

SHAPING THE FUTURE OF AUTOMATION

komax

Investor Day, 23 October 2020

AGENDA

- 1 Current situation – outlook 2020**
- 2 Insight into the new building
- 3 SMART FACTORY by KOMAX
- 4 E-mobility
- 5 Higher level of automation
- 6 Focused strategy
- 7 Questions

Impact of COVID-19 on harness plants

Situation beginning of February



AMERICAS	Mexico	Honduras	Nicaragua	Brazil	Argentina	Paraguay
overall situation	100% harness plants are open	100% harness plants are open	100% harness plants are open	100% harness plants are open	100% harness plants are open	100% harness plants are open



EMEA	Morocco	Tunisia	Egypt	SRB/ALB	Romania	Ukraine
overall situation	100% harness plants are open	100% harness plants are open	100% harness plants are open	100% harness plants are open	100% harness plants are open	100% harness plants are open



ASIA	India	China	Thailand	Vietnam	Philippines	Japan
overall situation	100% harness plants are open	20% harness plants are open	100% harness plants are open	100% harness plants are open	100% harness plants are open	100% harness plants are open

Impact of COVID-19 on harness plants

Situation beginning of April



AMERICAS	Mexico	Honduras	Nicaragua	Brazil	Argentina	Paraguay
overall situation	35% harness plants are open	0% harness plants are open	100% harness plants are open	5% harness plants are open	0% harness plants are open	0% harness plants are open



EMEA	Morocco	Tunisia	Egypt	SRB/ALB	Romania	Ukraine
overall situation	5% harness plants are open	0% harness plants are open	50% harness plants are open	30% harness plants are open	10% harness plants are open	5% harness plants are open



ASIA	India	China	Thailand	Vietnam	Philippines	Japan
overall situation	0% harness plants are open	100% harness plants are open	90% harness plants are open	100% harness plants are open	10% harness plants are open	100% harness plants are open

Impact of COVID-19 on harness plants

Situation beginning of May

	AMERICAS	Mexico	Honduras	Nicaragua	Brazil	Argentina	Paraguay
	overall situation	15% harness plants are open	5% harness plants are open	5% harness plants are open	40% harness plants are open	50% harness plants are open	40% harness plants are open
	EMEA	Morocco	Tunisia	Egypt	SRB/ALB	Romania	Ukraine
	overall situation	35% harness plants are open	40% harness plants are open	80% harness plants are open	20% harness plants are open	30% harness plants are open	30% harness plants are open
	ASIA	India	China	Thailand	Vietnam	Philippines	Japan
	overall situation	0% harness plants are open	100% harness plants are open	90% harness plants are open	70% harness plants are open	50% harness plants are open	65% harness plants are open

Impact of COVID-19 on harness plants

Situation beginning of June



AMERICAS	Mexico	Honduras	Nicaragua	Brazil	Argentina	Paraguay
overall situation	95% harness plants are open	10% harness plants are open	50% harness plants are open	75% harness plants are open	100% harness plants are open	100% harness plants are open



EMEA	Morocco	Tunisia	Egypt	SRB/ALB	Romania	Ukraine
overall situation	95% harness plants are open	95% harness plants are open	100% harness plants are open	90% harness plants are open	90% harness plants are open	95% harness plants are open



ASIA	India	China	Thailand	Vietnam	Philippines	Japan
overall situation	100% harness plants are open	100% harness plants are open	100% harness plants are open	100% harness plants are open	70% harness plants are open	100% harness plants are open

