



Financial Results

FY2022 Annual Closing

Nippon Denkai, Ltd.

May 10th, 2023





Table of Contents

1. FY2022 Business Result Highlights
2. FY2022 Financial Results
3. FY2023 Earnings Forecast
4. Appendix





Table of Contents

1. FY2022 Business Result Highlights
2. FY2022 Financial Results
3. FY2023 Earnings Forecast
4. Appendix



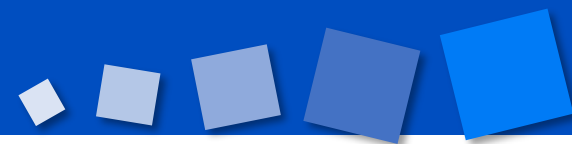


- Net sales declined by 17.1% YoY due to severe sales environment
 - EV battery copper foils: Lowered share at a major customer and prolonged chip shortages
 - Circuit board copper foils: The continuous sales reduction for the smartphone, manufactures slump spreads to all over the world including China

- Production volume: 8,520 metric tons, 28.6% decreased YoY

- Operating profit fell in the red, -1,611million yen
 - Costs increased due to a decline in sales and production volume
 - Manufacturing costs increased due to energy price hikes in Japan and the US
 - Remuneration for lawyers and consultants associated with the construction of a new plant in the US also imposed a burden

Summary



- Net sales declined by 17.1% YoY due to severe sales environment
- Production volume: 8,520 metric tons, 28.6% decreased YoY
- Operating profit fell in the red, -1,611million yen

(Unit: ¥ millions)

	FY2021	FY2022	YoY	YoY (%)
Net sales	20,558	17,047	(3,510)	(17.1%)
EV Battery Copper foils	13,589	11,316	(2,272)	(16.7%)
Circuit board Copper foils	6,969	5,730	(1,238)	(17.8%)
Operating profit	1,004	(1,611)	(2,616)	—*
Ordinary profit	976	(1,840)	(2,816)	—*
Profit/Loss attributable to owners of the parent	848	(1,933)	(2,782)	—*
Production volume (metric tons)	11,936	8,520	(3,416)	(28.6%)

*The numbers are rounded down. And the results of percentage figures may differ from those after rounding figures since they're calculated in units of 1 yen.
Percentage change is omitted since this is a comparison of increase and decrease.

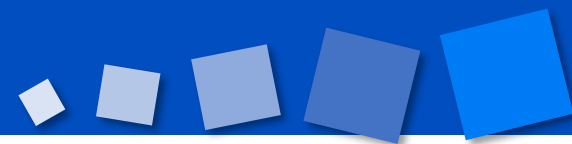


Table of Contents

1. FY2022 Business Result Highlights
2. FY2022 Financial Results
3. FY2023 Earnings Forecast
4. Appendix



FY2022 Financial Results



- Net sales decreased by 17.1% YoY: Lowered share at a major customer and prolonged chip shortages
- Operating profit decreased due to energy price hike and remuneration for lawyers and consultants associated with the construction of a new plant in the US.

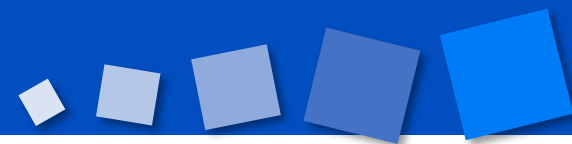
(Unit: ¥ millions)

	FY2021	FY2022	YoY	YoY (%)
Net sales	20,558	17,047	(3,510)	(17.1%)
Cost of sales	18,527	16,943	(1,584)	(8.6%)
Gross profit	2,030	104	(1,926)	(94.9%)
Gross profit margin (%)	9.9%	0.6%	(9.3p)	—
SG&A	1,025	1,715	690	67.3%
SG&A (%)	5.0%	10.1%	5.1 p	—
Operating profit	1,004	(1,611)	(2,616)	—*
Operating profit (%)	4.9%	(9.5%)	(14.4p)	—
Depreciation	1,274	1,240	(33)	(2.6%)
EBITDA	2,278	(371)	(2,649)	—*
EBITDA margin (%)	11.1%	(2.2%)	(13.3p)	—

*The numbers are rounded down. And the results of percentage figures may differ from those after rounding figures since they're calculated in units of 1 yen.

Percentage change is omitted since this is a comparison of increase and decrease.

