

We are actively engaged in efforts addressing social issues and contributing to creating a bright future for society.

We wish to express our sincerest gratitude to everyone for your unwavering and exceptional support. In this section, we review our performance in the fiscal year ended March 31, 2020, and introduce our current business measures and management policies for the future.



Shigeo Yoshida  
President & COO

Ippei Takeda  
Chairman & CEO

## Performance in the year ended March 31, 2020

### Sales continued strong for our EV and HV products and NECST business products amid drops in overall sales and profits due to the COVID-19 pandemic

The Japanese economy continued to gradually improve into the fiscal year ended March 31, 2020, supported by corporate capital investment and improving employment conditions until the global spread of the COVID-19 pandemic abruptly slowed economic activity in early 2020. Overseas, the March rise in novel coronavirus patients in the United States led to restrictions on activities that caused rapid deteriorations in employment and income conditions and increased uncertainty about the economic outlook. In Europe, the coronavirus also severely restricted economic activity, while the chaos

associated with Brexit also caused a slowing of exports and capital investment remained sluggish, particularly in the automotive industry. Private consumption in China declined as did corporate capital investment owing to the prolonged trade friction with the United States. The COVID-19 pandemic also impacted economic activity as factory operations were suspended and population movement was restricted beginning in January. Overall economic activity gradually started improving again in March, but economic growth was much slower than prior to the pandemic.

In these conditions, the Group continued to focus on four key markets where IoT, AI, 5G, and other new technologies and progress toward a low-carbon society are expected to trigger diversification: energy, the environment (ecology) and medical equipment; automotive and railway-car related appliances; household electrical appliances and industrial inverters; and information and communications equipment.

## Management policy and business strategy

### Top Notch Management

First-class performance in every aspect of our business, including quality, cost, delivery, service, and technology

### Growth Strategy Based on a Structure of Two Business Headquarters

For each business headquarters, completing an organizational structure for thoroughly integrated management from development through to sales

### Three Core Product Lines and Targets

Aluminum electrolytic capacitors / Film capacitors / Circuit products





The result of our business efforts in these conditions was a 2.6% year-on-year decline in net sales to ¥119,676 million. Operating income fell 53.4% to ¥2,549 million and ordinary income was down 49.2% to ¥3,621 million. Net profit attributable to owners of the parent was ¥2,812 million, compared with a net loss of ¥7,953 million in the previous fiscal year.

By product category, sales declined for capacitors for electronics used in automotive components and inverter equipment. Sales increased for capacitors for electric apparatus and power utilities & capacitor applied systems and equipment on strong demand for automotive film capacitors for EVs and HVs.

Sales of circuit products rose substantially on a sharp increase in sales for household energy storage systems, growth in the switching power supply products business, and increases in sales of vehicle-to-home (V2H) systems and other EV-related equipment.

Regional sales declined in 17.1% year on year to ¥45,415 million in Asia on diminished sales of capacitors for inverter equipment. Coupled with diminished sales in the Americas and Europe due to weak demand for automobiles, industrial equipment, and consumer devices, total sales overseas contracted 16.0% to ¥61,502 million. As a result, the ratio of overseas sales to consolidated sales decreased 8.2 percentage points from the previous fiscal year to 51.4%. The Group continues to take steps to strengthen its production and sales capabilities in overseas markets.

### **Expanding production capacity and introducing new products to meet growing demand for EV and HV film capacitors and household power storage systems**

The capacitor business saw shrinking demand for automotive capacitors, inverters, and industrial equipment in the fiscal year ended March 31, 2020, due to the global economic slowdown. At the same time, our motor drive inverter smoothing film capacitors for EVs and HVs were utilized in an expanding range of vehicles in Japan and overseas. We are responding to this growth in demand by expanding our production facilities in Japan and constructing new production lines in China. In addition, the SLB series of our new small li-ion rechargeable batteries optimized for IoT and wearable devices and information communications terminals has been tapped to be the battery in stylus pens for new smartphone models. We also created new value by using the batteries to develop a self-powered, IoT-integrated environmental sensor system with Kyoto University and Ricoh Electronic Devices Co., Ltd. (details on the next page)

In the NECST business, demand for household power storage systems increased with the ending of Japan's electric power feed-in tariffs (FIT) system and amid preparations for the increasingly frequent natural disasters. The business increased its production capacity and expanded its product lineup during the year, including launching a new line of hybrid power storage systems. At the end of the fiscal year, cumulative sales of household power storage systems since their launch in 2012 reached approximately 75,000 units. With the growing volume of sales, we established a collection and treatment system to recycle the systems, and obtained wide-area waste recycling certification for general and industrial waste from the Ministry of the Environment (details on page 33).

