

Financial Results For 2Q of the Year ending December 31, 2020

Investor Meeting
July 31, 2020

Nippon Electric Glass Co., Ltd.

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and Our Action for Business
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Financial Results for 2Q of FY2020



Summary of 2Q Financial Results

- Economic trends

(Global)

Rapidly decelerating due to stagnant economic activities caused by the spread of COVID-19, in addition to the prolonged trade dispute between the U.S. and China

(Japan)

Employment environment and personal consumption have been deteriorated and business activities have been gravely affected

- Business performance

Net sales: More or less in line with the initial schedule in 1Q

Shipments of glass for flat panel displays (FPDs) and glass fiber declined due to deterioration of demand in related markets in 2Q

Operating income: Generally met the initial schedule

(－)Decline in net sales

Falls in capacity utilization rates in the glass fiber

(＋)Reduced raw material and fuel cost, cost reduction initiatives, construction reviews, etc.

Summary of 2Q Financial Results

(Billions of JPY)

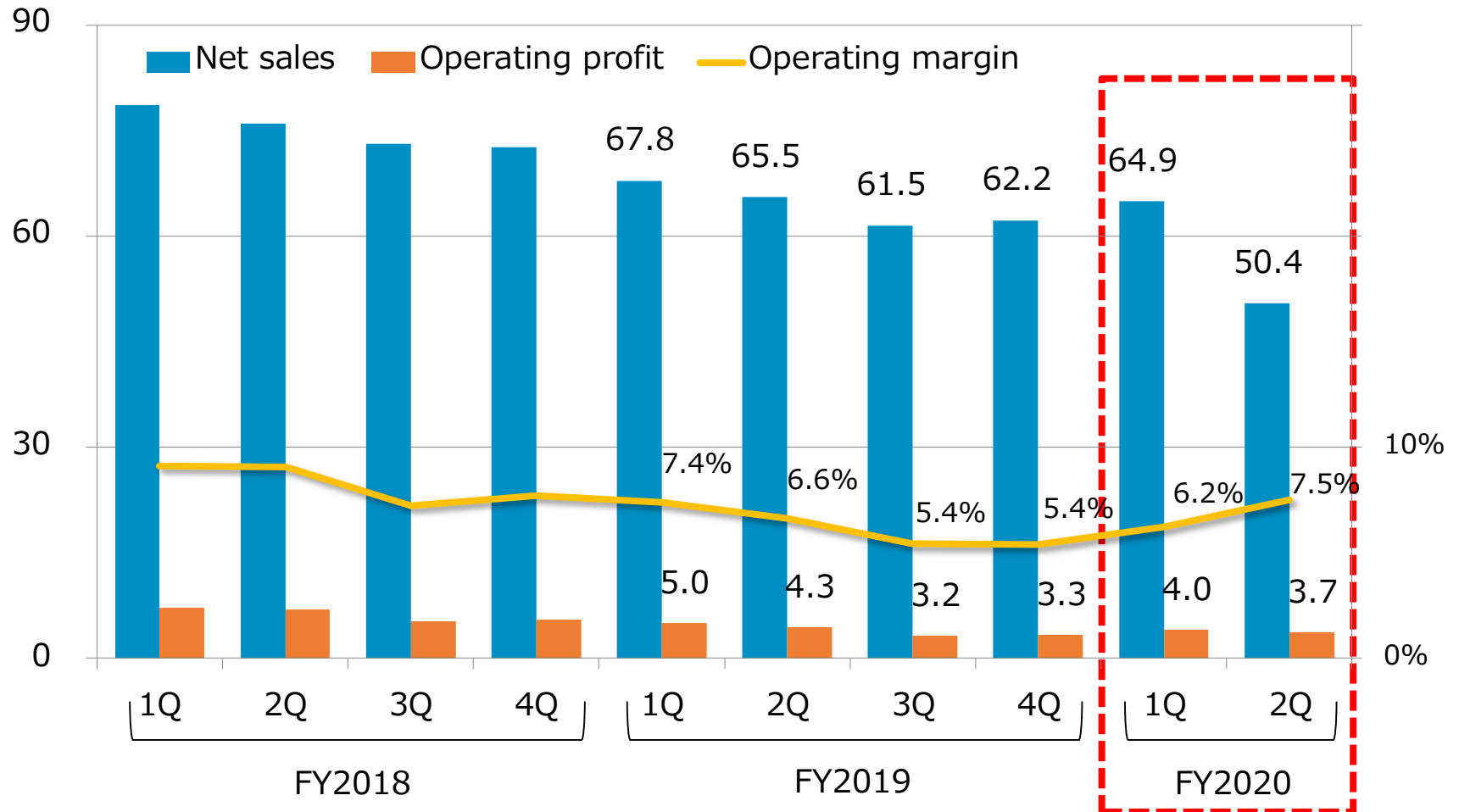
	FY2020			FY2019	Change
	1Q	2Q	2Q (accum)	2Q (accum)	%
Net sales	64.9	50.4	115.3	133.4	(14)
Operating profit <i>Operating margin</i>	4.0 6.2%	3.7 7.5%	7.7 6.7%	9.4 7.1%	(18)
Ordinary profit	3.5	3.3	6.8	8.7	(21)
Extraordinary income/loss	0.2	2.2	2.4	(0.0)	-
Profit before income taxes and minority interests	3.7	5.6	9.3	8.6	9
Profit attributable to owners of parent	2.2	4.5	6.8	5.4	24
Earnings per share (JPY)	¥23.12	-	¥70.62	¥56.88	24
Net assets	464.4	-	469.2	515.2	-
Equity ratio	70.2%	-	71.1%	72.5%	-
Dividend per share (JPY)	-	-	¥50	¥50	-

Topics on non-operating expenses and extraordinary income/losses

- Foreign exchange losses
Revaluation of receivables and payables related to loans for some overseas subsidiaries due to an appreciation of JPY and a depreciation of CNY
- Reversal of provision for special repairs
The cancellation of plans to repair some glass melting furnaces
- Gain on sales of investment securities
Sold some securities after a regularly review of investment securities

Quarterly Trends

(Billions of JPY)



