

# Consolidated Business Results & Forecasts

**FY2023/03 Second Quarter Ended September 30, 2022**

October 28, 2022

---

**SCREEN Holdings Co., Ltd.**

• **Financial Summary of FY2023/03 1H**

**Yoichi Kondo, CFO, Senior Managing Director**

• **Business Environment and Forecast**

**Toshio Hiroe, CEO, President**

\* Cautionary statement with respect to these materials: The earnings forecasts contained in these materials and communicated verbally, are made in accordance with currently available information and rational assumptions. SCREEN Holdings does not promise that the forecasts or estimates will be accurate. Therefore, it should be noted that actual results could differ significantly due to a variety of factors.

\* Figures have been rounded down to eliminate amounts less than 100 million JPY, except per share figures. A ratio has been rounded off.

\* SCREEN's fiscal year (FY) encompasses the period from April 1 to March 31 of the following calendar year. (Ex. FY2023/03: April 1, 2022 - March 31, 2023)

# Financial Summary of FY2023/03 1H

October 28, 2022

---

**SCREEN Holdings Co., Ltd.**  
CFO, Senior Managing Director  
**Yoichi Kondo**

## Financial Summary

### Business results in 1H

- **Company-wide:**
  - **Steady overall, both sales and profits hit record highs as 1H results. Exceed July forecasts**  
Due to the success of steady control in the face of supply chain disruptions such as material shortages
  - **Increased in sales and profit YoY, operating income 1.6 times, and net profit 1.7 times**
- **SPE:**
  - **Major driver of company-wide performance. Record highs in sales, operating income and OP margin as 1H results**
  - **OP margin achieves 21.7%**
- **GA and PE: Steady in both sales and profits, benefiting from the impact of foreign exchange rates as well**
- **Net Cash of ¥104.5 bn and equity ratio of 57.5% in B/S**

# FY2023/03 1H Business Results

YoY

(Billions of JPY)	FY2022/03						FY2023/03						Difference (YoY)		Difference (Comparison with forecast in July)	
	1Q	2Q	1H	3Q	4Q	Full	1Q	2Q	1H (Forecast In July)	1H						
<b>Net sales</b>	82.8	104.3	187.2	103.9	120.7	411.8	101.8	<b>116.5</b>	215.0	<b>218.4</b>	<b>31.1</b>	<b>16.7%</b>	<b>3.4</b>	<b>1.6%</b>		
<b>Operating income (to net sales ratio)</b>	8.6 10.5%	15.3 14.7%	24.0 12.9%	16.0 15.5%	21.1 17.5%	61.2 14.9%	17.8 17.5%	<b>20.3</b> <b>17.4%</b>	34.5 16.0%	<b>38.1</b> <b>17.5%</b>	<b>14.0</b>	<b>58.5%</b> <b>4.6pt</b>	<b>3.6</b>	<b>10.6%</b> <b>1.4pt</b>		
<b>Ordinary income</b>	8.6	15.1	23.7	16.1	19.5	59.4	18.2	<b>20.4</b>	33.5	<b>38.6</b>	<b>14.8</b>	<b>62.6%</b>	<b>5.1</b>	<b>15.5%</b>		
<b>Profit attributable to owners of parent</b>	6.0	11.5	17.6	12.0	15.8	45.4	16.0	<b>13.5</b>	26.0	<b>29.6</b>	<b>12.0</b>	<b>68.6%</b>	<b>3.6</b>	<b>14.2%</b>		

# FY2023/03 1H Business Results

YoY

(Billions of JPY)	FY2022/03						FY2023/03						Difference (YoY)		Difference (Comparison with forecast in July)	
	1Q	2Q	1H	3Q	4Q	Full	1Q	2Q	1H (Forecast in July)	1H						
<b>Net sales</b>	<b>82.8</b>	<b>104.3</b>	<b>187.2</b>	<b>103.9</b>	<b>120.7</b>	<b>411.8</b>	<b>101.8</b>	<b>116.5</b>	<b>215.0</b>	<b>218.4</b>	<b>31.1</b>	<b>16.7%</b>	<b>3.4</b>	<b>1.6%</b>		
<b>SPE</b>	59.7	81.6	141.4	84.6	93.2	319.3	84.6	91.9	177.5	176.5	35.1	24.8%	(0.9)	-0.5%		
<b>GA</b>	9.6	11.2	20.9	9.9	12.3	43.3	10.5	11.6	19.5	22.2	1.3	6.2%	2.7	14.0%		
<b>FT</b>	10.2	7.2	17.5	5.5	10.1	33.2	3.0	8.4	11.0	11.5	(6.0)	-34.4%	0.5	4.9%		
<b>PE</b>	2.3	3.4	5.8	3.3	4.0	13.3	3.3	4.2	6.0	7.6	1.7	30.5%	1.6	26.9%		
<b>Others</b>	0.8	0.5	1.4	0.2	0.8	2.5	0.2	0.2	1.0	0.4	(0.9)	-66.6%	(0.5)	-52.8%		
<b>Operating income (to net sales ratio)</b>	<b>8.6</b>	<b>15.3</b>	<b>24.0</b>	<b>16.0</b>	<b>21.1</b>	<b>61.2</b>	<b>17.8</b>	<b>20.3</b>	<b>34.5</b>	<b>38.1</b>	<b>14.0</b>	<b>58.5%</b>	<b>3.6</b>	<b>10.6%</b>		
	<b>10.5%</b>	<b>14.7%</b>	<b>12.9%</b>	<b>15.5%</b>	<b>17.5%</b>	<b>14.9%</b>	<b>17.5%</b>	<b>17.4%</b>	<b>16.0%</b>	<b>17.5%</b>	<b>4.6pt</b>		<b>1.4pt</b>			
<b>SPE</b>	8.8	15.4	24.3	17.1	21.4	62.8	18.8	19.5	37.5*	38.3	14.0	57.9%	0.8	2.3%		
<b>GA</b>	0.2	0.4	0.6	0.4	0.5	1.6	0.6	0.9	1.0*	1.6	0.9	143.1%	0.6	62.4%		
<b>FT</b>	0.2	(0)	0.1	(0.3)	0.7	0.5	(0.8)	(0.2)	(1.0)*	(1.0)	(1.2)	-	(0)	-		
<b>PE</b>	0.2	0.7	0.9	0.6	0.5	2.0	0.4	1.1	1.0*	1.5	0.6	68.2%	0.5	58.7%		
<b>Others</b>	(0.8)	(1.0)	(1.9)	(1.7)	(2.1)	(5.8)	(1.2)	(1.0)	(4.0)*	(2.3)	(0.3)	-	1.6	-		
<b>Ordinary income</b>	<b>8.6</b>	<b>15.1</b>	<b>23.7</b>	<b>16.1</b>	<b>19.5</b>	<b>59.4</b>	<b>18.2</b>	<b>20.4</b>	<b>33.5</b>	<b>38.6</b>	<b>14.8</b>	<b>62.6%</b>	<b>5.1</b>	<b>15.5%</b>		
<b>Profit attributable to owners of parent</b>	<b>6.0</b>	<b>11.5</b>	<b>17.6</b>	<b>12.0</b>	<b>15.8</b>	<b>45.4</b>	<b>16.0</b>	<b>13.5</b>	<b>26.0</b>	<b>29.6</b>	<b>12.0</b>	<b>68.6%</b>	<b>3.6</b>	<b>14.2%</b>		

