DENSO
Crafting the Core

New Management Structure Strategy

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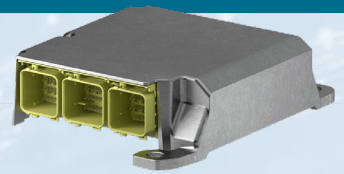
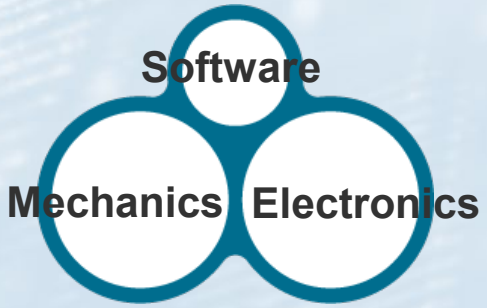
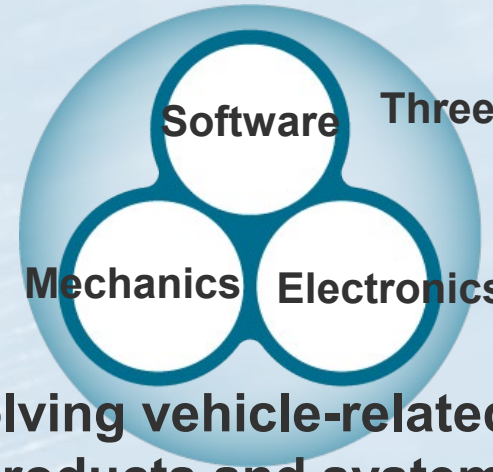
Representative Member of the Board
DENSO Corporation

DENSO's history and its cultivated strengths

	1950s to 1960s	1970s to 1980s	1990s to 2000s	2010s and beyond
Social developments	Advancement of motorization	Exhaust gas - Air pollution Frequent traffic accidents	Global warming	Advancement of CASE
DENSO's history	Contribution to the spread of vehicles by offering highly reliable products	Alleviation of social issues by realizing systems ahead of environmental and safety regulations	Contribution to further evolution of vehicles through three-pillar system development	
Products (examples)	 Starter	 ECU	 Integrated system	





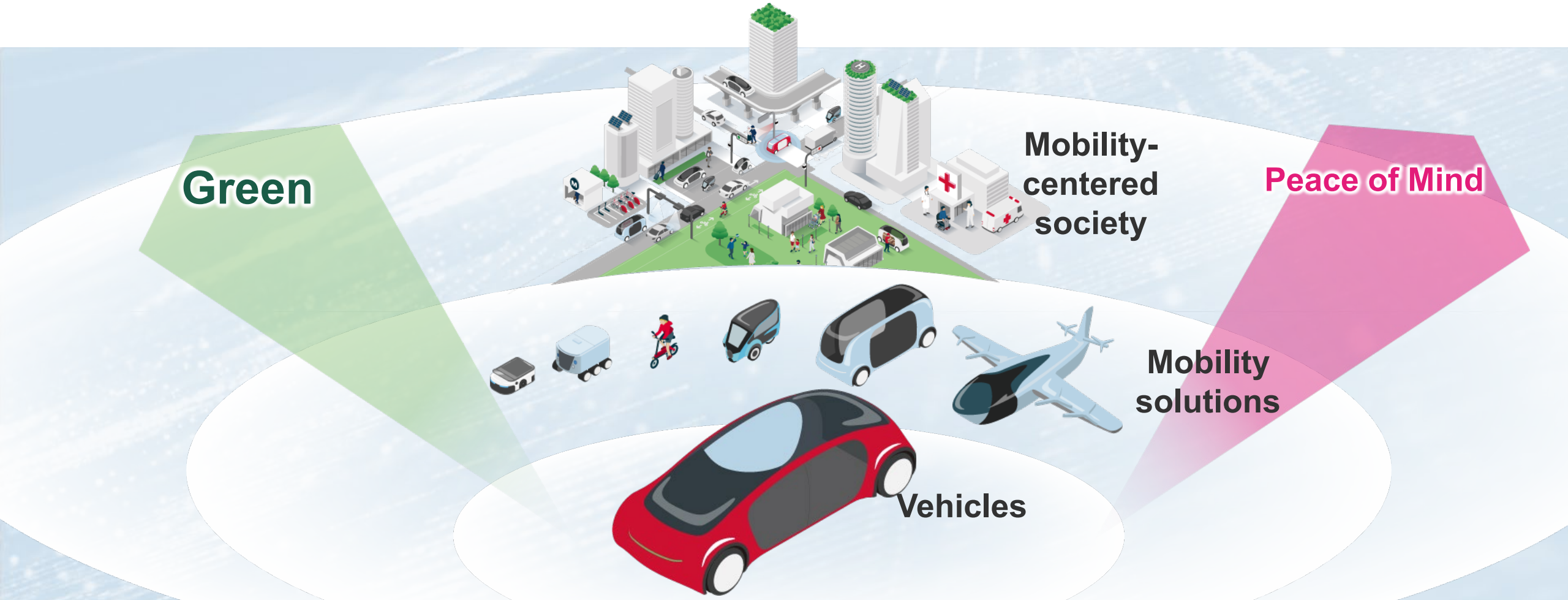
As "a Tier 1 supplier that supports the auto industry," contribute to solving vehicle-related issues based on "high reliability," "the proven ability to turn concepts into products and systems," and "the three-pillar system development capabilities"

