Client Presentation for an International Automotive Manufacturer

A data-driven analysis of trends in the German automotive market

Made with GAMMA

Scope of the Analysis

This analysis focuses on identifying key market trends and structural patterns in the German automotive market from 2020 to 2025, with a special emphasis on:

1. **Consumer preferences, by:**
   Color, size, Age group
2. **Fuel type transition:**
   Electric and hybrid adoption dynamics
3. **Market signals:**
   Opportunities and entry barriers
4. **Competitive landscape:**
   Performance of top models by segment

The goal is to derive insights that support **early-stage decision-making** for a market entry strategy by an international EV/Hybrid automotive manufacturer

Made with GAMMA

Meet our team

Artur Jodkowski

Data Engineer

10+ years of experience in the Automotive industry,
Background in Engineering

View LinkedIn Profile

View GitHub

Jan Tarnaske

Data Analyst

5+ years of experience in Finance and
2+ years in Business Operations

View LinkedIn Profile

View GitHub

Made with GAMMA

The Data Preperation Journey

1

Data Search

Kraftfahrt-Bundesamt

- Vehicles: 25 datasets per year & 4 datasets per month
- Drivers: 19 datasets per year
- Road transport: 18 datasets per year

2

Data Structuring

Excel

Vehicles:

- Monthly New Registrations: 4 datasets per month
- Vehicle Stock: 13 Datasets per year

3

Data Cleaning

python

pandas

- Excel and some PDF sheets
- Focus on "meaningfull" datsets

4

Data Plotting

tableau

- Creating Interactive Charts

Made with GAMMA

Home market preferences

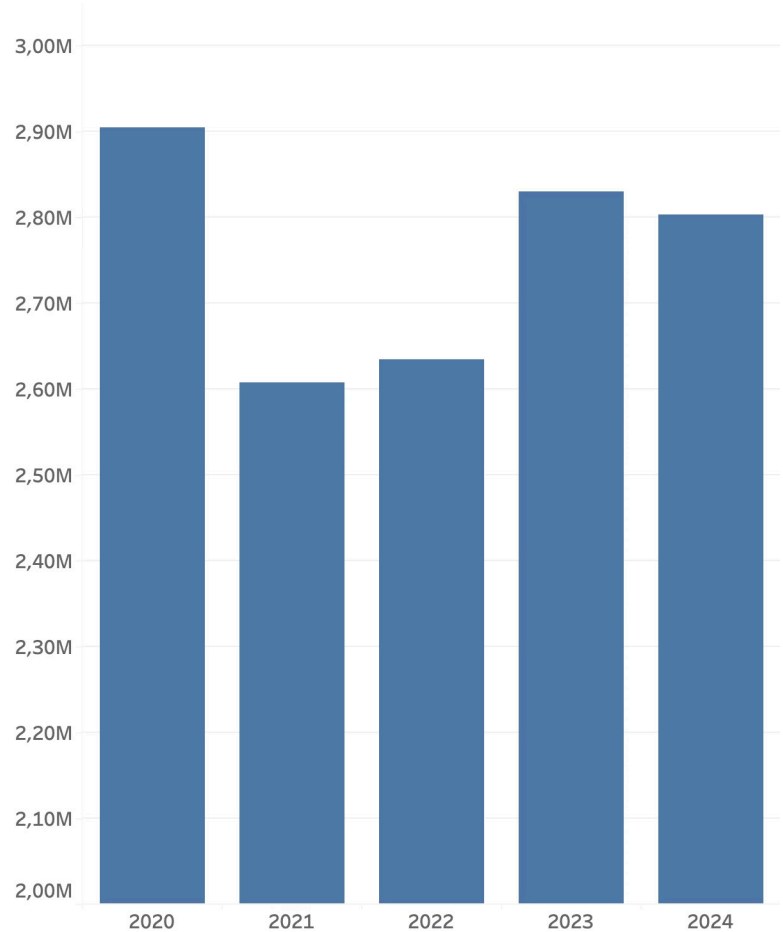
Chinese Automotive market

Preference Area	Leading Trends in 2024–25
Vehicle Size	SUVs (~36%) & medium cars; compacts for city use
Fuel Type	EV + Hybrid ~50% sales
Car Colors	White > Black > Gray; brighter tones mostly on EVs; red rarely chosen
Tech Appeal	Advanced driver assistance, AI, app integration

