

Japan Display Inc.

FY24/3 H1 Corporate Presentation

November 10, 2023





PersonalTech For A Better World



FY24/3 H1 Earnings Overview



Outperformed Forecast on Positive FX, Higher Fab Productivity, Cost Reductions, and Breakthrough to OLED Profitability

JPY vs. Plan **Sales** 119.9B +8%

Core businesses (Automotive, Smartwatch/VR) up, while non-core business (LCD smartphone) down on strategic downsizing to focus resources on core business growth

vs. Plan **EBITDA** -18.1B JPY +8.0B

Operating Profit -21.4B JPY +7.7B

Net Income -28.7B JPY +3.5B

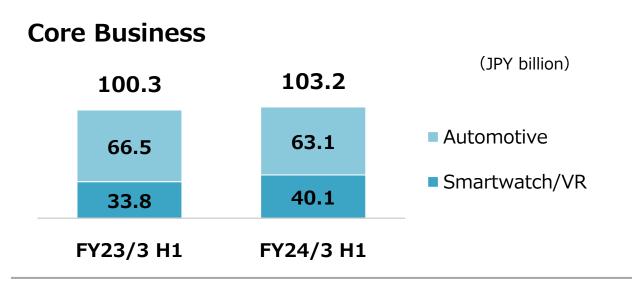
Outperformed forecast on positive FX, higher fab productivity, cost reductions, and breakthrough to OLED profitability

Note: To make them easier to understand, JDI has changed segment names from FY24/3 Q2 as follows: "Mobile" to "LCD Smartphone" and "Non-Mobile" to "Smartwatch/VR." Please note that this change is only a name change and does not impact the segment definitions themselves..

FY24/3 H1 Sales by Product Area



Steady Growth of Smartwatch/VR, Automotive Temporarily Down on Withdrawals from Unprofitable Products, and Strategic Downsizing of Non-Core LCD Smartphone Business

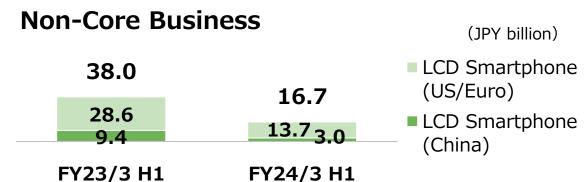


Automotive (YoY -5.2%)

Sales temporarily down due to withdrawals from unprofitable products, but the longer-term growth trend continues

Smartwatch/VR (YoY +18.6%)

