

DENSO

Crafting the Core

Strategies for Corporate Value Enhancement

November 15, 2023

Yasushi Matsui

Executive Vice President & CFO

DENSO Corporation



Agenda

- 1. Progress in Achieving the Mid-term Policy for 2025**
- 2. Business Portfolio Reformation for Achieving Profitability and Exercising Philosophy**
- 3. The Evolution of Mobility (Electrification & ADAS)**

1

Progress in Achieving the Mid-term Policy for 2025

[Sustainable management] Strategies for “Green” and “Peace of Mind” and reinforcement of corporate foundation

Green

Aiming to become carbon neutral by 2035

	Main results (FY2022/2023)
Manufacturing (Monozukuri)	<ul style="list-style-type: none"> - CO2 emissions -50% (compared to FY2012) - SCOPE3 target disclosure (received SBT certification)
Mobility Products	<ul style="list-style-type: none"> - Market launch of DENSO's first SiC inverter - Electrification sales: 680 billion yen (YoY: 117%)
Energy Use	<ul style="list-style-type: none"> - Targeted market launch of SOEC/SOFC (from 2024 onward)

Corporate foundation (Main results)

[Management foundation] Promoted the globalization of non-financial KPIs and started the formulation of double materiality

[Business foundation] Accelerated reformation of business portfolio

Peace of Mind

Aiming to become a leading company that provides “peace of mind” to society

	Main results (FY2022/2023)
Zero fatalities from traffic accidents	<ul style="list-style-type: none"> - Achieved world-class wide angle of image sensor - ADAS sales: 391 billion yen (YoY: 109%)
Comfortable Spaces	<ul style="list-style-type: none"> - Market launch of the world's first radiant heater technology to the market
Support for Working People	<ul style="list-style-type: none"> - [Agriculture] Made Certhon Group a wholly owned subsidiary

Steady progress in efforts to maximize the value of “Green” and “Peace of Mind”

External evaluation and awards for initiatives

Main SRI/ESG investment index



FTSE4Good



FTSE Blossom Japan



FTSE Blossom Japan Sector Relative Index



2023 ESG FINANCE AWARDS JAPAN BRONZE



2023 Sompo Sustainability Index



S&P/JPX カーボン エフィシエント 指数

Long-term credit rating

Rating company	Rating
R&I	AAA
S&P	A+
Moody's	A2

(As of November 15, 2023)

Evaluation of IR activities

IR activities Top award (3 consecutive years)

ディスクロージャー
2021年度 優良企業



SAI 日本証券アナリスト協会

Integrated Report Silver Award (2 consecutive years)



INTEGRATED REPORT AWARD 2022

Evaluation in Japan and overseas



DRIVING AMBITIOUS CORPORATE CLIMATE ACTION



CLIMATE WATER



IEEE Corporate Innovation Award Winner (Development and dissemination of QR*1 code)



Energy Conservation Grand Prize Award Winner for 13 consecutive years



WorldSkills Competition Cumulative total of 34 gold medals



Amata Best Waste Management Award Awarded for 8 consecutive years (Thailand)



We received numerous high evaluations and awards for our business activities globally.

[Financial strategy] ROE, operating margin, revenue

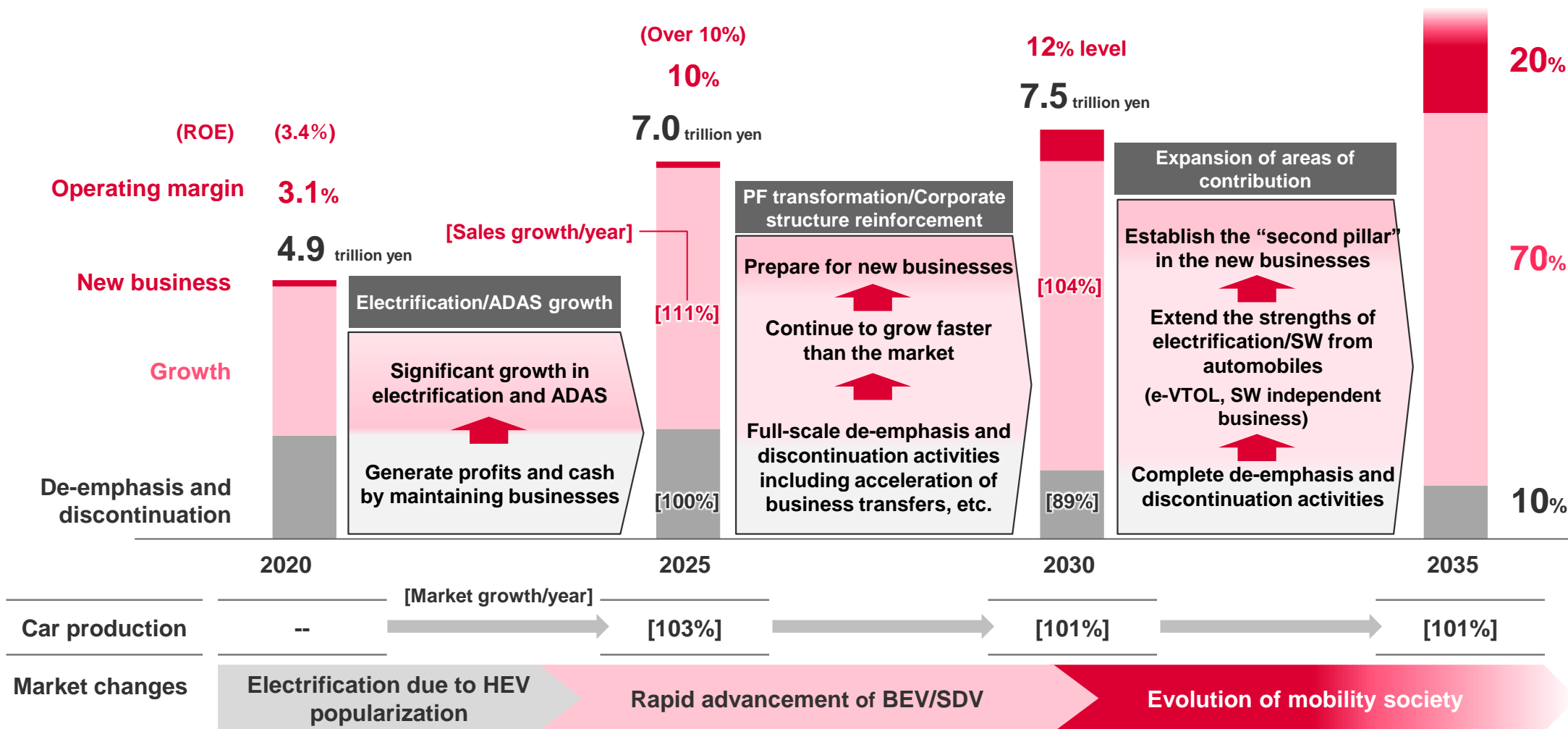
Financial strategy	ROE	=	Sustainable ROIC improvement	×	Utilization of leverage	
	ROE		Operating margin		Revenue	ECR
Target for 2025	Over 10%		10%		6.7 trillion yen	More than 50%
Estimate for 2023	9.7% (Cost of stockholders' equity: 8.0%)		9.0%		7.0 trillion yen	More than 50%
Other major KPIs [Estimate for 2023 ⇒ Target for 2025]	<ul style="list-style-type: none"> Cash on hand compared with monthly turnover : 1.0 month ▶ Maintaining current level Cross-shareholdings : 18 brands (as of 11/15/2023) ▶ Further reduction Global inventory : 1.7 months ▶ Continuous reduction 				<ul style="list-style-type: none"> DOE : 3.2% ▶ Stable improvement over the long term Treasury stock acquisition: Make flexible/increase acquisition 	

