

**Product Initiatives for Carbon Neutrality** 

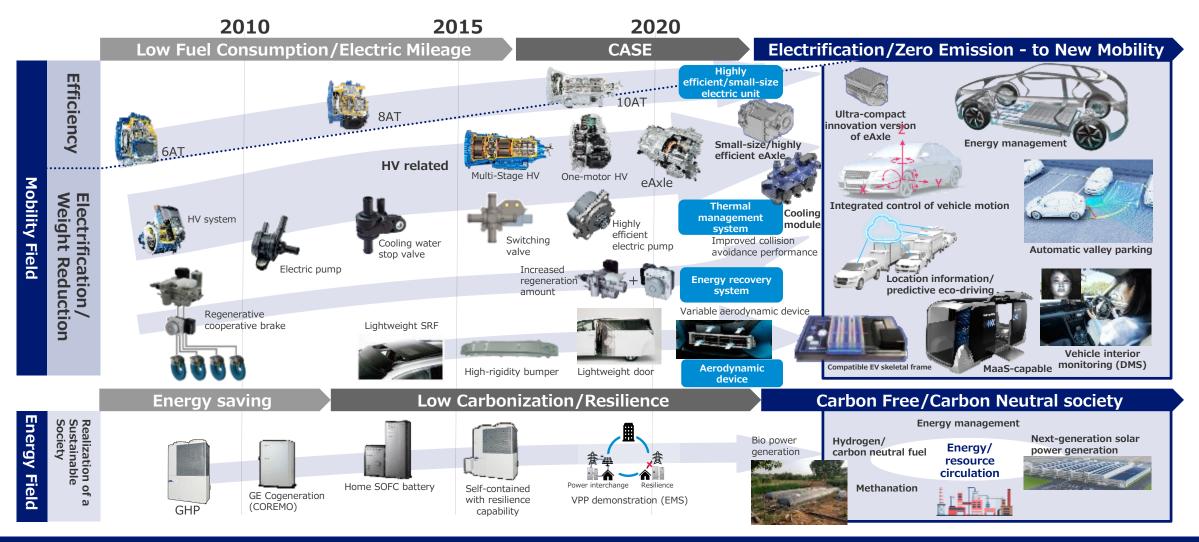
- Electrification in the Mobility Field

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Yoshihisa Yamamoto
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2021.11.18



## **Product Initiatives for Carbon Neutrality**

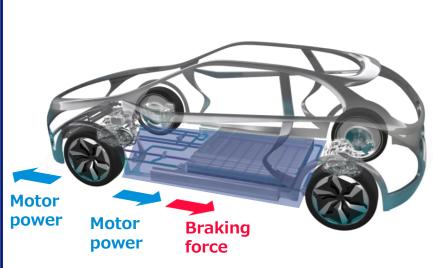


Contribution to carbon neutrality through mobility electrification and energy solutions with a wide range of products

## **Efforts for Electrification in the Mobility Field**

Contribute to optimal energy utilization of the entire vehicle with a wide range of products



