

 Project Management and Consulting Practice Capstone Course

Spin-Off Co. BUSINESS CASE



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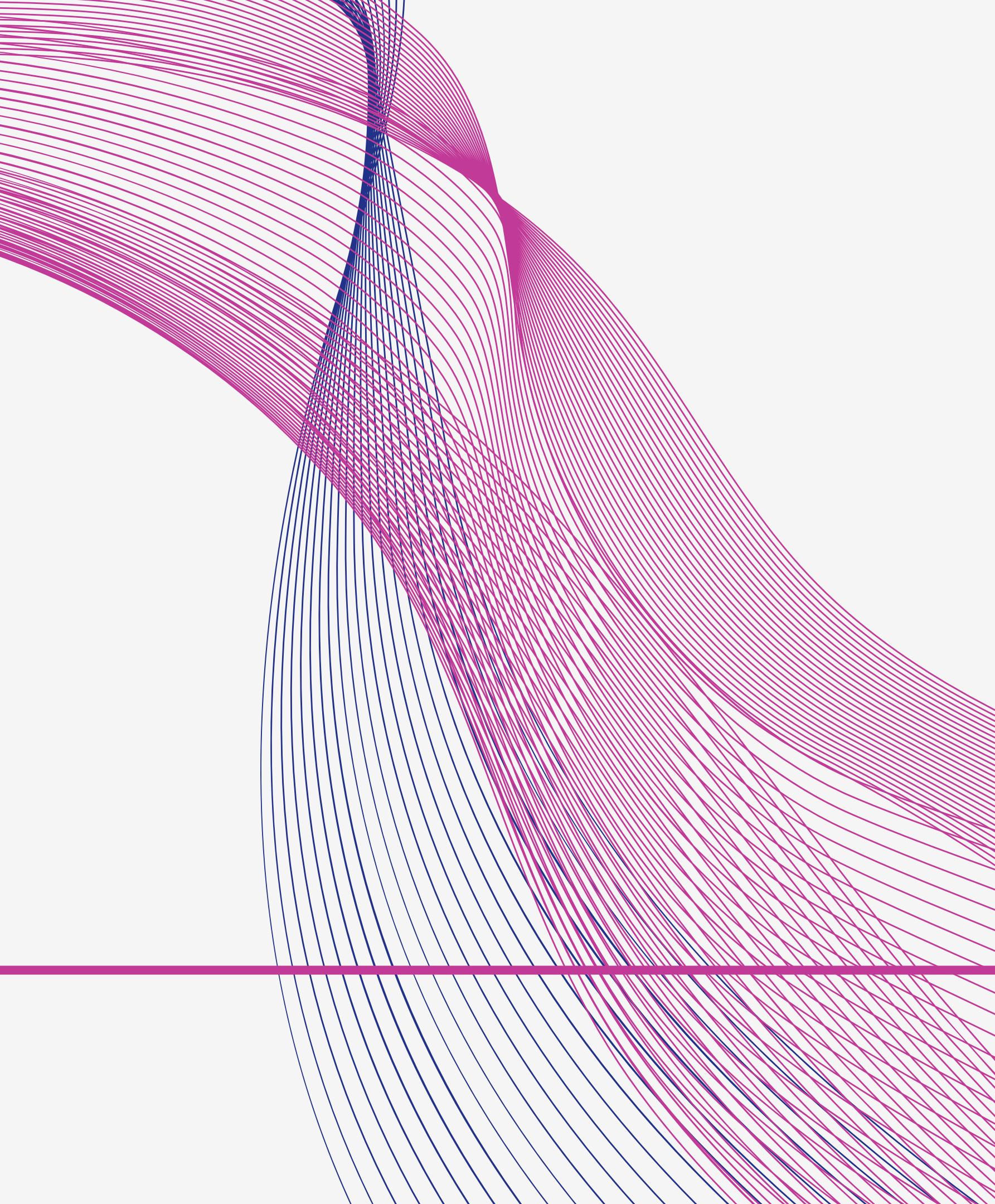
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Recommendations

We have been hired by Mrs. Smith to solve the following questions...

- 1 Is this attractive market to be in today and five to seven years into the future?
- 2 Could 'Spin-off Co' become a market leader with its technology in the key markets?
- 3 If carved out of 'Corp Co' how to ensure business continuity as a standalone company?



MARKET ANALYSIS & FORECASTS

Market Overview

TRENDS AND GROWTH PREDICTIONS

- Global: The electric bike market is estimated to double from 36,5 million to **77,3 million e-bikes** from 2022 to 2030. The estimated annual growth rate is around **10 percent**.
- Global: In 2022, the e-bike market size was valued at **37,47 billion USD** and it's estimated to reach **119,72 billion USD** by 2030 (**CAGR of 15,6%**).
- EU: E-bike sales have been growing steadily from 2016 to 2021. The statistics also show a spike in sales during 2020 and the sales continued to increase even after the pandemic.
- EU: The most **e-bikes were sold in Germany during 2021, 2 million units**. **France** had the second-largest e-bike sales in Europe as they sold **0,659 million e-bikes**, and the **Netherlands** came third by selling **0,478 million e-bikes**.
- EU: The E-bike market size during 2021 was **12,91 billion USD**, **estimated** to grow to **32,07 billion USD** by 2027.
- EU: The e-bike market is projected to grow the most in **Luxembourg** in the coming years; the annual growth rate is estimated to exceed **20%**. **Poland, Switzerland, Denmark**, and the **UK** also have strong projected growth in the e-bike market.

THE CURRENT & PROJECTED MARKET SIZE

by bottom-up extrapolation method

Germany

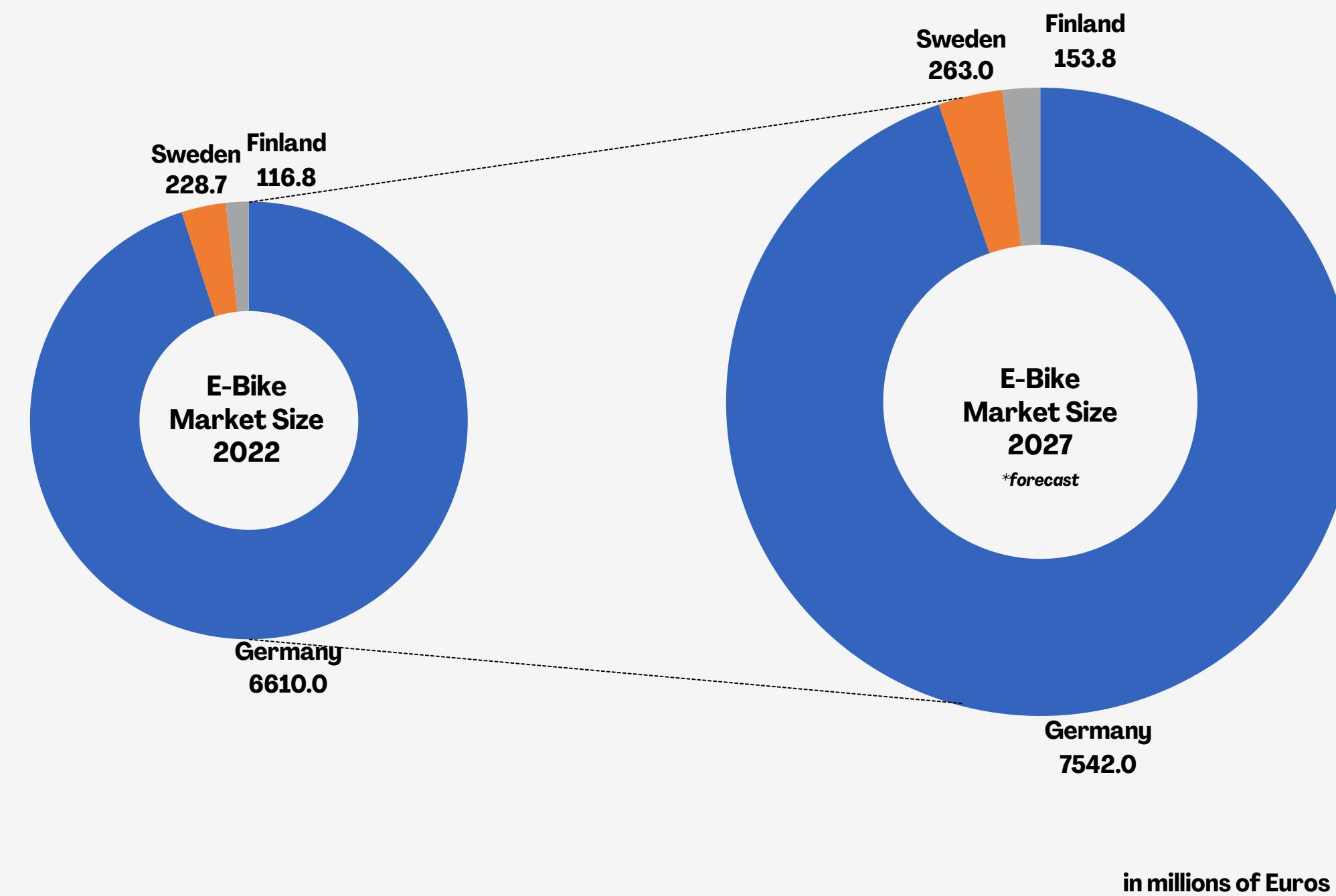
- The estimated annual market growth is **9-14%***
- The current and historic market price for an E-bike in Germany is **2 800€**

