ZIV – German Bicycle Industry Association

2023 Market Data – Bicycles and E-Bikes

in cooperation with the VSF – German Service & Bicycle Association

ZIV DIE FAHRRAD-INDUSTRIE

ZIV – German Bicycle Industry

121 members ~ 90% of bicycle and e-bike production in Germany

ZIV – German Bicycle Industry Association

National representation of the interests of the German and international bicycle industry

- The ZIV currently represents 121 manufacturers and importers of bicycles and e-bikes, bike parts and accessories
- Approx. 90% of the bicycles and e-bikes produced in Germany in 2023 were from ZIV members
- What we do:
  - Further development of the German and European bicycle and e-bike markets
  - Involvement in national and international committees on technology, standardisation, transport and infrastructure
  - Member of the Confederation of the European Bike Industry (CONEBI) and a partner of EUROBIKE, the leading international trade fair for the bicycle industry
  - Annual publication of market data from the bicycle industry: **welcome!**

ZIV DIE FAHRRAD-INDUSTRIE

2023 Market Data – Bicycles and E-Bikes

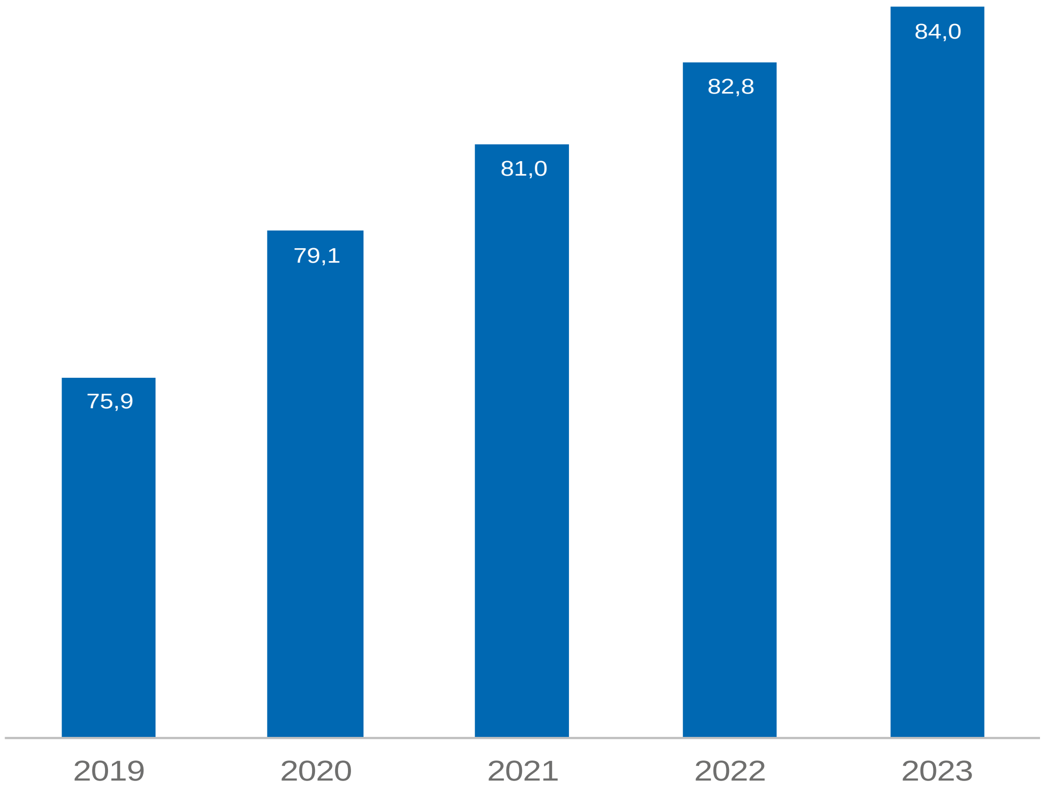
1. Total units – Production – Supply within Germany

Photo: Kalkhoff | timo.lutz.de

Total units in Germany (in million units*)

Bicycles and e-bikes

- Continuously growing number of units
- +8.1 million units since 2019
  - Market saturation not yet attained!
- Growth drivers remain unchanged:
  - replacement of older bicycles
  - clear trend toward owning 2–3 bikes, urban + sport + possibly also a cargo bike, etc.
  - Our industry offers diverse outstanding products

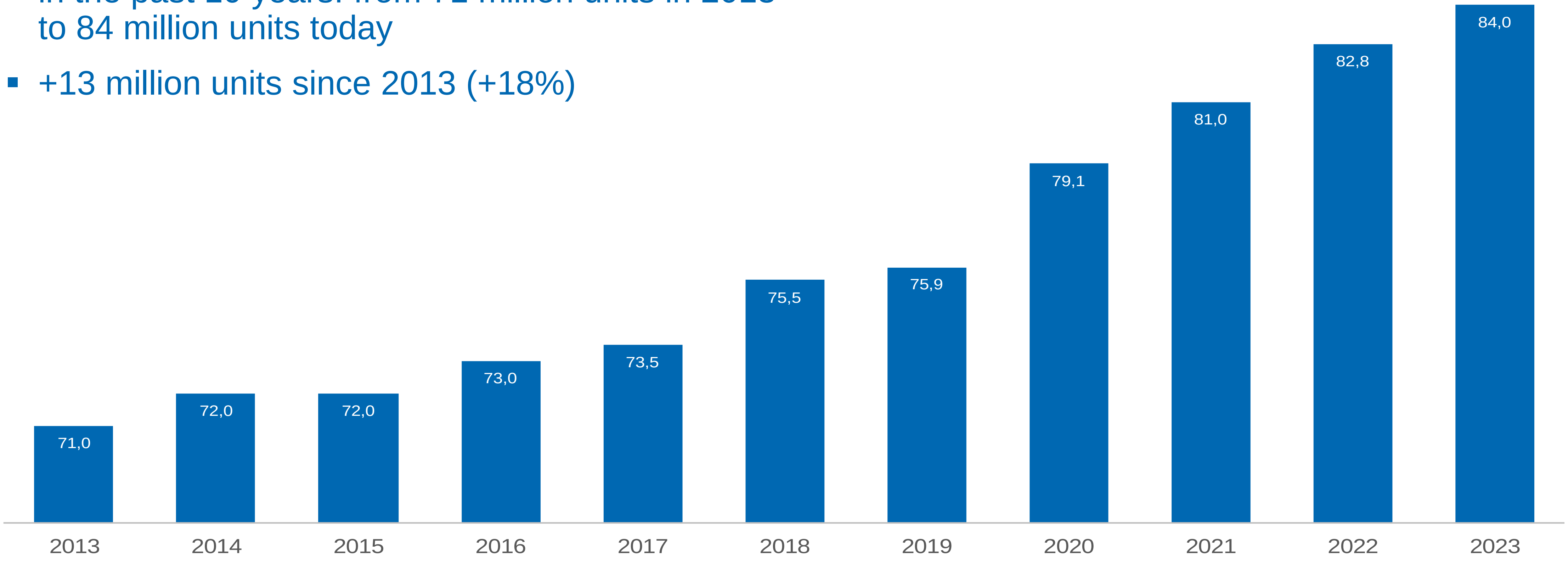


Source: ZIV (* figures adjusted by discarded bicycles)

Bicycles and e-bikes in Germany (in million units*)

Stable at high level

- Number of bicycles and e-bikes has risen sharply in the past 10 years: from 71 million units in 2013 to 84 million units today
- +13 million units since 2013 (+18%)

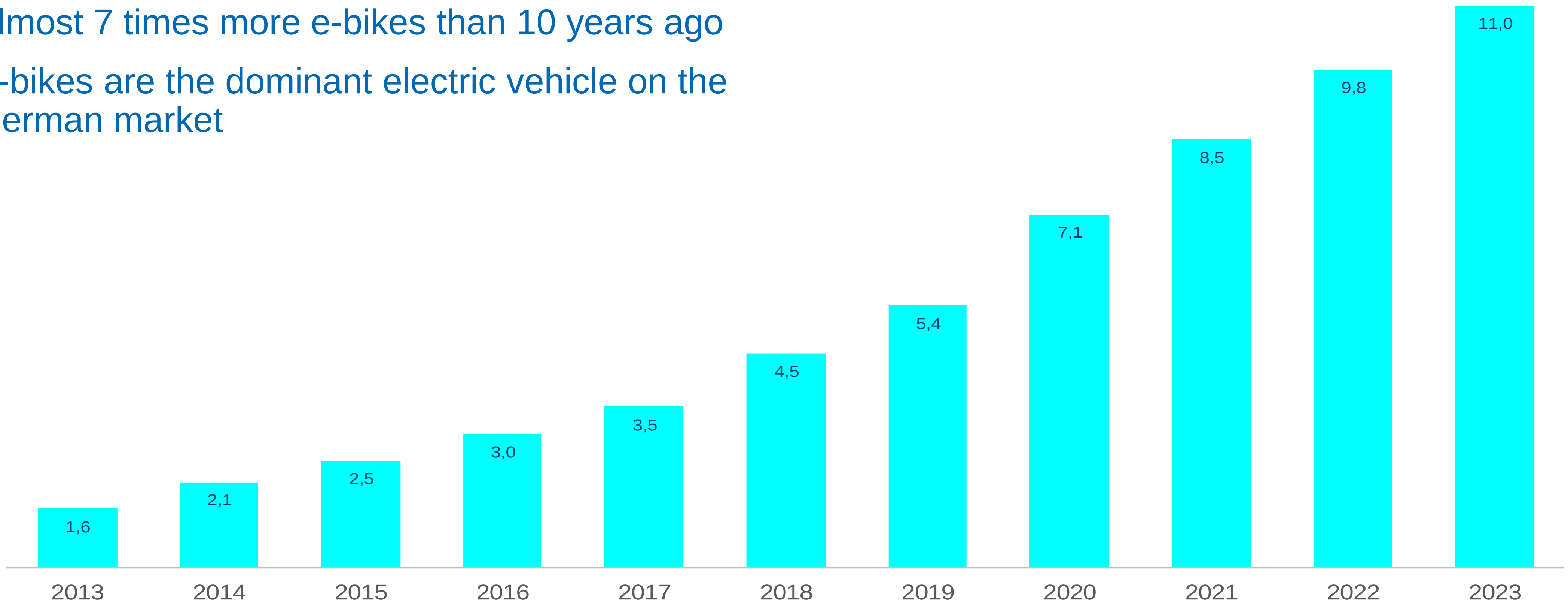


Source: ZIV (* figures adjusted by discarded bicycles)

E-bikes in Germany (in million units)

11 million e-bikes on the road

- Number of e-bikes at the end of 2023: 11 million
- Almost 7 times more e-bikes than 10 years ago
- E-bikes are the dominant electric vehicle on the German market

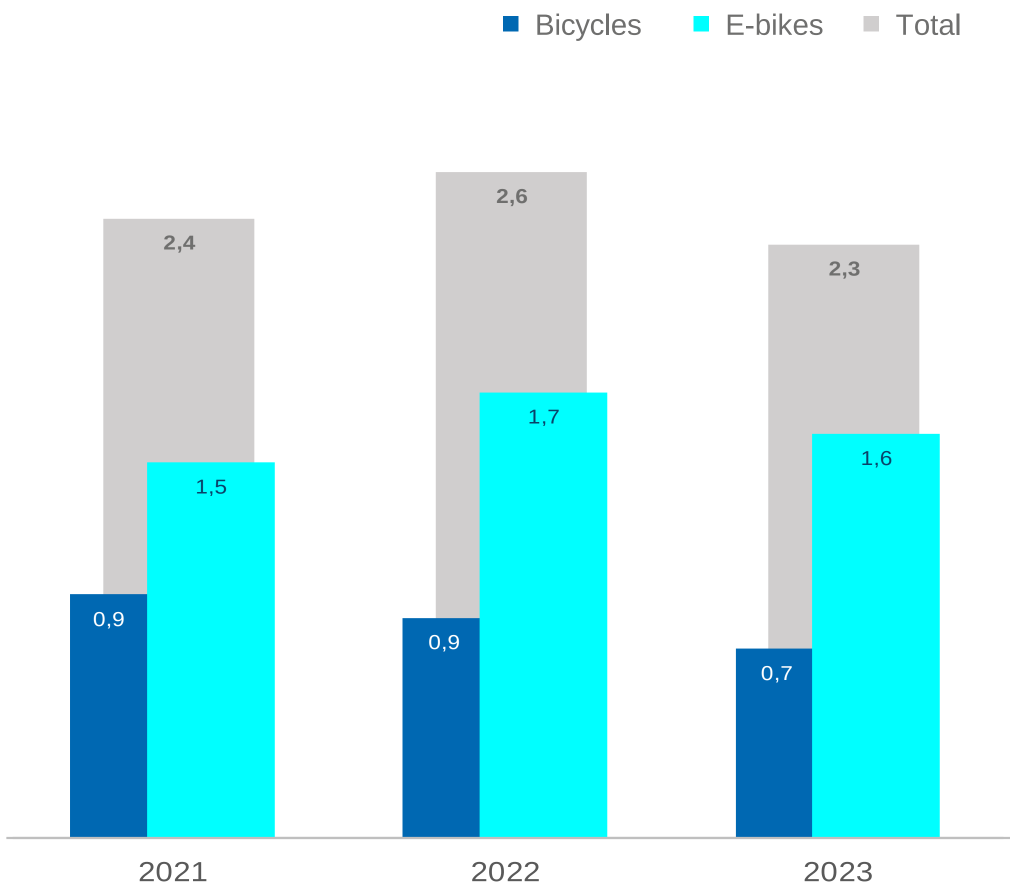


Source: ZIV

Bicycle and e-bike production in Germany (in million units)

Slight decline in production, though still high

- Total production: 2.3 million units
  → -11% compared to 2022
  → Still at an all-time high
- E-bike production: 1.6 million units
  → -5.9% decrease compared to 2022
- Production levels remain very high



