



PARAGON

paragon GmbH & Co. KGaA

Earnings Call H1

August 31, 2022

Agenda

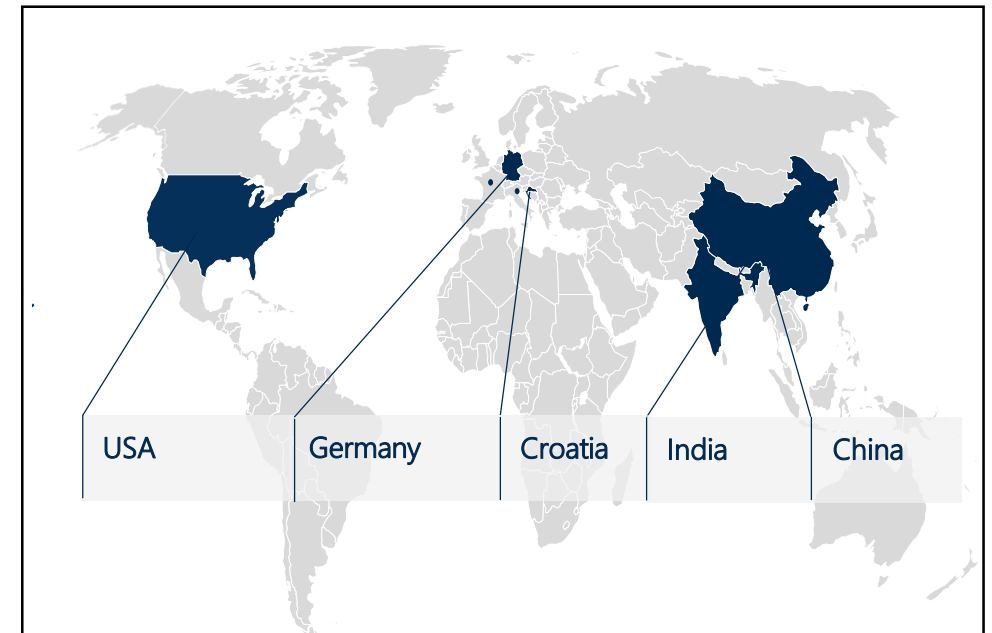
1. Robust Business Model
2. Financial Results
3. Bonds
4. Spotlight Business Unit Kinematics
5. Business Update

Agenda

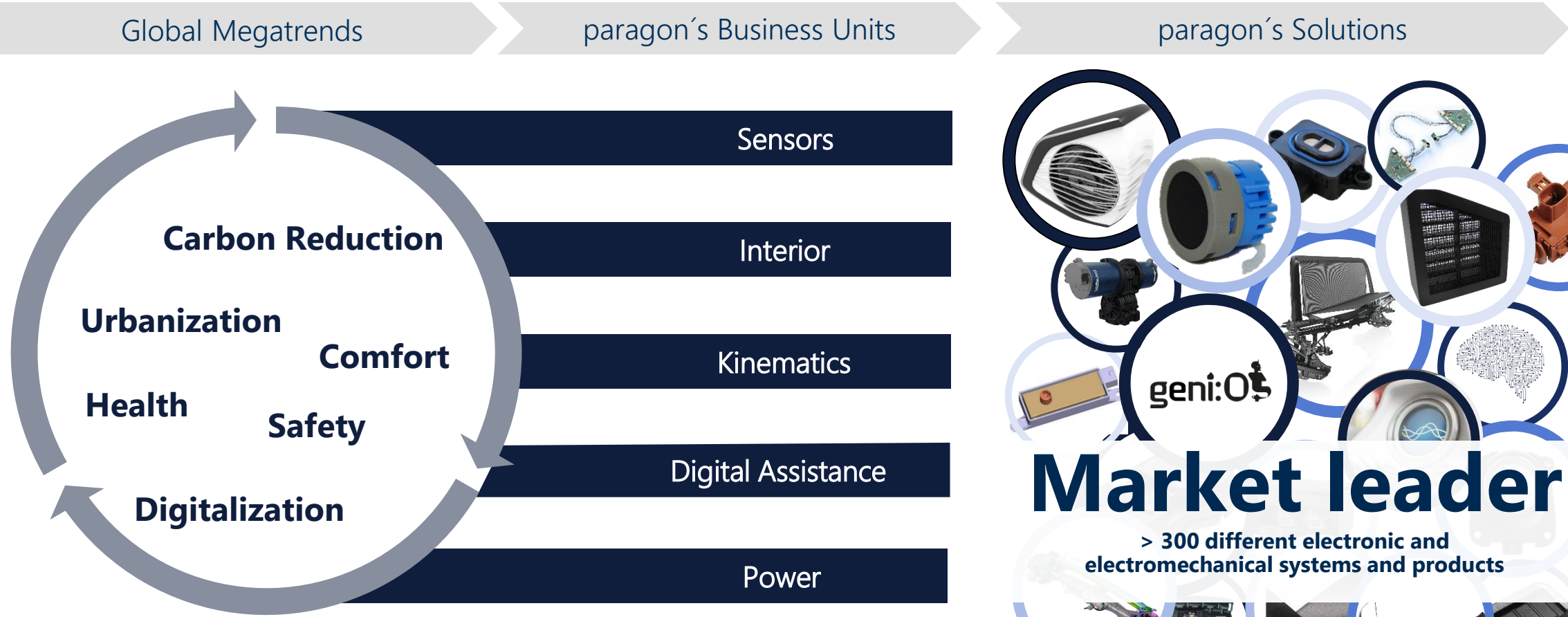
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Technology Provider for more than Three Decades

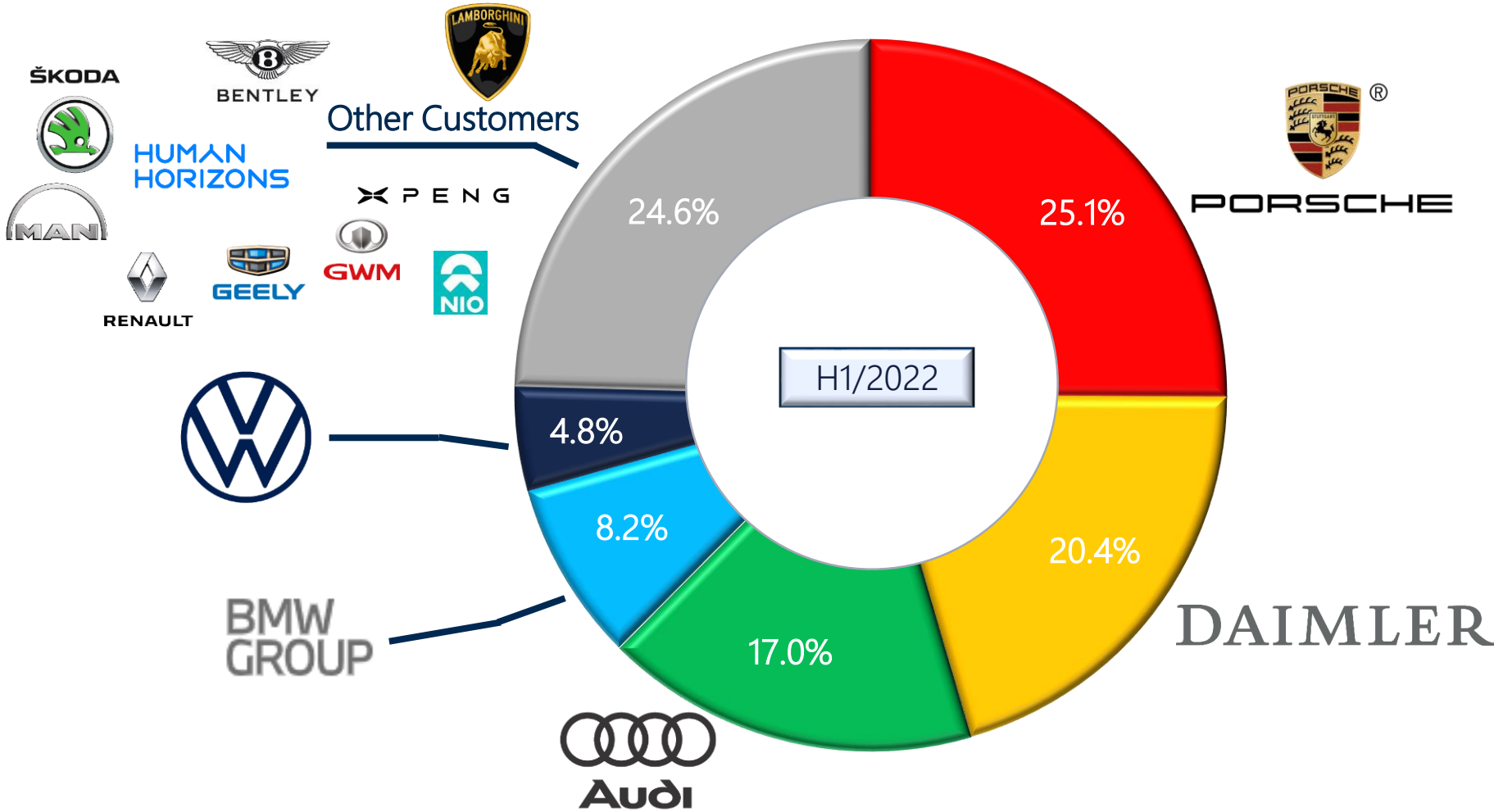
- Year of foundation: 1988
- Corporate form: GmbH & Co. KGaA (limited partnership)
- General Partner: paragon GmbH (unlimited liability)
- Management: Klaus Dieter Frers, founder and CEO
Dr. Martin Esser, CFO
- Stock exchange: Listed in Frankfurt/Main since 2000
ISIN DE0005558696
- Shareholders: Klaus Dieter Frers 49.3 %
Freefloat 50.7%