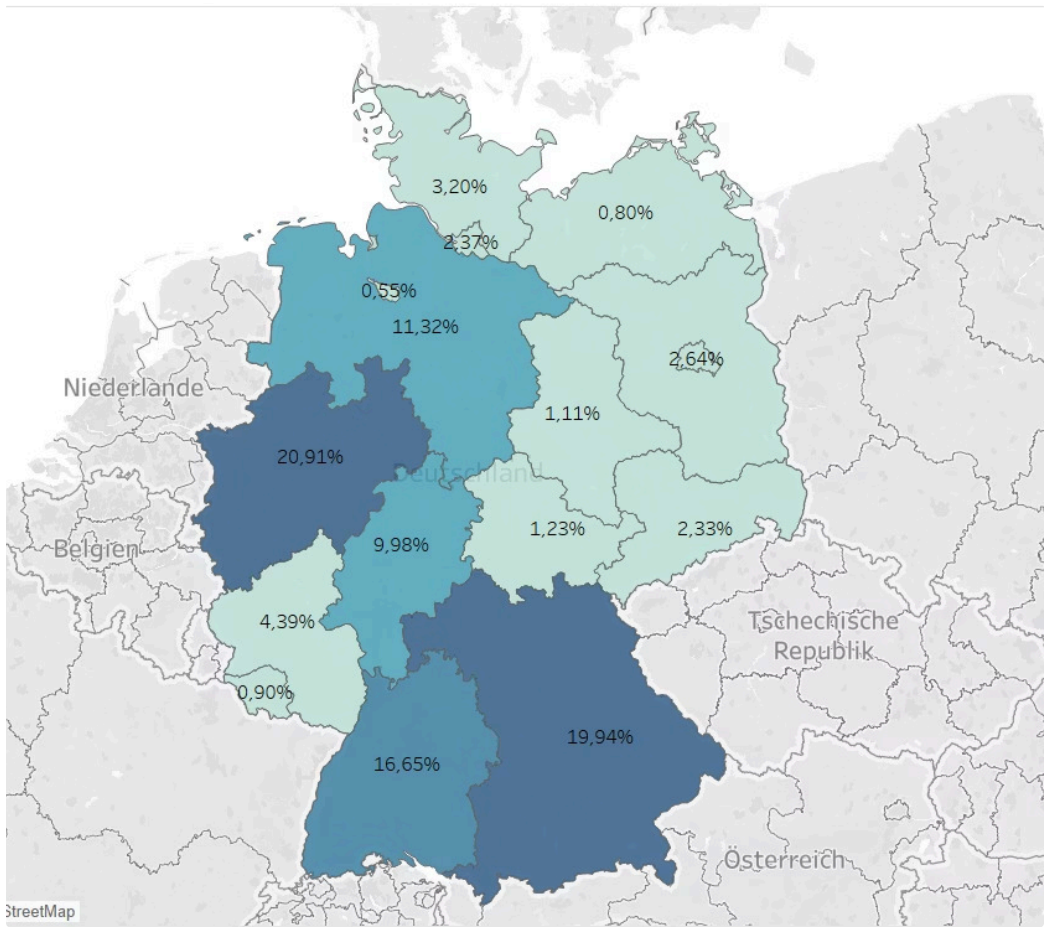
Made with GAMMA

The German Automotive market

Total New Registration



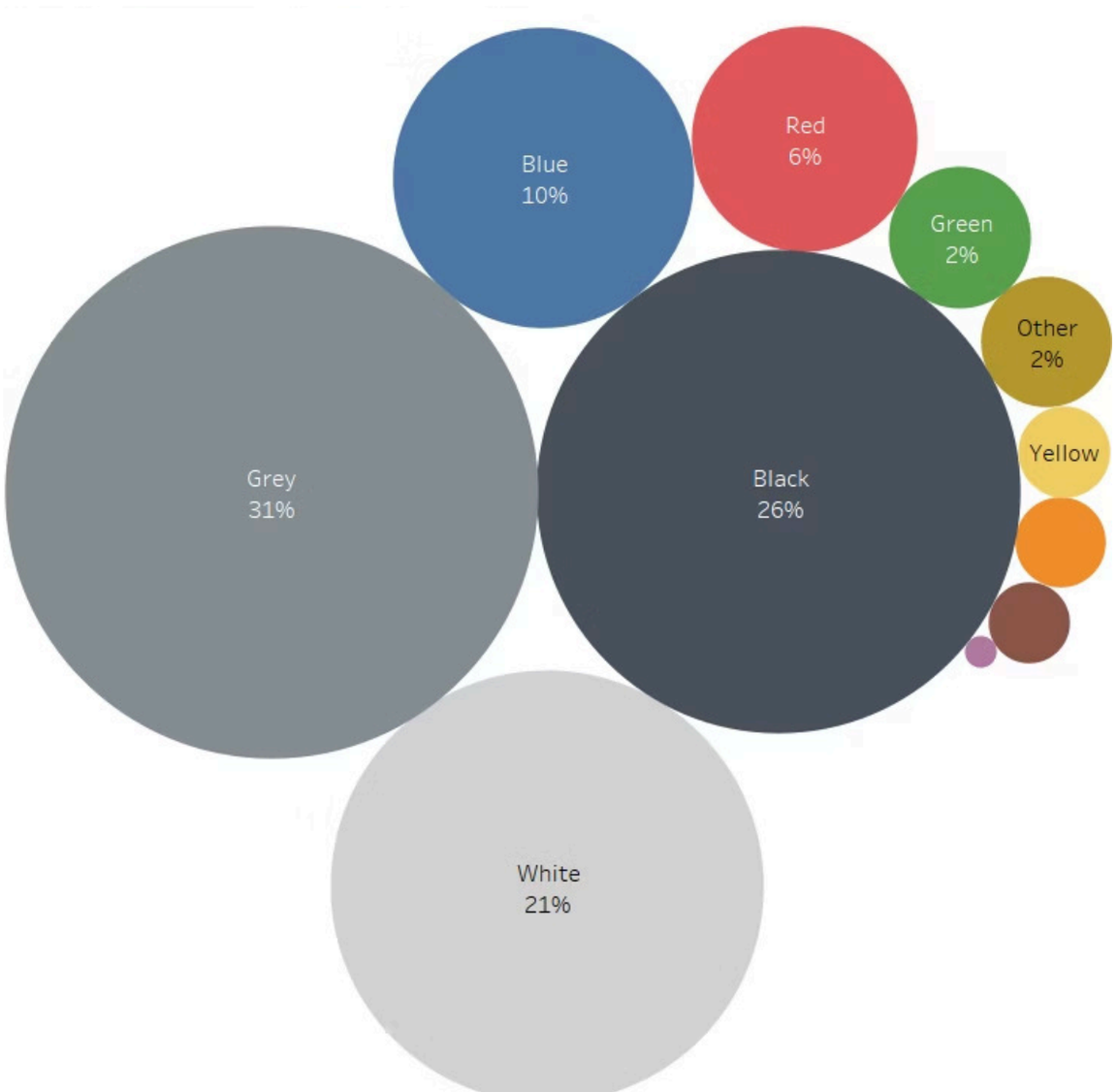
New Registration by Region



Made with GAMMA

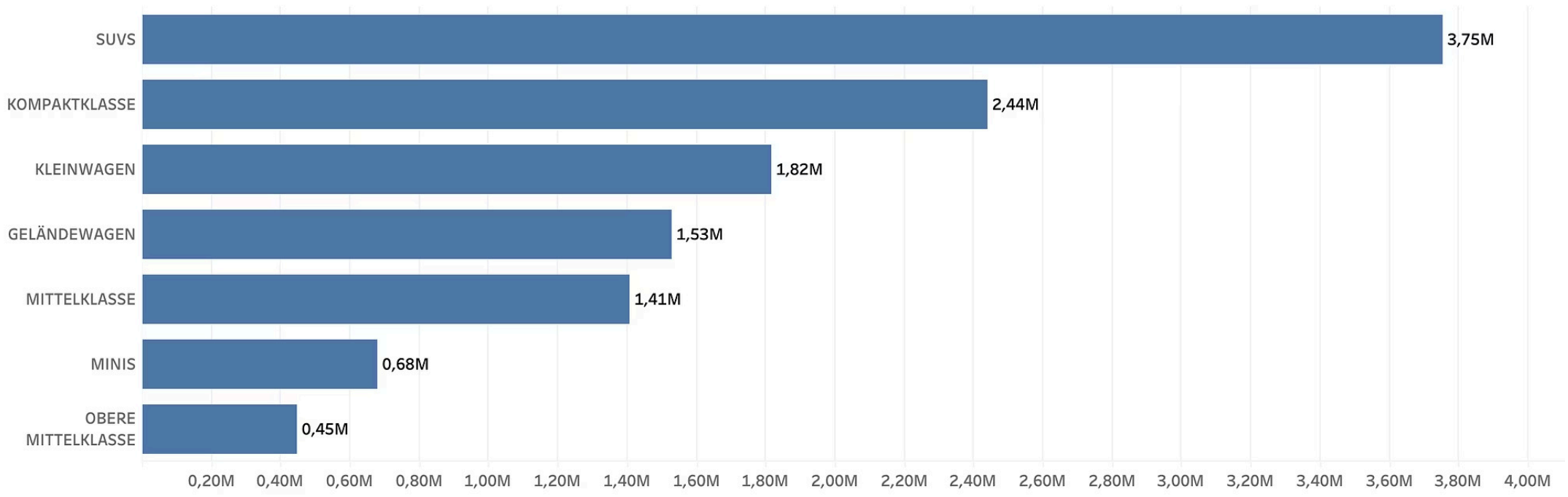
Most popular colors in the German Automotive market

New Registration per Color (2020-25)



Made with GAMMA

New Registrations by Segment



Made with GAMMA

New Registrations per Age group and year

