

Product Initiatives for Carbon Neutrality Electrification in the Mobility Field

AISIN CORPORATION Yoshihisa Yamamoto Executive Vice President Chief Electric Strategy Officer

2021.11.18

ESG Conference 2021 / Nov. 18th, 2021 / © AISIN CORPORATION All Rights Reserved.

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 Lineup Scheduled for mass production in 2023 To be installed in small cars 2020 2025 2030 For small Higher efficiency/ Small (including P4) High efficiency/ cars smaller size small size Electromec hanical **Higher efficiency**/ Medium integration smaller size Higher efficiency/ eAxle Super small size (Fr/Rr) smaller size Mass production to start in 2022 Driving/manueve Shaft core oil-cooling rabilityCapable of Large premium quick charging method adopting the High efficiency/high output latest small motor

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



•High efficiency = reduced battery capacity

•Small size = resource saving

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 CO₂/energy management
Less power sources/heat sources/waste

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



Contribution to

the environment

Improved competitiveness

Cumulative investment of 110 billion yen over the next 10 years

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"