Increase in smartwatch OLED & VR high-resolution LCD shipments

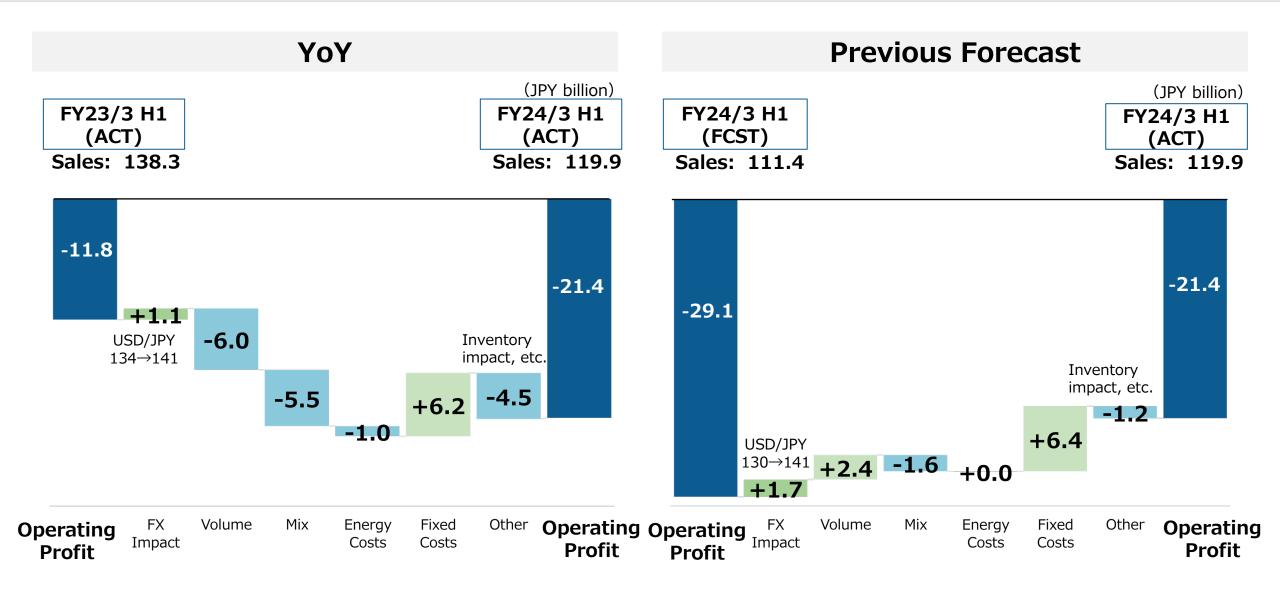


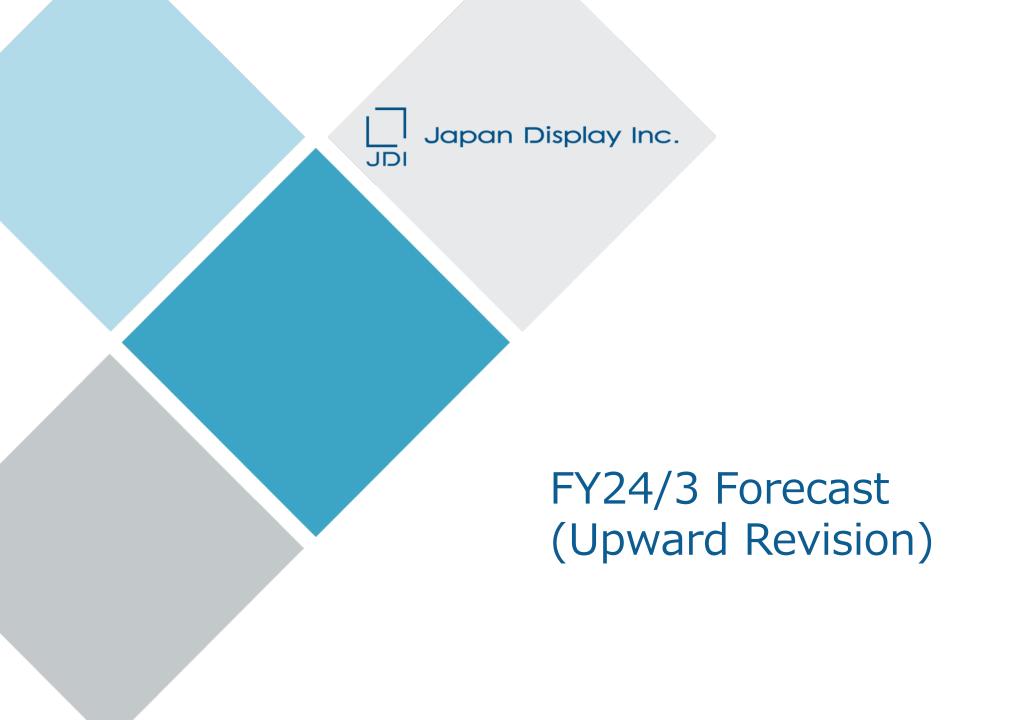
LCD Smartphone (YoY -56.0%)

Strategically exiting unprofitable non-core business to focus resources on core business growth

FY24/3 H1 Operating Profit Breakdown







FY24/3 Forecast (Upward Revision)



Revised Up on Positive FX, Higher Fab Productivity, Cost Reductions, and Breakthrough to OLED Profitability Reduced VR Outlook – Will Update Post-Xmas Sales Season

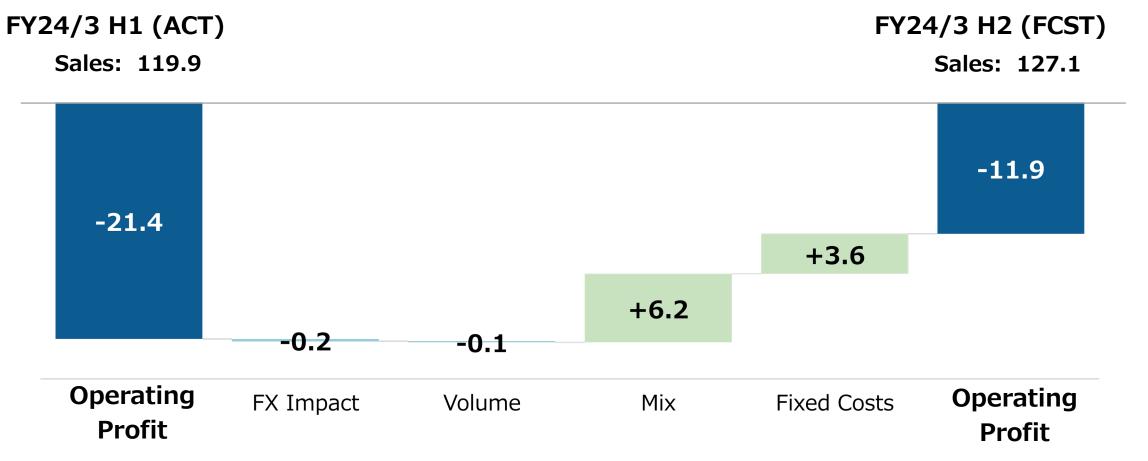
(JPY billion)	FY24/3				
	H1	H2	Full-Year	Full-Year	
	Actual	New FCST	New FCST	vs. Prev FCST	
Sales	119.9	127.1	247.0	+7.0	
Automotive	63.1	69.8	132.9	+6.6	
Smartwatch/VR	40.1	39.0	79.1	-15.4	
LCD Smartphone (US/Euro)	13.7	15.4	29.1	+15.1	
LCD Smartphone (China)	3.0	2.9	5.9	+0.7	
EBITDA	-18.1	-9.4	-27.5	+6.5	
Operating Profit	-21.4	-12.6	-34.0	+6.4	
Recurring Profit	-19.1	-13.4	-32.5	+10.7	
Net Income	-28.7	-15.3	-44.0	+3.8	