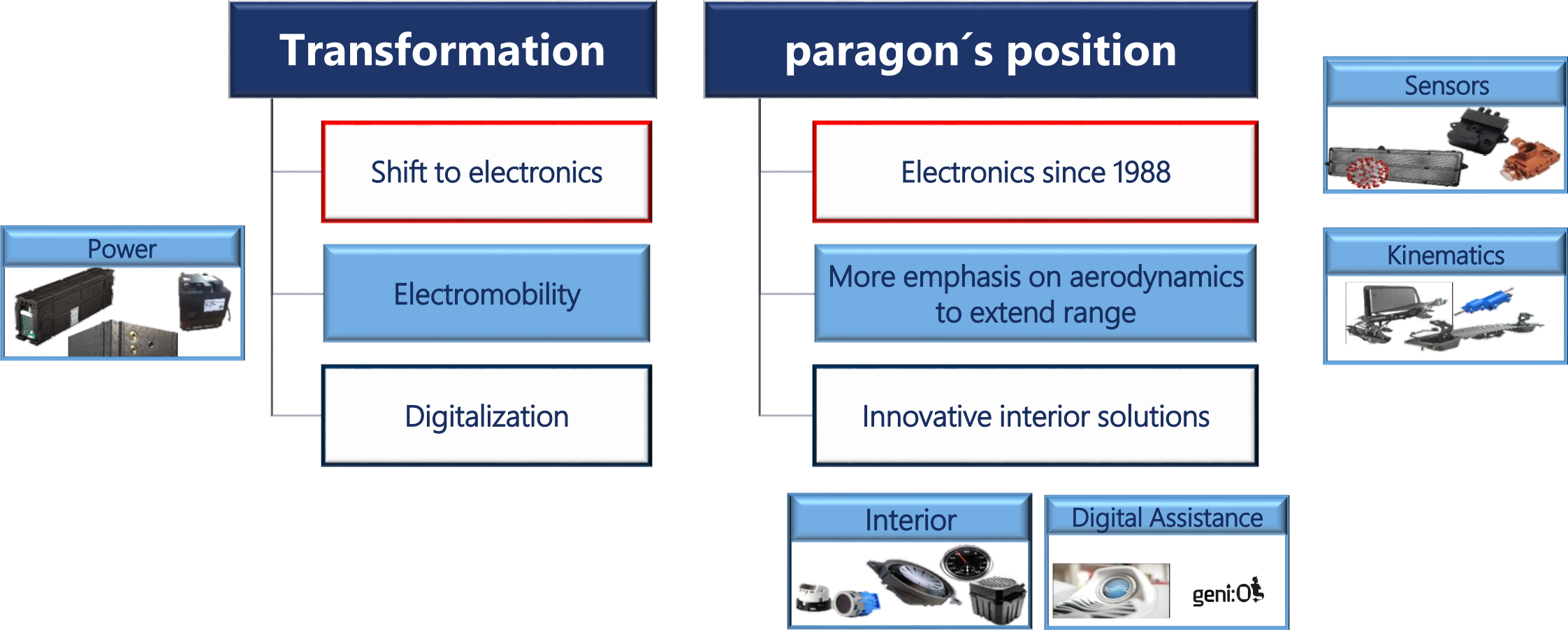
paragon addresses Global Megatrends



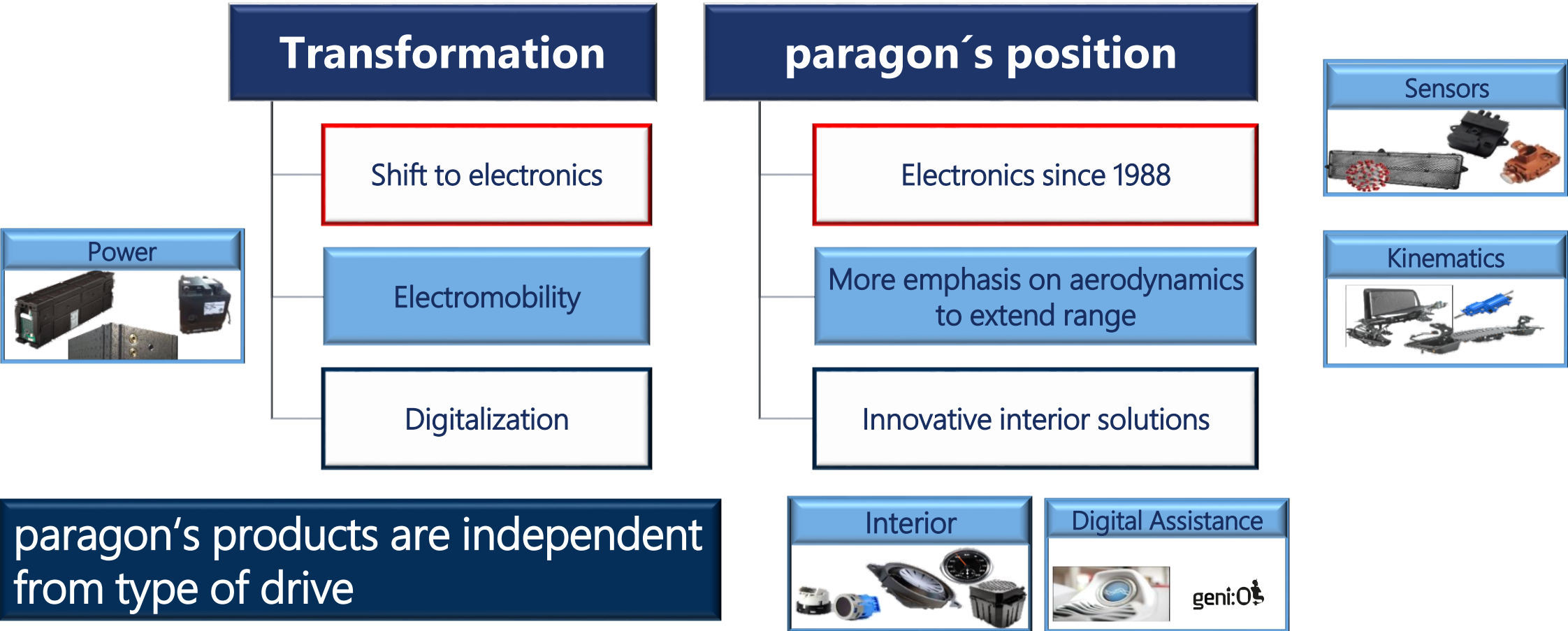
paragon's Premium Automotive Customers H1/2022