Sweden

- The estimated annual market growth is **2,84 %***
- The current and historic market price for an E-bike in the rest of Europe is **2,425€**

Finland

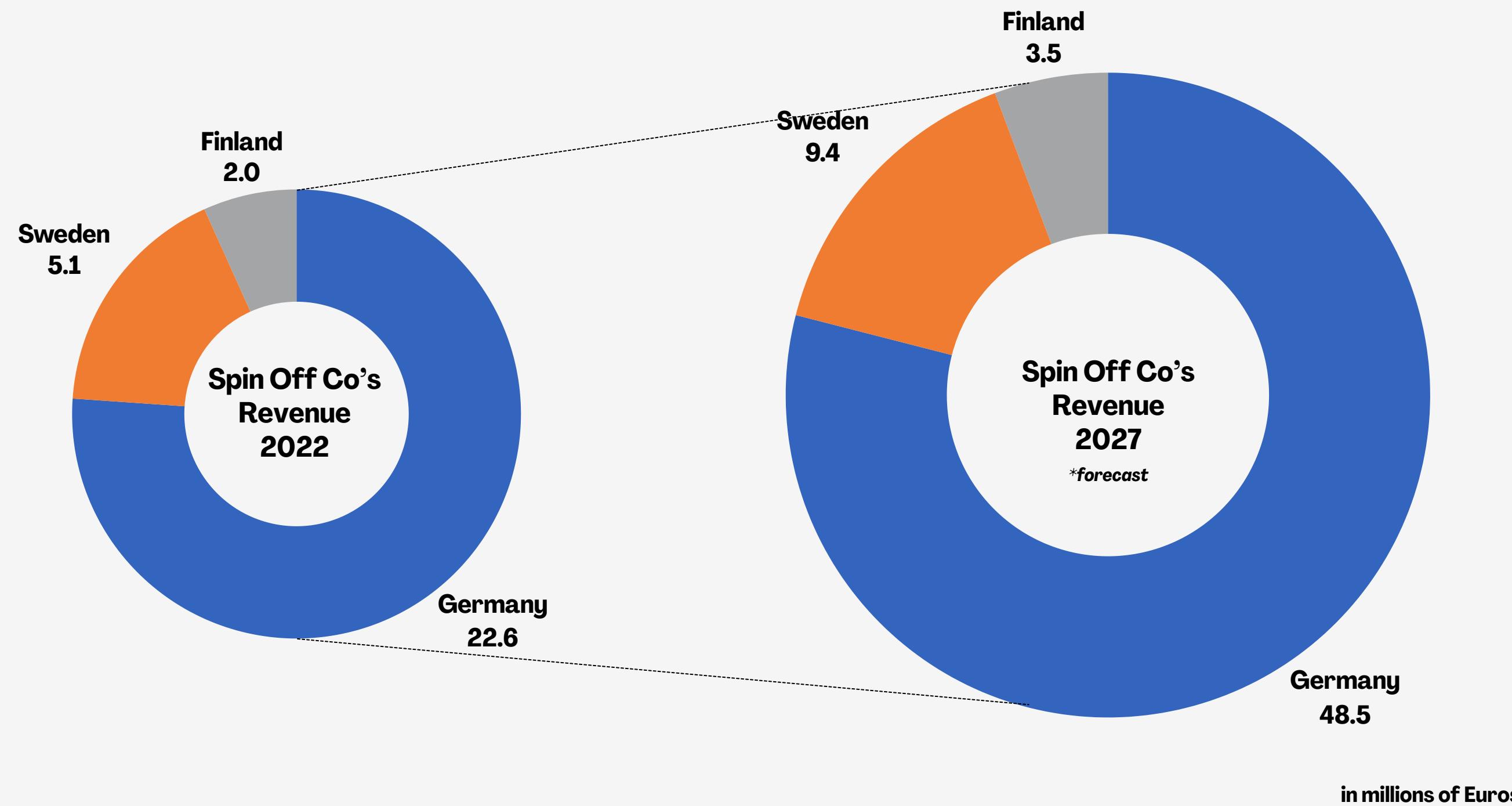
- The estimated annual market growth is **5,66 %***
- The current and historic market price for an E-bike in the rest of Europe is **2 425€**



*The market sizes were calculated on the basis of historical data and annual growth trends. Based on this data projections were done.

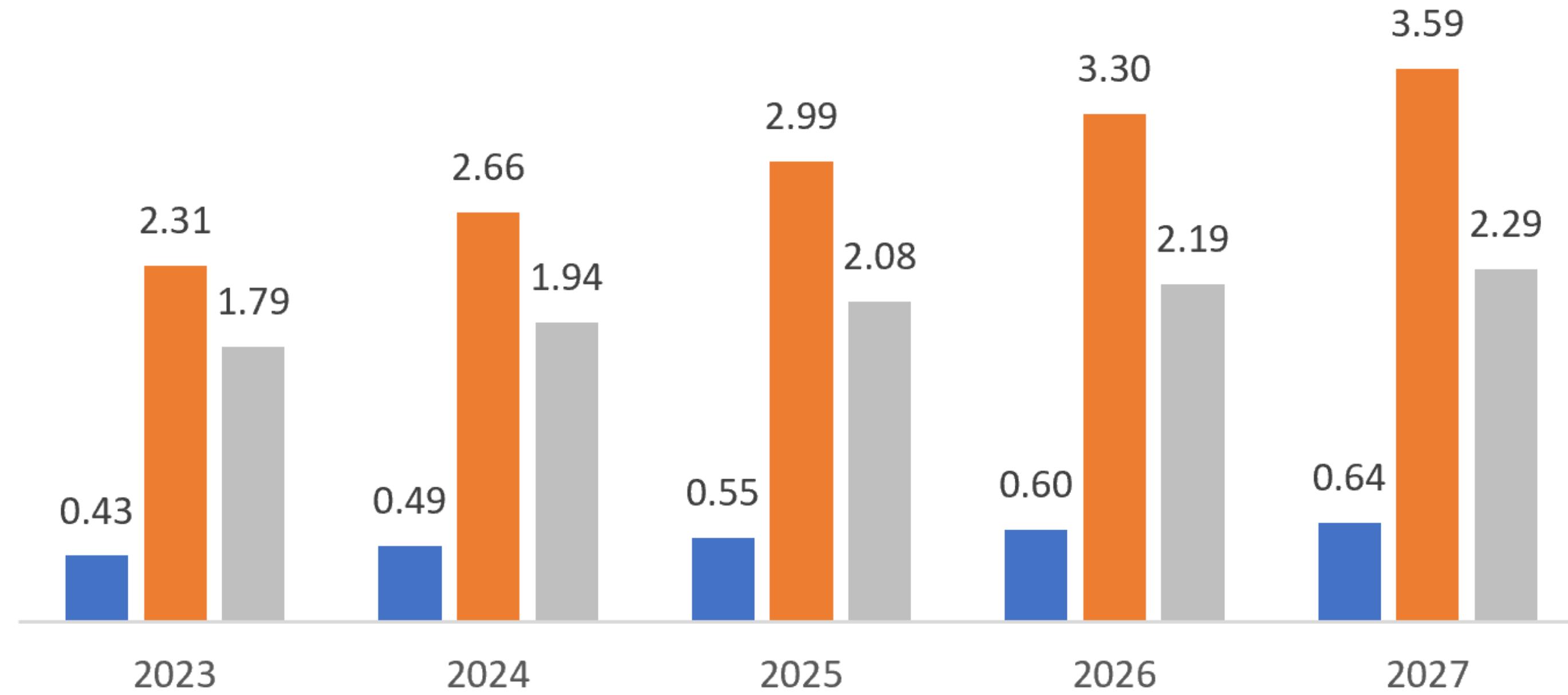
SPIN OFF CO'S CURRENT & PROJECTED REVENUE GROWTH

