



# PARAGON

**paragon GmbH & Co. KGaA**  
**Deutsches Eigenkapitalforum**

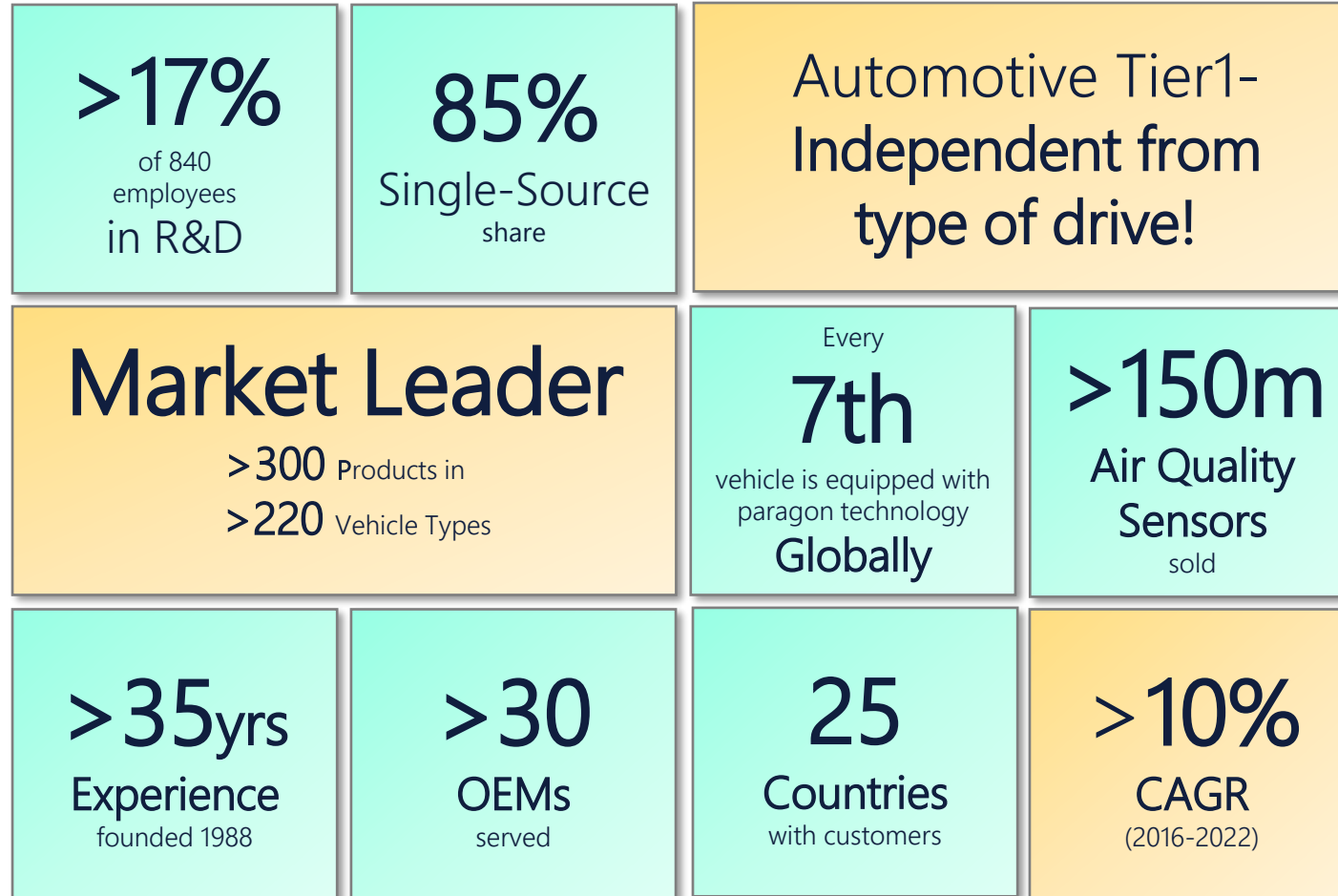
Frankfurt | November 27, 2023

"paragon's revenues increased to  
EUR 122.0m"

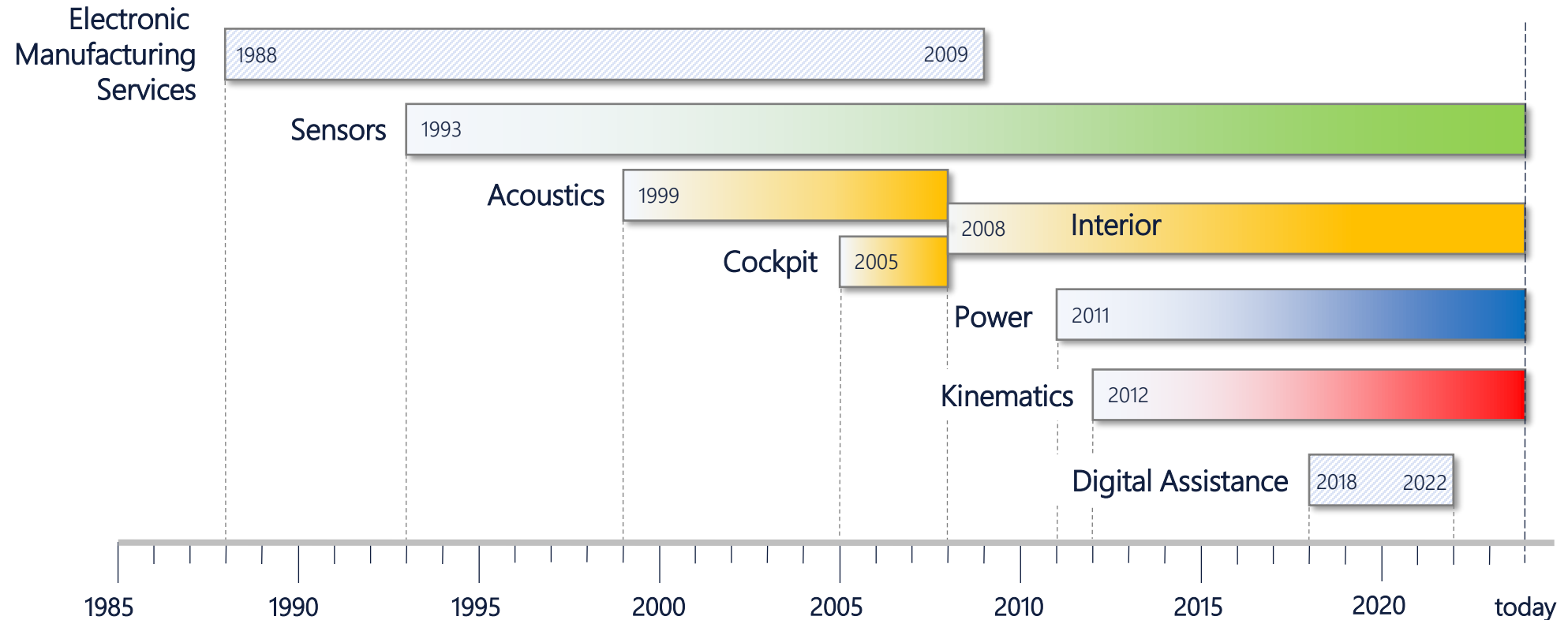
"Cooperation and supply agreement  
with Clarios closed"