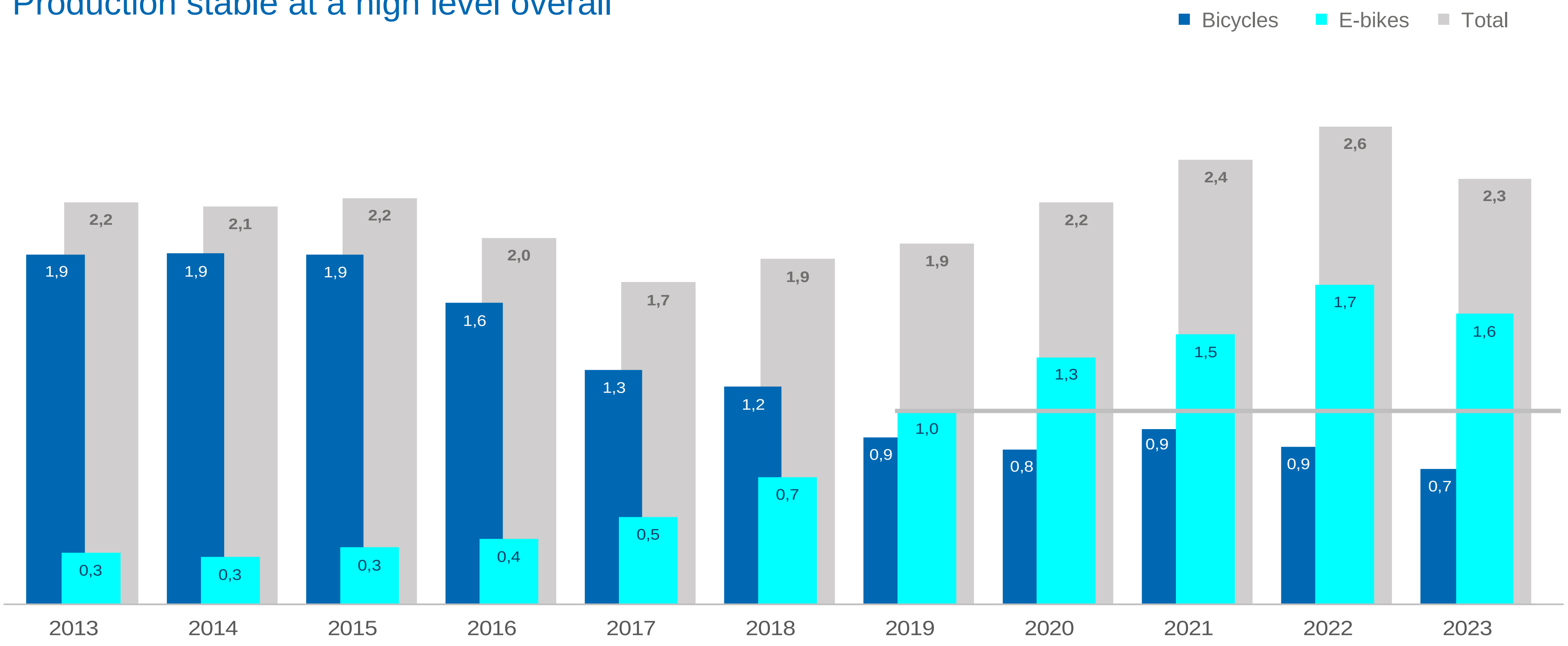
Source: ZIV

ZIV DIE FAHRRAD-INDUSTRIE

Bicycle and e-bike production in Germany (in million units)

E-bikes are driving the bicycle industry

- Production stable at a high level overall

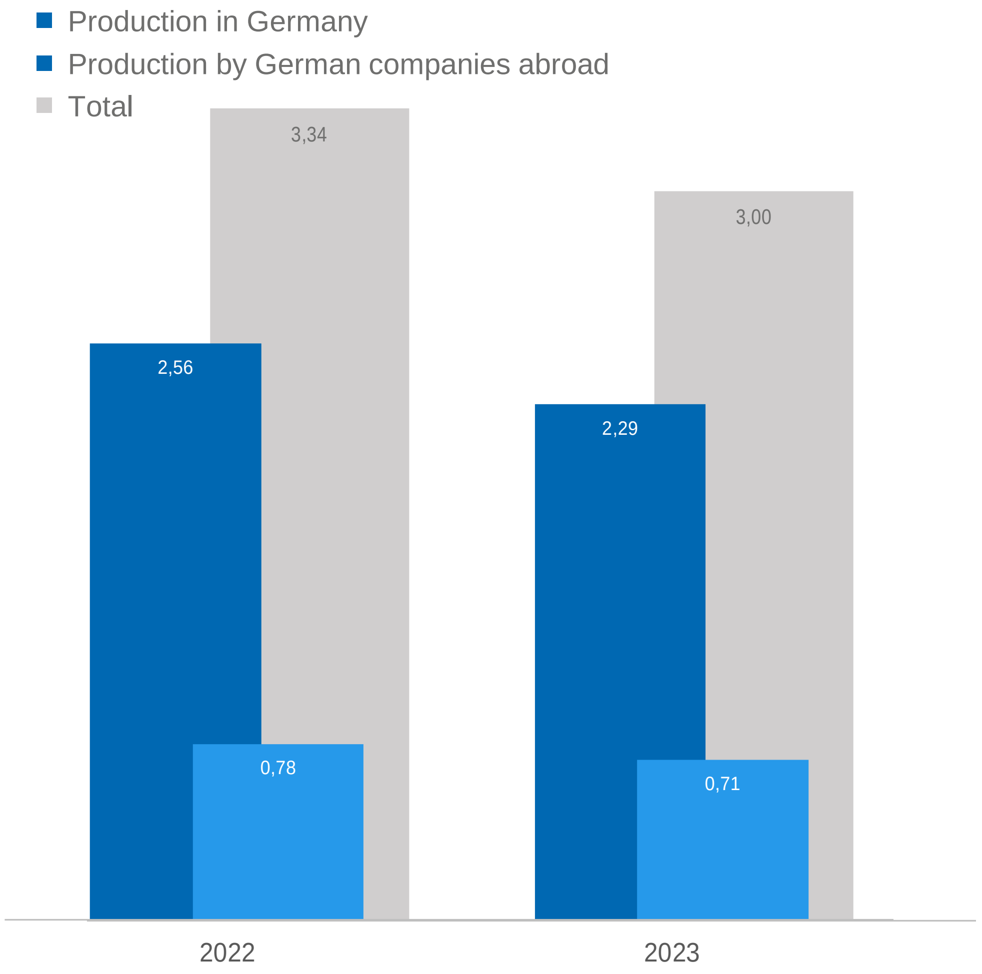


Source: ZIV

Bicycle and e-bike production by German companies abroad

“Extended production lines”

- 710,000 bicycles and e-bikes were produced outside Germany in facilities owned by German companies
- Around 85% in the EU
- Total bicycles and e-bikes produced in Germany or by German companies abroad: 3 million units

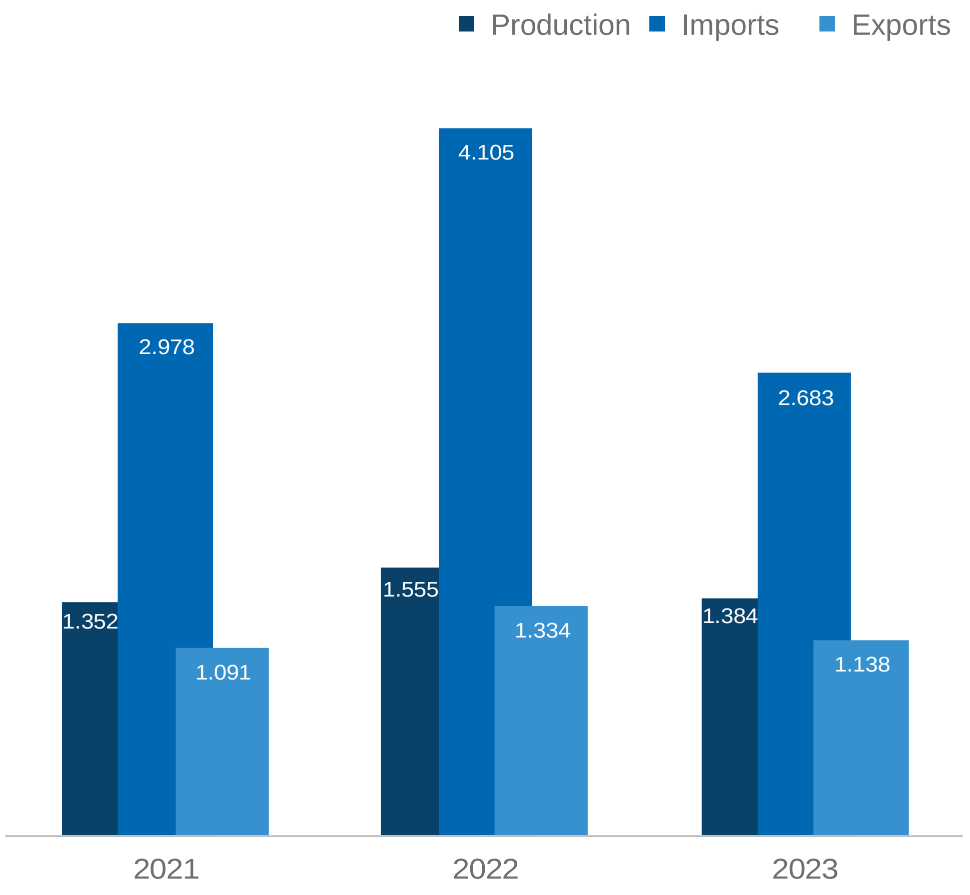


Source: ZIV

Market data – bike parts in Germany (in million euros)

Production, imports and exports remain stable overall

- Imports have normalised again now that the supply chain problems have ended
- Exports remain stable
- High level of vertical integration in Germany



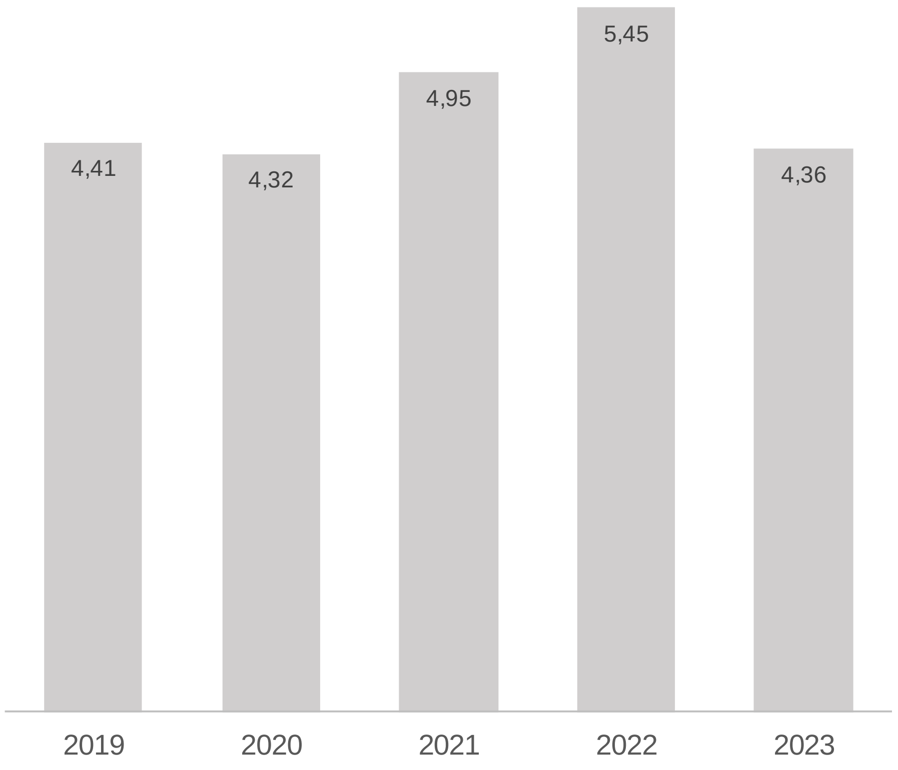
Source: StBA and ZIV

Domestic supply of bicycles and e-bikes to retailers (in million units)

High stock levels tangible

Domestic supply =
production plus imports minus exports

- Domestic supply to German retailers: 4.36 million units in 2023
- Decline in supply due to high stocks remaining from 2022
- Sustained good performance of the bicycle industry



Source: ZIV

ZIV DIE FAHRRAD-INDUSTRIE

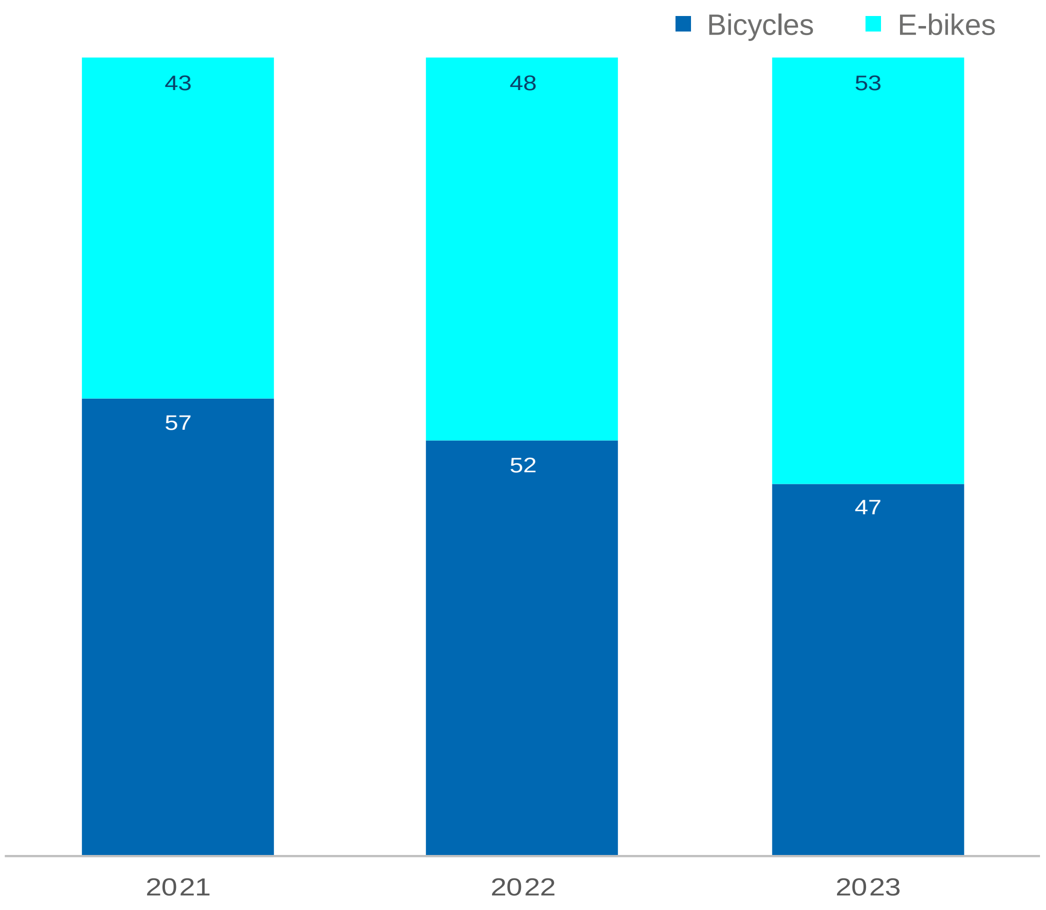
2023 Market Data – Bicycles and E-Bikes
2. Bicycle and e-bike sales in Germany