FY24/3 H2 Operating Profit Breakdown



Losses to Nearly Halve On Back of Product Mix Improvements & Fixed Cost Reductions

(JPY billion)

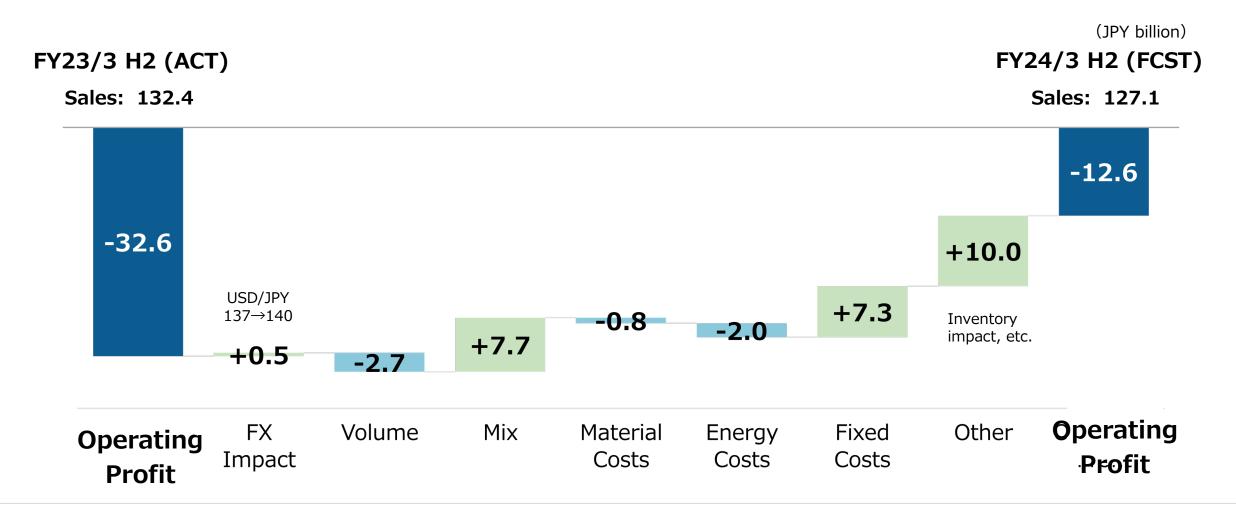


Note: JPY-0.2billion of FX impact is due to a change in FY24/3 H2 FX assumption from JPY/USD 141 to 140.

FY24/3 H2 Operating Profit Breakdown



Losses To Shrink by c. 60% on Positive FX, Higher Fab Productivity, Fixed Cost Reductions, and Breakthrough to OLED Profitability





Overview (1)



- Executing METAGROWTH 2026 Growth Strategy to Deliver Total Transformation of JDI Business Model & Earnings Foundation, while Developing New Global Display Ecosystem Based on JDI Global No.1 Technology Set
- Production End at Older G4 Tottori Fab to Reduce Fixed Costs & Drive Higher Earnings (Announcement: Aug 2, 2023, Production End: March 2025)

Overview (2)



- Late Entrant to OLED, But Have Leveraged JDI's Deep Display Expertise to Overtake Peers & Build Competitive Advantage. OLED Business Has Broken Through to Profitability. Immense Customer Demand: Forecast FY24/3 OLED Sales +74% YOY
- eLEAP, JDI's NextGen OLED, Delivers Unprecedented Cost-Performance & Customer Value and Will Further Drive JDI's Growth

Overview (3)



