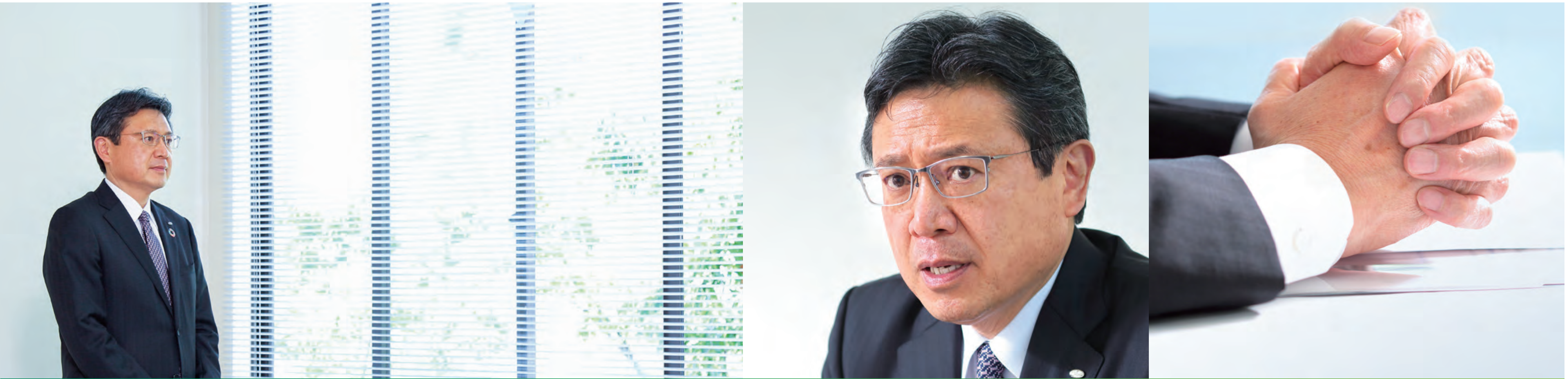
Pursuing the potential of energy devices to continue to create new value



Osamu Murao, President, GS Yuasa Corporation

Post-merger trajectory

Since the 2004 corporate merger of Japan Storage Battery (GS) and Yuasa Corporation, the GS Yuasa Group has worked to increase corporate value under a philosophy of "Innovation and Growth." Our results for fiscal 2019 indicate the extent to which our business has grown in scale compared to the time of the merger, with net sales increasing 1.7 times and operating income up 25 times. Meanwhile, current-term net income attributable to owners of the parent reached a record high. On the financial side, our equity ratio grew from 23.8% in fiscal 2004 to 45.8%.

We have also steadily enhanced our product portfolio. Our core automotive and motorcycle lead-acid batteries hold the top share of the Japanese domestic market, and have established a leading market position globally. In addition, in fiscal 2016, the year after I became president, we took over the lead-acid battery business of Panasonic Corporation, further solidifying our business base.

In 2009, with demand also expected to grow in the lithium-ion battery field, we were first in the world to successfully mass-produce lithium-ion batteries for electric vehicles (EVs). Since then, we have continued to invest in R&D and in facilities, steadily growing net sales. Since fiscal 2016, we have also seen a path emerge for moving operating income into the black.

Our development of the lithium-ion battery business has also generated synergies with other businesses. In the industrial battery and power supply business, for example, our product lineup includes both lead-acid and lithium-ion batteries. Our ability to respond to a wide range of customer needs has ensured us a competitive advantage in the market.

We have also made significant progress in global expansion in the 16 years since the merger. Both the former GS and the former Yuasa were relatively early to move into the Asia region, and since the corporate merger, we have continued to establish locations in other regions around the world. Today, the Group has 37 production and sales sites in 19 countries, and our after-sales service network has expanded worldwide.

In line with our status as a global company, both in name and in fact, beginning in fiscal 2018 we embarked on a reorganization. Our business divisions, which had been separated along two lines—one by product, including automotive lead-acid batteries, industrial batteries and power supplies, and automotive lithium-ion batteries; and the other by domestic and overseas business—were rearranged and consolidated into a divisional system centered around products. Those product divisions now serve as a vertical axis, with a horizontal axis running through each covering management area such as CSR, health and safety, quality assurance, and the environment, thus optimizing both operations and governance.

