





AGENDA

- Introduction
- Strategic overview
- Kendrion foundation
- Business pillars
 - Automotive
 - Industrial Brakes
 - Industrial Actuators and Controls
 - China
- Financial targets
- Questions & answers



CAUTIONARY NOTE REGARDING FORWARD LOOKING STATEMENTS

Certain statements contained in this presentation constitute forward-looking statements. These statements may include, without limitation, statements concerning future results of operations, the Company's share of new and existing markets, general industry and macro-economic trends and the Company's performance relative thereto and statements preceded by, followed by or including the words "believes", "expects", "anticipates", "will", "may", "could", "should", "intends", "estimate", "plan", "goal", "target", "aim" or similar expressions. These forward-looking statements rely on a number of assumptions concerning future events and are subject to uncertainties and other factors, many of which are outside the Company's control that could cause actual results to differ materially from such statements.



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KENDRION STRATEGIC HOUSE

Unchanged



STRATEGIC INTENT BRAKES AUTO <u>IAC</u> Cash engine Growth Growth **CONTROLS** 'ACES' ROBOTS WINDPOWER **ENERGY** LOGISTICS TRANSPORT Growth **CHINA CHINA CHINA**

KENDRION GLOBAL ORGANIZATION



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IT KEY INITIATIVES



Delivered

Investment in people and in technology

- Global team, global mindset, business-focused
- Enhanced security posture
- Strengthened project execution: business value, faster delivery
- Strong analytics platform for better decisions

Coming next

Leverage technology to drive business performance

- Put technology at the heart of business transformation: seamless partnership
- Overhaul major platforms with modern technology (ERP, PLM*, HR)
- Invest in advanced analytics: intelligent forecasting and predictive models
- Digitalize manufacturing operations using Al and automation



TECHNOLOGY EVOLUTION 2022-2027



Increasing maturity and value-add, along with business and product changes

2022

Project execution:

Deliver business

value

2023

Data science New PLM & HR platforms 2024

ERP upgrade End-to-end automation

2025

Digital Manufacturing iOT products

2026

Power of data 2.0

2027

Hyper automation

Increasing technology value-add over time



PROGRESSING ON SUSTAINABILITY



Concluding 2019-2023 target framework

	Target	Realized in HY 2022
Relative reduction of energy consumption	15%	11%
Relative reduction of CO2 emission	15%	26%





PROGRESSING ON SUSTAINABILITY

Accelerating ambitions beyond 2023













ECOVADIS SUSTAINABILITY RATING



Kendrion top 22% of rated companies



78th percentile







TOP 1%

75 - 100





TOP 25% 56 - 66



TOP 50% 47 - 55

Source: EcoVadis



MERGER & ACQUISITIONS





- Continues to be part of the strategic growth plan
- Clear acquisition criteria, disciplined approach
 - Strategic fit, in direct support to Kendrion's strategic objectives
 - Clear identifiable synergies, justifying the acquisition premium
 - Strong management
 - Cultural fit
- Healthy balance sheet supports further deals



OUR CULTURE OF COOPERATION

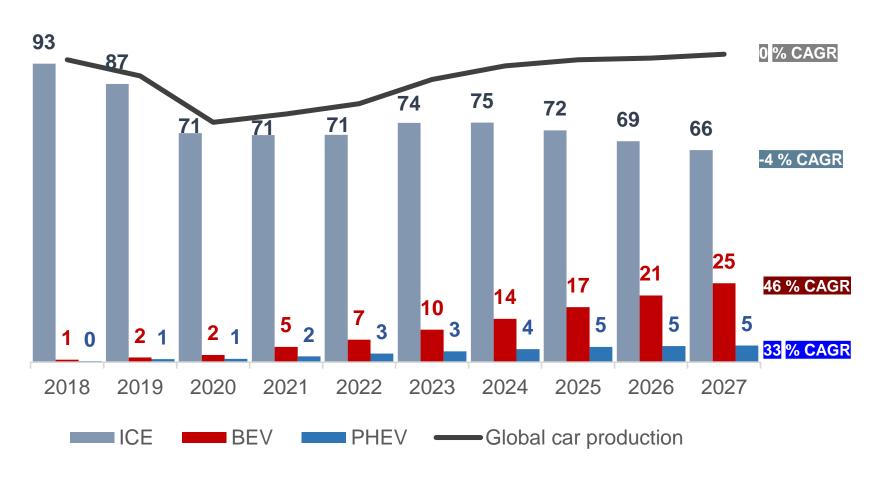




A global **TEAM** of actuator **SPECIALISTS**, with **COURAGE** to act, curiosity to learn from successes and **MISTAKES**, confidence to **LEARN** and **SHARE**, and open to **FEEDBACK**.



ELECTRIFICATION CONTINUES TO ACCELERATEMillion units

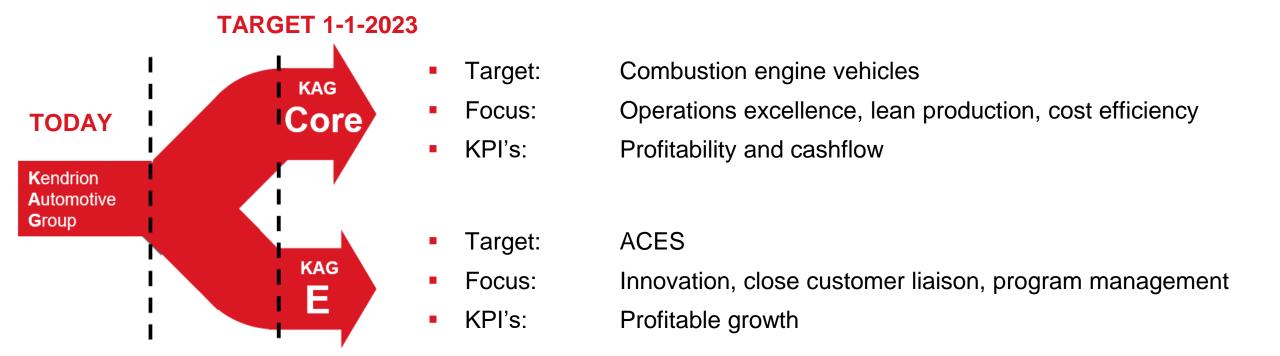






AUTOMOTIVE 'CORE' AND AUTOMOTIVE 'E'