The Future of the Automotive Industry



The Future of the Automotive Industry



paragon's Business Model proves as Robust

H1/2022

- Revenues up to EUR 86.4m (H1/2021: EUR 75.7m)
- **H1 growth rate +14.1% (IHS: market in 2022 +0.7%)**
- Q2/2022 +22.5% compared with Q2/2021
- Growth drivers were adaptive spoilers and instruments
- Operational EBITDA EUR 12.0m burdened by noncash effects (EUR 3.1m)
- Minor influence of Corona-lockdowns, Ukraine-war, chip shortages und supply chain issues
- Higher costs of material, logistics and energy mostly compensated due to improvements along the value chain
- Orders received in H1/2022: EUR 100m
- Booked business until Dec 2026 up 17% to EUR 630m

H2/2022

- paragon's customers globally successful
- paragon's product portfolio in sweet spot
- Order releases remain strong
- Sourcing of material secured
- Measures improving profitability show effect
- Outlook positive – including 2023
- **Upgrade of revenue target to EUR 170m (was EUR 165m)**
- Operational EBITDA margin expected at 15+%

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H1/2022: Financial Highlights in a Nutshell

Robust business model

Further work on refinancing / debt reduction

Revenues up by
14.1% compared
to H1/2021

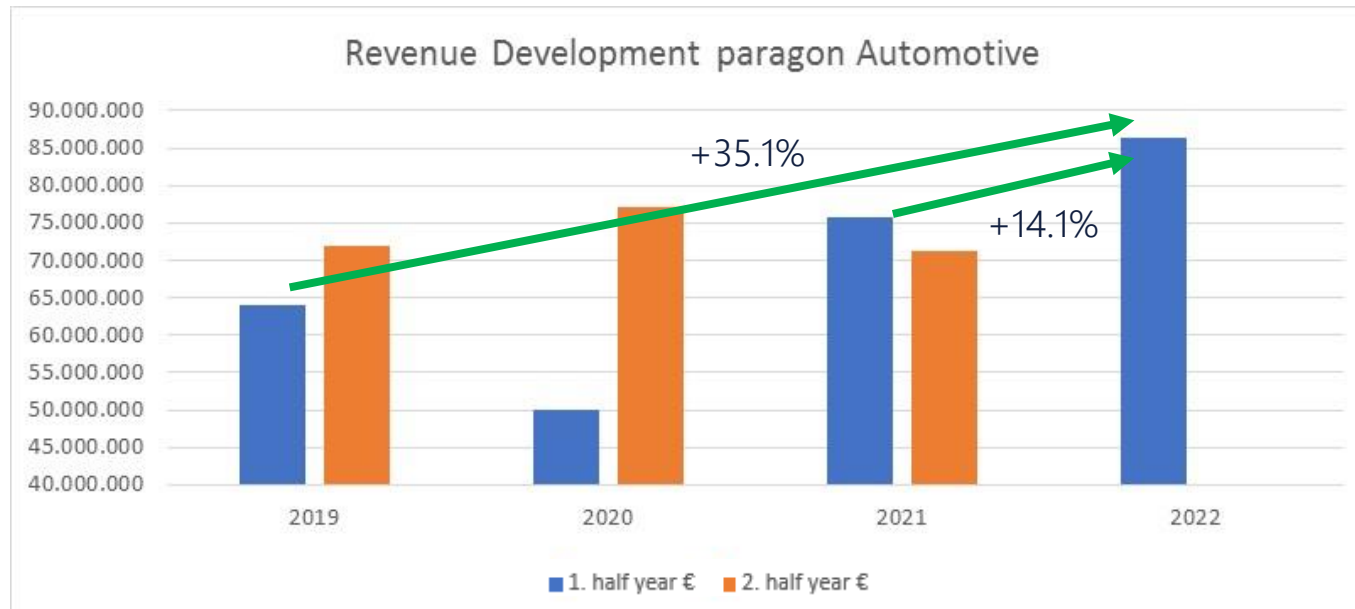
EBITDA at 10,3%
including
noncash/one-time
effects of EUR 3.1m

Revenue forecast
for 2022 increased
to EUR 170m

Prolongation of
EUR-bond and
partial repayment
of CHF-bond

Plans for
repayment/
refinancing of
bonds due in April
2023 are
progressing

Revenue increase by 35.1% compared to pre-Corona year 2019



Revenues increased to EUR 86.4m in the first six months 2022

- ⇒ Increase of 14.1% compared to H1 2021
- ⇒ Increase in Q2/2022 of 22.5% compared to Q2/2021
- ⇒ Increase of 35.1% compared to H1/2019

Organic growth in all business units despite challenging headwinds in the last 2 years

Robust business model due to innovative products and solid customer base

P&L Development

Income Statement in EURm	2021	Q1 2022	Q2 2022	H1 2022
Revenues	146.9	41.7	44.7	86.4
Other own work capitalized	7.4	2.7	2.2	4.9
Change of finished goods	0.4	0.7	2.9	3.6
Other operating income	4.8	1	0.9	1.9
Total operating performance	159.5	46.1	50.7	96.8
Costs of materials	-72.9	-22.8	-23.8	-46.6
Personnel expenses	-44.6	-12.4	-13.4	-25.8
Other operating expenses	-22	-5.9	-9.6	-15.5
EBITDA	20	5	3.9	8.9
Depreciation & amortization	-19.2	-4.1	-3.6	-7.7
EBIT	0.8	0.9	0.3	1.2

Revenues increased by 14.1% to EUR 86.4m in the first six months

EBITDA of EUR 8.9m despite noncash one time effects:

Sale of Aachen-activities in first quarter 2022 (book loss of EUR 0.45m)

Unrealized currency losses due to weaker EUR to CHF (book loss EUR 0.9m)

Sale of vacant production hall (book loss EUR 1.75m)

Operational EBITDA at EUR 12.0m (13.9%)

Headwinds in H1/2022

General wage and salary development:

paragon adjusted wage and salaries in H1/2022 to reflect higher cost of living

On the other hand paragon was able to achieve efficiency increases in direct and indirect area next to higher revenues

As a result:

Average headcount increased only by 4.5% (from 889 in H1 2021 to 929 in H1 2022) compared revenue increase of 14.1% => This enabled paragon to overcome this headwind

Electricity and heating costs:

paragon's energy costs increased in accordance with the market by 67% in H1/2022 compared to H1/2021

Of course paragon initiated activities to reduce the energy consumption

However, more important is that paragon does not maintain an energy intensive production. Total energy costs increased therefore "only" from 0.5% to 0.8% of total revenues

Supply chain issues:

paragon is also confronted with recent supply chain challenges

The purchasing department was able to get all necessary components (esp. chips) delivered on time to ensure deliveries to our automotive customers

paragon increased for various components the safety stock (see also next page).