Almost achieved ROE targeted for 2025 by promoting financial strategy

2

Business Portfolio Reformation for Achieving Profitability and Exercising Philosophy

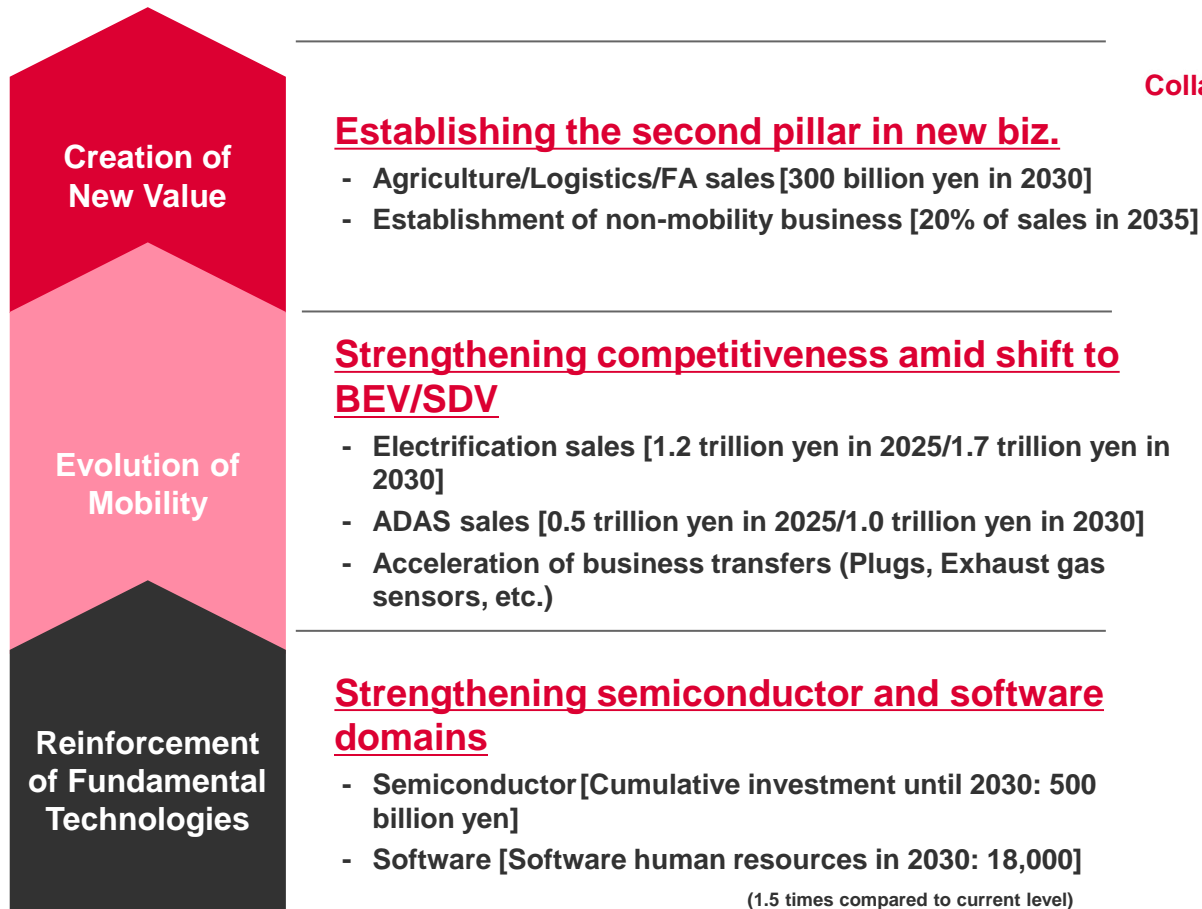
Growth Strategy



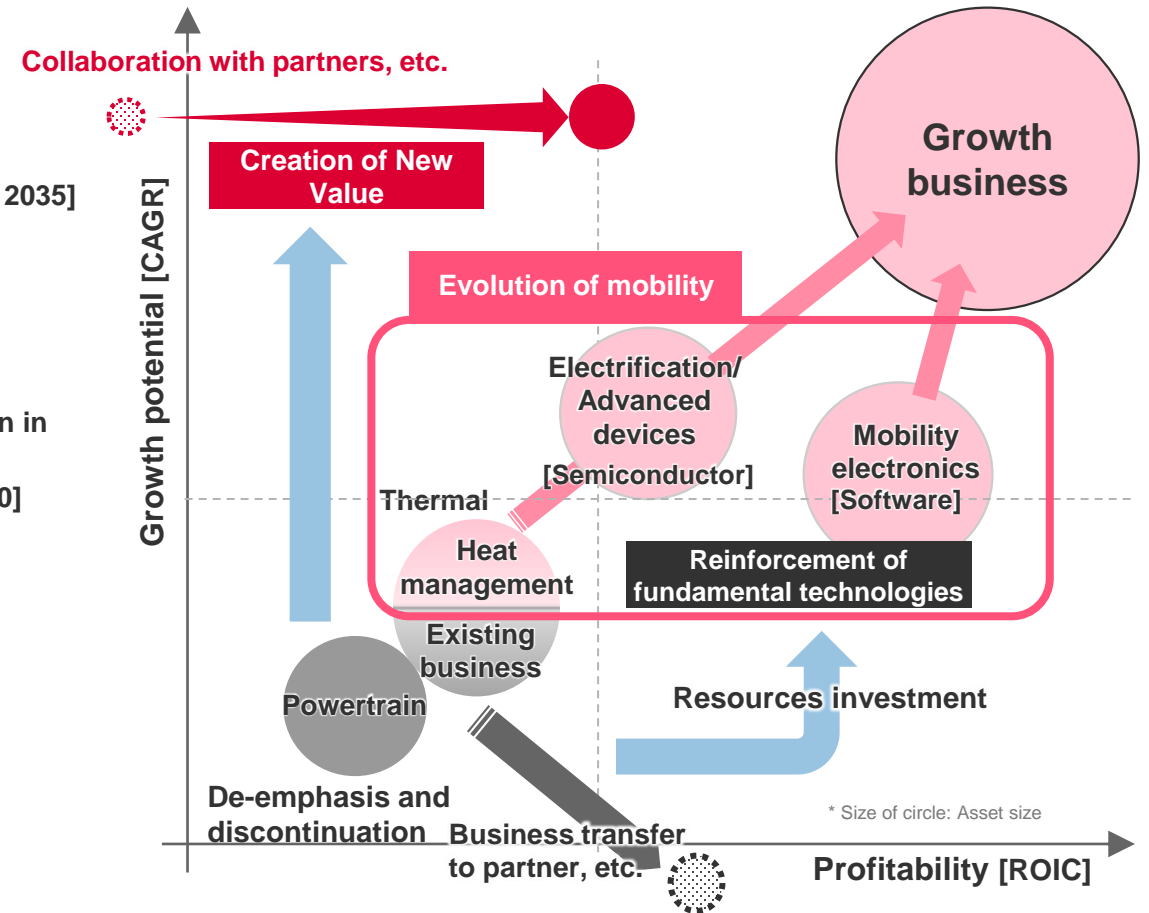
Reinforce corporate structure by reforming our business portfolio between 2025-2030 and make further progress by creating new value beyond 2030

Direction of Business Evolution

■ 3 initiatives for business evolution



■ Transformation of business portfolio [2025 ⇒ 2030]



Software and semiconductors, which are fundamental technologies, will serve as a foundation for the evolution of mobility and the creation of new value.