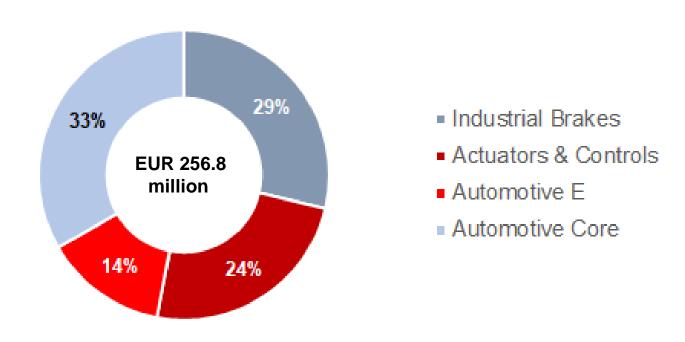


- Core and E have own and full P&L responsibility with separate and distinct KPIs
- Core and E revenue will be reported separately



COMPOSITION OF GROUP REVENUE

HY1 2022 in million EUR



- Existing E product portfolio is ~30% of Automotive revenue
- Automotive Core represents around 33% of Group revenue in HY1 2022



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KENDRION AUTOMOTIVE E

Short term strategy 2022-2023

- Expand our customer base and our portfolio with existing customers
- Concentrate our efforts on our 3 existing focus segments, allowing us to market new products and gain market share









Become a relevant, attractive employer and win the war for talent



KENDRION AUTOMOTIVE E



Structure follows strategy

Enlarge customer base and portfolio at existing customers

- Dedicated BD who hunts for new customers
- Account Management focused on customer intimacy
 - Understand customer roadmaps
- Recognize future segments for Kendrion

Focus on 3 segments, market products, gain market share

- Dedicated segments teams: Product Management, Project Management, Technical Experts to increase focus and expertise
- R&D, IE, Project Quality, Project Purchasing and Purchasing Electronics support the segments

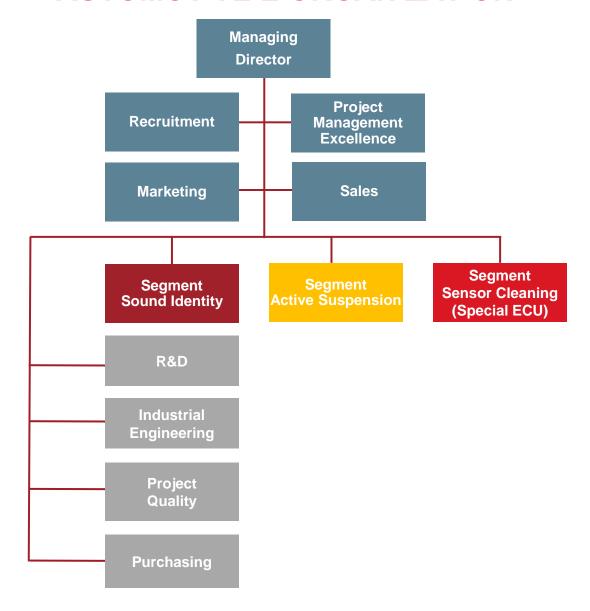
Become a relevant employer, win the war for talent

- Appoint dedicated recruiter
- Focus from Marketing on employer branding and recruitment campaigns
- Cooperate with relevant M.Sc and B.Sc education institutes
- Expand hunting outside Germany