After five years as president, I feel once again that the corporate merger has gone well. From the beginning, we moved forward with the integration by focusing on absorbing the best of the other party. As a result, we have cultivated an unique corporate culture at GS Yuasa that incorporates both solidity and a pioneering spirit. I think this can be seen as a successful example of Japanese corporate merger, including in terms of business results.

The challenge of creating new value

I always believe that nothing is more important to a company than continuing to create new value that contributes to society. Companies incapable of creating new value have no chance of sustainable growth. What matters is that we constantly focus on feedback from the market and from users, pick up on a variety of societal changes to innovate ourselves, and take a flexible approach to new challenges. In that sense, one thing I have been acutely aware of since becoming president is the need to build new pillars of business.

As you know, the Group already has one major pillar in the form of lead-acid batteries. Still, to continue growing into the future, we need a follow-up to automotive lead-acid batteries and industrial batteries and power supplies. This is clear if we consider the drastic changes expected in the automotive industry and global issues such as climate change and environmental and energy problems.

One such new pillar is lithium-ion batteries. The Group was quick to focus on the growth potential of this segment, establishing Lithium Energy Japan in 2007 and Blue Energy Co., Ltd. in 2009, the start of more than 10 years of ongoing R&D and investment. That persistent effort is now finally beginning to show results.

In addition, the Group has launched another new challenge: the *Koto Zukuri* (service creation) business set forth in our Fifth Mid-Term Management Plan.

The *Mono Zukuri* (product creation) we have engaged in to date was based on a one-time model in which the sale and delivery of a product such as a storage battery or peripheral device represented a complete transaction. In contrast, a major characteristic of *Koto Zukuri* is that business continues with the customer even after the product has been sold and delivered. One example might be a status detection service for storage batteries. This would involve the use of AI, IoT, and other cutting-edge digital technology to remotely detect, in real time, the condition of facilities and equipment used by customers, service and maintain them, and provide advice about when components should be updated or replaced. A portfolio of paid services also offers the expectation of ongoing revenue even after a product has been sold.

By leveraging our overwhelming market share and customer base to develop and expand a new business model integrating *Mono Zukuri* and *Koto Zukuri* (product and service creation), GS Yuasa hopes to build an even stronger business base.

A future drawn against the great transformation of the century

The automotive industry, the Group's largest customer base, is currently facing a major once-in-a-century transformation in the midst of a swelling trend known as CASE.* The role energy and devices have to play has also grown increasingly important in addressing global-scale social issues such as seen in the Sustainable Development Goals (SDGs).

Given these circumstances, in fiscal 2019 the Group established its long-term vision, laying out a goal for 2030 of becoming an energy device company that continually creates new value. This vision outlines, from a long-term perspective, what kind of value we will offer society as we work toward sustainable growth.

Management held numerous discussions in formulating this long-term vision. For example, regarding the future of automotive lead-acid batteries, we predicted that even as the electrification of automobiles gradually progresses in developed countries, combustion engine vehicles will, for the time being, remain in the mainstream in markets in new and emerging economies. Based on that, we expect demand for lead-acid batteries to hold up even 10 years from now. In automotive lead-acid batteries, we thus established further expansion of global share and the building of an optimal production structure as important issues going forward. In the ASEAN region in particular there remains some duplication of production sites and sales networks, established prior to the corporate merger, and we will be working to build a leaner business structure by addressing those overlaps.

Meanwhile in automotive lithium-ion batteries, selection and concentration is a major issue. To date, the Group has developed this business through an omnidirectional strategy targeting EVs, plug-in hybrid electric vehicles (PHEVs), and hybrid electric vehicles (HEVs). As global competition continues to intensify, however, survival will require establishing clear targets on which to focus corporate resources. While doing so involved some very difficult predictions, in the end we decided on a policy of concentrating resources on HEVs. Seen in terms of cost performance, this assumes that, for the time being, HEVs will lead the shift to automobile electrification. In addition, we made this selection because the HEV high input/output lithium-ion battery field is one in which we can best leverage our technical expertise and existing supply chain.