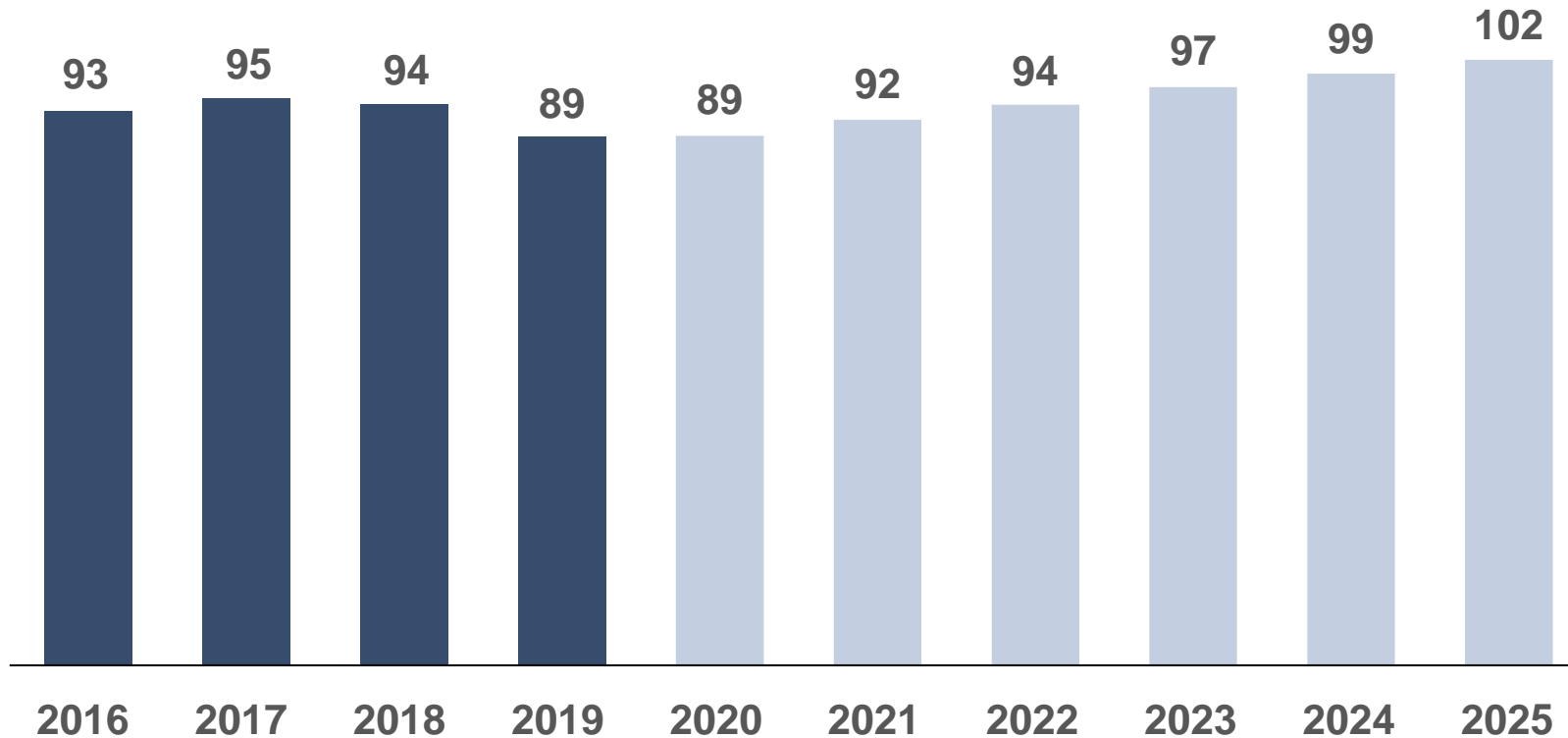
Current market environment



Global vehicle production

Analysis from November 2019

Production of passenger cars and light commercial vehicles
in million vehicles

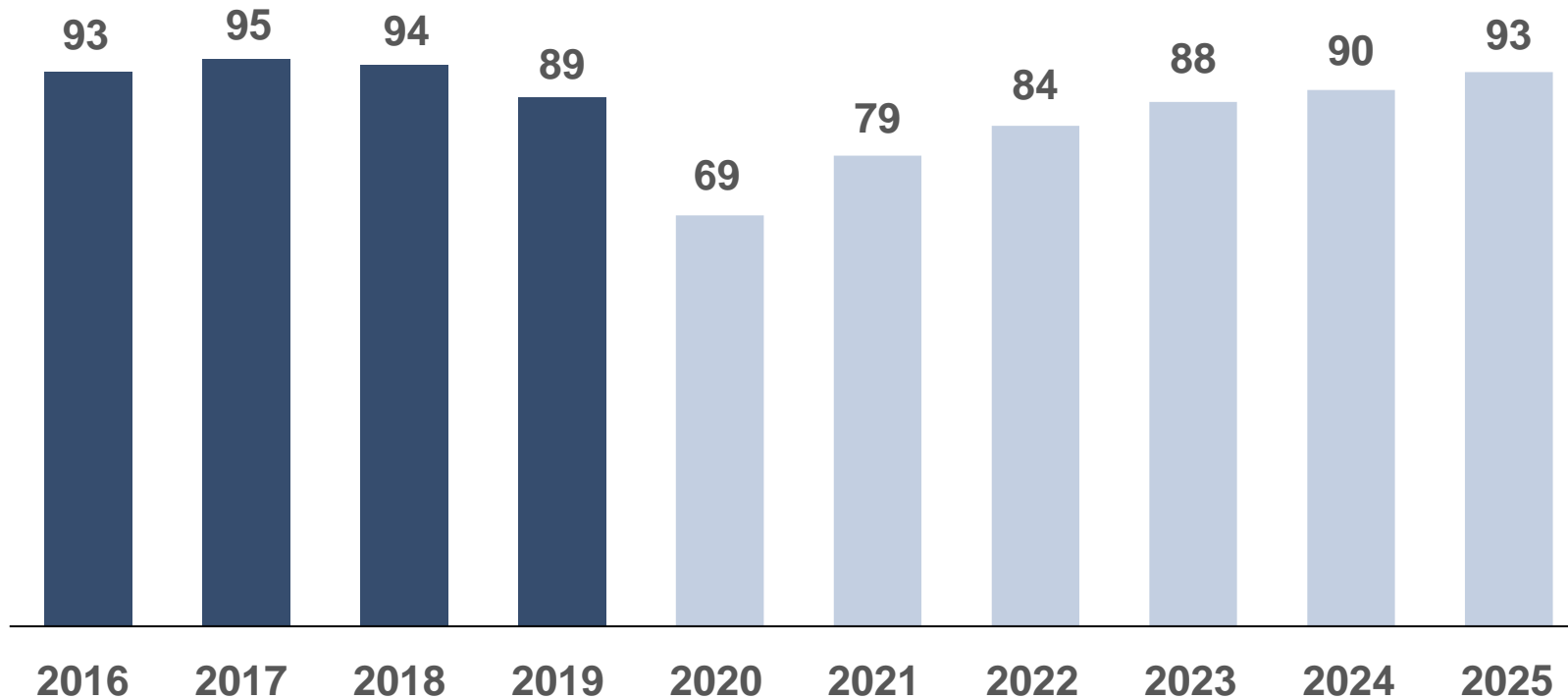


Source: IHS Markit, November 2019

Global vehicle production

Analysis from July 2020

Production of passenger cars and light commercial vehicles
in million vehicles

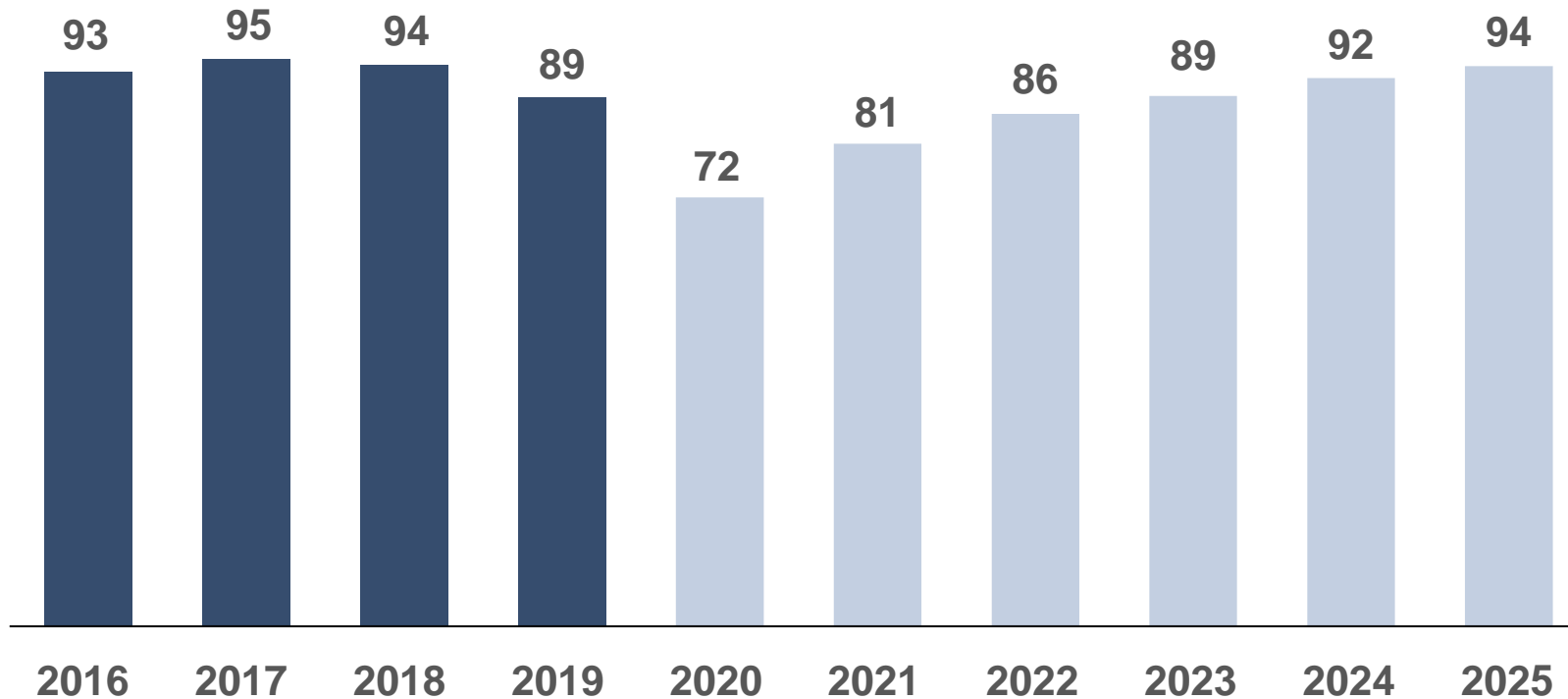


Source: IHS Markit, July 2020

Global vehicle production

Analysis from October 2020

Production of passenger cars and light commercial vehicles
in million vehicles



Source: IHS Markit, October 2020

Multifaceted package of measures

Structural adjustments and short-term cost-cutting measures

Swift and rigorous implementation of numerous measures to cut costs in the short term

- Introduction of short-time working in various countries
- Reduction of external services (e.g. research and development)
- Postponement of projects
- Recruitment freeze
- Travel freeze
- Massive reduction in marketing expenditure

Multifaceted package of measures

Structural adjustments and sustainable cost-cutting measures

Adjustment of headcount to current market situation

- All production sites: reduction of temporary and fixed-term staff, also some redundancies
- Reduction in headcount in 2020 to date: 150 employees or around 7% of workforce

Consolidation of locations

- Reduction in number of production sites in North America (previously: US and Mexico; new: Mexico)

Risk minimization

- Reduction of customer-specific activities in the companies Exmore (Belgium), Komax AG (Switzerland), Komax SLE (Germany), and Laselec (France)

Outlook 2020

- The market situation for Komax has improved every month since mid-year. Therefore, we expect to achieve a better result in the second half of 2020 than in the first six months of the year.