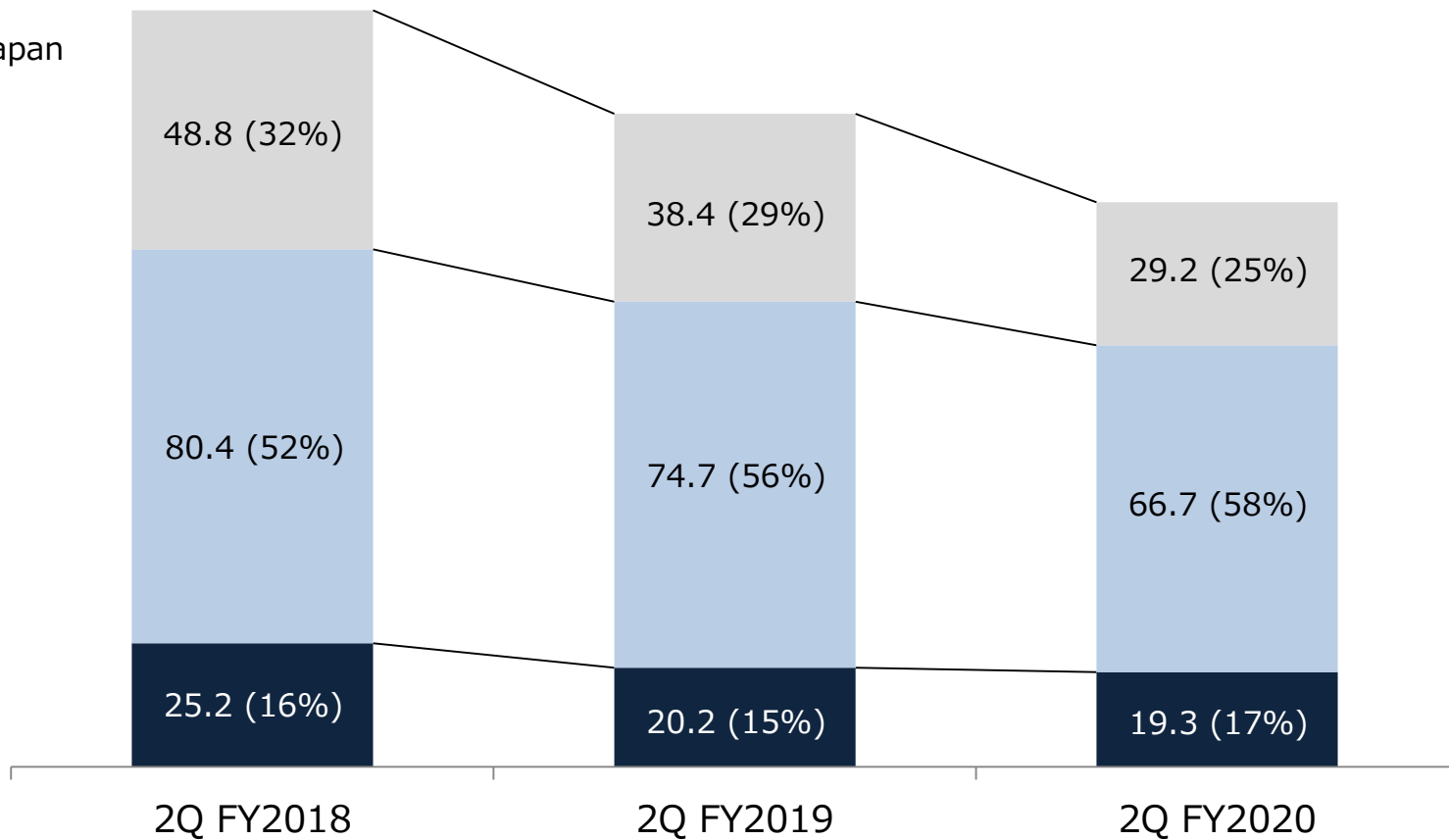
Sales by Region

■ Europe, U.S., etc.

■ Asia

■ Japan

(Billions of JPY)

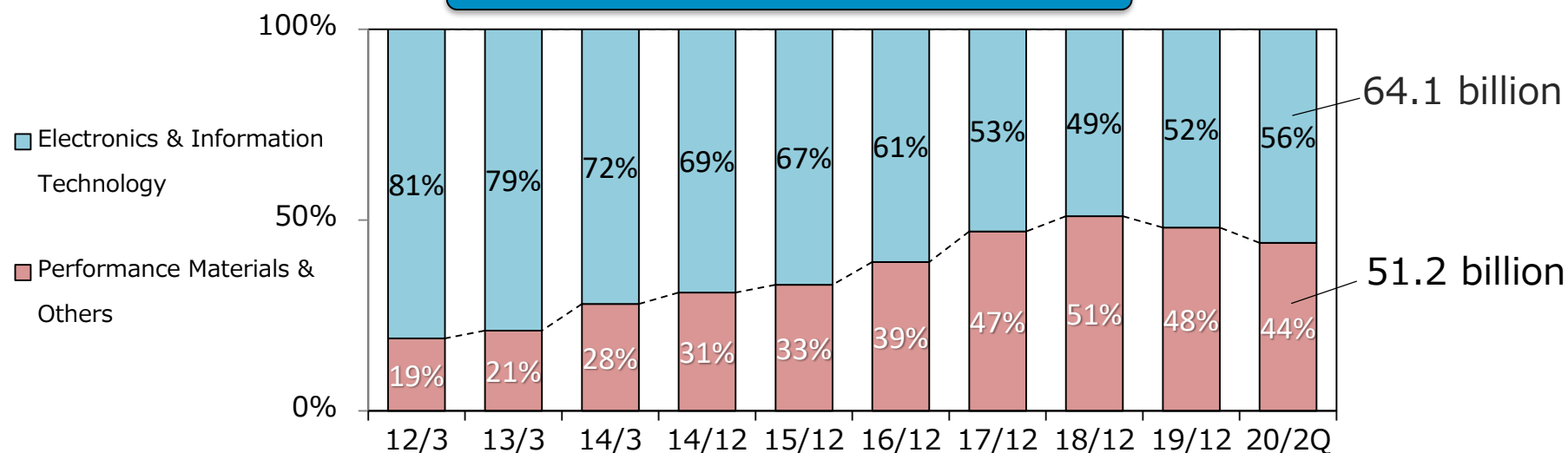


Sales by Business

(Billions of JPY)

		2Q FY2019 (accum)		2Q FY2020 (accum)		Change	
		Net Sales	Ratio	Net Sales	Ratio	Net Sales	%
Glass Business	Electronics & Information Technology	70.2	53%	64.1	56%	(6.1)	(9)
	Performance Materials & Others	63.2	47%	51.2	44%	(11.9)	(19)
Total		133.4	100%	115.3	100%	(18.1)	(14)