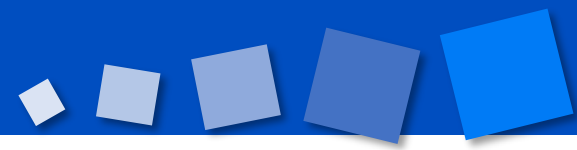
YoY Operating Profit Comparison



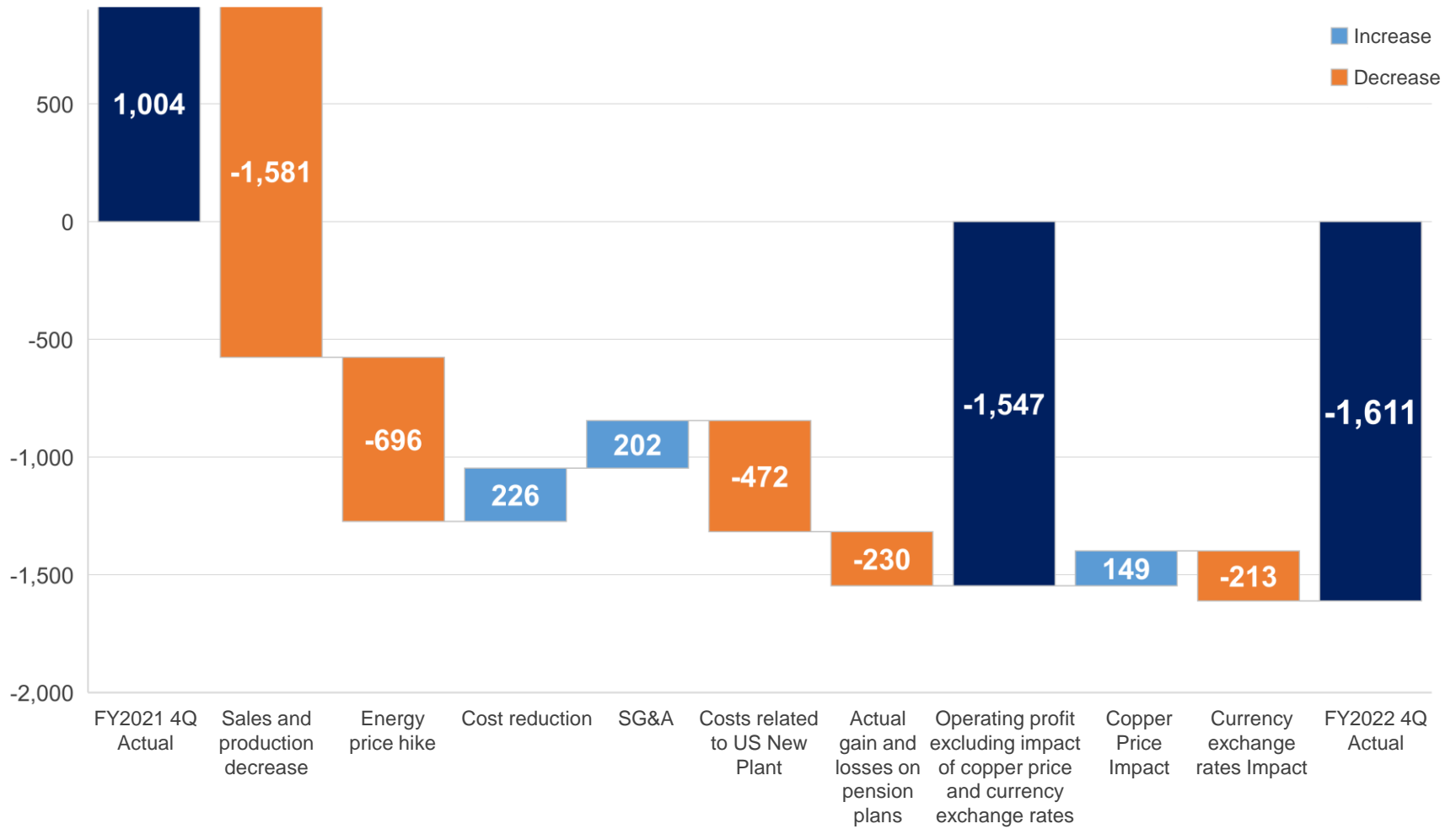
(Unit: ¥ 100 millions)

		Japan	US	Consolidated Adjustment	Consolidated
Operating Profit for FY2021		9	(1)	2	10
	Decline in sales and production volume	(10)	(6)	-	(16)
	Energy price hikes	(7)	-	-	(7)
	Costs related to construction of a new plant in the US	-	(5)	-	(5)
	Currency exchange rates impact	-	(2)	-	(2)
	Cost reduction	3	2	-	5
	Copper price impact	1	-	-	1
	Others	-	-	(2)	(2)
	YoY delta	(13)	(11)	(2)	(26)
Operating Profit for FY2022		(4)	(12)	0	(16)