Collaboration with partners to accelerate transformation of business portfolio

2017 - 2023 <7 years>		IN (450 billion yen) [●Establishment/acquisition ○Investment]	Future direction	OUT [Business transfer]
New value	Agriculture/FA Energy, etc.	<ul style="list-style-type: none"> ● Tohoku Pioneer EG ● AgriD ● Certhon Group 25 billion yen	Further scale up business toward the establishment of the “second pillar”	TD mobile
	Electrification	<ul style="list-style-type: none"> ● Toyota Motor Corporation Hirose Plant ● BluE Nexus 	Promote bold portfolio transformation with optimal partners	Fuel pump Type III alternator Spark plug*2 Exhaust gas sensor*2
Mobility	ADAS	<ul style="list-style-type: none"> ● J-Quad DYNAMICS ○ Aurora Innovation 170 billion yen		
Fundamental technologies	Semiconductor	<ul style="list-style-type: none"> ○ Renesas Electronics ○ Infineon Technologies ○ JASM*1 ○ Rapidus ○ Silicon Carbide LLC 255 billion yen	Reinforce vertical integration to demonstrate comprehensive strength throughout the entire supply chain	--
	Software	<ul style="list-style-type: none"> ○ Fujitsu Ten ○ Toshiba Information Systems (Japan) ○ e-SOL 	Solidify development system for large-scale and advanced development	

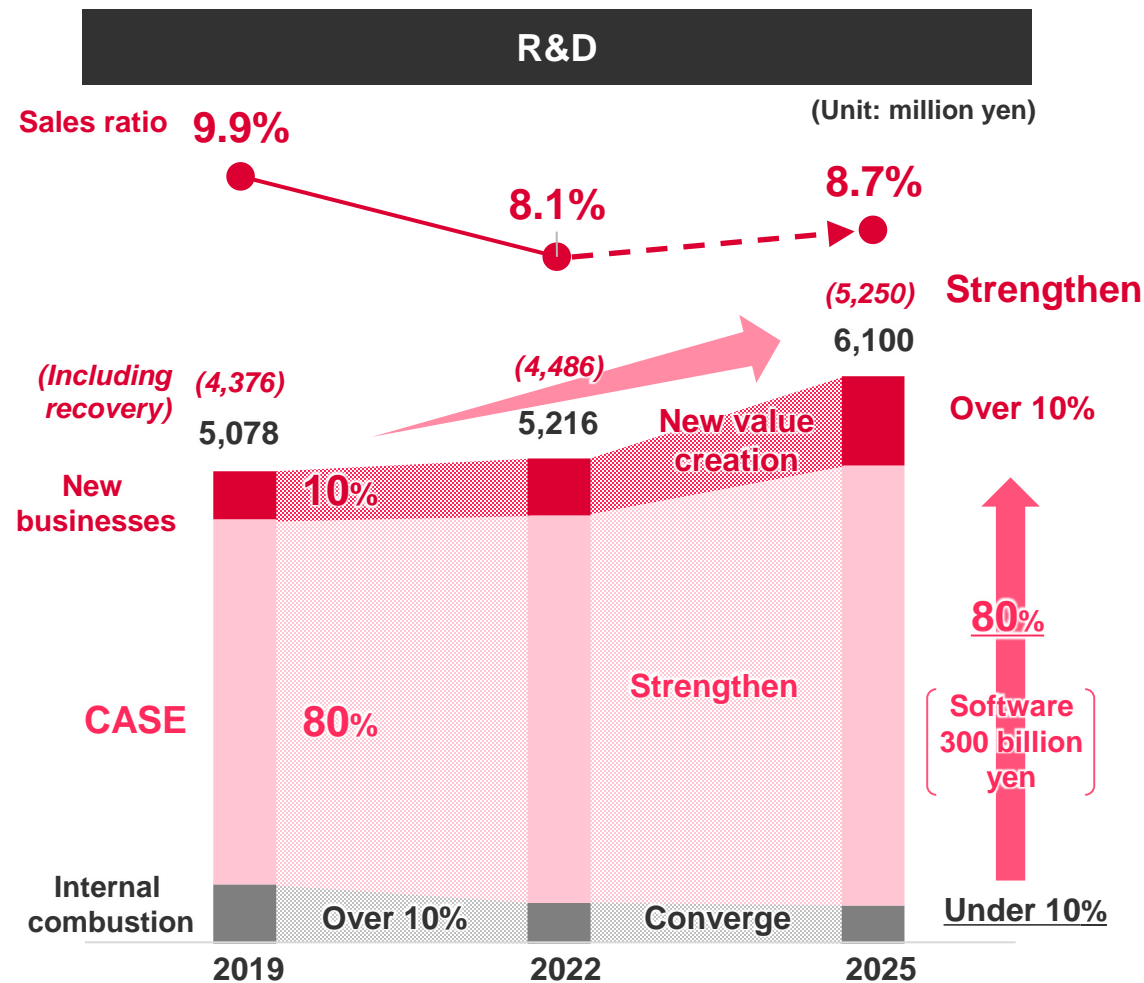
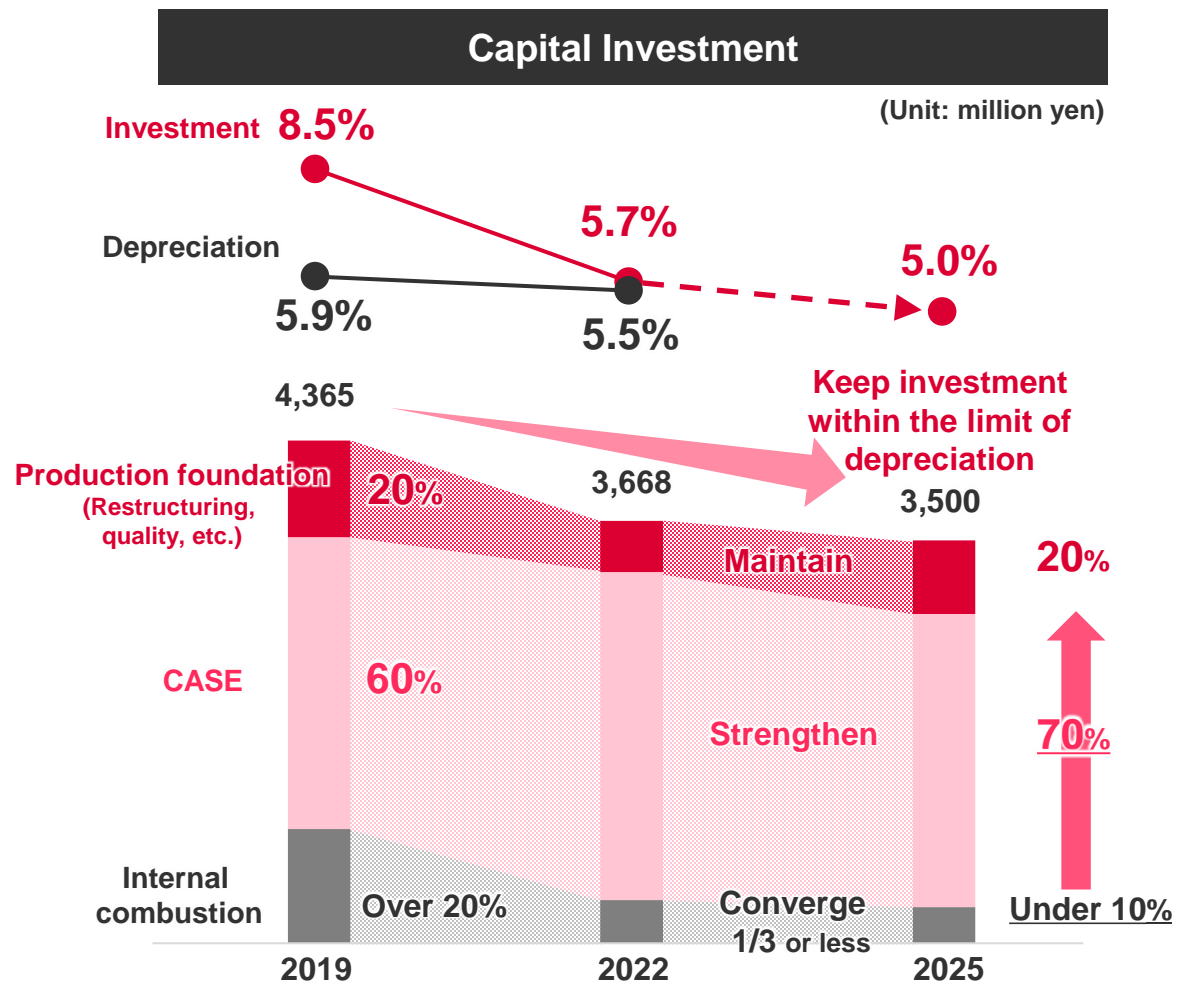
Cash generation