Photo: bumm

Shares of bicycles and e-bikes sold in Germany (as a percentage)

E-bikes overtake bicycles in sales

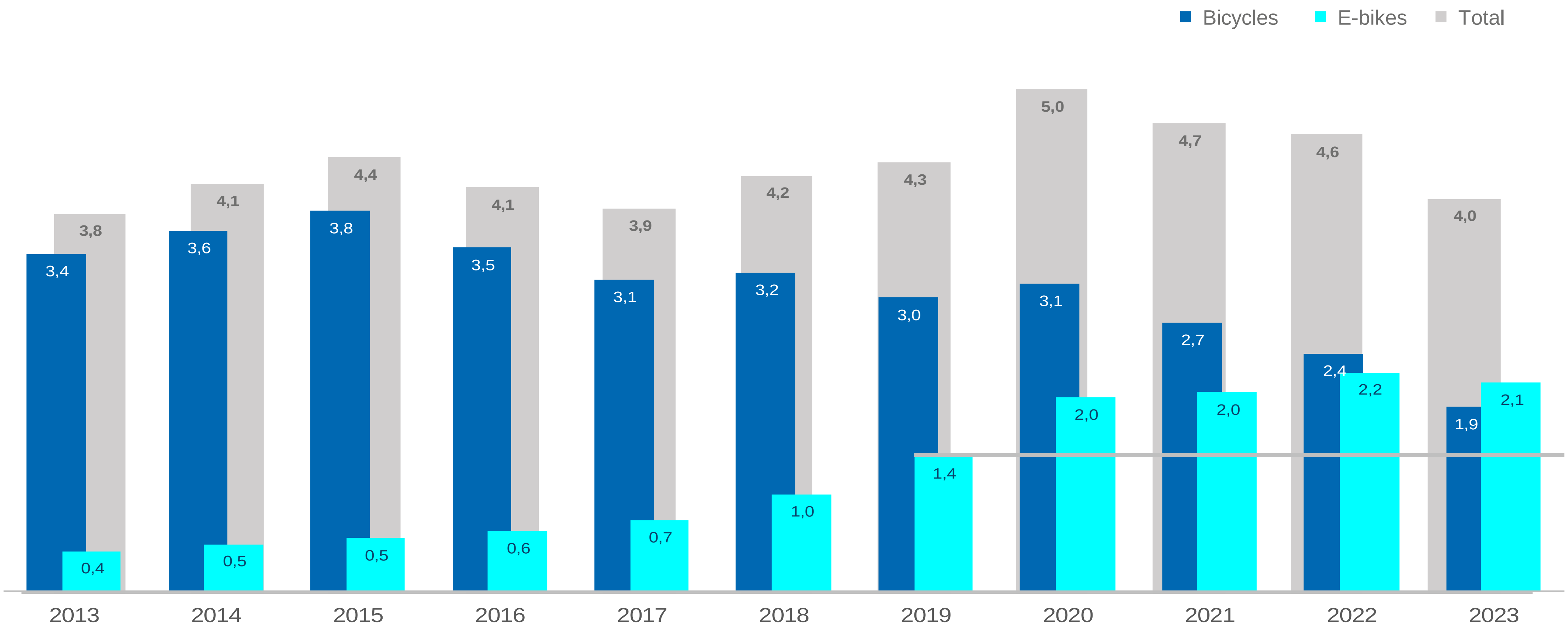
- Share of e-bikes in sales exceeds 50% for first time
- **Bicycles: 1.9 million (47%)**
- **E-bikes: 2.1 million (53%)**
- Forecast: e-bike share will continue to grow



Source: ZIV

Sales of bicycles and e-bikes in Germany (in million units)

Decrease in units compared to 2022



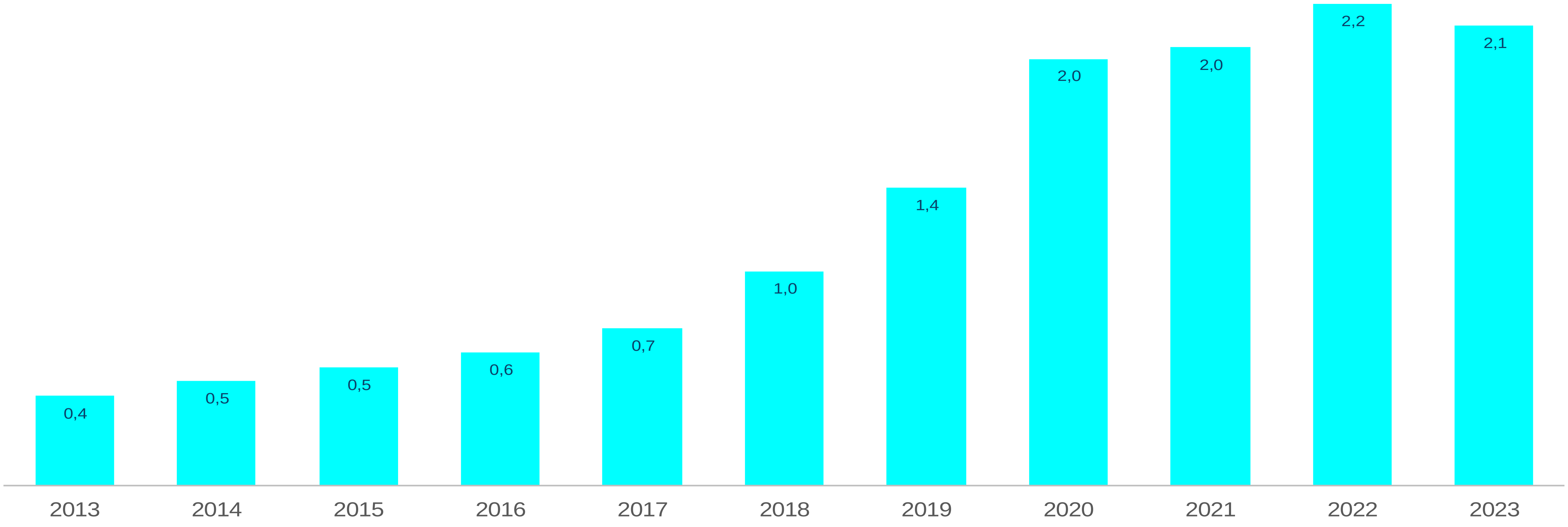
Source: ZIV

ZIV DIE FAHRRAD-INDUSTRIE

E-bike sales in Germany (in million units)

E-bikes: drivers of sales, turnover and innovation

- E-bike sales more than doubled since 2018 and increased fivefold since 2013

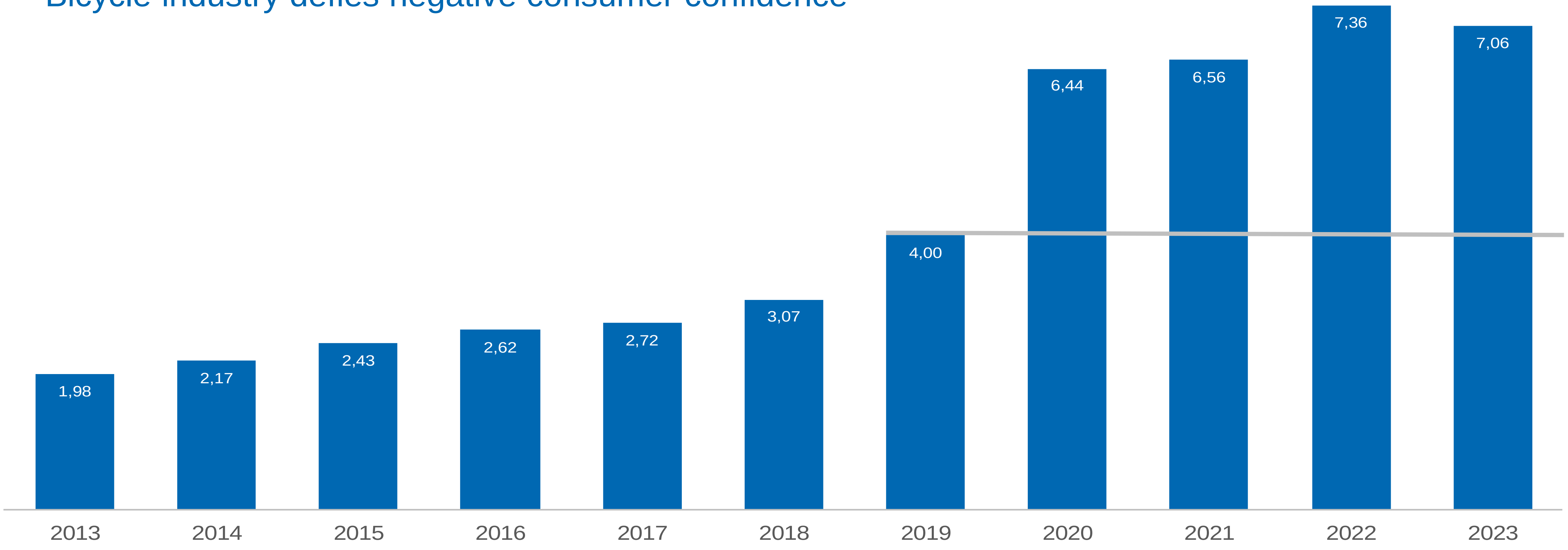


Source: ZIV

Sales value of bicycles and e-bikes in Germany (in billion euros)

Stable high sales

- Bicycle boom continues: sales remain consistently high
- Bicycle industry defies negative consumer confidence

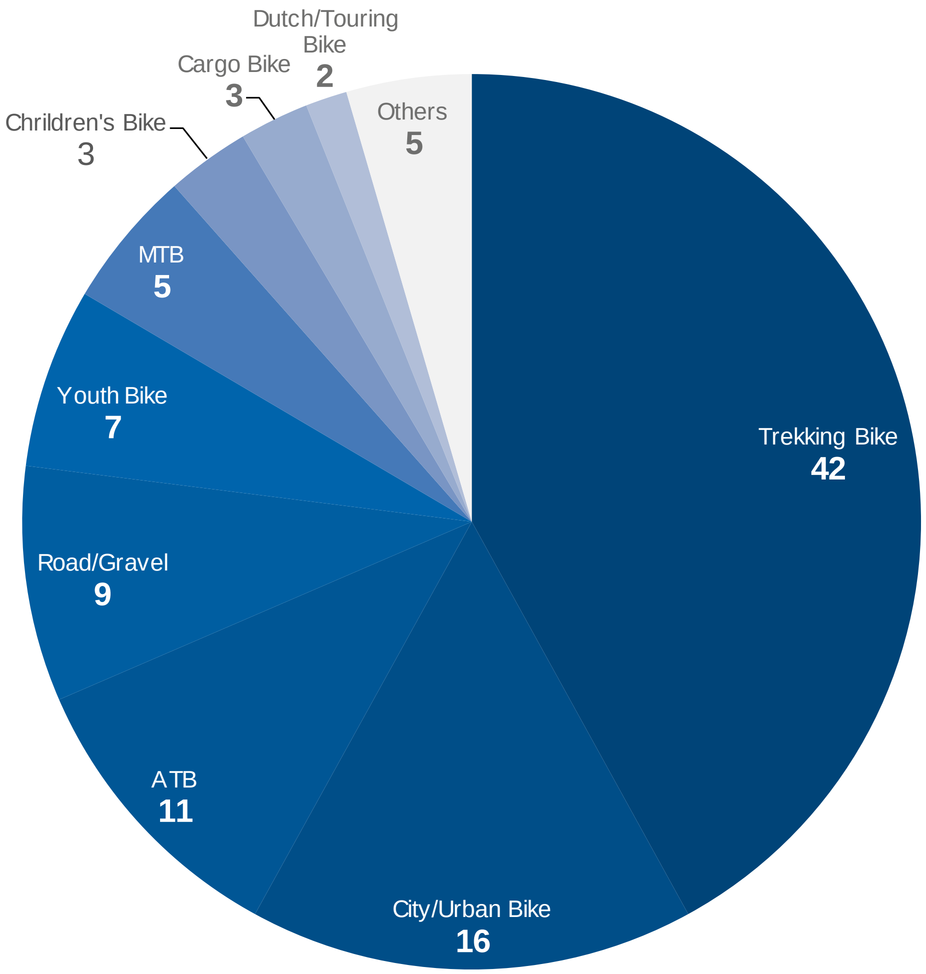


Source: ZIV

Bicycle product category shares (percentages of sales)

Versatile bicycles dominate market

- Trekking, city/urban and all-terrain bikes account for more than two thirds of bicycle sales: everyday and leisure use

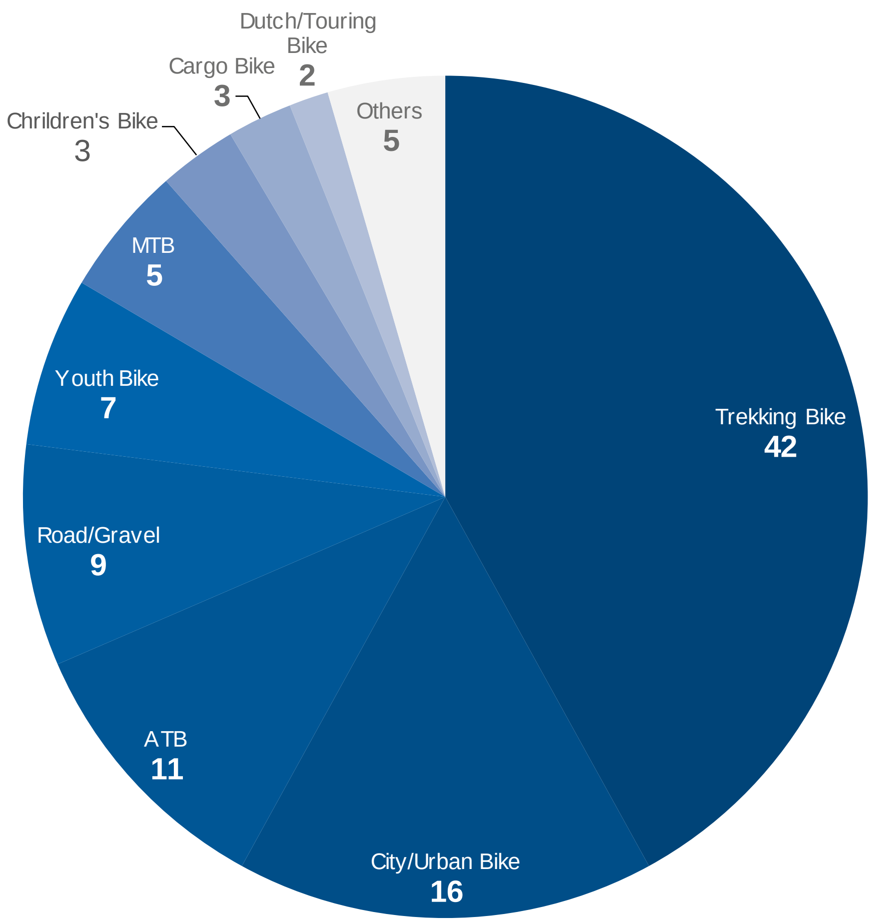


Source: ZIV

Bicycle product category shares (percentage of sales)