■ SPE: Semiconductor Production Equipment Business    ■ GA: Graphic Arts Equipment Business  
■ FT: Display Production Equipment and Coater Business    ■ PE: PCB-related Equipment Business

\* Forecast operating income by segment: approximate numbers per ¥0.5 bn

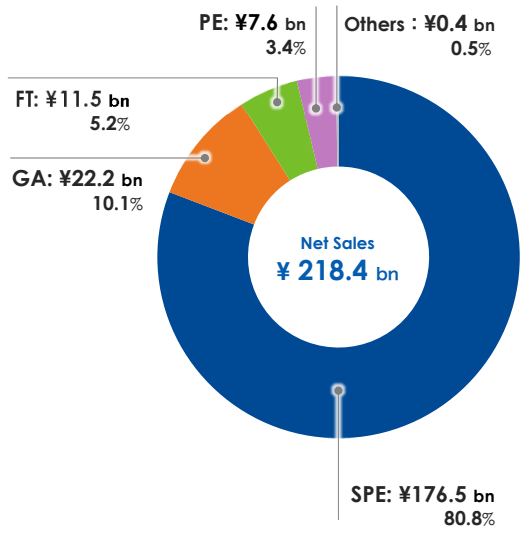
# FY2023/03 1H Business Results

By Segment

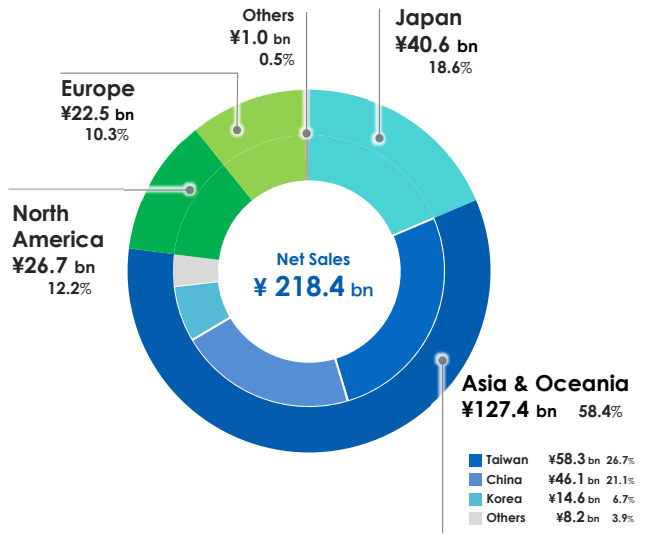
		FY2022/03			FY2023/03		
		1Q	2Q	1H	1Q	2Q	1H
SPE	Sales of foundry and logic increased, while sales of memory decreased. Sales increased in Taiwan and Europe	Net sales	59.7	81.6	141.4	84.6	176.5
	Significant increase in Taiwan	OP (to net sales ratio)	8.8 14.9%	15.4 18.9%	24.3 17.2%	18.8 22.3%	38.3 21.7%
GA	Sales of POD and other equipment increased as well as recurring business (RB) increased. Sales and profits increased, benefiting from the positive impact of foreign exchange rates	Net sales	9.6	11.2	20.9	10.5	22.2
	Sales of RB remains steady at a high level, benefiting from the positive impact of foreign exchange rates	OP (to net sales ratio)	0.2 2.7%	0.4 3.6%	0.6 3.2%	0.6 6.4%	1.6 7.3%
FT	Both sales and profits declined due mainly to the impact of the Shanghai lockdown	Net sales	10.2	7.2	17.5	3.0	11.5
	Sales recovered; deficit decreased	OP (to net sales ratio)	0.2 2.2%	(0) -0.9%	0.1 0.9%	(0.8) -27.0%	(1.0) -9.4%
PE	Increased demand for data centers led to an increase in both direct imaging system sales and profits. Sales and profits increased, benefiting from the positive impact of foreign exchange rates	Net sales	2.3	3.4	5.8	3.3	7.6
	Profit margin increased significantly, hit record highs as a quarter results, benefiting from the positive impact of foreign exchange rates	OP (to net sales ratio)	0.2 9.0%	0.7 21.0%	0.9 16.2%	0.4 14.0%	1.5 20.8%

# FY2023/03 1H Business Results

## Sales by Segment



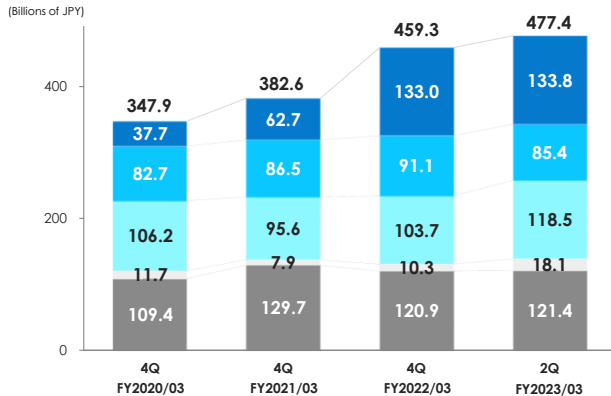
## Sales by Region



## Financial Situation: B/S

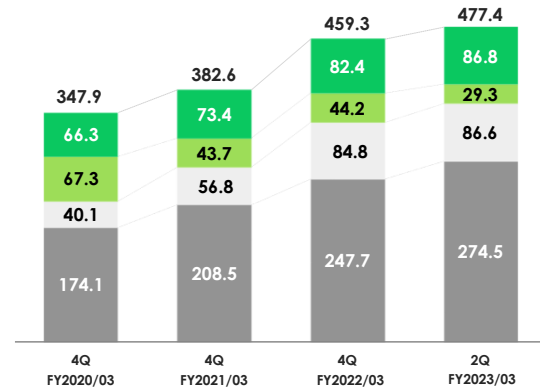
### Assets

■ Cash & time deposits
 ■ Notes & accounts receivable
 ■ Inventories
 ■ Other current asset
 ■ Non-current asset



### Liabilities & Net Assets

■ Notes & accounts payable
 ■ Interest-bearing debt
 ■ Other liabilities
 ■ Net assets