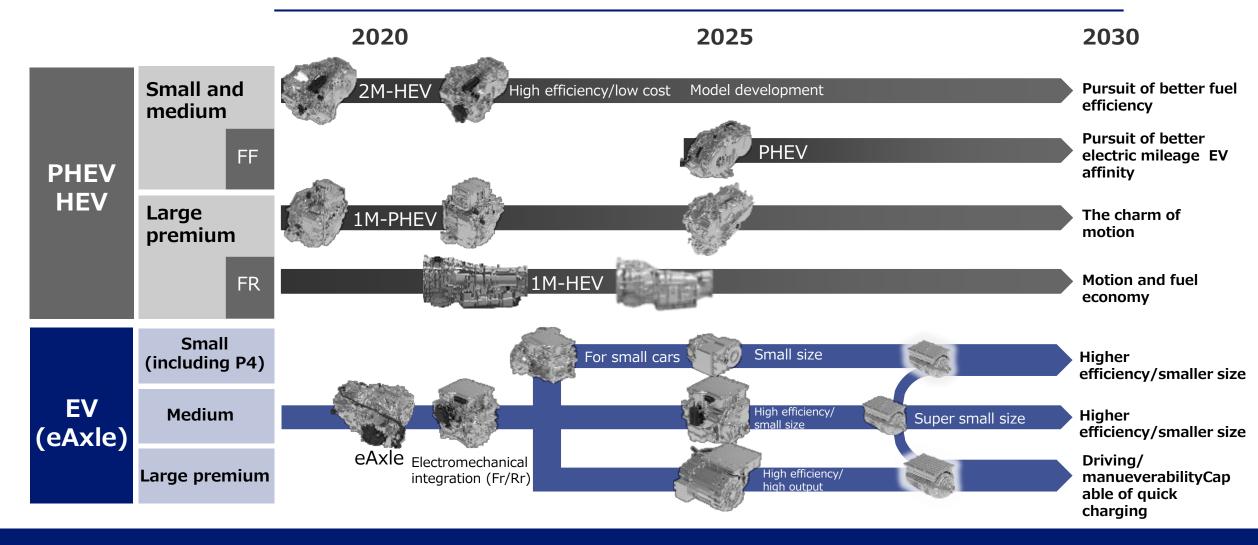






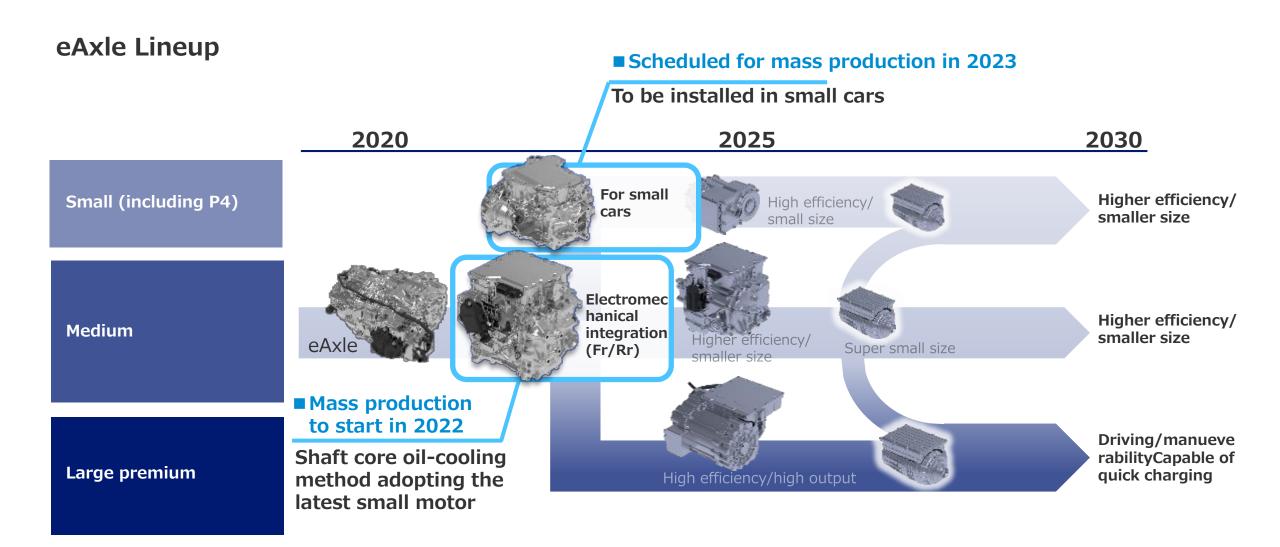
"Improvement of electric mileage by a total of over 10% in 2025," by mounting Aisin's electric units