Shares of bicycles for urban use: 86.5%

- **Urban:** Across all product categories, bikes for urban use hold a 86.5% market share
  (excluding bicycles for children and youths and other bicycles)
- Trekking bikes hold by far the largest share with 42% (2022: 45%), followed by city/urban bikes with 16% (2022: 18%)
- ATB (all-terrain bikes for roads + light terrain): 10.5% (2022: 9%)
- **Sport:** Share of sports bicycles: 13.5% (racing bikes, gravel bikes, MTBs)
- Share of non-motorised MTBs has stabilised at 5% (2022: 4%)

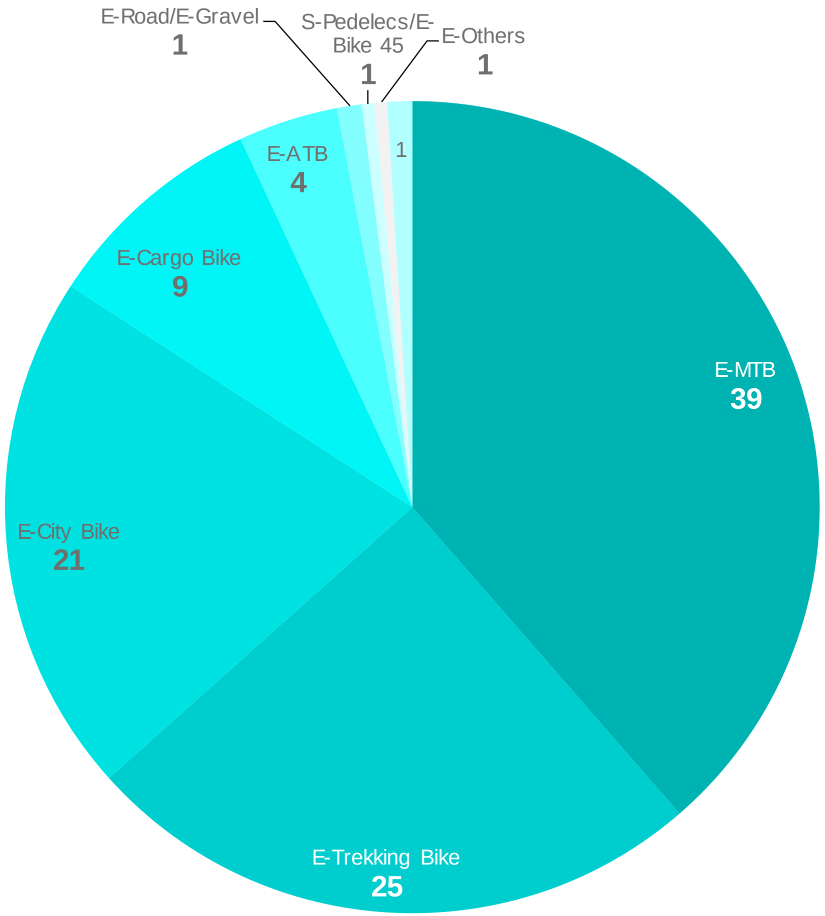


Source: ZIV

E-bike product category shares (percentages of sales)

Diverse product categories, also for e-bikes

- Slight decrease in e-city bikes and e-trekking bikes (-3% compared to 2022)
- E-mountain bikes retain their lead
- Cargo bikes with motor assistance remain very popular
- New category: E-ATB (motorised all-terrain bikes for roads and light terrain)

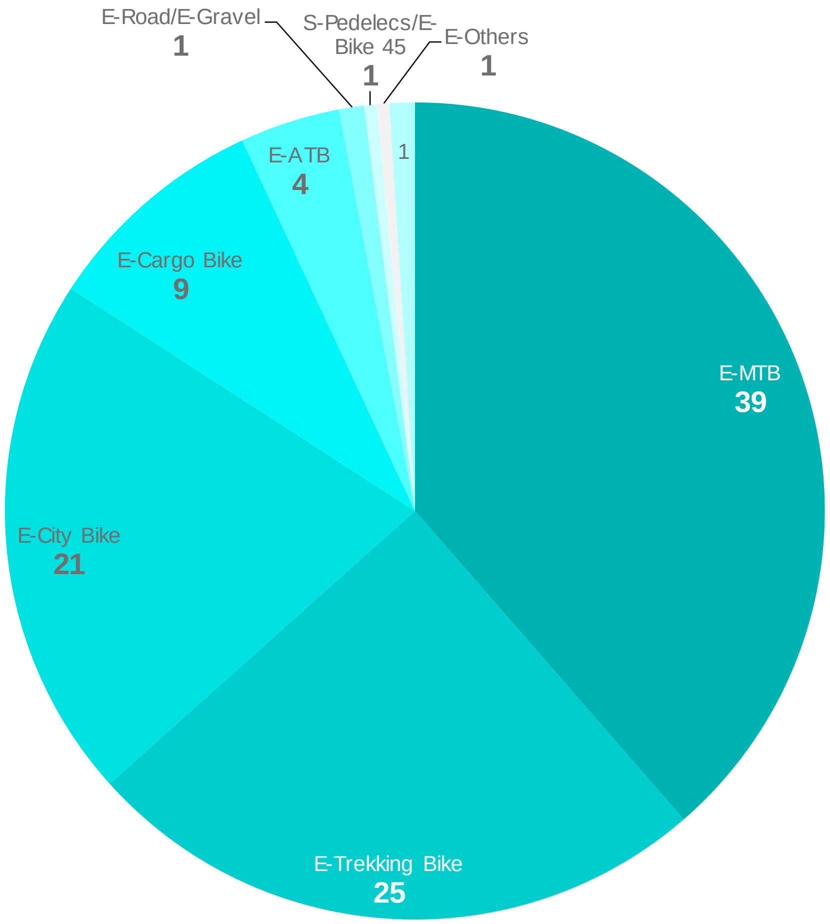


Source: ZIV

E-bike product category shares (percentages of sales)

Sharp increase in e-cargo bikes (+14.5%)

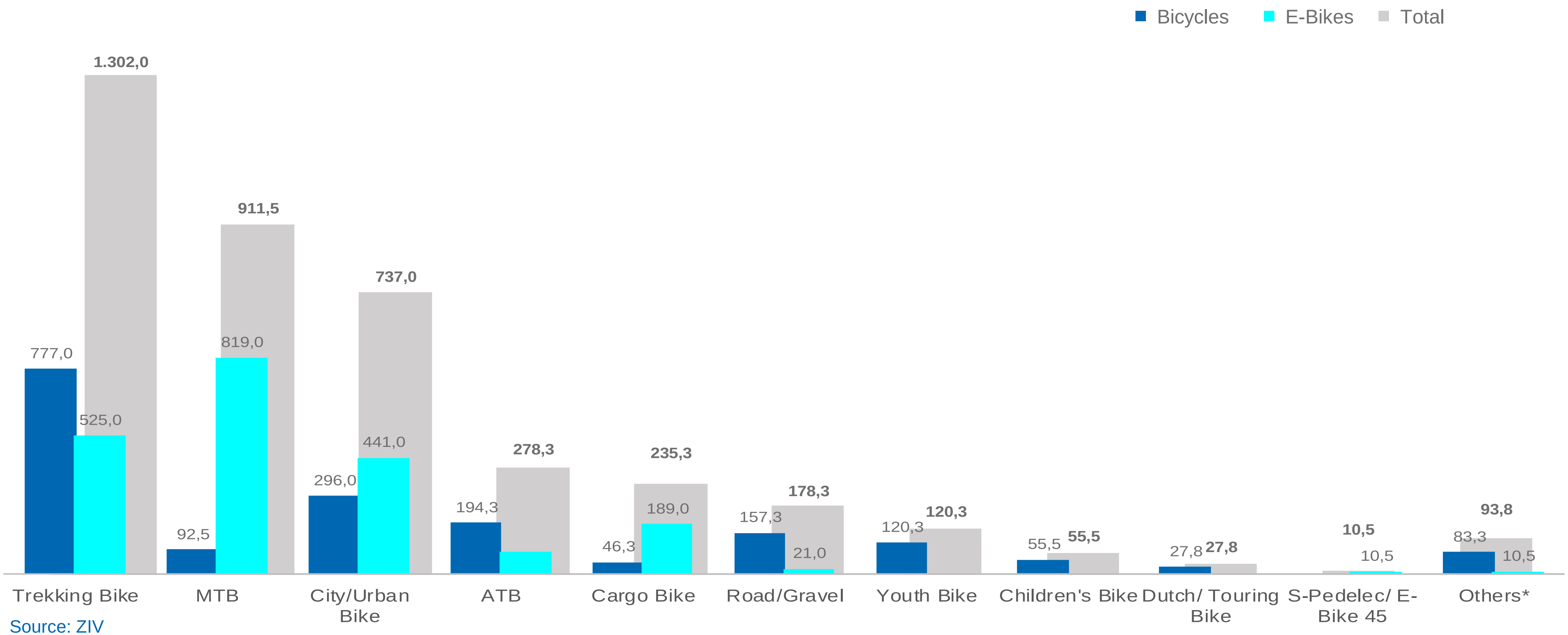
- E-trekking bikes favored by buyers for a long time, but e-MTBs experienced a boom in 2021. They took the lead for the first time and retained this position in 2023.
- **Biggest increase:** E-cargo bikes / 189,000 units (2022: 165,000 units) Increase: 14.5%
- **E-MTBs**
  39% / 819,000 units (2022: 836,000 units) 2% decrease
- **E-trekking bikes**
  25% / 525,000 units (2022: 616,000 units) 14.7% decrease
- **E-city bikes**
  21% / 441,000 units (2022: 528,000 units) 16.5% decrease
- **E-cargo bikes**
  9% / 189,000 units (2022: 165,000 units) 14.5% increase
- **Racing/gravel bikes**
  1% / 21,000 units (2022: 22,000 units) 4.5% decrease
- **Speed pedelecs**
  0.5% / 10,500 units (2022: 11,000 units) 4.5% decrease



Source: ZIV

Sales of bicycles and e-bikes by product category (in 1,000 units)

Clear differences between bicycles and e-bikes



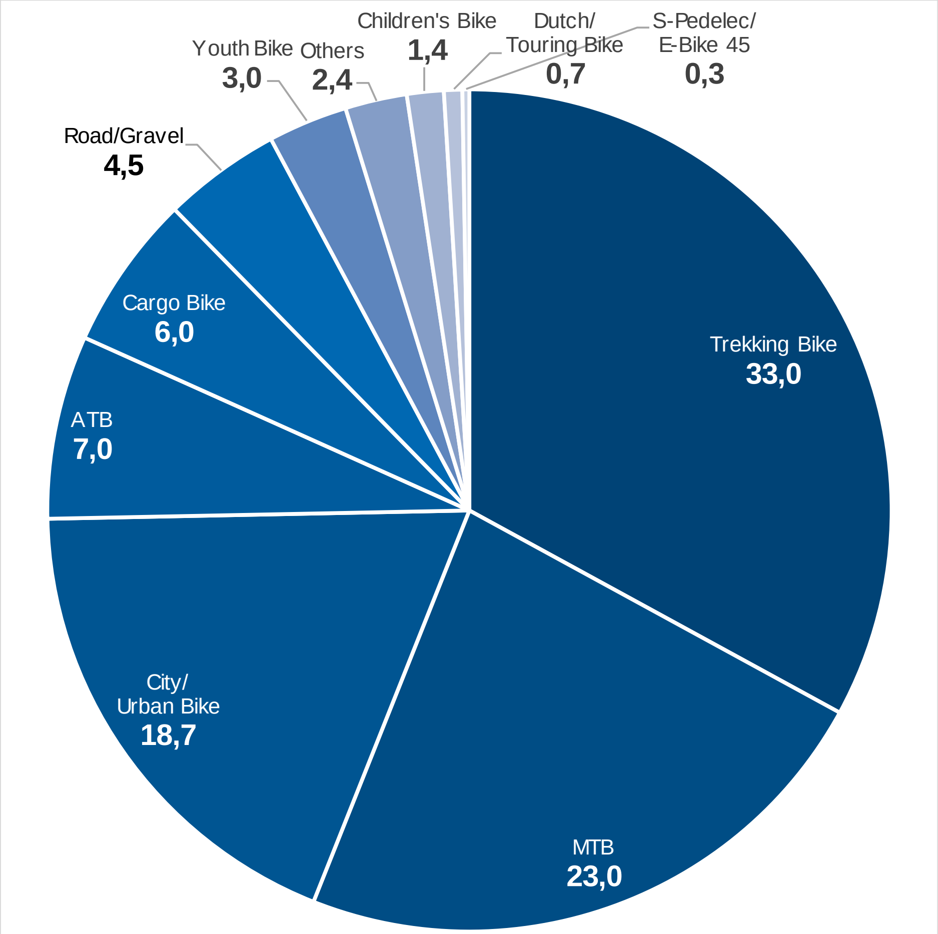
Source: ZIV

ZIV DIE FAHRRAD-INDUSTRIE

Sales of bicycles and e-bikes by product category (percentages of sales)

Diverse uses

- For all product categories together: Most bicycles and e-bikes are considered suitable for both everyday use and cycling trips