Benzin, Diesel & Hybrid

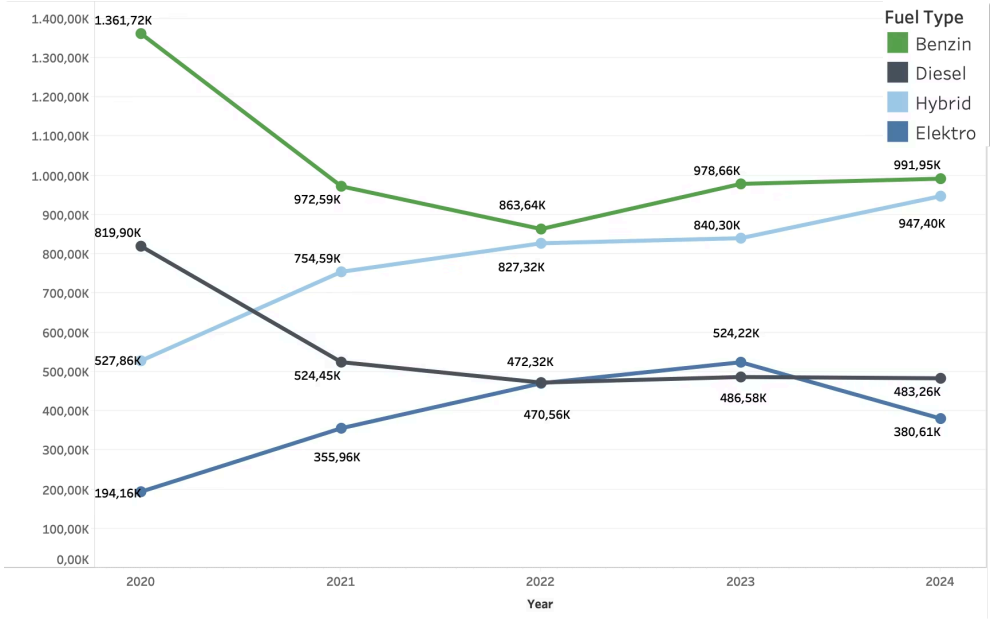
_Age Group	2020	2021	2022	2023	2024	2025
BIS 17 JAHRE	0,09%	0,07%	0,07%	0,07%	0,06%	0,07%
18-20 JAHRE	0,58%	0,50%	0,43%	0,40%	0,40%	0,41%
21-24 JAHRE	2,00%	1,92%	1,84%	1,81%	1,86%	1,72%
25-29 JAHRE	4,22%	4,13%	4,14%	4,19%	4,52%	4,39%
30-34 JAHRE	5,89%	6,09%	6,24%	6,16%	6,38%	6,41%
35-39 JAHRE	6,71%	6,89%	7,19%	7,18%	7,48%	7,89%
40-44 JAHRE	7,76%	8,19%	8,44%	8,22%	8,24%	8,48%
45-49 JAHRE	9,80%	9,67%	9,52%	9,64%	9,27%	9,36%
50-54 JAHRE	14,53%	14,41%	13,69%	12,85%	11,79%	11,23%
55-59 JAHRE	15,21%	15,53%	15,60%	15,54%	15,13%	14,71%
60-64 JAHRE	12,43%	12,50%	12,95%	13,37%	13,58%	13,69%
65-69 JAHRE	8,91%	8,72%	8,63%	8,79%	9,10%	9,54%
70-74 JAHRE	5,67%	5,71%	5,78%	6,00%	6,12%	6,16%
75-79 JAHRE	3,82%	3,28%	3,11%	3,26%	3,47%	3,47%
80 UND MEHR	2,37%	2,39%	2,39%	2,51%	2,59%	2,47%

