



Financial Results

FY2022 Q3

February 10th, 2023

Nippon Denkai, Ltd.



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- 1 . Business Results for FY2022 Q3
- 2 . Forecast and State of Progress for FY2022 full-year
- 3 . Appendix



Business Results

- Net Sales 12,717million yen (YoY 17.8% decrease)
- Operating Profit \triangle 870million yen (YoY 1,761million yen decrease)
- EBITDA 61million yen (YoY 1,766million yen decrease)

Business Overview

- Sales condition is continuously in a difficult situation since 1H
 - EV battery copper foils: Continued costumer's production restraint as prolonged semiconductor supply shortages.
 - Circuit board copper foils: Lower demand for smartphones and automotive circuit boards.
- Operating Profit \triangle 870million yen
 - Manufacturing cost increased due to:
 - Energy price hike in Japan and the US.
 - Decline in operating rate due to lower sales and production volume.
- Production volume: 6,592Mt (YoY 29.2% decrease)



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FY2022 Q3 Business (Consolidated)



- **Net Sales:** Sales volume for EV battery copper foils declined.

The demand for circuit board copper foils remained low overall.

- **Manufacturing cost** increased due to energy price hike and decrease in operating rate by lower sales and production volume.

(Million Yen)	FY2021 Q3	FY2022 Q3	Difference	YoY (%)
Net Sales	15,469	12,717	△ 2,751	△ 17.8%
EV battery copper foils	10,119	8,464	△ 1,654	△ 16.4%
Circuit board copper foils	5,349	4,252	△ 1,096	△ 20.5%
Operating Profit	890	△ 870	△ 1,761	—*
Ordinary Profit	874	△ 1,055	△ 1,929	—*
Profit Attributable to Owners of Parent	632	△ 994	△ 1,626	—*
Production Volume (Mt)	9,309	6,592	△ 2,717	△ 29.2%

In the above table, numbers are rounded down. 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.

FY2022 Q3 Operating Profit & EBITDA (Consolidated)



(Million Yen)	FY2021 Q3	FY2022 Q3	Difference	YoY (%)
Net Sales	15,469	12,717	△ 2,751	△ 17.8%
Cost of Net Sales	13,789	12,602	△ 1,187	△ 8.6%
Gross Profit on Sales	1,679	114	△ 1,564	△ 93.2%
Gross Profit Margin (%)	10.9%	0.9%	△ 10.0pt	—
SG&A	788	985	196	24.9%
SG&A Margin (%)	5.1%	7.7%	2.6pt	—
Operating Profit	890	△ 870	△ 1,761	—*
Operating Profit (%)	5.8%	△ 6.8%	△ 12.6pt	—
Depreciation	937	932	△ 4	△ 0.5%
EBITDA	1,827	61	△ 1,766	△ 96.6%
EBITDA Margin (%)	11.8%	0.5%	△ 11.3pt	—