"Debt reduced to EUR 49.0m"

## paragon in a Nutshell



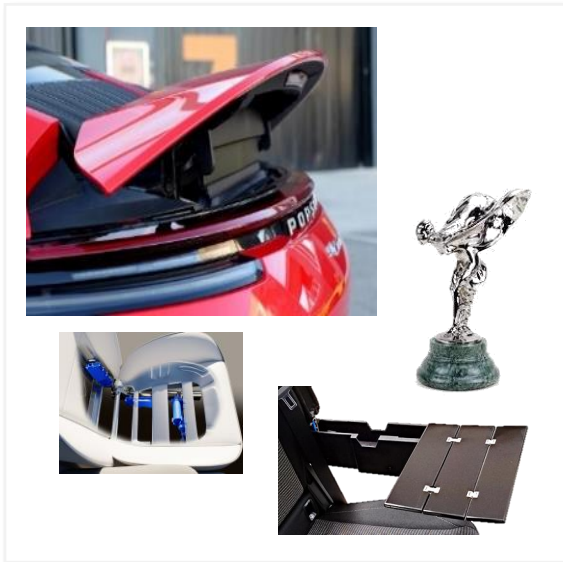
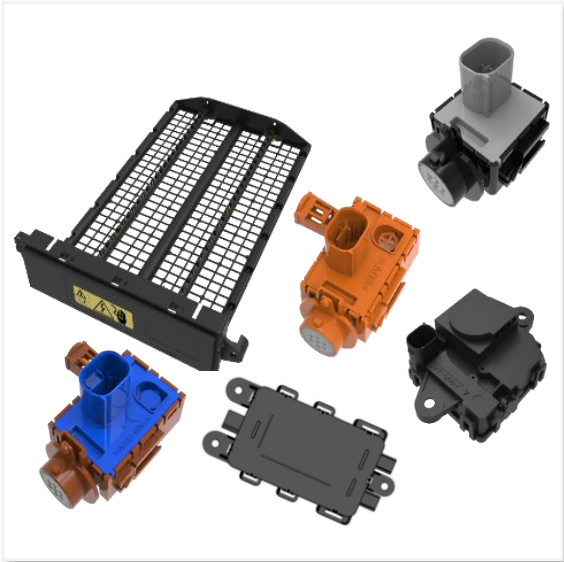
# History of paragon



Since more than 35 Years, paragon has build-up an Automotive Tier 1 with Propriety Products

# Product Portfolio Today - Overview

\*) ... of YTD 2023 revenues



**Sensors** 26% \*)

**Interior** 33% \*)

**Kinematics** 36% \*)

**Power** 5% \*)

**In-Cabin Wellbeing**

**CO<sub>2</sub>-Reduction**

## Product Portfolio Today - Sensors



### Air Quality Sensor

- Automatic control of the vehicle recirculation flap
- Reduction of dangerous emissions inside the cabin
- Advanced technology for detection of toxic gases and unpleasant smell
- High-sophisticated SW-algorithms for detection of special traffic situations
- Over 150 million pcs. produced



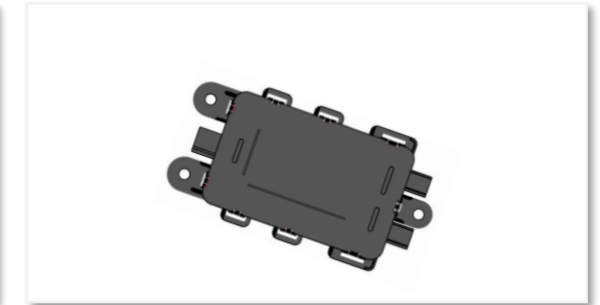
### DUSTDETECT

- Measurement of particulate matter outside and in-cabin
- Exterior and interior installation
- Laser sensor with optical particle counting
- Size discrimination PM1, PM2.5 and PM10



### DUSTPROTECT

- High-voltage plasma filter cleans air inside vehicle's cabin by filtering particles and viruses
- Much better than state of the art filtration systems
- Saving space, energy, waste and costs in comparison to HEPA
- Constant efficiency over lifetime



### Air Quality Improver

- Fresh air effect by artificial ionization
- Enhancing of well-being of vehicle passengers
- Fine dusts, gases and smells are bound by negative ions
- Reduction of germs and bacteria in vehicle interior through physical air treatment

**World market leader for In-Cabin Air-Quality**

# Product Portfolio Today - Interior



## Loudspeakers

Broad product spectrum incl. sound systems and signal processing

Tweeters, midranges, woofers, subwoofers, headrest and ultimate speakers

Special solutions like exciters, air motion transformers, high-temperature exhaust speakers, external speakers for e-vehicles

Small to high volumes, entry to award-winning high-end levels

White label branding possible (e.g. B&O, Bespoke Audio, ETON)



## Microphones

Multiple use cases such as voice assistance, vehicle noise control, handsfree and in-car communication, road and wind noise cancellation, external microphones for autonomous driving

Clever combination of acoustical mechanics and adaptive electronic filter

Very low wind sensitivity by active and passive elements

Analogue and digital interfaces

Cutting edge tech and efficient manufacturing



## Instruments

Market leader with very well-known chronometers, analogue clocks, compasses and control applications

The choice for premium and luxury cars

Many more analogue and hybrid instruments for any use case

Own design team to meet any customer requirement

Inhouse stepper motor and plastic parts development and mass production



## Wireless Charging

High efficiency wireless charger based on Qi-standard

Patented active cooling system

Self diagnostic

Member of Wireless Power Consortium (WPC) since 2013

## In-Cabin Wellbeing

# Product Portfolio Today - Kinematics



## Spoilers

Electro-mechanical systems for high variety of vehicles

Application in sportscars, hatch, station cars, SUVs, e-vehicles and trucks

High innovation and realization competence

Range extension for e-vehicle by reduction of air resistance



## Actuators

Drive systems for active spoilers and seat adjustment

Integrated electronics and sensors for advanced vehicle architecture

Multi-stage gear reduction with powerful DC-motors

Fast operation of heavy loads



## Folding Tables

Special folding system to minimize space

Various electronic interfaces (wireless charging, USB-C, displays and keyboards)