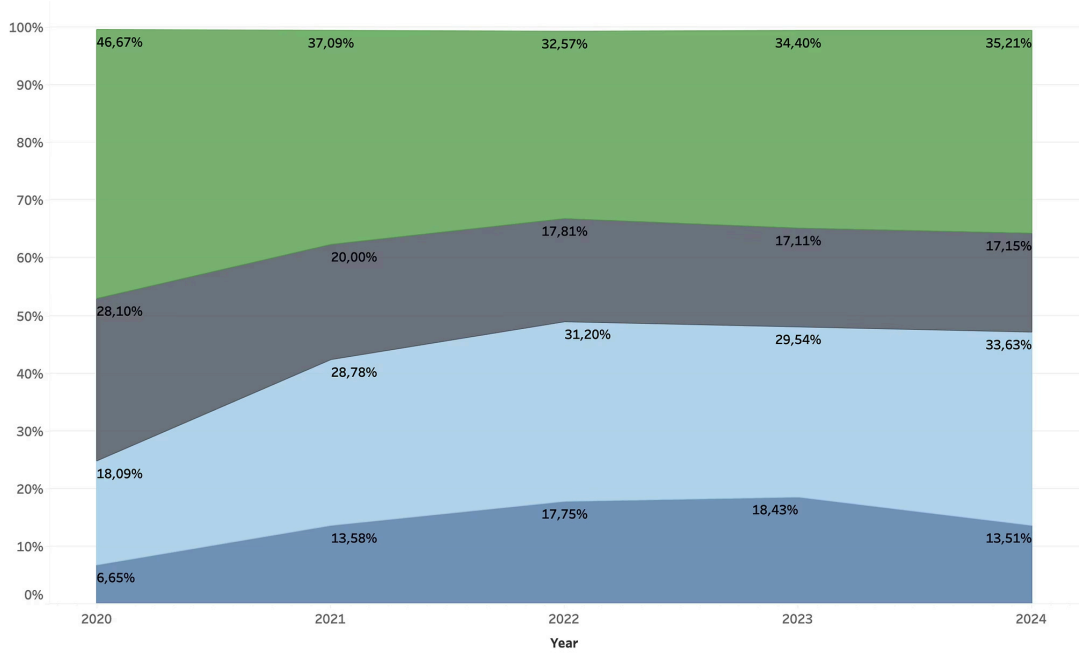
Electro

_Age Group	2020	2021	2022	2023	2024	2025
BIS 17 JAHRE	0,03%	0,02%	0,02%	0,01%	0,00%	0,01%
18-20 JAHRE	0,22%	0,27%	0,22%	0,19%	0,18%	0,13%
21-24 JAHRE	0,88%	1,18%	1,12%	1,03%	1,07%	0,81%
25-29 JAHRE	2,78%	3,30%	3,47%	3,37%	3,69%	3,16%
30-34 JAHRE	5,86%	6,68%	6,81%	7,03%	7,71%	6,27%
35-39 JAHRE	8,68%	9,35%	9,79%	10,19%	11,21%	9,88%
40-44 JAHRE	10,31%	10,75%	11,19%	11,62%	12,50%	11,87%
45-49 JAHRE	12,34%	11,82%	11,42%	11,39%	11,90%	11,44%
50-54 JAHRE	17,97%	16,47%	15,73%	13,85%	12,72%	12,27%
55-59 JAHRE	16,67%	15,96%	15,83%	15,31%	14,35%	15,03%
60-64 JAHRE	10,56%	10,31%	10,73%	11,25%	10,50%	12,18%
65-69 JAHRE	6,57%	6,57%	6,85%	7,32%	6,84%	7,99%
70-74 JAHRE	3,71%	3,84%	3,87%	4,20%	4,01%	4,95%
75-79 JAHRE	2,06%	1,97%	1,72%	1,92%	1,95%	2,52%
80 UND MEHR	1,36%	1,50%	1,23%	1,32%	1,36%	1,48%