YoY Operating Profit Comparison

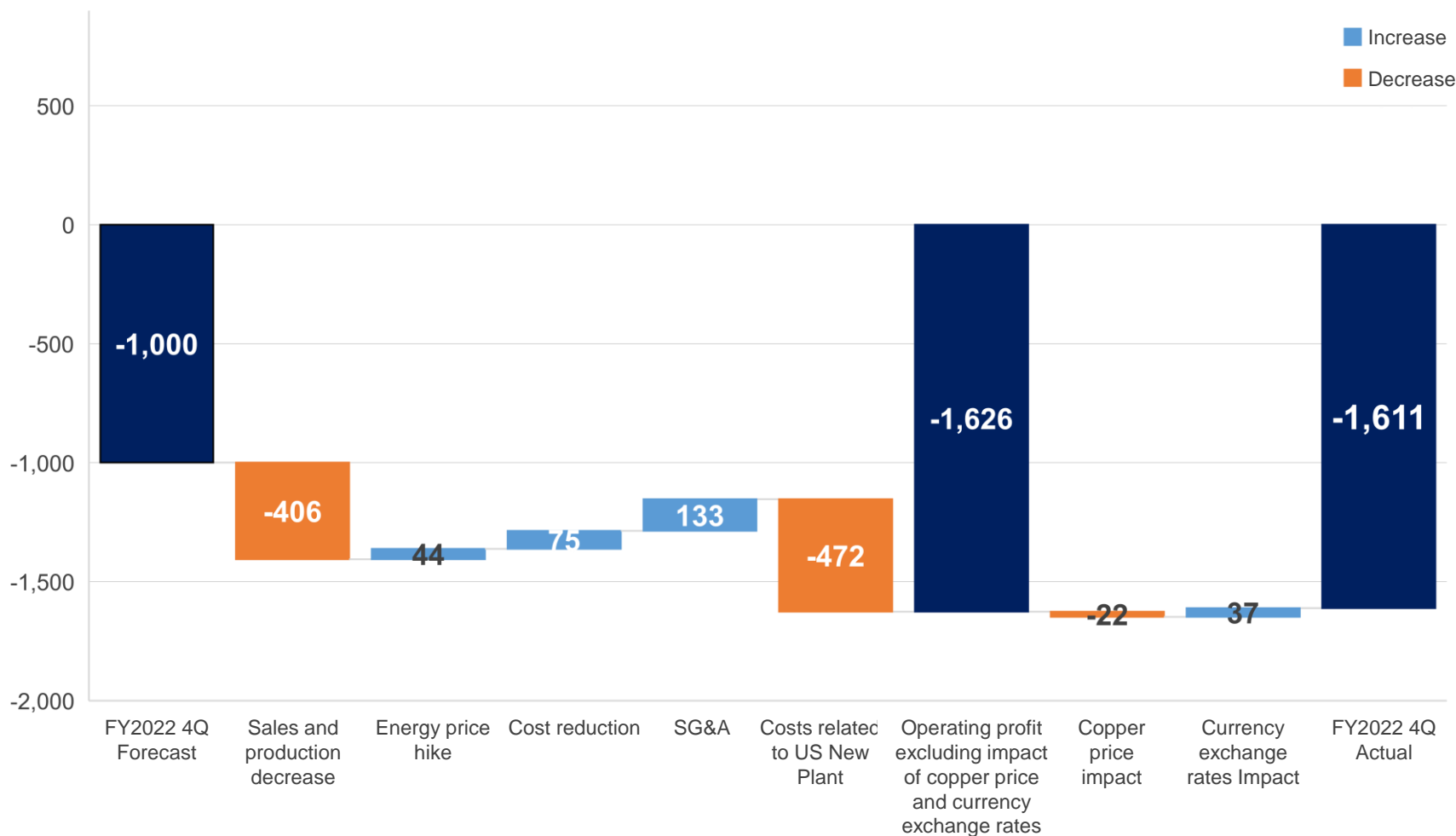


(Unit: ¥ millions)



Forecast vs Actual Operating Profit Comparison

(Unit: ¥ millions)