Lightweight through use of magnesium and aluminum

Resists head impact

Meets various crash requirements



## Special Kinematics

Tailor-made solutions with cost-effective development

Electrical lowering mechanism of hood ornament

Anti-theft and pedestrian crash protection

Wind deflectors for convertible cars and motorcycles

Easy operation with 3D-movement

## High-sophisticated Kinematics for Exterior and Interior



# Product Portfolio Today - Power



## Battery Management Systems

- Huge background with ECU projects
- Predictive algorithms
- Intelligent balancing
- SW-based safety concept incl. top-edge SOC/SOH-calculation
- New quiescent current concept (deep-sleep and transport modes for extended shelf life)



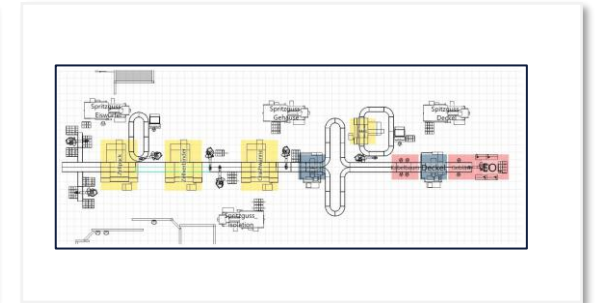
## Traction Batteries

- Lightweight concepts
- Use of Flow-Shape-Design technology
- Embedded battery safety
- "Lord of the cells" battery management



## Flow-Shape-Design

- Expanded foam as case for battery systems and modules
- Substitution of conventional metal housing
- Less weight/space/costs
- Absorption of shocks/vibration/temperature
- Licenses available

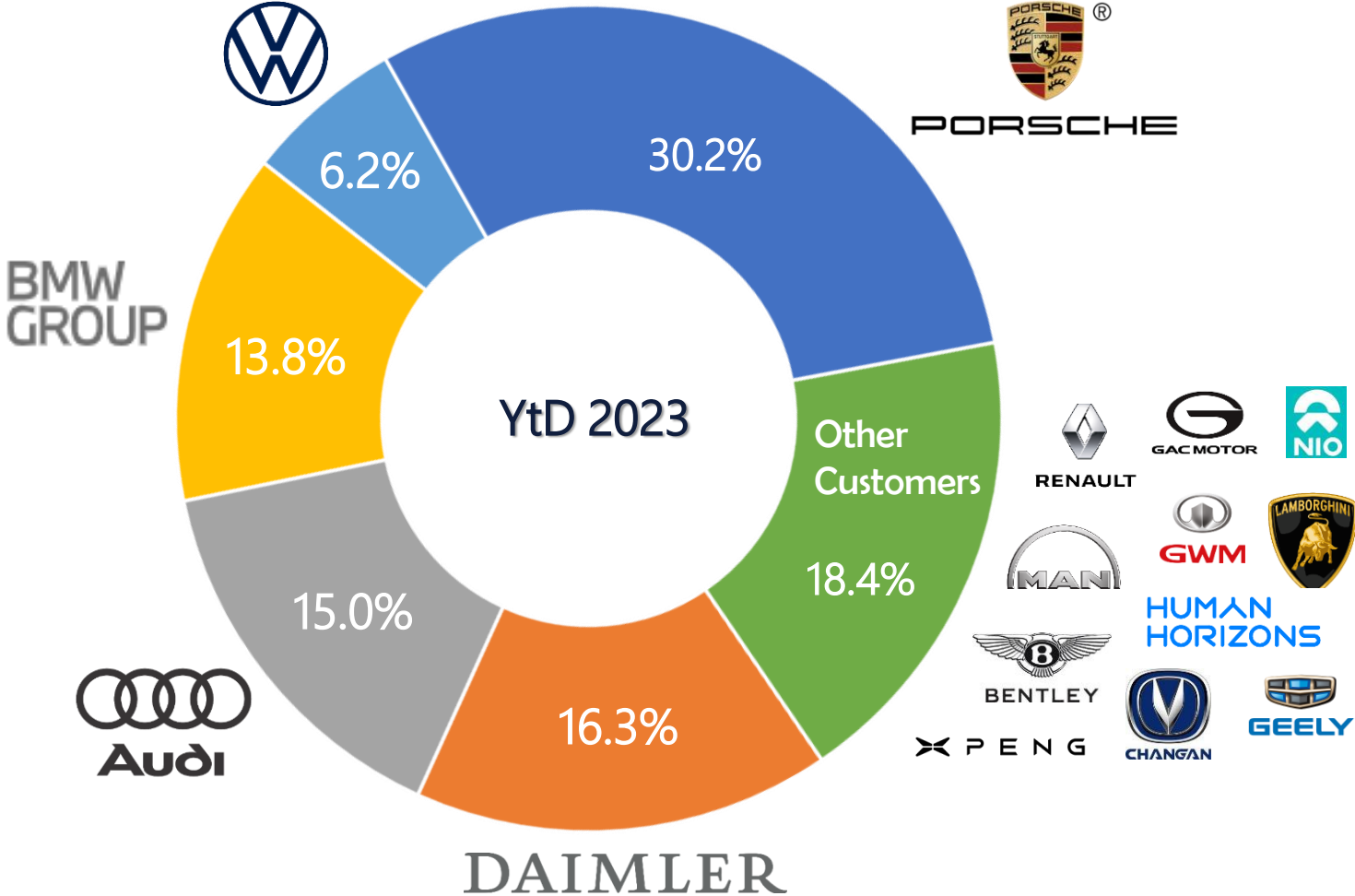


## Consulting

- Technology transfer in regards of Flow-Shape-Design
- Projecting and realization of production lines
- In-house production of test equipment
- Turn-key projects

## Game-Changing Battery Technologies

# paragon's Premium Automotive Customers YTD 2023



## 9m/2023: Financial Highlights at a Glance

Revenues up by 2.9% compared to 9m/2022

Asset deal with Clarios lead to a profit in the mid single mill. EUR

EBITDA (continued business) at EUR 16.3m after nine months

Revenue and EBITDA forecast for 2023 adjusted

Start of buy-back program for EUR Bond

## Asset Deal with Clarios

- Closing on September 30, 2023
- Agreement includes sale of different production lines and transfer of a group of engineers and workers to Clarios
- paragon will remain manufacturer of battery management systems for Clarios
- Clarios licenses paragon's Flow-Shape-Design-Technology (FSD) for non-traction batteries
- paragon keeps the industrial property rights for FSD in regards of traction batteries