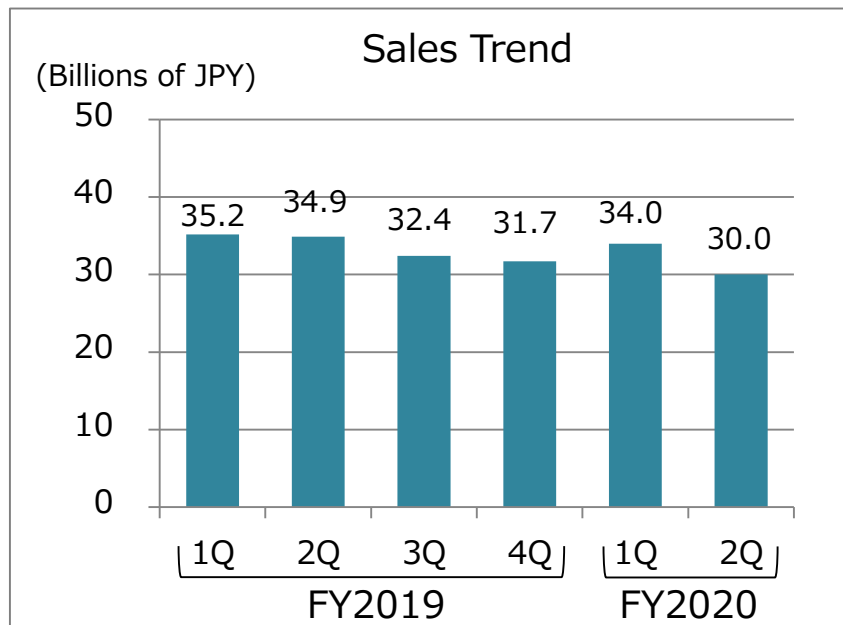
Trends of sales by business



Market changes due to COVID-19

- Displays: Shutdown at assembly manufacturers and decrease in operating rates at panel manufacturers in 2Q
- Electronic devices: Excessive demand from placing orders in advance by some customers
- Optical devices: Solid demand on growing investment for 5G communication infrastructure

- Glass for FPDs:
Shipments increased in 1Q,
declined in 2Q
- Cover glass <Dinorex™>:
Declined shipments
- Glass for electronic devices:
Flat sales for home appliances
LTCC (Low Temperature
Co-fired Ceramics) joint venture business contributes to sales



- Glass for optical devices: Strong sales



Sales – Performance Materials & Others

Market changes due to COVID-19

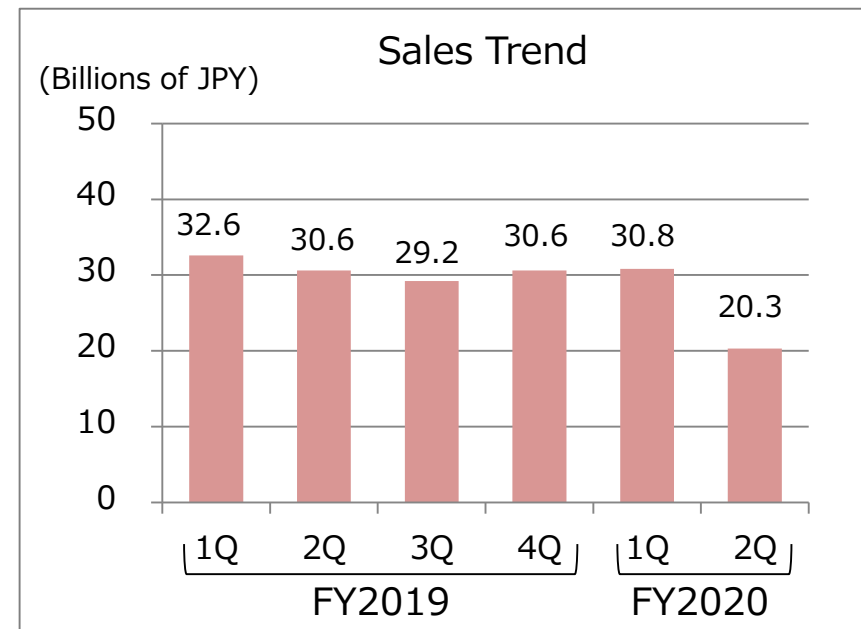
- Glass fiber: Rapid slow down in auto production and large production adjustment in upper tiers
- Glass tubing for medical use: Demands increased
- Heat resistant glass: Effected mainly by partial shutdown and decreased order of European customers in 2Q
- Building materials: Domestic and overseas construction projects decreased

• Glass fiber :

- Slowdown for high-performance resin used in auto parts
- Weak for wind turbine blades used in wind power generation and for housing equipment application

• Others :

- Heat resistant glass : weak
- Glass tubing for medical use : increased in overseas market
- Building materials : weak due to a decrease in construction

