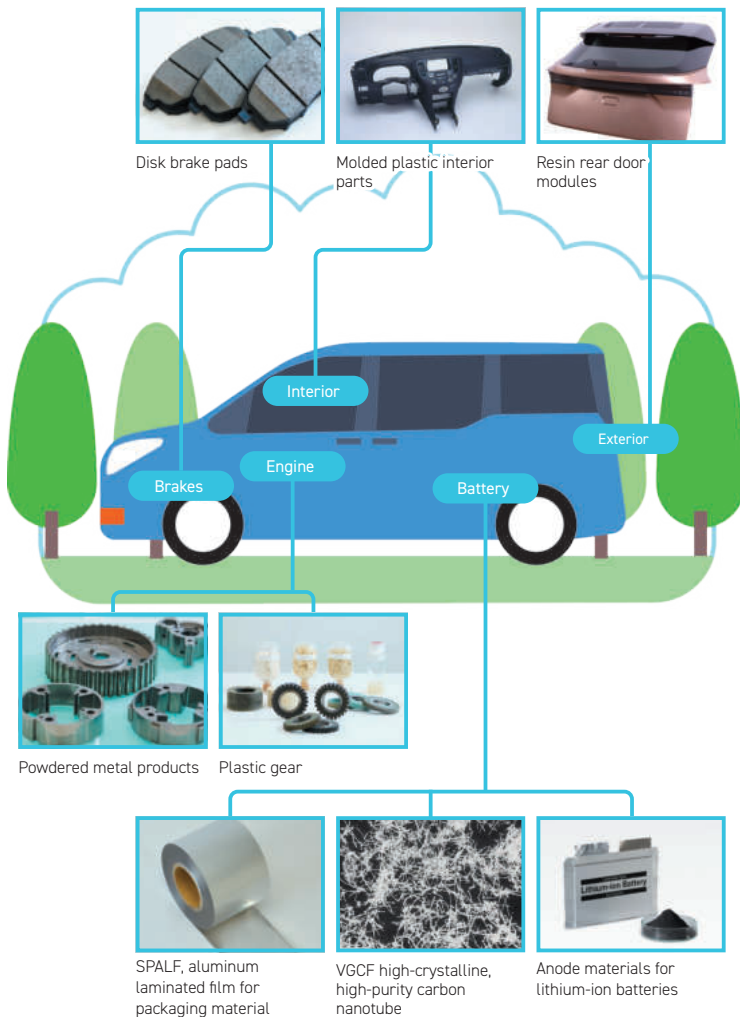




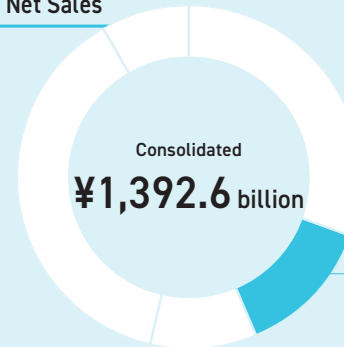
Business Strategies

Mobility

Resonac products in everyday life



Fiscal 2022 Net Sales



Mobility Segment

Segment net sales

¥180.6 billion

Automotive products **¥146.4 billion**

Lithium-ion battery materials **¥30.7 billion**

Segment operating loss

¥(0.7 billion)

Management Target

EBITDA margin **20% or more** in 2025

Strategy for Realizing the Long-Term Vision

Currently, the Mobility segment is positioning the rising technological needs associated with CASE (connected cars, autonomous/automated driving, shared, and electric) technologies, particularly those related to the development of electrified vehicles, as a business opportunity. As a growth strategy, the segment is taking advantage of Resonac's weight reduction, electrification, and heat control technologies to develop business and achieve growth. On the other hand, for the business for internal combustion engine vehicles, whose market is expected to shrink, we will work to build a strong revenue base by optimizing production capacity and implementing measures for fixed costs. Through business portfolio management in this way, we aim to achieve our target of an EBITDA margin of 20% or more.

	Results in 2022	Plan for 2023	Vision for the future (2030)
Automotive products	<ul style="list-style-type: none"> Performance lower than initial forecasts, reflecting a decrease in automobile production volume caused by supply shortages for semiconductors Commencement of production of rear door modules and copper-free disk pads for 12 new automobile models Split off of the ceramics business*1 and the insulating materials business 	<ul style="list-style-type: none"> Higher sales and income, despite ongoing semiconductor shortages, due to the resumption of the recovery trend as we project for the second half of 2023 Launch of foam molded products for new car models, plastic gears for new applications, copper-free disk pads, etc. Promotion of passing increased cost of raw material and energy on selling price Promotion of the establishment of a solid revenue base through structural reforms 	<ul style="list-style-type: none"> Top share acquired through aggressive investment as a Core Growth business targeting niche markets EBITDA margin of 20% to be targeted as a Core Growth business
Lithium-ion battery materials	<ul style="list-style-type: none"> Expansion of a range of models using Resonac anode materials for battery-electric vehicles (BEVs) and development of new products Winning new projects for SPALF aluminum laminated film and expansion of production capacity for VGCF conductive additive Web 	<ul style="list-style-type: none"> Development of new anode materials to respond to rapid charging performance and other technical needs of next-generation EVs Acquisition of certification for high-end SPALF models and steady expansion of production capacity and construction of a resilient supply chain for VGCF 	<ul style="list-style-type: none"> Target of net sales of ¥115.0 billion to be achieved by incorporating rising needs associated with the advancement of CASE technologies and pursuit of carbon neutrality