Environmental changes in the auto industry and the vision of initiatives

Past	Future	Social demand
“Low carbon”	“Decarbonization”	Acceleration of carbon neutrality
Globalization	Diversification	Multi-pathway
Mass production/ consumption	Optimal production/ consumption	Circular economy
Hardware	Hardware × Software	Integrated systems

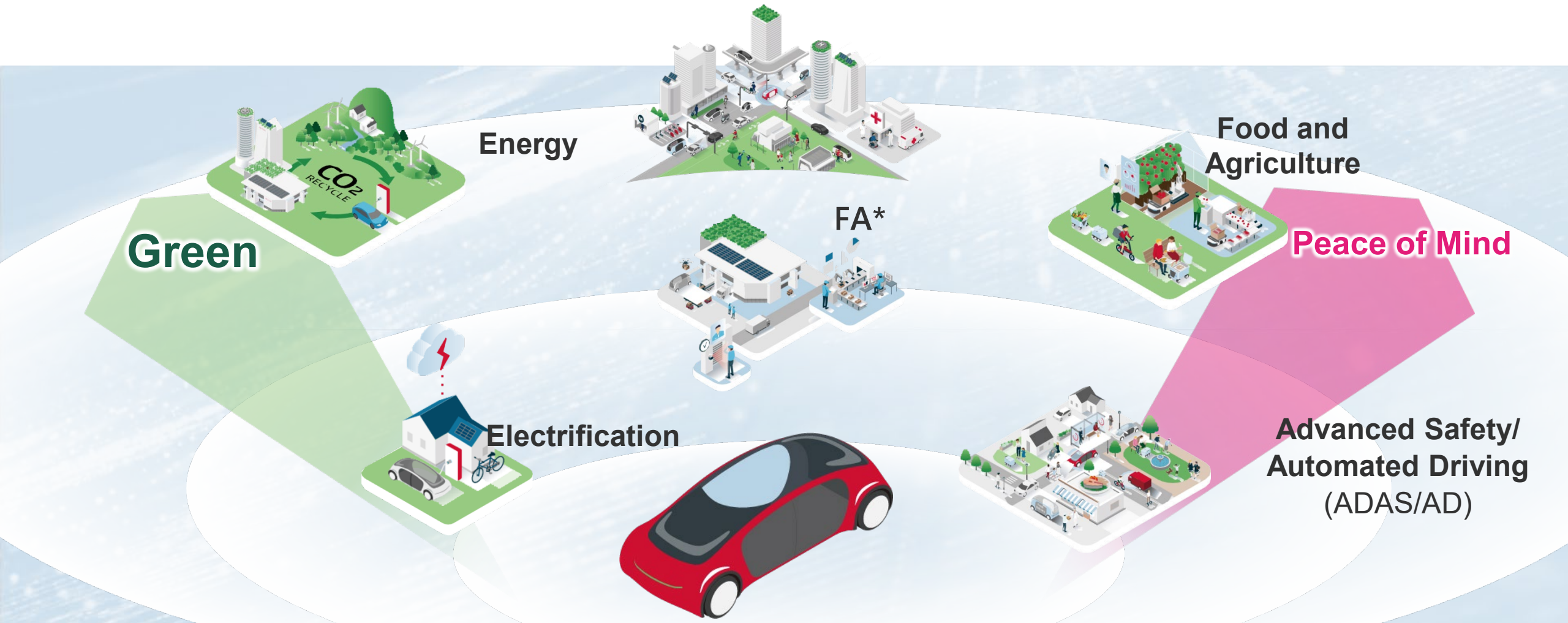
Broaden the perspective to solve issues of society as a whole, not just vehicles