- We believe it will at least break even in terms of EBIT in the second half of 2020 (first half of 2020: CHF –4.7 million) and achieve revenues of at least CHF 300 million for the 2020 financial year as a whole (first half of 2020: CHF 145.2 million).
- This is all assuming that the coronavirus pandemic does not affect delivery capacity in the next few weeks.

Step-by-step recovery

Further cost-cutting measures – mainly in Switzerland

- We are confident that the market situation will continue to improve in 2021 – but not yet to pre-crisis level.
- Volume business in particular needs more time to recover.

Measures to be optimally positioned in 2021

- Reduction of worldwide headcount, which will ultimately be around 10% lower than at the end of 2019 (2211 employees).
- We have been adjusting our structures at various Group companies since the start of the year, reducing headcount at the Komax Group by around 150 employees.
- The remaining reductions will mainly affect the two sites in Switzerland. Komax plans to cut around 10% of the current workforce (660 employees) in Switzerland.
- The consultation process started today.
- If this reduction is implemented, we expect that it will have no or very little need for short-time working in Switzerland in 2021.

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New building at the headquarters

First machine produced in April 2020

- Vertical factory
- More than 20,000 m²
- On each floor: production and office work
- Lower ground floor: state-of-the-art, automated small-parts storage area (15,000 articles) with an intralogistics system
- Abandonment of the rented site in Küssnacht am Rigi at the end of 2020









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Challenges and opportunities

Cost of vehicle is going up, industry needs to gain efficiency



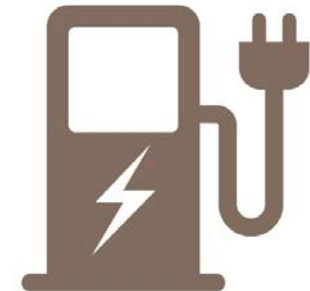
CONNECTED
+2-3 %



AUTONOMOUS
+12-22 %



SHARED
+2-3 %



ELECTRIFIED
+12-16 %

SMART FACTORY by KOMAX

Simpler, more convenient, and safer

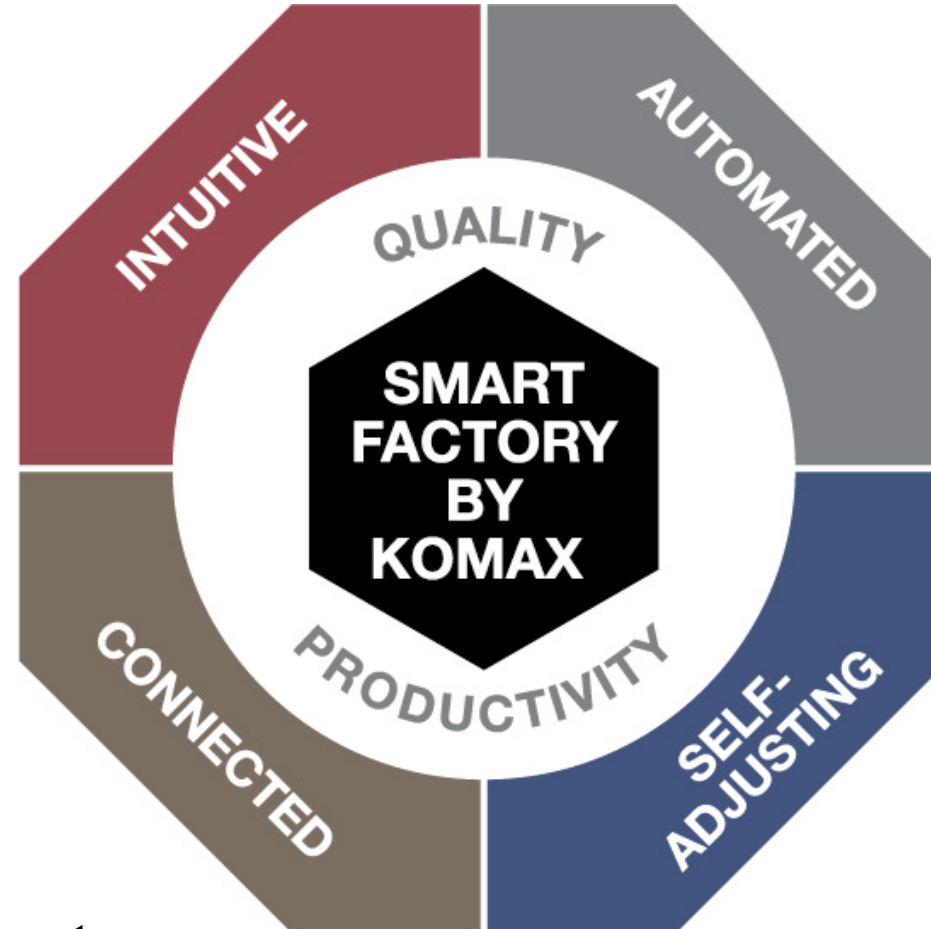
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TSK Connect