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

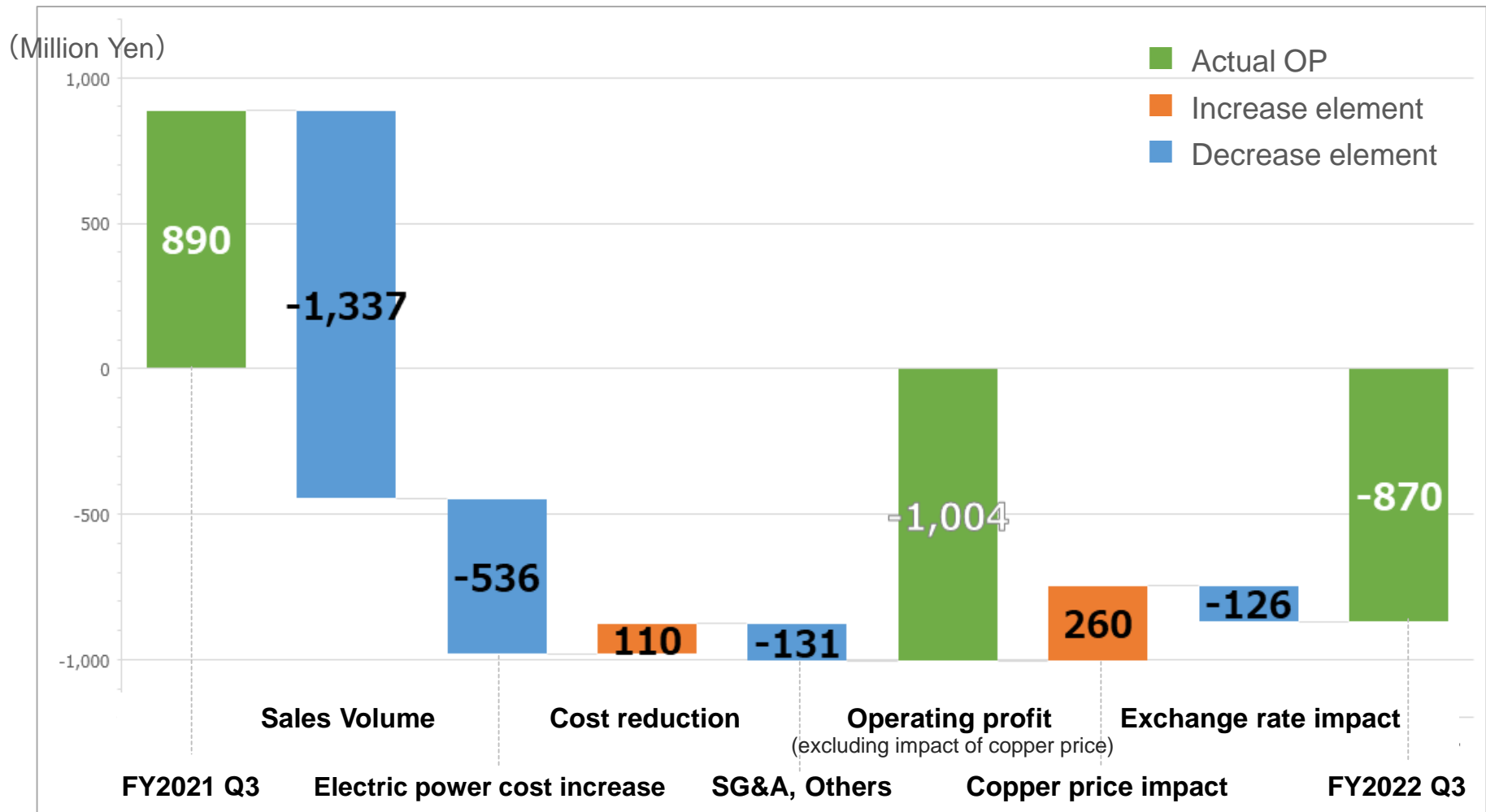
* Percentage change is omitted since this is a comparison of increase and decrease.

Operating Profit Q3 YoY Comparison (Consolidated)



Operating Profit decreased due to:

- Decline in operating rate due to lower sales and production volume
- Manufacturing cost increase by energy price hike





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Revision of Financial Results FY2022 Full-year (Consolidated)



		FY2022 Forecast	FY2022 Q3
	(Million Yen)		
Net Sales		17,700	12,700
	EV battery copper foils	11,600	8,400
	Circuit board copper foils	6,100	4,200
Operating Profit		△1,000	△800
Ordinary Profit		△1,200	△1,000
Profit Attributable to Owners of Parent		△1,100	△900
EBITDA		200	60

※ Actual figures are rounded down to 100 million yen same as the forecast.