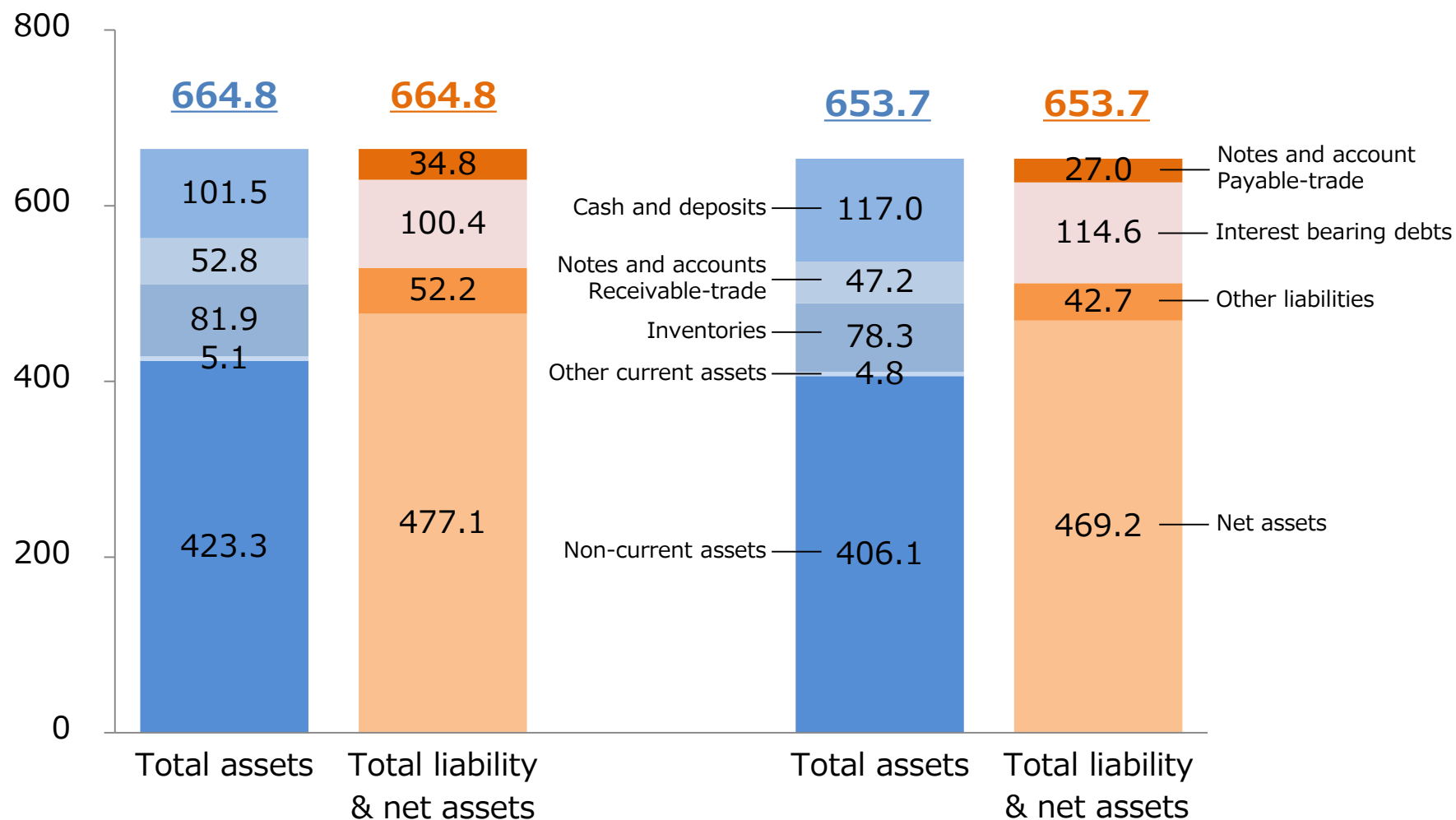


Consolidated Balance Sheet

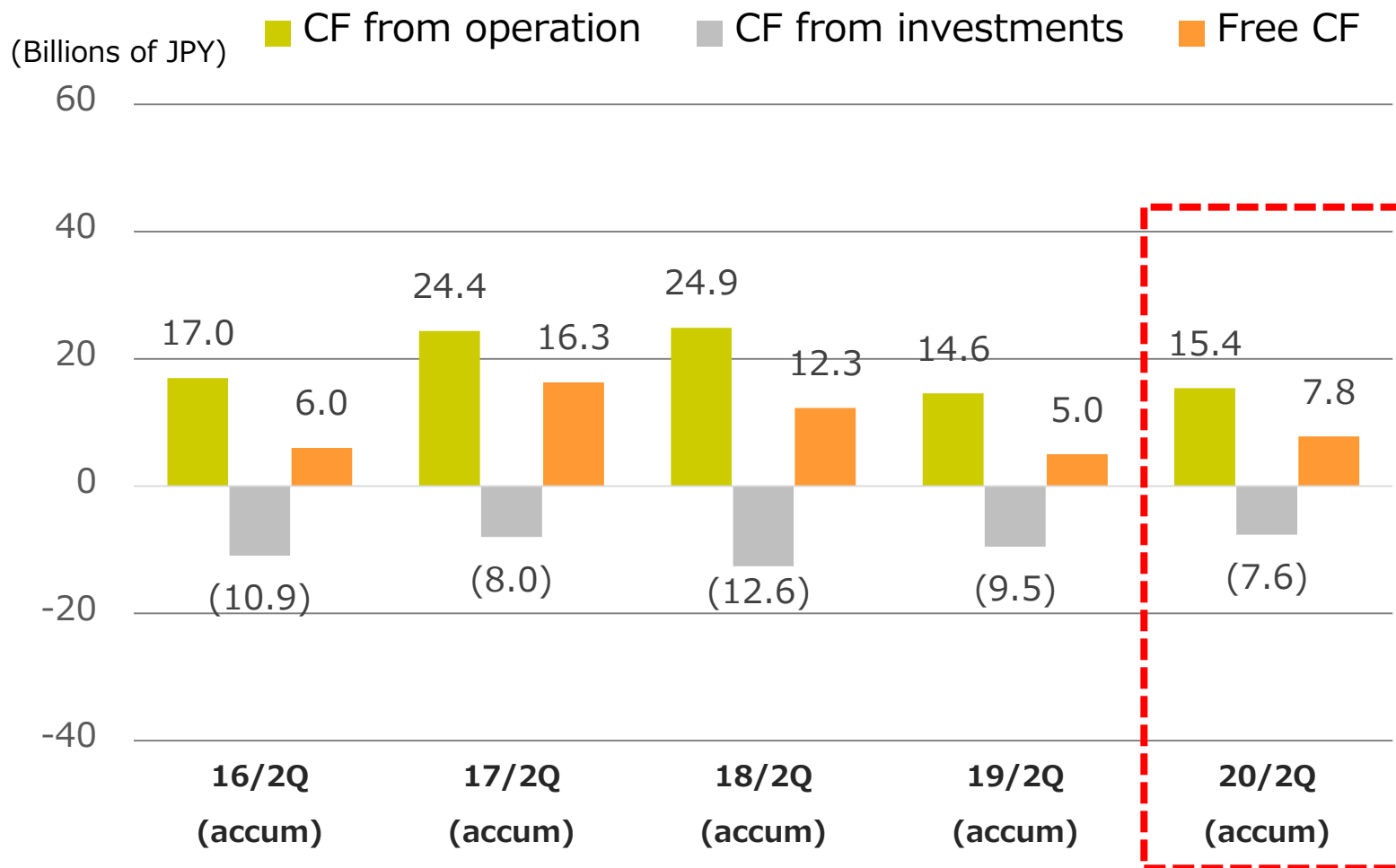
Dec 31, 2019

Jun 30, 2020

(Billions of JPY)



Consolidated Statement of Cash Flows



Predicted Impacts of COVID-19 and Our Action for Business

Predicted Impacts of COVID-19

(External environment for each business)

Displays	<ul style="list-style-type: none">● Recovery of end markets for large TVs and other products● Resumption of production at assembly manufacturers and increase in operating rates at customers● Gradual recovery of demand in 2H of this fiscal year after bottoming out in 2Q
Optical and Electronic Devices	<ul style="list-style-type: none">● Gradual recovery of demand for car electronic products after bottoming out in 3Q● Decrease in general-purpose products in reaction to an increase in 1H of this fiscal year● Solid demand for products related to communication infrastructure, including 5G
Glass Fiber	<ul style="list-style-type: none">● Gradual recovery of automobile and related markets after bottoming out in 2Q, but full recovery expected in the next year and beyond● Challenging market conditions forecast for wind turbines and housing equipment until the end of the year
Medical Heat-Resistant Building Materials	<ul style="list-style-type: none">● Glass tubing for medical use: Strong demand in various countries● Heat-resistant: Gradual recovery after resumption of production at customers in Europe and the U.S.● Building materials: Downturn in the market due to decreased housing starts in Japan, etc.