#### **Electric Unit Lineup**



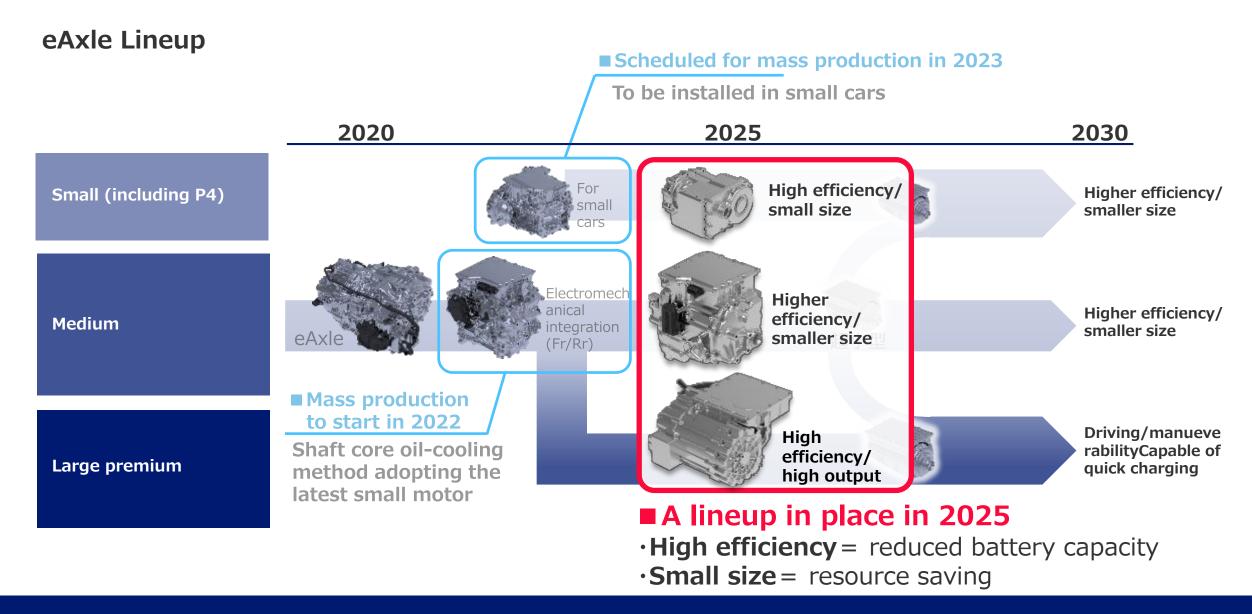
A wide range of customer needs will be met with a full lineup of eAxles, PHEVs and HEVs.