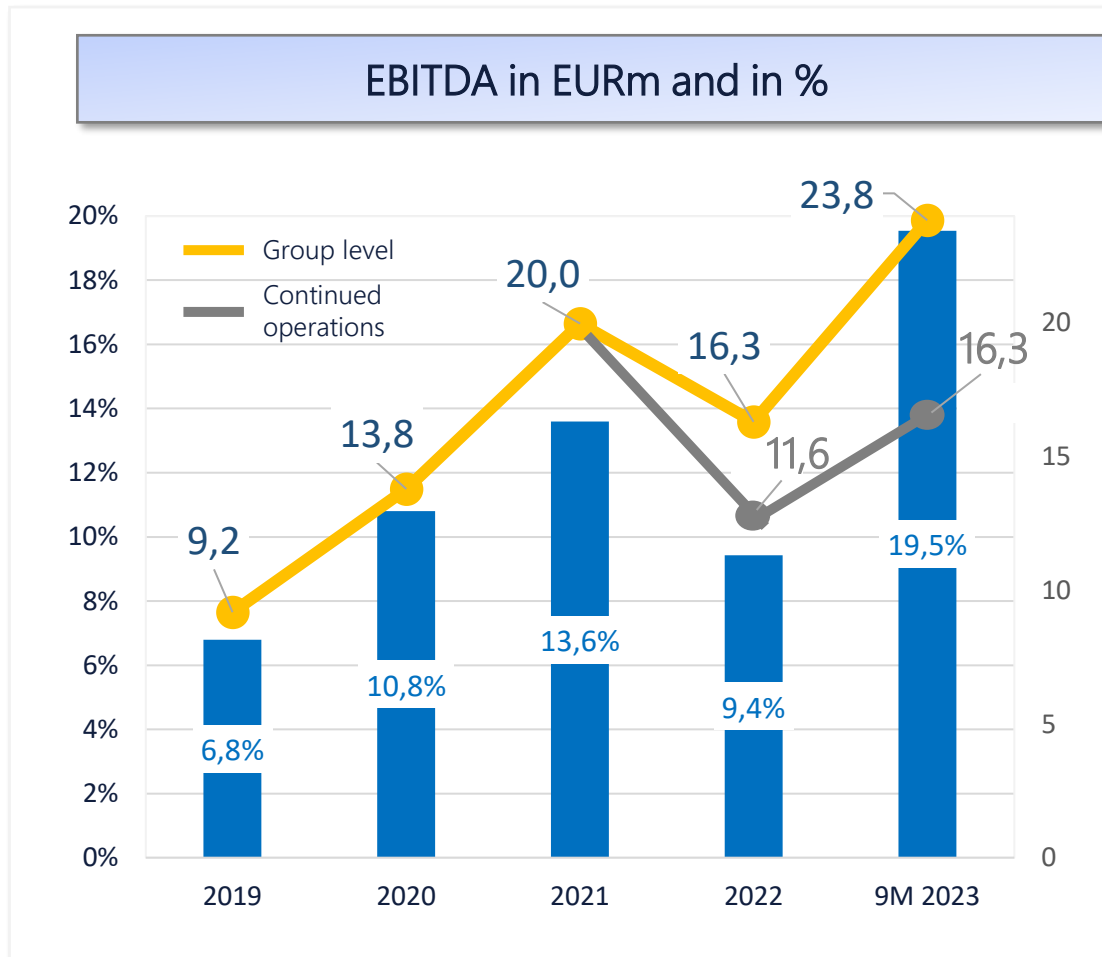


## P&L Development paragon – First nine Months

<b>Income Statement in MEUR</b>	<b>9m/2022</b>	<b>9m/2023</b>
Revenues	118,6	122,0
Other own work capitalized	4,5	1,7
Change of finished goods	2,4	0,6
Other operating income	2,6	9,7
<b>Total operating performance</b>	<b>128,1</b>	<b>134,0</b>
Costs of materials	-67,4	-68,4
Personnel expenses	-31,4	-34,0
Other operating expenses	-20,8	-15,3
<b>EBITDA</b>	<b>8,5</b>	<b>16,3</b>
Depreciation & amortization	-9,7	-10,8
<b>EBIT</b>	<b>-1,2</b>	<b>5,5</b>
EBITDA paragon semvox	3,5	7,5
<b>Group EBITDA</b>	<b>12,0</b>	<b>23,8</b>

- ❑ P&L according to IFRS 5 (top line does not include revenues of paragon semvox GmbH)
- ❑ Revenues increased to EUR 122.0m in first nine months
- ❑ Reduction of own work capitalized due to higher reimbursements of development costs from customers
- ❑ Other operating income includes profit impact of asset deal with Clarios
- ❑ **EBITDA:**
  - Continued operations: EUR 16.3m (+90% vs. 9m/22)
  - paragon semvox: EUR 7.5m
  - Group level: EUR 23.8m
- ❑ **Depreciation & amortization include**
  - EUR 0.6m PPA paragon movasys
  - EUR 4.5m IAS 38 amortization

# P&L Development paragon – First nine Months



EBITDA first nine months 2023:

- Continued operations: EUR 16.3m (+90% vs. 9m/22)
- paragon semvox: EUR 7.5m
- Group level: EUR 23.8m

EBITDA full year 2022:

- Continued operations: EUR 11.6m
- paragon semvox: EUR 4.7m
- Group level: EUR 16.3m

9m 2023: Achieved EBITDA of continued operations amounts to 100% of FY 2022 EBITDA

## EUR-Bond: Buy-back Program

- \_ Nominal-Volume: EUR 20.2m
- \_ Background: **Actual terms and conditions modified in the course of prolongation**
  - ❑ Usage of EUR 25.0m out of the proceeds from semvox-sale ./ . EUR 4.8m already repurchased
- \_ Activities: **Program to buy back bonds from the market until July 5, 2025**
  - ❑ In compliance with the Market Abuse Regulation (MAR)
  - ❑ Less than 25% of the average daily trading volume are allowed to buy from the market to avoid market manipulation
  - ❑ In the first two weeks of the program paragon bought a nominal volume of 57,000 EUR