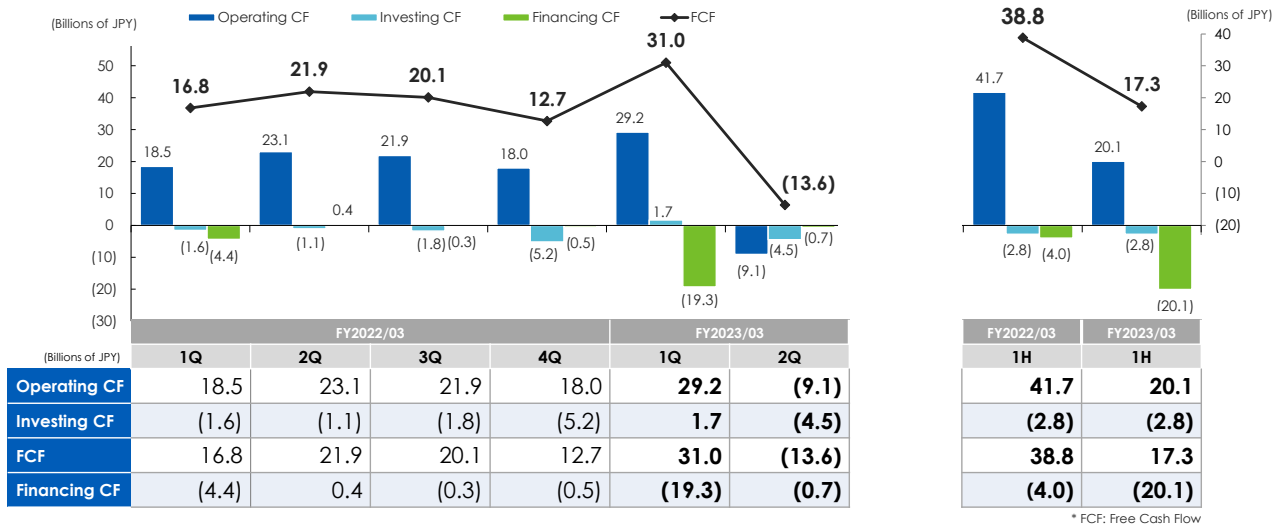
■ **Equity ratio: 57.5% (FY2023/03 2Q)**

■ **Net cash of ¥104.5 bn**

- Total assets stood at ¥477.4 bn.
- Assets:
  - Assets stood at ¥477.4 bn, an increase of ¥18.1 bn, or 3.9%, compared with March 31, 2022.  
This was largely due to an increase in inventories and other current assets, despite a decrease in notes and accounts receivable including electronically recorded monetary claims.
- Total liabilities and total net assets:
  - Total liabilities amounted to ¥202.8 bn, down ¥8.6 bn, or 4.1% from March 31, 2022.  
This was mainly attributable to a decrease in convertible bond-type bonds with share acquisition rights, despite an increase in notes and accounts payable including electronically recorded obligations and income taxes payable.
  - Total net assets amounted to ¥274.5 bn, up ¥26.8 bn, or 10.8%, from March 31, 2022.  
This was mainly attributable to the recording of quarterly profit attributable to owners of parent, the conversion of convertible bond-type bonds with share acquisition rights causing both an increase in capital surplus and a decrease in treasury stock, despite payment of cash dividends.
- As a result, the equity ratio as of September 30, 2022 stood at 57.5%.



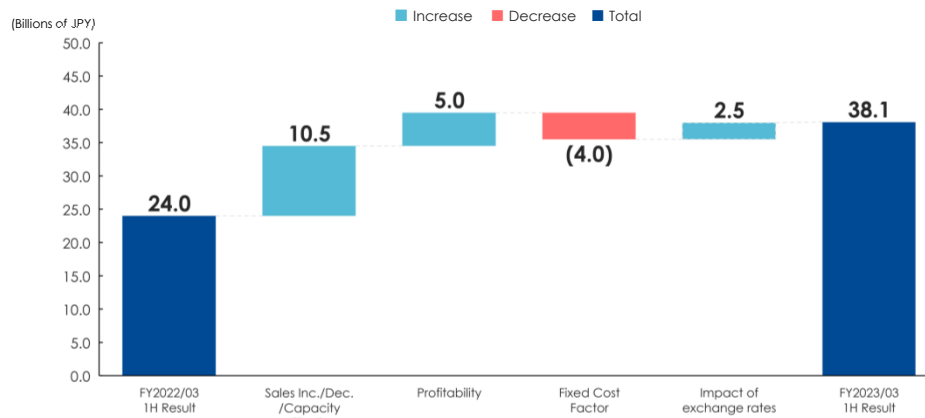
# Financial Situation: Cash Flows



- 1H Operating CF decreased YoY due to an increase in inventories and an increase in payment of Income taxes
- 2Q Operating CF temporarily deteriorated mainly due to payments of withholding tax on dividends from subsidiaries

# Analysis of Comparison in Operating Income

## FY2022/03 1H Result vs FY2023/03 1H Result



\* Operating Income Factor: approximate numbers per 0.5 bn

- >> Operating Income improved due to increased sales/capacity utilization and improved profitability mainly in SPE
- >> Fixed costs increased due mainly to higher personnel expenses, performance-linked remuneration and R&D expenses, etc. in SPE for further growth
- >> Exchange rates affect SPE, GA, PE

# Business Environment and Forecast

October 28, 2022

---

**SCREEN Holdings Co., Ltd.**

CEO, President

**Toshio Hiroe**

## Business Environment and Forecast

### Business Environment

- **SPE:**
  - Demands remain strong, mainly in foundry and logic, despite of a decrease in memory
  - Record highs in sales, operating income and OP margin as 1H results
  - 2Q orders at the same high level as in 1Q
- **GA and PE: Steady in both sales and profits, benefiting from the impact of foreign exchange rates as well**

### Full Year Business Forecast

- **Full-year forecast unchanged**
  - Both sales and profits are expected to update record highs
  - Remain steady in 1H; risk factors factored in 2H
- **In order to achieve sustainable growth, capital expenditure, R&D expenses and depreciation and amortization all reach record highs**

## Market Trend and Outlook

SPE

- **WFE: Expect around +10% YoY growth in CY2022, around \$100 bn**
  - Foundries and logic : Investment remains firm though some adjustment made in investment priorities for each technology node
  - Memory : Investment slowdowns started, and geopolitical issue also become apparent