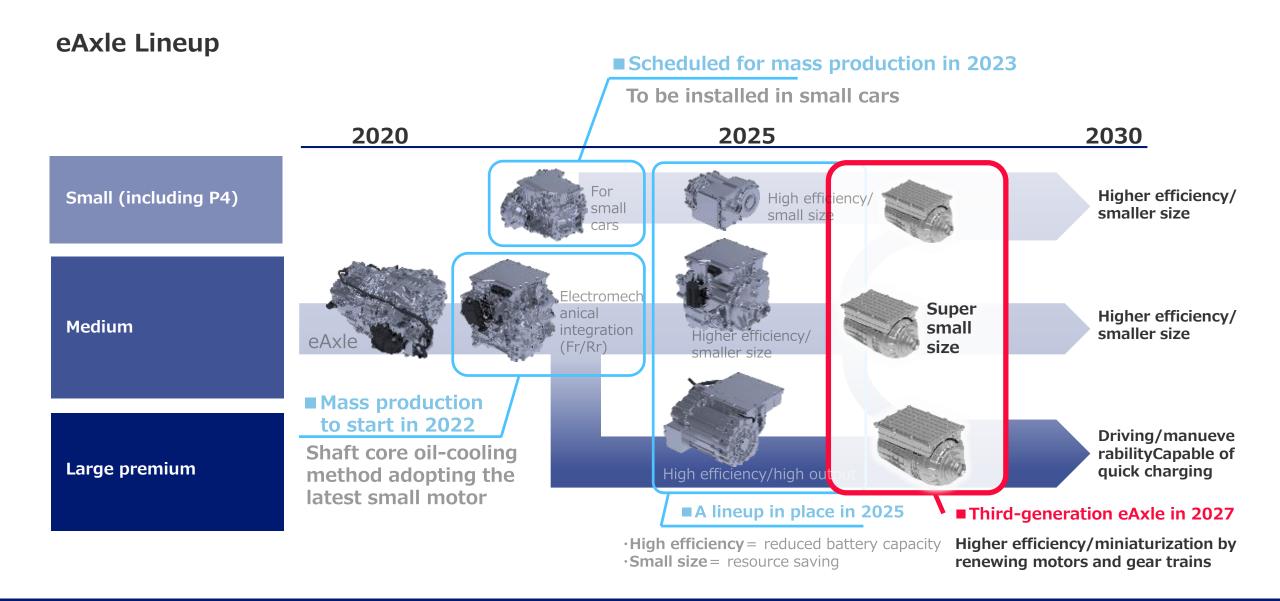


eAxle (first generation) with integrated mechanical and electrical equipment will be introduced from 2022.





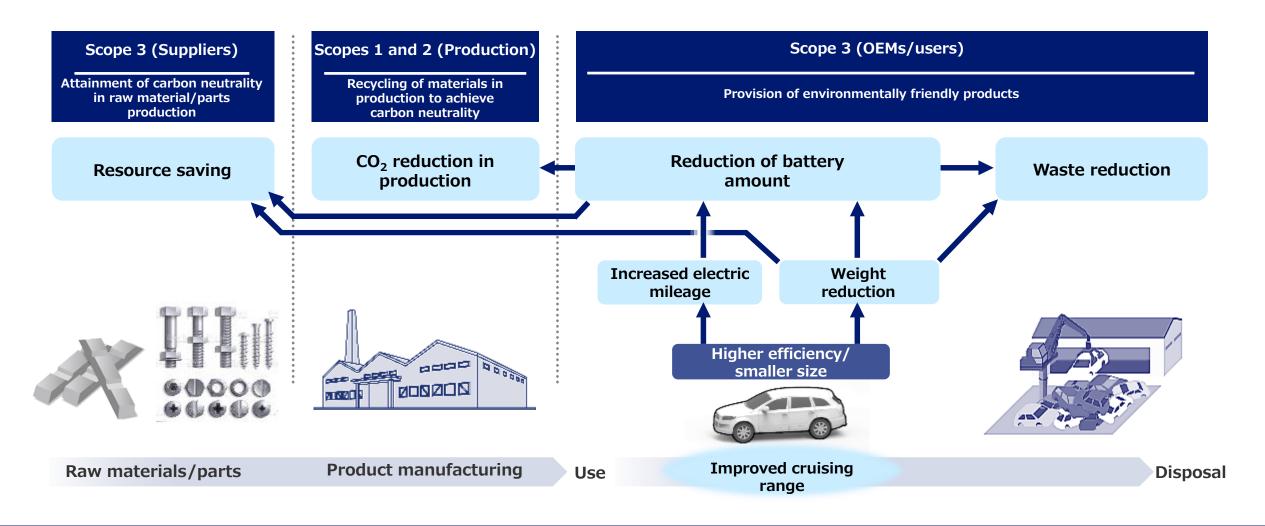
A lineup of the highly efficient second-generation eaxle will be in place for all vehicle classes in 2025.



Moving toward the overwhelmingly highly efficient, small-size third-generation eAxle