Accelerate portfolio reformation through strategic partner collaboration in addition to organic growth

*1 Japan Advanced Semiconductor Manufacturing

*2 Basic agreement to start considering business transfer

Resource strategy (Capital investment / R&D)

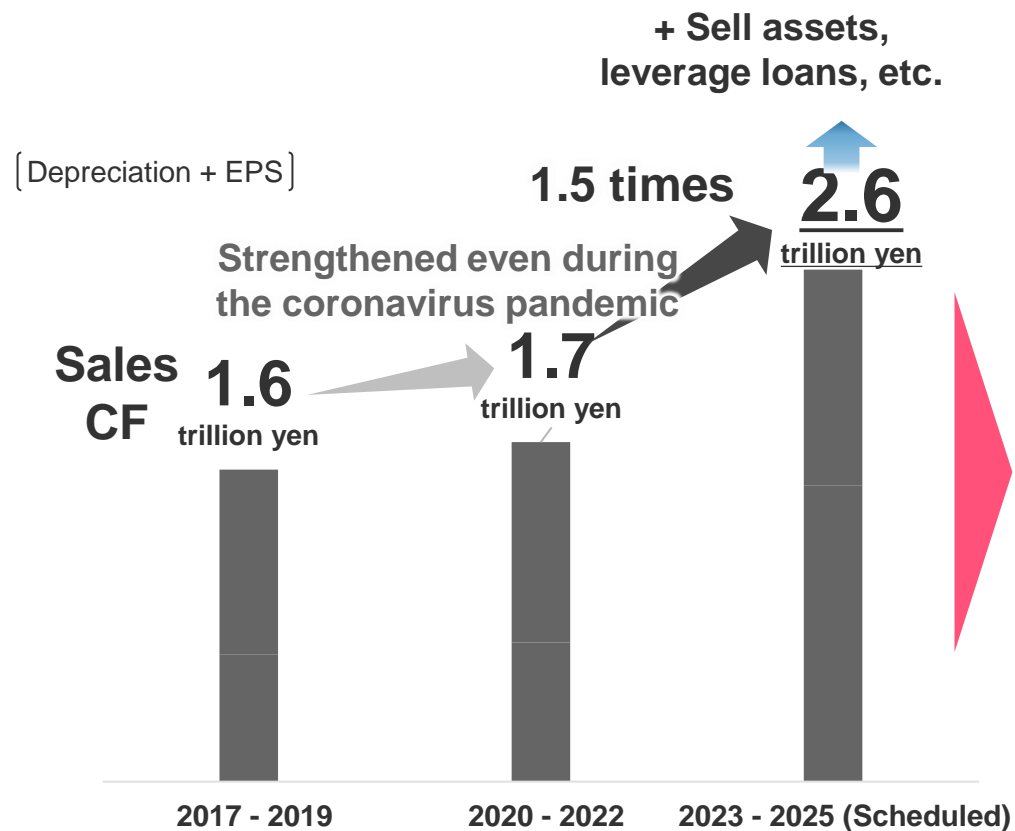


Shift investment from the internal combustion field to the Green and the Peace of Mind fields including electrification, semiconductor and software

Cash Allocation

[Earning power] Cash inflow

[Future investment] Cash outflow



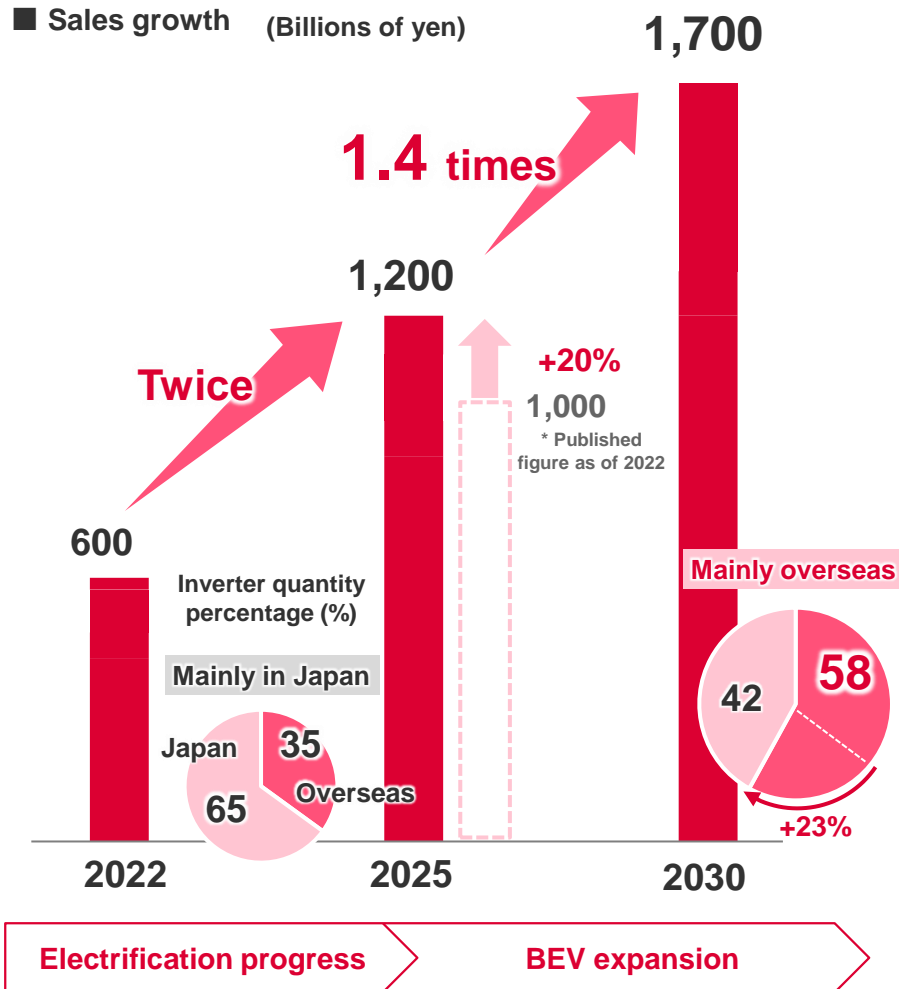
Strategic investment	1.0 - 1.1 + α trillion yen	Investment/ M&A	Engage in strategic collaboration with partners in new and growth fields
Shareholder return	0.4 - 0.5 trillion yen	Treasury stock acquired	Make flexibly/increase acquisition in consideration of trends in share price and capital structure
Capital investment	1.0 - 1.1 trillion yen	Dividend	Long-term stable DOE improvement from 3.0%
		Capital investment	Shift investment to growth fields and keep investment within the limit of depreciation expense