Due to generally higher transportation costs logistic costs increased in H1/2022 from 1.9% of total revenues to 3.1% => expected to be at 2.5% in 2022

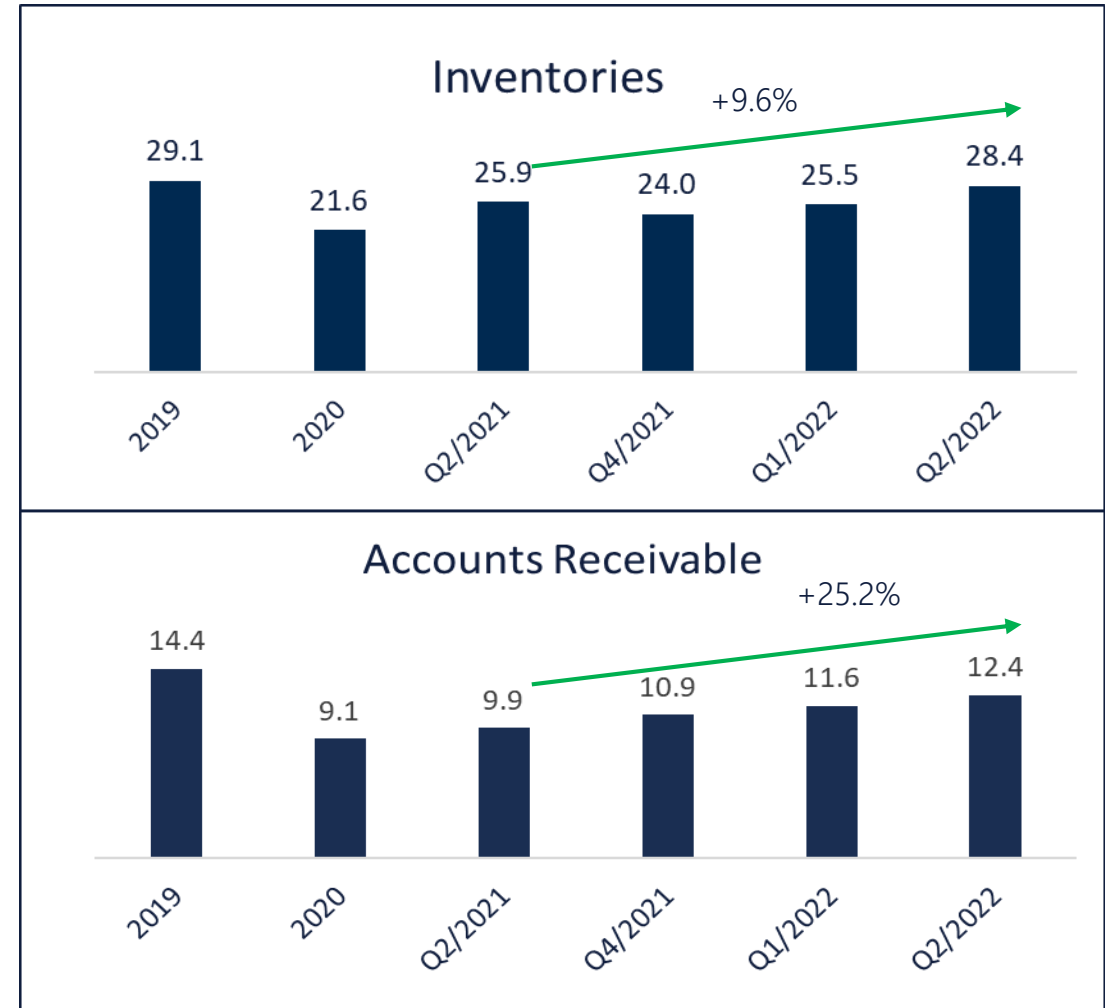
Focus on Working Capital Management

Inventories

- 14.1% higher revenues (H1/2022 compared to H1/2021) but inventories up 9.6% only
- + EUR 2.5m compared to Q2/2021
- Still influence from China lockdowns and supply chain issues
- Negative impact on free cashflow (see later slide)
- Area for improvement in H2/2022

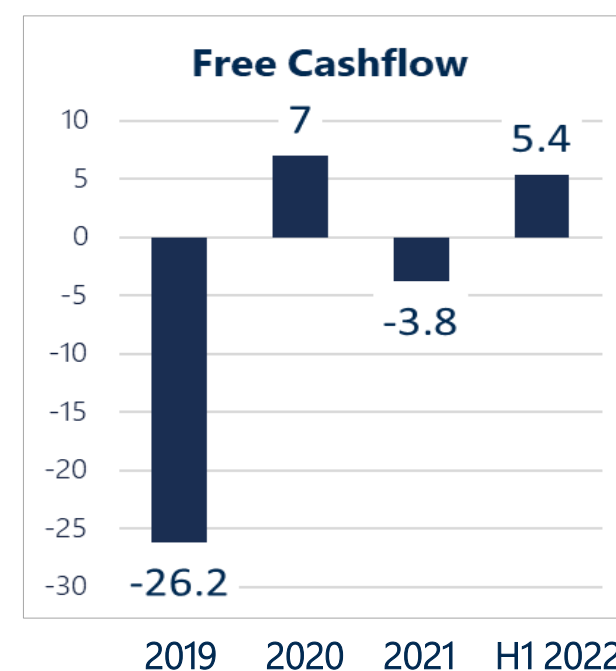
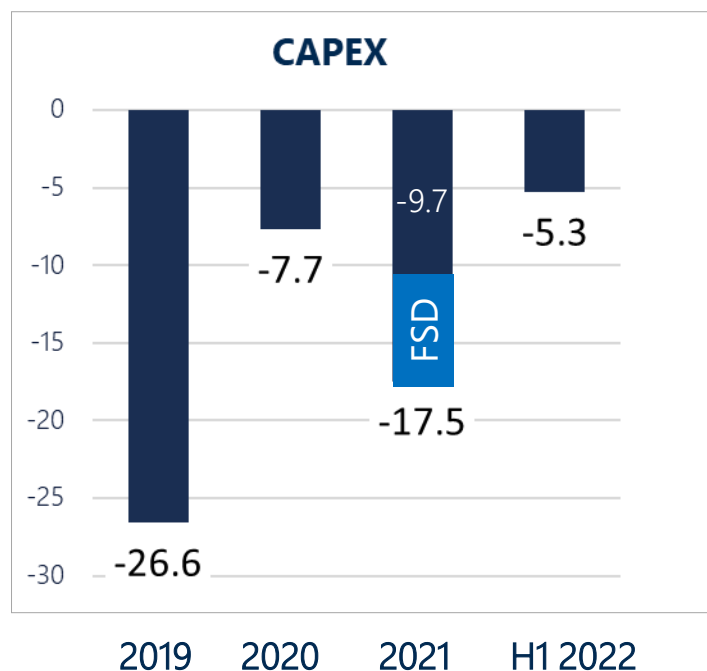
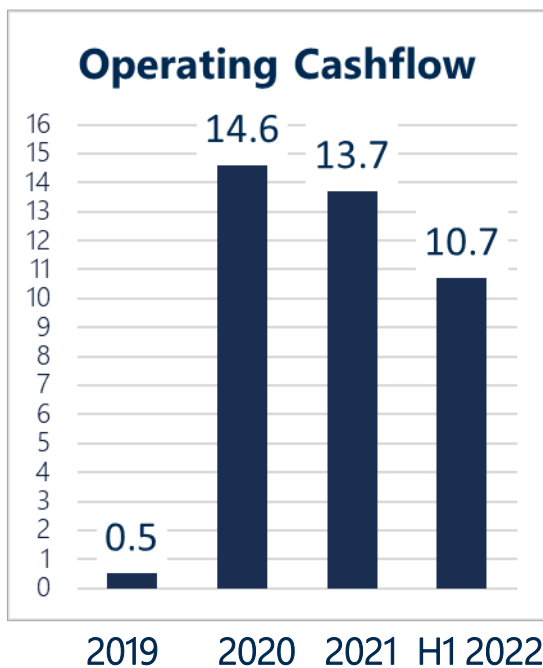
Accounts Receivable

- + EUR 2.5m compared to H1/2021
- Increase mainly related to increased revenues compared to 2021 in combination with delayed reimbursements from customers