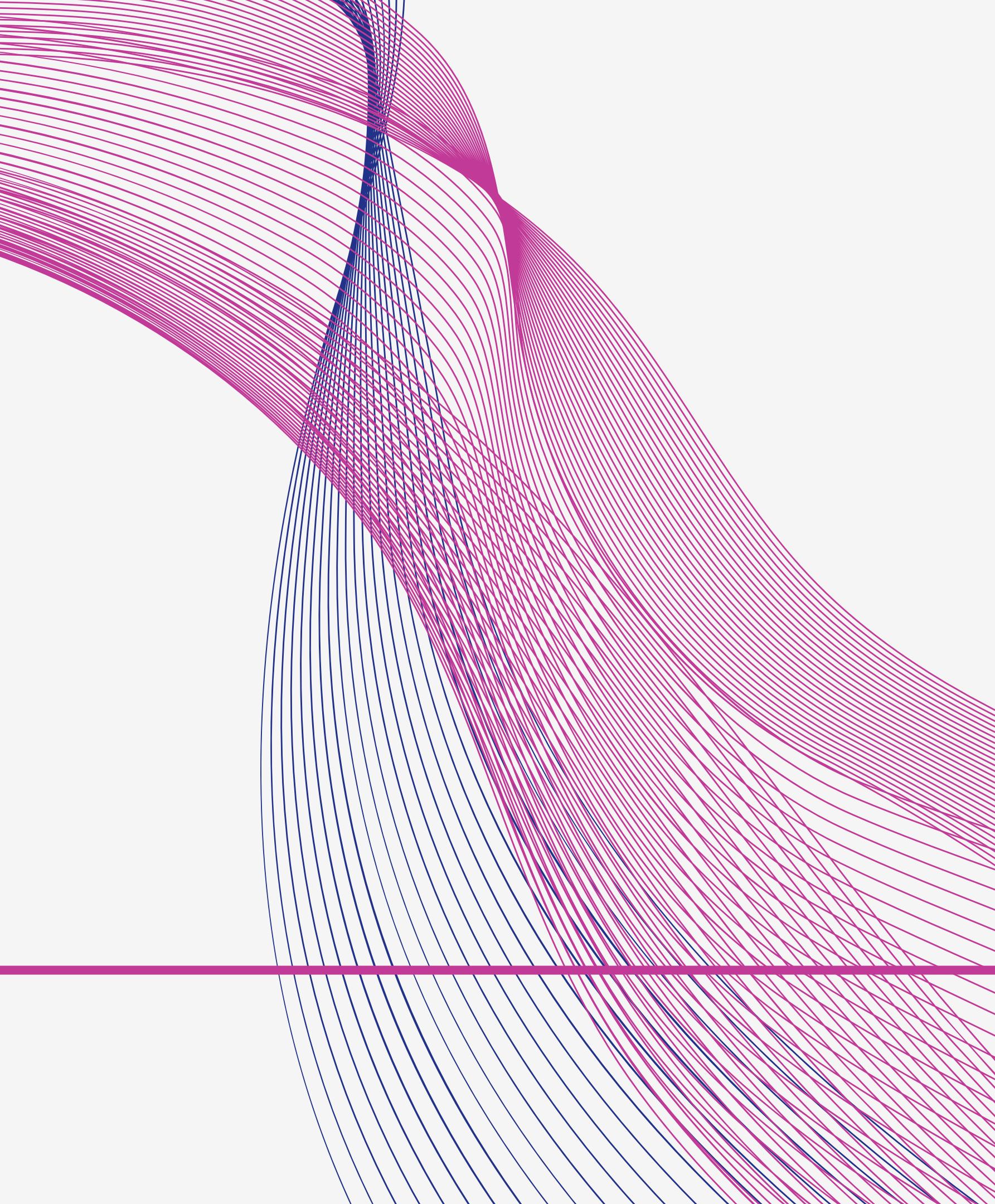
by ETS Machine Learning Algorithm based on historical data from 2018-2022



SPIN-OFF CO'S MARKET SHARE (%)

■ Germany ■ Sweden ■ Finland





BUSINESS ANALYSIS

SWOT Analysis

- **Strengths:**

- Fast and flexible
- Cheaper than cars
- Environmentally friendly → offers a solution to the increasing concerns regarding GHG emissions and global warming limitations
- Zero fuel costs
- Durable
- Can provide connectivity → bicycle-to-vehicle (B2V) technology being researched



- **Weakness:**

- Pricier than traditional bikes
- Expensive to maintain and repair
- Heavy.
- Regulations might differ in different regions.
- Batteries tend to weaken over time
- Long time to charge
- Due to the battery, the travelling distance is limited.

- **Opportunity:**

- The sales volume of e-bikes in Europe grew from 2.8 million (2018) to 5.0 million (2021) (Statista)
- Increased urbanization and traffic congestions → solutions needed
- Finland leading the governmental funding of cycling (per person) in 2020 (Statista, 2020)
- Governmental incentives to reduce car riding via bike benefits (tax relief and purchase premiums)

- **Threats:**

- Lack of charging stations
- Other electric vehicles like e-cars and e-scooters available
- Possible taxation in the future can be an issue as well
- Competitive and price sensitive market



Challenges

TO BECOMING A MARKET LEADER

REGULATORY CHALLENGES

1. Battery Regulations and Sustainability Standards:

- Compliance with Battery Regulations: New EU regulations on lithium-ion batteries present challenges in terms of design, disposal, and recycling. Spin-off Co needs to innovate while adhering to these evolving standards.

2. GDPR Compliance for Data Protection:

- Adhering to GDPR: As Spin-off Co expands its digital footprint, especially with connected e-bikes, complying with GDPR becomes crucial yet challenging, involving significant investment in data protection and cybersecurity measures.

3. Safety Regulations for E-Bikes:

- Meeting Safety and Liability Requirements: Ensuring e-bikes meet stringent safety standards and managing liability risks are ongoing challenges, particularly as Spin-off Co introduces more technologically advanced models.



CHALLENGES IN TECHNOLOGICAL INNOVATION & TRENDS

01

Battery Technology
Development Challenges:

- **R&D Investment Challenge:** Spin-off Co faces the challenge of continually investing in R&D for battery technology, which is a significant financial commitment.
- **Market Adaptation:** Adapting battery technology to meet varied market regulations and consumer preferences, while balancing costs, is a continuous challenge.

02

Integrating Smart Features and
Connectivity:

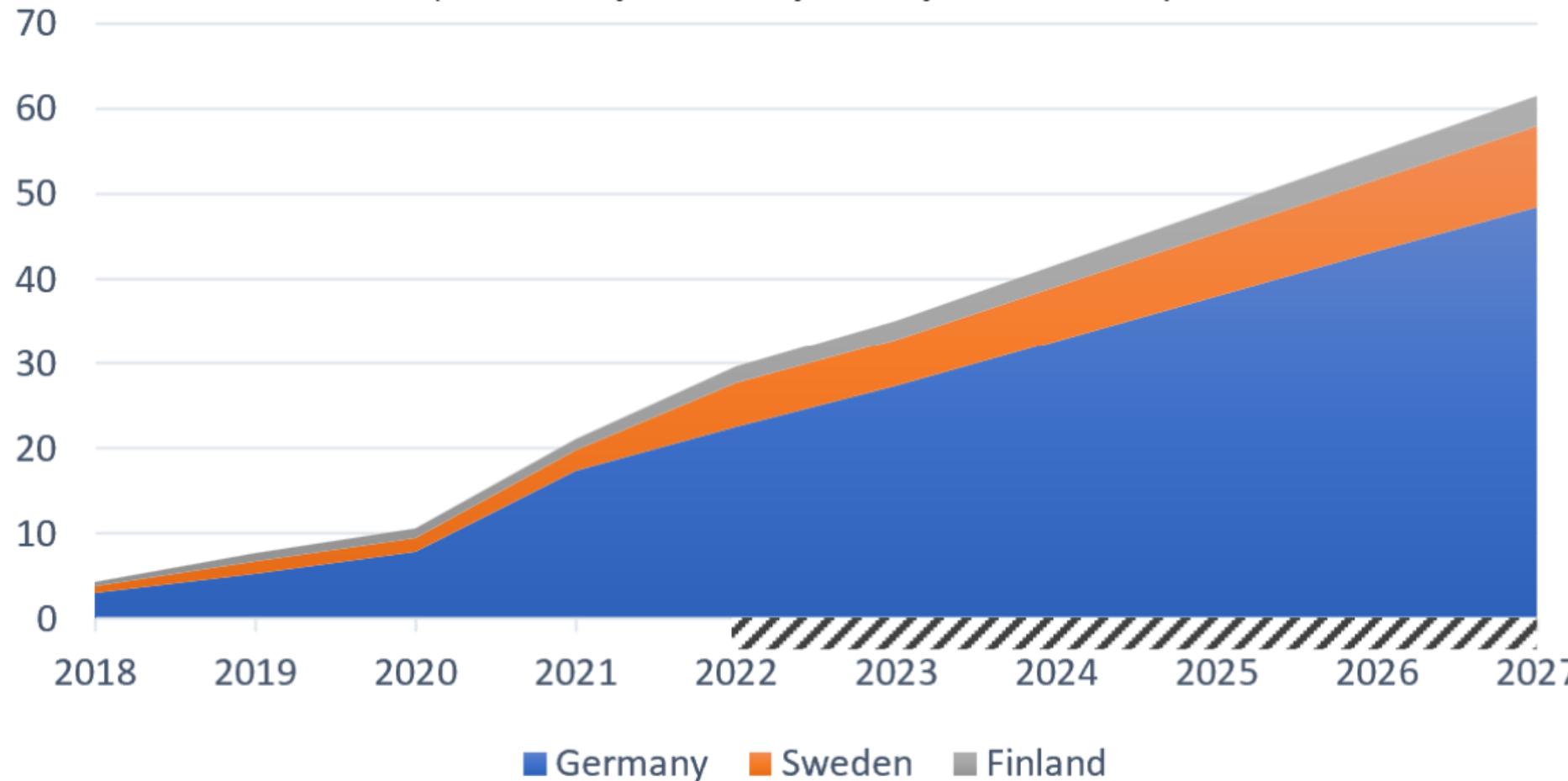
- **Cost vs. Innovation Balance:** Integrating cutting-edge smart features like GPS and anti-theft systems increases production costs.
- **Data Security and Privacy:** Ensuring data security in connected e-bikes is a technological and financial challenge, requiring significant investment in IT security infrastructure.

Market Leadership

TRAJECTORY & POTENTIAL

Spin Off Co.'s Revenue

(in millions of Euros incl. forecast from 2023-2027)

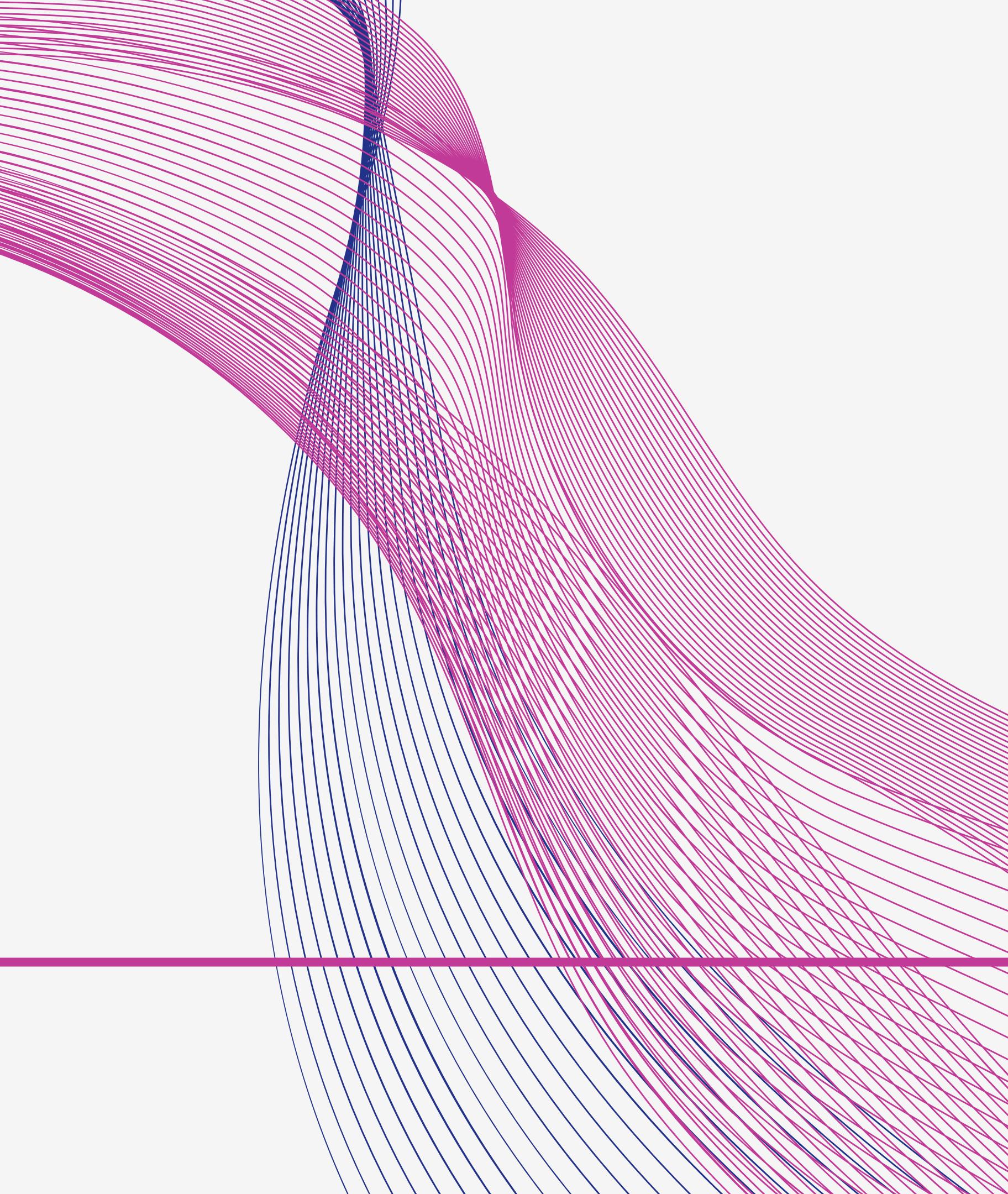


- **Impressive Revenue Growth:** Growth from €4.3 million in 2018 to €33.5 million in 2022, reflecting growth trajectory.
- **High CAGR:** A projected compound annual growth rate of +16%, showcasing rapid and sustained financial growth.
- **Financial Health Indicators:** Robust financial metrics that demonstrate consistent growth potential.
- **Investment Attractiveness:** Attractiveness to investors due to consistent financial performance and upward market trend.

Operational Strengths

- **Efficient Production Processes:** The company has implemented state-of-the-art manufacturing techniques, reducing production time by 30% while maintaining high-quality standards.
- **Strategic Supply Chain Management:** Spin-off Co has developed a resilient supply chain network with multiple suppliers, ensuring uninterrupted component supply even during global disruptions.
- **Agile and Responsive Management:** The organizational structure of Spin-off Co is designed for agility, allowing quick decision-making and adaptability to market changes.
- **Cross-Functional Teams:** By employing cross-functional teams, Spin-off Co encourages collaboration and innovation, leading to more holistic and customer-centric product designs.
- **Robust IT Infrastructure:** Spin-off Co has invested in a robust IT infrastructure, ensuring seamless operations across all departments, from design to sales.

○



COMPETITIVE LANDSCAPE & KEY TRENDS

E-Bike Market

KEY TRENDS



- Socially conscious way of exercising
- Sales volume of e-bikes in Europe grew from 2.8 million (2018) to 5.0 million (2021) (Statista)



- Cycling friendly infrastructure most critical factor affecting the e-bike market
- Charging and parking spots needed, cycling paths as well
- Finland leading the governmental funding of cycling (per person) in 2020 (Statista, 2020)



- Connectivity of e-bikes (B2V-technology) being researched
- Offers increased safety of both cyclists and surrounding vehicle drivers



- Increasing traffic congestion caused by urbanization
- 70% of world's population expected to live in cities by 2050 (UN)
- Increased fuel prices due to geopolitical incidents have also caused a shift to biking