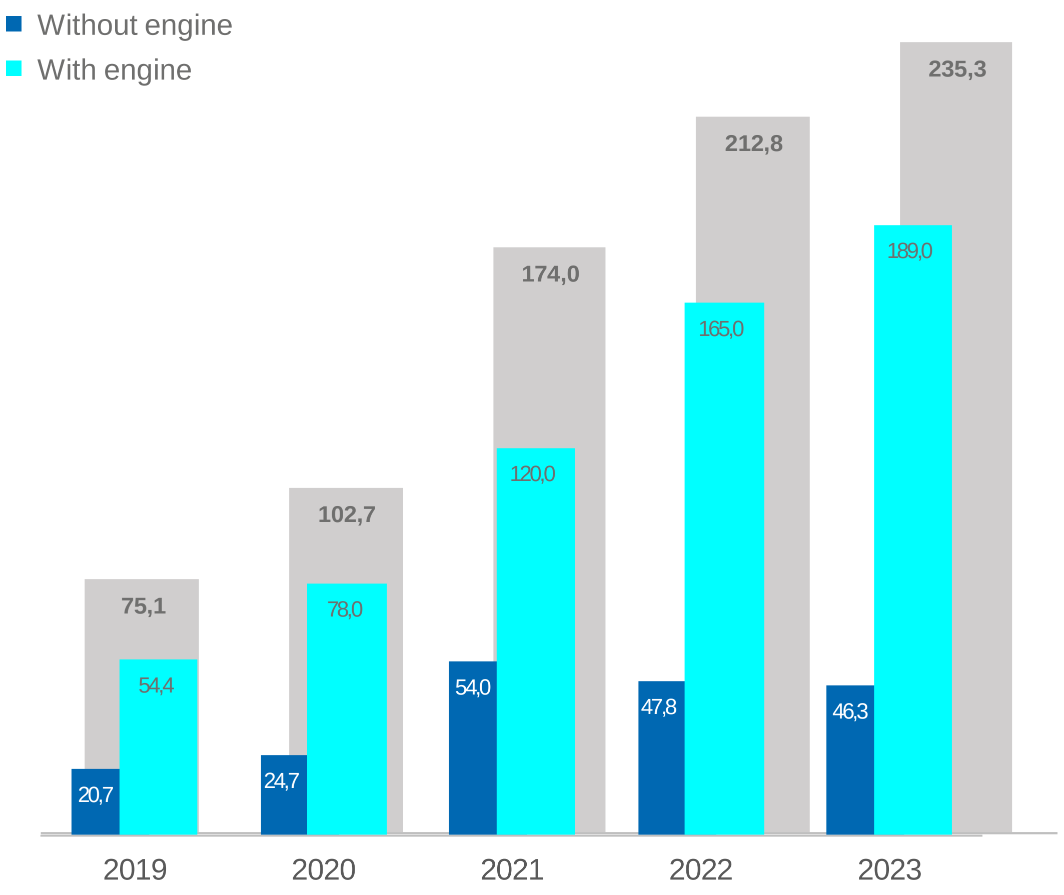
Source: ZIV

ZIV DIE FAHRRAD-INDUSTRIE

Sales of cargo bikes (in 1,000 units)

Cargo bikes are booming – especially those with an engine

- Significant growth (+ 14.5%) primarily linked to huge popularity of e-cargo bikes
- For many, motor assistance enables usage
- Total cargo bikes sold: 235,250 units (2022: 212,800 units)
- Total increase compared to 2022: 10.5%



Source: ZIV

ZIV DIE FAHRRAD-INDUSTRIE

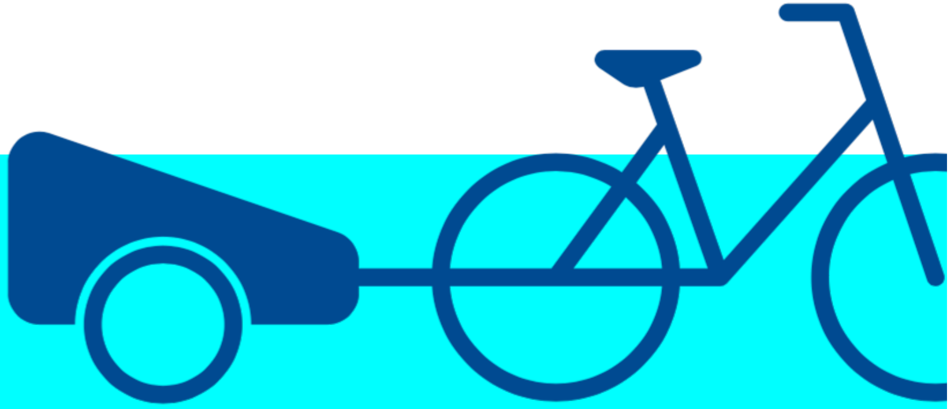
Bicycle trailer sales

Remains an underestimated market

- After bicycle-mounted seats, bicycle trailers are the most popular solution for transporting children
- Child transport options*:

Seat	55%
Trailer	**42%**
Cargo bike	15%
Other	10%

Included in the ZIV data survey since 2022:
Bicycle trailers sold in 2023
206,000 units (2022: 293,000)
By way of comparison: cargo bikes sold in 2023: 235,300 units



Source: ZIV   *2023 SINUS bicycle monitor

ZIV DIE FAHRRAD-INDUSTRIE

2023 Market Data – Bicycles and E-Bikes

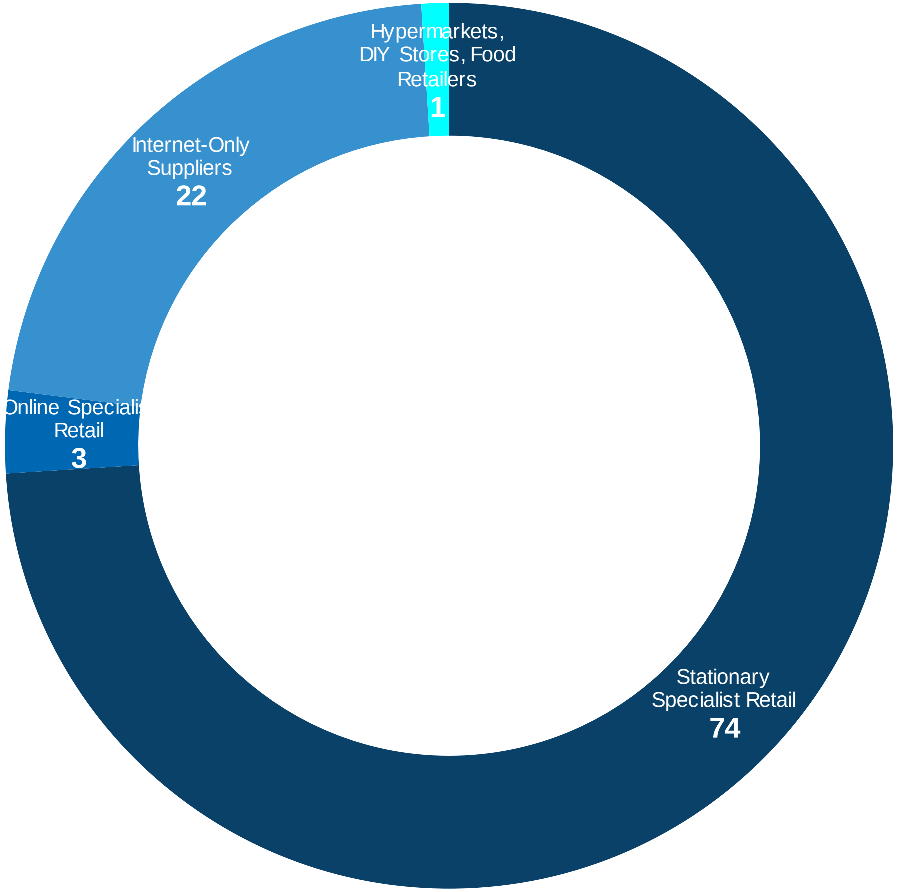
3. Sales – Retail – Price development

Photo: ZEG

Shares of distribution channels (as a percentage)

Specialist retail share remains high at 77%

- **Consumers continue to value quality, purchase advice and service highly**
- Stationary specialised retail: 74%*
  (No change compared to 2022)*
- Online specialist retail: 3%*
  (No change compared to 2022)*
- Internet-only suppliers: 22%*
  (Minimal change compared to 2022: +1%)*
- Hypermarkets, DIY stores and food retailers continue to lose ground: down 1% from 2% in 2022 to 1% in 2023



Source: ZIV

Average sales prices for bicycles and e-bikes (all sales channels)

Inflation-related increases only passed on proportionately – stable price level

- **Customers continue to focus on high quality and good technology, especially for e-bikes**
- Average gross sales prices in euros for all channels and product categories* (not only stationary specialist retail):

	2019	2020	2021	2022	2023
Bicycles	343	445	466	500	470
E-bikes	2,200	2,600	2,650	2,800	2,950
Bicycles + e-bikes	**929**	**1,279**	**1,395**	**1,602**	**1,788**

* Among others, this includes the growing share of high-priced cargo bikes, which also raises the average prices.

Source: ZIV

ZIV DIE FAHRRAD-INDUSTRIE

Figures from specialist retail

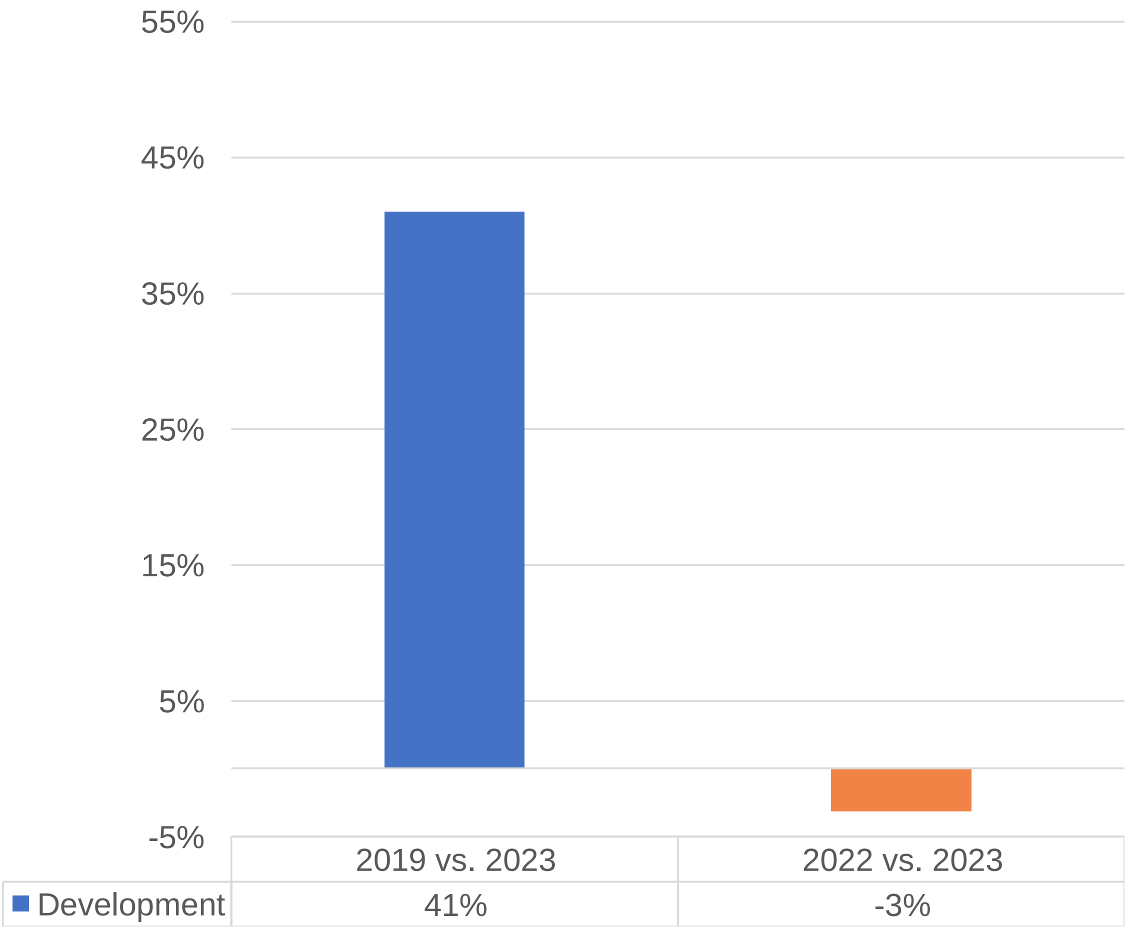
Uwe Wöll
Managing Director | VSF – German Service & Bicycle Association

Findings from the 2023 VSF/BIKE&CO retailer survey

VSF. Verbund Service und Fahrrad

Sales development between 2019 and 2023

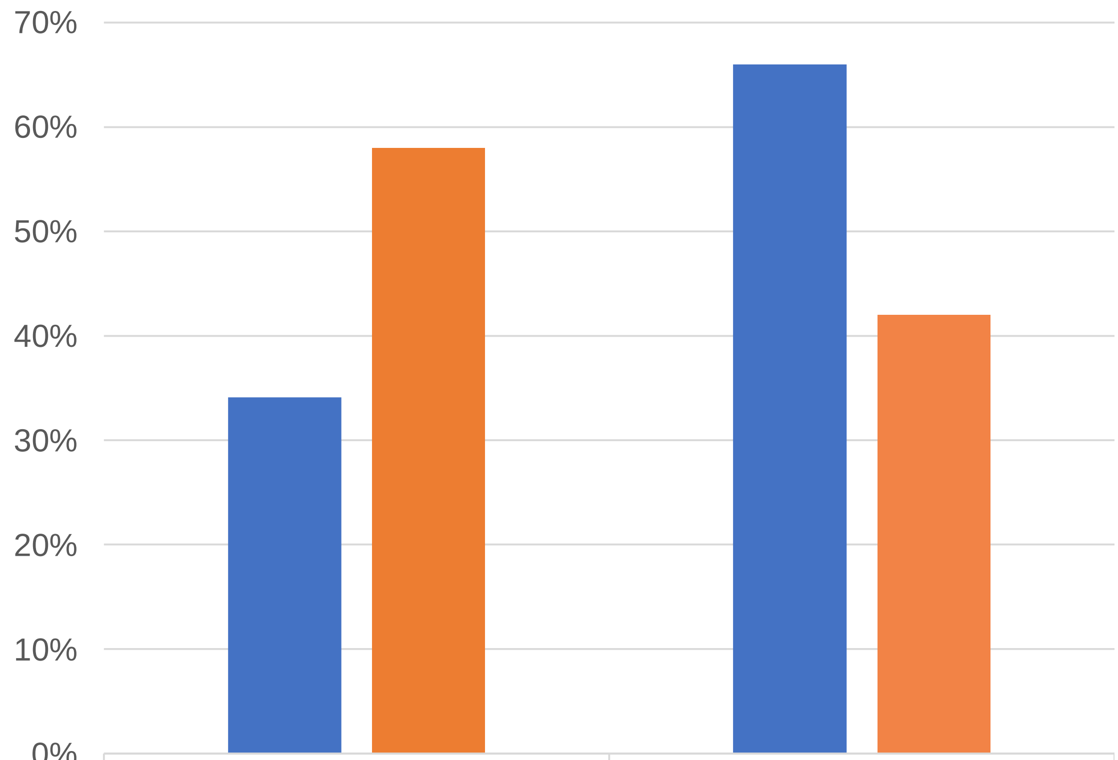
- Approx. 40% increase in sales of stationary specialist retailers since the 2020 boom year
- Stationary specialist retailers maintained high sales level in 2023