# Successful Strategy to Reduce Debt Burden

1

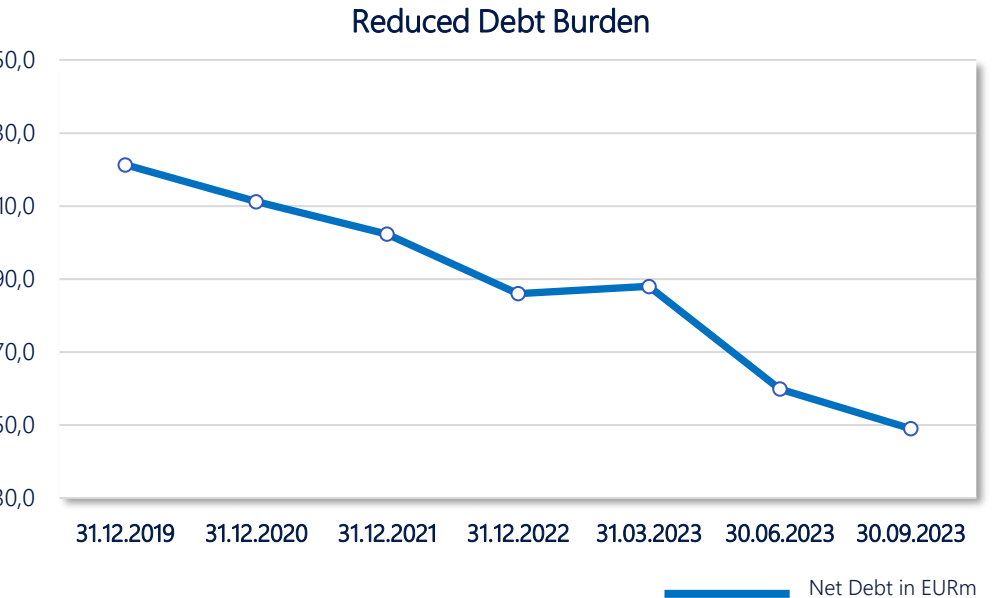
Net debt reduced from EUR 121.3m end of 2019 by nearly 60% to EUR 49.0m end of Q3/2023

2

This is a reduction of EUR 72.3m in the last three years and nine months  
Average monthly reduction in the last 45 months was EUR 1.6m

3

paragon considers a range of EUR 50m to 60m as appropriate for the current set up of the group



4

Interest rate of bond depends on net leverage ratio; rate <2.5 will lead to an interest rate of 7.5% from Jan 5, 2024, on

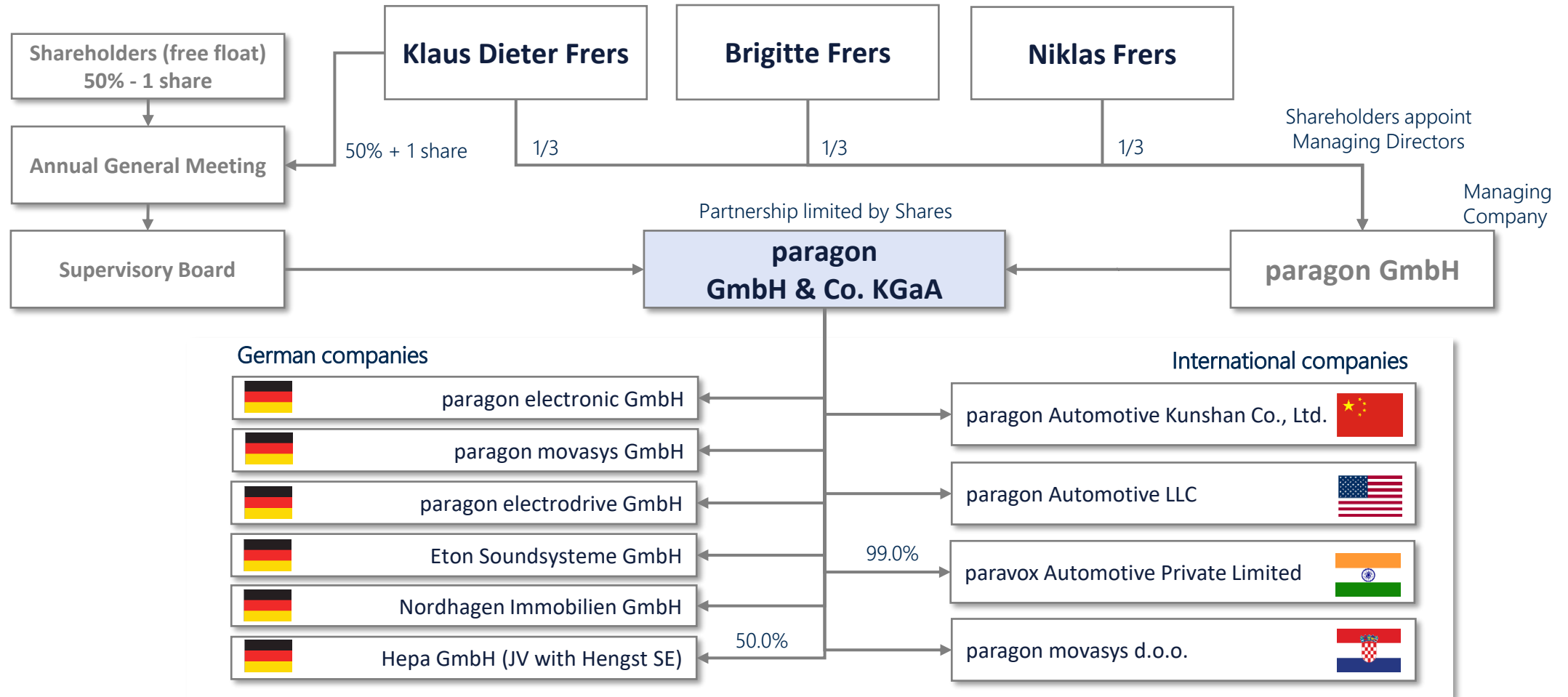


## Director's Dealing

- September 29, 2023: Klaus Dieter Frers (Managing Director of paragon GmbH) bought back 1,355,000 paragon-shares from ElectricBrands AG for the same price (€ 4.53 per share), ElectricBrands AG acquired the package from him in November 2022 (Total purchase price: € 6,138,150)
- Klaus Dieter Frers, again, now has 50%+1 total voting rights (before: 20.06%)
- The German Federal Financial Supervisory Authority (BaFin) has exempted him from the obligations to publish a mandatory offer \*)

\*) Pursuant to section 35 (1) sentence 1 WpÜG and pursuant to Section 35 (2) Sentence 1 in conjunction with Section 14 (2) sentence 1 WpÜG and Section 37 (1) Var. 4 of the German Securities Acquisition and Takeover Act (Wertpapiererwerbs- und Übernahmegesetz, WpÜG)