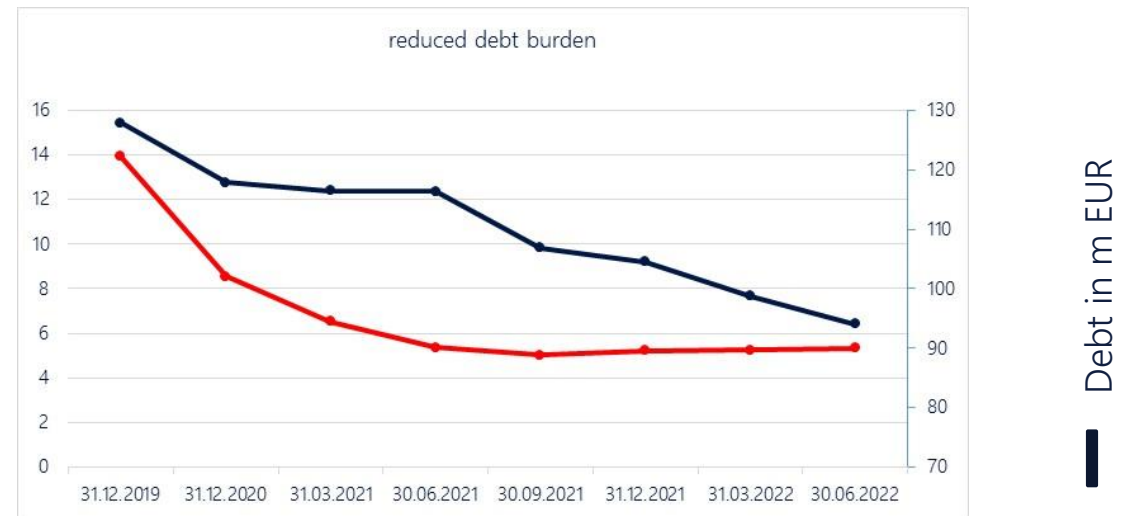
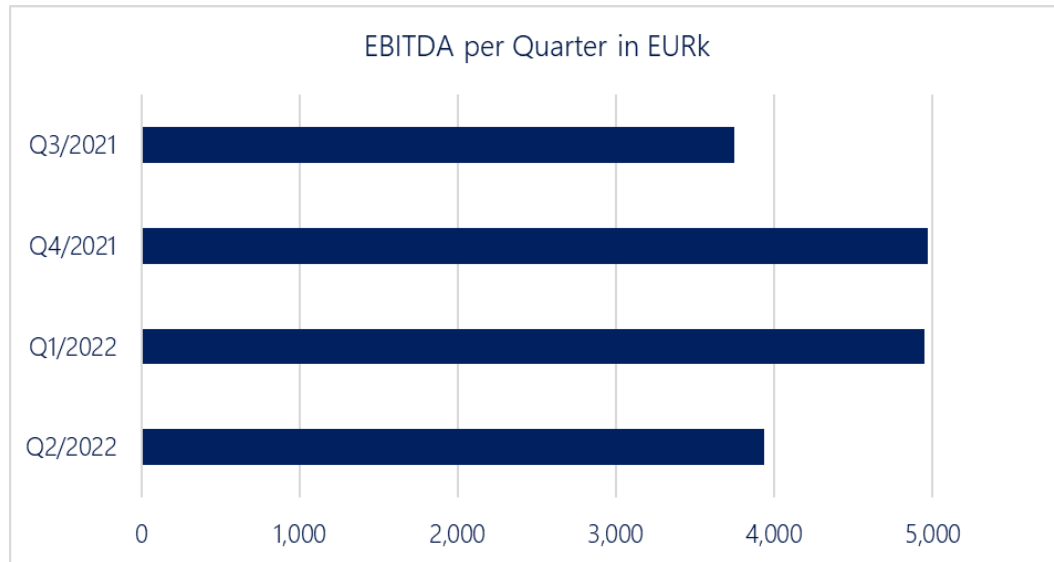
2022: Cost Reductions and Efficiency Increases show Effect

Free cashflow impacted by increase in inventories (EUR 2.5m)



Free Cash Flow not suffering from one-time effects

Actual Gearing at 5.3



paragon-Automotive achieved EUR 17.6m EBITDA in the last 12 months

Total liabilities to banks and bondholders have been reduced from EUR 127.9 by EUR 33.8m to EUR 94.1m from Dec. 2019 to March 2022

Increased profitability and reduced debt improve **gearing** (debt to EBITDA) since December 2019 from 13.9 to 5.3 at the end of June 2022 - paragon is committed to further deleveraging step-by-step

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Bond Report

Prolongation of EUR-bond

- Prolongation as alternative to sale of subsidiary
- 2020/2021 was not suitable for achieving adequate prices on M&A-market
- 99.9% vote for prolongation until July 2027 reached
- Terms and conditions improved for the bondholders - Planning certainty achieved for paragon
- Next repayment of EUR 5.0m due on April 23, 2023

CHF-bond already repaid by 40%

- Webcast for bondholders on September 20, 2022 (meeting on September 27, 2022)
- Proposal for prolongation by 5 years as non-binding condition of EUR-bondholders
- Uncertain result of voting due to high quorum of 66%
- Final repayment of CHF 21m due on April 23, 2023
- Alternative plans for repayment/refinancing are progressing
- Information to the market in fall 2022 only as paragon is bound to MAR

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paragon's Products are Independent of Drive Type

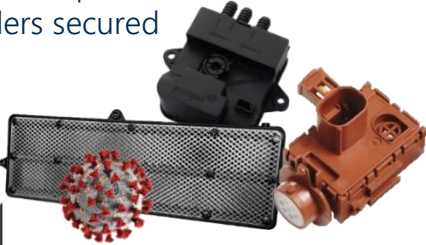
Business Unit

Sensors

AQS: Rising production figures and new development based on artificial intelligence

AQI: Increasing sales through China business

Electronic filters: Great potential for worldwide roll-out - several major orders secured



Business Unit

Digital Assistance

Geni:OS: Next generation AI with proactivity and empathic interaction

Major order for infotainment platform

Edwin: Roll-out at various OEMs in Europe and USA



paragon GmbH & Co. KGaA

Business Unit

Kinematics

Spoiler: Growing premium segment business with new products and new customers in China

Actuators: Significant potential in the growth market of sunroof actuators/LIDAR

Seating components: Great opportunities for significant market share



H1, Earnings Call | August 31, 2022

Business Unit

Interior

Microphones: New generations secure follow-up orders

Loudspeakers and sound systems: Sustainable growth through exterior loudspeakers for electric vehicles

Instruments: Robust sales driver for the business unit and new opportunities in the display sector

Wireless charging: New products



Business Unit

Power

Starter batteries: Disruptive technology shift from lead-acid batteries to environmentally friendly, durable and lightweight Li-ion batteries offers significant market opportunities

Buffer batteries: 12-volt buffer batteries for electric cars as an attractive market opportunity

Traction batteries: Focus on motorcycles and scooters



23

paragon's Products are Independent of Drive Type

Business Unit

Sensors

AQS: Rising production figures and new development based on artificial intelligence

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Electronic filters: Great potential for worldwide roll-out - several major orders secured



Business Unit

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Business Unit

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Spoilers Systems

- Spoilers, sunroofs or loading space covers: The number of moving, electrically driven parts in and on a vehicle is constantly growing
- They are used for convenience but also improve handling. That's because front and rear spoilers, grill shutters, wind screens and wind deflectors **reduce the air resistance and thus reduce the CO₂ emissions on combustion engine vehicles and help electric cars achieve a greater range**
- We have a unique competitive edge: we build on our expertise in production technology and the superior acoustics knowledge - this way, we cater for even the highest demands quickly and flexibly