FY2022 Financial Position



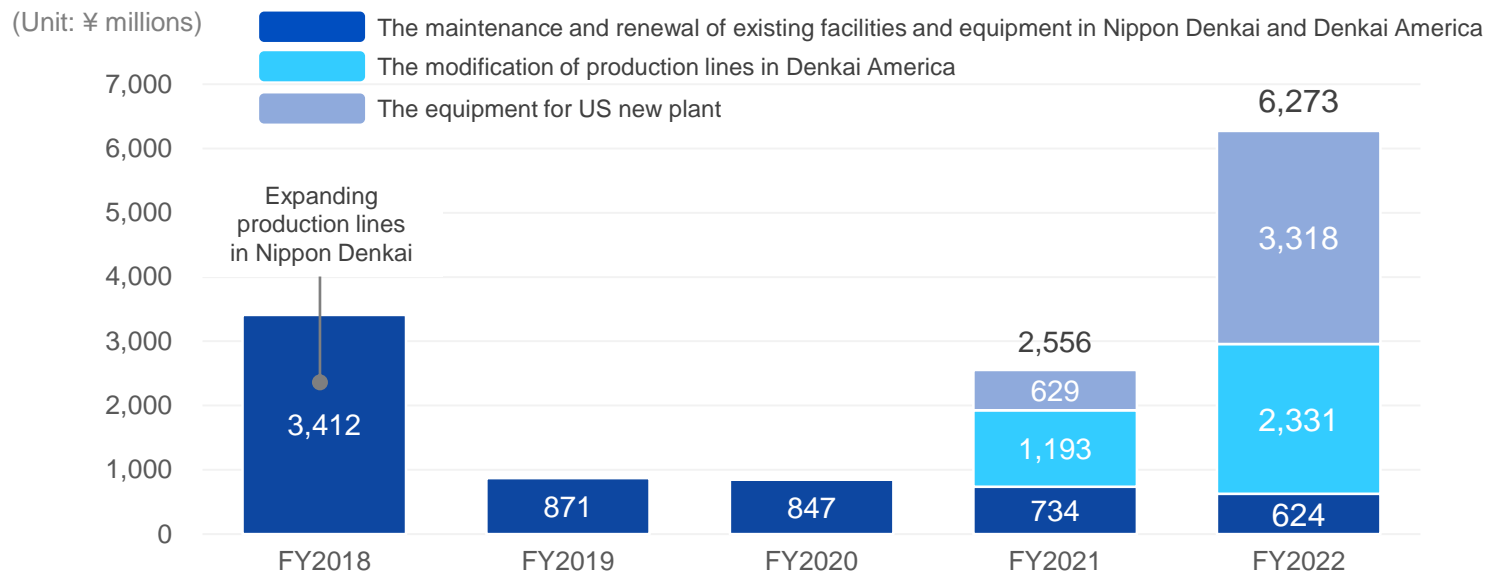
- Net assets increased by 1,692 million yen due to issuance of new shares upon the exercising of new share warrants. Equity ratio increased by 0.9 points.
- Net interest-bearing debt increased by 2,431 million yen due to rising short-term borrowings

(Unit: ¥ millions)

	FY2021	FY2022	YoY	YoY (%)
Total assets	18,034	22,678	4,644	25.8%
Net assets	5,755	7,447	1,692	29.4%
Equity ratio	31.9%	32.8%	+ 0.9P	–
Interest bearing debt	8,866	12,377	3,510	39.6%
Short-term borrowings	800	5,000	4,200	525.0%
Current portion of long-term borrowings	958	1,358	400	41.7%
Short-term lease obligation	20	20	0	(0.6%)
Long-term borrowings	6,831	5,762	(1,069)	(15.7%)
Long-term lease obligation	256	235	(20)	(8.0%)
Cash and deposits	2,500	3,579	1,078	43.1%
Net interest-bearing debt	6,366	8,797	2,431	38.2%

Investment Details

● Historical Summary



● Details of FY2022

(Unit: ¥ millions)

	Nippon Denkai	Denkai America	Total
Maintenance and renewal	251	56	307
Improvement and modification	303	—	303
Installation of R&D facilities	14	—	14
Modification of production lines in Denkai America	—	2,331	2,331
Equipment for new US factory	—	3,318	3,318
Total	568	5,705	6,273

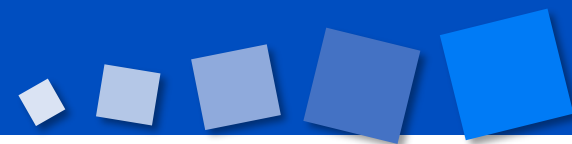


Table of Contents

1. FY2022 Business Result Highlights
2. FY2022 Financial Results
3. FY2023 Earnings Forecast
4. Appendix



FY2023 Forecast



(Unit: ¥ millions)

	FY2022 Actual	FY2023 Forecast	YoY	YoY (%)
Net sales	17,047	20,600	3,553	20.8%
EV battery copper foil	11,316	14,800	3,484	30.8%
Circuit board copper foil	5,730	5,800	70	1.2%
Operating profit	(1,611)	(600)	1,011	—
Ordinary profit	(1,840)	(1,100)	740	—
Profit attributable to owners of the parent	(1,933)	(1,100)	833	—
EBITDA	(371)	800	1,171	—
Production volume (metric tons)	8,520	10,400	1,880	22.1%

● Basis of above forecast

	<u>FY2022 Actual</u>	<u>FY2023 Forecast</u>
Copper Market price :	¥1,209 / kg	¥1,250 / kg
Forex (\$/¥, Average Rate) :	@ 135.51	@ 130.00



Nippon Denkai

- **EV battery copper foils:**
 - Increase in orders from existing customers (from Q1)
 - Start supplying new copper foils for high-capacity LIBs (from Q2)
- **Circuit board copper foils:**
 - Start supplying to new customers in Japan (from Q4)

