Financial Results

FY2023 Q2

Nippon Denkai, Ltd. November 10th, 2023

1. FY2023 1H Highlight
2. FY2023 1H Financial Results
3. Revision of FY2023 Earnings Forecasts
4. Appendix

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FY2023 1H Highlight

Consolidated Financial Results

Net Sales
8,578 million yen
YoY -2.3%

Operating Profit
-545 million yen
YoY +20Mm yen

Profit Attributable to owners of the parent
-402 million yen
YoY +206Mm yen

Business Overview

EV Battery Copper Foil	The demand for copper foil remained sluggish. This was caused by decreasing export amount of battery cell from Japan, due to IRA.
Circuit Board Copper Foil	- Decrease in production and sales due to malfunction of rectifiers. - The demand for copper foil remained slow resulting from change of component configuration by our main customers.

Topics

U.S. Camden, SC Plant	The one of rectifiers resumed in early July. The another unit is planed to resume at the end of Nov. at the earliest.
U.S. Augusta, GA New Plant	We are currently working on financing to target to start the construction in 2023.

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FY2023 1H Financial Results

- Net sales decreased by 2.3% YoY : Demand for circuit board copper foil reduced due to malfunction of the rectifiers or other causes.
- The loss in operating profit reduced by the improvement of product mix.

(Unit: ¥ millions)

	FY2022 1H	FY2023 1H	Amount Change	% Change
Net Sales	8,775	**8,578**	(197)	(2.3%)
EV Battery copper foil	5,695	**6,478**	783	13.8%
Circuit board copper foil	3,080	**2,100**	(980)	(31.8%)
Operating Profit	(565)	**(545)**	20	-
Ordinary Profit	(583)	**(147)**	435	-
Profit Attributable to Owners of the Parent	(609)	**(402)**	206	-
Production Volume (metric ton)	4,247	**4,382**	135	3.2%

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- The percentage change in comparison with negative numbers shown as – in the table above.

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FY2023 1H Profit and Loss Statement

(Unit: ¥ millions)

	FY2022 1H	FY2023 1H	Amount Change	% Change
Net Sales	8,775	**8,578**	(197)	(2.3%)
Cost of Net Sales	8,679	**8,504**	(174)	(2.0%)
Gross Profit	96	**73**	(23)	(23.8%)
Gross Profit margin (%)	1.1%	**0.9%**	-	-
Selling, general and administrative expenses	662	**618**	(43)	(6.6%)
SG&A margin (%)	7.6%	**7.2%**	-	-
Operating Profit	(565)	**(545)**	20	-
Operating Profit margin (%)	(6.4%)	**(6.4%)**	-	-
Depreciation	617	**580**	(37)	(6.0%)
EBITDA	51	**35**	(16)	(31.7%)
EBITDA margin (%)	0.6%	**0.4%**	-	-