In the electric vehicle field, we introduced the EVPower Station vehicle-to-home (V2H) system capable of connecting to the power grid and received favorable reviews of our Tribrid Energy Storage System™ linking solar power generation, EVs, and storage batteries. Our Power Mover portable power charger enabling EV, fuel cell vehicle (FCV), and plug-in hybrid vehicle (PHV) batteries were used as power sources in areas where natural disasters have caused large-scale power outages. These and other unique solutions are driving our growth in the NECST Business.

## Creating value through industry-academia collaborations

### The world's first self-powered, IoT-integrated environmental sensor system with IoT using film-type perovskite solar cells

Our groundbreaking self-powered, IoT-integrated environmental sensor system enables maintenance-free installation of IoT edge devices\* even in places where power is unavailable. The system combines Kyoto University's film-type perovskite solar cells, which are capable of high conversion efficiency in low light conditions, such as indoors, and the Ricoh Electronic Devices' power supply IC, which features low power loss, with the NICHICON Group's small li-ion rechargeable batteries featuring low internal resistance and capable of rapid charging and discharging even with very weak voltage.

\* IoT edge devices wirelessly send collected data to a network

#### Kyoto University

Film-type perovskite solar cells



#### Ricoh Electronic Devices

Power supply IC



#### NICHICON

Small li-ion rechargeable batteries



### Four potential applications

#### 1. Smart Homes

IoT sensors in the home can collect temperature, humidity, and other data in all of the rooms, which can then be analyzed and used to direct air conditioners to blow air, humidify, or dehumidify in specific rooms.

#### 2. Smart Factories

IoT sensors on production lines or in warehouses can provide real-time monitoring of the line conditions, warehouse inventory volume, and other conditions.

#### 3. Smart Agriculture

IoT sensors in plastic greenhouses can collect temperature, humidity, and light data, which can then be analyzed and used to create ideal growing conditions.

#### 4. Disaster Detection

IoT sensors installed in houses and buildings as well as at strategic locations at mountains, rivers, and other sites enable immediate alerts using sound and lights in the event of a fire, flood, or earthquake.

## Initiatives for the year ending March 31, 2021 and onward

### Concentrate management resources on growth products Seize opportunities for growth

With the drastic changes in the business environment, the NICHICON Group is reshaping its management structure to make it more resilient to the external environment, such as changing economic and political conditions. We are concentrating our management resources around specific growth products, which include automotive and 5G aluminum

electrolytic capacitors, automotive film capacitors, small li-ion rechargeable batteries, household energy storage systems, V2H systems, and accelerator power supplies for medical facilities.

We see significant growth potential for automotive and 5G aluminum electrolytic capacitors and automotive film capacitors. Specific areas include the fusion of CASE (Connected, Autonomous, Shared and Electric) vehicle technology and IoT from the power electronics field, advances in robot technology using AI, and the start of high-speed 5G information communications, which will lead to modifications in base stations and expanded use of IoT. Demand for small li-ion rechargeable batteries should grow

## Message from the Chairman and the President

as IoT market growth accelerates in 2020. We anticipate the batteries being used not just in wearable devices and data communication terminals, but also in smart homes and factories, smart agriculture, and disaster detection. We will ensure we take advantage of these opportunities by enhancing our supply capacity to meet the growing demand and stepping up development of highly competitive new products.

Attention has been focusing on our household energy storage systems and V2H systems not only for use as environmentally friendly systems to independently generate power for private use, but also as backup emergency systems to improve preparedness amid the increasing frequency of natural disasters. For this market, we introduced a new power generation unit in May 2020 that automatically switches to electricity storage mode in response to weather advisories.

We are also preparing to be a contributor to future society using distributed power generation, the local production of electricity for local consumption. We are collaborating and supplying V2H and household energy storage systems demonstration tests of virtual power plants (VPPs) and are also participating in demonstration tests for public and industrial power storage systems.