Source: VSF

Shares of e-bikes sold by stationary specialist retailers

- The e-bike success story continues: in 2023, e-bikes clearly overtook bicycles in stationary specialist retail for the first time

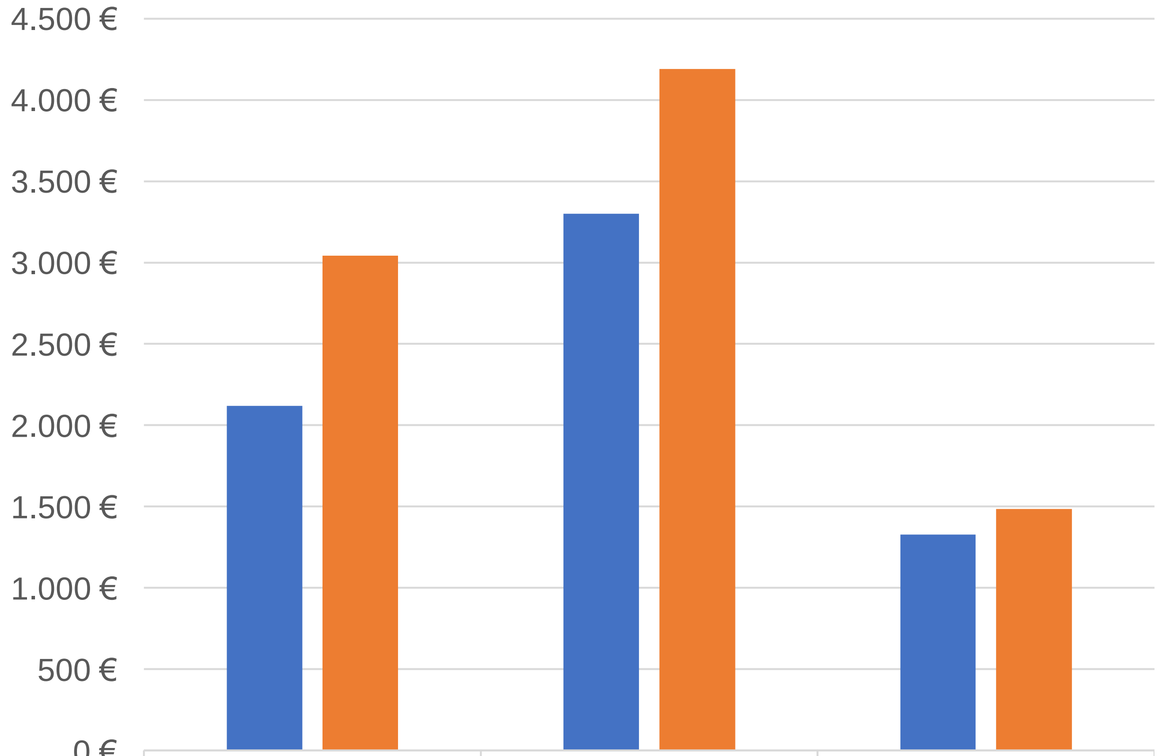


	E-bikes	Bicycles
2019	34%	66%
2023	58%	42%

Source: VSF

Average sales prices

- Customers of stationary specialist retailers continue to opt for high and top quality – especially when it comes to e-bikes
- Adjusted for inflation, the average sales price in the e-bike segment only increased moderately by 13%

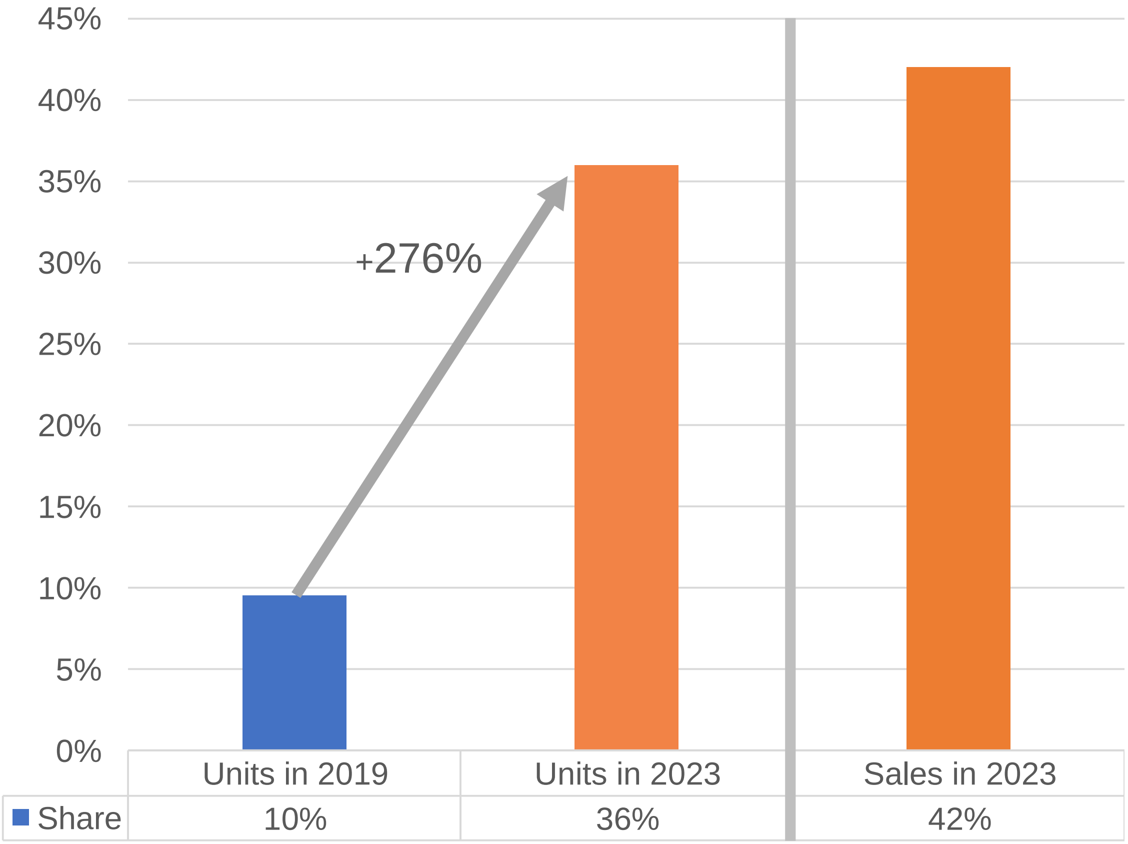


	Total	E-bikes	Bicycles
2019	2.119 €	3.301 €	1.328 €
2023	3.042 €	4.190 €	1.484 €

Source: VSF

Share of leased bicycles sold

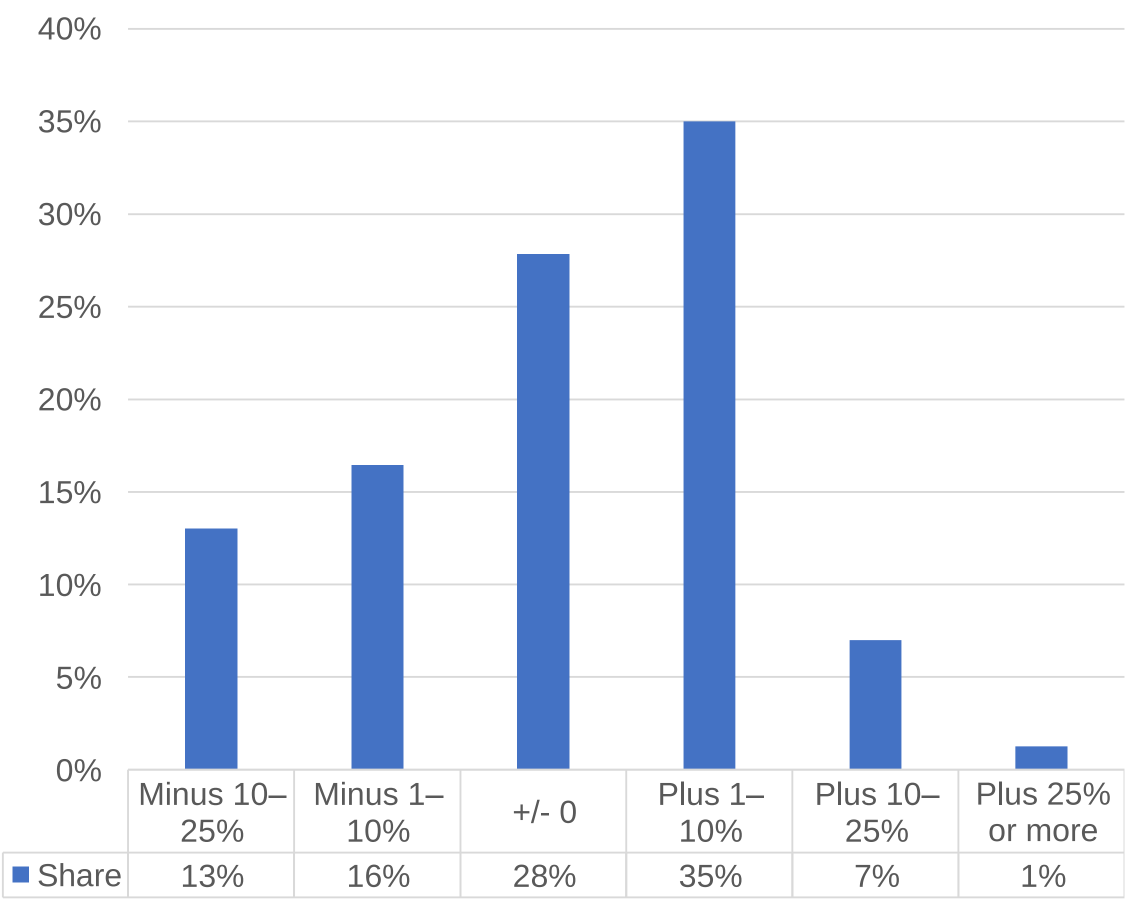
- Sales via leasing are today crucial for stationary specialised retailers
- On average, customers choose higher quality bikes for leasing



Source: VSF

Anticipated sales development in 2024

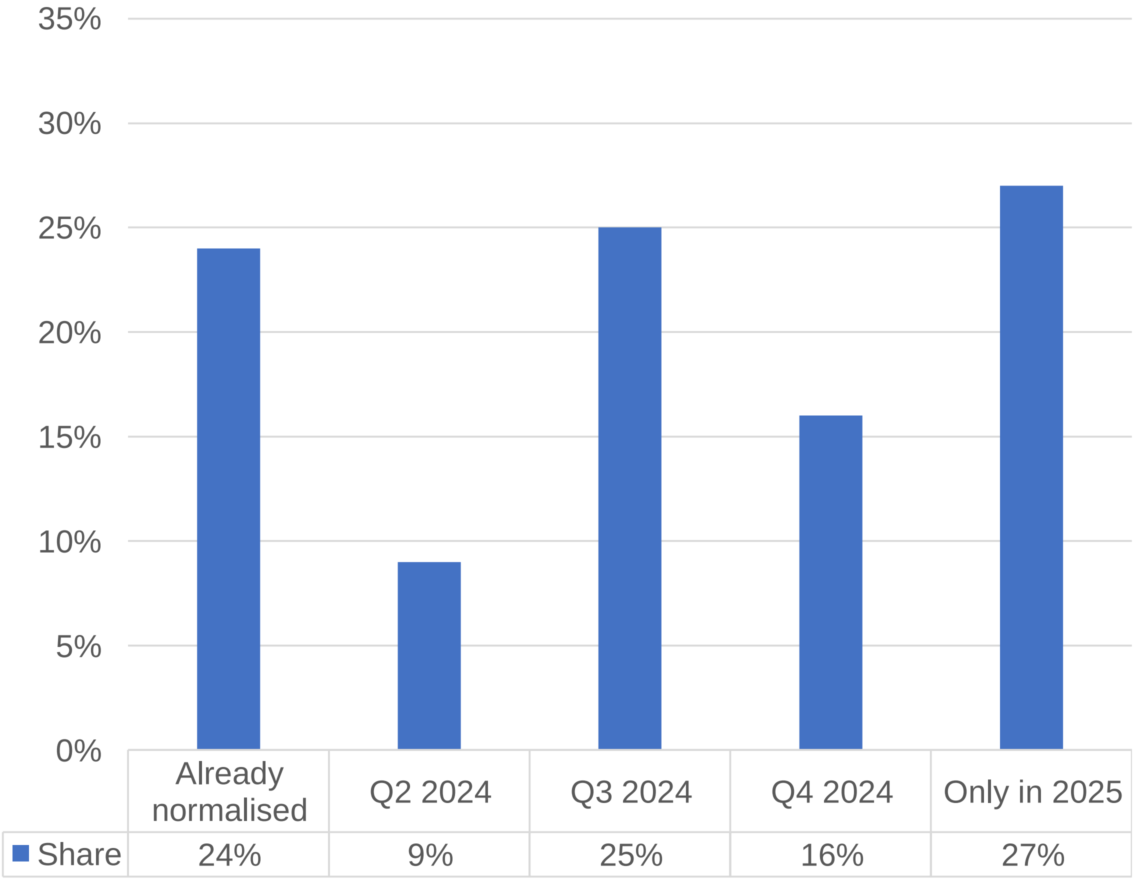
- Restrained confidence: Around 70% of stationary specialist retailers expect neutral to positive sales development in 2024 season



Source: VSF

Period anticipated for the normalisation of stock levels

- One third of specialist retailers expect to no longer have any surplus stock by the summer
- 74% of stationary specialist retailers expect their stock levels to normalise before the end of the season