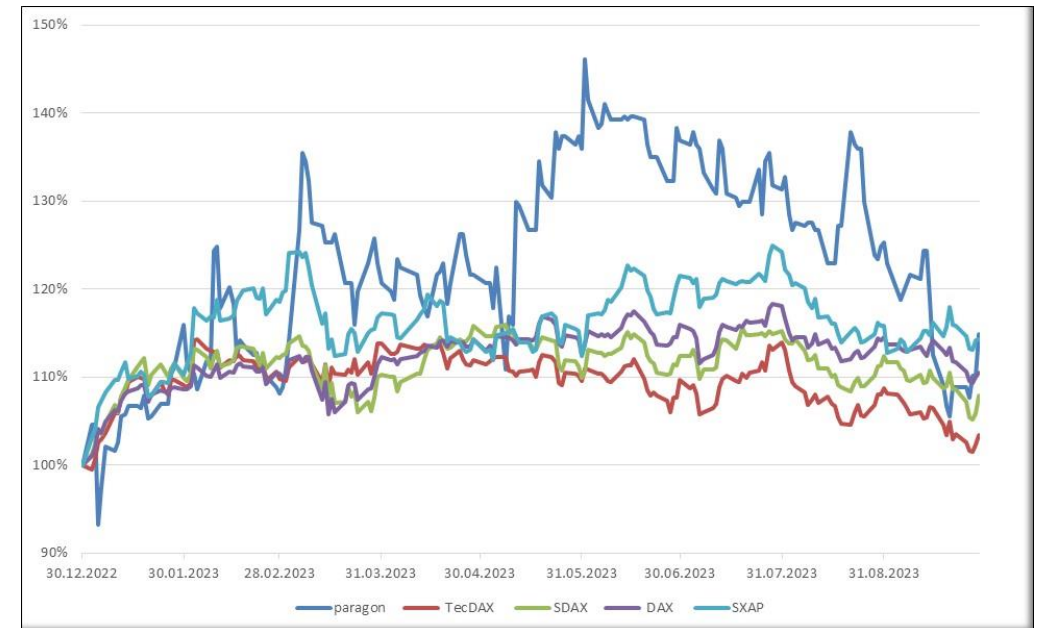
# Corporate Organization ensures Stability



# Share Performance

– Highlights:

- ❑ Closing price December 31, 2022: 4.31 EUR
- ❑ Closing price March 31, 2023: 5.20 EUR
- ❑ Peak (June 1, 2023): 6.30 EUR
- ❑ Closing price June 30, 2023: 5.90 EUR
- ❑ Closing price September 30, 2023: 4.95 EUR
- ❑ Market capitalization (Sept. 30): EUR 22.4m
- ❑ +14.8% in the first nine months 2023



# Actual Research Reports show High Upside Potential

## paragon Group

Auto Parts / Germany

### Rather positive Q3 preliminary results

Earnings/sales releases - 25/10/2023

paragon group announced a good set of preliminary 9M figures even though sales suffered from supply chain disruption. The group notably again lowered its net debt and positively adjusted its guidance for FY23.

**Target: EUR 10.30/share**

Operations

- Significant reduction in net gearing, now standing at 1.7x (net debt <€50m compared to <€60m at H1 23)
- The outlook for FY23 saw a positive adjustment

Analysis

**Supply chain woes weigh on sales**

The 6.3% decline observed in Q3 23 was primarily due to the discontinuation of a sensor product as well as extended plant vacations by automotive manufacturers. Nevertheless, the EBITDA amounted to €23.8m after 9 months (including €7.6m from discontinued operations) compared to €12m a year ago, pointing to strong growth in profitability with a 19.5% EBITDA margin (9M 22: 10.1%). We will learn more about the drivers in the official results release.

**An improving financial profile**

The significant reduction in net debt resulted from the use of the cash proceeds (mid-single digit million range) following the asset deal with Clarion on the Power business unit, which was not disclosed during this deal announcement. We see this move as positive for the stock as the debt level had been a sword of Damocles overhanging the share price.

**A rather positive outlook adjustment**

The company now expects FY23 EBITDA (including discontinued operations) of between €25m and €27m (vs €20-25m previously) and sales of between €160 and €170m (approximately €170m previously). This guidance update is rather positive in our view as the management is confident on the margin side despite lower orders.

Impact

We will revise our estimates downward to reflect the reduced sales guidance as well as a lower EBITDA stemming from continuing operations than in our previously overly-optimistic forecast.

## Baader Europe

**Buy** Upside: 129%

Target Price (6 months) € 10.3  
Share Price € 4.51  
Market Cap: €M 20.4  
Price Momentum NEGATIVE  
Extremes 12Months 3.81 P 6.30  
Sustainability score 2.7  
Credit Risk BB-  
Fundamental Strength 0  
Bloomberg PGN GY Equity  
Reuters PGN.G.DE

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PERF	1w	1m	3m	12m
paragon Group	-3.01%	-3.84%	-21.7%	12.8%
Autos	-5.87%	-7.62%	-14.3%	10.8%
STOXX 600	-3.26%	-4.01%	-8.57%	8.27%

Sector Opinion Underweight  
Strongest upside Forvia  
Worst potential BMW

Complete Sector Analysis

Last updated: 25/10/2023 12:22A 12:23E 12:04E 12:09E

Adjusted P/E (x)	-2.65	8.58	5.64	3.70
Dividend yield (%)	0.00	0.00	0.00	0.00
EV/EBITDA(R) (x)	10.8	3.11	2.80	1.97
Adjusted EPS (€)	-1.84	0.53	0.80	1.22
Growth in EPS (%)	n/a	n/a	52.2	52.4
Dividend (€)	0.00	0.00	0.00	0.00
Sales (€M)	180	167	180	198
EBITDAR margin (%)	7.21	13.2	12.9	12.7
Attributable net profit (€M)	-3.37	9.38	1.62	3.52
ROE (after tax) (%)	-170	66.0	5.22	9.11
Gearing (%)	na	286	122	78.0

Company Valuation - Company Financials

## EDISON

### paragon

A dip in the road ahead

paragon expects extended summer breaks and anticipated year-end

for the Eurobond redemption has yet to be communicated, but should improve the equity outlook and investor sentiment.

Year end	Revenue (€m)	PBT* (€m)	EPS* (€)	DPS (€)	P/E (x)	Yield (%)
1201**	135.4	(3.5)	(0.72)	0.0	N/A	N/A
1202**	160.3	(7.9)	(1.15)	0.0	N/A	N/A
1223e	164.7	1.1	0.38	0.0	11.6	N/A
1224e	178.0	10.3	1.58	0.0	2.8	N/A

Note: \*PBT and EPS are normalised, excluding amortisation of acquired intangibles, exceptional items and share-based payments. \*\*Continuing - restated for paragon semtex, discontinued in FY21/FY22.