Komax Connect

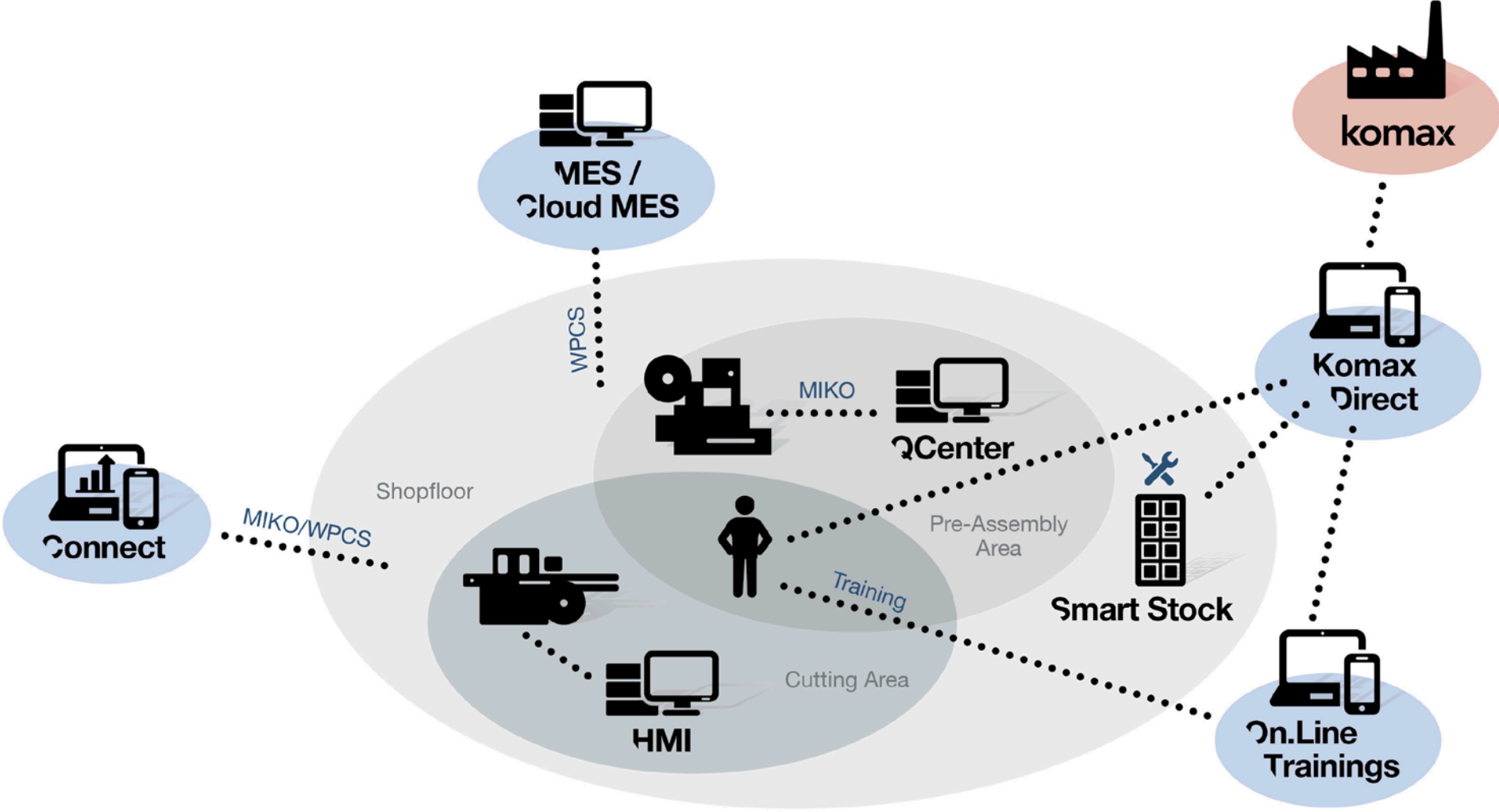


Lambda 416 H-MTD



Q1250

Digital services



Increase of transparency

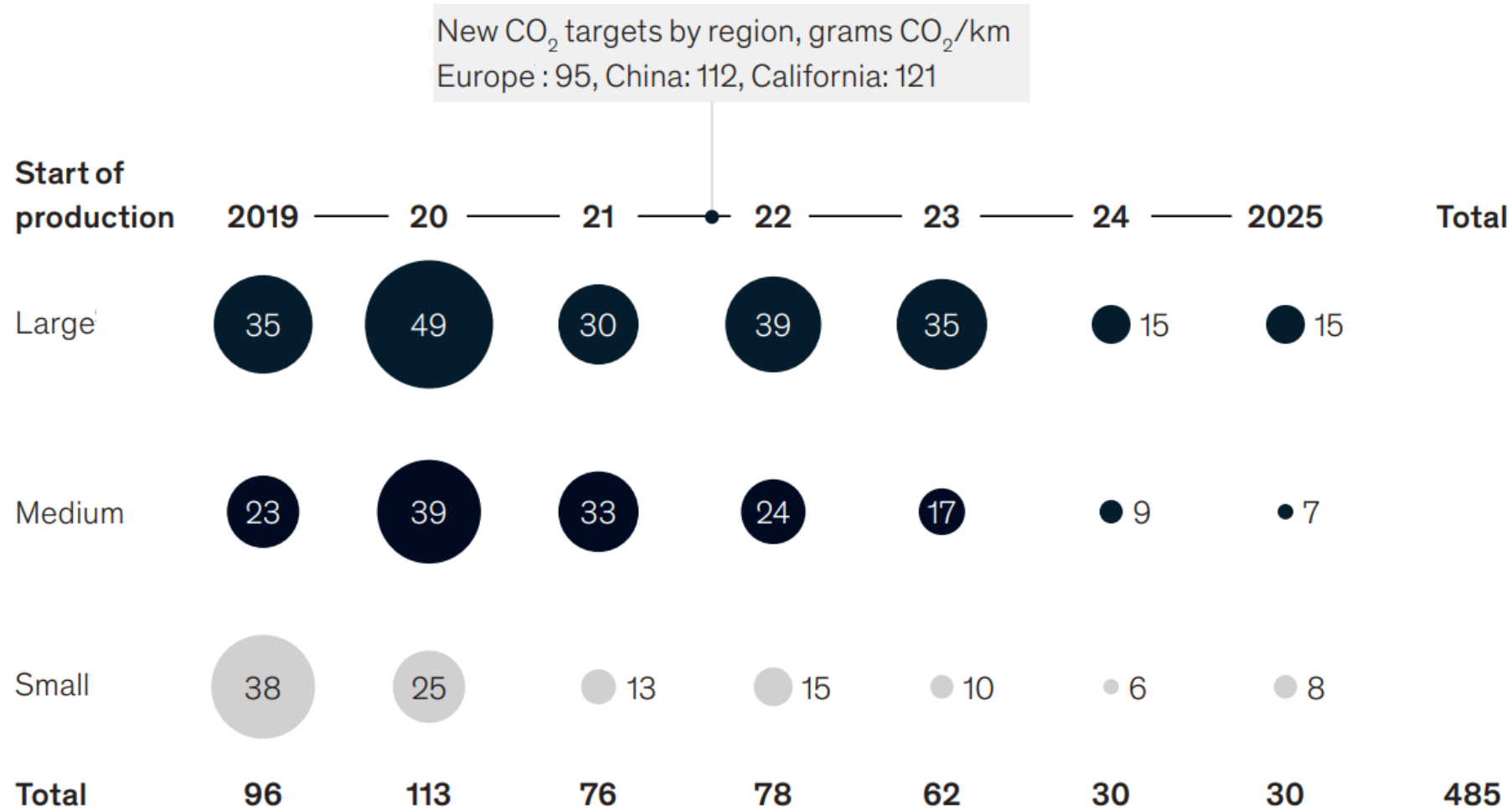
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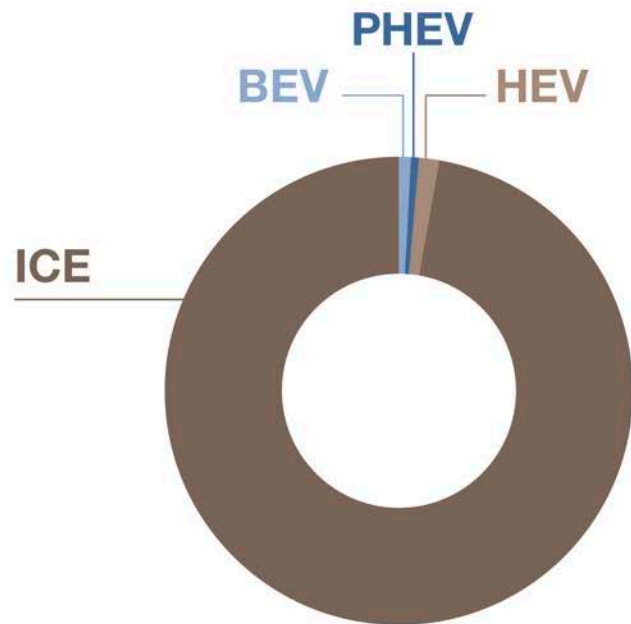
Number of battery electric vehicle launches