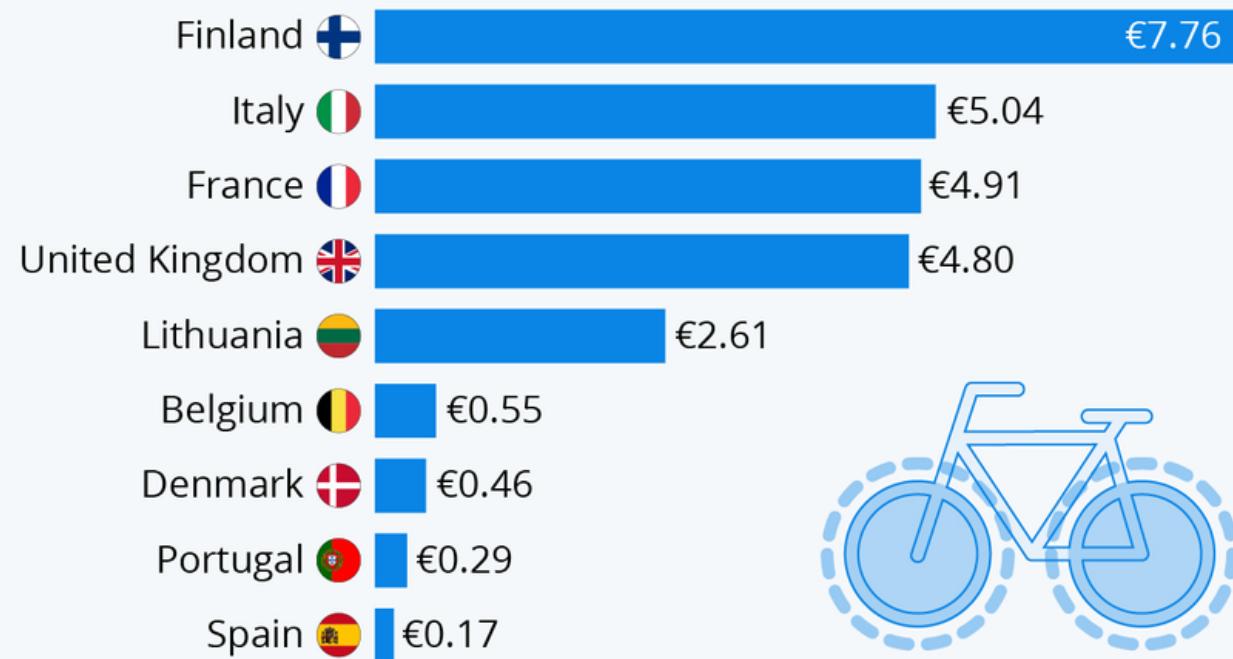


- Global warming limitations by UNFCCC for industrial operators to 1.5°C
- Incentives to reduce car riding via bike benefits for example

KEY MARKETS

How Covid-19 Boosted Cycling Investment In Europe

Additional funding allocated for cycling during the pandemic (euro per person)*



Finland

- Estimated **CAGR** 2023-2029
 - 5.66%
- Competitive and somewhat consolidated market (*more fragmentation than in other target markets*)
 - Helkama: **30%** market share of e-bike market → market leader with sales doubling each year
 - Tunturi: large bike operator
 - Others:
 - Pelago
 - Nopsa
 - Solifer
- **2022:** 58 000 e-bikes sold
- Tax relieved benefit (e-bike benefit) for commuting offered to employees
- Dense network of trails, Helsinki alone has 1200 km of cycling routes

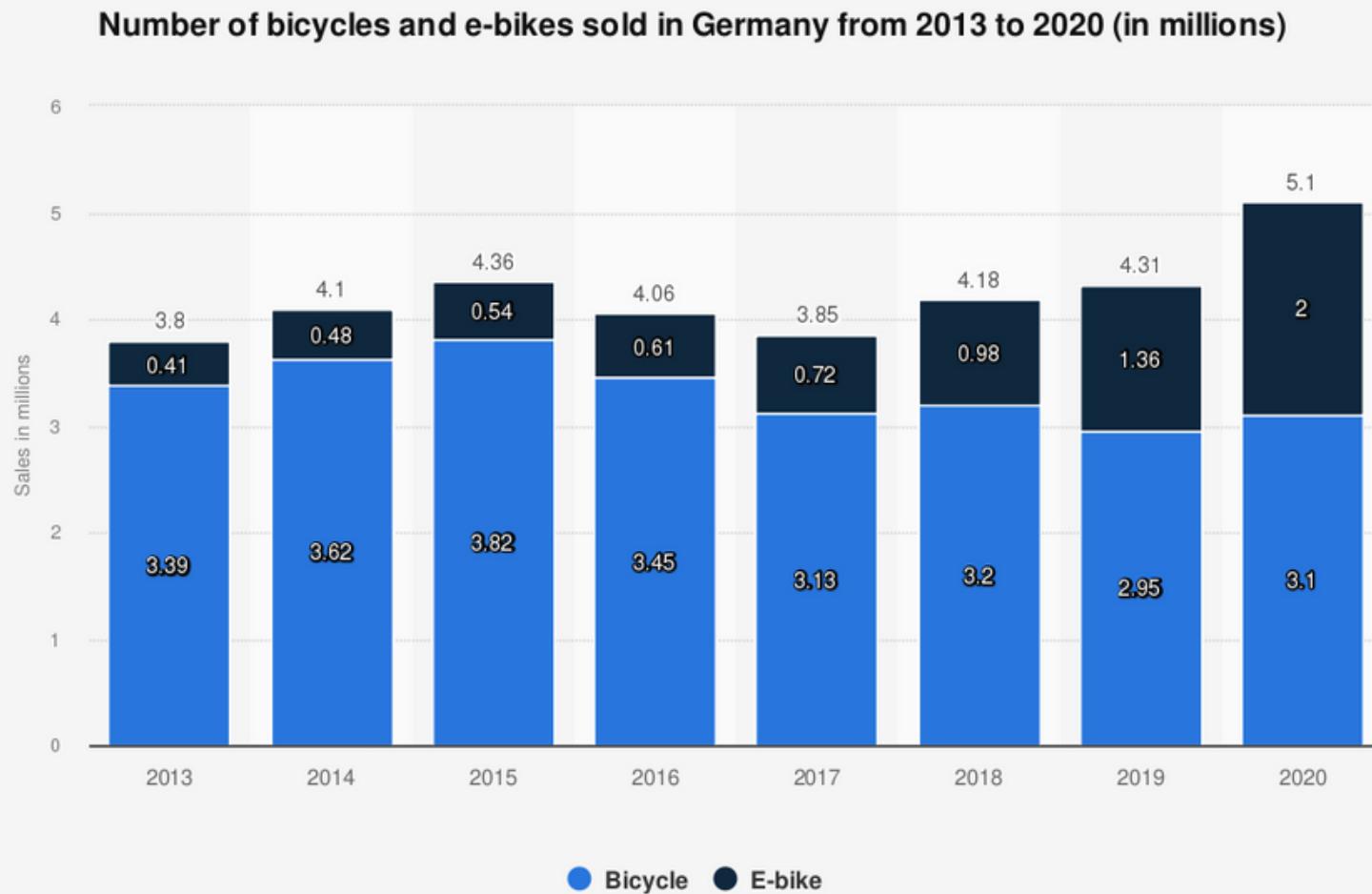
Sweden

- Estimated CAGR 2023-2029:
 - **2.84%**
- Competitive and somewhat consolidated market
- Five top companies: **48%** market share
 - Blix Electric
 - Giant manufacturing
 - Kalkhoff Werke
 - Royal Dutch
 - VanMoof BV
- **2021:** 90 000 e-bikes sold
- Tax relieved benefit (e-bike benefit) for commuting offered to employees

Denmark

- Estimated CAGR 2023-2029:
 - **7.69 %**
- Competitive and moderately consolidated market
- Five top companies: **59%** market share
 - Batavus Intercycle Corporation
 - MHW Bike-House GmbH (Cube Bikes)
 - Qwic
 - Royal Dutch Gazelle
 - Van Moof BV
- **2021:** 100 000 e-bikes sold
- After China, Denmark has highest proportion of e-bike owners (25%)