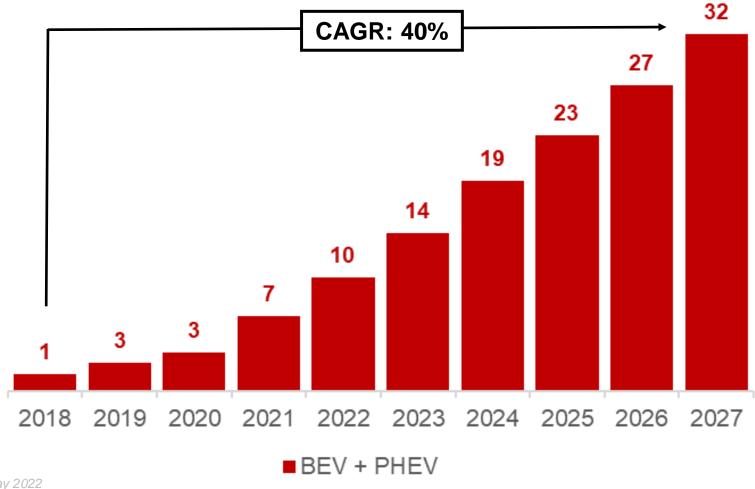
AUTOMOTIVE E ORGANIZATION







GLOBAL ELECTRIC VEHICLE PRODUCTION

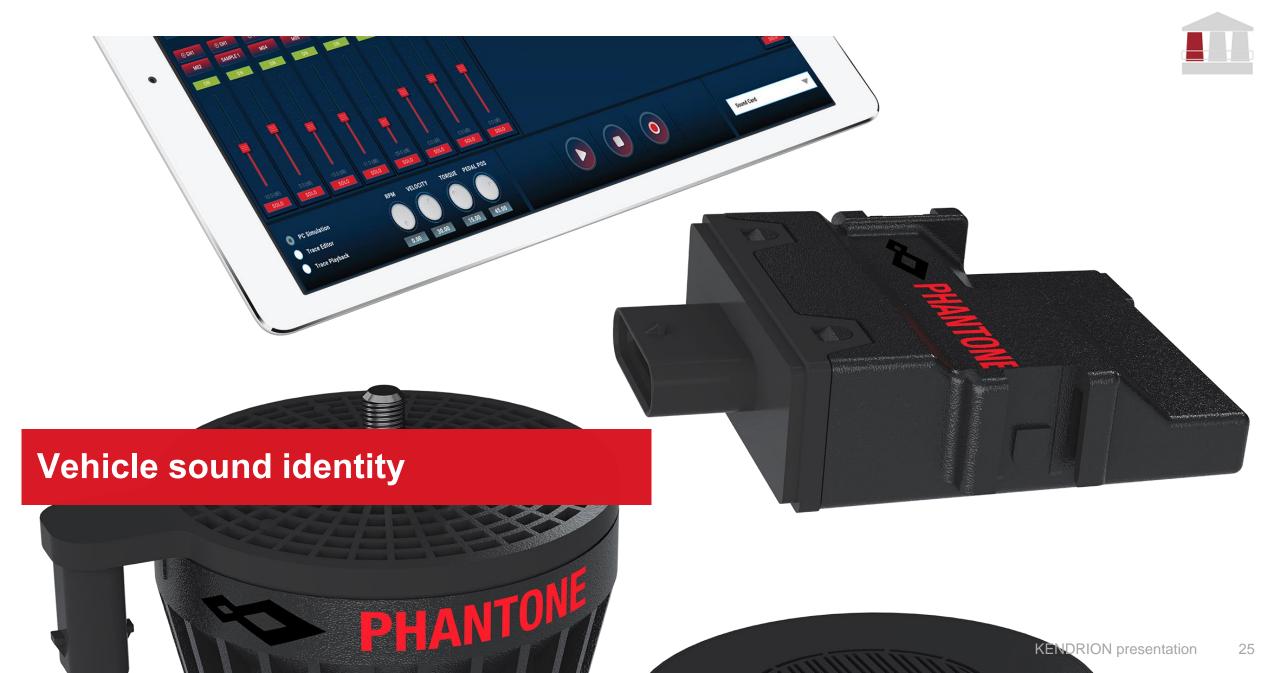


Source: IHS Markit May 2022





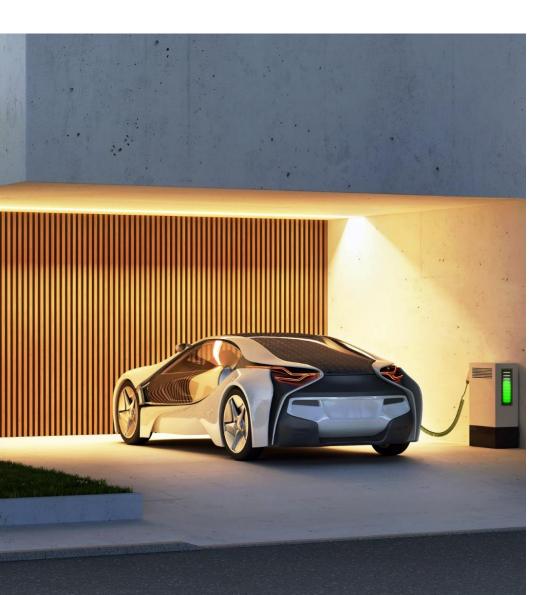






VEHICLE SOUND IDENTITY





- Creates a unique SOUND IDENTITY for each vehicle that gets to the heart of a car brand and conveys a high sense of quality
- Enhances DRIVING EXPERIENCE
- Comprehensive vehicle sound by combining individual sound components, ready for the future E/E

 ARCHITECTURE
- MODULAR, freely configurable design options with a detailed understanding of CUSTOMER NEEDS



PHANTONE VEHICLE SOUND IDENTITY (VSI)



Soundscape of the future



Our **Phantone Sound Systems** transfer CAN signals into unique sound experience for driver or pedestrians. Either via structure-borne sound as interior sound enhancement with actuators, or via airborne sound as exterior sound (AVAS).

CUSTOMER BENEFITS

INDIVIDUAL



- Sound profile tailored to personal needs
- Customized sound experience

MODULAR



- Complete solution
- Easy to customize
- For different vehicle types

SOUND DESIGN SOFTWARE



- Unique brand-specific sound
- "On the drive" ECU update
- Direct CAN-bus connection

SAFETY



- AVAS conform
- Acoustic warning directed to road users









ADAPTIVE SUSPENSION COMPONENTS (ASC)



Improving driving dynamics for the vehicles of tomorrow

PRODUCT

Our **eCDV** – **External Damper Valve** is controlling compression and rebound of dampers to improve safety, comfort and vehicle dynamics!

CUSTOMER BENEFITS

MODULAR



- Platform design with high adaptability
- Flexible connector

INDIVIDUAL



- Individual drive mode (eco |sport | comfort)
- Customized characteristics

SAFETY | COMFORT



- Fail safe function
- High level of passenger safety | safety in traffic
- High comfort in different road conditions



ACTIVE SUSPENSION



Semi-active dampers

- eCDV (external Continuous Damper Valve) platform
 - Nominations in place, first SOP 2023
- iCDV (internal Continuous Damper Valve) platform
 - In concept study
- Customer Specific Damper Valves (for the bigger TIER1)
 - Majority of our current business



- Multi-chamber air valves in concept study
- Air supply management
 - Air distribution valve block combined with ECU for air compressor control
 - Business case in development