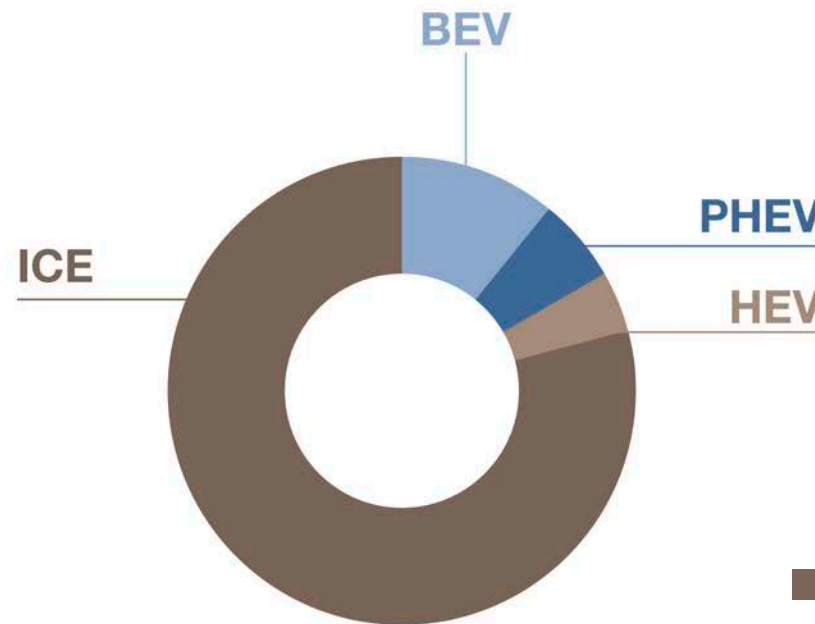
Source: McKinsey; January 2020

Development of e-mobility

High level of growth for electric vehicles (BEV & PHEV) – CAGR 30%



2019



2027

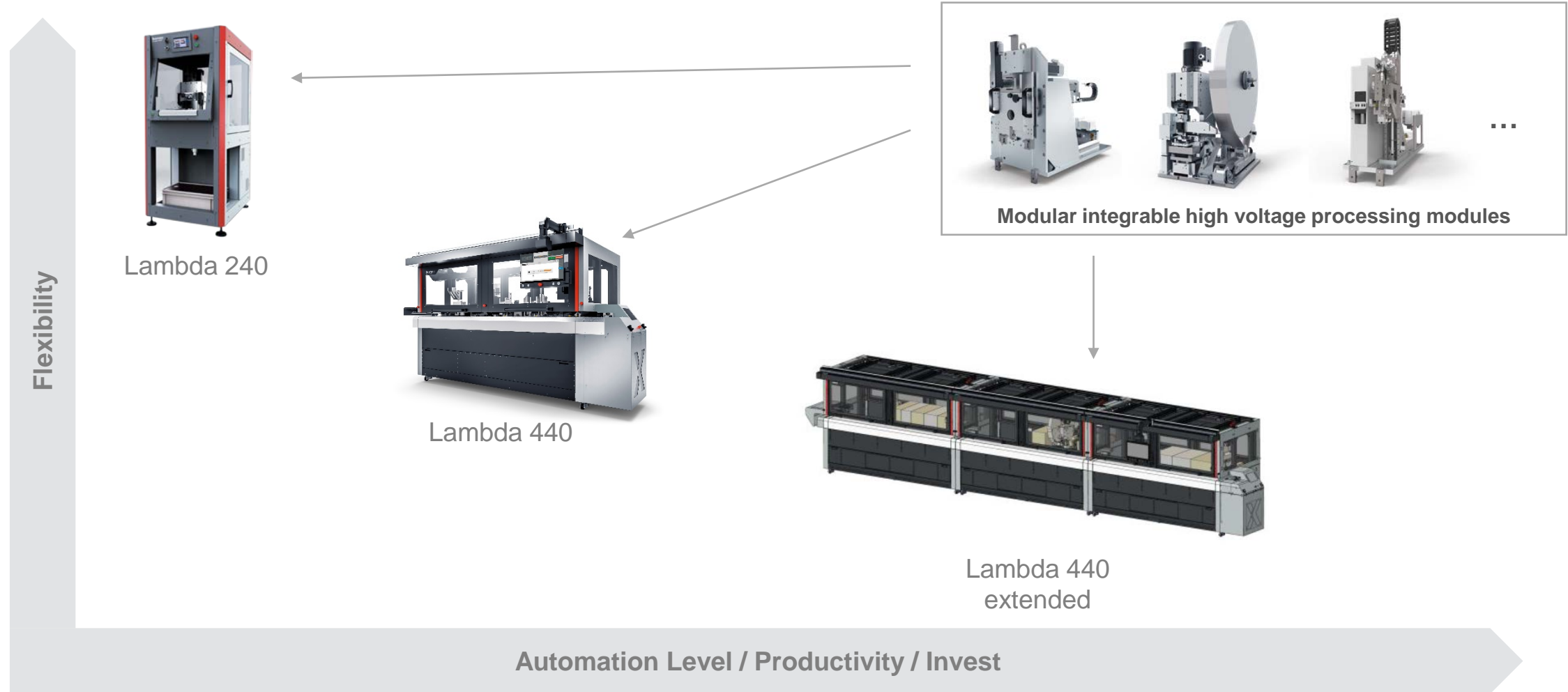
- Internal combustion engine (ICE)
- Full hybrid (HEV)
- Plug-in hybrid (PHEV)
- Battery electric vehicle (BEV)

Komax well positioned as full solution provider