USPs

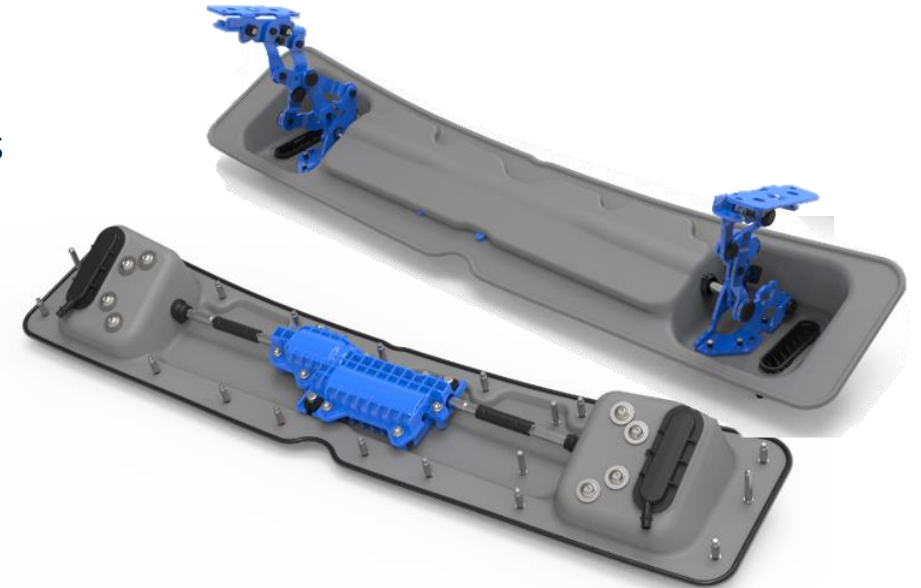
- + Spoiler system for high variety of applications – Sports Cars, E-Vehicles, Trucks, etc.
- + Global market leader thanks to high innovation and realization competence

History/Status/Timeline:

2012	Foundation of the Business unit
2017	1st million spoiler produced
9.2022	1 st SOP spoiler in china

Spoiler Systems: modular Spoiler Architecture

- Motor as standard part, with customer-specific EE interface
- Kinematics with multi-bearings with same interfaces, same materials and connecting elements for different wind loads
- Standard crimp connections with variable length
- Flexible tooling and assembling procedure using scale-effect
- Automotive-standard surface protection
- Foam seals from own-production for seal interface to the vehicle body



USPs

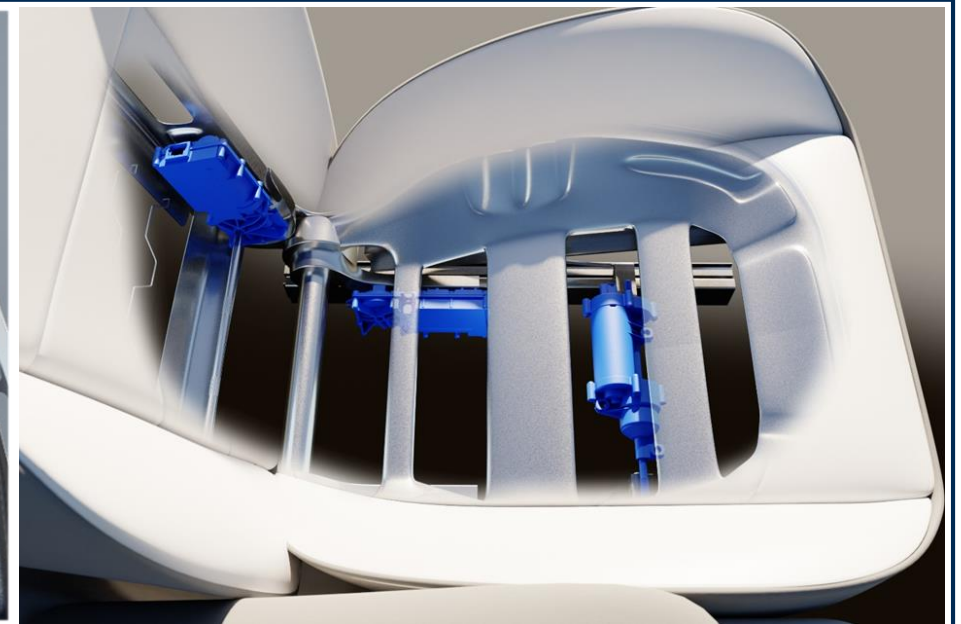
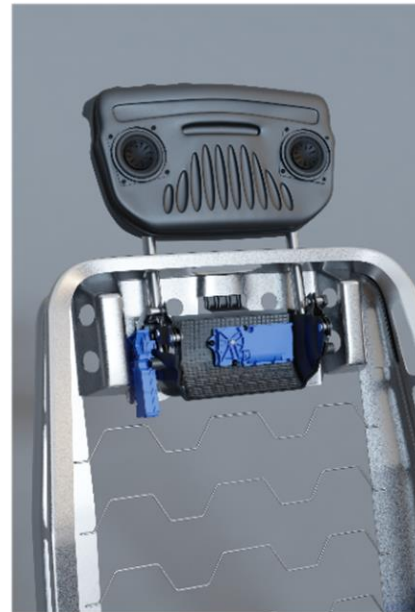
- + Low development cost
- + High quality due to use of modular systems with high degree of standardization
- + Fast time to market

History/Status/Timeline:

- | | |
|---------|-------------------------------------|
| 2020/Q3 | Definition of modular system |
| 2021/Q2 | Application to series project |
| 9.2022 | 1 st SOP on Asian market |

Seat Components: Electrical Driven Seat Adjustment

- Electric seat cushion depth adjuster
- Electric seat backrest adjustment
- Electric seat movement
- Electric seat height adjuster
- Intelligent drives for seat backrest adjustment
- Intelligent drives for neck recline height adjustment
- Meets various crash requirements (front, side, back)



USPs

- + Series production for premium cars.

History/Status/Timeline:

2008	First project
10/2009	First SOP

Special Kinematics: Foldable Tables

- Resists the head impact regulations
- Meets various crash requirements (front, back side)
- Protection against overload
- Lightweight through use of magnesium and aluminum possible
- Special folding system to minimize installation space
- Class-A surface in different colors possible
- 2017 Concept study incl. wireless charging, USB-options



Source: Porsche

USPs

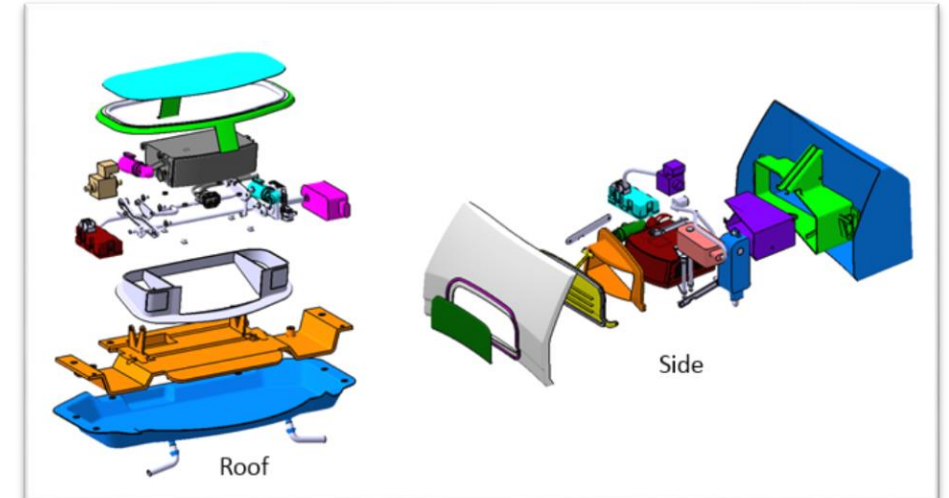
- ✚ Series production for premium cars

History/Status/Timeline:

2010	First project
03/2013	First SOP

LiDAR Kinematics for Roof and Side

- _ Kinematics to drive inside & outside new LiDAR sensors
- _ The sensor needs to be protected from weather
- _ In the outside position, a cleaning function is foreseen
- _ Different possibility of installation in the roof and on the side of the vehicle



USPs

- + Compact modular construction
- + Drive, cleaning function and control integrated
- + High precision in the positioning

History/Status/Timeline:

- | | |
|---------|------------------------------|
| 07/2021 | Basic development kinematics |
| 08/2021 | Calculation components |
| 08/2021 | Concept of module assembly |

Special Kinematics: Advanced Central Drive (ACD)