- Signed MOU for Large-Scale eLEAP Project in Wuhu, China –
 Will Expand eLEAP Production Capacity by >50X
- Switched HKC Alliance Discussions from eLEAP to Automobiles
- Accelerating METAGROWTH 2026 with Acquisition of JOLED Engineering Talent

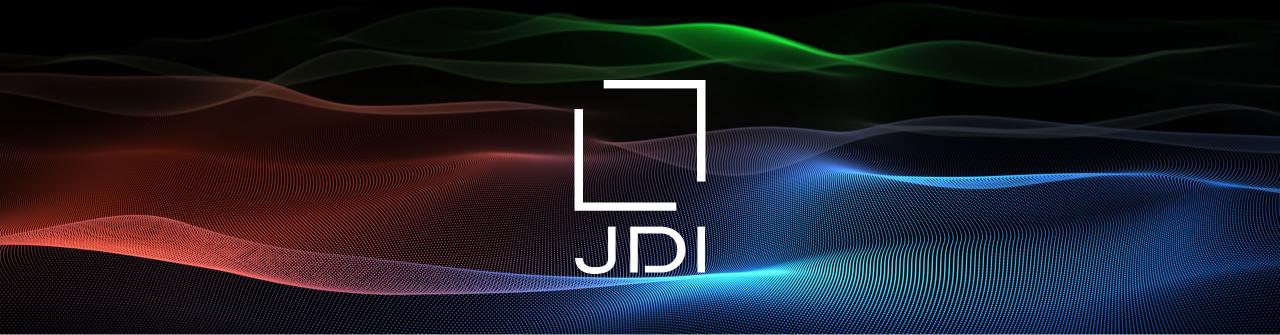
Overview (4)



- Continued Focus on Sustainability & Newly Announced Support for TCFD
- Moving Forward with <u>CHINA + INDIA</u> Fab Strategy, Building Local Production & Presence in Massive, Growing Markets

Global No. 1 Technology Leadership to Best Serve Customers and Deliver PersonalTech For A Better World

METAGROWTH in Value Creation



METAGROWTH 2026 Core Strategy



Displays are a foundational technology for modern society JDI has unmatched technological capabilities to deliver customer and social value and improve people's lives



FY24/3 Strategic Initiatives





Build a New Global Display Ecosystem based on JDI's Global No.1 Technology Set



- Create unprecedented customer value through eLEAP and other NextGen tech
- Cement JDI's unique competitive advantages
- Transform business model & drastically improve profitability

2



Dramatically Strengthen Competitiveness via Fab Optimization

- Production end at Higashiura Fab (G3.5 LCD) & opening of Higashiura Engineering Center
- Production end at Tottori Fab (G4 LCD) & continuation as strategic operating center
- Fixed cost reductions & shift to asset-light strategy drive higher profitability & capital efficiency

FY24/3 Strategic Initiatives



3

Technology Revolution: Developing & Commercializing JDI's Global No.1 Technology Set



- NextGen OLED eLEAP
- High performance, ultra-low power consumption, low-cost backplane technology HMO
- Smart Lighting LumiFree
- Other new technologies, products, & businesses under development

4

Significant Strengthening of Financial Position & Acceleration of METAGROWTH 2026



- Dramatically strengthened balance sheet with support from Ichigo & INCJ
- Accelerate METAGROWTH 2026 on back of newly strengthened financial position
- Push through current business environment & bridge to NextGen tech

FY24/3 Strategic Initiatives



5

MOU with Wuhu Economic and Technical Development Zone on Large-Scale eLEAP Project (Sep 2023)



- Final agreement to be concluded by December-end 2023
- Will increase JDI's eLEAP production capacity by >50X

Dramatically Strengthening Competitiveness via Fab Optimization



Increasing Core Profitability through Fixed Cost Reductions & Asset-Light Execution

Japan

- Mobara Fab (G6, Chiba)
- Ishikawa Fab (G4.5, Ishikawa)
- Tottori Fab (G4, Tottori)
- Hakusan Fab (G6, Ishikawa)
- Higashiura Fab (G3.5, Aichi)

- → LCD Smartphone Line Downsizing FY24/3 Q1
- → Production End Mar 2025
- **→** Sold Oct 2020
- → Production End Mar 2023 Facility Sale Apr 2024



Global

- Nanox Philippines Inc. (Philippines)
- Kaohsiung Opto-Electronics Inc. (Taiwan) → Sold Dec 2021
- Suzhou JDI Electronics Inc. (China)
- **→ Sold Jan 2023**

Fixed Cost Reductions JPY 43B/Year

eLEAP (NextGen OLED)





- environment positive
- <u>L</u>ithography with maskless deposition
- <u>Extreme long life, low power, & high luminance</u>
- Any shape Patterning



eLEAP's Unprecedented Customer Value



High Brightness (2X)