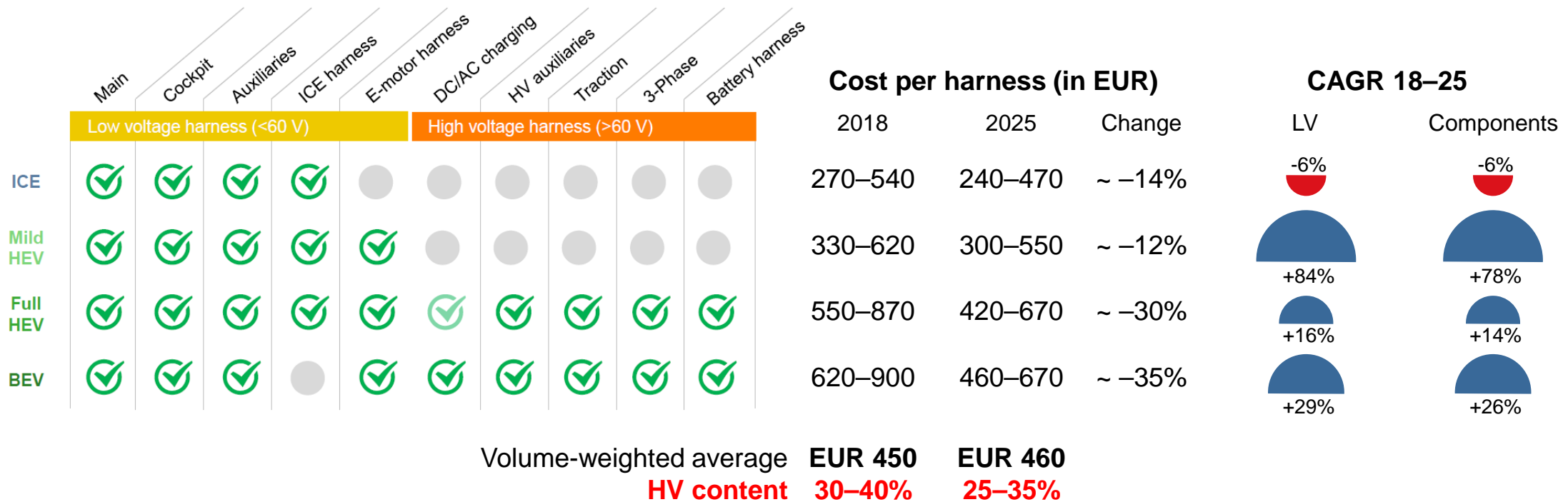
Platforms for high voltage solutions

Modularized system for all automation levels



Overall harness value remains stable

15–20 cables represent one third of the value



Source: McKinsey, Leoni

AGENDA

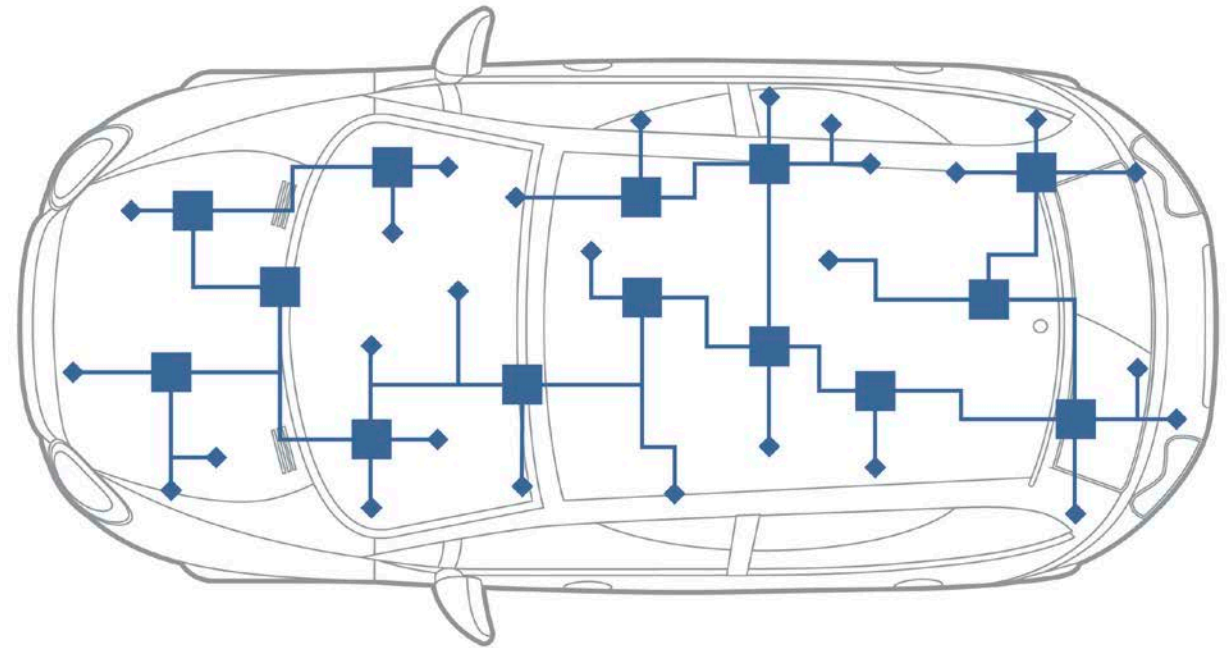
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Increase of automation is necessary