- Central drive system for active spoilers and seat adjustments
- Integrated electronics – suitable for advanced vehicle architecture
- Integrated angle measurement – no external sensor necessary
- Very fast operation (1s) / Supports heavy loads (650N Wind load)
- Target: 25 % cheaper than DSG
- Multi-stage gear reduction with powerful DC-Motor and PWM control
- About 20 Nm torque



USPs

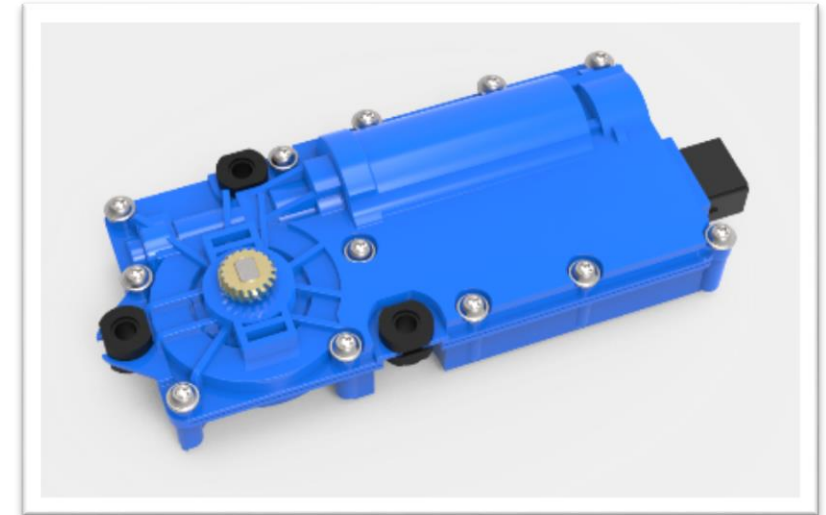
- + Fast operating times
- + Optimized drive efficiency with self-locking through external loads
- + Integrated control unit

History/Status/Timeline:

Q1/2022	C-Samples available
2023	SOP

Special Kinematics: Smart Worm Drive (SWD)

- Smart drive for general automotive applications
- Possible applications for sunroof, power windows (wet side), seats, etc. About 10 Nm torque
- Integrated electronics – suitable for advanced vehicle architecture
- Integrated angle measurement – no external sensor necessary
- Rated IP53 (possible until IP6x9k)
- Acoustic Management – following customers specifications for the interior
- Drive with DC or BLDC motor and motor controller



USPs

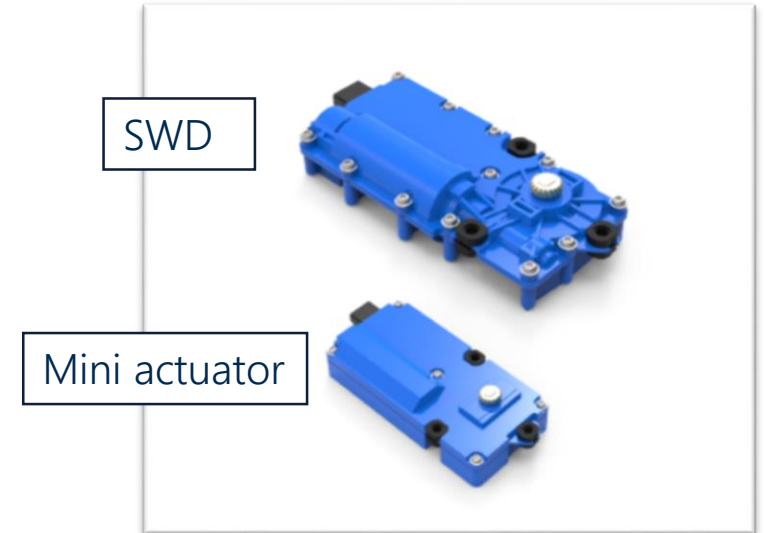
- + Integrated control unit
- + Bus system
- + BLCD or DC Motor

History/Status/Timeline:

- Q1/2022 C-Samples available
- Q1/2023 SOP

Special Kinematics: Mini Actuator

- A small and powerful drive for automotive applications
- Possible application: electric tailgate or comfort functions like active belt feeder or seat adjustments
- Integrated electronics – suitable for advanced vehicle architecture
- Integrated angle measurement – no external sensor necessary
- Very low noise level → developed for future standards
- Drive with DC or BLDC motor and motor controller
- About 5 Nm torque
- IP rating possible until IP6x9k



USPs

- + Integrated control unit
- + Bus system
- + BLCD or DC Motor

History/Status/Timeline:

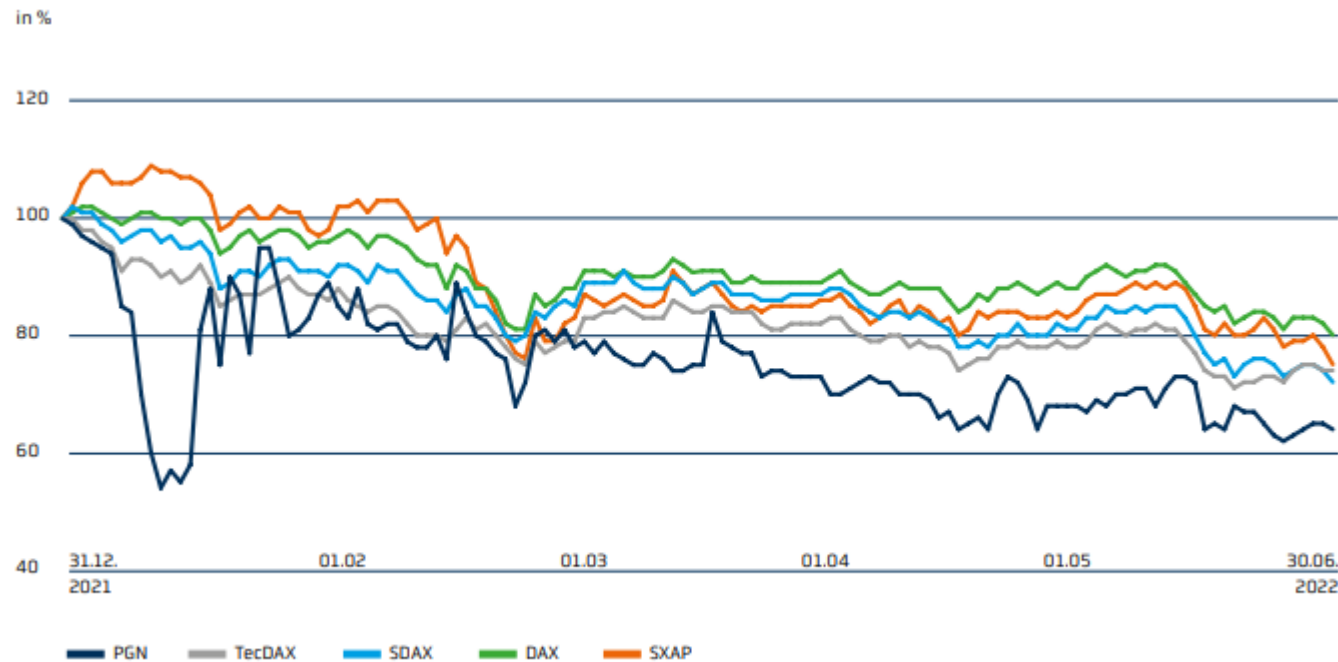
- | | |
|---------|---------------------|
| Q1/2022 | A-Samples available |
| Q1/2023 | C-Samples available |
| Q1/2024 | SOP |

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Share Performance

Capital Market



- Bear market (Dax 40: -20%)
- Rising inflation rate
- Spread of the Omicron Covid-variant
- War against Ukraine

Actual Research Reports show High Upside Potential

EDISON

paragon

Refocused automotive growth strategy

paragon has spent much of the pandemic refocusing on its core automotive activities and addressing the issue of bond refinancing. Both are now largely complete and management's revised growth strategy targets ambitious financial targets over the next few years, with a positive start already made. As much of its product portfolio is fuel type agnostic, paragon is well positioned to address the evolving connectivity, digitalisation and electrification requirements of electric vehicles (EVs). We believe the strong growth outlook merits a higher FY23e P/E ratio than the current 3.6x, which we feel reflects concern over the refinancing of the outstanding CHF21m bond due in April 2023.