- **Trends by applications**

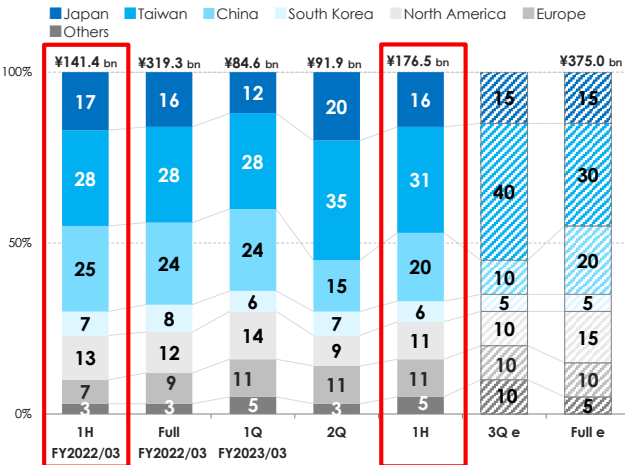
<b>Foundry</b>	Despite a slowdown in end-user demand, investment continues with a view to medium- to long-term expansion of the semiconductor market
<b>Logic</b>	Solid investment continues, but some investment timing adjustments were made
<b>Memory</b>	Not only the slowdown in investment, but also the geopolitical impact become apparent. Need to closely monitor the timing of the market recovery
<b>Imaging Device</b>	Investments in Japan and Asia remain strong
<b>Power Device</b>	Investments, mainly in major European companies, as well as in Japan and Asian area, remain firm
<b>Chinese market</b>	Investment in mature node semiconductors and memories still active, but need to watch for impact of future export restrictions
<b>Others</b>	Solid investments in analog, sensors, optics, etc. continue

- ▶ **Providing a variety of solutions not only for leading-edge node where needs for cleaning increasing due to miniaturization but also for volume zones to mature nodes**  
 >> **We will reinforce development and production structure to fulfill supply responsibility**

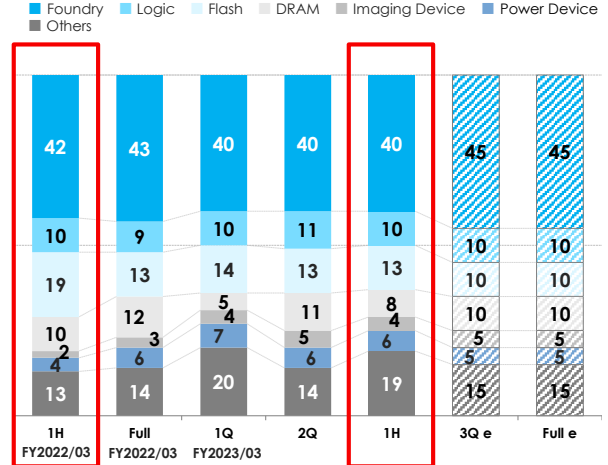
# Composition of Sales

By Region (Consolidated) / By Application Device (Nonconsolidated)

## By Region -destination-



## By Application Device



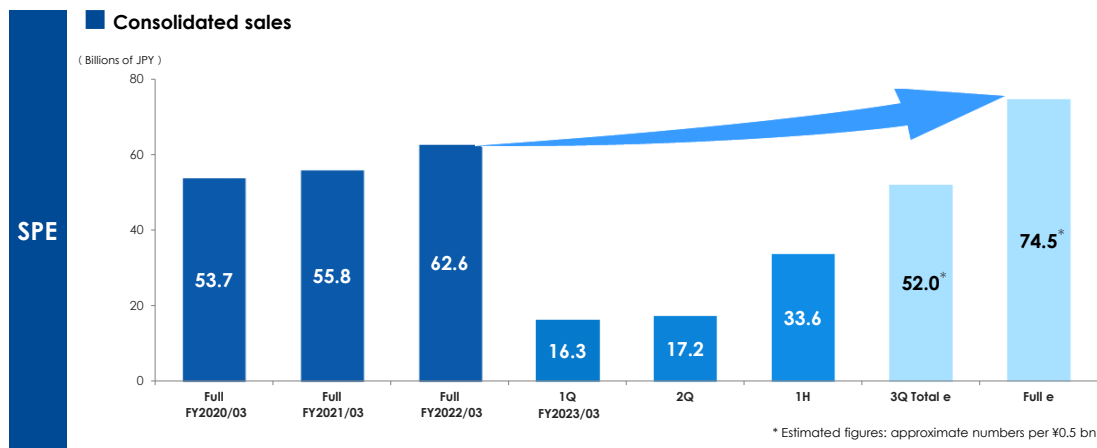
\*Estimated ratio: approximate numbers per 5%

- By region: (1H YoY) Sales increased in Taiwan and Europe. (QoQ) : Sales increased largely in Japan and Taiwan
- By application: (1H YoY) Sales increased significantly in others, while increased in power device and imaging device. (QoQ) Sales increased in DRAM

# Business Situation

SPE

## After sales services



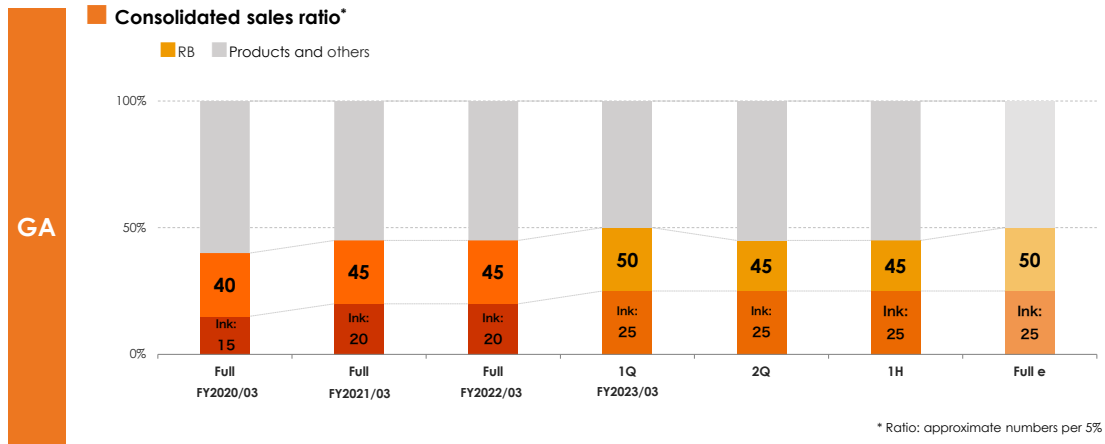
■ 2Q: Increased compare with 1Q

■ Going forward: Increase in full-year forecast. Expect to contribute to further improvement in OP margin from increasing needs for maintenance and modification for newly delivered equipment