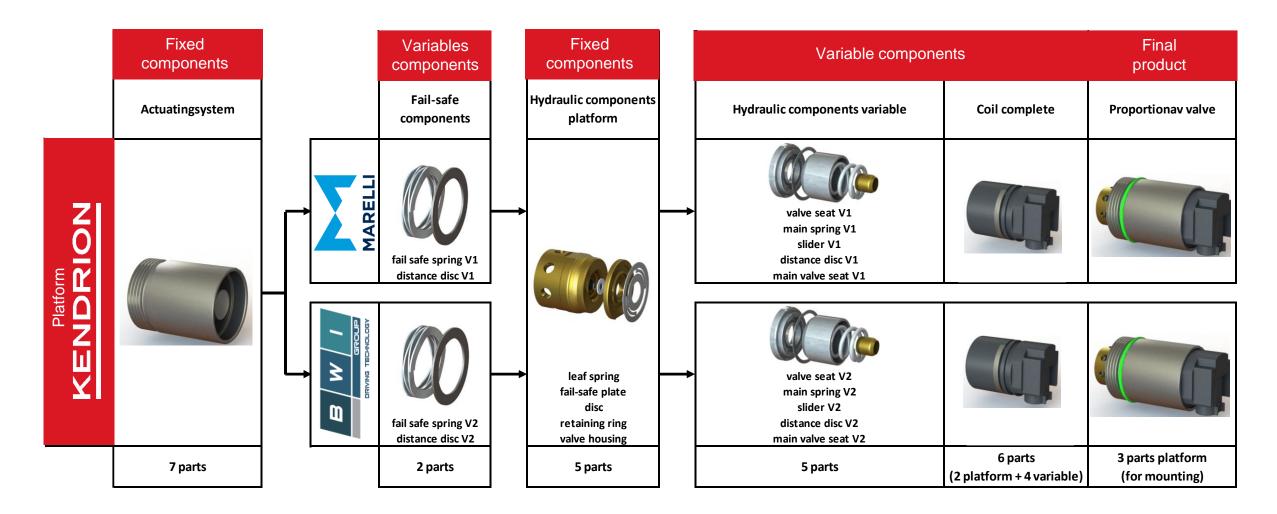






ECDV PLATFORM CONCEPT

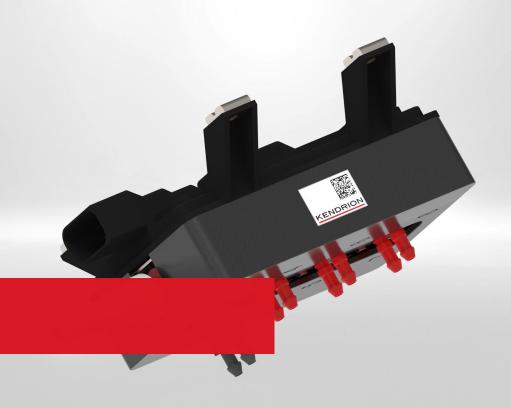






Sensor cleaning



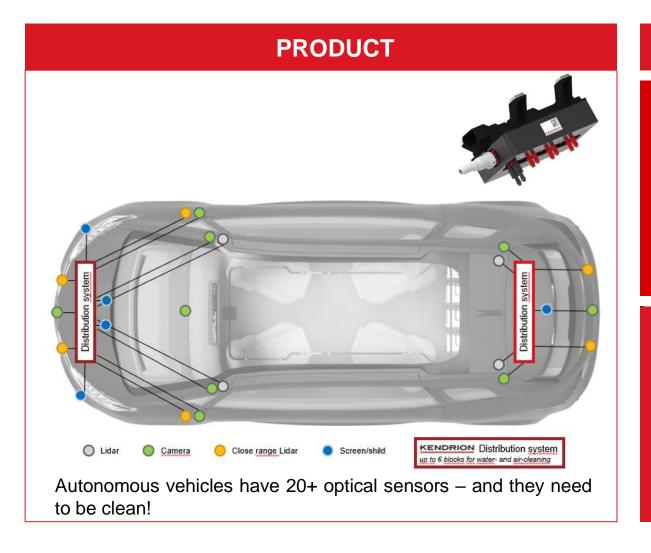




SENSOR CLEANING



Improving reliability of Autonomous Driving Vehicles



CUSTOMER BENEFITS

MODULAR



 Valve block, hardware and software are coordinated and come from a single source

INDIVIDUAL



 LiDAR and cameras could be cleaned by air and | or water

SAFETY | COMFORT

K 7

K 7

- 1/3 smaller than competitor
- 3 valve sizes possible for different sensor types

SAVINGS



- Up to 20 % water, using intelligent cleaning algorithms
- Low-cost system monitoring



SENSOR CLEANING



Sensor cleaning

- Combined air-water distribution valve block with an ECU for air/water pump control
 - First samples available
- Joint development agreement with Kautex
- First applications in people carrier shuttles (2025-2026)
 - Followed by autonomous trucks
 - Autonomous driving cars expected after 2028









Structure follows strategy



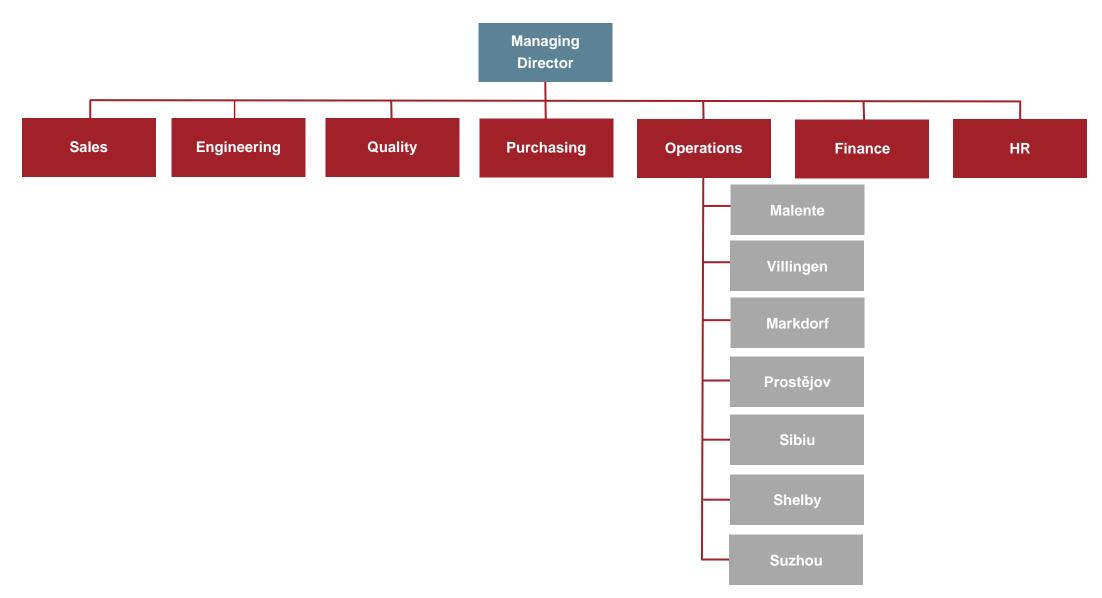
"Core focuses on increasing the profitability of our (existing) products"

- Value, profitability, and cash flow
- Lean, flexible, and simple organization
- Transform the Automotive Group's manufacturing excellence
 - Shift from a mechanic components producer to mechatronic systems producer
 - Allocate product groups to dedicated production plants
 - Adjust manufacturing capacity



