

Message from the CEO

“Becoming the *energy* that changes the future and achieving a society in which the pursuit of happiness and a sustainable environment are harmonized free of conflict”

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Message from the CEO

Inspiring each other and improving problem-solving skills

Panasonic Energy was established in April 2022 by bringing together all of the Panasonic Group's battery divisions.

Panasonic Energy is built upon a history of 100 years in the battery business. Starting with dry batteries for bicycle headlamps in 1923, we have continuously come up with industry-leading technologies to drive the evolution of batteries, including nickel-cadmium, nickel-metal hydride, and consumer Li-ion batteries. In 2008, we commenced the mass production of cylindrical Li-ion batteries for electric vehicles (EVs), which

greatly contribute to a smaller environmental footprint, and to date, we have supplied a total of approximately 13 billion cells. We take pride in the fact that the technology we have cultivated over the course of our history to deliver higher capacity, quality, and safety is superior to other companies. Even today, we continue to lead the global battery industry by drawing on our strengths: the technological capabilities honed over a century, the market creation capabilities for solving the issues of customers and society from the ground up, and the trust and track record built up day after day.

As the world focuses on the “energy” we provide, we intend to further enhance our appeal and engage many different stakeholders to ramp up our ability to provide solutions with energy. At the same time, we will turn Panasonic Energy into a monolith and drive our business forward at an unprecedented speed.



Formulated our Mission, Vision, and Will to turn Panasonic Energy into a monolithic company

When Panasonic Energy was established, the first thing we did was to unify the approximately 20,000 employees under a banner that resonates with everyone. We therefore set ourselves a “Mission” to fulfill and a future “Vision,” and shared a strong “Will” to link these aspirations to actions.

Our Mission is to “achieve a society in which the pursuit of happiness and a sustainable environment are harmonized free of conflict.” People have long sought joy in everyday life and pursued happiness through economic development. However, this pursuit has placed a significant burden on the earth's environment, mainly in the form of global warming and resource depletion, and if things continue as they are, the earth may no longer be able to sustain humanity. The pursuit of happiness in our lives now is coming at the expense of the well-being of future generations. This is the trade-off that we hope to overcome by using the energy that we provide. The energy we deliver is potentially powerful enough to end this contradiction because it can do more than just power objects or keep the lights on, and we therefore believe the purpose of our energy lies in that potential.

Guided by this Mission, the Vision we have envisaged for ourselves is one in which we become the “energy that changes the future.” In our company name too, we deliberately chose “energy” instead of “battery.” Our purpose is to supply energy essential to humankind with a view to the future and our goal extends beyond merely making batteries—it is about solving the challenges up ahead. In extreme terms, we might even consider the possibility of ceasing battery production, if such option is imperative for solving the challenges. To express our Vision in another way, it is challenging ourselves to create a future in which children born today are smiling and laughing with each other, surrounded by the splendor of nature. More specifically, our Vision involves driving the transition to EVs to bring about a decarbonized society, enabling reliable and safe infrastructure that keeps functioning even during times of emergency, and supplying power to areas beyond the reach of electricity. In doing so, we can contribute to people's happiness, becoming the energy that guides society towards a sound future that is in sync with a sustainable world.

yarushika — our future symbol

The “*yarushika*” symbol represents the future we want to create, based on our Mission, Vision, and Will. Within the deer's antlers lies a green forest and the glowing yellow lights of a city. It represents a world where a sustainable environment and people's happiness are in harmony. The round sphere signifies the earth. The deer is an entity that purposefully nurtures and supports the sphere, as is its destiny. In other words, this deer is each and every employee of Panasonic Energy. What it carries on its head is extremely large and very heavy and therefore this symbol embodies our desire to shoulder such a lofty and heavy responsibility with ease.