Today's harness topology

Today

- Distributed vehicle architectures
- Incompatible hardware and software
- Security and over-the-air update challenges
- Inefficient development
- Not easily upgraded or scaled

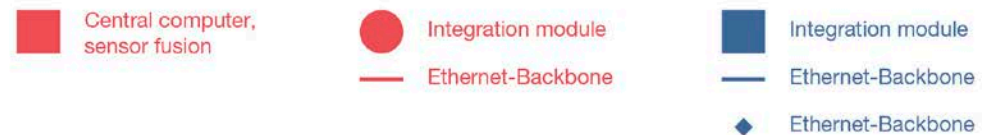
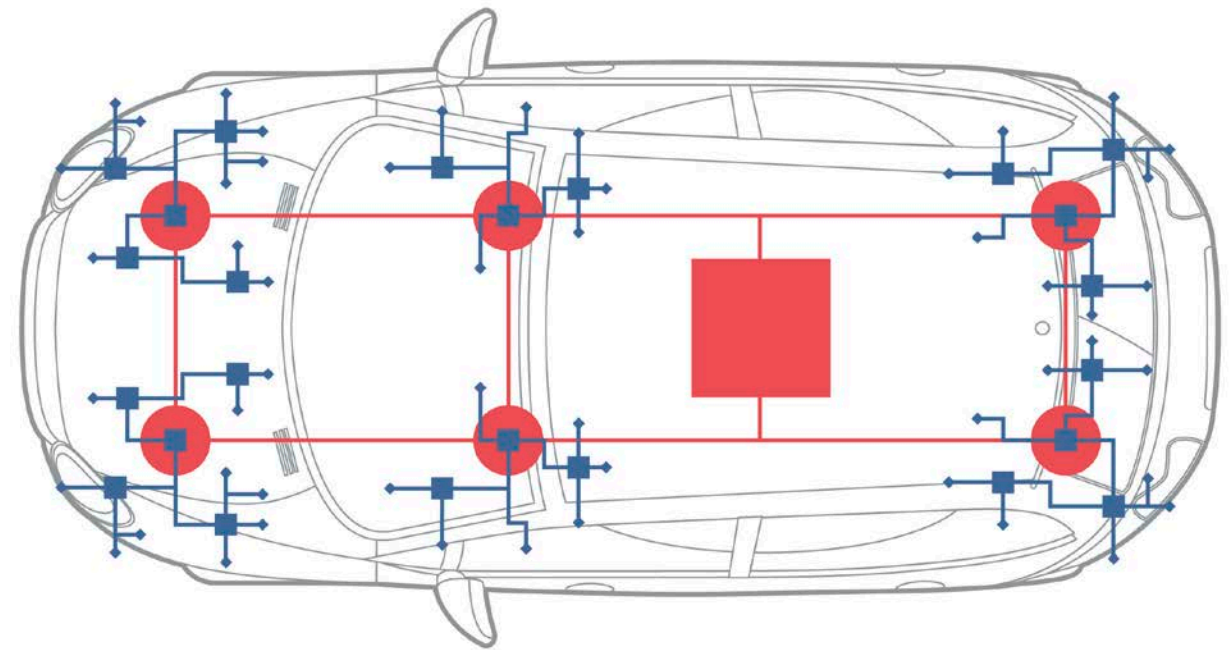


Increase of automation

Tomorrow's harness topology

Tomorrow

- High performance domain architectures
- Greater network capacity
- Secure, safe over-the-air updates
- Efficient to develop
- Upgradable and scalable platform, future proof



ARENA 2036

Automation of wire harness engineering, production, and assembly

- **Active Research Environment for the Next Generation of Automobiles in 2036**
- One year old
- 15 Partners along the supply chain (OEM, Tier 1 / 2 /3) plus scientific institutes
- Open (no closed shop)
- Industry driven (no public funding)
- Focus on pre-competitive enablers and standards for automation
- Based and coordinated by the research campus ARENA2036 on the campus of the University of Stuttgart

ARENA2036


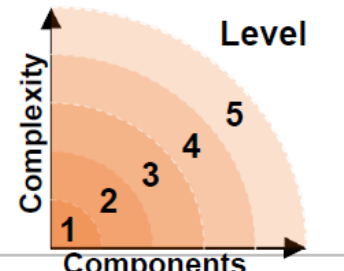
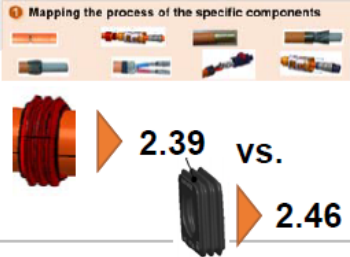
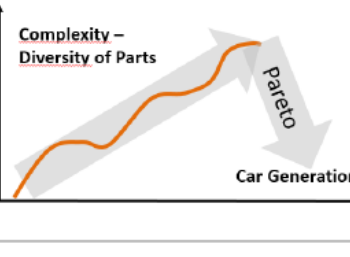
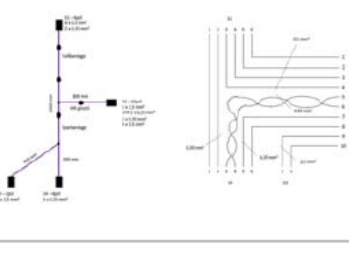
ARENA 2036

15 partners – new members are welcome

			
			