Source: VSF

2023 Market Data – Bicycles and E-Bikes

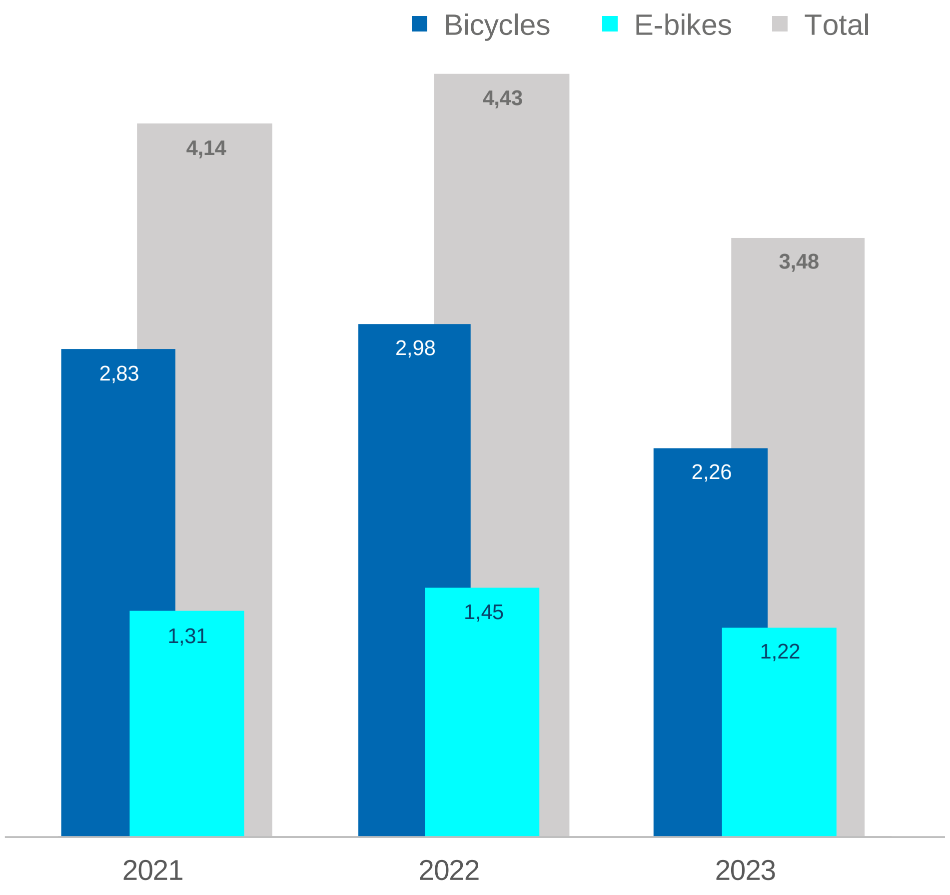
4. Imports – Exports

Photo: bumm

Imports of bicycles and e-bikes into Germany (in million units)

Imports react to high stock levels and strong domestic production

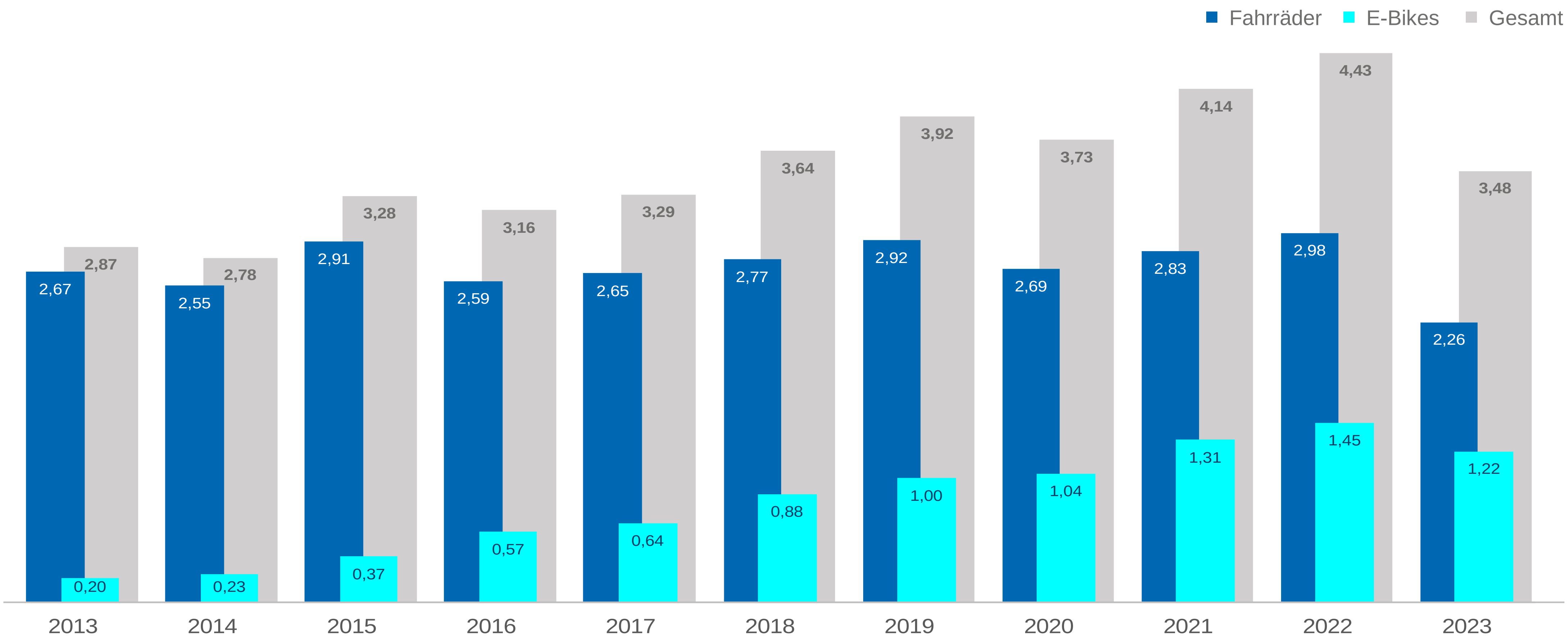
- 3.48 million bicycles and e-bikes were imported into Germany in 2023 compared to 4.43 million in 2022 (-21%)
- Note: Some German manufacturers have production facilities in neighbouring EU countries.



Source: StBA

Imports of bicycles and e-bikes to Germany (in million units)

Slight decline also discernible in imports



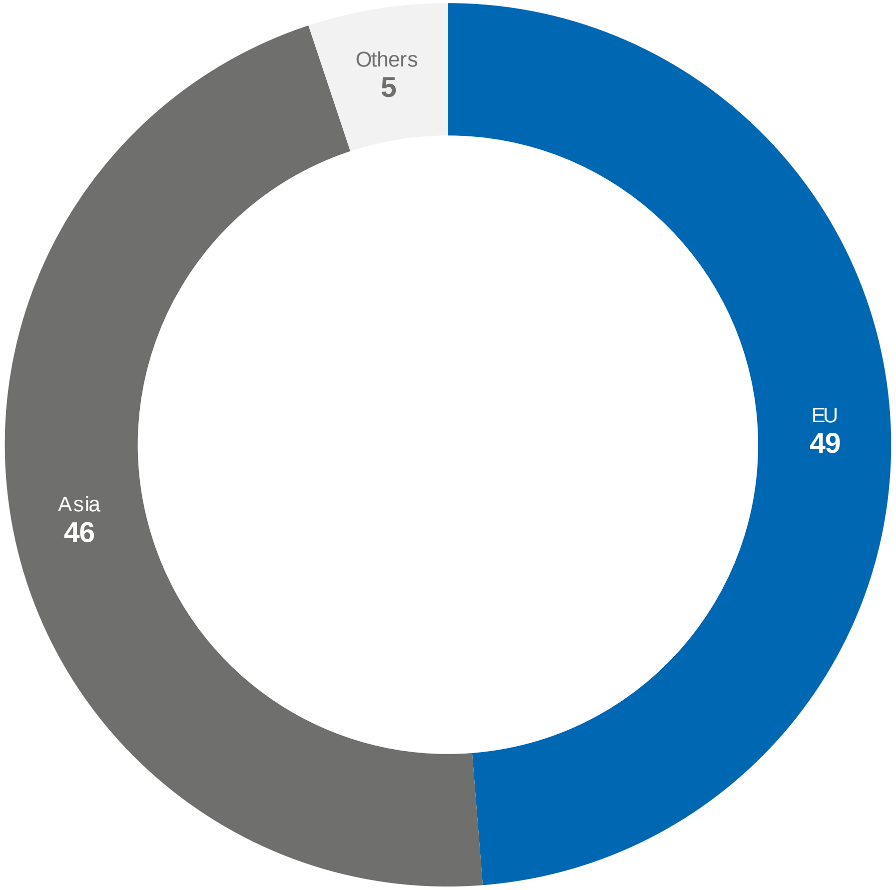
Source: StBA

ZIV DIE FAHRRAD-INDUSTRIE

Imports of bicycles (excluding e-bikes) into Germany (as a percentage)

EU production continues to gain in importance

- EU share growing (44.3% in 2022)
- Asia loses ground (55.1% in 2022)
- Slight tendency toward “reshoring” discernible within EU

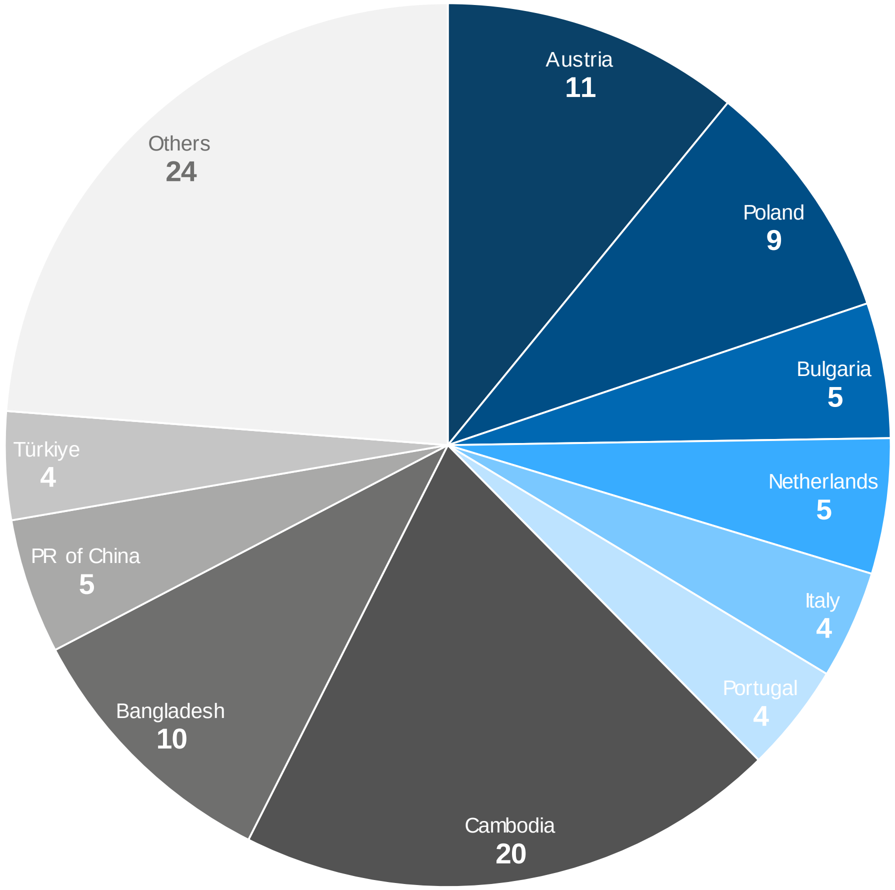


Source: StBA

Share of bicycle imports (excluding e-bikes) into Germany (as a percentage)

Breakdown by importing country

- Main supplier (still far in the lead!): Cambodia with 20%

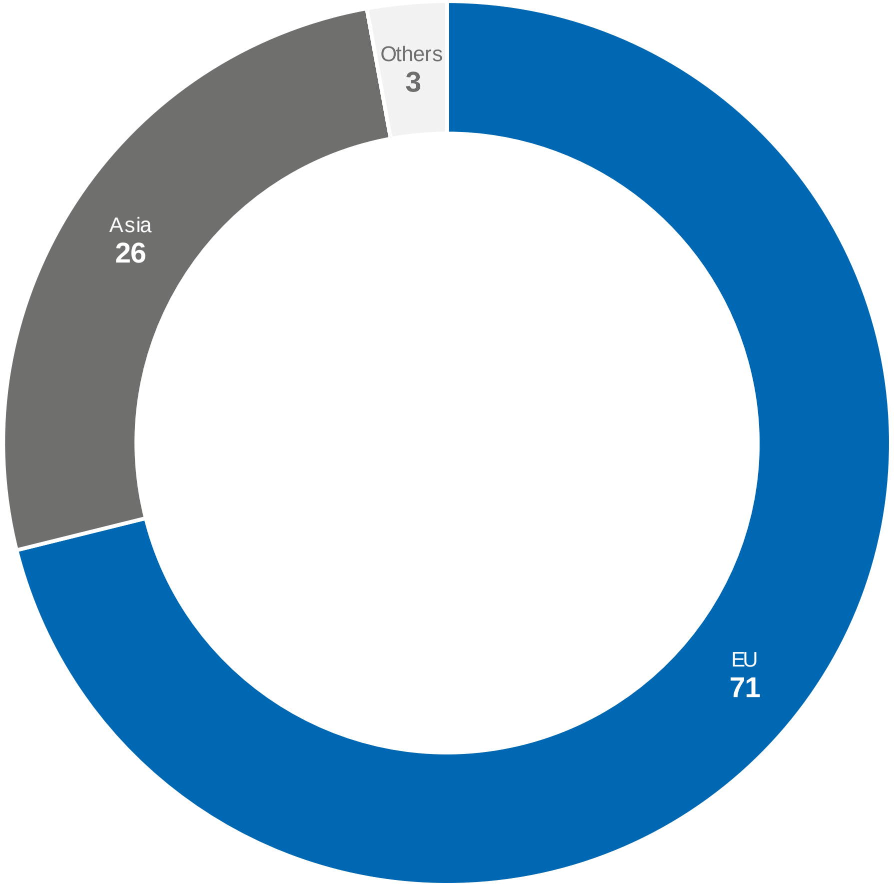


Source: StBA

Share of e-bike imports to Germany – by region (as a percentage)

Asia vs. EU: more than three times as many e-bikes from EU countries

- 1.22 million e-bikes imported
- Share of e-bikes imported from EU countries lay at around 71% in 2023 (69% in 2022)
- Proportion of imports from Asia decreased slightly to 26% (27% in 2022)
- Protection through anti-dumping duties (China) works – and remains necessary

