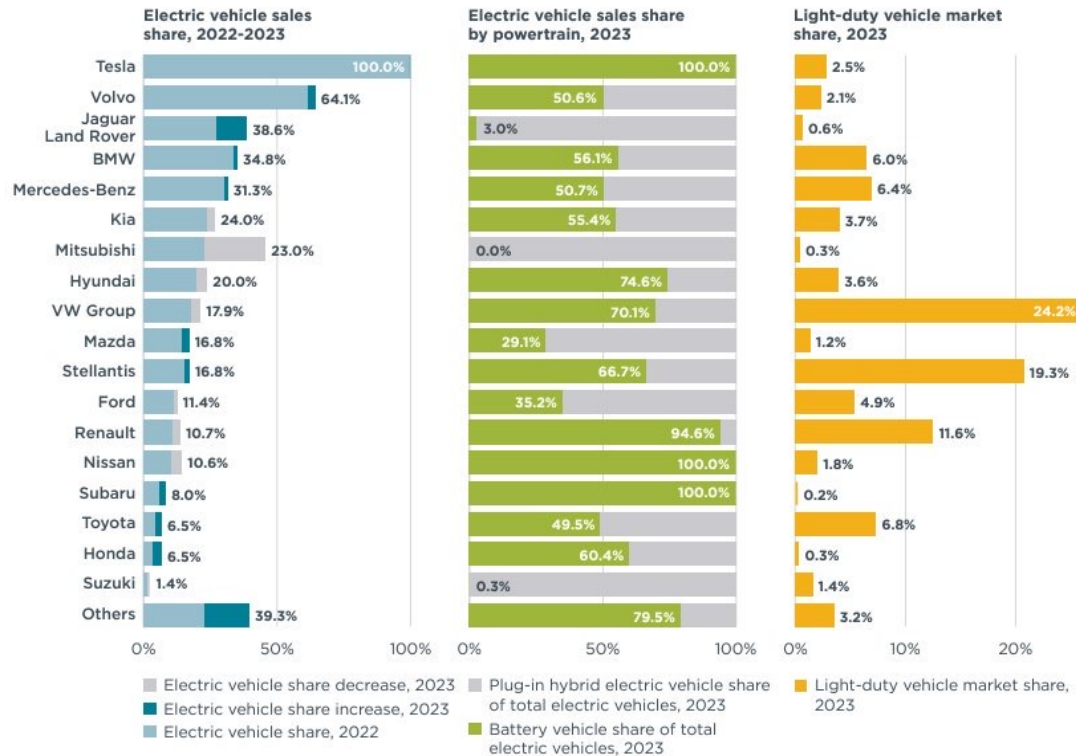
<https://theicct.org/publication/ev-ldv-major-markets-monitor-2023-may24/>

The average driving range of electric vehicles keeps increasing in all major markets



<https://theicct.org/publication/ev-ldv-major-markets-monitor-2023-may24/>

The share of electric vehicle sales among manufacturers varies greatly, ranging from 0 to 100%



<https://theicct.org/publication/ev-ldv-major-markets-monitor-2023-may24/>

“Fair Play”?

- A historic perspective

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“Fair Play”? – A historic perspective

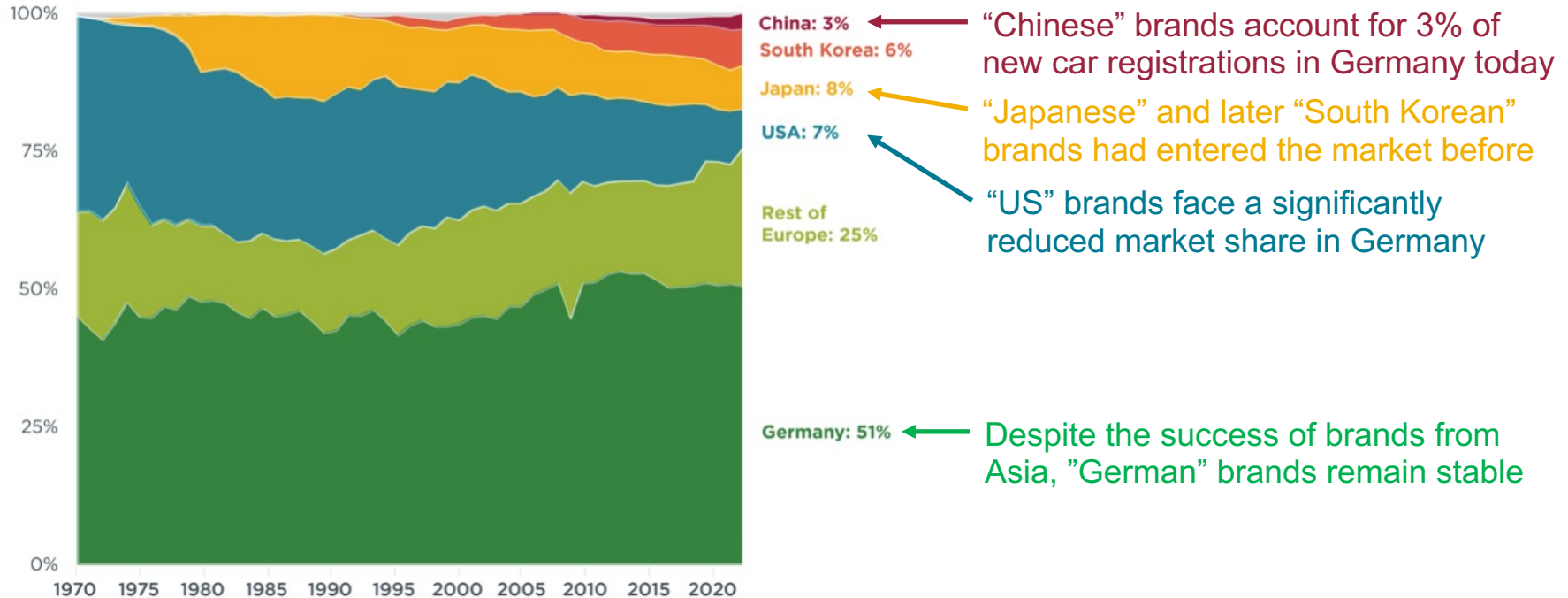
Developing a historic time series comes with some caveats