**H223 constrained by customer output adjustments**

Sales for the ongoing activities rose 2.9% to around €122m in the first nine months of FY23. Q323 revenues fell c 6.4% due to extended summer plant shutdowns at some customers and the previously indicated ending of a sensor supply contract for a discontinued car model in Q223. Ongoing EBITDA for the year to date rose to €16.3m, including the gain on the Power asset disposal in Q323, which we estimate at around €5m. Debt reduction continued with adjusted net debt falling below €50m, a leverage ratio of around 2x. Management has adjusted FY23 revenue guidance to €160-170m from c €170m previously, and the EBITDA expectation is increased to €25-27m. Excluding the estimated gain on the asset disposal, the underlying level is within the previous guidance range of €20-25m.

**Adjusting for the lower growth trajectory**

As it has reduced debt, management has disposed of two potentially high-growth parts of its business. That increases the focus on the remaining automotive activities of the Electronics and Mechanics (body kinematics) segments, which have solid growth potential. The strategy is designed to drive above market growth through new product innovation and regional expansion, but the overall medium-term growth rates are lower without the sold businesses. We have adjusted our forecasts to exclude the batteries business from forecasts and we expect management to update its medium-term outlook following Q323 results in November.

**Valuation: Bond redemptions remain key**

The lower growth expectations reduce anticipated cash flow growth and thus, despite the debt reduction achieved to date, our DCF value falls to €18.5/share from €22.1/share previously. The low single-digit FY24e P/E multiple highlights the potential if the accelerated bond redemption plans are successfully implemented.

### Q3 trading update

Automobiles and parts

25 October 2023

Price €4.41  
Market cap €20m

Adjusted net debt at 30 September 2023 c €50m (includes leases c €14m)

Shares in issue 4.5m  
Free float 50.7%  
Code PGN  
Primary exchange Frankfurt Xetra  
Secondary exchange N/A

**Share price performance**

% 1m 3m 12m  
Abs (3.7) (19.5) 11.6  
Rel (local) 0.7 (12.4) (3.0)  
52-week high/low €6.38 €3.86

**Business description**

Based in Delbrück, Germany, paragon designs and supplies automotive electronics and solutions, selling directly to OEMs, including sensors, interior and body kinematics. It has production facilities in Germany, Croatia and China.

**Next events**

Q323 result 13 November 2023

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## **Forecast for 2023 adjusted**

### **Revenues 2023e**

Orig.: approx. EUR 170m

New: EUR 160 to 170m

### **EBITDA 2023e**

Orig.: EUR 20 to 25m

New: EUR 25 to 27m

(at group level)

Noticeable increase in demand expected in  
Q2/Q3 2024

## paragon's Way to Growth: Where are we going?

- \_ First, paragon's focus was the **premium high-end car** market in Europe
- \_ Its innovative products are finding applications in **higher-volume premium models** following advanced vehicle standards in regards of:
  - Air Quality
  - Energy efficiency
  - Increased demand for comfort or convenience
- \_ Usage of paragon's products in **more models** and **through more OEMs driving growth**
- \_ Same applies to **regional expansion**, e.g. the rapid growth of Chinese OEMs



... to understand paragon's road to the next level, it's good, first to **understand paragon**

# paragon's Standard Method to generate new Products

## – Starting Questions:

- Which products from other industrial sectors (like building technology and consumer electronics) would make sense using them in a vehicle?
- Where are new legislations that need new products?

– Followed by analyzing **established principles** and **technologies** incl. patent screening

– We seek to **transfer such technologies into the car** by simplifying and making the product much more robust

– We **develop own technologies** and modifications to ensure the function in a vehicle

- Examples: Air Ionizing, Particle Matter Sensor, Electrical Filter, High-Fidelity Loudspeakers...

## – Criteria:

- Scalable products (usage across different car-lines and OEM-agnostic)
- High quantities (through standardization)
- High automation (labor expenses per product <10%)
- Fast occupation of new markets (pioneer profit)
- Establishing high market entry barriers for competitors

## – Goal:

- Market Leadership

## Strategy since 2011

- (1) To accelerate growth, paragon has the ambition to **take over** a larger portion of the **automotive value chain**
- (2) Since 2011, paragon build up the system business along the identified megatrends like...
  - Electro-Mobility → Business Unit Power
  - Energy saving by improving aero dynamics → Business Unit Kinematics
- (3) Since 2021, the megatrends are melting together:
  - Adaptive spoilers for range extension of electrical cars

- (1) In the past, paragon successfully has developed topics and **sold after the growth phase**:
  - 2021: **Voltabox** (High voltage Lithium-Ion batteries for industrial use)
  - 2022: **semvox** (AI for infotainment of vehicles)
  - 2023: **Power** (Non-traction batteries)
- (2) When selling, these activities were still cashflow-negative but always...
  - Proceeds of sale > Book value
  - Sale effected in...
    - Debt reduction due to the proceeds
    - Book profits
    - Relief for P&L and cashflow



# Core Achievements

\_ Behind every finish line a new challenge is waiting – we are on it and very well prepared!

- ❑ Mastering **60+ technologies** in R&D and production
- ❑ Long lasting **OEM-relationships** as Tier 1-supplier
- ❑ All product groups **leading the market** in Europe or world-wide
- ❑ High level of **booked business**
- ❑ Well-filled **product pipeline**
- ❑ We know **high complexity / high volume**
- ❑ We manage **challenging demands** in regards of functionality, cyber-security, maximal availability and reliability