Largest MARKET

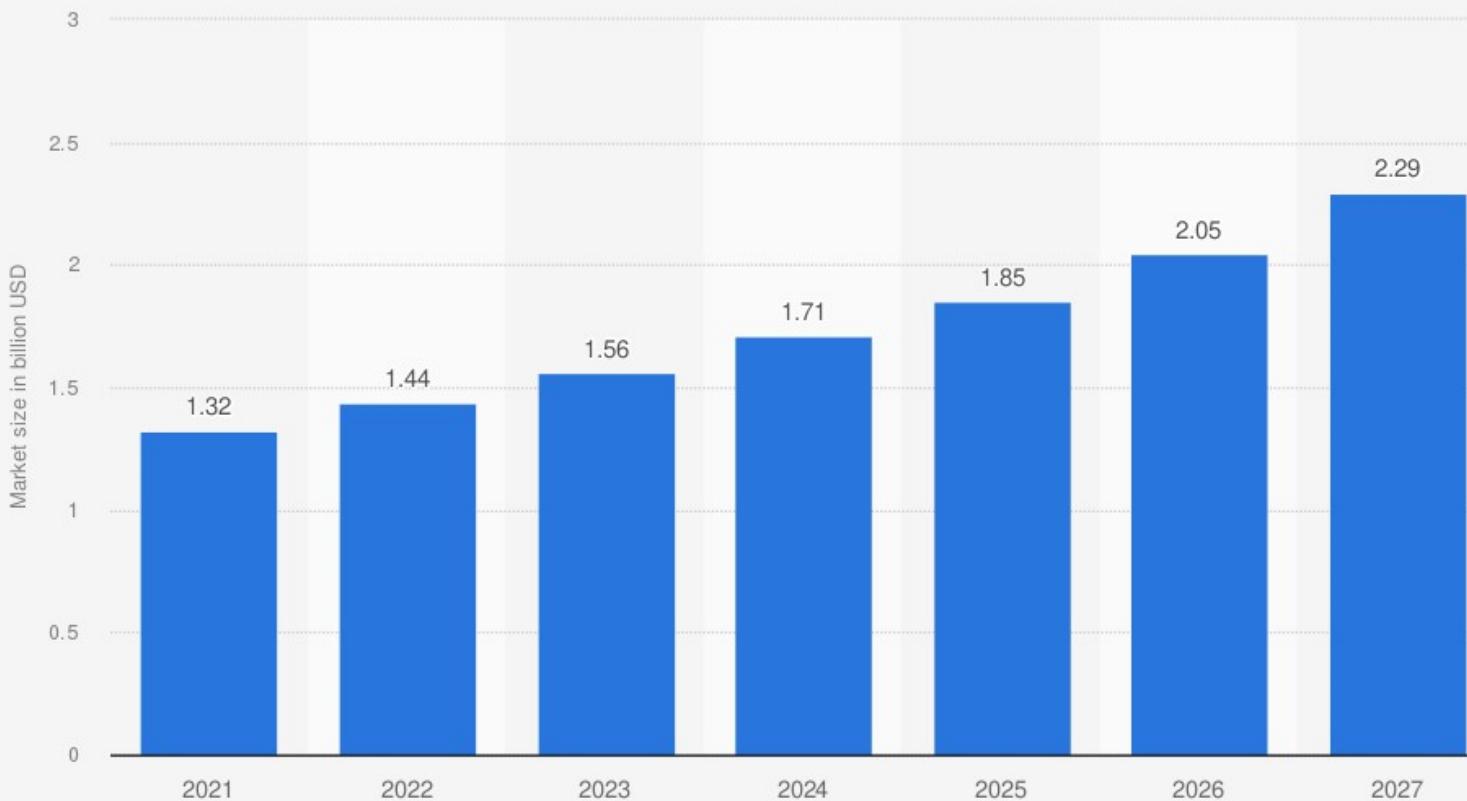


Germany

- Estimated CAGR 2023-2029: **4.16 %**
- Leading e-bike market (in Europe) in terms of sold e-bikes
 - **7.1 million** e-bikes owned by German households in 2021
- Competitive and consolidated market
- Five top companies: **61%** market share
 - Cartrend GmbH (Fischer)
 - GROUPE SPORTIF PTY LTD (Haibike)
 - Kalkhoff Werke GmbH
 - MHW Bike-House GmbH (Cube Bikes)
 - Prophete GmbH & Co. KG
- E-bikes holding **48%** share in the industry
- Benefit biking offered to employees in Germany as well

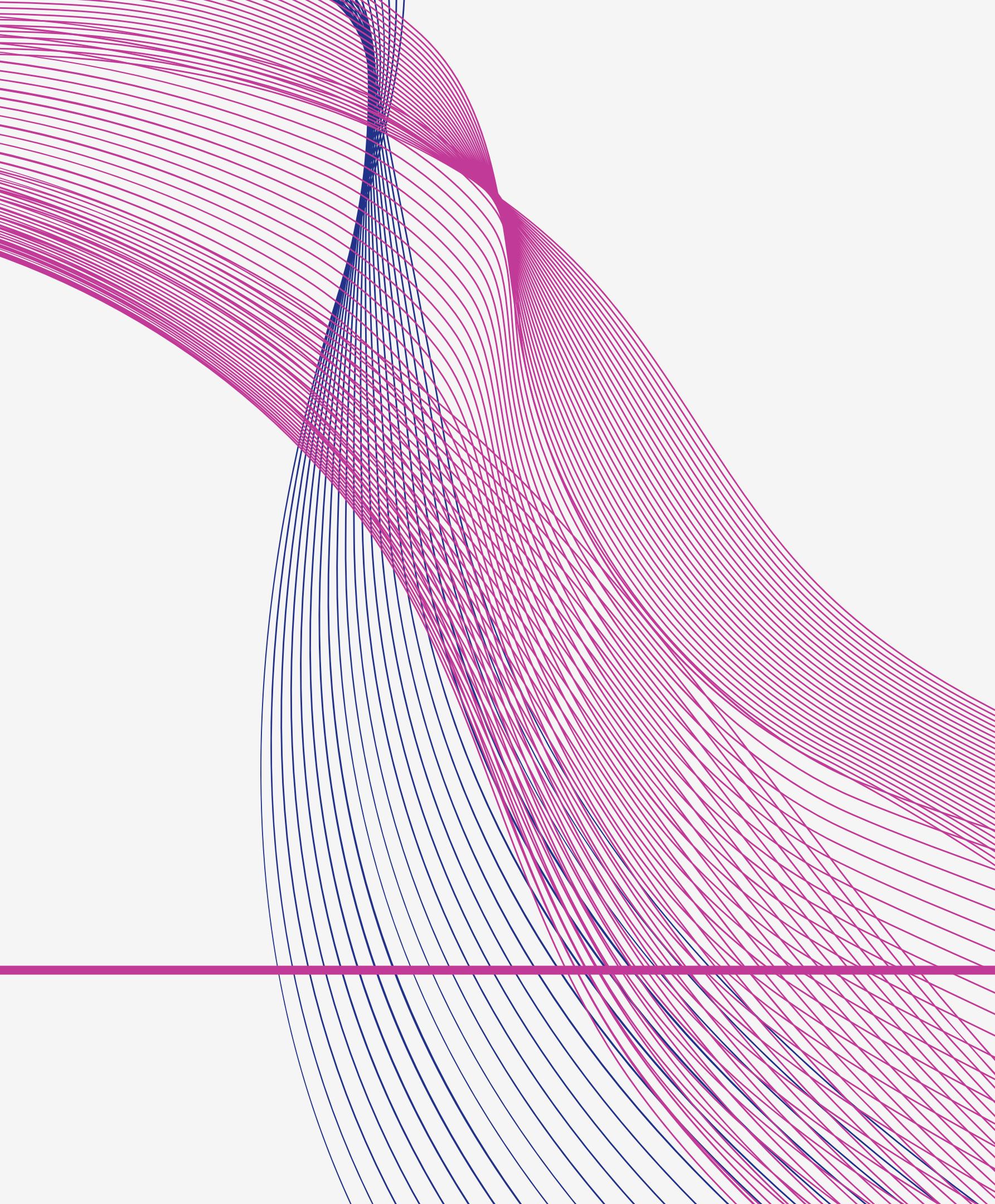
Potential MARKET

E-bike market size in France in 2021, with a forecast from 2022 to 2027 (in billion U.S. dollars)



France

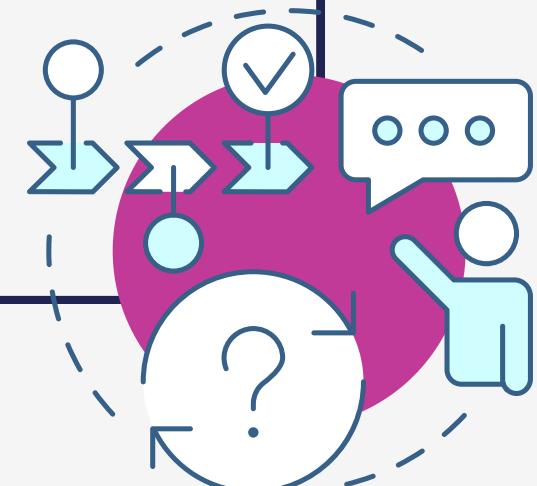
- Estimated **CAGR** 2023-2029:
 - 4.05%
- Competitive and somewhat consolidated market
- Five top companies: **52%** market share
 - Decathlon (one of the largest)
 - Lapierre (one of the largest)
- 23% of the market is covered by e-bikes
- Government incentivizing e-bike purchases until 2027
- **2022:** 740 000 e-bikes sold
- **2021:** 660 000 e-bikes sold
- Tax relieved benefit (e-bike benefit) for commuting offered to employees