For business-by-business forecasts in 2H of this fiscal year, please see page 26.



Action for COVID-19

Policy	<ul style="list-style-type: none"> Putting the safety and health of all stakeholders first, including employees, their families, customers, and business partners
Management Strategy	<ul style="list-style-type: none"> <u>Maintaining the medium to long-term policy and strategy</u> Maintaining the pace of research and development and investment for growth <u>Securing the soundness of financial conditions</u> Adjusting operation to reduce inventories Ensuring liquidity on hand and commitment lines (credit lines) Cost reduction and prioritizing capital investment, repair and others
For Employees	<ul style="list-style-type: none"> Thoroughly implementing infection prevention measures Implementing teleworking, staggered commuting, office dispersion, and mask wearing Minimizing business trips and actively utilizing videoconferences and teleconferences, etc.
For Shareholders	<ul style="list-style-type: none"> Long-term stable dividends Holding shareholders' meetings and enhancing information provision (reviewing implementation methods of IR events, etc.)
For Customers	<ul style="list-style-type: none"> Continuing stable supply of products and enhancing support for customers Enhancing product information on our website
For Business Partners	<ul style="list-style-type: none"> Collecting information from overseas suppliers and monitoring their situation
For Local Communities	<ul style="list-style-type: none"> Providing sanitary supplies to medical institutions and social welfare facilities

Action for COVID-19

● Action for business activities



Closely watching sales/order trends to maintain production at all Japanese and overseas sites

- Securing raw materials and components (using multiple suppliers, placing orders for overseas raw materials in advance, etc.)
- Using multiple logistic channels for procurement
- Moving inventories among Japanese and overseas sites
- Collecting information from business partners and monitoring their situation

Paying close attention to employees' health and infection prevention to fulfill responsibility for supplying products to business partners

Running business according to the "Guidelines for Preventing the Spread of Novel Coronavirus Disease (COVID-19) in Manufacturing Workplaces" published by the Japan Business Federation, and continuing production and sales in all Japanese and overseas sites

[Labor environment]

- Implementing infection prevention measures in each process
- Preparing manuals for measures in the event of an infection

[Capital investment]

- Continuing to enhance capacity in anticipation of market growth (in Xiamen and Malaysia)
- Prioritizing capital investment and repairing to review their timing

[Sales]

- Enhancing communication with customers

[Company Management]

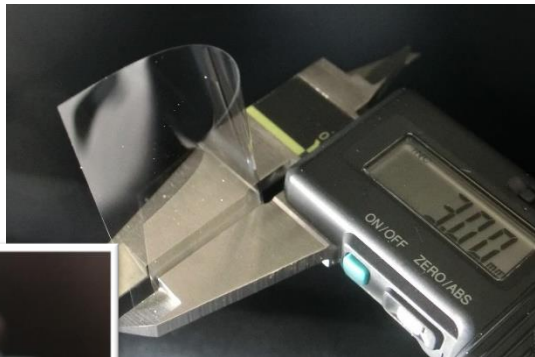
Building the IT environment to increase operational efficiency; adjusting personnel management to the changing labor environment; reducing costs; accelerating research and development, marketing; enhancing cooperation with overseas sites; and using young personnel

Action for Business: Displays

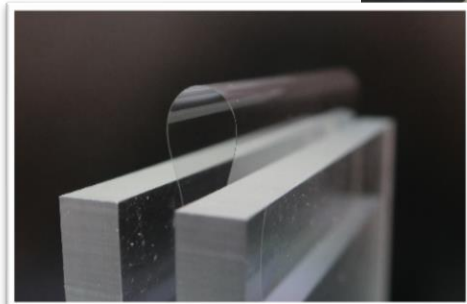
In progress

- Horizontally deploying innovative manufacturing processes (to improve productivity and quality)
- Increasing our presence in growing markets (enhancing capacity at Electric Glass (Xiamen) as planned)

Thinnest cover glass for foldable devices



The cover glass with a thickness of 25 μm (0.025 mm) is foldable to a diameter of just 3 mm.

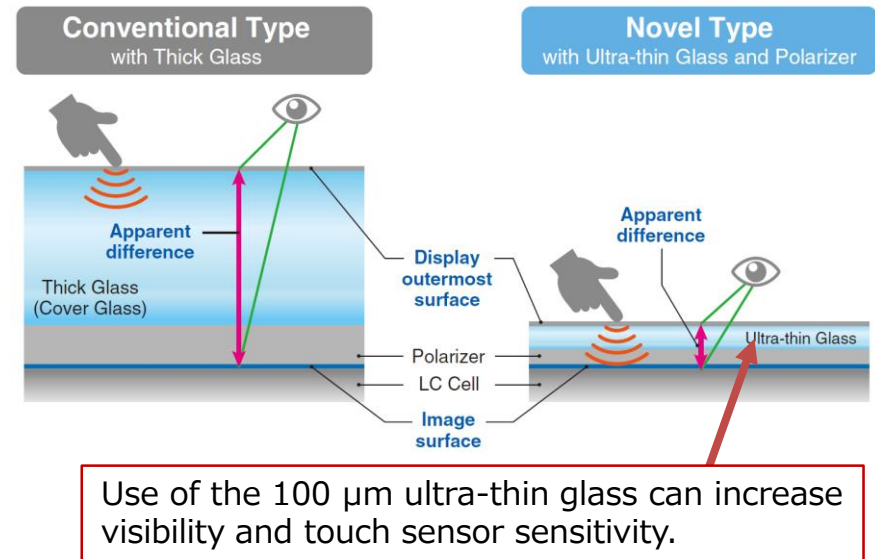


Dinorex UTG™

Path forward

- Launching Dinorex UTG™ in markets
- Promoting the joint development of ultra-thin glass with polarizing film with Nitto Denko
- Expanding sales of glass substrate for high-function displays

Ultra-thin glass with polarizing film





Action for Business: Glass Fiber

In progress

- Adjusting production according to market changes
- Improving productivity at sites in Europe and the U.S.
- Establishing the production of high-modulus glass fiber, etc.