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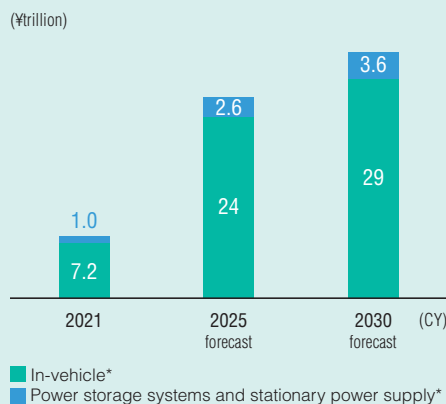
In order to put this Mission and Vision into action, we have also expressed our Will of “doing what human-kind requires.” It serves as our very own motto for persevering through even the most challenging tasks as we go about solving the problems shared by the entire human race. In addition, we want not only our employees, but all stakeholders to get a sense of our Mission, Vision, and Will, not just through the words they convey, but also through images. That is why we have embarked on a branding campaign with the use of a forest as our company symbol. The forest represents a harmonious world in which living things and nature coexist in perfect balance with each other. Panasonic Energy itself aspires to be like a forest where we coexist with colleagues and partners from all walks of life in the best way possible, perpetually rejuvenating ourselves, resiliently surviving without ever perishing, and continuing to be of valuable service.



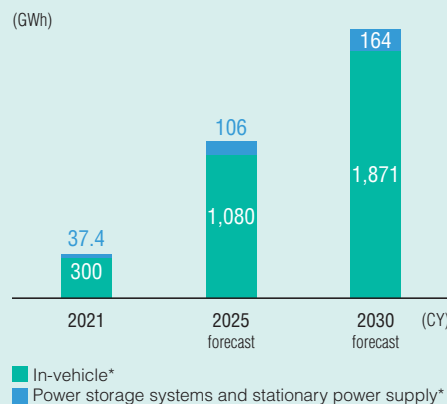
At the cutting edge of a burgeoning market

The areas of significant growth in the industry include Li-ion batteries for in-vehicle use and Li-ion batteries for power storage systems and stationary power supply applications. The size of the market for in-vehicle applications is expected to increase from 2021 by ¥16.8 trillion and reach ¥24.0 trillion by 2025. Similarly, the market for power storage systems and stationary power supply applications is projected to grow by ¥1.6 trillion to ¥2.6 trillion by 2025. Also, the market overall is expected to grow to roughly ¥33.0 trillion by 2030.

Li-ion batteries: Market size



Li-ion batteries: Demand



Source: *FUJII KEIZAI GROUP CO.,LTD., “2022 Global secondary battery market report: major applications, market size, share, trends” (in Japanese).

In terms of scale, the market for in-vehicle applications is driving the overall business, but demand from the adoption of renewable energy and emergency/disaster response needs is growing rapidly, so the industrial and consumer application markets are also poised for strong growth up ahead. In recent years, Chinese and South Korean battery manufacturers have rapidly expanded their share of the market. However, it is not so much about competing for growing market demand as it is about collectively tapping demand that greatly exceeds existing production capacity—a situation that is seen as a collaborative effort to shape the market together.

Particularly when it comes to high-performance batteries used in EVs, the designs vary based on the product models of the customer, which means we must be meticulous in the way we coordinate with customers and establish production techniques. Accordingly, we need to establish a value chain with customers and suppliers who share the same set of values for the market several years ahead. Ultimately, we think a division of markets will naturally occur in the industry. In this context, we intend to lead the way with our technological capabilities and steadily discover value in fields where our technology can be utilized.



Firm grip on top position in North America

In 2017 we built the world’s largest-class factory for Li-ion batteries for EVs in Nevada and commenced the mass production of 2170-size cells. The size denotes the dimensions of the cylindrical battery in millimeters, with the first two digits representing the diameter and the last two representing the height. Combined with the 1865-size cells that we manufactured up until now, to date we have supplied enough batteries for 2.3 million EVs, earning us the number one share of the North American market.