- Lack of statistical time series for Europe as a whole
 - Germany as a proxy market for the analysis
- Challenging to tie a manufacturer brand to a specific location
 - Example Opel: originally US, from 2021 counted as European brand (owned by Stellantis)
 - Example Volvo: originally Swedish, from 2009 on counted as Chinese brand (owned by Geely)
 - Example Smart: counted as German brand, even though production in China (owned by Mercedes & Geely)
 - Example Tesla: counted as US brand, even though production to some extent in China

“Fair Play”? – A historic perspective

Historically, the market share of “Chinese” brands is (still) low

New car registrations in Germany, by location of brand ownership



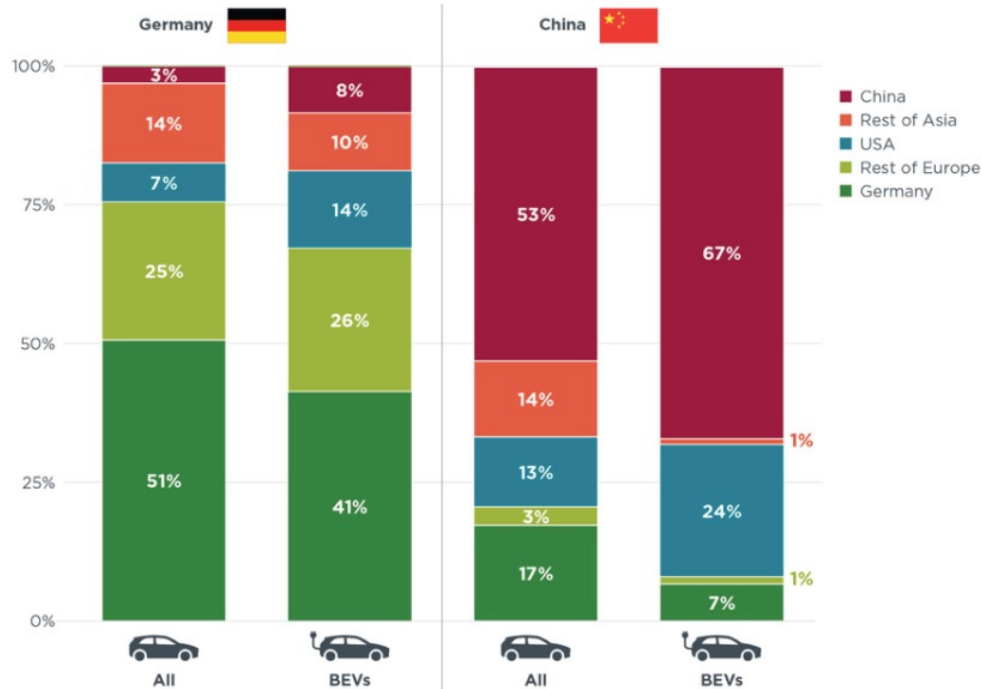
Data source: KBA

<https://theicct.org/german-car-market-amid-increasing-competition-from-china-based-manufacturers-apr24/>

“Fair Play”? – A historic perspective

“Chinese” brands have fostered a strong home-market for EVs

New car registrations, by location of brand ownership, in 2023



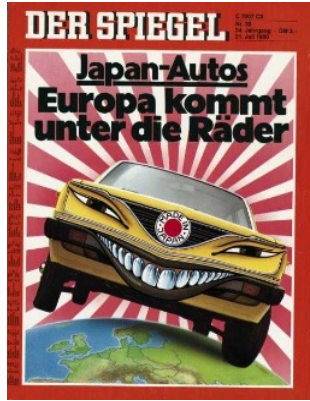
- “Chinese” brands are much stronger with electric car sales than with combustion engine cars, both in Germany as well as in China
- “German” brands account for a much higher market share in China than “Chinese” brands in Germany