Improve “earning power” and make investment to realize further future growth and create corporate value

3

The Evolution of Mobility (Electrification & ADAS)

Electrification ①: Growth Strategy









Differentiation strategy	Fundamental engineering capabilities	Product lineup	Manufacturing capabilities
	Experience-based engineering capabilities	Extensive product lineup that meets diverse needs	Development timeline halved at new Anjo Plant

Number of units produced (Unit: Million units)	Product	2022	2025	2030
	Inverter <BEV percentage>		3.49 <Less than 10%>	12 <30%>
Thermal management		0.61	2.8	6.3
Power supply system (BMU)		2.94	7.6	12.7

Drive our growth through our fundamental engineering capabilities, system development capabilities and manufacturing capabilities which are cornerstones of our business.

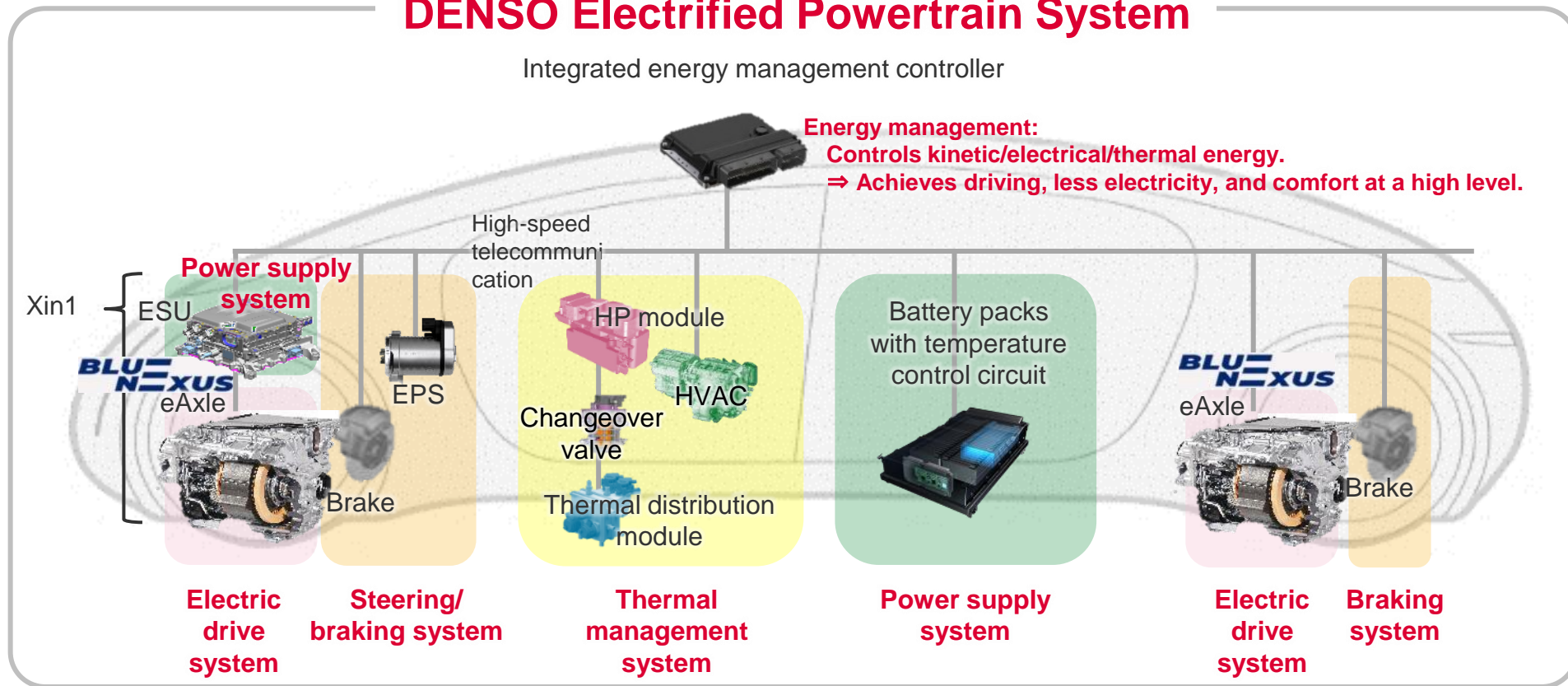
Electrification ②: Product Competitiveness

	Inverter	Comparison with competitors [Status of competitors]	Power supply system (BMU)	Comparison with competitors [Status of competitors]
Compactness	Lay-flat double-sided cooler for BEV	 Cooling capabilities 1.4 times [Single-sided cooling]	High-withstand-voltage semiconductor integration process	 Integration ratio 1.5 times [2023 model]
High functionality and reliability	In-house SiC manufacturing techniques with low defects and on resistance (RAF method, etc.)	 Power loss -20% [External procurement]	High-accuracy current/voltage detection technologies	 Accuracy 3 times [2023 model]
	ATC pulse pattern control that reduces loss <small>* Angle Triggered Control</small>	 Power loss -10% [Three-phase PWM]	Breaking technologies we have cultivated through the production of automotive high voltage circuits	 Supports large currents.
Production technologies	Reduced investment and lower costs with flexible lines that supports a diverse array of models			
Environmental response	Reduced environmental impact by considering reduction in CO ₂ emissions, recycling, and reuse on a material-by-material/component-by-component basis			

Contribute to improving electrification capabilities by honing the competitiveness of components through our engineering capabilities.