# Business Situation

GA

Recurring business remains stable at a high level. Profits are recovering

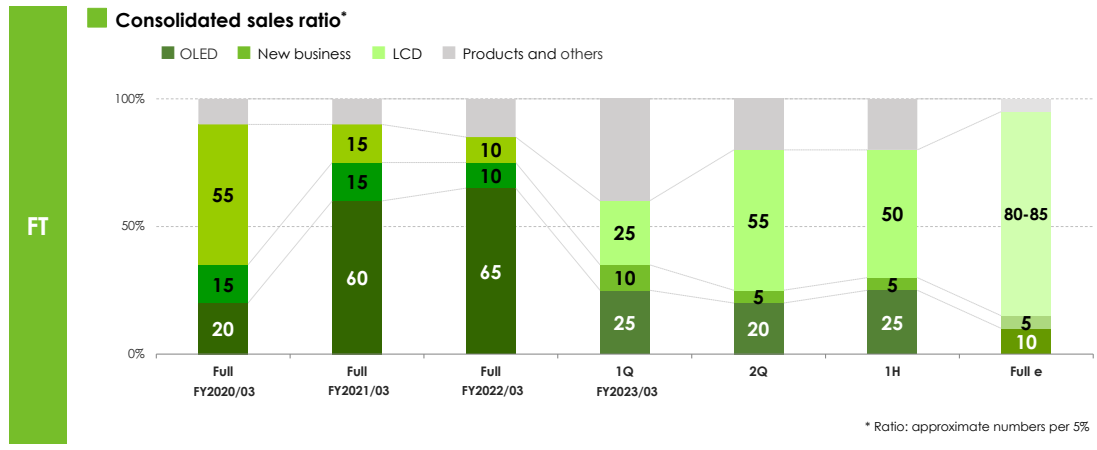


- Recurring business (RB), especially ink sales, remains firm
- Response to growing demand for POD in North America and Europe
- OP margin in 1H of 7.3% and expect to maintain the same level for the full year



# Business Situation

Display market uncertain, sales composition is centered on LCDs

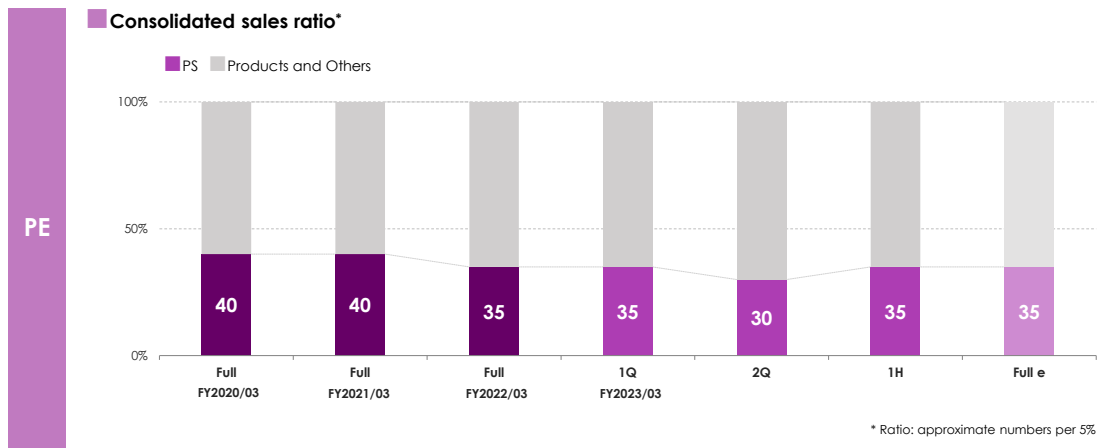


- 2Q: sales recovered compared to 1Q as the impact of the Shanghai lockdown decreased
- In the current fiscal year, the display market is expected to be in an uncertain environment. Sales come mainly from LCD (LTPS)
- Targeting business portfolio transformation aim for future growth in new energy business, such as in hydrogen-related and fuel cell-related fields

# Business Situation

PE

## After sales services is level off



- Demand is still robust for data centers
- Continued strengthening of new product development for further growth
- Expect a high level of OP margin this fiscal year

## FY2023/03 Business Forecast (as of October 28, 2022)

\*    is a record high

	FY2022/03	FY2023/03					
	Full	1H		2H		Full	
		July Forecast	October Result	July Forecast	October Forecast	July Forecast	October Forecast
<b>Net sales</b>	<b>411.8</b>	<b>215.0</b>	<b>218.4</b>	<b>245.0</b>	<b>241.6</b>	<b>460.0</b>	<b>460.0</b>
SPE	319.3	177.5	176.5	197.5	198.5	375.0	375.0
GA	43.3	19.5	22.2	20.5	18.8	40.0	41.0
FT	33.2	11.0	11.5	17.5	16.5	28.5	28.0
PE	13.3	6.0	7.6	8.0	7.4	14.0	15.0
Others	2.5	1.0	0.4	1.5	0.6	2.5	1.0
<b>Operating income (to net sales ratio)</b>	<b>61.2</b> <b>14.9%</b>	<b>34.5</b> <b>16.0%</b>	<b>38.1</b> <b>17.5%</b>	<b>40.0</b> <b>16.3%</b>	<b>36.4</b> <b>15.0%</b>	<b>74.5</b> <b>16.2%</b>	<b>74.5</b> <b>16.2%</b>
SPE	62.8	37.5*	38.3	41.5*	40.7	79.0*	79.0*
GA	1.6	1.0*	1.6	1.5*	1.4	2.5*	3.0*
FT	0.5	(1.0)*	(1.0)	0*	(1.0)	(1.0)*	(2.0)*
PE	2.0	1.0*	1.5	1.0*	1.0	2.0*	2.5*
Others	(5.8)	(4.0)*	(2.3)	(4.0)*	(5.7)	(8.0)*	(8.0)*
<b>Ordinary Income</b>	<b>59.4</b>	<b>33.5</b>	<b>38.6</b>	<b>39.5</b>	<b>34.4</b>	<b>73.0</b>	<b>73.0</b>
<b>Profit attributable to owners of Parent</b>	<b>45.4</b>	<b>26.0</b>	<b>29.6</b>	<b>24.0</b>	<b>20.4</b>	<b>50.0</b>	<b>50.0</b>

Notes: Assumed Exchange Rate in FY2023/03 >> USD1 = ¥140, EUR1 = ¥140

\* Forecast operating income by segment: approximate numbers per ¥0.5 bn

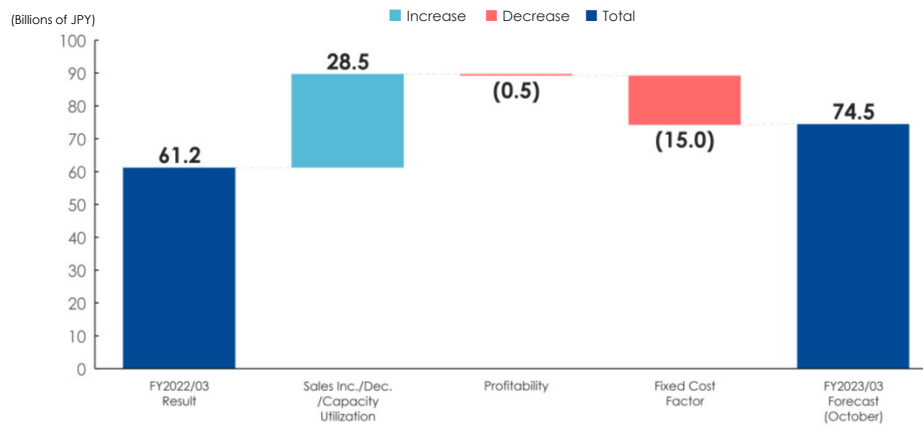
Assumed exchange rate sensitivity in FY2023/03 (Full year Operating income base) >> To USD: ¥140 million, To EUR: ¥30 million