We are also focusing on 12V lithium-ion batteries used in power supplies for automobile starters, another segment of the automotive lithium-ion battery business. In this field, lithium-ion batteries are forecast to begin replacing lead batteries, primarily in Europe where environmental regulation is progressing. We can also expect that demand will grow for a variety of other applications, including not just starters, but power supplies for various other electrical equipment and as backup power sources for autonomous driving systems.

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

A stepping stone to the future

Based on the above long-term outlook, we have moved forward with a number of different initiatives in each business under the key phrase *Mono-Koto Zukuri* (product and service creation), as set forth in our Fifth Mid-Term Management Plan begun in fiscal 2019. In the lead-acid battery business, we are working to strengthen profitability in our main regions, and

Under the Fifth Mid-Term Management Plan, a variety of initiatives are underway based on the key phrase, *Mono-Koto Zukuri.*

rolling out efforts to expand sales in important regions and sites. In the lithium-ion battery business, we are using facilities investments and strategic deployment of development funds in areas that play off of our strengths, including HEVs, 12V lithium-ion batteries, and industrial applications to establish a foothold for growth during the term of our next Mid-Term Management Plan.

In fiscal 2019, the first year of the current plan, net sales fell 4.2% year on year, to 395.6 billion yen. The primary factors in this decline included, in the automotive battery business, lower sales prices associated with a drop in the price of lead, and the impact of a strong yen. Operating income fell by 4.3% year on year to 21.7 billion yen (or operating income of 23.9 billion yen before amortization of goodwill) , in part due to deteriorating profits brought on by upfront investments in the automotive lithium-ion battery business. That said, current-term net income attributable to owners of the parent marked a record high of 13.7 billion yen.

These results deserve a degree of recognition. Additionally, beyond the numbers, the past year has seen a variety of developments on the strategy side.

In the automotive lithium-ion battery business in particular—set out as a strategic issue in establishing a stepping stone to the future—a major achievement was the addition of Toyota Motor Corporation as a new client for HEVs, alongside Honda Motor Co., Ltd. With this development, Blue Energy, which is responsible for manufacturing lithium-ion batteries for HEVs, has decided to build a second plant to respond to the increase in demand. The plant is expected to begin operation in fiscal 2022, and by fiscal 2023 we will double production capacity. Operations also began at our new plant in Hungary in anticipation of increased demand for 12V lithium-ion batteries in Europe. We look forward to this expansion as an important stepping stone to the future.

In the industrial battery and power supply business, in addition to private sector demand, government demand is strong against the backdrop of the Japanese government's Plan for National Resilience. I also give high marks to the start of our project at a large-scale wind power facility in Hokkaido, based on a new business model that includes a 20-year deal for service and maintenance. This is truly the embodiment of the *Koto Zukuri* business. We will continue to expand proposals centered on the renewable energy field that integrate *Mono Zukuri* and *Koto Zukuri*, as we work to create a new business base.

Sowing and nurturing the seeds

Going into 2020, the novel coronavirus pandemic has had a serious impact on global economic activity. While that impact was limited with regards to the Group's fiscal 2019 results, there is no question that the effects will be felt across the Group going forward.

Given this situation, we will be revising the term of our Fifth Mid-Term Management Plan. While that term was previously scheduled to cover the three years between fiscal 2019 and fiscal 2021, we will now extend it to four years, ending in fiscal 2022 (the fiscal year ending March 31, 2023), with fiscal 2020 excluded from the Fifth Mid-Term Management Plan and set aside under a stand-alone fiscal year plan. Note that the initial plans for fiscal years 2020 and 2021 will now be shifted to fiscal years 2021 and 2022, respectively.

While our results forecast for fiscal 2020 remained undetermined as of the start of the fiscal year, based on information and estimates available as of August 2020, we have forecasted net sales of 370 billion yen, operating income of 14 billion yen (or operating income of 16 billion yen before amortization of goodwill), and net income attributable to owners of the parent of 6 billion yen. Based on the assumption that production and sales activities at each of the Company's locations will normalize as the economy recovers toward the end of fiscal 2020, we expect net sales to be down about 6% over fiscal 2019, with a drop in operating income of about 35%. While the impact of the novel coronavirus pandemic is unavoidable, the Group is moving forward with efforts to secure both sales and profits based on the business foundations we have built to date.