Electrification ③: Product Lineups

DENSO Electrified Powertrain System



Driving range +20%*1

Charging time -15%*2

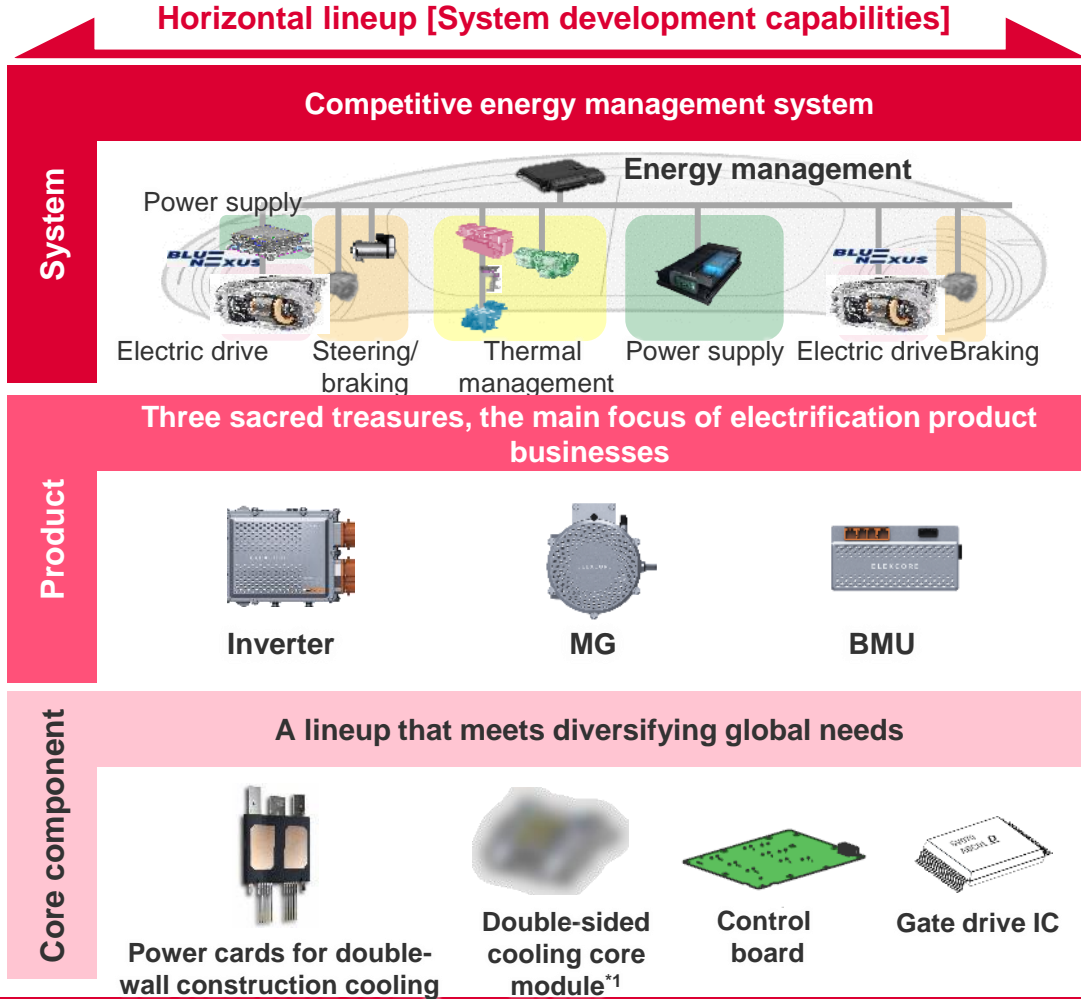
Achieve expanded driving range and shortened charging time through the system and improve the BEV product competitiveness.

Electrification ③: Product Lineups

Diversifying needs of customers

Customer's demand for in-house production

Large



Vertical lineup [Fundamental engineering capabilities]

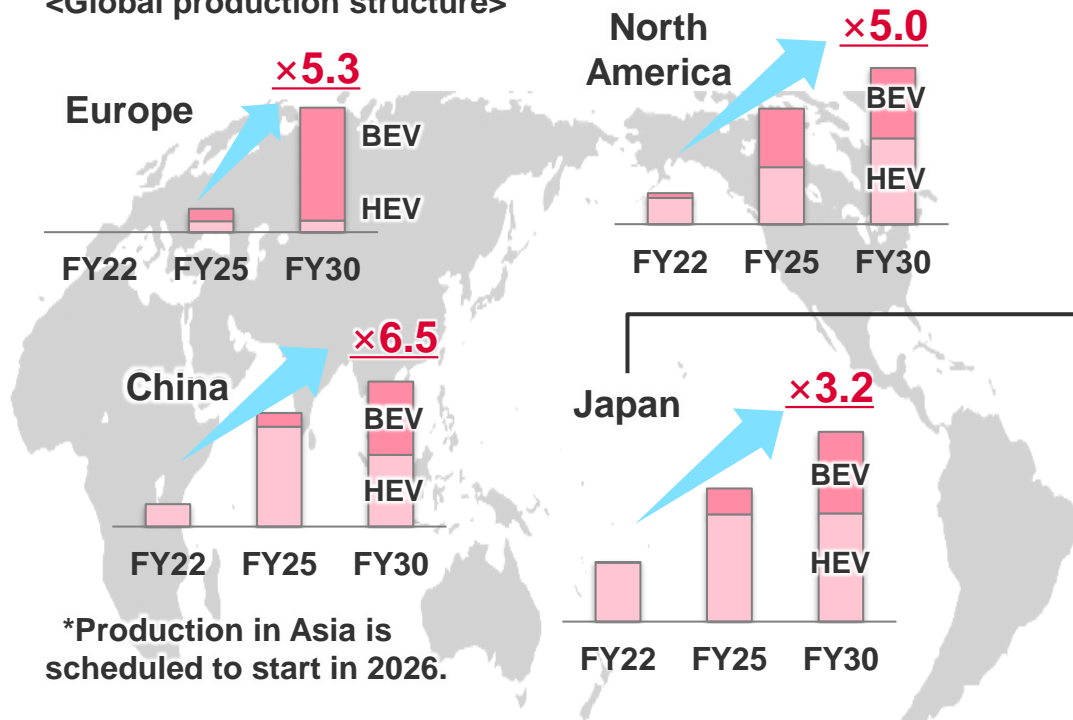
As customer needs diversify, contribute to the spread of electrification with a wide variety of products.

¹Due to the high level of novelty of the product, the image is not available.

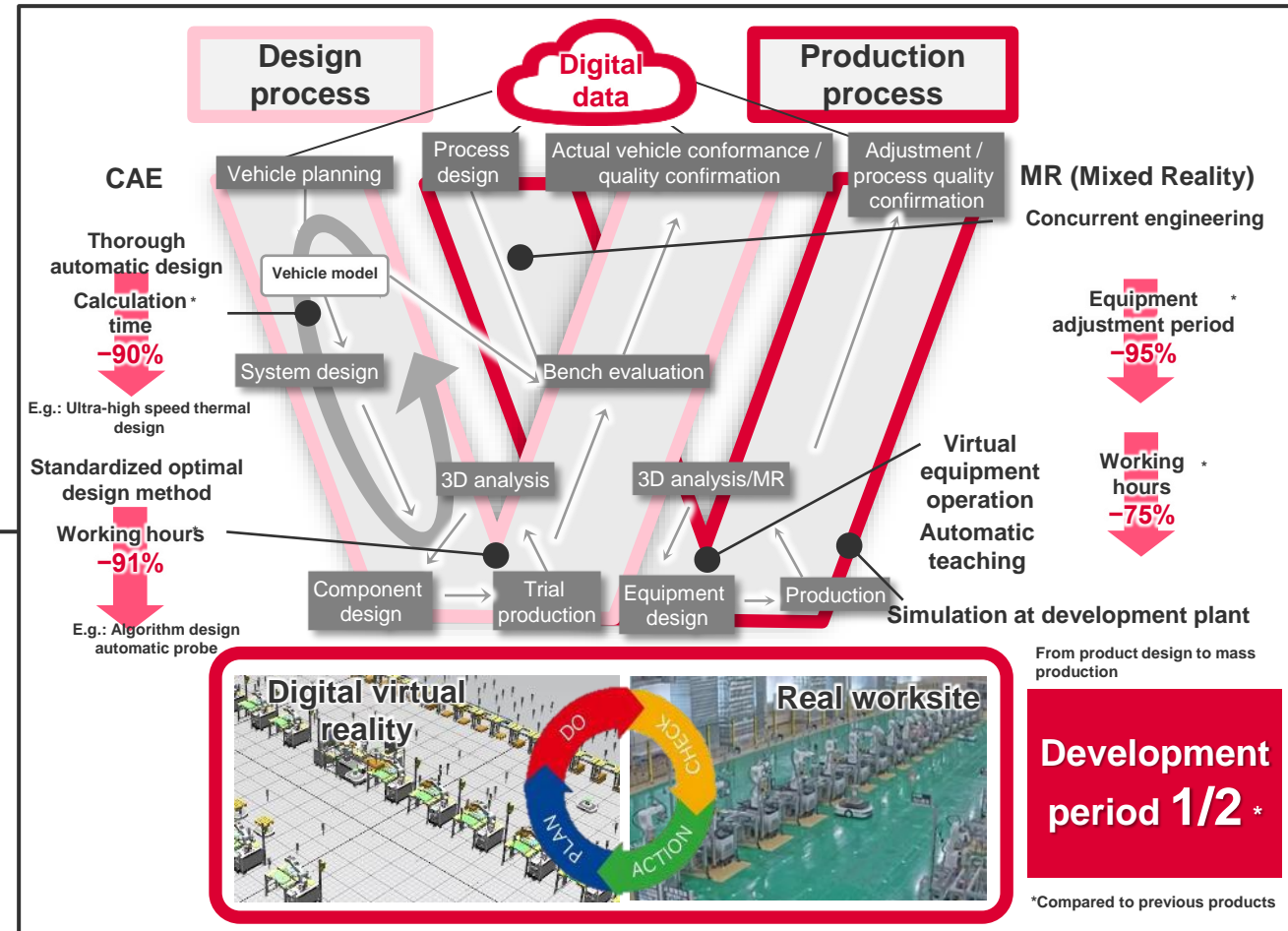
Electrification④: Manufacturing Capabilities