Conventional OLED 28%





eLEAP

Brightness, vividness & free shapes unimaginable with existing technology





Long Lifetime (3X)

Lifetime Comparison

New 0h

After 1yr

After 3yrs

After 5yrs

1000h 3000h

5000h

Conventional OLED









eLEAP









 \divideontimes Image assuming luminance deterioration due to 3h / day lighting with brightness equivalent to 600nit

eLEAP's Unprecedented Environmental Value



Maskless OLED deposition is a breakthrough, environment positive production process that eliminates mask cleaning chemicals 150k tons p.a. of CO2 emission reduction via deployment at JDI Mobara



150k tons of yearly CO2 emissions =

CO2
Absorption
Volume
of 17M
cedar trees



Cedar forest the size of 3.7k Tokyo Domes



CO2 emissions are JDI's calculations based on G6 Mobara plant at 30 k sheets/month

eLEAP Powerfully Moves OLED Forward



OLED Is A Truly Extraordinary Display Technology

Beautiful, Ultra High Contrast & Wider Color Gamut



No Backlight, Thin, Lightweight, Low Power





Fast, Nearly Instant Refresh Rates



However, OLED Has Inherent Issues



High Production Cost



Short Lifetime

These issues make OLED disfunctional for a wide variety of display applications. OLED market share is <1% for Automotive, <3% for IT, & <3% for TVs.

Creating a New Global Display Standard



eLEAP

All of OLED's advantages while solving its shortcomings









eLEAP Development Advancing at Tremendous Speed



eLEAP 14" Prototype







First Customer Samples: Sep 2022 **Display Area**

58X



First Customer Samples: July 2023

Specs & performance surpass customer expectations.

At DIC2023 in Shanghai, eLEAP wins highest award: the Special Technology Prize.

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Display Tech's Three Revolutions



eLEAP Completes the 3rd Display Tech Revolution

3rd Revolution



Cathode Ray Tube (CRT)



Moving images for every household

2nd Revolution

Liquid Crystal (LCD)



Compact, energy-efficient & high-resolution screens at home or on the go

OLED
The 2.5
Evolution



Gorgeous, fast, & light-weight displays but high cost & short lifetimes

eLEAP



World's First
Maskless Deposition
+ Lithographic OLED

Higher Performance OLED at lower cost & with longer lifetimes

1930~ 1970~

2010~

2024~

JDI is Working to Become the Undisputed Global Leader in OLED



- eLEAP is a Gamechanger for Global Display Tech. eLEAP
 Combines Unmatched Performance, Low Cost, & the Ability to
 Scale Across All Display Sizes & Applications
- eLEAP's Total Addressable Market (TAM) is thus the total Global Display Market, with a Total Market Size of USD 120 Billion Annually
- With eLEAP, JDI is Committed to Delivering Unprecedented Customer Value & Completing the 3rd Display Revolution

JDI Large-Scale eLEAP Project in Wuhu, China



Wuhu JDI

- JDI has signed a memorandum of understanding (MOU) with the Wuhu Economic and Technical Development Zone on September 29, 2023
- The final contract is scheduled to be concluded by December-end 2023.
- The project will increase JDI's eLEAP production capacity by >50X
- The project is an extremely important step towards building a new global display ecosystem based on JDI's Global No.1 technologies

Accelerating METAGROWTH 2026 with JOLED Engineering Talent



 Acquisition of World-Class JOLED OLED Engineering Talent to Support and Broaden eLEAP Rollout

 JOLED Talent and OLED IP and Know-How Will Significantly Accelerate METAGROWTH 2026 Growth Strategy

JOLED Engineers

Acquired JOLED Engineering Talent to Accelerate METAGROWTH 2026 Growth Strategy

JDI Sustainability - Working for a Better World





JDI is deeply committed to being an environmentally conscious, sustainable company and always considers its fabs' impacts & works to reduce resource usage & emissions.









FTSE Blossom Japan Index



FTSE Blossom Japan Sector Relative Index



To progress the achievement of the SDGs & support their principles, JDI has signed the UN Global Compact (UNGC).

JDI supports TCFD and recognizes the importance of identifying climate change risks and opportunities and related disclosures in order to support JDI's sustainable growth.

JDI's commitment to ESG concerns has been recognized by being included in the FTSE Blossom Japan Sector Relative Index in 2022 and FTSE Blossom Japan Index in 2023.

JDI's ecological footprint of eLEAP is a milestone for GreenTech by drastically reducing chemicals, energy consumption & CO2 emissions.