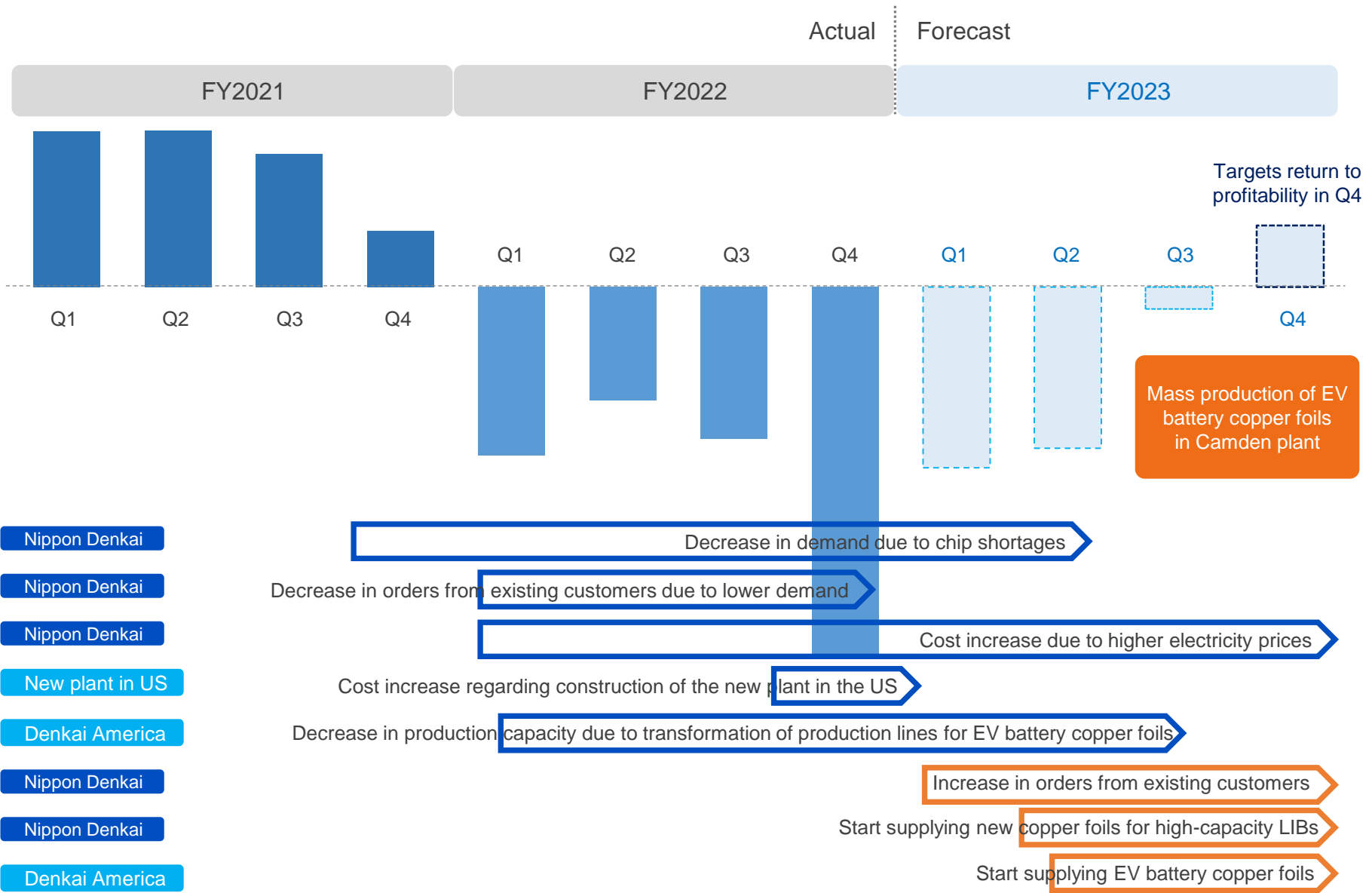
Denkai America

- **EV battery copper foils :** Start mass production (from Q3)
- **Circuit board copper foils:** Increase in orders from existing customers (from Q1)

Mutual Factor

- Expanding sales of copper foils manufactured by Nippon Denkai to U.S. circuit board manufacturers (from Q1)