(Unit: Million units)	2022	2025	2030
Inverter	3.5 (vs 2022)	12 (x3.4)	19 (x5.4)

<Global production structure>



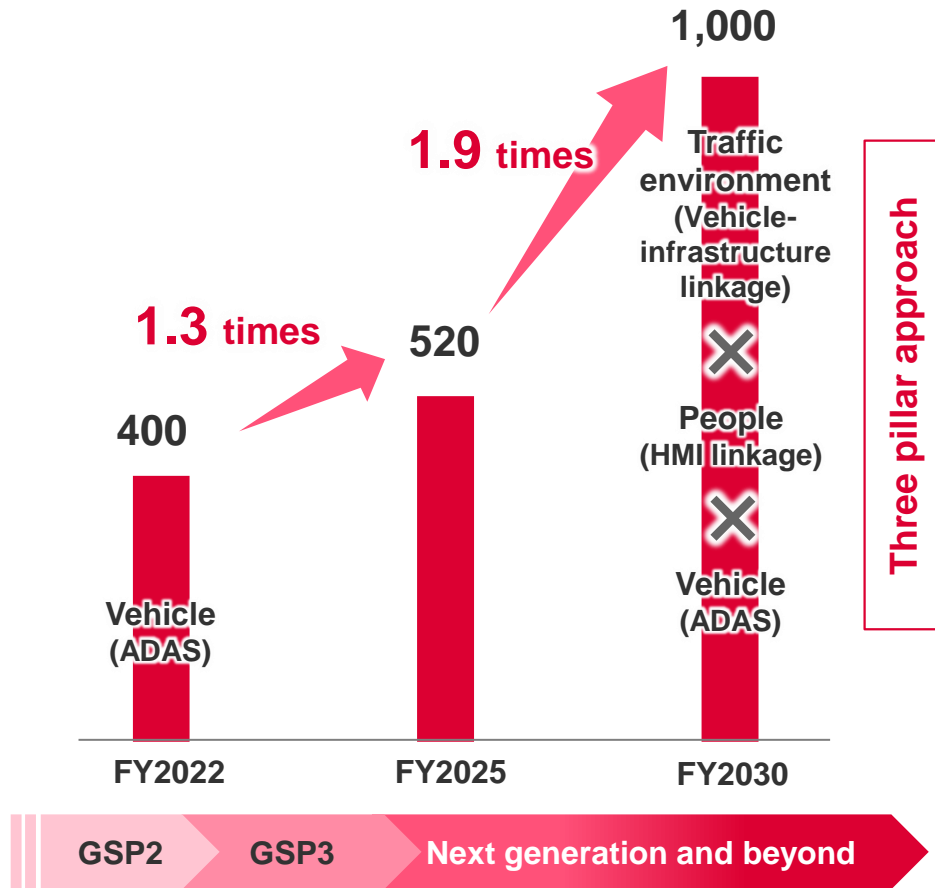
<Initiatives that support global production at Anjo EIC*>



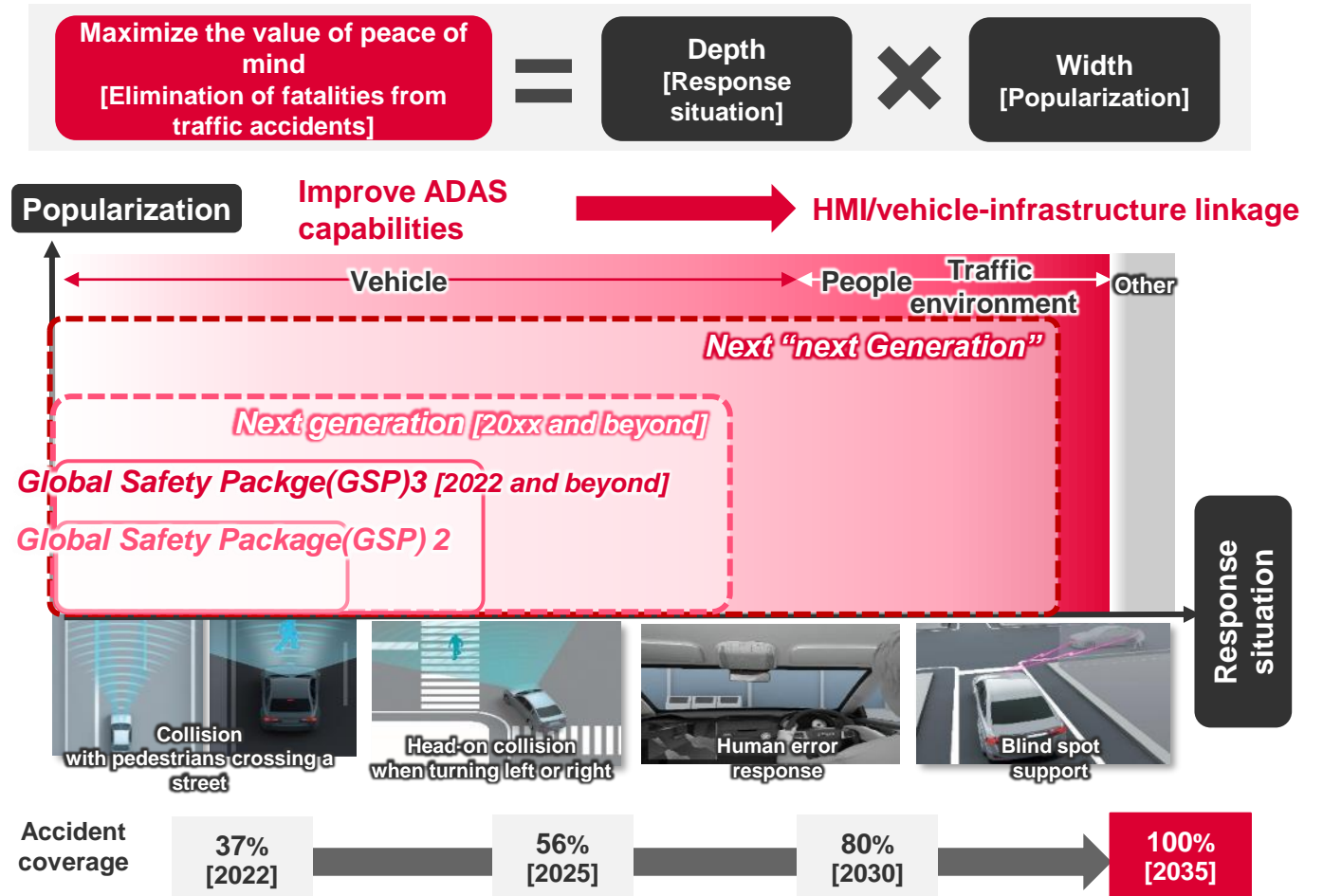
Support globally expanded production at Anjo EIC, a global mother plant.