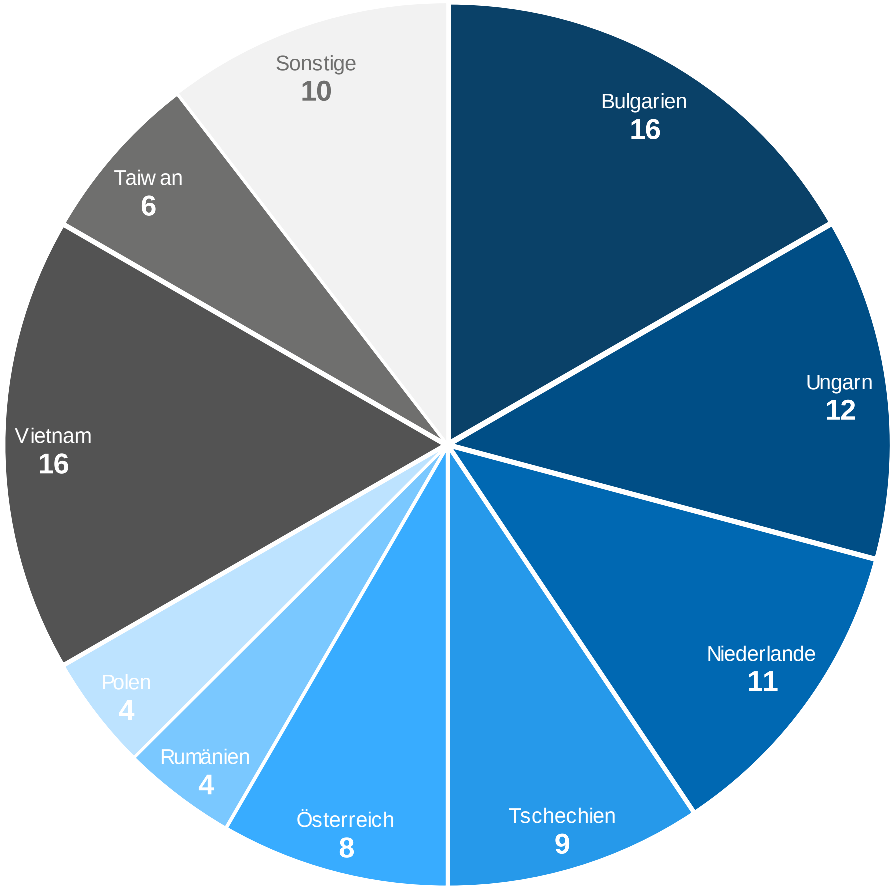


Source: StBA

Share of e-bike imports to Germany – by country (as a percentage)

E-bike imports – partly “extended production lines”

- Largest suppliers in the EU:
  Bulgaria, the Netherlands and Hungary
- Largest suppliers in Asia:
  Vietnam and Taiwan

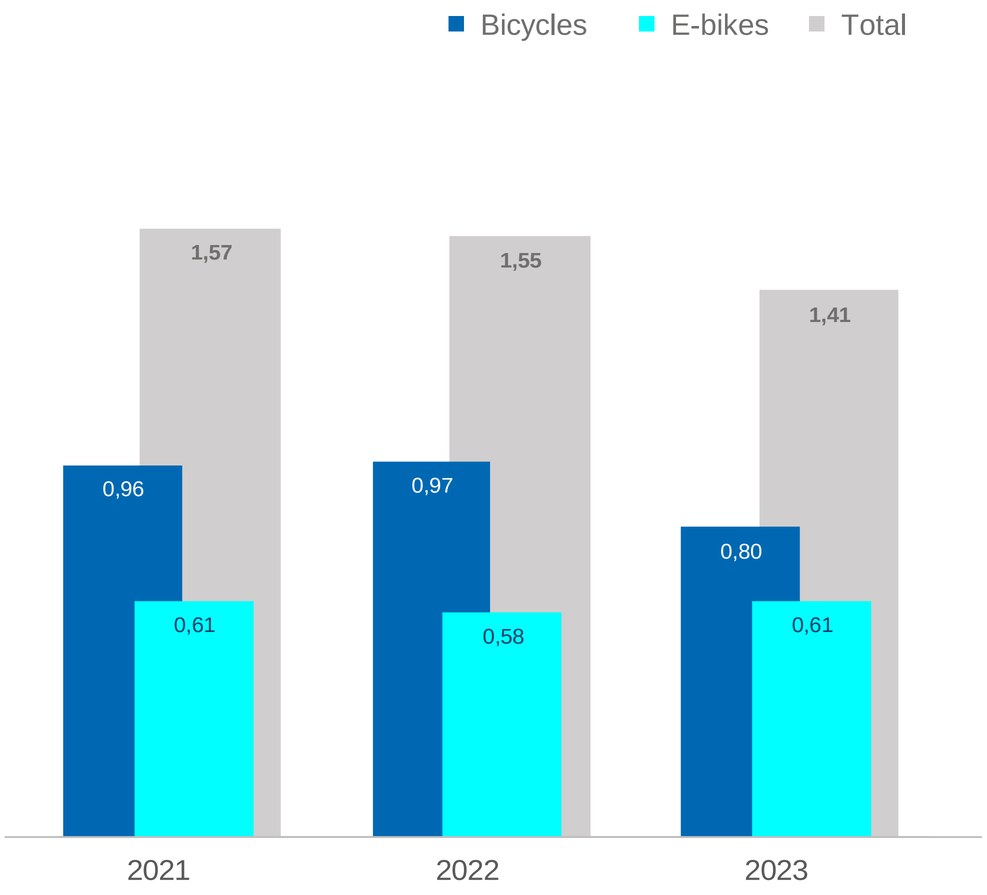


Source: StBA

Exports of bicycles and e-bikes to Germany (in million units)

Slight increase in e-bike exports

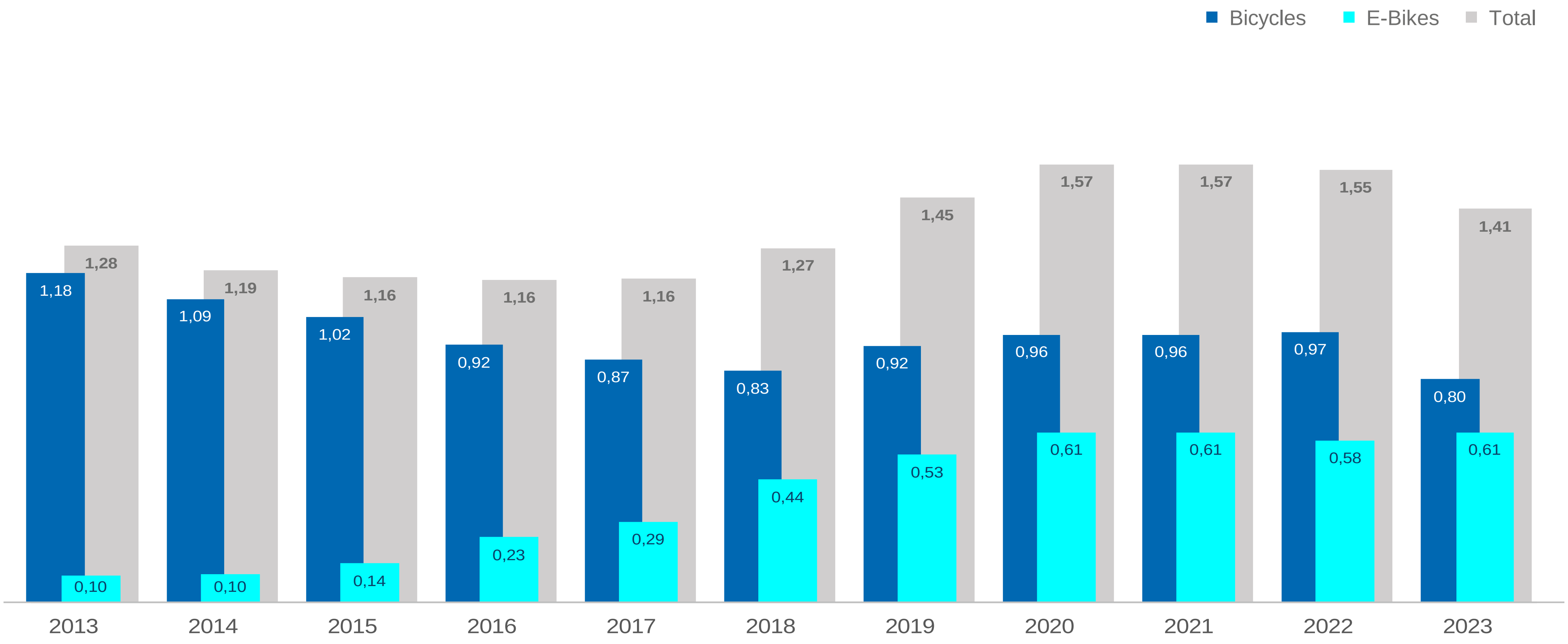
- 795,000 units exported in total
  – 175,000 units fewer than in previous year
- E-bike exports grew slightly compared to previous year (up 30,000 units to 610,000 units)
- Overall, slight decrease in exports (down 15,000 units to 1.41 million units)



Source: StBA

Exports of bicycles and e-bikes from Germany (in million units)

Slight decline in exports, though e-bike exports remain strong



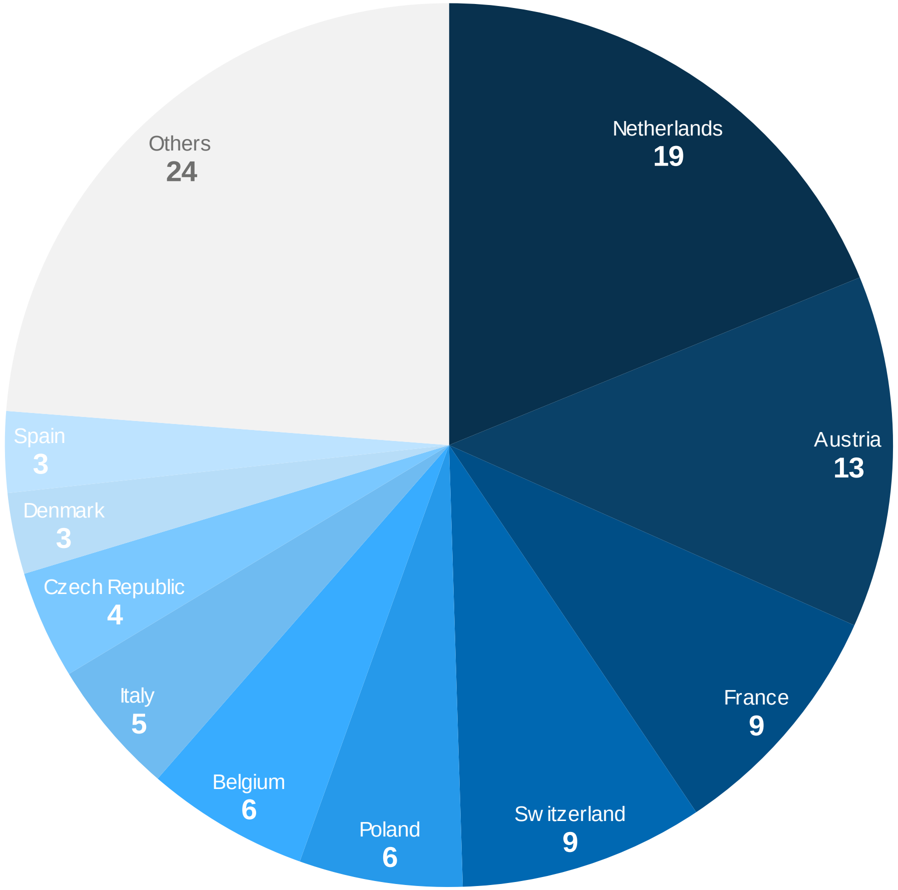
Source: StBA

ZIV DIE FAHRRAD-INDUSTRIE

Share of bicycle exports (excluding e-bikes) from Germany (as a percentage)

Netherlands remains main customer for German bicycles

- Almost 93% of exported bicycles delivered to EU/EFTA countries
- With 19%, the Netherlands is the most important export destination, followed by Austria with 13% and France with 9%
- Bicycles “Made in Germany” still in high demand in other European countries

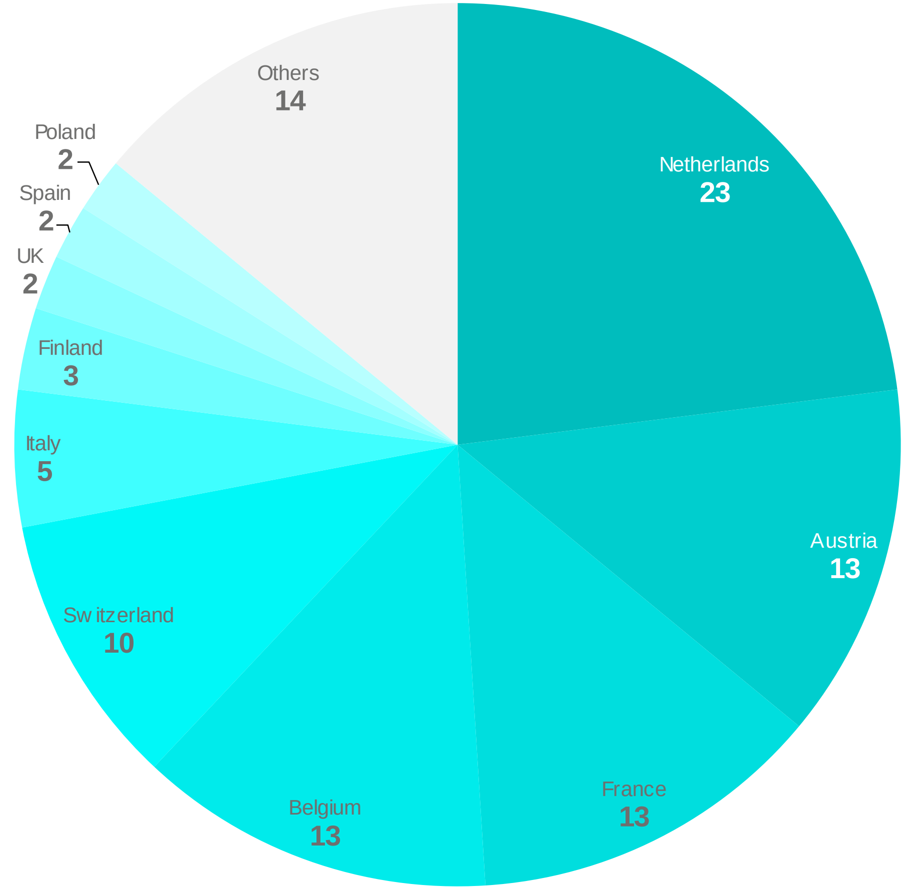


Source: StBA

Share of e-bike exports from Germany (as a percentage)

Exports almost exclusively to EU/EFTA countries

- Over 98% of exports to EU/EFTA countries
- The Netherlands remains the most important export country with 23% (138,000 units, 24 % in 2022)
- Following quite some way behind are Belgium (2022: 11%), Austria and France (2022: 12%) with 13%, Switzerland with 10% (2022: 11%) and Italy with 5% (2022: 6%)
- Strong demand from the Netherlands also a reflection of the transport policy there



Source: StBA

Contact

ZIV – German Bicycle Industry Association

Managing Director / CEO
Burkhard Stork

Chief Advocacy Officer
Anke Schäffner

Press Spokesperson
Pablo Ziller

Reinhardtstr. 7
10117 Berlin

+49 30 439 735 773
+49 170 734 23 72
presse@ziv-zweirad.de

ziv-zweirad.de

VSF – German Service & Bicycle Association

Managing Director
Uwe Wöll

Biegenstraße 43
35037 Marburg

+49 6421 88 58 740
info@vsf-mail.de

vsf.de