JDI Sustainability – Support for TCFD





JDI recognizes the importance of identifying climate change risks and opportunities, generating robust responses, and disclosing those responses in order to support its sustainable growth. JDI has therefore decided to support TCFD.

By incorporating climate change responses into its strategy and operations, JDI is accelerating its efforts to contribute to a low-carbon, sustainable society.

TCFD was established by the Financial Stability Board (FSB) at the request of the Finance Ministers and Central Bank Governors of G20 to study climate-related disclosures and the response of financial institutions to climate change. Recommendations announced by TCFD in 2017 are global initiatives that encourage companies to disclose risks and opportunities related to climate change with respect to their business activities.

JDI Sustainability – Inclusion in FTSE Blossom Japan Index Series





JDI is working to become a more environmentally friendly and sustainable company. JDI always considers its fabs' impact on the environment and is reducing resource usage and emissions

JDI's ongoing commitment to ESG concerns has been recognized with JDI being included in the FTSE Blossom Japan Sector Relative Index in 2022 and FTSE Blossom Japan Index in 2023



FTSE Blossom Japan Index



FTSE Blossom Japan Sector Relative Index

- The FTSE Blossom Japan Sector Relative Index Series is widely used to evaluate sustainable investment funds
- The Series has been adopted as an ESG management benchmark by the Japanese Government Pension Investment Fund (GPIF)

CHINA + INDIA JDI Fab Strategy



Local Production & Presence in Massive, Growing Markets

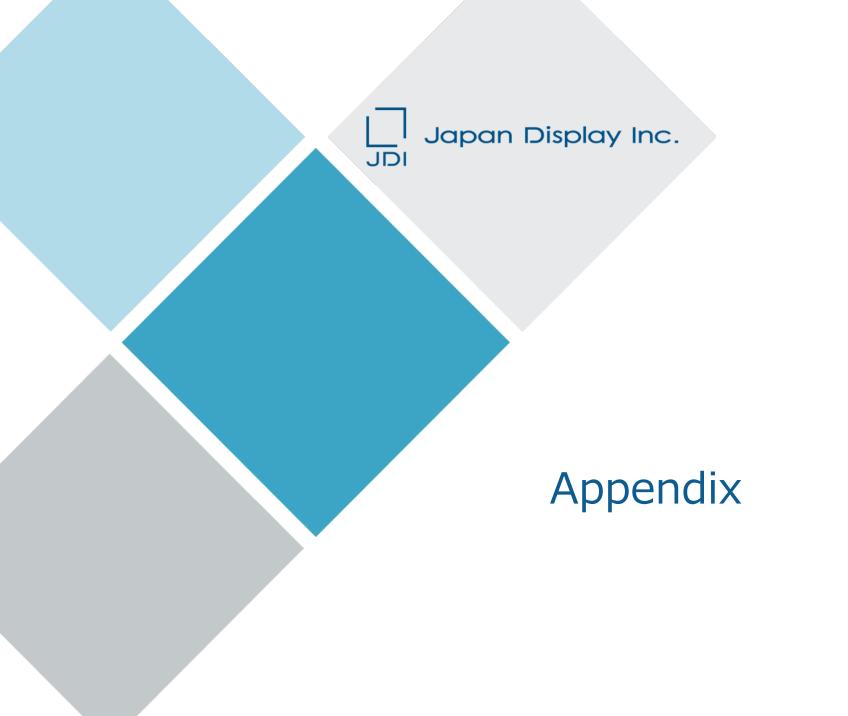






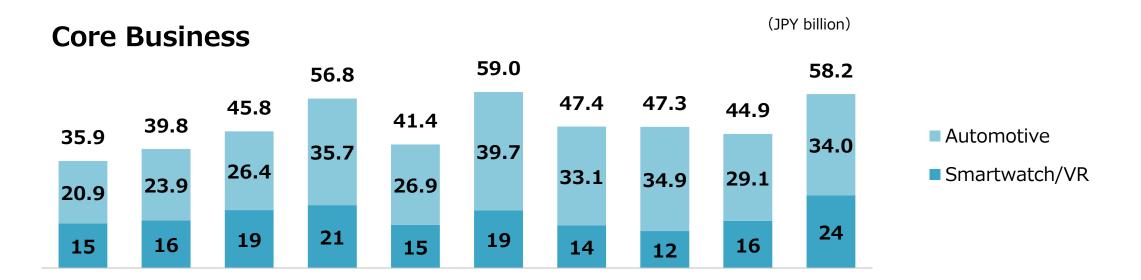
 Target signing of final contract for Wuhu large-scale eLEAP project by December-end 2023

- Inbound inquiries from multiple Indian conglomerates for technical support & joint business development in India
- Ongoing discussions on building eLEAP fab & business in India