CARVE-OUT ANALYSIS

Key Rationales Behind Carve-Out Analysis

- All IT applications transferring are used ‘globally’ across all countries where Spin-off Co is operating – i.e. there are no local-only IT systems
- All legal entities part of the transaction perimeter will be acquired 100% by the PEfund.
- PEfund will **acquire 100% of the shares of the Green Bull Oy**, and all its subsidiaries.
- **Green Bull Oy will be the parent company** of the new legal group of Spin-off Co companies.
- **All more than 50% dedicated personnel** to Spin-off Co will transfer with the target business in the transaction.
- PEfund does not have any existing legal entities in place in asset deal countries Estonia, Latvia, Poland and Hungary suitable to used in this transaction



Projected costs for PEfund as part of the deal parameter (acquisition)

| Deal Type | Categories | Total costs per annum (in EUR) |
|--------------------------------|---|--------------------------------|
| Share deal | Employees | 3,288,000 |
| Share deal | Core business HR, manufacturing and engineering | 285,000 |
| Asset deal | IT infrastructure systems | 91,000 |
| Share deal | Vendor management (55 vendor contracts for the deal perimeter in Finland, Sweden and Germany) | 55,000 |
| Combined Costs of deals | | 3,760,000 |

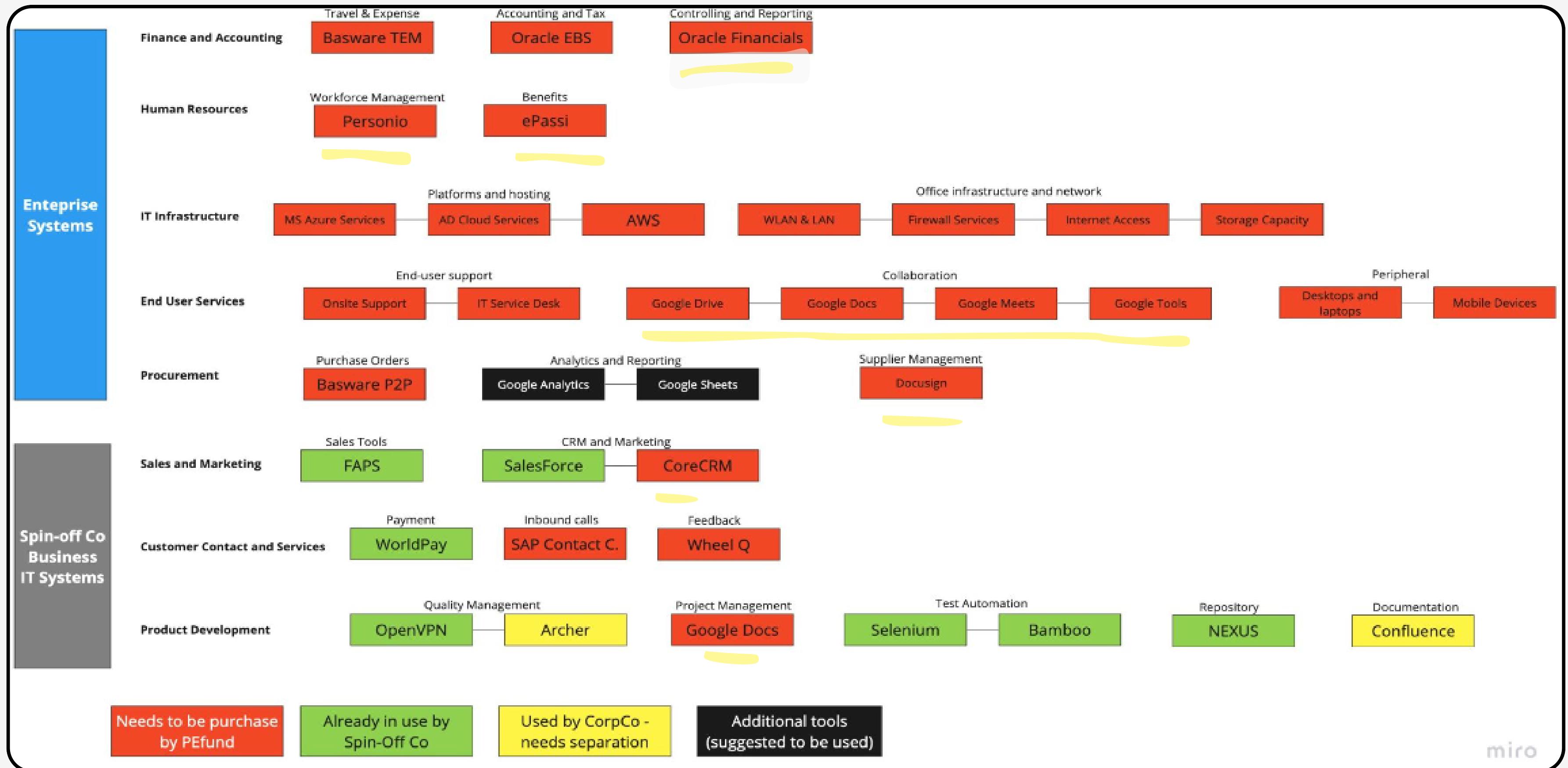
Rationale for the new Infrastructure Outlook

Rationale for the following Figure shown below of the IT infrastructure is to keep the most essential related to the business such as Customer Management and Product Development. However, from Finance, Accounting and HR there are simpler and economical tools that can be used. For now, we suggest to

- **Downgrade from Workday** to using something significantly more economical and user-friendly such as Hi-Bob, Sympa or Personio.
- Given the numbers of employees it could be reasonable **to shift to Google IT Infrastructure** for affordability reasons such as Google Docs, Google Meets.
- Since the customer base of Spin-Off Co at least initially will be less than CorpCo, **it is better to prioritize the procurement tools** i.e. choose one of DocuSign or SAP Ariba.
- SAP tools are generally expensive → assuming that PEfunds does not have any existing tools and does not use SAP, we should use something more central and less complex.



New Infrastructure Outlook For Spin-OFF Co



IT Infrastructure Analysis & Cost Breakdown

| System Type | Department | Amount of tools or services to be used | Expected cost per annum (in EUR) | Notes |
|--|---------------------------------|--|----------------------------------|---|
| Enterprise Systems | Finance and Accounting | 3 | 12,000 | Basware systems are marked at 300 EUR per month and Oracle systems between 6-10k EUR per year. |
| | HR | 2 | 10,000 | Personio is priced at 2,0-6,0k EUR for smaller sized firms depending on the features used. E-passi is usually a tax benefit, so the payment for the companies is between 3-5k EUR for a 50 employee sized firm. |
| | IT Infrastructure | 7 | 15,000 | This section is marked as one of the expensive ones since they are a critical enterprise system. |
| | End-user services | 6 | 40,000 | Here the most costly tools are the laptops and mobile devices to be bought by the company for existing employees and / or the cost to maintain them. |
| | Procurement | 2 | 2,000 | Docusign is chosen as one of the platforms in supplier management with Basware P2P taken into account in the section above. |
| Spin-Off Co Business IT Systems | Customer Contact and Management | 3 | 5,000 | The estimated cost of tooling for the customer support and CRM management. |
| | Sales and Marketing | 3 | 2,000 | |
| | Product Development | 7 | 5,000 | Test automation; documentation and quality management for the tooling. |
| Total Cost | | 33 tools | 91,000 | |

Employee Cost of the Support Functions in Sweden, Finland and Germany, Green Bull

| Entity | Department | Employees (as of 2022) | Total Cost per annum in EURs |
|--|---|------------------------|------------------------------|
| Green Bull AB Total HC = 35 | Customer Service | 6 | 195,194 |
| | HR, General Management & Administration | 3 | 136,200 |
| | Product Development | 9 | 584,000 |
| | Sales | 13 | 688,420 |
| | Supply Chain Management | 4 | 175,110 |
| Green Bull Oy Total HC = 1 | General Management & Administration | 1 | 178,160 |
| Green Bull GmbH Total HC = 20 | Customer Service | 5 | 162,674 |
| | General Management & Administration | 1 | 112,200 |
| | Product Development | 2 | 177,200 |
| | Sales | 6 | 661,080 |
| | Supply Chain Management | 4 | 217,640 |
| Totals | | 56 employees | 3,288,000 |

Strategy to outsource 80% of manufacturing and engineering

Due to the manufacturing and engineering being based in Hungary and Poland - **PEfunds needs to decide whether it should invest (outsource) the business like CorpCo to those countries where they know the manufacturers.** An alternative option is to outsource the manufacturing to Asian countries such as China. This comes at a significantly cheaper labor cost which is almost twice as less meaning they can produce and also have the ability to be the market leader in terms of production. Spin-Off Co would benefit this especially since they have operations in Germany and data shows that the Europe E-Bike Market size is expected to grow from USD 10.71 billion in 2023 to USD 19.28 billion by 2028, at a CAGR of 12.48% during the forecast period (2023-2028).