Path forward

- Improving productivity mainly at sites in Europe and the U.S. to increase overall cost competitiveness
- Developing new products and manufacturing processes

Recent Situation and This FY's Challenges by Site

Site	Japan	Malaysia	Europe	U.S.
Sales	The production of customers was largely adjusted in 2Q, and sales bottomed out in June.		<ul style="list-style-type: none">• Sales fell rapidly after European and U.S. car makers suspended their operation.• Wind turbines and housing equipment: Sales stalled after construction projects were suspended in Europe and the U.S. → These difficult situations will continue throughout this year.	
Production	All the sites will maintain operation at an adjusted capacity of about 40% for the time being.			
	High production efficiency is maintained.		Production efficiency is being improved, but the recovery of profitability is being delayed due to reduced production.	
This FY's Challenges	Developing new highly value-added products and prototyping them for mass production	Increasing the production efficiency of forming machines, and further improving cost competitiveness	Improving yields and enhancing measures for organization streamlining	Itemizing cost reduction items and promoting cost reduction

(New trends in medical products)

- **High-efficiency deep UV-transmitting glass**

Being adopted in deep ultraviolet LED antiseptic lamps for medical settings, etc.

- **Infrared lenses with the world's highest performance infrared transmitting glass**

Contribute to improving the performance of infrared cameras, including medical thermography cameras

- **Translucency-adjusting glass beads, used as modeling materials for 3D printers**

Expected to be used for provisional dentures with high heat resistance, strength and translucency



Deep UV-transmitting
glass (tubes)



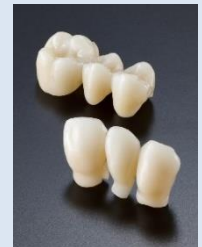
Infrared transmitting
glass

Glass beads realize translucency of 3D printed models developed



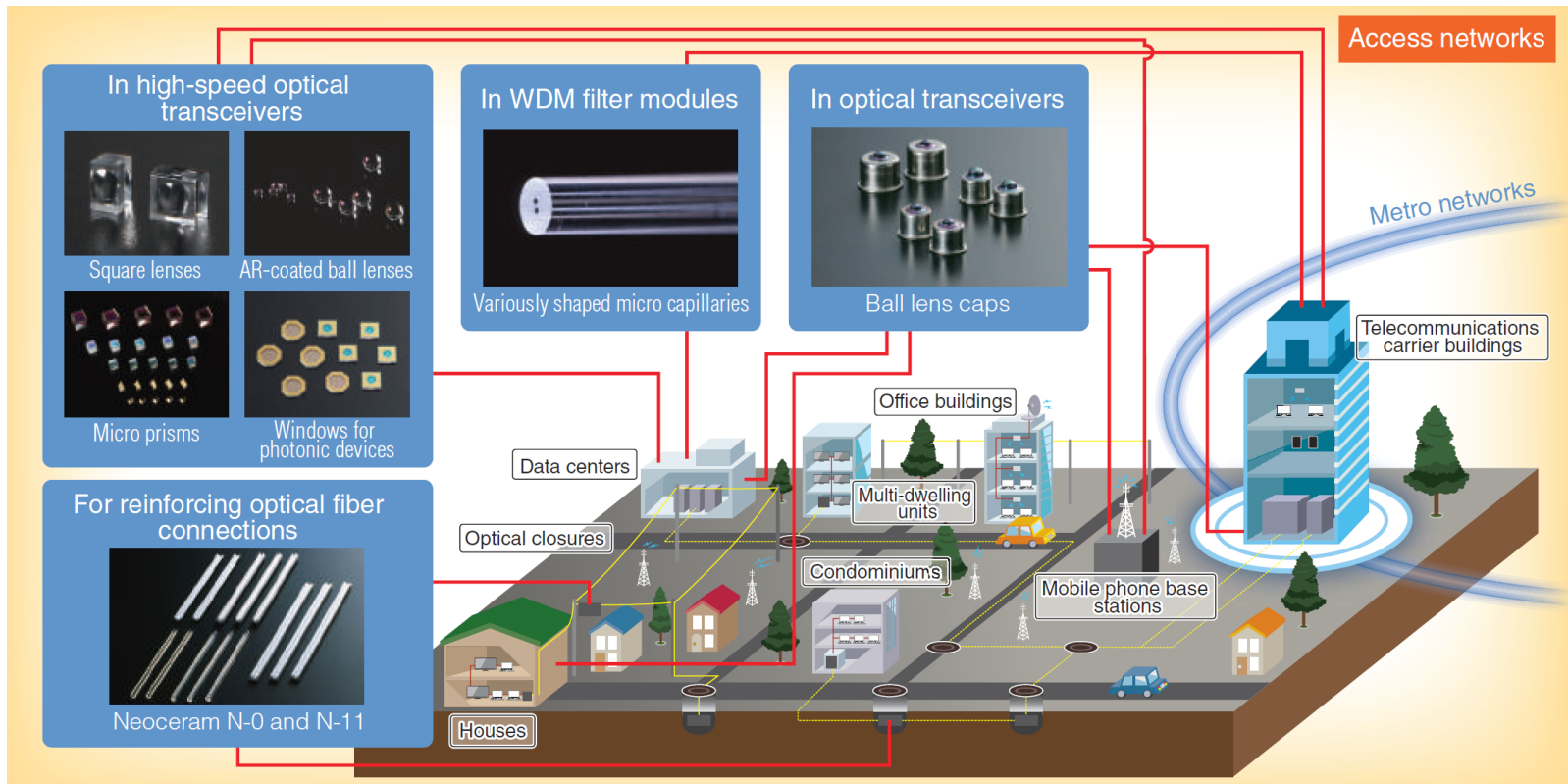
Newly developed
product used

Off-the-shelf
product used



Action for Business: Optical and Electronic Devices Nippon Electric Glass

■ Enhance sales for various optical devices used in 5G communication networks



*Other products suit high-band spectrum are under development to catch up 5G deployment

■ New application example for a changing lifestyle

High refractive index glass for AR and VR smart glass for teleworking

Action for Business: Others

■ Glass tubing for medical use

Have been adopted as COVID-19 vaccine packaging containers
Promoting sales to capture demand for advanced medical products in emerging countries
Increase production capacity in Malaysia to start operation within 2020.

■ Heat-resistant glass

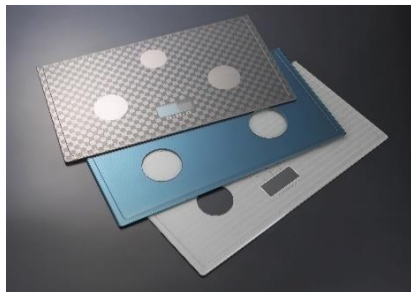
Top plates for cooking appliances: In order to reduce the lead time, we are working to carry out processing in Europe where top plates are in demand.

■ Building materials

Cultivate markets for radiation shielding glass for medical facilities (X-ray rooms and MRI rooms).
FireLite™, fire-rated glass: Increase in size to suit construction design.