ADAS ① Maximization of the Value of Peace of Mind and Sustainable Growth

■ Sales growth (Billions of yen)



■ Realization approach



The key is to expand and promote response situations through the three pillar approach (ADAS x HMI / vehicle-infrastructure linkage).

ADAS②: DENSO's Vision for Next-Generation System

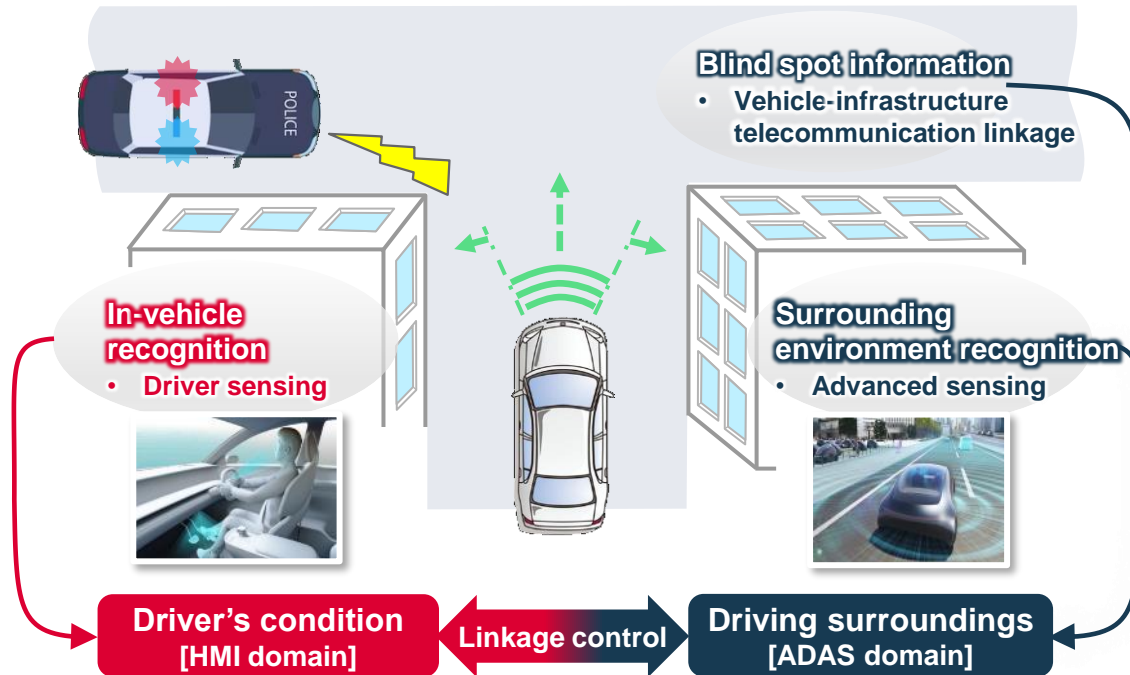
Human-coordinated ADAS [System integration technology]

Expand the domain to “everyday driving” through the integration of “driver recognition” and “driving environment recognition”

Achieve a human-coordinated ADAS system through the ADAS-HMI linkage control

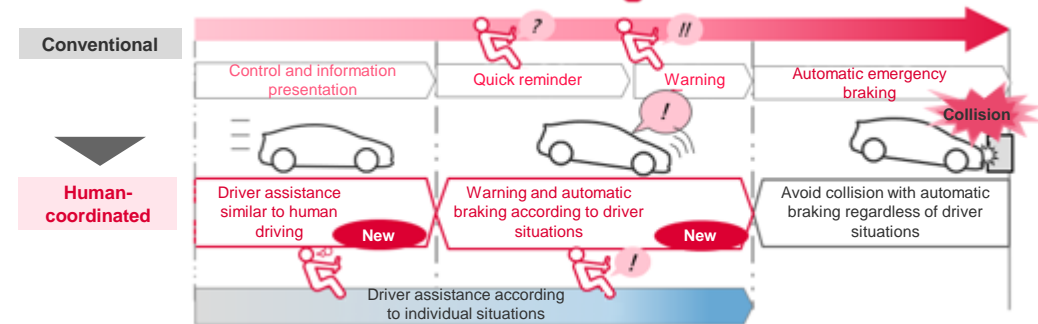


System outline



Feature

Optimal driver assistance according to driver conditions through the HMI/ADAS linkage



Differentiation technologies	Comparison with competitors	HMI domain & ADAS domain				
		Sensing	HMI control	Control linkage	ADAS control	Sensing
	DENSO	○	○	○	○	○
	Company A	○	△	Domain not covered by other competitors	△	△
	Company B	○	-	Domain not covered by other competitors	△	-

Aim to develop intelligent vehicles through the comprehensive strengths of ADAS-HMI linkage.

ADAS③: Technologies That Support Next-Generation System

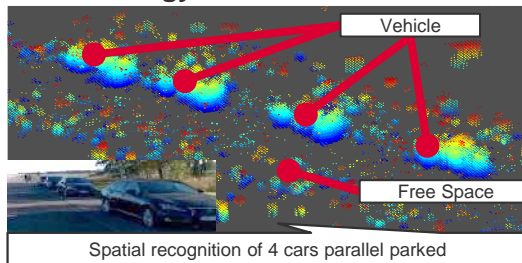
Imaging Radar [Advanced sensing technology]

A compact, high-resolution radar tremendously improves sensing accuracy using 3D information. The evolution of detection areas and resolution **achieves vertical angles, outlines and environmental recognition, as well as conventional distance, speed, and horizontal angles.**



Proprietary technologies and their usage situations

3D information (point cloud) output technology



Outline detection technology



Vertical angle



Outline



Environmental recognition



Engineering competitive advantage

Sensing technologies that capture small, clear images

Noise immunity technology
[Hardware]

Virtualization technology
[Software & hardware]

High-definition recognition algorithm
[Software]

proprietary technology (DENSO Patent)

- ✓ Tolerance for noise (Reflected wave reduction)
- ✓ DENSO's unique algorithm (MUSIC for adapting vehicle)

Improve vehicle capabilities through the combination of proprietary technologies and accelerate contribution to the value of peace of mind.

FY2025 Target and FY2030 Projection

Newly disclosed

Item	FY2022 Result	FY2023 Estimate	FY2025 Target	FY2030 Projection
Revenue	6.4 tril. yen	7.0 tril. yen	7.0 tril. yen (6.7 tril. yen in the previous announcement*)	7.5 tril. yen
Electrification sales	680.0 billion yen	840.0 billion yen	1.2 tril. yen (1.0 tril. yen in the previous announcement*)	1.7 tril. yen
ADAS sales	391.0 billion yen	435.0 billion yen	520.0 billion yen (500.0 billion yen in the previous announcement*)	1.0 tril. yen
Operating margin	6.7%	9.0%	10%	12% level
ROE	7.3%	9.7%	Over 10%	

* Dialog Day in December 2022

The FY2025 target is close to being achieved, and we have set the new FY2030 projection with the aim of driving further growth.

DENSO

Crafting the Core