This does also mean that there are significant factors such as partnering with a Chinese production plant and having the know-how to operate in China. Therefore having the right connections is the most important thing to succeed in making e-bikes. One key factor is that the plant is far away meaning this influences shipping costs and potential challenging repair problems which can not be handled by the local offices.

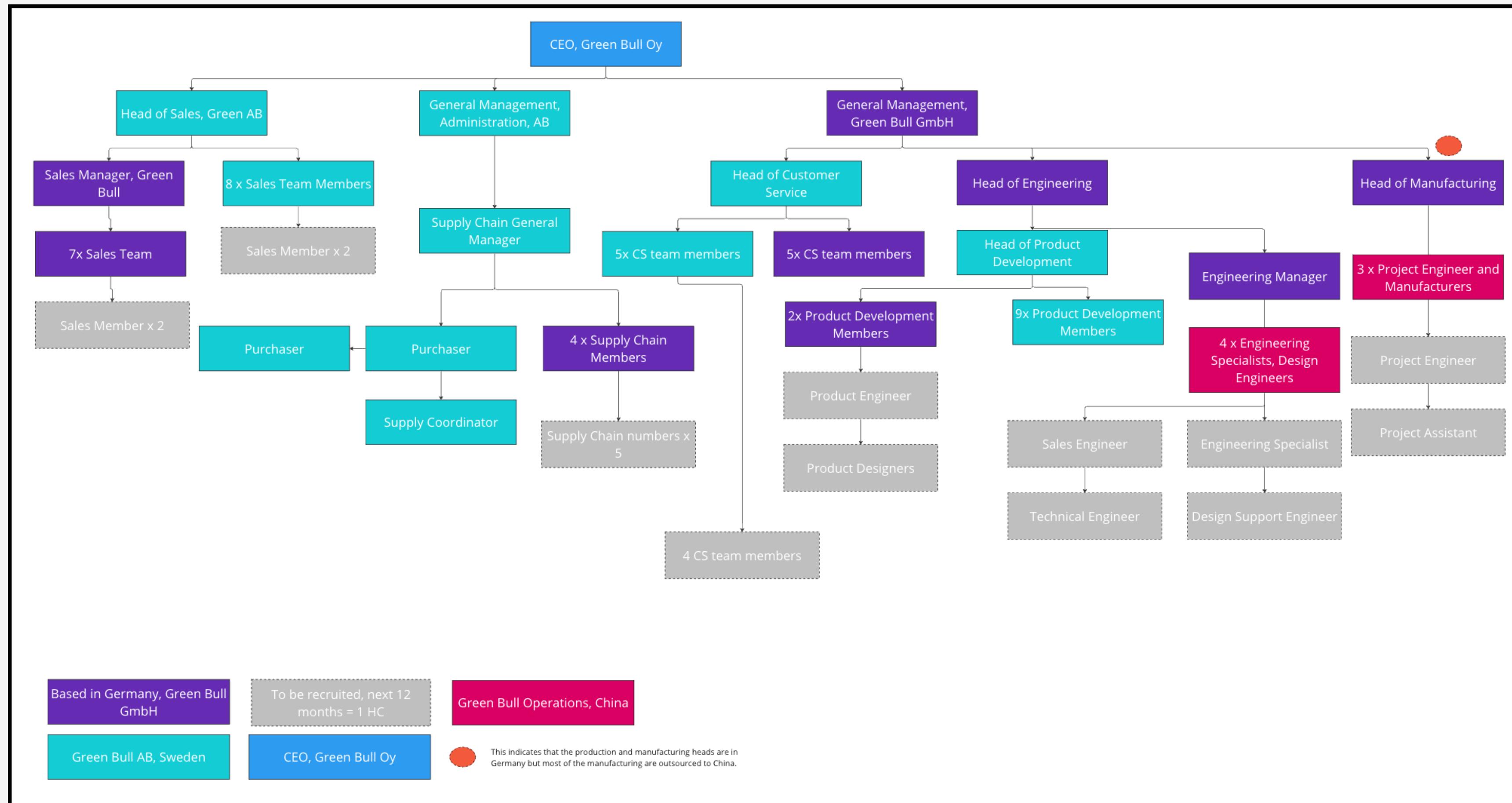
The rationale for the cost per annum was taken from the Spin-Off Co Employee Data -> this is visible in the Figure in the next slide (Slide 26).

- The average cost for the engineering department headcount is €50k per annum
- The average cost for the manufacturing department headcount is €45,5k per annum
- Since the employee data includes Spin-Off Co employees that are working for CorpCo who are not involved in the Green business, the assumption is to start building the workforce with 30% of the total headcount.

Strategic options for core business Functions - engineering and manufacturing

| Strategy | Department | Employees headcount (30% of CorpCo) | Total Cost per annum (in EUR) |
|--|---------------|---|-------------------------------|
| Option 1 - Similar to CorpCo to have core functions in Hungary and Poland | Engineering | 7 | 350,000 |
| | Manufacturing | 4 | 182,000 |
| Option 2 - To have engineering and manufacturing (80-90% outsourced to China) | Engineering | 5 design and sales engineers (in China) at €15k per annum 2 engineers in Germany at €60k per annum | 195,000 |
| | Manufacturing | 4 project engineers in China “1 Head of Manufacturing in Germany | 90,000 |

Proposed Organisation Structure (Model)



ACQUISITION TIMELINE, PE FUNDS X SPIN-OFF CO



JANUARY 2024

Prepare the acquisition of Green Bull in three entities including covering the costs of the infrastructure and core business planning.
Communicate the news

Prepare the asset and employee headcount deal including Manufacturing and Engineering Operations in China.

FEBRUARY 2024

Make the acquisition and monitor the progress for the first 30 days to onboard the new management, strategy and organisational structure of Spin-Off Co.

MARCH 2024

Have a 1v1 set-up for the employees in all departments including performance management and expectations going forward.

To answer the questions, we recommend.. (next slide)

- 1 Is this attractive market to be in today and five to seven years into the future?
- 2 Could 'Spin-off Co' become a market leader with its technology in the key markets?
- 3 If carved out of 'Corp Co' how to ensure business continuity as a standalone company?

Our recommendations to Mrs.Smith of PEfunds

BUY


We would recommend Mrs. Smith to acquire Spin-Off Co. for the three markets and deal parameter due to the above average market growth in Germany, Sweden and Finland; the revenue growth by 200% in all markets; and the market opportunity in the three markets which increases drastically. We give three reasons to proceed with the purchase of Spin-Off Co. Slide 12 provides good indication for Spin-Off Co's attractiveness.

1. Spin-Off Co. has an **average revenue growth rate of 16%** (year on year) from 2023 to 2027, which indicates that the firm can go from making €29 million euros in 2022 to €60 million euros at the end of 2027. This is a strong buy indicator for purchasing Spin-Off Co.
2. The **market size of e-bikes increases by approximately 15% from 2022 to 2027**, the largest market opportunity being in Germany at €7,5 billion euros for e-bikes and also the similar ratio increase (10-15%) in Finland and Germany of the e-bike market size. It has to be noted that there are market entry opportunities in other countries such as France, Italy and Poland that has not been accounted in the revenue projections. **Hence this can be strongly considered as an attractive market for the next 5 to 7 years.**
3. The **expected market share growth of Spin-Off Co is supposed to grow exponentially from 2022 to 2027** at a year-on-year growth of 10-15%. While Spin-Off Co is not a leader among these markets with the right marketing and branding it has the opportunity to increase market share in an increasing market size. Overall from 2022 to 2027 the market share increases by 50-65% in each market. **In short, Spin Off Co can not become a market leader in these regions.**

References

1. Tilastokeskus (statistics Finland)
2. SCB (statistics Sweden)
3. DST (statistics Denmark)
4. Insee (statistics France)
5. Destatista (statistics Germany)
6. Statista
7. RAI Vereniging
8. Ernst & Young
9. Mordor Intelligence
10. United Nations

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