Glass tubing for
medical use



Top plates for cooking
appliances



Radiation shielding
glass

Action for Research & Development Nippon Electric Glass

In progress

- Accelerating the development of new products by promoting the integrated development of products, engineering, and manufacturing processes
- Strengthening the marketing function
- Promoting the development of innovative manufacturing processes

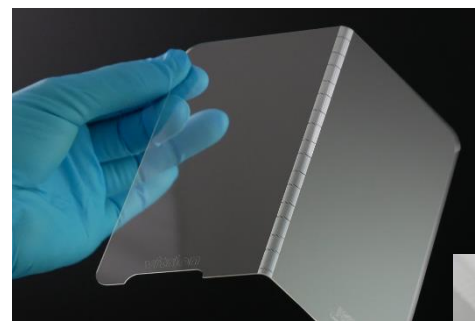
Path forward

- Revitalizing research and development using computer science (ICT and AI)
- Exploring various manufacturing processes (laser technology-based microfabrication, etc.)
- Promoting joint development with other companies and research institutions

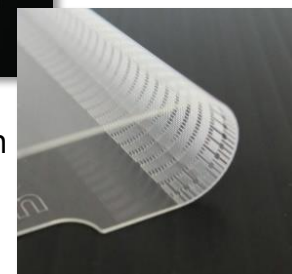
New products released in 2020 and new R&D trends

Release date	Details
Jan. 28	Dinorex™ adopted for in-vehicle displays in the latest Toyota luxury minivan models
Feb. 4	World's first achievement: Development of glass beads that realize translucency of 3D printed models
May 29	Paper on the all-solid-state sodium (Na)-ion secondary battery using NEG's glass-ceramics recognized as Top Downloaded Paper 2018–2019
June 12	Performance of the all-solid-state sodium (Na)-ion secondary batteries improved, and commercialization promoted
July 21	Successful development of the world's thinnest glass as a cover glass for foldable displays
July 28	World's first ultra-thin glass with polarizing film jointly-developed with Nitto

Laser microfabrication technology and equipment introduced from LPKF Laser & Electronics AG



Usage example: Partially modifying the property can render a 0.5-mm glass plate flexibly foldable.



Forecasts of FY2020

Consolidated Earning Forecasts (1)

(FY2020)

(Billions of JPY)

	Net sales	Operating profit	Ordinary profit	Profit attributable to owners of parent
Full Year	230.0	12.0	11.0	9.0

(Outlook)

Summary

- Economic trends: Remained unclear mainly due to uncertainty of COVID-19 exit
- Business performance :
 (Sales) Modest recovery
 (Profit) Decline due to adjustment the level of operations, increase R&D, and execute part of postponed CAPEX and repairs

Foreign exchange rate

- Assumption: 1USD=105JPY, 1EUR=120JPY

Raw materials and fuels

- Slightly decline (assumption: \$65/bbl)

Consolidated Earning Forecasts (2)

(Outlook)

Displays(FPDs)	<ul style="list-style-type: none">● Keep sales volume in FY2020 as the same as in FY2019● Slight price decline continues
Optical and electronic devices	<ul style="list-style-type: none">● Take advantage of growth in markets such as 5G and telecommunications infrastructure● Weakness sales in auto parts and home appliances markets● Improve promotion of newly developed products such as for medical use
Glass fiber	<ul style="list-style-type: none">● Modest recovery in auto parts market● Review the production structure and product mix on global scale to realize recovery in business performance
Medical Heat-resistant Building materials	<ul style="list-style-type: none">● Glass tubing for pharmaceutical and medical use: strengthen production capacity in Malaysia and expand sales in China● Heat-resistant: expand sales for cooking appliance top plates overseas● Building materials: expand sales for fire rated glass and radiation-shielding glass



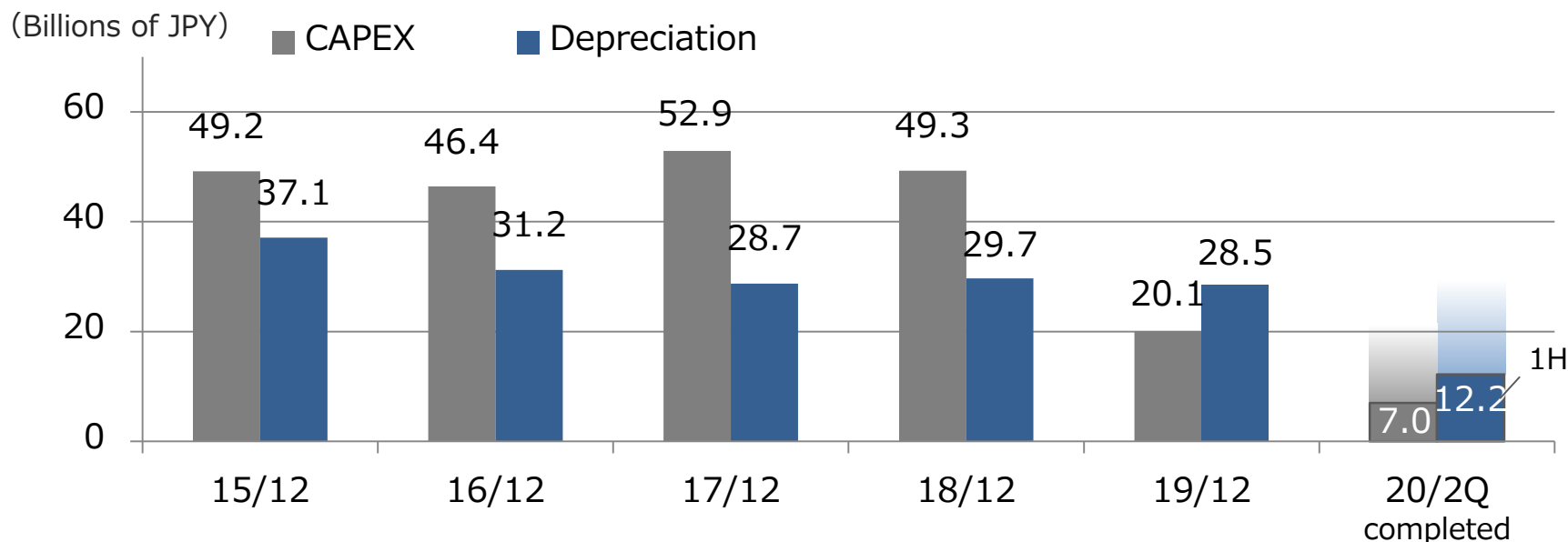
CAPEX / Depreciation

CAPEX

- Posted 7.0 billion JPY in 1H
- Under 26.0 billion JPY in FY2020, less than original plan
Enhance product capacity for glass tubing: On going
Equipment repairs, productivity improvement, and investment in new markets: Reviewing

