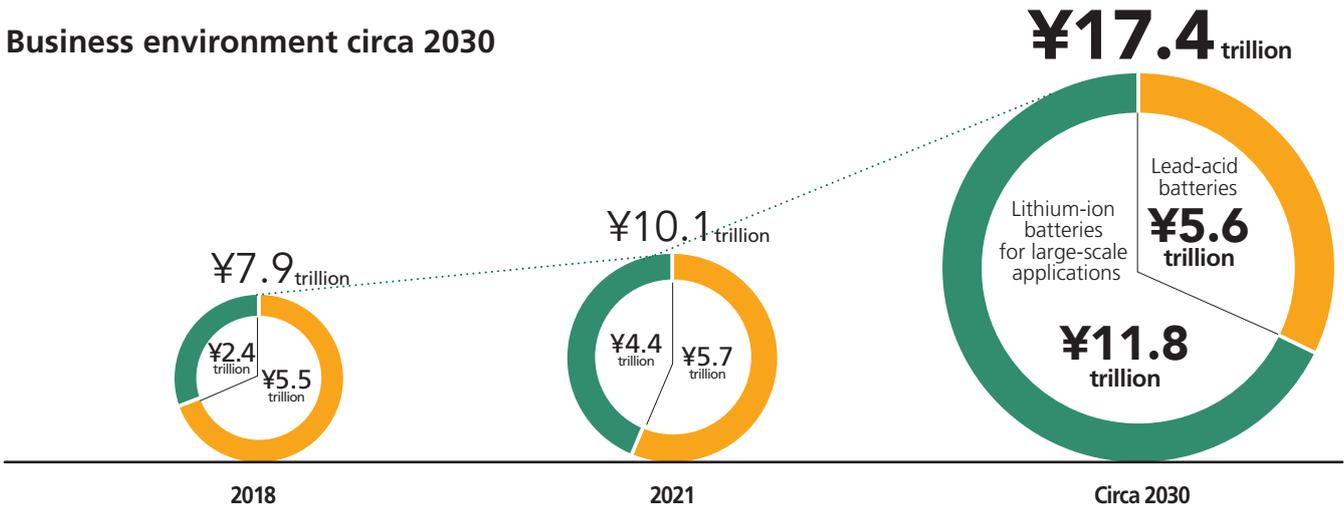


Responding to Expectations for Energy Devices

In order to continue growing amid environmental changes, which we see as opportunities, our Group has compiled a long-term vision and the Fifth Mid-Term Management Plan envisaging the business environment around 2030. We will continue creating the valuable energy devices required in the future.

Business environment circa 2030



Source: Fuji Keizai, *Future Outlook for Energy, Large Secondary Batteries, and Materials 2018—Energy Device Edition* (partly estimates)

Demand for lithium-ion batteries for large-scale applications to grow significantly toward the 2030s

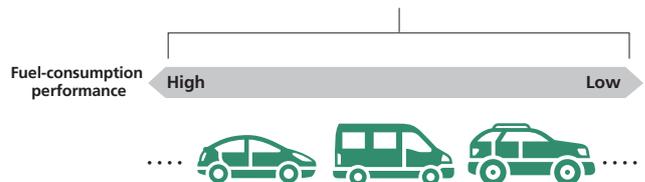
Demand for lithium-ion batteries for large-scale applications is expected to grow significantly toward the 2030s, especially in the field of next-generation eco-friendly vehicles.

The automotive industry is facing a major once-in-a-century transformation in the form of CASE.* In addition, efforts to tackle society's Sustainable Development Goals (SDGs) are accelerating, and companies in the West are introducing the concept of corporate average fuel efficiency (CAFE) to reduce the environmental load of society as a whole. Automakers are strengthening the development and sale of eco-friendly vehicles to curb CO₂ emissions.

*CASE: An acronym combining Connected, Autonomous, Shared/Service, and Electric

Outline of CAFE regulations

Automakers Since regulatory values on average fuel consumption are set for all models sold, it is essential for automakers to expand the sale of low-fuel-consumption vehicles.



Demand for lead-acid batteries to remain steady

Global demand for lead-acid batteries is expected to increase, albeit only slightly.

Our lead-acid batteries, which have a high level of reliability stemming from our track record over many years and can be produced at low cost, are likely to continue to be the mainstream for starter batteries and auxiliary batteries for automobiles, which are going to increase in number, especially in newly emerging countries. In addition, in the field of industrial applications, demand is expected to increase for forklifts, wireless base stations for telecommunications, uninterruptible power supply devices, and so on.

Examples of lead-acid battery use