Quarterly Trend of Operating Profit



Progress of Transformation of Production Lines in US plant



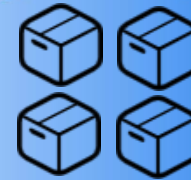
May, 2023

Completion of transforming



Summer, 2023

Start preparing sample



2H 2023

Start supplying products

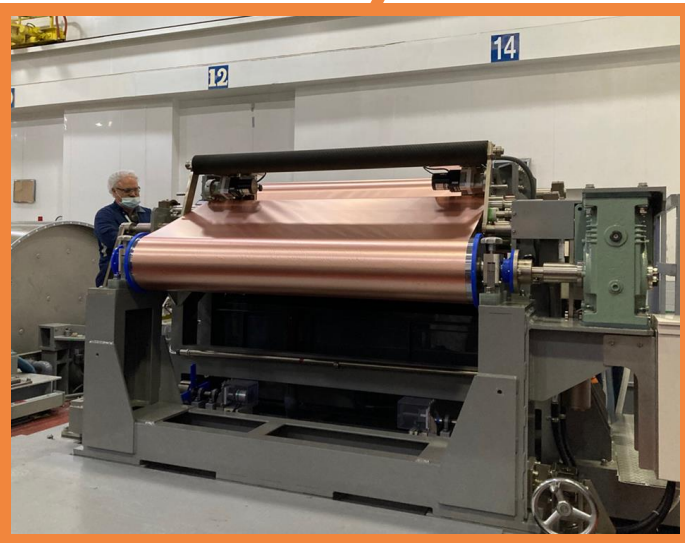


Photo: test production at Camden plant

- **Location**
Camden Plant, South Carolina, U.S.
- **Capex**
US\$26 million
- **Product / Capacity**
Copper foil for LIBs / 1,200 metric ton per year
- **Customers**
Major LIB manufacturers in US

FY2023 Q1 Earnings Release Schedule



Q1 FY2023 financial results are scheduled for release on

Wednesday, August 9th, 2023.



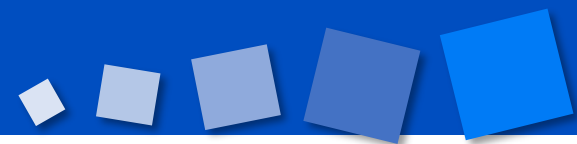


Table of Contents

1. FY2022 Business Result Highlights
2. FY2022 Financial Results
3. FY2023 Earnings Forecast
4. Appendix



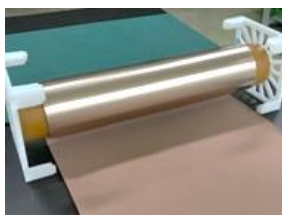
FY2022 Sales by Product



Circuit Board Copper Foil

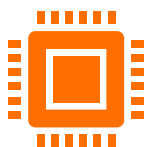
HL·Seed

Adhesion·Low Loss·High Flexibility



Uses

Flexible Printed Circuits
Board Package Substrate



Major End-products



5G
Smartphone

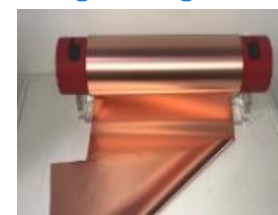


5G Communication
Base Station, etc...

EV Battery Copper Foil

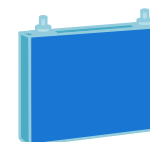
YB

High tensile strength,
high elongation



Uses

Lithium-Ion Batteries (LIB)



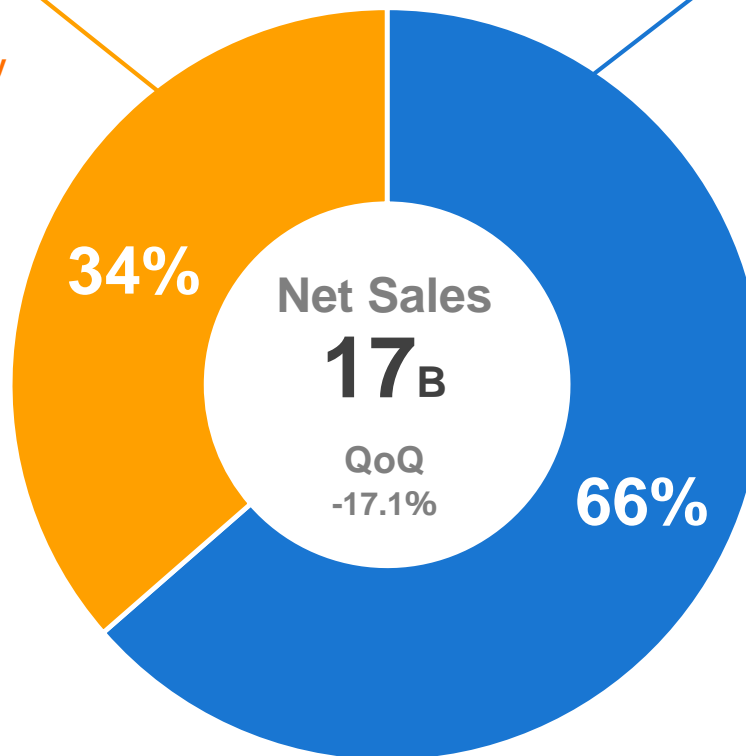
Major End-products



EV



HV



EBITDA¹ JPY -300M

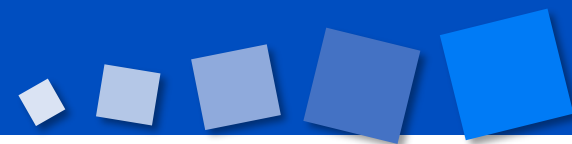
EBITDA margin -2.2%

¹ EBITDA is calculated by adding depreciation and amortization, etc. to operating profit.