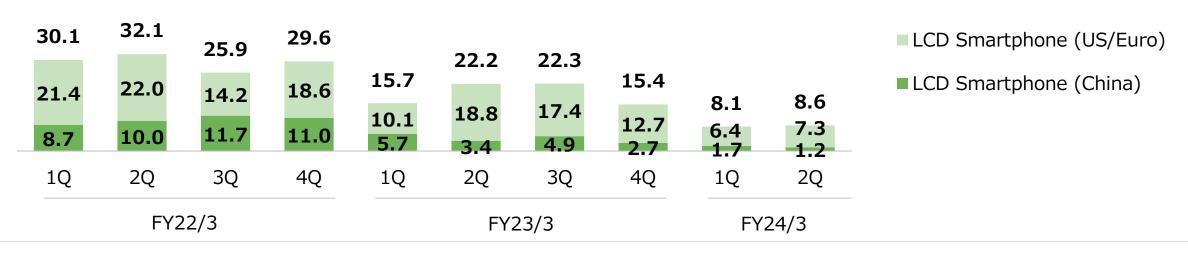


Quarterly Sales Breakdown by Product Category





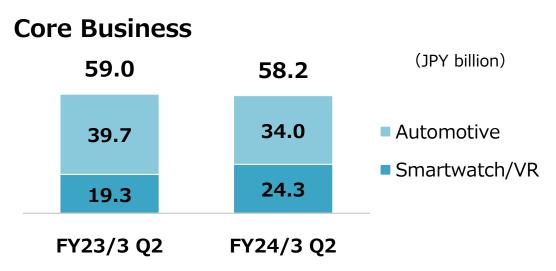
Non-Core Business



FY24/3 Q2 Sales by Product Area



Automotive Down Temporarily on Withdrawals from Unprofitable Products, Smartwatch/VR Up Steadily, & LCD Smartphone Continued Strategic Downsizing



Automotive (YoY -14.4%)

Down due to withdrawals from unprofitable products, and reversal effect from robust FY23/3 Q2 sales after the Shanghai lockdown impact

Smartwatch/VR (YoY +25.8%)

Increased OLED smartwatch & high-resolution VR LCD. Achieved record quarterly sales

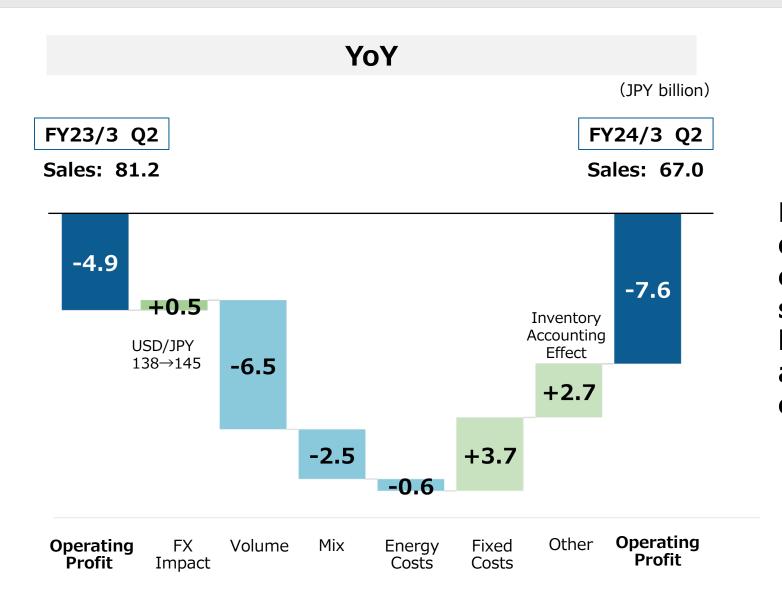


LCD Smartphone (YoY -61.1%)

Strategically exiting unprofitable non-core business to focus on growing core Automotive & Smartwatch/VR businesses