KENDRION AUTOMOTIVE CORE







MANUFACTURING FOOTPRINT

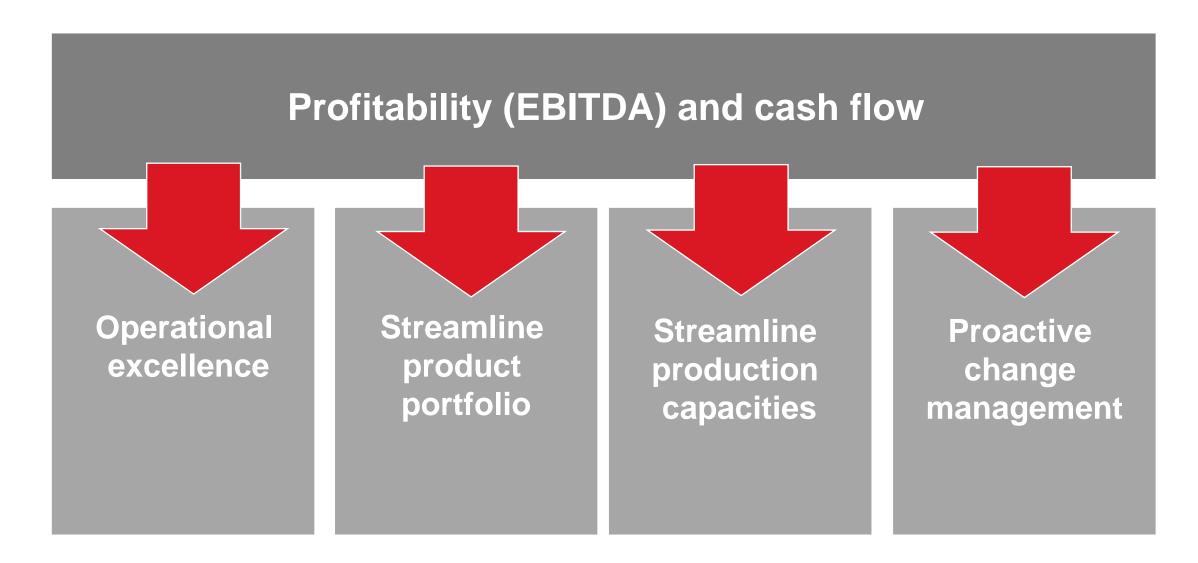






FOCUS AUTOMOTIVE CORE

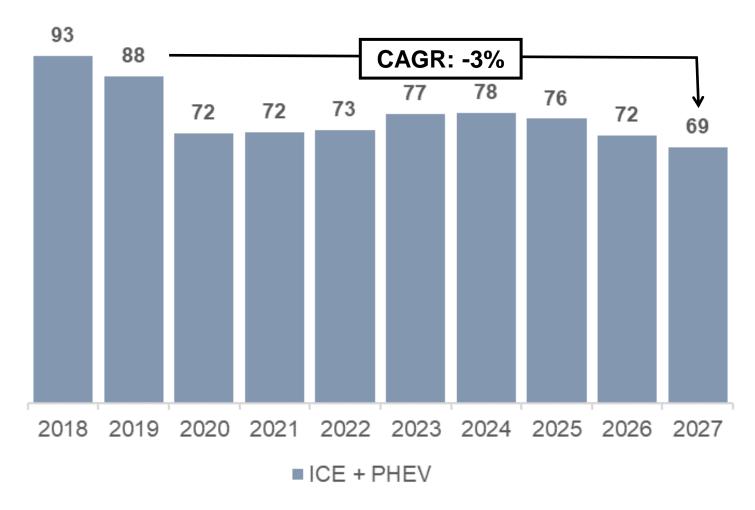






GLOBAL ICE PRODUCTION





Source: IHS Markit May 2022



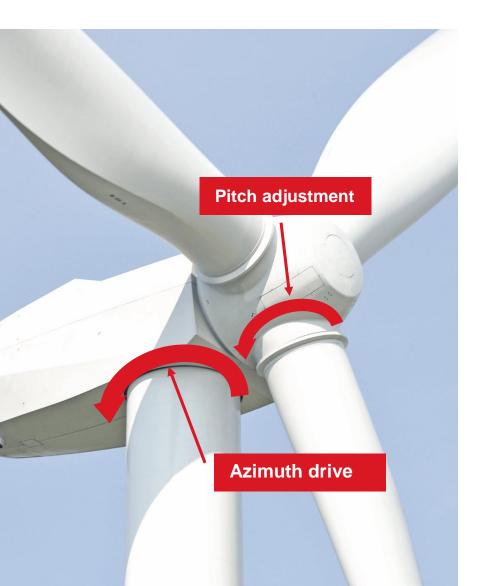
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WIND POWER - GLOBAL MARKET SIZE





2021	2027 (estimated)
93 GW installed	134 GW to be installed
Ø size of wind turbines: 4.5 MW	
~21,000 wind turbines installed	~28,000 wind turbines to be installed
Price per MW: 2,2' EUR Brake investment per tower: 1,200 EUR (based on 13 brakes)	
CARG ~+7,0-12,0%	
~25-32' million EUR	~40-70' million EUR

Per turbine: max. 13 brakes in pitch and azimuth



SUMMARY EXISTING MARKET



2021

	Total market size (million EUR)		
Industrial robots	80-90		
Industrial trucks	60-70		
Wind power	25-30		
Electric motors	480-620		
Other markets	500-700		
Total	~1,2 - 1,5 (billion EUR)		

CAGR (estimate)
~2-3%
~2-4%
~7-12%
~2-3%
~5-7%
~6%

^{*} not considered: material price, logistic increase and other possible surcharges



TRANSFORMING TRENDS 2022-2027



Changing markets – Energy transition and automatization

Market changes



Carbon reduction

Alternative energy sources, change of mindset towards environmentally friendly resources