Made with GAMMA

New Registrations by Fuel Type





Made with GAMMA

The year 2024 in retrospect

- Overall market weakness due to recession in Germany
- Crisis year for electric cars
  - Registrations of pure electric cars fell by -27.4% compared to 2023
  - Subsidy stop: The environmental bonus was abruptly canceled in December 2023. Particularly affected: affordable e-models for private buyers
  - Infrastructure problems e.g. charging stations

Made with GAMMA

Rebound Opportunities in the EV market in 2025

Outlook for EV market in Germany

National Goals

- **15M EV's** until 2030
- Increase public EV charging stations
- Protection & Partnerships: EU - GER?

Source: Bundesregierung, BDEW, VDA

Investment & Funding

- Investments for Expansion of the charging infrastructure
- Planned immediate tax write-offs for companies & purchase incentives until 2035

Source: Bundesministerium, Reuters, Clean Energy Wire

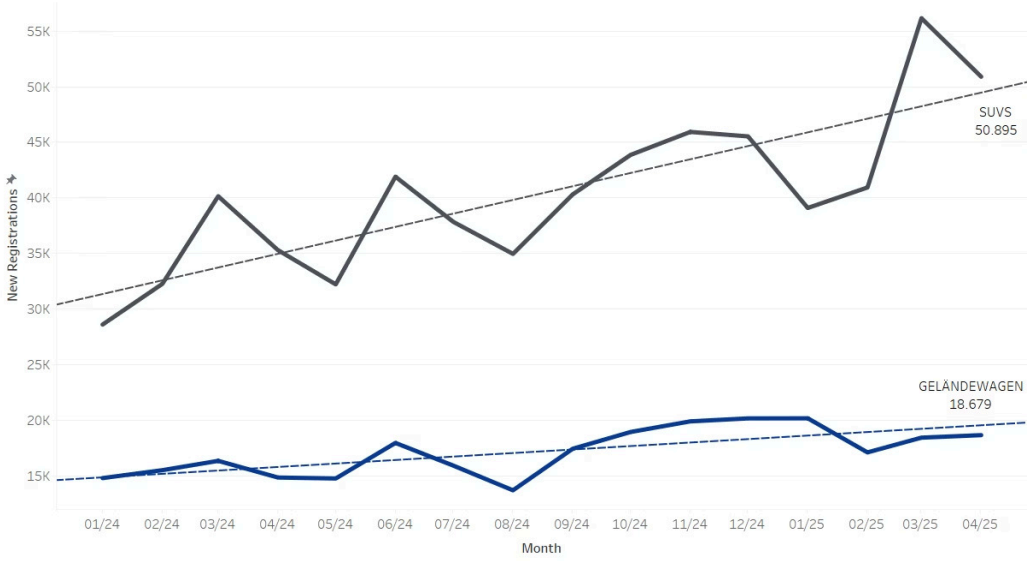
Made with GAMMA

Analyzing the trends of 2025 for the most promising segments

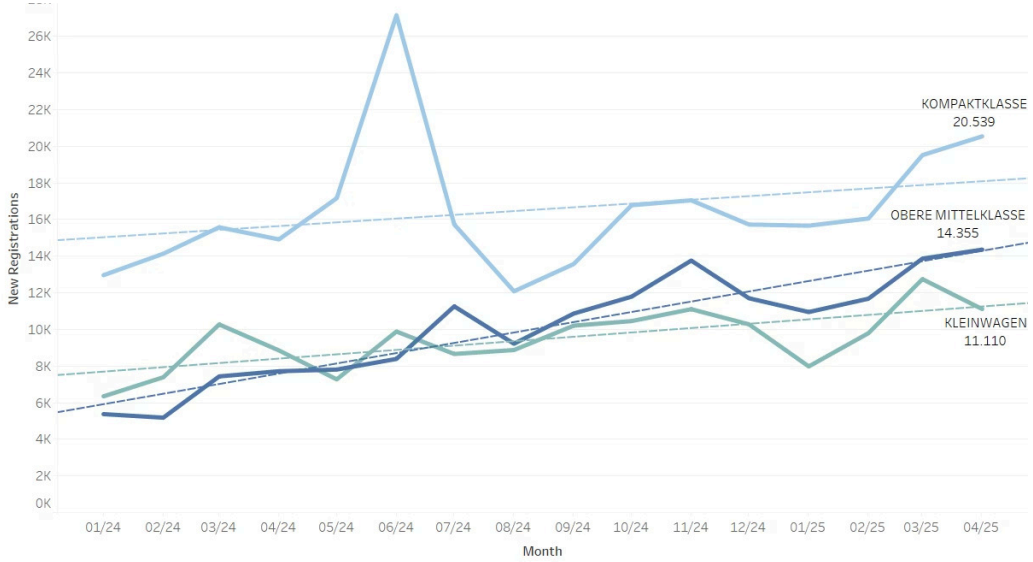
Made with GAMMA

New Registration by EV & Hybrid for Jan 2024 -Apr 2025

New Registration for Top Segment SUV



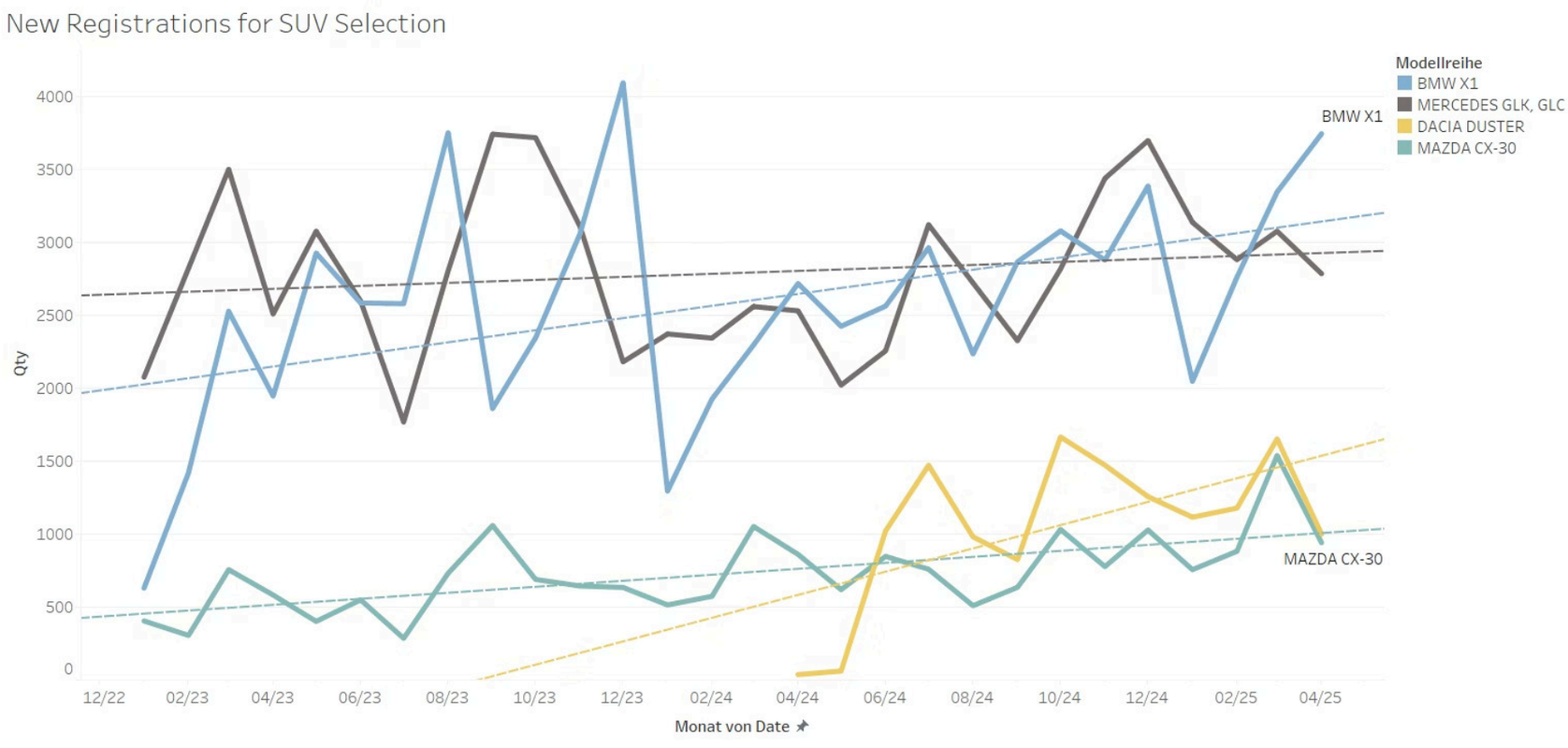
New Registration for Growing Segments



Made with GAMMA

Segment: SUV's

Selection of New Registrations by Electro & Hybrid for Jan 23 -Apr 25

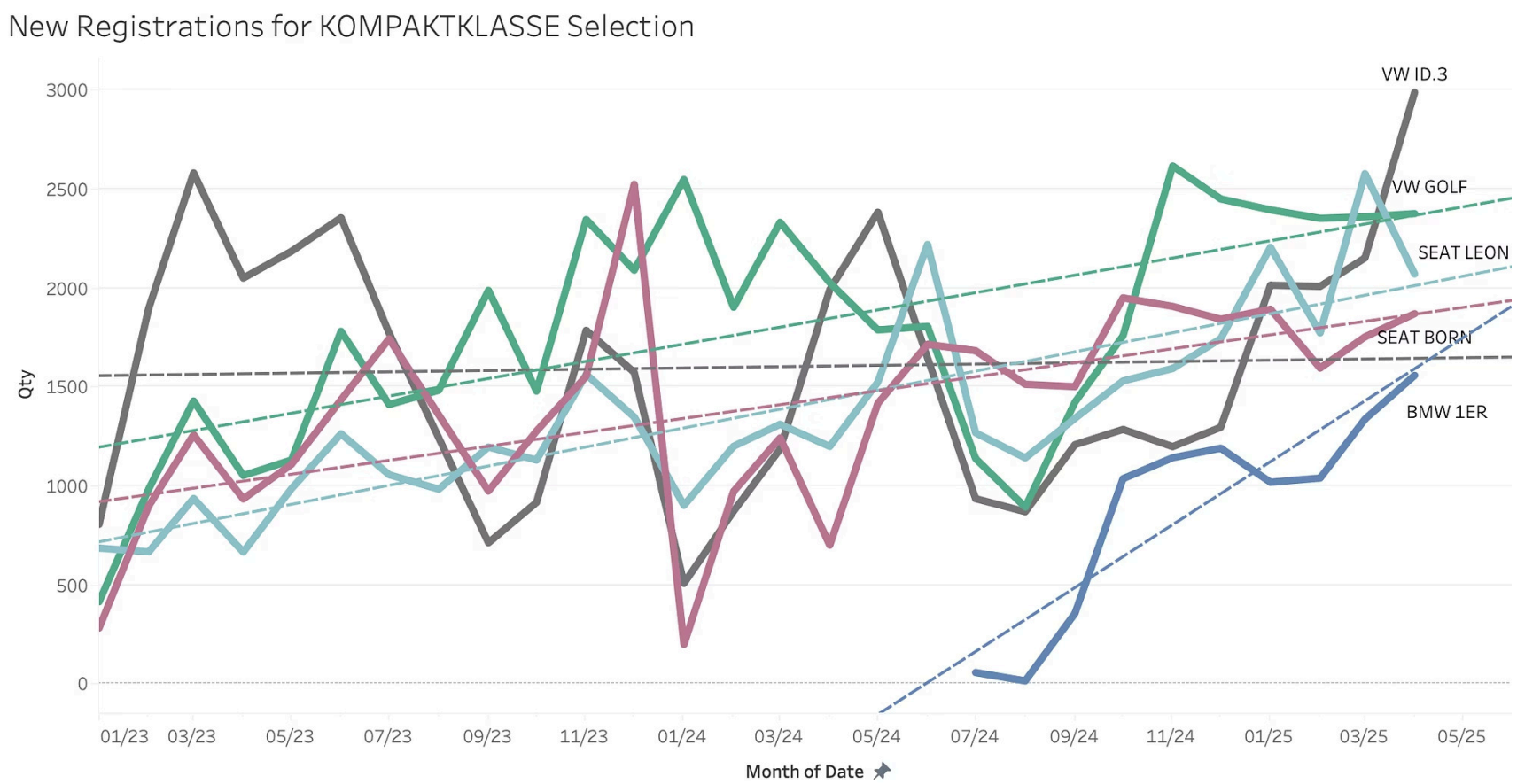


Models	Price start (€)	Price end (€)	Average Price (€)
DACIA DUSTER	20 990	27 490	24 240
MAZDA CX-30	27 990	42 890	35 440
BMW X1	44 600	64 800	54 700
MB GLK, GLC	60 000	68 240	64 120