*1 Former Hitachi Chemical's automotive and semiconductor fields

Business Strategies: Mobility

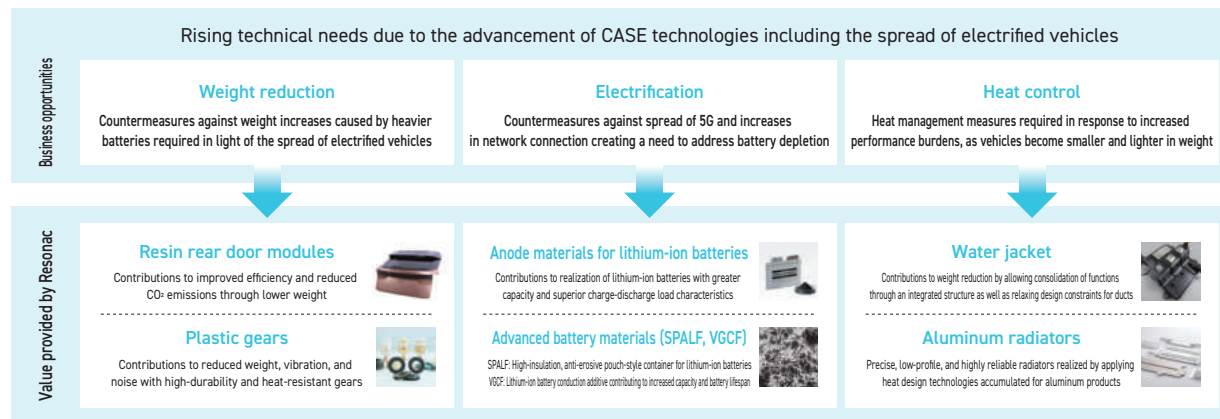
Competitive Edge

The mobility market is currently in a period of great change. To work toward carbon neutrality and address social issues, numerous countries have set CO₂ emissions reduction targets and implemented stricter environmental regulations (excluding vehicles that use environmentally friendly fuels). This is driving growth in demand for electric vehicles (EVs). It has been estimated that EVs will increase to represent more than half of the cars on the road within 10 years. Among EVs, Resonac will be pursuing business growth by targeting battery-electric vehicles (BEVs), which will no doubt see growth over the long term.

The Mobility segment aims to expand its business by addressing the needs of the automotive market while positioning CASE-related needs as a key growth driver. This will require us to respond to new technical needs. Accordingly, Resonac will be offering a lineup of battery-related solutions to accommodate smaller, lighter-weight, and electrified vehicles; materials for controlling heat, sound, and electromagnetic waves; and modularization of components.

Specific measures will include the expansion of the range of existing customers' models for which our molded plastic exterior products, such as resin rear door modules and resin foam molded products, are used as well as approaching new customers. Our main target in this endeavor will be market segments where we expect to see a strong need for reducing the weight while accommodating design concerns. As for composite materials, we will maintain our leading share for mainstay plastic gears while approaching new customers with various heat management products, such as radiators, for which demand is expected to increase in line with the spread of electrified vehicles. In addition, we will develop a service model for advanced battery materials that satisfies customers' development needs while boosting the quality of SPALF in order to earn the top share in the mobility market.

Growth strategy for the mobility business

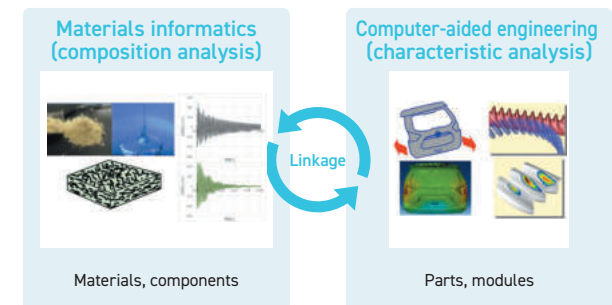


Co-creation Case Study

DX

Reinforcement of Development Capabilities through Materials Informatics

Currently, strong emphasis is put on shorter development lead times, in addition to responses to changes in technical needs and values, such as the advancement of CASE technologies and the pursuit of carbon neutrality. To this end, major automobile manufacturers and suppliers are increasingly embracing model-based design, which entails simulating the terminal component functions and performance features necessary for overall automotive systems using virtual models. This design approach makes it possible to adopt a development style in which materials informatics is used to combine various materials selected from databases before computer-aided engineering methodologies are employed to perform analyses and thus conduct prototyping and testing in a virtual environment. For example, in the development of technology to improve the properties of lithium-ion battery materials, by utilizing model-based design, which applies the knowledge, experience, and manufacturing know-how we have cultivated over many years with our customers, we achieved a reduction of over 95% in the number of experiments, resulting in a shorter development lead time. Going forward, we will continue collaborating with industry-academic-government research institutions to develop materials and manufacturing processes and to perform verification tests in local facilities. Thus, we intend to continue supplying materials, components, and parts that are useful to society.



Resonac's Intended Approach toward Model-Based Design