Our accelerator power supplies for medical facilities are the core component of equipment used to administer particle beam therapy in the treatment of cancer. At the end of March 2020, our accelerator units are in use at 16 medical facilities in Japan and nine facilities overseas, primarily in North America. We continue to actively work with research institutes furthering development of the latest technology in particle beam therapy.

### NICHICON Group priority initiatives

Business	Strategy	Key Strategies
<p><b>Capacitor Business</b></p>	<p>Focus on automotive, industrial, and information and communications equipment</p>	<ol style="list-style-type: none"> <li><b>1. Increase automotive equipment offerings</b> Expand production capacity for EV/HV film capacitors Develop and introduce new aluminum electrolytic capacitors</li> <li><b>2. Support 5G technology</b> Increase sales of aluminum electrolytic capacitors for base stations</li> <li><b>3. Increase use in IoT equipment</b> Further widen sales of small li-on rechargeable batteries, collaborate with IC manufacturers</li> <li><b>4. Grow presence in the inverter market</b> Increase sales of large aluminum electrolytic capacitors for industrial machinery and servo amplifiers</li> </ol>
<p><b>NECST Business</b></p>	<p>Develop and introduce new products and technologies for the emerging private power generation/consumption and EV markets, focus on the advanced medical field</p>	<ol style="list-style-type: none"> <li><b>1. Capture growing demand for private power generation/consumption initiatives</b> Increase sales of household energy storage systems</li> <li><b>2. Respond to growing interest in disaster preparedness and BCP measures</b> Increase sales of the power grid-connected V2H system EVPower Station Increase sales of the Power Mover portable power charger</li> <li><b>3. Expand presence in the advanced medical equipment field</b> Increase sales of accelerator power supplies for medical facilities</li> </ol>

## Our compass for sustainability

The Mission Statement of the NICHICON Group states our dedication to creating valued products that will contribute to a brighter future for society. This Mission Statement is our compass as we develop products and enter markets in the energy, electric vehicle, ICT equipment, medical equipment, and other fields centered on our core aluminum electrolytic capacitors, film capacitors, and circuit products. We believe that continuing to pursue advances in these areas will lead to solutions to social issues that will contribute to social sustainability. Our growth strategy is based on establishing a position as a domestic and international corporate group whose presence is constantly needed, generating results in fields that we expect to grow, and building a management structure that is resilient to changes in the external environment.

Putting these initiatives into practice will require each employee to be sensitive to the needs of society and the times, and to be highly aware of compliance necessities. Our people are the Group's greatest management resource. In addition to ensuring occupational safety and supporting physical and mental health, we provide various programs to promote employee satisfaction and growth and to help them realize their full potential, including through human resource development, education and training programs, incentive programs, and workstyle structures to support healthy work-life balances. During the worldwide COVID-19 pandemic, the Group is doing its utmost to prevent the spread of the virus and protect the health of our customers, employees, and their families while continuing to provide products and services to customers.

During the pandemic, we have responded to the movement restriction orders in China and Malaysia where we have production bases by engaging our BCP measure of parallel production. This entails shifting production of some products from China to factories in Japan and Malaysia, and transferring some production from Malaysia to factories in Japan and China. These steps have enabled us to mitigate the potential risk to our customers from disrupted product delivery and reduced factory operating rates. We will continue to flexibly respond to any changes in the situation.

August 2020 marked the 70th anniversary of the founding of NICHICON. We have overcome and grown through numerous trying times in the past, including the oil crisis, the collapse of Japan's economic bubble, and the global financial crisis. In times like the present where the future is anything but certain,



we remain highly motivated to continue enhancing our ability to create value and driving full-steam ahead into the future.

Returning profits to shareholders is a management priority of the NICHICON Group, and we seek to steadily increase dividends by maximizing our corporate value and strengthening our business structure. We have set the annual dividend for the year ended March 31, 2020, at ¥24 per share.

We appreciate the continuing support of our shareholders, investors, and all stakeholders.

June 26, 2020

**Ippei Takeda**  
Representative Director and  
Chairman

**Shigeo Yoshida**  
Representative Director,  
President