Energy efficiency

Electrification, e.g. of hydraulic & pneumatic applications



Optimization of manufacturing

Growing e-commerce, labour efficiency

Impacted applications / portfolio





























Brakes for servo motors, geared motors and brake systems



Robotics & Automation



AGV



Industrial trucks



Wind power



Electric motors



Machine building



Hoists & Cranes



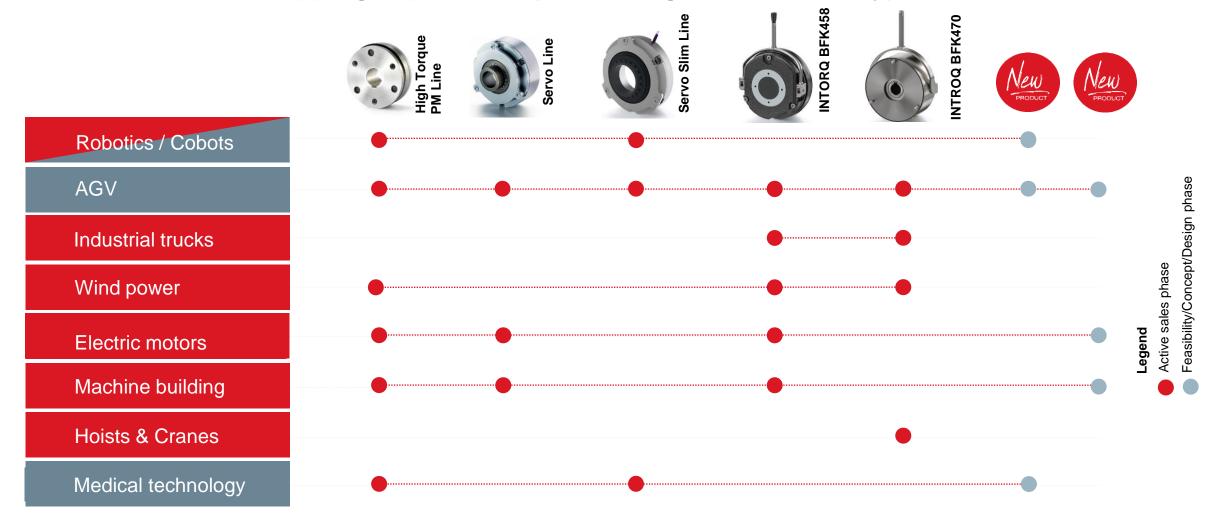
Medical technology



MARKET SEGMENTS



Mapping of products (selected: growth + maturity)

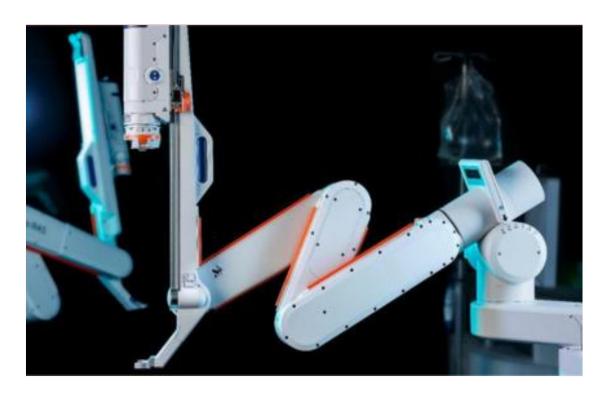




ROBOTICS



Example for customer tailored solutions



Surgery robot

Customer approach: Precise holding of safety position with

zero backlash

Customer: Manufacturer of electronic

components and devices for medical

technology

Products: High Torque Line / PM Line sizes 11 and 12

Success factors:

- Open, transparent communication

with the customer

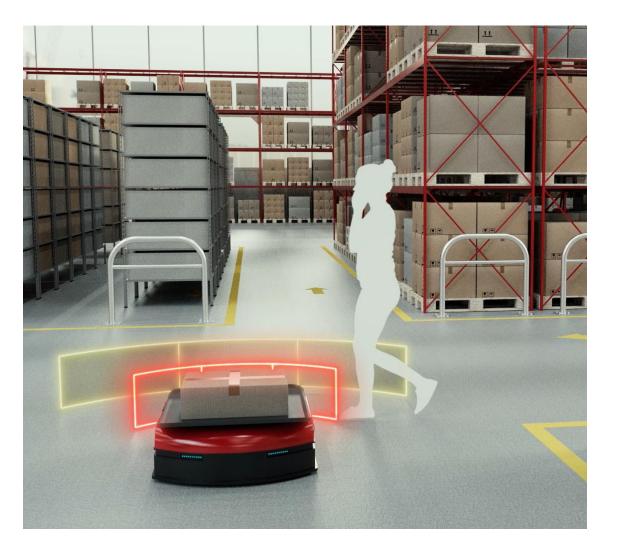
- Understanding customer needs
- High technical requirements
- Great sales and technical support
- Closely linked combination of single expertise in robotics and medical





AUTOMATED GUIDED VEHICLES (AGV)

Example for customer tailored solutions



AGV logistics applications

Customer approach: Customized design-in solution

Customer: Manufacturer of electric motors

Products: Servo Line sizes 03 and 08

Success factors: - Giving providing technical, smart

solutions by intensive customer

consultancy

Close and fast coordination of all involved specialists

 Flexible support and regular, close communication with the customer

- Agile approach (fast validation loops,







5 PILLARS OF SUCCESS















- ✓ Successful integration: growing together
- Extensive product platform: always the right solution
- ✓ Focus markets: extensive experience in key markets
- ✓ Human capital: Strong, experienced team
- ✓ **Global footprint:** Right next door

Industrial Brakes is a reliable and innovative partner. We support our customers and grow together.