Progress to be made under the new management system



Evolution from a “Tier 1 supplier that supports the auto industry” to a “Tier 1 supplier that supports a mobility-centered society” by leveraging strengths cultivated through the manufacture of automotive components

DENSO's business domains



Expand the scope of value offered by DENSO based on automotive technologies to contribute to a mobility-centered society

* FA: Factory Automation

Declaration under the new management system

Strategy	**Growth** under the new management system ▼ **Path** toward growth	Evolution from a “Tier 1 supplier that supports the auto industry” to a “Tier 1 supplier that supports a mobility-centered society”
		Expansion of the scope to mobility-centered society by leveraging strengths cultivated through the manufacture of automotive components
Initiatives	▼ Three **Initiatives**	• Creation of New Value • Evolution of Mobility • Strengthening Fundamental Technologies

Three Initiatives

Green

Peace of Mind

Society as a whole

Mobility

Fundamental Technologies

Creation of New Value

Energy, Food and Agriculture, FA

Evolution of Mobility

Electrification, ADAS

Strengthening Fundamental Technologies

Semiconductors, Software

Evolution of Mobility
— Electrification —

Product competitiveness	Improve functions and performance to enhance competitiveness	• Establish an advantage for inverters in terms of cooling performance and power loss • Develop high-voltage-resistant, high-accuracy power systems
Product lineups	Improve the product lineups to meet various needs of customers	• Offer an extensive product lineup from core components to systems • Offer energy management systems from the viewpoint of an entire vehicle
Manufacturing	Achieve the development speed that meets global needs and build the mass production system	• Shorten the development period in half through integration of functions and DX • Establish a bridge supply system based on five regions in the world

Revenue in 2025 1.0 trillion yen (Previously announced *) ▶ **1.2 trillion yen**

Revenue in 2030 **1.7 trillion yen**

* Dialog Day in December 2022

Evolution of Mobility
— ADAS —

Product competitiveness	Increase the percentage of accident scenarios covered by coordinating ADAS, HMI[*1] and infrastructure	• Improvement of ADAS functions by developing next-generation products • Optimal driver assistance in coordination with the driver and traffic environment
Product lineups	Identify various needs of respective regions and customers	• System packages that meet the characteristics of respective regions and customers • Use of optimal sensors depending on the required detection accuracy
Technology development	Develop next-generation technologies that underpin the evolution of systems and components	• Development of control coordination technologies to differentiate from competitors • Establishment of high-performance sensing technologies by using three-dimensional information