Historical Financials



(Unit: ¥ millions)	FY2021				FY2022				YoY
	1Q	2Q	3Q	4Q	1Q	2Q	3Q	4Q	
Net sales	4,895	5,176	5,397	5,088	4,419	4,356	3,941	4,329	(759)
EV battery copper foils	3,274	3,381	3,463	3,469	2,729	2,965	2,769	2,851	(617)
Circuit board copper foils	1,621	1,794	1,933	1,619	1,690	1,390	1,172	1,477	(141)
Cost of net sales	4,329	4,599	4,860	4,737	4,426	4,252	3,923	4,340	(397)
Gross profit	566	576	536	351	(7)	103	18	(10)	(361)
<i>Gross profit margin (%)</i>	11.6%	11.1%	9.9%	6.9%	-0.2%	2.4%	0.5%	-0.2%	-
SG&A	255	263	269	237	330	332	322	730	493
<i>SG&A margin (%)</i>	5.2%	5.1%	5.0%	4.7%	7.5%	7.6%	8.2%	16.9%	-
Operating profit	311	313	266	113	(337)	(228)	(304)	(741)	(855)
<i>Operating Profit (%)</i>	6.4%	6.0%	4.9%	2.2%	-7.6%	-5.2%	-7.7%	-17.1%	-
Ordinary profit	283	322	268	101	(318)	(264)	(471)	(784)	(886)
Profit attributable to the owners of the parents	196	242	192	216	(294)	(315)	(384)	(939)	(1,155)
Depreciation	303	314	318	337	307	310	314	308	(28)
EBITDA	614	627	585	451	(29)	81	9	(432)	(883)
<i>EBITDA margin(%)</i>	12.6%	12.1%	10.8%	8.9%	-0.7%	1.9%	0.2%	-10.0%	-
Production volume(metric tons)	3,053	3,181	3,073	2,627	2,074	2,172	2,345	1,928	(699)



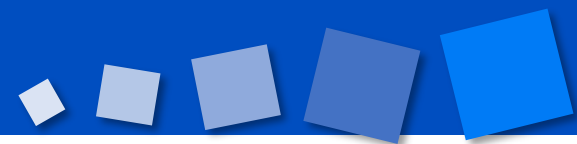
Cash and cash equivalent increased by 1,078 million yen year over year

- **Cash flow from operating activities:** The funds increased to 697 million yen. This was mainly due to depreciation of 1,255 million yen, a decrease of 834 million yen in notes and accounts receivable – trade, and a decrease of 771 million yen in inventories absorbed net loss before income taxes.
- **Cash flow from investment activities:** The funds decreased by investment activities of the current consolidated fiscal year was 6,495 million yen, which is caused by purchase of property, plant and equipment of 6,578 million yen.
- **Cash flow from financial activities:** The funds increased to 6,606 million yen primarily due to an increase of 4,200 million yen in short-term borrowings, an increase of 3,373 million yen in proceeds from issuance of common shares, and repayments of long-term loans payable of 958 million yen.