Year end	Revenue (€m)	PBT* (€m)	EPS* (€)	DPS (€)	P/E (x)	Yield (%)
12/20**	127.2	(5.0)	0.79	0.00	5.1	0.0
12/21**	146.9	1.2	0.27	0.00	14.8	0.0
12/22e	165.9	2.3	0.37	0.00	10.8	0.0
12/23e	182.8	6.9	1.11	0.00	3.6	0.0

Note: *PBT and EPS are normalised, excluding amortisation of acquired intangibles, exceptional items and share-based payments. **Restated following the disposal of Voltabox, excluded from FY20 and FY21 as discontinued.

Streamlined to focus on growing core automotive

The newly streamlined paragon looks set to continue to grow strongly despite ongoing supply chain problems in the automotive industry generally, which has disrupted output at most car manufacturers. The innovative solutions philosophy for the premium end of the market has insulated paragon from the worst disruption and new products have led to a burgeoning order book. With €830m of future revenues booked at 1 May 2022 and €100m of the backlog due for delivery in 2022, 99% of forecast FY22 sales are covered. Under its strategy, management is planning for CAGR revenue growth of 12–15% and an EBITDA margin of 20% by FY20 as new

Target: EUR 19.6/share

Restoring estimates/outlook

Automobiles and parts

9 August 2022

Price €4.00

Market cap €18m

Adjusted net debt (€m) at 31 March 2022 98.8 (excludes lease liabilities €11.3m)

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	(5.8)	(19.3)	(60.8)
Rel (local)	(10.4)	(19.4)	(54.9)
52-week high/low	€11.15	€3.65	

Business description

Based in Dettrüch, Germany, paragon designs and supplies automotive electronics and solutions, selling directly to OEMs, including sensors, interior, digital assistance, body kinematics and power. Production facilities are in Germany, Croatia and China.

Next events

H122 results 22 August 2022

Analyst

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paragon is a research client of Edison Investment Research Limited

Baader Europe

07 Jun 2022
Auto Parts
Germany

paragon Group

German automotive group with a Chinese focus

PROS

- A robust business model, backed by strong relationships with German premium manufacturers
- Increasing internationalisation, notably in China, i.e. the market with the strongest growth in demand for cars
- Virtually no impact of the supply chain crisis, owing to chip storage (which protects against supply bottlenecks) and a diversified product portfolio (risk spreading)

CONS

- Even though paragon is an 84% single source supplier, the appeal of the auto supply industry is undermined by the fact that investors perceive it as a commoditised market

Target: EUR 15.2/share

Opinion Buy

Upside (%) 211

Price (€) 4.9

Target Price (€) 15.2

Bloomberg Code PGN GY

Market Cap (€M) 33.1

Enterprise Value (€M) 112

Momentum UNFAVORABLE

Fundamental Strength 0/10

Sustainability 3/10

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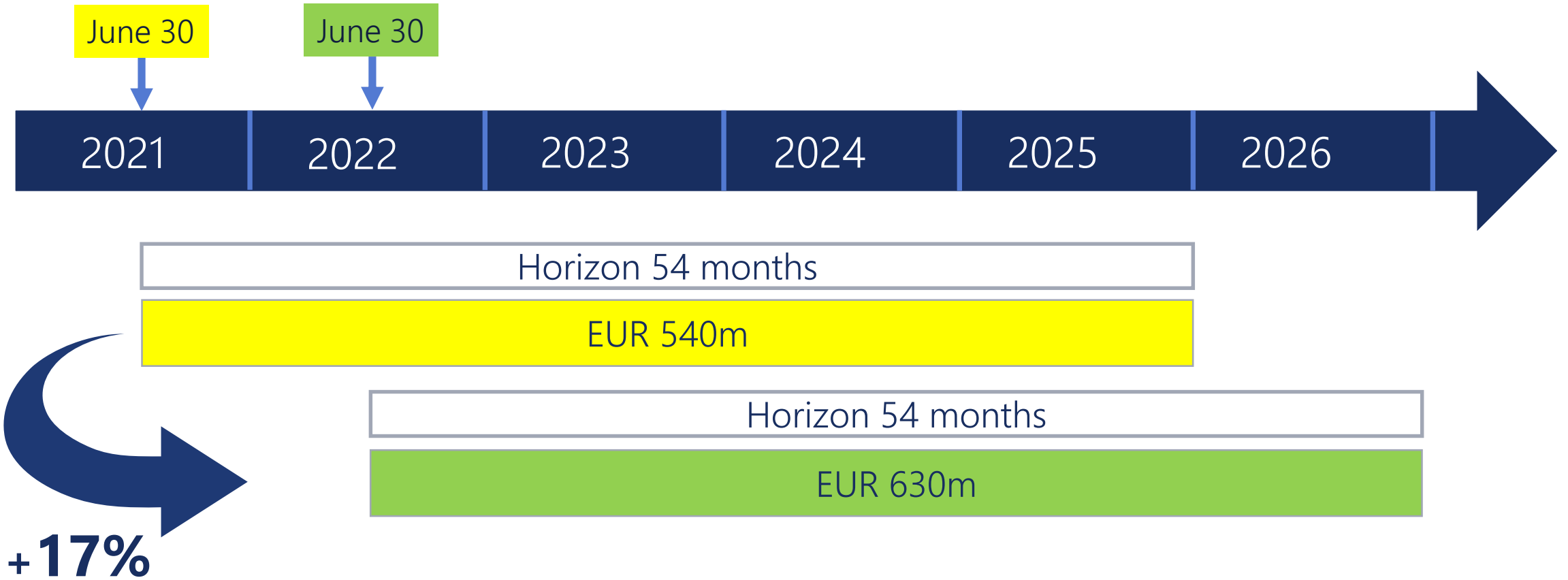
KEY DATA

	12/20A	12/21A	12/22E	12/23E	12/24E
Adjusted P/E (x)	-3.72	-13.4	8.84	4.17	3.12
Dividend yield (%)	0.00	0.00	0.00	0.00	0.00
EV/EBITDA(R) (x)	-16.9	7.84	4.50	3.18	2.13
Adjusted EPS (€)	-2.68	-0.66	0.55	1.17	1.57
Growth in EPS (%)	n/a	n/a	n/a	112	33.6
Dividend (€)	0.00	0.00	0.00	0.00	0.00
Sales (€M)	145	147	165	185	206
EBITDA/R margin (%)	-7.23	13.0	15.1	16.5	17.7
Attributable net profit (€M)	-27.8	-11.4	1.13	6.57	11.2
ROE (after tax) (%)	-84.5	-138	4.50	11.5	13.9
Gearing (%)	1,018	3,703	205	97.8	49.5

Frers family that not only control the fully liable partnership but also 49% of the listed shares

situation, as recent restructuring has only spread out the high debt

Booked Business



paragon stays Decoupled from Overall Market

- **Revenues up 14.1%** vs. market +0.7%
- High level of order releases for H2/2022 and 2023
- Revenue **Forecast 2022 upgraded to EUR 170m** (expected growth rate of 15.7% compared to 2021)
- Strong order income in H1/2022 – **Booked Business EUR 630m** until Dec 2026 increased by 17%
- Customer and product portfolio focussed on today's and tomorrow's sweet spots **Range extension, well-being in the cabin and battery solutions**
- **No dependancy on type of drive** but beneficiary of transformation
- paragon outperforming the automotive sector since years
- Analysts foresee **Upside potential for paragon's share by factor 3...4**

Financial Calendar

September 5, 2022	Equity Forum, Frankfurt a.M.
September 19-23, 2022	Baader Investment Conference, Munich
September 27, 2022	CHF-bondholder meeting
November 22, 2022	Consolidated Interim Report first nine months 2022
November 28-30, 2022	Equity Forum, Frankfurt a. M.

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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