### Company-wide, FY2023/03 Full Term

- Net sales is ¥460.0 bn, operating income is ¥74.5 bn, ordinary income is ¥73.0 bn and profit attributable to owners of parent is ¥50.0 bn, expected to be the highest on record
- Due to the expanding impact of soaring raw material prices and the recent depreciation of the yen due to inflations, the cost of materials will inevitably increase. As the result, we are cautious about 2H forecast

# Analysis of Comparison in Operating Income

## FY2022/03 Result vs FY2023/03 Forecast in October



- >> Changes in sales/capacity utilization mainly due to SPE
- >> Negative profitability mainly due to FT
- >> Fixed costs increased due mainly to higher personnel expenses, performance-linked remuneration and R&D expenses, etc. in SPE for further growth

## Business Forecast for FY2023/03

Others

(Billions of JPY)	1H Result (FY2022/03 Result)	2H e (FY2022/03 Result)	FY2023/03 e (FY2022/03 Result)
<b>Depreciation and amortization</b>	<b>4.3</b> (4.7)	<b>5.7</b> (4.7)	<b>10.0</b> (9.5)
<b>Capital expenditures*<sup>1</sup></b>	<b>8.9</b> (4.1)	<b>22.1</b> (9.2)	<b>31.0</b> (13.4)
<b>R&amp;D expenses*<sup>2</sup></b>	<b>11.9</b> (10.5)	<b>17.1</b> (13.5)	<b>29.0</b> (24.0)

\*1: It includes investment in strengthening SPE production and service systems

\*2: They are used to strengthen development in HD and aim to develop new products in LS, AI, ADPKG, and hydrogen-related fields

### >> Cash dividend (Forecast)

- Dividends will rise due to a significant increase in profit attributable to owners of parent (May forecast unchanged)
- Returning profits to shareholders in line with the target of maintaining a total consolidated shareholder return ratio of 30% or above as set forth in the medium-term management plan

(JPY)	FY2023/03 e
<b>Cash dividends per share</b>	<b>322</b>

## Recent Group News (Excerpt from our website: July 28, 2022, to October 28, 2022)

HD

- Selected as one of the 200 Asia-Pacific Climate Leaders 2022 (July 28, 2022)
- Clarifies the mechanism behind the collapse of nano structures during the cleaning of semiconductors  
-Clarifying the process of collapse will contribute to further miniaturized and highly concentrated semiconductors- (July 29, 2022)
- Hiroshima University and SCREEN complete clinical trial of "OrganPocket," a medical device for kidney transplantation to develop a medical device that supports more reliable kidney transplantation (August 9, 2022)
- Selected as a cooperative operator for the Supply Chain Decarbonization Support Project run by Kyoto Prefecture (September 1, 2022)
- Provides additional funding to the AI development-related venture Laboro.AI (September 14, 2022)

SPE

- Become first in semiconductor production equipment industry to introduce zeroboard service for profiling CO2 emissions (August 31, 2022)
- Joins the Semiconductor Climate Consortium (SCC) (October 24, 2022)

FT

- Receives Excellent Equipment Partners Award from AUO (September 22, 2022)
- Launches OLED panel production systems for 8th generation substrates  
– SK-E2200G and SK-E2200H join E series lineup – (October 18, 2022)

## ESG-Related Initiatives

### E (Environmental)

- SCREEN Becomes First in Semiconductor Production Equipment Industry to Introduce zeroboard Service for Profiling CO2 Emissions
  - Promote the development of more effective low-carbon technologies and provide the market with cutting-edge environmental performance (Turn to Slide 27 for details)
- Selected as a cooperative operator for the Supply Chain Decarbonization Support Project run by Kyoto Prefecture

### S (Social)

- Implementing of the 4th workplace vaccination of COVID-19 compatible to Omicron variants (late October to mid-December, at Head Office and Hikone)
- Strengthening the foundation of health and productivity management
  - Health promotion seminars (2nd session in July and 3rd in September, for domestic Group employees)
  - Hold a lively health promotion campaign (November, for domestic Group employees)

### G (Governance)

- Strengthening shareholders relations (engagement) activity based on ESG
  - >> For dialogue tools, we used Annual Report 2022 (published in August)
  - >> Continuously focus on shareholders relations / ESG engagement. Conducting dialogue with voting representatives and ESG investment representatives globally
- Continuously selected for ESG-related stock indices
  - >> SCREEN Holdings Co., Ltd. is a constituent of the FTSE4Good Index Series (since 2014), the FTSE Blossom Japan Index (since 2017), FTSE Blossom Japan Sector Relative Index (since 2022) and the SOMPO Sustainability Index (since 2018).



## Topics>>

### Annual Report 2022 released in August, 2022



#### ◆ Theme: We have the power to change the world

#### ◆ Structure

#### A special emphasis placed on creating coherence and narrative relevance with the value creation process

>> Starting with a reaffirmation of the Group's purpose, the report details the components of our value creation processes with a focus on where the Group should be in the next 10 years.

<https://www.screen.co.jp/en/ir/annual>



#### ◆ Revised Points

- Continuing from the previous year, aimed for dialog tools for IR and SR interviews
- Enhanced the quality of interview articles with CEO and CFO (referencing the Q&A sessions with investors)
- Revised the value creation process (elements of which are explained in detail on another page)
  - >> In particular, posted new explanations of the concepts of portfolio management, innovation management, and SCREEN Value
- Clarified the deployment of core technologies into products
- Identified materiality by board resolution
- Reported progress on the medium-term management plan
- Regarding the creation of value through business, posted interview articles about sales and *Gemba KPI* examples, and enriched information about new business
- Enhanced disclosure of non-financial information (Environmental: initiatives based on TCFD recommendations, Social: enhancing human capital, Governance: outside director roundtable, etc.)