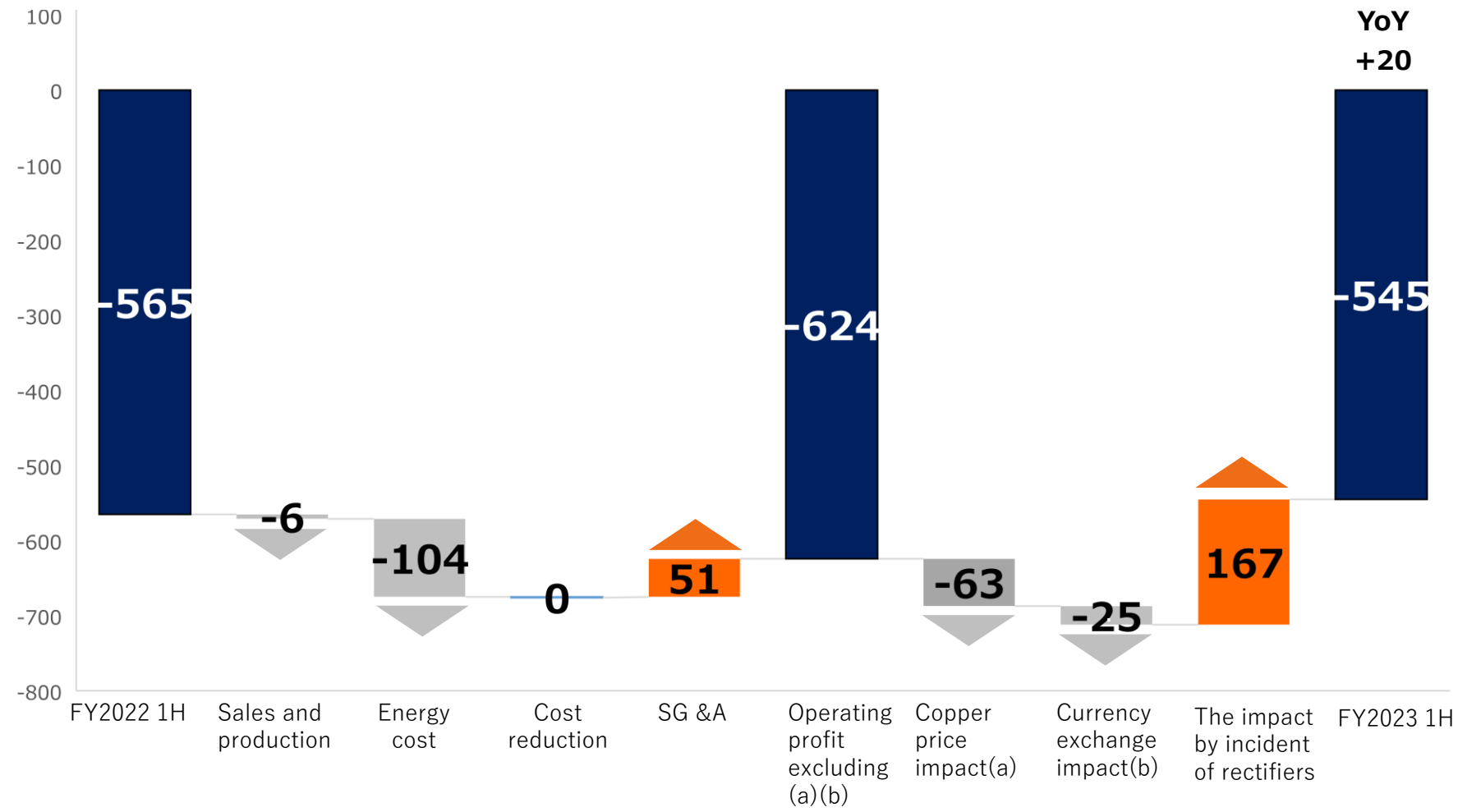
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YoY Operating Profit Analysis

- There was extraordinary loss due to malfunction of the rectifiers.
- The improvement in SG &A and other factors mitigated the impact of energy cost hikes and lower sales etc.

(Unit: ¥ millions)



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Revision of FY2023 Earnings Forecasts (Consolidated)

(Unit: ¥ millions)	Forecasts as of May 10 (A)	Forecasts as of Nov.10 (B)	Difference (B - A)
Net Sales	20,600	**16,900**	▲3,700
EV battery copper foils	14,800	**12,700**	▲2,100
Circuit board copper foils	5,800	**4,200**	▲1,600
Operating Profit	▲600	**▲1,000**	▲400
Ordinary Profit	▲1,100	**▲800**	300
Profit Attributable to Owners of Parent	▲1,100	**▲1,200**	▲100
EBITDA	800	**200**	▲600

<Basis of Forecasts> Announced on		**May 10**		**November 10**
Production volume	:	10,400 Mt	→	8,500 Mt
Exchange rate	:	130 ¥/$	→	145 ¥/$
Copper market price*	:	1,250 ¥/kg	→	1,250 ¥/kg

*"Copper market price" is domestic copper price referred by JX Nippon Mining & Metals Corporation in Japan.

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Revised Financial Forecasts and Details

(100 Million Yen)

FY2023 Operating Profit announced on May 10		**(6)**
Factors	The decline in the production and sales due to the malfunction of Denkai America's rectifiers	(7)
	Classification of loss related to malfunction of Denkai America's rectifiers into extraordinary loss	+ 3
	The decreasing export amount of battery cell from Japan, resulting from the impact of IRA	(2)
	Impact of currency exchange	(1)
	Electricity price	+ 2
	Cost reduction and SG & A	+ 1
Total change of Operating Profit since May 10		(4)
FY2023 Operating Profit Forecasts announced on November 10		**(10)**

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YoY Full-year Comparison (Consolidated)