FY24/3 Q2 Operating Profit Breakdown

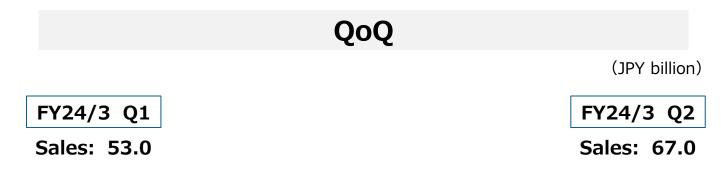


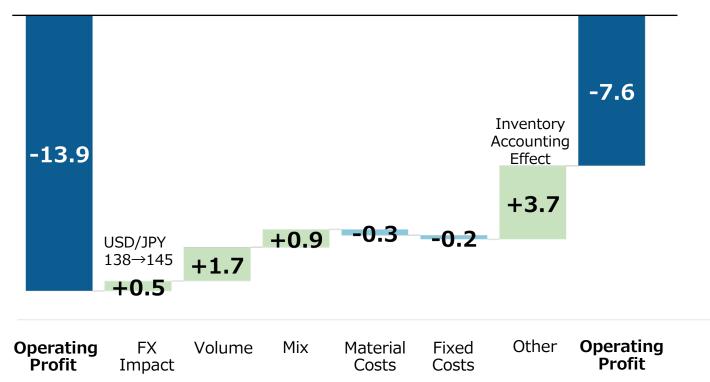


Mitigated the negative impact of reduced shipments in noncore businesses due to strategic downsizing, and higher materials, processing, and energy costs through fixed cost reductions.

FY24/3 Q2 Operating Profit Breakdown







Volume & mix improvements on increased OLED smartwatch and high-resolution VR LCD (core businesses) contributed to OP improvements

Consolidated B/S



(JPY billion)	FY23/3	FY24/3 Q2	vs. FY23/3	
Cash and deposits	26.2	29.7	+3.4	
Accounts receivable - trade	40.9	32.7	-8.2	
Accounts receivable - other	18.3	22.2	+3.9	
Inventories	60.3	63.3	+2.9	
Other	5.1	6.9	+1.8	
Total current assets	150.9	154.7	+3.9	
Total non-current assets	71.8	77.5	+5.7	
Total Assets	222.7	232.3	+9.6	
Accounts payable - trade	45.2	52.2	+7.0	
Interest-bearing debt	1.5	21.4	+19.9	
Accounts payable - other	9.3	17.4	+8.2	
Other liabilities	42.3	43.8	+1.5	
Total Liabilities	98.3	134.8	+36.5	
Total Net Assets	124.4	97.5	-27.0	
Shareholders Equity Ratio	55.8%	55.8% 41.9%		

Note: Differences in balances of "cash and deposits" in B/S & "cash & equivalents" in cash flow statement are "deposits"

Consolidated P&L



(JPY billion)	FY23/3 Q2	FY24/3 Q2	YoY	FY23/3 (H1)	FY24/3 (H1)	YoY
Sales	81.2	66.9	-14.3	138.3	119.9	-18.4
EBITDA	-2.8	-5.9	-3.2	-7.5	-18.1	-10.6
Operating Profit	-4.9	-7.6	-2.7	-11.8	-21.4	-9.7
Non-Operating Income	1.8	1.7	-0.2	5.0	4.4	-0.6
Non-Operating Expenses	-1.0	-1.2	-0.1	-1.6	-2.1	-0.5
Recurring Profit	-4.1	-7.0	-3.0	-8.4	-19.1	-10.7
Extraordinary Income	0.0	0.1	+0.1	1.0	0.1	-1.0
Extraordinary Losses	-0.1	-9.2	-9.1	-1.2	-9.2	-8.0
Income Before Income Taxes	-4.2	-16.1	-12.0	-8.6	-28.2	-19.6
Net Income	-6.6	-16.5	-9.9	-11.6	-28.7	-17.1
Avg. FX rate (USD/JPY)	138.3	144.6		134.0	141.1	
Q-End FX rate (USD/JPY)	144.8	149.6		144.8	149.6	

Consolidated Cash Flow Statement



(JPY billion)	FY23/3 Q1	FY24/3 Q2	FY23/3 (H1)	FY24/3 (H1)	YoY
Income before income taxes	-12.1	-16.1	-8.6	-28.2	-19.6
Depreciation & amortization	1.7	1.6	4.3	3.4	-0.9
Working capital	3.2	6.3	-8.5	9.5	+18.0
Other	-2.5	9.6	-1.5	7.1	+8.5
Cash Flow from Operating Activities	-9.7	1.4	-14.2	-8.3	+5.9
Fixed asset investments	-7.0	-1.4	-5.8	-8.4	-2.6
Other	-0.2	-1.1	-0.6	-1.3	-0.7
Cash Flow from Investing Activities	-7.2	-2.5	-6.3	-9.7	-3.4
Net increase / decrease in short-term borrowing	12.0	8.0	13.0	20.0	+7.0
Other	-0.2	-0.2	-0.2	-0.4	-0.2
Cash Flow from Financing Activities	11.8	7.8	12.8	19.6	+6.8
Ending Balance, Cash & Equiv.	21.9	29.1	47.2	29.1	-18.1
Free Cash Flow	-16.7	-0.2	-20.0	-16.9	+3.1

Note: Free Cash Flow = Cash Flow from Operating Activities less Capex





Thank You!

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