## SCREEN Launches OLED Panel Production Systems for 8th Generation Substrates

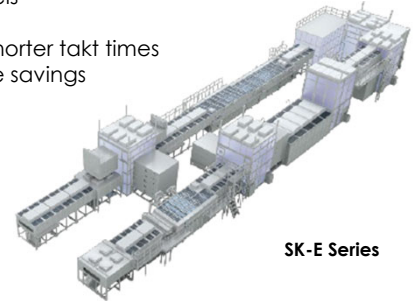
– SK-E2200G and SK-E2200H Join E Series Lineup – released on October 18, 2022

- Two models have been developed for 8th generation substrates and added to the "E Series\*1" lineup
  - SK-E2200G: Coater/developer used in the formation process for the backplanes
  - SK-E2200H: Coater/developer used in the formation process for the touch sensor panels
- Compared to conventional systems, productivity improved by around 10%\*2 by offering shorter takt times  
Overall length around 30%\*1 shorter than conventional systems, providing significant space savings
- SK-E2200G designed with a "1 by 2" configuration \*3, connecting to two exposure systems
- Launched in October 2022

\*1 A models deliver industry-leading productivity with markedly improved yield rates, which can resolve various issues that occur during the manufacturing process for OLED panels, including the generation of organic contaminants, minute particles and static electricity.

\*2 Comparison with SCREEN FT's 8th generation model, the SK-2200G

\*3 A production line that previously included two coater/developers and two exposure systems can now be configured with only a single coater/developer, providing a major space saving. Multi model on glass (MMG) processing is also supported, enabling the production of panels of different sizes from the same substrate. In addition, exposure processing can be performed for a time longer than the line takt by operating two exposure systems in parallel.



SK-E Series

>>Support for 8th generation substrates that can take more panels to meet the growing need for OLED displays  
>>planning further additions to its E series lineup in the future in order to contribute to the reliable production of OLED panels and other high-definition, high-value-added displays

## SCREEN Joins the Semiconductor Climate Consortium (SCC) released on October 24, 2022

Semiconductor Climate Consortium (SCC) is established by SEMI.  
SCREEN Semiconductor Solutions Co., Ltd. (SCREEN SPE) joins as a founding member.

- Promote efforts to create effective semiconductor ecosystems that can help to address climate change issues, though participating in the SCC at a leadership level  
Actively engage in reducing water and chemical consumption used by semiconductor manufacturing equipment
- Collaborate with partners companies participating in SCC to reduce Scope 3\* emissions in our supply chain

\* Scope 3 covers greenhouse gases (CO<sub>2</sub>, etc.) produced by third parties connected to the activities of a business entity. These emissions are not included in Scope 1 or 2, which include outputs produced by the business itself. The categories are defined by the Greenhouse Gas Protocol, an organization that establishes comprehensive global standardized frameworks to measure and manage greenhouse gas emissions.

- SCC: Set an ambitious target of achieving net zero emissions for the semiconductor industry as part of international efforts to keep global temperature rise within 1.5°C compared to pre-industrial levels. Promote progressive climate change measures through collaboration and information sharing



Semiconductor  
Climate Consortium  
FOUNDING MEMBER

>>Promote and contribute to the construction and sustainable development of a decarbonized, recycling-oriented, and nature-harmonious society

## SCREEN Becomes First in Semiconductor Production Equipment Industry to Introduce zeroboard Service for Profiling CO2 Emissions

released on August 31, 2022

To visualize the CO2 emissions and accelerate efforts to reduce environmental impact. Introducing zeroboard, a cloud-based service for calculating and visualizing greenhouse gas emissions to assess the CO2 emissions of each of its products and services.

- **Zeroboard**

- zeroboard is a cloud-based service that enables the calculation and visualization of greenhouse gas emissions produced by a company's activities and those of its supply chain, based on international Greenhouse Gas Protocol standards

- Developed by Zeroboard Inc., marketed and distributed by NAGASE & CO., LTD. (NAGASE)

- **Expanded the scope of CO2 emissions calculation**

- Conventional: Calculation of CO2 emissions related to a portion of the energy used by the equipment

- Currently: Calculation of CO2 emissions from raw material procurement to disposal for all energy used in equipment

>>Develop semiconductor production systems to be more responsive to ecological requirements and provide the industry with cutting-edge environmental performance

## ■ Hiroshima University and SCREEN Complete Clinical Trial of “OrganPocket,” a Medical Device for Kidney Transplantation

### - To Develop a Medical Device That Supports More Reliable Kidney Transplantation - released on August 9, 2022

Hiroshima University and SCREEN have recently completed a clinical trial to examine the safety and usefulness of “OrganPocket,” a medical device for kidney transplantation developed by SCREEN. SCREEN will place the medical device on the market and continue research and development, aiming to expand the intended for use to organs other than kidneys.

- To counteract temperature rise in kidneys during transplantation procedures, a medical device, an “OrganPocket”, has been developed to cover organs temporarily and keep them cool. Made of a special gel material, this thermal isolation bag is a medical instrument shaped like a drawstring pouch bag and wraps an organ to be transplanted, blocking contact heat and physical stimuli. The special material, which is transparent and extremely soft, adheres closely to the kidney to protect it while allowing vascular anastomosis of the blood vessels or the ureter exposed through the product opening.
- Hiroshima A clinical trial has been conducted under the direction of Prof. Hideki Ohdan, Professor of the Department of Gastroenterological and Transplant Surgery, Graduate School of Biomedical and Health Sciences, Hiroshima University. The results indicate that using OrganPocket enables more reliable control of temperature rises.
- This product has been notified to the authority as a medical device, and SCREEN will manufacture and market the product, and is planning to conduct research and development aiming to expand the product’s application to organs other than kidneys.

>>The clinical trial results will be presented at an academic conference by the end of this year  
>>SCREEN will continue to strengthen industrial-academic cooperation through joint research to contribute to the development of transplantation medicine

## Clarified the mechanism behind the collapse of nano structures during the cleaning of semiconductors

Clarifying the process of collapse will contribute to further miniaturized and highly concentrated semiconductors released on July 29, 2022

The research team comprising associate professor Yuki Kimura and others of the Institute of Low Temperature Science at Hokkaido University and SCREEN revealed the process of nano structure collapse during semiconductor cleaning. Establishing the observation method is expected to solve issues in the semiconductor manufacturing process.

- Nano structures collapse during semiconductor cleaning due to the effects of surface tension as liquid evaporates. To isolate the nano structures, we developed a technique in which a concentrated ion beam device is employed to cut off nano structures that form on the surface of semiconductors and then enclosing them inside testing vessels for liquid observation with 2-propanol (IPA), which is mainly used in cleaning processes. This enabled us to observe the process of nano structure collapse using a transmission electron microscope (TEM).