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INDUSTRIAL ACTUATORS AND CONTROLS



Trends	Technology/ Products	CAGR at +15 % EBITA
Health / medical treatment	Fluid technology (valve modules)Locks	5 – 10%
 Sustainability / energy consumption and efficiency 	Inductive heating systemsNPP – pilot actuators	15 – 20 %
Manufacturing automation (robotics, AGV, logistics)	Control systemsSolenoid products	15 – 20 %
Smart & remote operated security systems	Locking systems & solenoidsSensor modules, PCBs	10 – 15%



HEALTH AND MEDICAL TREATMENT

Applications / Revenue expectation









WAS unit + Dental treatment unit



Valves & Pressure Regulator + Respiratory

Product Type	Customers	Applications	Status	Potential (million EUR)
Power pinch valve	NX-Stage, Stratec	Home dialysis, IVD	R&D	1,500,000
Proportional valves	Sirona, Planmeca, Siargo	Dental technology, Gas mixing & dosing	Prototype	400,000
Water-air-supply unit	Dürr Dental	Dental technology	R&D	900,000
O2 pressure regulator	Staiger, Seleon, Löwenstein, Dräger	Ventilators & Anesthesia technology	R&D	300,000



CLEAN ENERGY / INDUCTION HEATING SYSTEM

Applications / Revenue expectation















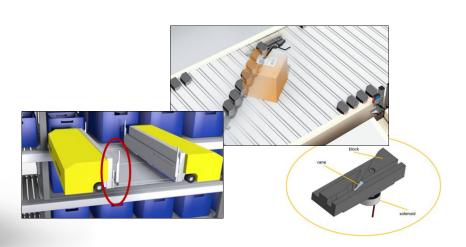
Energy	Customer	Application	Status	Potential (million EUR)
Gas	Bühler	Waffles baking	R&D	1,000,000
Oil	Matthews	Embossing, foil welding	Prototype	200,000
Induction	SSM Schärer Schweiter Mettler AG	Texturing	R&D	1,000,000
New	Mühlbauer GmbH	Battery cell assembly	Prototype	100,000



WAREHOUSE TECHNOLOGY / AUTOMATED GUIDED VEHICLES



















Product	Customer	Application	Status	Potential (million EUR)
Bistable solenoid	Ocado	Online grocery storage & retrieval	Ramp-up	1,000,000
Bistable rotary solenoid	MHS Van Riet	Parcel sorting	Ramp-up	1,700,000
Safety controls	Jungheinrich	AGV	Prototype	300,000
Safety / drive controls	Motius & other AGV Manufactures	AGV	Prototype	500,000



SMART AND REMOTE SECURITY SYSTEM

Applications / Revenue expectation











Motorized door locks

Product Type	Customers	Applications	Status	Potential (million EUR)
Solenoid door lock SL/AL	Wiesheu, Eloma, AT- OS, Eppendorf	Professional baking ovens, Desinfector, Centrifuges	Ramp-up	1,800,000
Rotary door lock RL	Imesa, Dexter, Alliance, AGA	Professional laundry	Ramp-up	1,500,000
Motorized door locks	Gorenje, Debag, Fines	Professional laundry, baking ovens	R&D	2,000,000



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WHAT WE HAVE ACHIEVED & PLANNED



∹ SIMPLIFY

© FOCUS

SCALING

Ⅲ GROW

Simplify management in China

Focus strength combinations of Germany/China

R&D localization

Sustainable Profitable Growth

5 fingers to 1 fist, 5 BUs to 1 China organization



Integrate business/ management synergy and material purchasing power of five business units, to maximize Kendrion value in China/Asia.

Germany + China Strengths



- Leading technology & SPEC
- Reliable quality
- Confidence/Trust
- Aggressive business expansion
- · Fast response & lead time
- Competitive cost

R&D localization will be the key driver of coming growth



- Build a fully localization R&D team for Industrial (IB / IAC) BU in 5 years
- Form a local R&D team in China for Automotive



- Continue revenue growth of 2016
 - 2022
- 10 years manufacture plan



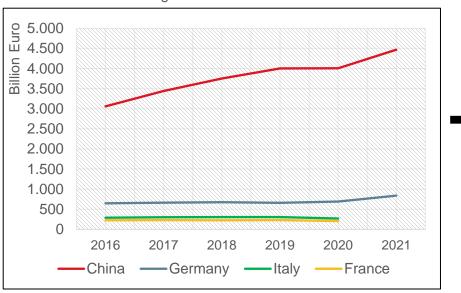
POTENTIAL GROWTH OPPORTUNITY



Industrial (IAC & IB) market size

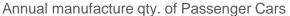
- = 5 times of Germany
- = 15+ times of other European countries, like Italy, France etc.

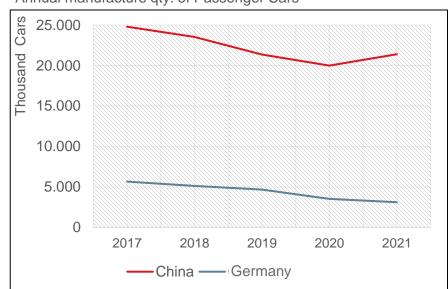
GDP from Manufacturing



Automotive market size

= 7 times of Germany

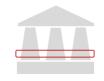




- **=**▶
- 1. Keep high growth
- 2. Eventually, our business will be in line with Industrial / Automotive market size in China



BUSINESS STRATEGY: ONE KENDRION







Fist (Kendrion Group) is much more powerful than finger (single BG)

Integrated all BGs resources to get more professional economic scale on

- Local talent / knowledge
- Supply chain
- Operation infrastructure
- Government PR / policy
 - Bigger scale, better government support

One factory / organization

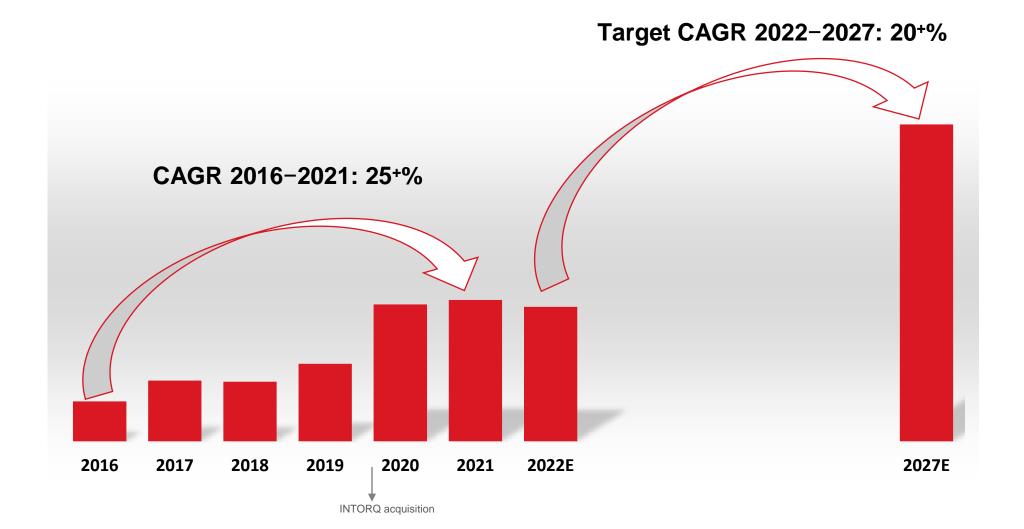
- Develop all potential business without boundary between Industrial & Automotive business groups
- Get efficient / effective result on business development
 & operation management
- Provide a more attractive organization for employee to grow career