Revenue in 2025: 500 billion yen (Previously announced [2]) ▶ 520 billion yen

Revenue in 2030: 1.0 trillion yen

[*1] HMI: Human Machine Interface

[*2] Dialog Day in December 2022

Strengthening Fundamental Technologies — Semiconductors —

Power	**Accelerate introduction of SiC power semiconductors to the market, which help improve electric mileage**	• **Practical application and cost reduction of high-quality wafers, and reduction of CO_2 emissions** • **Achieving stable supply through cooperation with our partners**
ASIC*1	**Differentiate ourselves by developing in-house products that support in-vehicle**	• **Mass production of world's first IC for monitoring 25-cell batteries** • **Realization of small ICs using high-heat-dissipation packages**
SoC*2	**Build SoC* optimal for in-vehicle applications through collaboration in the industry**	• **Cost advantage by acquiring chiplet technologies** • **Development of cutting-edge processes for the era of automated driving**

Total investment by 2030 | **500 billion yen**

Business scale by 2035 | **700 billion yen** (triple the current level)

*1 ASIC: Application Specific Integrated Circuit

*2 SoC: System on Chip

Strengthening Fundamental Technologies
— Software —

ECU-embedded software	**Realize large integrated ECUs based on various software IPs and implementation capabilities**	• Possession and utilization of a library of various in-vehicle software products, which competitors do not have • Integration and implementation of large-scale software meeting complex functional requirements
Standalone software	**Lead standardization and greater use of common software across OEMs**	• Development of tools for the development environment and security software • Spread and commercialization of OTA*2 to enhance the attractiveness of SDVs*1
Development capabilities	**Strengthen human resources, both quality and quantity, to build a robust software development system**	• Doubling of development efficiency by a seamless process from specifications to implementation • An increase of 6,000 engineers in the upstream process/advanced development

Software engineers in 2030

18,000 engineers
(1.5 times the current level)

Business scale by 2035
(including ECU-embedded software)

800 billion yen
(4 times the current level)

*1 SDV: Software Defined Vehicle *2 OTA: Over The Air

Creation of New Value

Energy	**Enter the hydrogen business to accelerate the realization of carbon neutrality**	• Utilization of ceramic ejector technologies, thermal management technologies, etc. • Marketing of SOEC*1(production) /SOFC*2 (use) systems
Food and Agriculture	**Industrialize farms on a full scale to contribute to a stable food supply**	• Introduction of manufacturing principles to horticulture, which is compatible with factories • Global business deployment by making the Certhon Group a wholly owned subsidiary
FA	**Spread factory automation to overcome labor shortages**	• High-quality, highly durable robots for various applications • Establishment of flexible and lean automation lines

Revenue in 2030 | **300 billion yen**

Percentage of overall revenue in 2035 | **2%** (current level) → **20%** (10 times)

*1 SOEC: Solid Oxide Electrolysis Cell *2 SOFC: Solid Oxide Fuel Cell

Summary of targets

Creation of New Value

Percentage of overall revenue in 2035

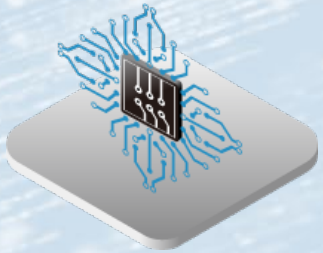
New businesses **20%**

Evolution of Mobility

Revenue in 2030

Electrification **1.7** trillion yen

ADAS **1.0** trillion yen



Strengthening Fundamental Technologies

Development system in 2030

Software engineers **18,000** (1.5 times the current level)

Investment until 2030

Semiconductors **500** billion yen

Management that values our people

Strategy

Transformation of the business portfolio

Shift from “mature fields” to “growth fields”

(e.g., internal combustion engines) (e.g., electrification, ADAS, new businesses)

Employees

Transformation of the employee's portfolio

Quantity

Add 4,000 employees to the growth fields (by 2025)

Quality

Career development
Support for reskilling

Intrinsic talents and passions

Link the “corporate philosophy” with the “purpose of work and life of employees”