Beginning in fiscal 2020, I have also decided to place myself in charge of the lithium-ion battery business. The Fifth Mid-Term Management Plan is a very important period for this business in terms of establishing a stepping stone to the future. Over the next several years, particularly in the high-priority areas of lithium-ion batteries for HEVs and 12V lithium-ion batteries, we need to sow as many seeds as possible, including in R&D, customer development, and facility and human resource investments. While we may not see these seeds grow and be ready for harvesting until our Sixth Mid-Term Management Plan and beyond, gaining the fruits of that labor will require that, during this initial sowing phase, we bring to the task even greater speed and decisiveness, and an agile execution of strategy that unites development, production, and sales. It is for that very reason that, as president, I have placed myself in direct charge of leading the business.

Over the three years of the existing Fifth Mid-Term Management Plan, we plan to put investment about 95 billion yen in facilities, with about half of that deployed in the automotive lithium-ion battery business. We expect that, given this scale of investment, critical decisions will need to be made based on a certain amount of risk. My intention is to share our strategy with the sales divisions, Group companies, the Lithium-ion Battery Technical Center, and others, bringing a sense of unity and speed to the process of sowing and nurturing seeds that can be harvested in the future.

We will bring a sense of unity and speed to the process of sowing and nurturing seeds that can be harvested in the future.

"Creating the Future of Energy"

Through "Innovation and Growth," the GS Yuasa Group has put forth a corporate philosophy of contributing to people, society, and the global environment. The social responsibilities we bear as a company are nothing less than efforts to embody that philosophy. To further clarify this management thinking, in May, 2017 we established the GS Yuasa CSR Policy and Code of Conduct as the President's Policy, and put in place a system for promoting those efforts by also establishing a CSR Committee to oversee CSR across the Group as a whole.

Under the Fifth Mid-Term Management Plan, we have also set forth "establishing business processes that incorporate CSR issues into our business strategy" as a strategic initiative. We have identified CSR issues as global social issues with a particular emphasis on SDGs, which, in a sense, are an expression of future market needs. We intend to use the degree to which we can contribute to solving the social issues set out in the SDGs as one guideline for assembling strategy as we pursue business growth.

While this overlaps somewhat with our CSR activities, the Group is also working to enhance corporate value from the perspective of ESG (environment, social, and governance issues). In terms of the environment, we are working to develop and sell products and build manufacturing systems that address climate change, energy problems, and other aspects of the global environment. At the same time, we are promoting efforts to reduce CO_2 emissions and water use associated with our business activities. From the social perspective, we give top priority to respecting human rights, and continue to focus on education and activities aimed at our employees and those involved in our supply chain. In governance, we are working to build a sound and highly transparent governance system while also ensuring compliance worldwide; we intend to promote business operations that respond to the demands of stakeholders in each part of the world.

In fiscal 2019, the Group established a new corporate slogan, "Creating the Future of Energy." That slogan incorporates our aspiration to grasp the needs of a constantly changing age, and by exploring a new vision for energy and new ways of using power storage technology, continue to create new value.

As we work to achieve a sustainable society, energy and devices will play an increasingly important role. We will continue to listen seriously to feedback from a variety of stakeholders as we take on the challenge of value creation toward the realization of an enriched society. We hope you will look forward to the future of the GS Yuasa Group.

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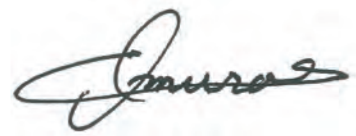

President
GS Yuasa Corporation

The novel coronavirus pandemic and its impact of results

With the spread of the novel coronavirus, the Company established a crisis management headquarters led by its president, and is putting in place measures to prevent the spread of infection with the safety of its employees and others the first consideration. Anticipating an increased demand for capital, in May, 2020 we also raised 5 billion yen in long-term funding. While the impact of the pandemic on fiscal 2019 business results was limited, we are working to build a flexible structure in response to fluctuating demand.

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