(Unit: ¥ millions)

	FY2022 Actual result	FY2023 Forecasts	Difference (FY2022 to FY2023)
Net Sales	17,047	**16,900**	(147)
EV battery copper foils	11,316	**12,700**	1,384
Circuit board copper foils	5,730	**4,200**	(1,530)
Operating Profit	(1,611)	**(1,000)**	611
Ordinary Profit	(1,840)	**(800)**	1,040
Profit Attributable to Owners of Parent	(1,933)	**(1,200)**	733
EBITDA	(371)	**200**	571

<Basis of Forecasts>	**FY2022 Actual Result**		**FY2023 Forecasts**
Production volume :	8,520 Mt	→	8,500 Mt
Exchange rate :	135 ¥/$	→	145 ¥/$
Copper market price* :	1,209 ¥/kg	→	1,250 ¥/kg

*"Copper market price" is domestic copper price referred by JX Nippon Mining & Metals Corporation in Japan.

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Breakdown of Full-year Comparison (Consolidated)

(100 Million Yen)

FY2022 Operating Profit		**(16)**
Factors	The decline in the production and sales due to the malfunction of Denkai America's rectifiers	(7)
	Classification of loss related to malfunction of Denkai America's rectifiers into extraordinary loss	+3
	The decreasing export amount of battery cell from Japan, resulting from the impact of IRA	(2)
	The decline in the production and sales by certain restrictions	+9
	Initial costs to introduce new products	(1)
	Construction related costs for New Plant in Augusta	+5
	Electricity price	+1
	Impact of copper price	(1)
	Impact of currency exchange	(1)
Operation Profit difference between FY2022 and FY2023		+6
FY2023 Operating Profit announced on Nov. 10		**(10)**

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FY2023 Sales Plan Updates

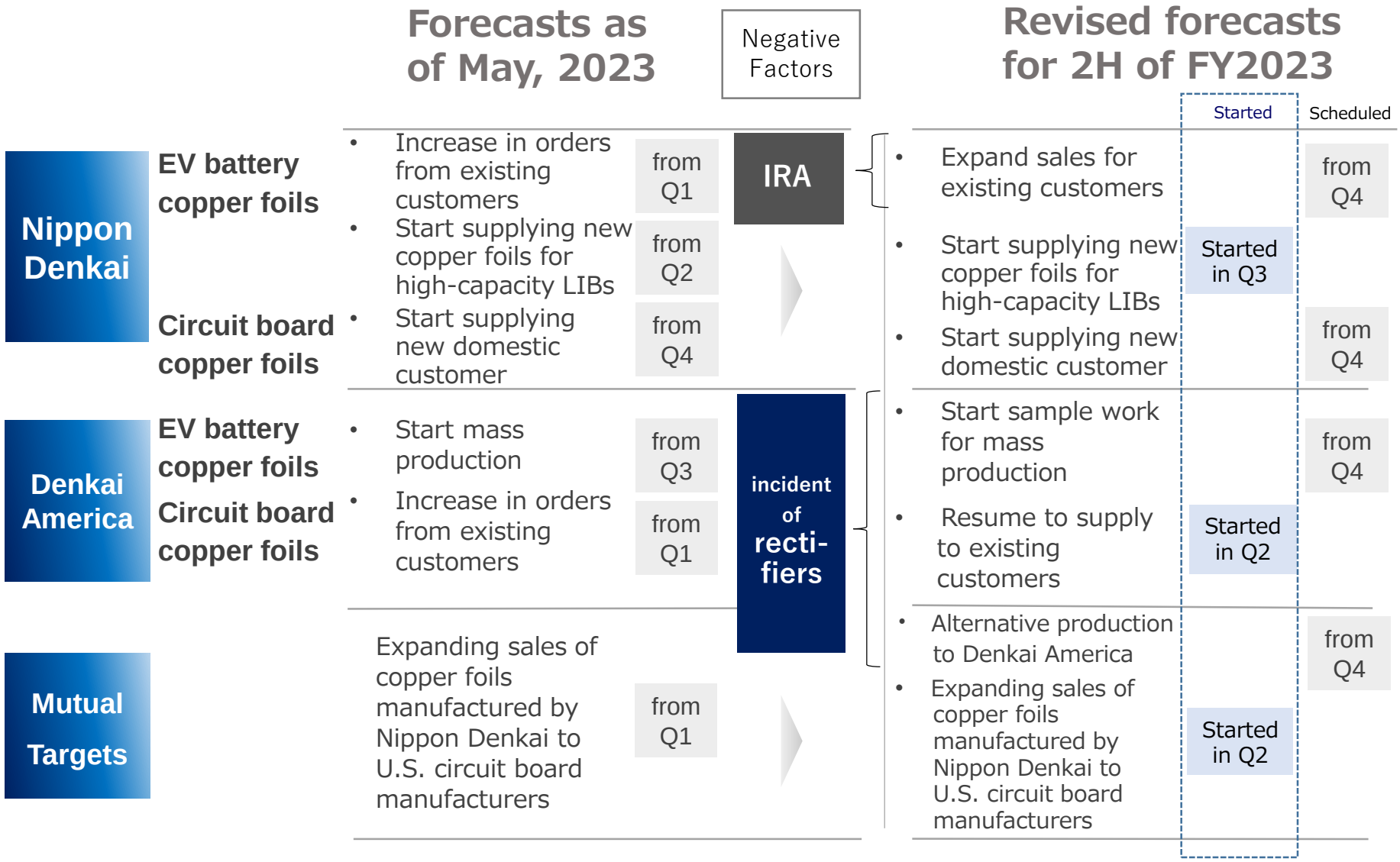
Start supplying high-capacity LIBs to customers' new products from Q3