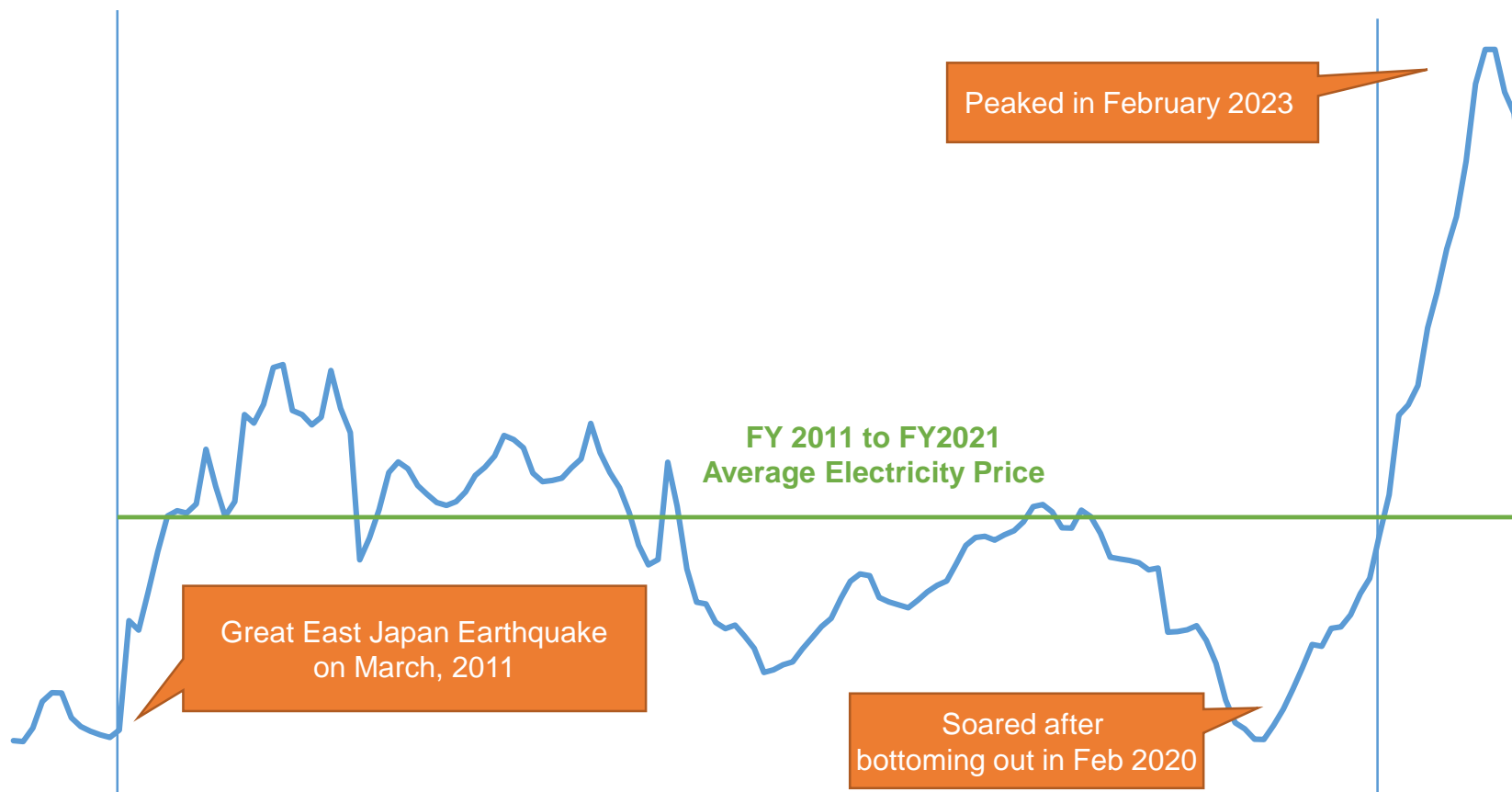
(Unit: ¥ millions)

	FY2021	FY2022
Cash flow from operating activities	217	697
Cash flow from investment activities	(2,191)	(6,495)
Cash flow from financial activities	2,706	6,606
Effect of exchange rate change on cash and cash equivalents	106	270
Delta	838	1,078
Cash and cash equivalents at beginning of period	1,662	2,500
Cash and cash equivalents at end of period	2,500	3,579

Electricity Price Trends



Electricity prices, which have continued to rise sharply since February 2020, peaked in February 2023 and began to decline.



Our Commitments to Sustainability

Environment

Carbon-free world with xEV

We aim for creating a **carbon-free world and a sustainable society** by providing high-quality copper foils for LIB and xEV.

Our environment SDGs targets



Our products are made from 100% recycled materials

We recycle scrap copper foils from the manufacturing process.

100% Recycled raw copper materials



Scrap copper foils from the manufacturing process are recycled

Our environment SDGs targets



Social

Pat-Run activity

Creating a safe and secure city /
Maintaining and improving employees' health

We work Pat-Run (Patrol Running) twice a month in Ibaraki for creating our local safe and clean.



Pat-Run is the activity that we clean and patrol while walking.

Our social SDGs targets



Governance

Nomination and Compensation Committee

We established the committee which is composed with 3 or more people directors (majority of its members shall be independent outside directors) selected by the board of directors in February, 2022.

Purpose: to further enhance our corporate governance structure by strengthening the fairness, transparency, and objectivity of procedures.

Our governance SDGs targets



Disclaimer

These documents have been prepared solely for the purpose of disclosing relevant information regarding Nippon Denkai, Ltd. (referred to herein as the "Company", "we" or "us") and, depending on the context, its consolidated subsidiary. These documents do not constitute an offer to sell or the solicitation of an offer to buy any security in the United States, Japan or any other jurisdiction.

These documents include forward-looking statements including current plans, outlook, estimates and forecasts. Forward-looking statements are based on the intentions of our management based on the information available as of the date that these documents are published.

These forward-looking statements are dependent on various risks and uncertainties and actual results may differ materially from the information provided in these documents.



日本電解株式会社
Nippon Denkai, LTD.