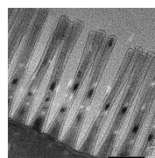


LC-TEM

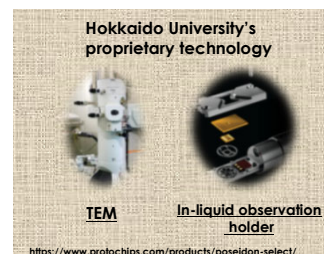
SCREEN

Substrate processing technology

Substrate observation technology



Cross-section of Si pattern after IPA drying (TEM image)



Hokkaido University's proprietary technology

TEM

In-liquid observation holder

<https://www.protochips.com/products/poseidon-select/>

>>Deepening the understanding of drying behavior and seeking sophistication of SCREEN's drying technology  
>>These research results were published in the ACS Applied Nano Materials journal released on June 22 (Wed.), 2022

## Appendix>> Business Situation

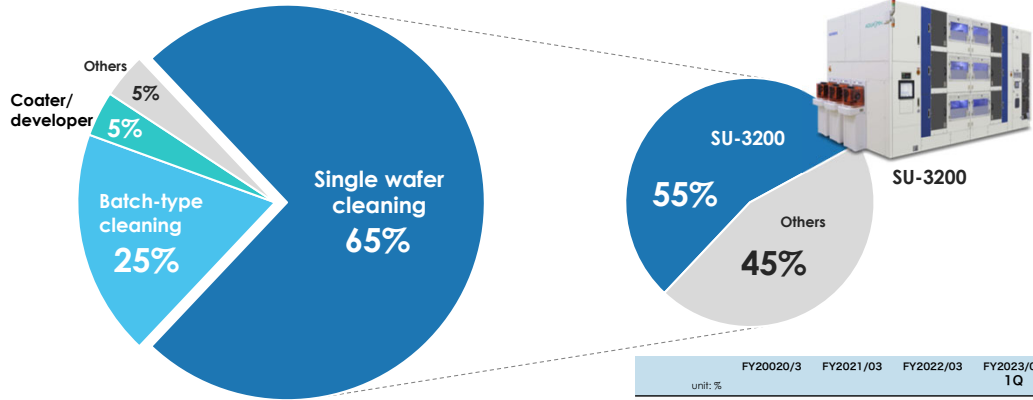
SPE

Comparison (YoY)	FY2022/03	FY2023/03	Difference	
	1H	1H		
(Billions of JPY)				
<b>Net sales</b>	141.4	<b>176.5</b>	<b>35.1</b>	<b>24.8%</b>
<b>Operating income (to net sales ratio)</b>	24.3 17.2%	<b>38.3</b> 21.7%	<b>14.0</b>	<b>57.9%</b> 4.6pt

Comparison (QoQ)	FY2023/03	FY2023/03	Difference	
	1Q	2Q		
(Billions of JPY)				
<b>Net sales</b>	84.6	<b>91.9</b>	<b>7.2</b>	<b>8.6%</b>
<b>Operating income (to net sales ratio)</b>	18.8 22.3%	<b>19.5</b> 21.3%	<b>0.7</b>	<b>3.8%</b> -1.0pt

# Appendix>> Composition of Sales (Nonconsolidated)

## Total Sales Ratio of Equipment by Product in FY2023/03 1H



	FY2020/3	FY2021/03	FY2022/03	FY2023/03		
unit: %				1Q	2Q	1H
Single wafer cleaning	65	70	70	65	<b>65</b>	<b>65</b>
Batch-type cleaning	25	25	25	30	<b>25</b>	<b>25</b>
Coater/developer	5	5	5	5	<b>5</b>	<b>5</b>
Others	5	0	0	0	<b>5</b>	<b>5</b>

\* Ratio: approximate numbers per 5%

## Appendix>> Business Situation

GA

Comparison (YoY)	FY2022/03	FY2023/03	Difference	
	1H	1H		
(Billions of JPY)				
Net sales	20.9	<b>22.2</b>	<b>1.3</b>	<b>6.2%</b>
Operating income (to net sales ratio)	0.6 3.2%	<b>1.6</b> <b>7.3%</b>	<b>0.9</b>	<b>143.1%</b> <b>4.1pt</b>

Comparison (QoQ)	FY2023/03	FY2023/03	Difference	
	1Q	2Q		
(Billions of JPY)				
Net sales	10.5	<b>11.6</b>	<b>1.1</b>	<b>10.5%</b>
Operating income (to net sales ratio)	0.6 6.4%	<b>0.9</b> <b>8.2%</b>	<b>0.2</b>	<b>41.8%</b> <b>1.8pt</b>



## Appendix>> Business Situation

FT

Comparison (YoY)	FY2022/03	FY2023/03	Difference	
	1H	1H		
(Billions of JPY)				
Net sales	17.5	11.5	(6.0)	-34.4%
Operating income (to net sales ratio)	0.1 0.9%	(1.0) -9.4%	(1.2)	- -10.4pt

Comparison (QoQ)	FY2023/03	FY2023/03	Difference	
	1Q	2Q		
(Billions of JPY)				
Net sales	3.0	8.4	5.4	177.1%
Operating income (to net sales ratio)	(0.8) -27.0%	(0.2) -3.1%	0.5	- 23.9pt

## Appendix>> Business Situation

PE

Comparison (YoY)	FY2022/03	FY2023/03	Difference	
	1H	1H		
(Billions of JPY)				
Net sales	5.8	7.6	1.7	30.5%
Operating income (to net sales ratio)	0.9 16.2%	1.5 20.8%	0.6	68.2% 4.7pt

Comparison (QoQ)	FY2023/03	FY2023/03	Difference	
	1Q	2Q		
(Billions of JPY)				
Net sales	3.3	4.2	0.9	27.5%
Operating income (to net sales ratio)	0.4 14.0%	1.1 26.2%	0.6	138.5% 12.2pt

## Appendix>> Changes in Main Index

(Billions of JPY)	FY2018/03	FY2019/03	FY2020/03	FY2021/03	FY2022/03	FY2023/03 Forecast
<b>Net sales</b>	339.3	364.2	323.2	320.3	411.8	<b>460.0</b>
<b>Operating income</b>	42.7	29.6	12.5	24.4	61.2	<b>74.5</b>
<b>Operating income ratio (%)</b>	12.6	8.1	3.9	7.6	14.9	<b>16.2</b>
<b>Total assets</b>	365.8	380.9	347.9	382.6	459.3	-
<b>Equity</b>	170.8	179.1	173.9	208.3	247.7	-
<b>Equity ratio (%)</b>	46.7	47.0	50.0	54.5	53.9	-
<b>ROE (%)</b>	18.2	10.3	2.8	7.9	19.9	-
<b>Depreciation and amortization</b>	5.7	6.8	8.8	9.6	9.5	<b>10.0</b>
<b>Capital expenditures</b>	14.4	24.0	7.9	7.8	13.4	<b>31.0</b>
<b>R&amp;D expenses</b>	20.8	22.8	21.5	21.5	24.0	<b>29.0</b>
<b>EPS (JPY)</b>	608.62	387.10	107.37	325.21	976.55	<b>1,057.84</b>
<b>Cash Dividends (JPY)</b>	110	97	30	90	293	<b>322</b>



Innovation for a Sustainable World