Company	Application		Customer Market	Q2	Q3	Q4
Nippon Denkai	EV Battery	LIB	Battery manufacturers (Japan/US)	Demand of some customers is predicted to slow down		
		High-capacity LIBs	Battery manufacturers (Japan)		● Start supplying	Start supplying high-capacity LIBs to customers' new products
	Circuit board (High-end products)	PCB	Circuit board manufacturers (Japan)			Start supplying copper foil used in customer's new products
		PCB	Circuit board manufacturers (US)	Supplying high-end copper foil to customers of Denkai America		
Denkai America	EV Battery	LIB	Battery manufacturers (US)	Incident → Recovery of 1 rectifier → Recovery of all rectifiers	● Under adjustment	QA certification and supply schedule are under adjustment due to malfunction of rectifiers
	Circuit board (Mid-range products)	PCB	Existing customers (Global)	Incident → Recovery of 1 rectifier → Recovery of all rectifiers		Aim to recover production and sales after restoration of all rectifiers

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FY2023 Changes of Sales Plan Basis

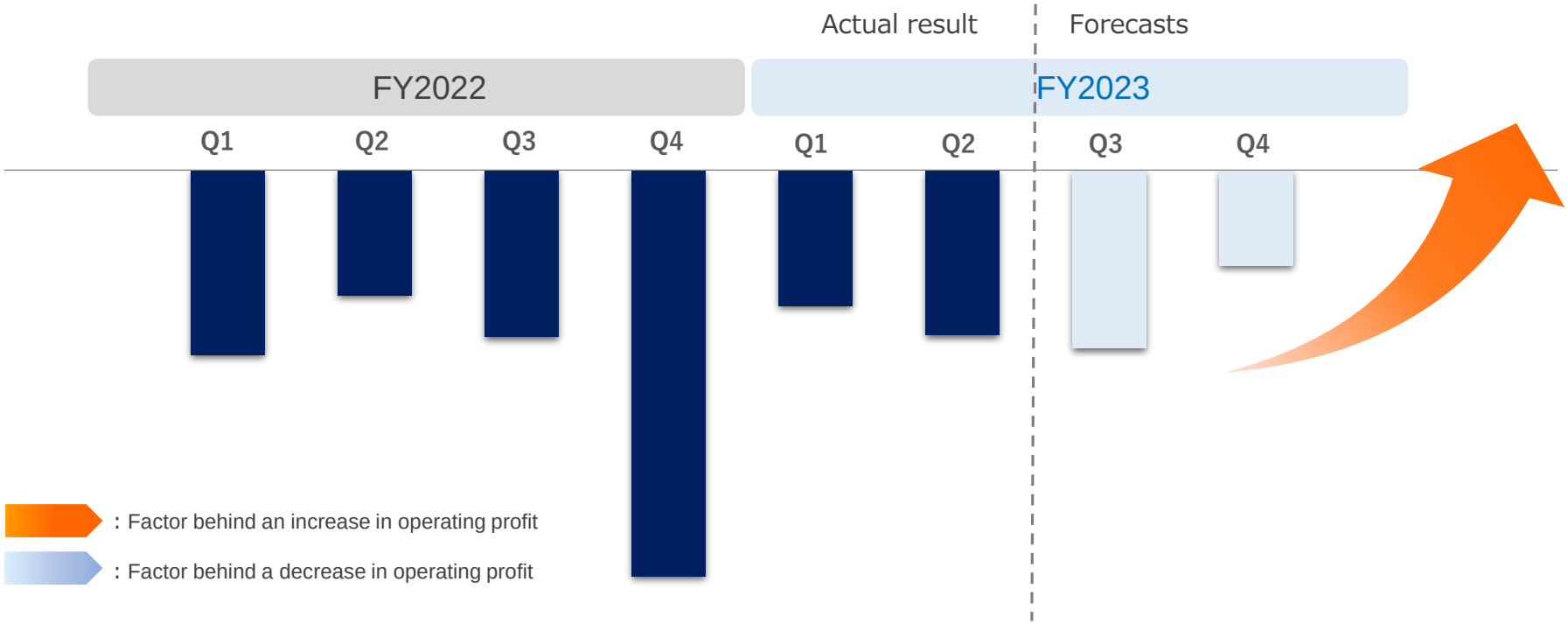
- Revision of business forecasts : The net sales is estimated to be below the business forecasts as of May, 2023.