AGGRESSIVE GROWTH PLAN TOWARDS 2027







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2025 FINANCIAL TARGETS



Revenue

Average organic growth at least 5% per year

ROIC

At least 25% in 2025

EBITDA margin

At least15% in 2025

Dividend

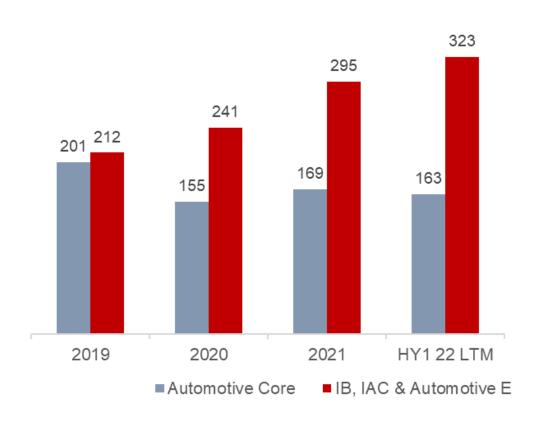
Between 35% - 50% of normalized net profit

^{*} Invested capital excluding goodwill and intangibles arising from acquisitions



ORGANIC GROWTH





Realized since HY1 2020

Kendrion Group

O 13% annual organic growth, revenue 2% above FY 2019

Industrial Brakes

+ Annual growth of 17% since, revenue up 26% from 2019

Industrial Actuators and Controls

+ Annual growth of 12%, organic revenue up 9% from 2019

Automotive E

+ Revenue 15% higher compared with FY 2019

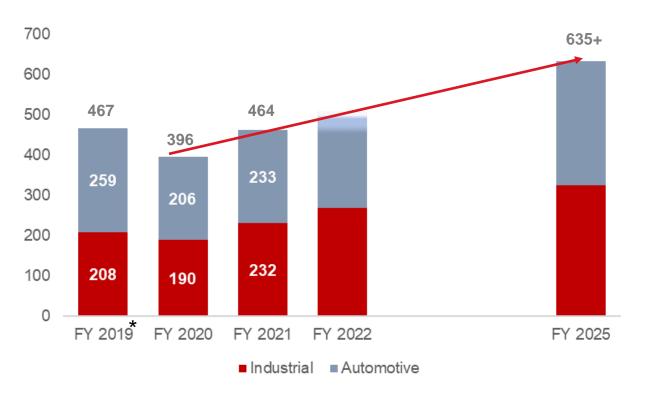
Automotive Group

-/- Total revenue 11% below 2019 due to semi-conductor shortages, affecting global and European car production



ORGANIC GROWTH





Roadmap to target

- Further market and application growth in IB; robotics, wind power, factory automation and AGV's
- Selective niche markets in IAC, including inductive heating, smart security systems and nuclear power plants
- Focus on fast growing electric car platforms with suspension valves and AVAS sound systems in Automotive
- Further market and market share expansion in China
- Gradual recovery from semi conductor shortages
 Automotive

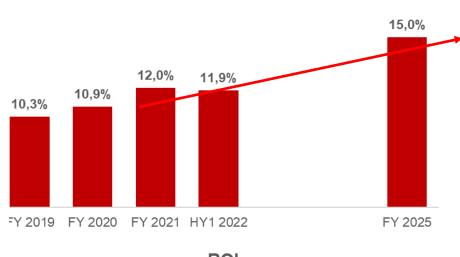
^{*} FY 2019 revenue pro forma including INTORQ with EUR 54.5 million



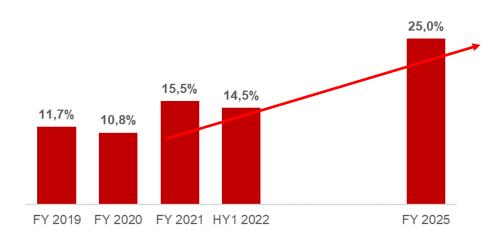
PROFITABILITY







ROI



Realized since HY1 2020

- + Normalized EBITDA margin increase of 1.6% compared to FY 2019
- + 17.9% EBITDA margin in industrial in HY1 2022
- + ~EUR 4 million annual cost synergies in IAC and IB
- + Stable added value margins despite inflationary pressure on raw materials
- + Increased ROI driven by increase in EBITA
- -/- Automotive EBITDA of 5.0% in HY1 2022, based on low production volumes, and a full R&D pipeline

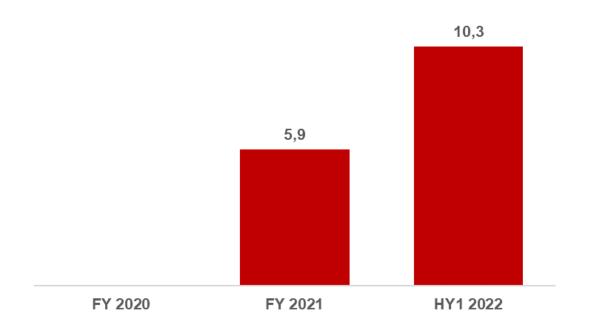
Roadmap to target

- 120 130 basis points margin increase from cost optimizations in Automotive Core
- 180 200 basis points margin increase from operational leverage
- Increase in utilization of invested capital (fixed assets)









Realized since 2020

- Dividend FY 2020 passed to protect financial position during first COVID-19 wave
- Pay-out ratio at high end of the policy in FY 2021 and FY 2022 (50% of normalized net profit)



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KENDRION