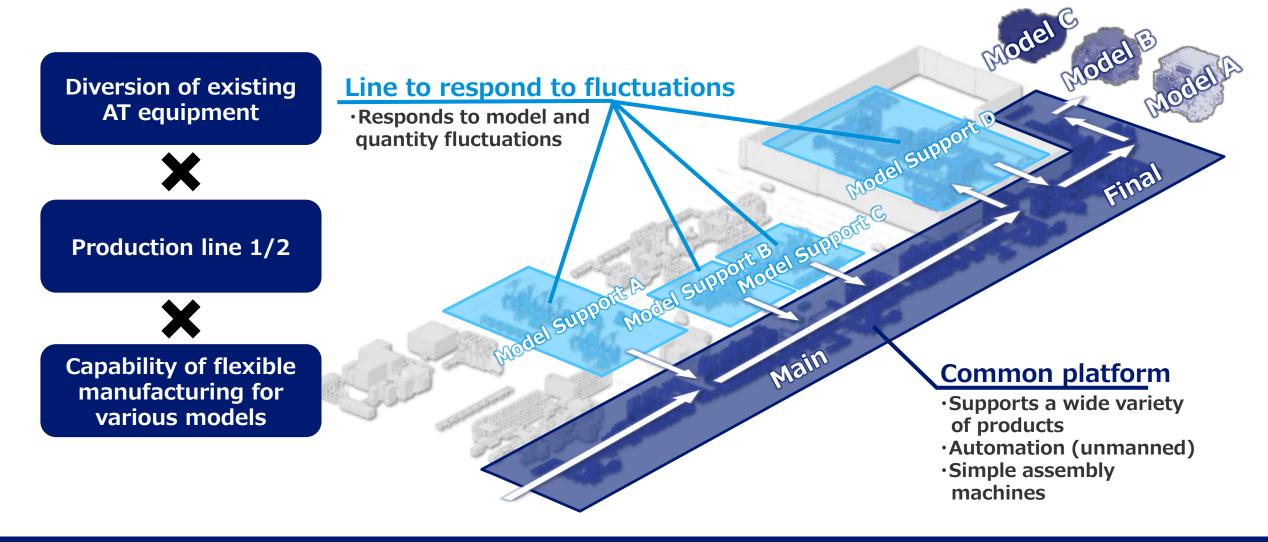
# Contribution to Carbon Neutrality through Higher Efficiency and Miniaturization



Contributing to carbon neutrality in all of Scopes 1, 2 and 3



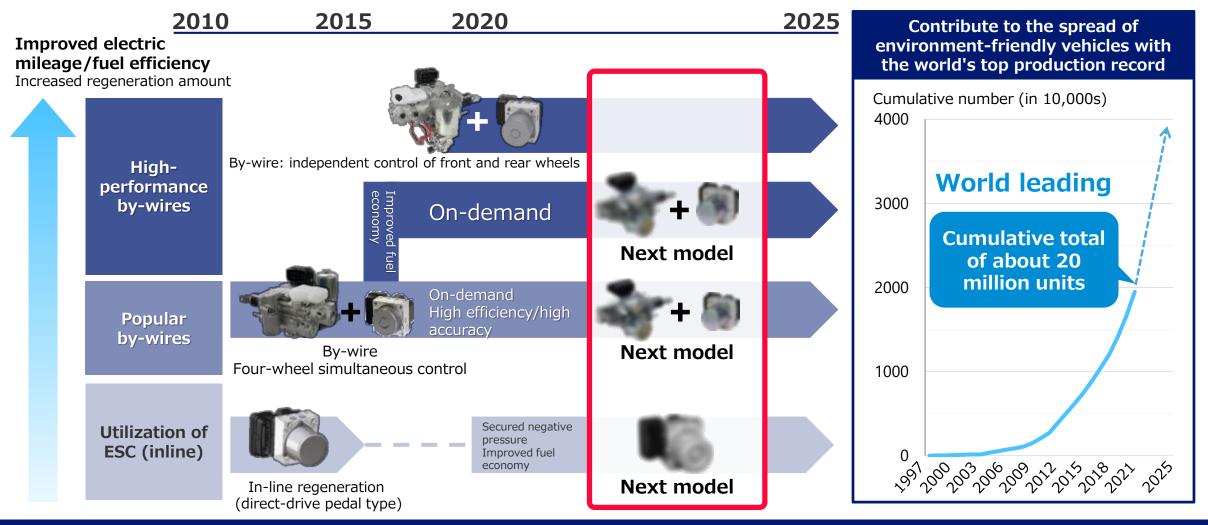
#### **Concept of eAxle Production Lines**



Products free of production-based CO2 will be provided by super- eco production lines.