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Quarterly Trend of Operating Profit

- Targets return to profitability of Nippon Denkai in Q4
  - ➡ Aims positive balance in consolidated FY2024



Nippon Denkai	Start supplying high-capacity LIBs
Denkai America	The decline in the production and sales due to the malfunction of equipment
Nippon Denkai	The decreasing export amount of battery cell from Japan, resulting from the impact of IRA
Nippon Denkai	Cost increase due to higher electricity prices

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FY2023 Q3 Earnings Release Schedule

FY2023 Q3 financial results are scheduled for release on

Friday, February 9th, 2024

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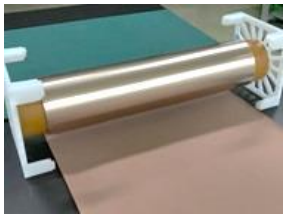
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FY2022 Sales by Product

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



EBITDA[1] JPY -300M

EBITDA margin -2.2%

EV Battery Copper Foil

YB

High Tensile Strength/High Elongation



Uses

Lithium-Ion Batteries (LIB)

Major End-products

EV

HV

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

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Historical Consolidated Financial Results

(Unit: ¥ millions)

	FY2020	FY2021	FY2022					FY2023		QoQ (c)-(b)	YoY (c)-(a)
			Q1	Q2 (a)	Q3	Q4		Q1 (b)	Q2 (c)		
Net Sales	14,584	20,558	4,419	4,356	3,941	4,329	17,047	4,759	**3,818**	*(940)*	*(537)*
EV battery copper foil	9,272	13,589	2,729	2,965	2,769	2,851	11,316	3,438	**3,040**	*(398)*	*74*
Circuit board copper foil	5,312	6,969	1,690	1,390	1,172	1,477	5,730	1,321	**778**	*(542)*	*(611)*
Cost of Net Sales	12,863	18,527	4,426	4,252	3,923	4,340	16,943	4,678	**3,826**	*(851)*	*(425)*
Gross Profit	1,721	2,030	(7)	103	18	(10)	104	81	**(7)**	*(88)*	*(111)*
Gross Profit margin (%)	*11.8%*	*9.9%*	*(0.2%)*	*2.4%*	*0.5%*	*(0.2%)*	*0.6%*	*1.7%*	***(0.2%)***	-	-
SG&A	1,194	1,025	330	332	322	730	1,715	322	**296**	*(26)*	*(35)*
SG&A margin (%)	*8.2%*	*5.0%*	*7.5%*	*7.6%*	*8.2%*	*16.9%*	*10.1%*	*6.8%*	***7.8%***	-	-
Operating Profit	527	1,004	(337)	(228)	(304)	(741)	(1,611)	(241)	**(303)**	*(62)*	*(75)*
Operating Profit margin(%)	*3.6%*	*4.9%*	*(7.6%)*	*(5.2%)*	*(7.7%)*	*(17.1%)*	*(9.5%)*	*(5.1%)*	***(8.0%)***	-	-
Ordinary Profit	440	976	(318)	(264)	(471)	(784)	(1,840)	44	**(192)**	*(236)*	*72*
Profit Attributable to Owners of the Parent	193	848	(294)	(315)	(384)	(939)	(1,933)	(22)	**(380)**	*(358)*	*(65)*
Depreciation	1,316	1,274	307	310	314	308	1,240	307	**273**	*(34)*	*(37)*
EBITDA	1,843	2,278	(29)	81	9	(432)	(371)	66	**(30)**	*(96)*	*(112)*
EBITDA margin (%)	*12.6%*	*11.1%*	*(0.7%)*	*1.9%*	*0.2%*	*(10.0%)*	*(2.2%)*	*1.4%*	***(0.8%)***	-	-
Production Volume (metric ton)	10,058	11,936	2,074	2,172	2,345	1,928	8,520	2,478	**1,904**	*(574)*	*(268)*