	 Mercedes-Benz		
			<p>“XYZ” (who is next?)</p> 

Some results of projects in phase 1

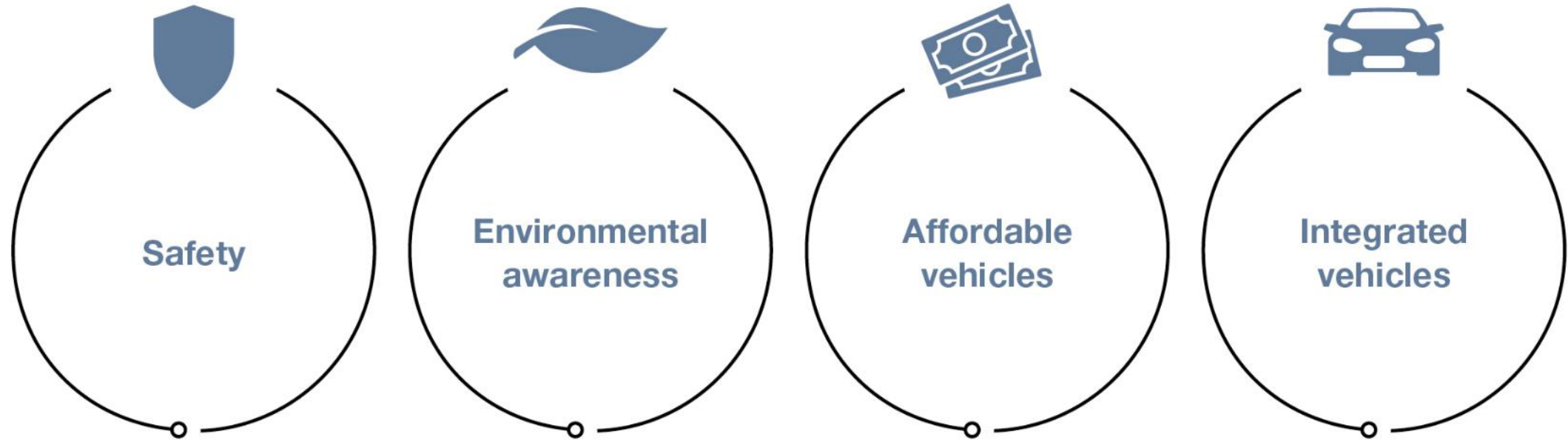
Komax leads the project “design rules for automation”

Design rules for Automation	Level of Automation	Index for Automation Effort	Reduction of Component Diversity	Automated assembly in the vehicle
<ul style="list-style-type: none"> • Idea is to consolidate all relevant design rules for automation of the wire harness as a whole and plug connectors • Results: more than 100 specific design rules with concrete parameters and data categories (work in progress) 	<ul style="list-style-type: none"> • Idea: Level of Automation help to keep the balance between different options of transformation • Results: Method of Level 0 to Level 5 with up to 15 criteria per level. 	<ul style="list-style-type: none"> • Idea: ONE index figure, that expresses the Automization Friendliness of a component! • Results: Method for measuring and comparing the Automation Friendliness Example: Comparing 2 HV Plugs 	<ul style="list-style-type: none"> • Idea: Would a 80/20 approach (“Pareto Principle”) help to define a set of basic components with as little diversity as possible? • Results: Suggestion of a drastically reduced set of core components 	<ul style="list-style-type: none"> • Idea: Elaboration of modern Human-Machine-Collaboration models • Results: Process- and benchmark analysis and concept for the positioning of the wire harness into the vehicle
				

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Global megatrends in the automotive industry

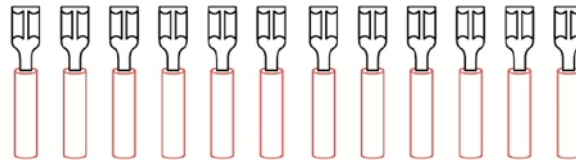


Steady rise in level of automation (CAGR: 2%–3%)

Numerous reasons



rising wage costs



rising number of wires



autonomous driving



e-mobility



traceability



staff availability



miniaturization

Focused strategy

We are very well positioned for future growth

SOLUTIONS
ALONG THE
VALUE CHAIN



INNOVATIVE
PRODUCTION
CONCEPTS



GLOBAL
CUSTOMER
PROXIMITY



DEVELOP NON
AUTOMOTIVE
MARKETS



Mid-term targets up to 2023

REVENUES

CHF

450–550

million

- Primarily organic growth
- Increase in number of vehicles produced from 2021
- Increase in level of automation (CAGR: 2%–3%)

EBIT

CHF

50–80

million

- EBIT dependent on product mix
- EBIT strongly influenced by volume business (crimp-to-crimp)
- Low revenues (CHF 450 million) resulting in low EBIT (CHF 50 million)

PAYOUT

50%–60%

of EAT

- Shareholders benefiting from sustained generation of value
- Attractive dividend policy
- Dividend dependent on business performance; no minimum dividend

Komax News Portal



Topics and insights from the world of automated wire processing



<https://newsportal.komaxgroup.com>

Interesting articles and videos about Komax and the wire processing industry

Inside Komax

Find out all about Komax apprenticeships at ZEBI 2020

22.10.2020 - Michael Gehrig



From November 5 to 8, 2020, Komax will be presenting itself at the Central Switzerland Education Fair ZEBI as an attractive company for apprentices, with 10 apprenticeships available.

[Read now >](#)

Inside Komax

Register now! Komax Digital Experience Days, October 20-30, 2020

15.10.2020 - Kamila Deja



The Komax Digital Experience Days

2020 are on the c...
turbulent market, t...
needs. Through st...

[Read now >](#)

Technology & Innovation

The best equipment deserves the best service

08.10.2020 - Wolfgang Denk



The innovative products and solutions from Komax enable manufacturers to produce seamless quality combined with maximum output.

[Read now >](#)

Know-how

White paper: optimization potential in control cabinet construction

06.10.2020 - Reiner Konetschny



Faster, cheaper, better: the optimization potential in control cabinet design and production is huge. Discover in our...

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Inside Komax

Reminder: Komax Digital Experience Days 2020

06.10.2020 - Kamila Deja



Register for the Digital Experience Days 2020 now! Nine exciting days lie ahead of us: for the first time ever, we will be opening the doors to our new virtual...

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Contact / Financial calendar



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Financial calendar

Preliminary information on 2020 financial year	26 January 2021
Annual media and analyst conference on the 2020 financial results	16 March 2021
Annual General Meeting	14 April 2021
Half-year results 2021	17 August 2021

Disclaimer



This presentation contains forward-looking statements in relation to Komax which are based on current assumptions and expectations. Unforeseeable events and developments could cause actual results to differ materially from those anticipated. Examples include: changes in the economic and legal environment, the outcome of legal disputes, exchange rate fluctuations, unexpected market behavior on the part of our competitors, negative publicity and the departure of members of management. The forward-looking statements are pure assumptions, made on the basis of information that is currently available.

QUESTIONS?

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