Made with GAMMA

Segment: Compact

Selection of New Registrations by Electro & Hybrid for Jan 23 -Apr 25

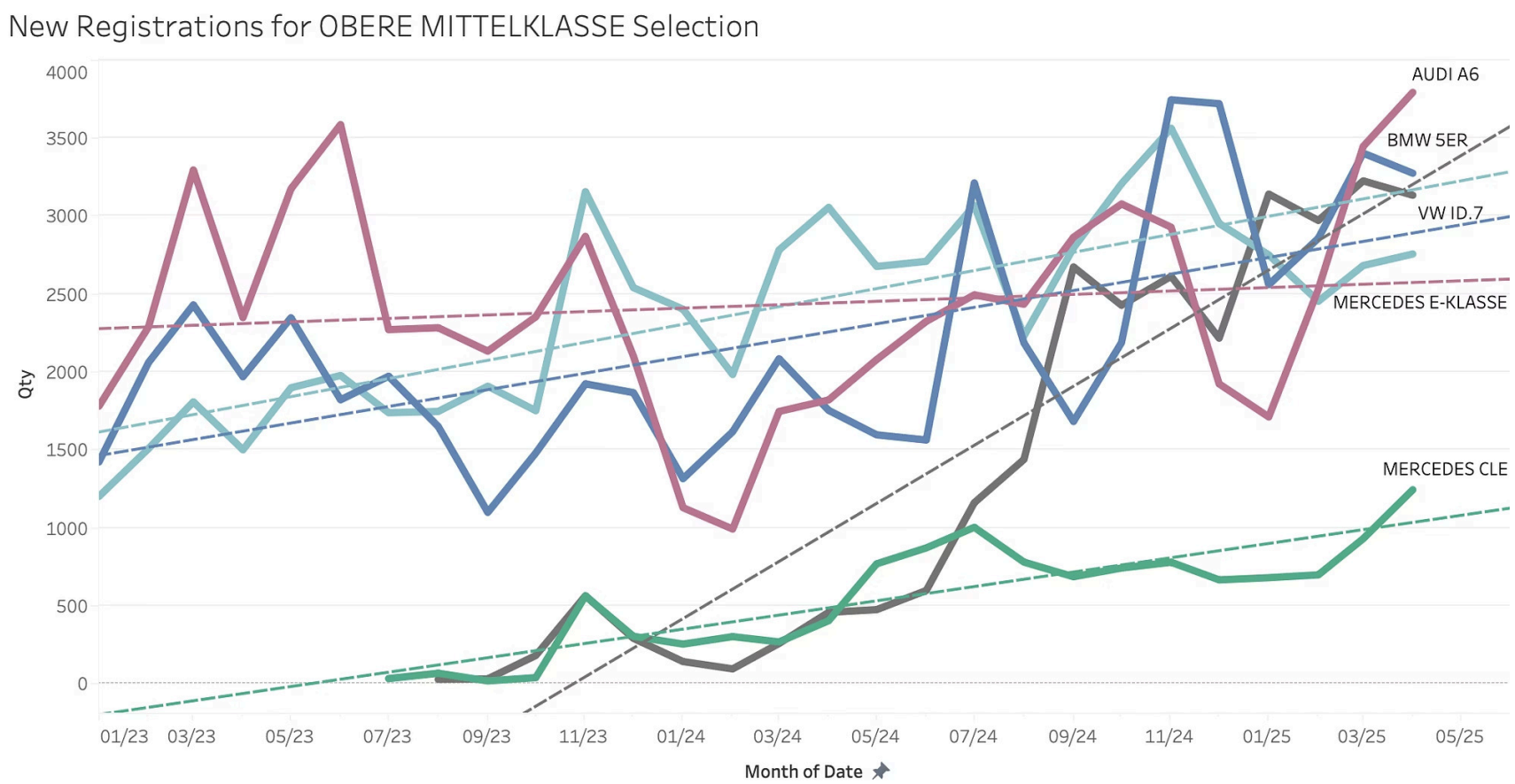


Models	Price start (€)	Price end (€)	Average Price (€)
VW Golf	28 485	58 880	43 683
SEAT Leon	28 530	38 925	33 728
VW ID.3	33 330	48 725	41 028
BMW 1 Series	34 200	56 200	45 200
CUPRA Born	40 450	52 870	46 660

Made with GAMMA

Segment: Upper Medium Size

Selection of New Registrations by Electro & Hybrid for Jan 23 -Apr 25

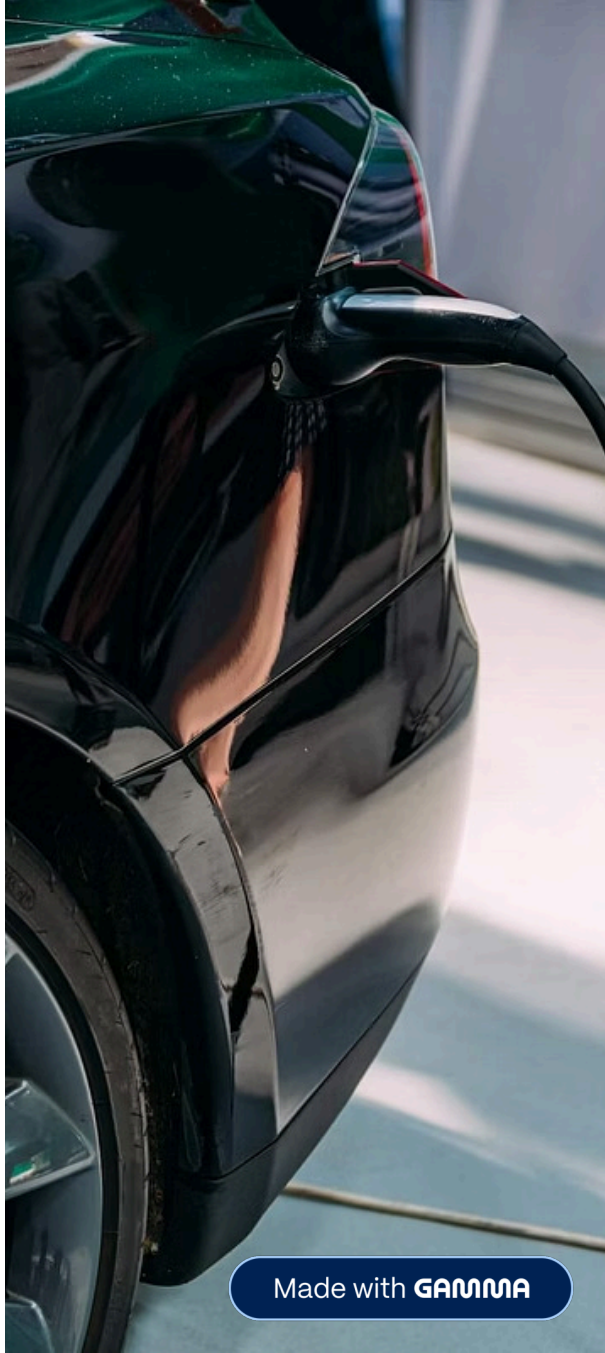


Models	Price start (€)	Price end (€)	Average Price (€)
MB CLE	53 520	91 511	72 516
Audi A6	55 500	101 150	78 325
VW ID.7	53 995	63 955	58 975
BMW 5 Series	57 550	99 500	78 525
MB E-Class	62 000	105 601	83 801

Made with GAMMA

Final Recommendation

- **Color discipline** – Stick to grey, black, white plus one signature color to match >80% of costumer preferences
- **Geography** – Launch sequentially in NRW, Bavaria, Baden-Württemberg
- **Age** – Aim for marketing audience at 35-44 years; for sales on 45-59 years
- **Trend** – Focus on Hybrid an EV
- **Start with SUV's:** It’s the largest segment; Focus either on high quality or low price offers
- **Add a Compact vehicle next:** Fastest-growing class, essential for volume
- **Then add an Upper-medium vehicle:** secures premium margins and brand credibility.



Made with GAMMA

Thank you for your attention

View GitHub