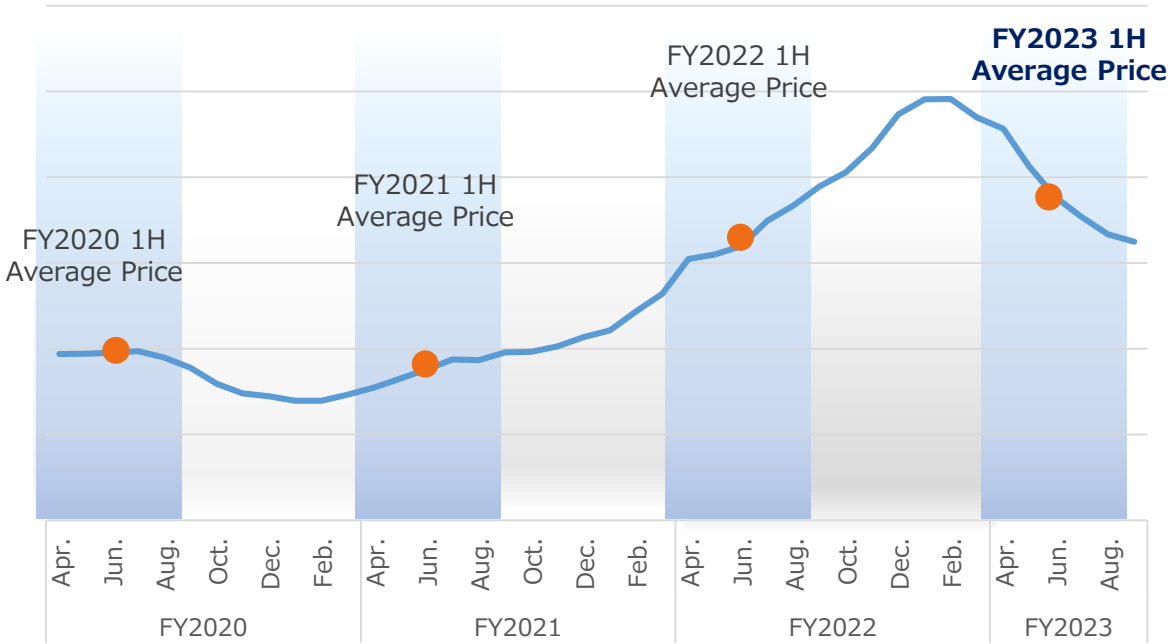
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Variable Factors

Electricity Price

- Electricity price remains high on average, although it has been on a downward trend since its peak.



Copper Price

- The selling price of our products is determined every three months based on the market price of copper. This system allows copper prices to be reflected in the selling price, although there will be a time lag in the reflection.

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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 SDGs targets



Our products are made from 100% recycled materials

We recycle copper foils scraps generated in the manufacturing process.
ISO 14021:2016 compliance has been verified by a third-party certification body.



Our SDGs targets



Social

Human Capital Management “Corporate development by employee growth”

We will enhance corporate value by employee growth through expanded training programs.

Our SDGs targets



Governance

Enhancing corporate governance by accelerating its environmental initiatives

In one example, Carbon Footprint Group is newly establish to strengthen Environmental Management Committee with the theme of Global Environment.

Our SDGs target



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