We recently broke ground on our new factory in Kansas, where we plan to start volume production by the end of March 2025. At this new facility we will mass produce the 2170-size cells in a bid to further expand supply in North America. Also, in the first half of fiscal year ending March 31, 2025 (fiscal 2025), we have plans to start mass producing the 4680-size cells that hold a dramatically larger capacity in our Wakayama Factory. We are eyeing the rollout of this size in North America as well, which would raise our production capacity of Li-ion batteries for EVs to 200GWh by fiscal 2031, roughly four times the capacity in fiscal 2023.

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Tighter environmental regulations in the North American market—a mature motorized society—are accelerating the uptake of EVs. Moreover, given the vast expanses of the region and the strong demand for long-distance travel, the North American market is probably where our strength in higher-capacity technology can be most effectively utilized. In addition, we can locally procure raw materials that have been mined and processed through making use of renewable energy. Having pioneered this market early on, we now intend to execute some bold investments in quick succession in order to shore up our top position in North America as the leading company driving the adoption of EVs.

Providing a wide range of batteries for different applications

In industrial and consumer applications, particularly telecommunications infrastructure like data centers, there is growing demand for 24/7 operations and stronger data integrity. We boast a high share of this market too by providing highly reliable, safe, and long-lasting backup power supply systems. We are also partnering with customers to advance the development of products for mainly construction and agricultural machinery, given the likelihood of future electrification in this sector.

Furthermore, we supply high-quality primary batteries for use in smart meters, medical equipment, and other IoT devices that require durability and long-term reliability to withstand harsh environments and conditions. Even though the secondary batteries that can be charged over and over again tend to attract attention, primary batteries serve a useful purpose as an indispensable power source in places where electricity is not readily available. Beyond that, the ultimate lifeline in an emergency situation is not the rechargeable battery, but a primary battery that can generate its own energy. As one of the few Japanese manufacturers capable of continually evolving batteries from primary to secondary cells, we will continue to offer a broad lineup of batteries suitable for various applications.

Making significant contributions to carbon neutrality

Natural disasters said to be caused by climate change are seriously impacting economic activity and destabilizing people's livelihoods in all parts of the world. In these circumstances, in 2022 the Panasonic Group announced a long-term environmental vision called "Panasonic GREEN IMPACT," aiming to contribute to more than 300 million tons in CO₂ emission reductions by 2050. We will play a pivotal role in reducing CO₂ emissions in our own value chain, as well as in society.

To reduce CO₂ emissions in our own value chain, we have set ourselves a target of making all of our factories carbon neutral by fiscal 2029. It should be noted, however, that a predominantly high proportion of our CO₂ emissions comes from the extraction of resources and the processing of raw materials, rather than our own factories. As such, we are taking stronger measures to address upstream processes; for example, procuring materials from local sources, procuring environmentally friendly materials, using recycled materials, and minimizing the use of rare metals. We also aim to halve our carbon footprint (CFP) by fiscal 2031 compared to the fiscal 2022 level. As for contributing to CO₂ emission reductions in society, we are targeting avoided CO₂ emissions of roughly 60 million tons by fiscal 2031 through the use of our products, particularly Li-ion batteries for in-vehicle use. This represents approximately two thirds of the Panasonic Group's fiscal 2031 avoided CO₂ emissions target of 93 million tons.

Doing what humankind requires

Amidst the unprecedented expansion of energy usage, there are countless issues that only we can lead the way in solving in order to address the challenges faced by all of humanity. The pride of becoming the energy that changes the future and the determination to do what humankind requires: these are the ideas that will motivate us to create new value with a view to achieving a society in which the pursuit of happiness and a sustainable environment are harmonized free of conflict—something the whole world longs for.

For the benefit of generations to come, we invite our customers, suppliers, equipment manufacturers, employees, future employees, and all other stakeholders, to join us in creating a better society and ensuring a healthier global environment.

Our future

Lush forests, electric flying cars in the sky, robots and humans, and various animals playing with each other. This is the kind of future we envision.