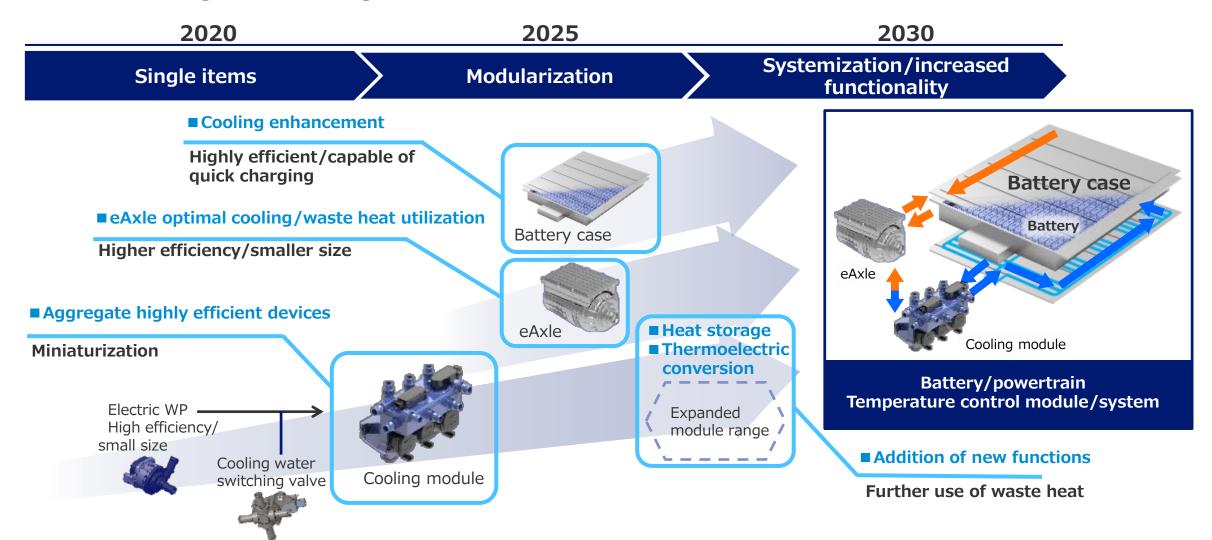


# **Lineup of Regenerative Cooperative Braking Systems**



A lineup of highly efficient and highly accurate next-generation regenerative cooperative braking systems will be in place for all vehicle classes.

#### **Thermal Management Using Waste Heat**

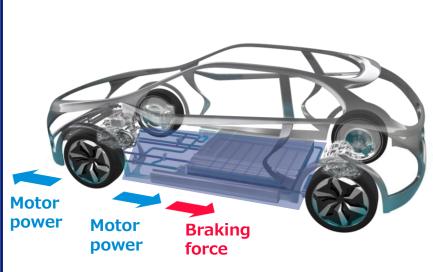


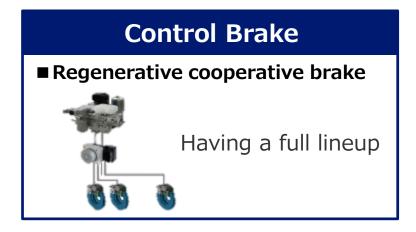
Moving toward highly functional thermal management systems based on the units

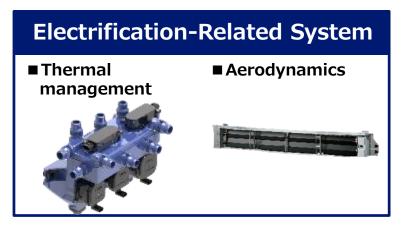
## **Efforts for Electrification in the Mobility Field**

Contribute to optimal energy utilization of the entire vehicle with a wide range of products









"Improvement of electric mileage by a total of over 10% in 2025," by mounting Aisin's electric units

#### **Environmental Investment by Aisin**

# **Production**

- •Reuse of CO<sub>2</sub>/energy management
- Less power sources/heat sources/waste

Year 203050% reduction of production-based CO2 (compared to 2013)

Cumulative investment of 110 billion yen over the next 10 years

Contribution to the environment

Improved competitiveness

# **Products**

- Provision of environmentally friendly products
- •Reduction of power consumption of the entire vehicle
- Vehicle cost reduction by reducing battery load

Year 2025Systems in place to produce
4.5 million electric units and
regenerative cooperative braking/heat
management systems

Cumulative investment of 270 billion yen over the next five years

Toward the realization of a carbon neutral society through initiatives centered on both "products" and "production"