Depreciation

- Posted 12.2 billion JPY in 1H
- Under 28.0 billion JPY in FY2020, less than original plan





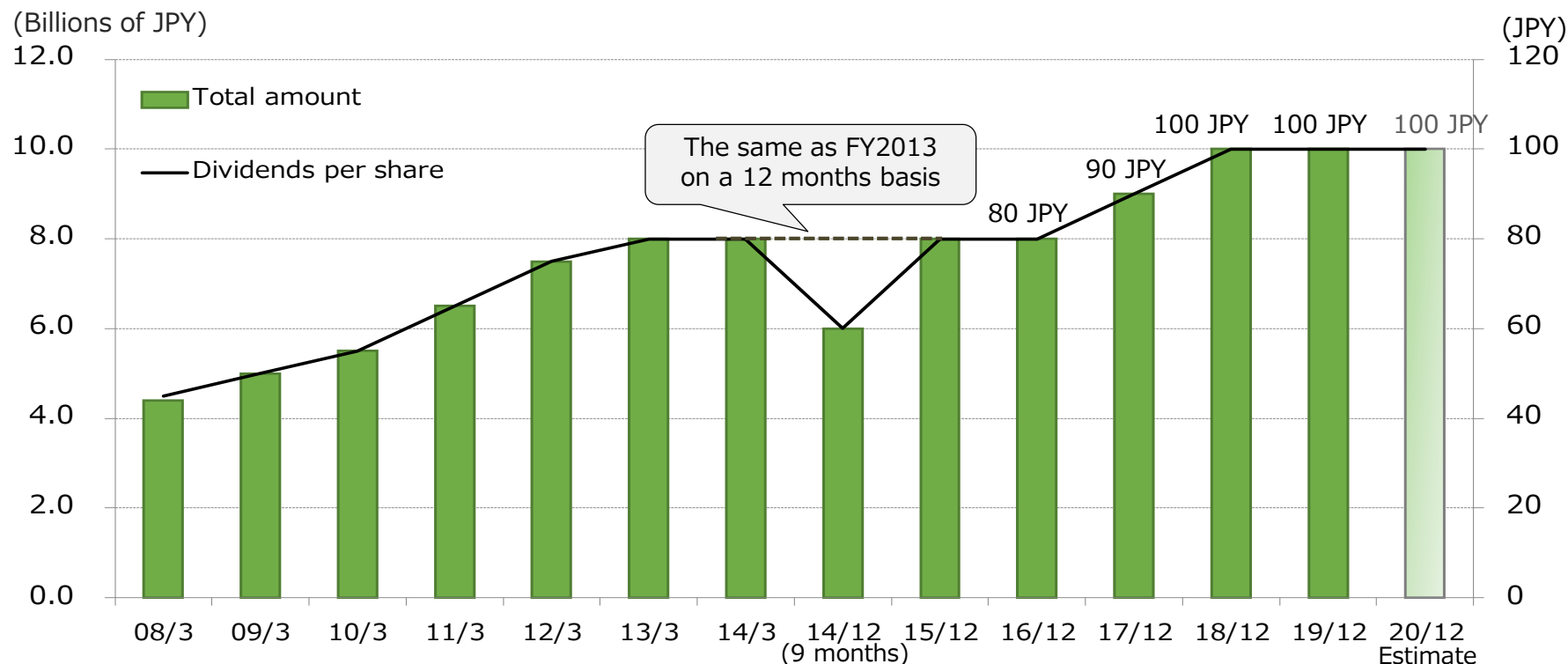
Profit allocation policy & Dividends

Profit allocation policy

- Continued and stable payment of dividends over the long term
- Dividends on equity ratio (DOE) :2% and upwards
- Implementation of flexible shareholder return measures according to the status achievement of the medium-term business plan

FY2020 (Estimate)

- Interim: 50 JPY per share
- Year-end: 50 JPY per share (100 JPY share/annum)



*Amounts of dividends per share are retroactively adjusted for the share consolidation.

Corporate Information

Main business

Electronics & Information Technology	FPD	Glass for Liquid Crystal Displays (LCD) Glass for Organic Light-Emitting Diode (OLED) Displays
	Cover Glass	"Dinorex" Specialty Glass for Chemical Strengthening
	Optical Devices	Capillary and Ferrule for Optical Communication Devices Lens for Optical Communication Devices Micro Prism
	Electronic Devices	Functional Powdered Glass Sheet Glass for Image Sensors Glass Tube for Small Electronic Products "Lumiphous" Phosphor-Glass Composites
	Solar Cells	Glass for Solar Cells
Performance Materials & Others	Glass Fiber	Chopped Strands for Function Plastic Reinforcement Wet Chopped Strands for Building Materials Roving for Plastics Reinforcement Chopped-Strand Mats for Automobiles Alkali-Resistant Glass Fiber for Cement Reinforcement
	Building Materials	Glass Blocks "Neoparies" Glass Ceramics Building Materials "FireLite" Fire Rated Glass "Lamion" Ultra-thin Glass Laminated on Resin "Invisible Glass" Ultra-Low Reflection Glass
	Heat-Resistant	"Neoceram" Super Heat-Resistant Glass Ceramic "StellaShine" Super Heat-Resistant Glass-Ceramics for Cooking Appliance Top Plates
	Medical Applications	Glass Tubing for Pharmaceutical and Medical Use "LX Premium" Radiation-Shielding Glass
	Others	Glass for Lighting Use Glass for Thermos Flasks Glass Making Machinery

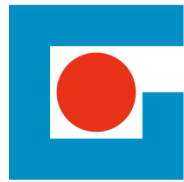
Corporate information

Name:	Nippon Electric Glass Co., Ltd.
Head Office:	7-1, Seiran 2-chome, Otsu, Shiga 520-8639, Japan
Founded:	Dec 1, 1949
Representative:	Masayuki Arioka, Chairman of the Board Motoharu Matsumoto, President
Capital:	32.1 billion JPY
Employees:	6,539 (Group total as of Jun. 30, 2020)
Business:	Production and sales of special glass products, and manufacture and sales of glass making machinery
Plants:	Otsu, Shiga-Takatsuki, Notogawa, Precision Glass Center
Sales Office:	Osaka and Tokyo
Consolidated Companies:	11 in Japan 15 overseas (Malaysia, Korea, China, Taiwan, Europe, U.S.)

Note regarding earnings forecasts

- ◆ The forward-looking statements, including earnings forecasts, contained in these materials are based on certain assumptions deemed to be reasonable by the Company at the present moment and include risks and contingencies.
- ◆ Actual business results may differ substantially from the earnings forecasts due to a number of factors.

GLASS FOR FUTURE



Nippon Electric Glass