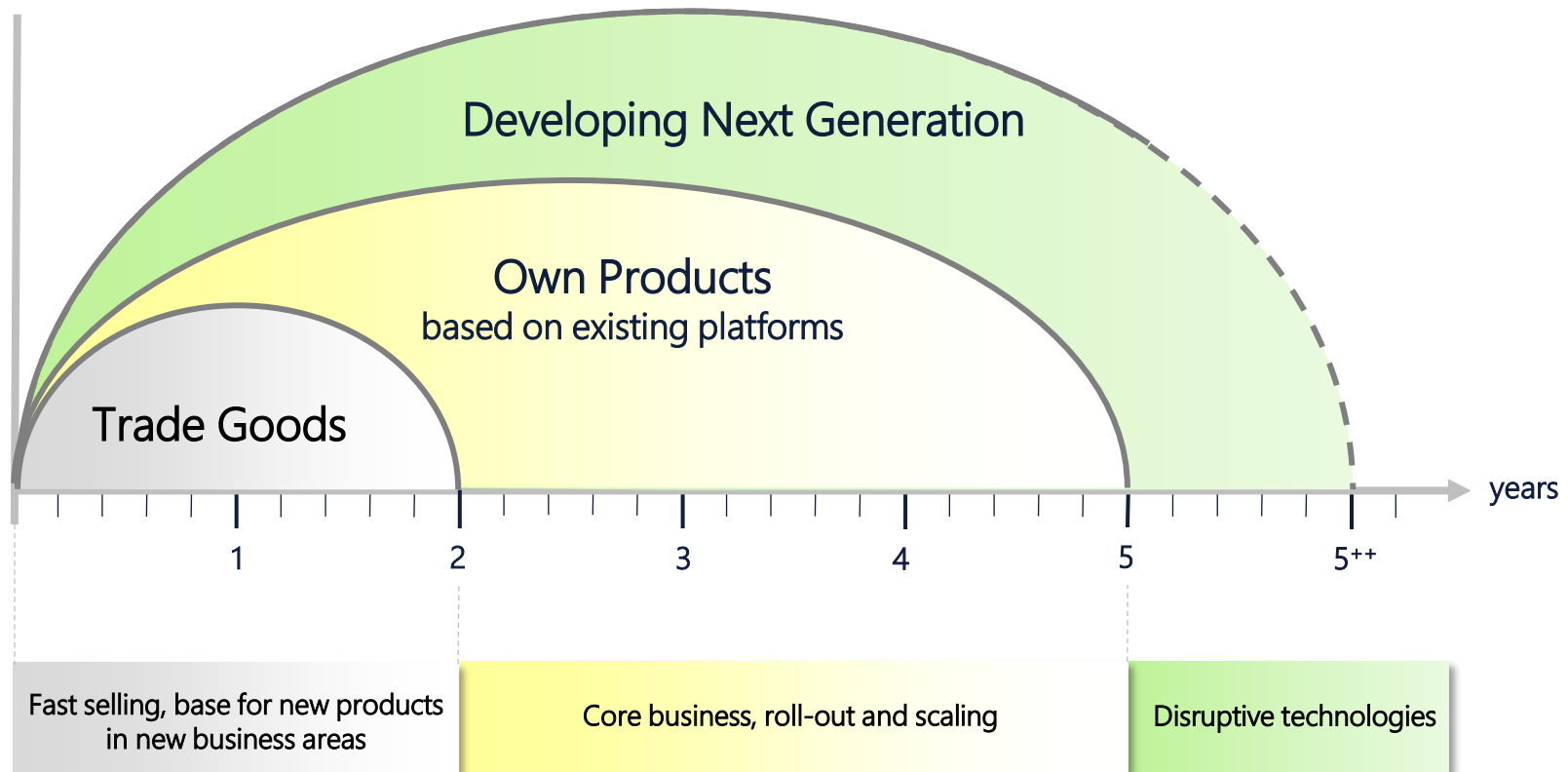
# Megatrends are changing the world

- \_ Megatrends are changing the world – slowly, but fundamentally and in the long term
- \_ paragon's product portfolio supports 8 of current 12 megatrends

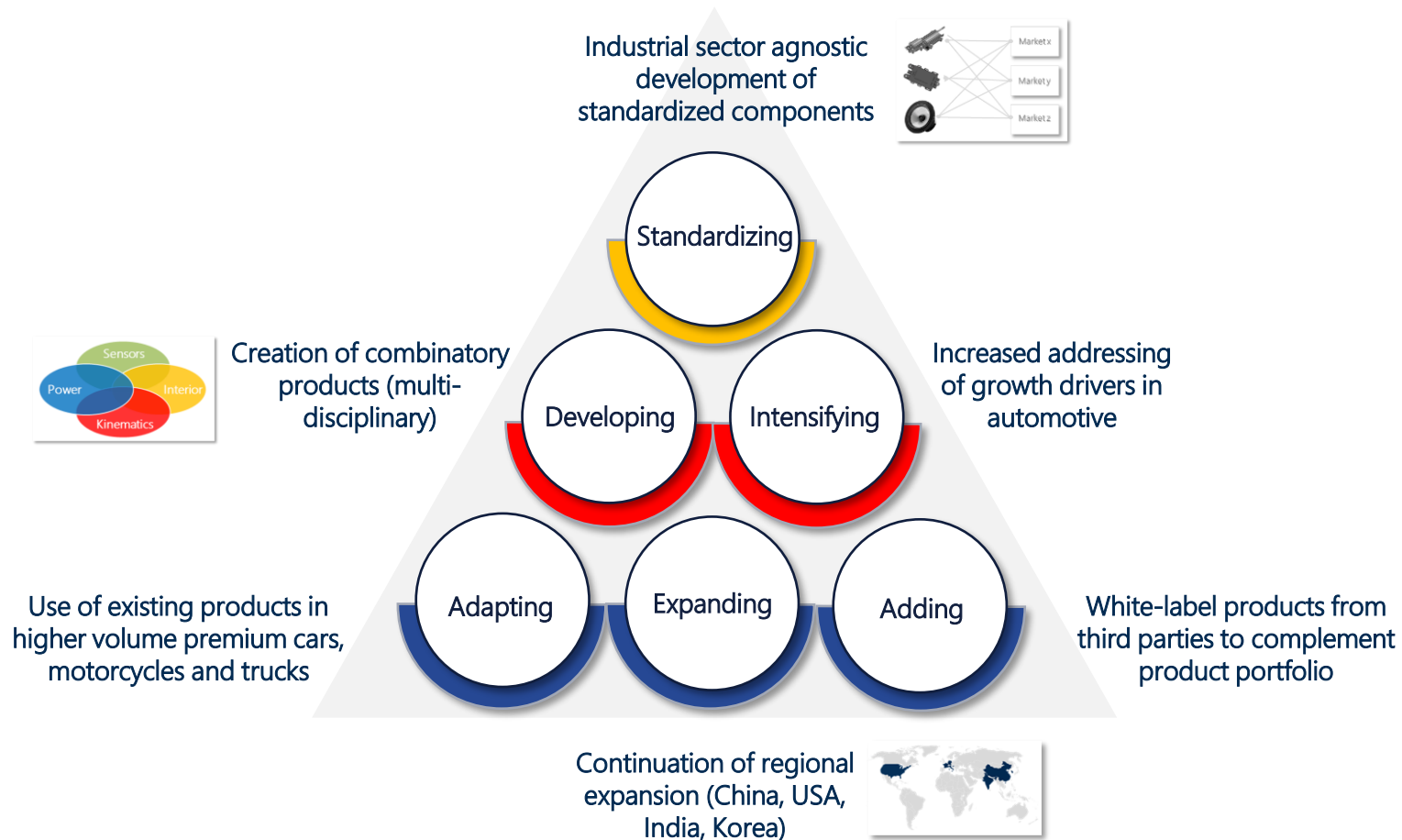


Quelle: zukunftsInstitut

# Multiple Layers for Generating Growth



# Strategy for paragon's ongoing Growth



# Thank you for your attention.

Please do not hesitate to directly contact Dr. Martin Esser or Klaus Frers in case of further questions.

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