Data source: KBA and MarkLines

<https://theicct.org/german-car-market-amid-increasing-competition-from-china-based-manufacturers-apr24/>

“Fair Play”? – A historic perspective

Today’s debate provides some similarities to the early 1980s



1980

“Japanese cars: Europe is getting under the wheels”

- Increasing fuel prices provide a competitive advantage for the more efficient Japanese models
- Lean Production, Kaizen, Just-in-Time, Muda result in lower production costs for Japanese models
- USA threatens to increase import tariffs from 2.9% to 20%
- “The industrial base in Germany is in danger” (BMW-CEO)



2024

“The electric shock: Germany despairs of the electric car”

- Chinese manufacturers have focused on electric vehicles early on, while German OEMs kept relying on diesel & co.
- High production volumes and battery suppliers’ network allow for economy of scales
- EU considering to raise import tariffs from today 10%
- “The world markets are flooded with cheap Chinese electric cars” (von der Leyen)

<https://www.spiegel.de/politik/die-japaner-sind-auf-sieg-programmiert-a-629d6e80-0002-0001-0000-000014315305?context=issue>

<https://www.spiegel.de/wirtschaft/volkswagen-betriebsratschefin-daniela-cavallo-ueber-den-umstieg-auf-elektromobilitaet-und-die-afd-a-1d5d7487-d73d-495b-b840-eaee08458e9f>

<https://www.flossbachvonstorch-researchinstitute.com/de/studien/innovation-und-wettbewerb-in-der-automobilindustrie-teil-2-gestaerkt-durch-die-japanische-bedrohung/>

“Fair Play”? – A historic perspective

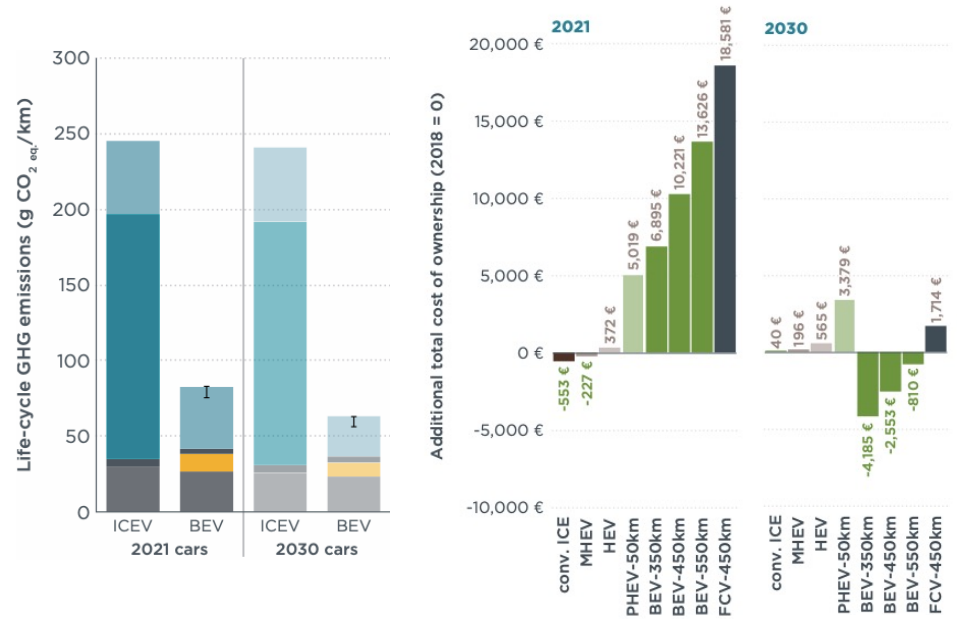
Increased tariffs may provide some breathing time, not more

- If history repeats itself, then increased import tariffs will result in more local production
- Technology perspectives will not change though, with battery electric vehicles offering significant emissions and cost savings

China's BYD will consider second Europe plant in 2025, executive says

By Nick Carey

May 9, 2024 5:54 PM GMT+2 · Updated a month ago



<https://www.reuters.com/business/autos-transportation/byd-will-consider-second-european-plant-2025executive-says-2024-05-09/>
<https://theicct.org/publication/a-global-comparison-of-the-life-cycle-greenhouse-gas-emissions-of-combustion-engine-and-electric-passenger-cars/>
<https://theicct.org/wp-content/uploads/2021/06/decarbonize-EU-PVs-may2021.pdf>

Conclusions

- China has the highest market share of EVs among major markets, and is also the world's largest EV exporter
- Despite recent growth, "Chinese" brands account for 3% of German new registrations
- Historically, "Japanese" and "South Korean" brands had entered the market without affecting the market share of "German" brands
- "German" brands account for a higher share in China than vice versa
- "Chinese" brands are particularly strong in selling EVs, also in China
- Historically, tariffs provided only a temporary "solution"
- Technologically, BEVs offer greatest benefits for consumers, environment & society
- European vehicle manufacturers need planning / investment security

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