< Basis of Forecast >

Production volume : **8,700 Mt**

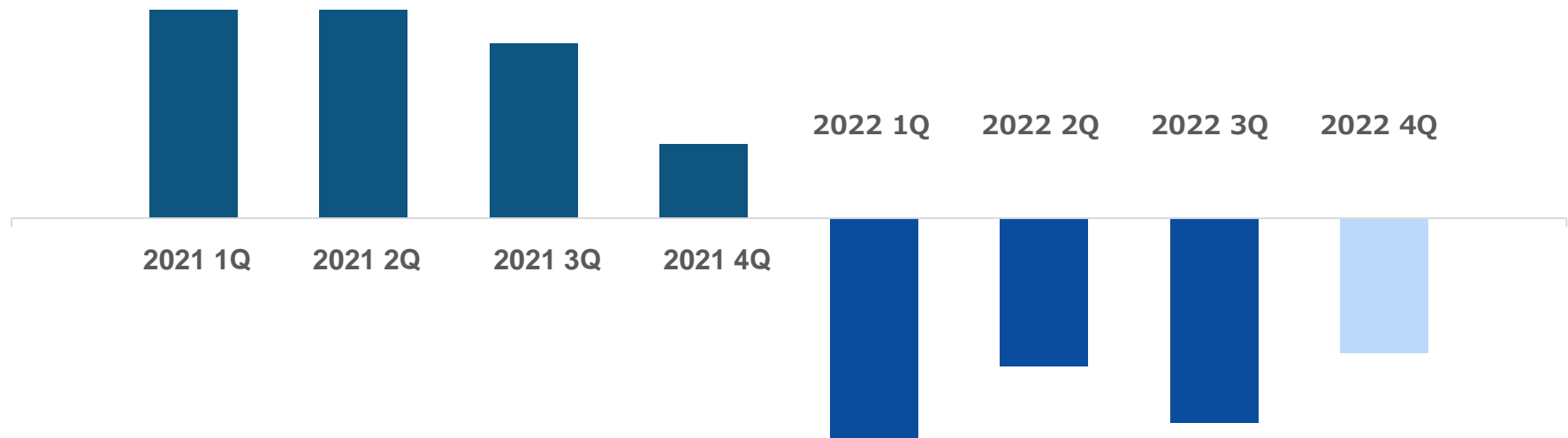
Copper market price* : **1,200yen/Kg**

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

◆ Q4: Downturn due to the following factors




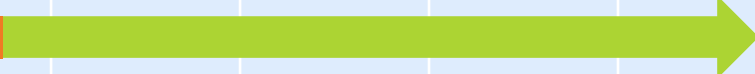



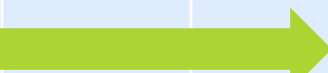

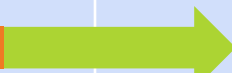
- The target “partial cost-reflective pricing in electricity” not achieved
- Further decline in orders compared to the plan announced on 11/10 due to delay in demand recovery of copper foil in EV battery and circuit board fields.
- Increase in copper price
- The target “Price revision of products in the US plant” not achieved

◆ Full-year result is predicted to achieve the forecast through fixed cost reductions, etc.



- Continue negotiating on partial cost-reflective pricing in electricity in Japan
- Continuous sample work with existing and new customers for new orders
- Retaining reduction of fixed costs by improving production efficiency

In progress
 Estimated time of monetarization

	FY2022	FY2023	FY2024	FY2025	FY2026 and after
Sales of high-end product to existing PCB customers in the US					
Price revision of products in the US plant					
Production increase for new lines in the existing customer					
Sales to new EV battery manufacturing customer					
Adoption to innovative EV battery					



**Completion of
construction
within FY 2022**

**Start sample
work in
summer 2023**

**Supply
productions
at the end of
2023**

Exterior @Camden Plant After Construction



- ◆ **Location**
Camden, South Carolina, USA
- ◆ **Investment amount**
US\$26 million
- ◆ **Product / Capacity**
EV battery copper foils / 1,200Mt per year
- ◆ **Supply destination**
Major LIB manufacturers in the US

**Next
Announcement**

May 10th, 2023



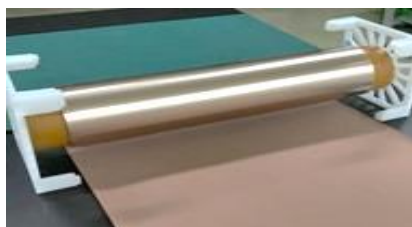
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Sales by Product (FY2021 full-year, consolidated)

Circuit Board Copper Foil

HL・Seed



Uses

Flexible Printed Circuits
Board Package Substrate

Major End-Products



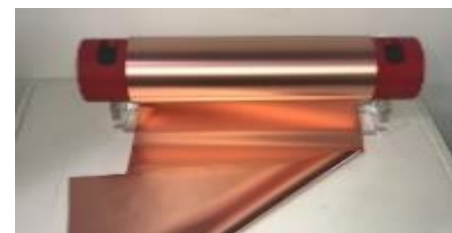
5G
smartphone



5G communi-
cation base
station etc..

EV Battery Copper Foil

YB

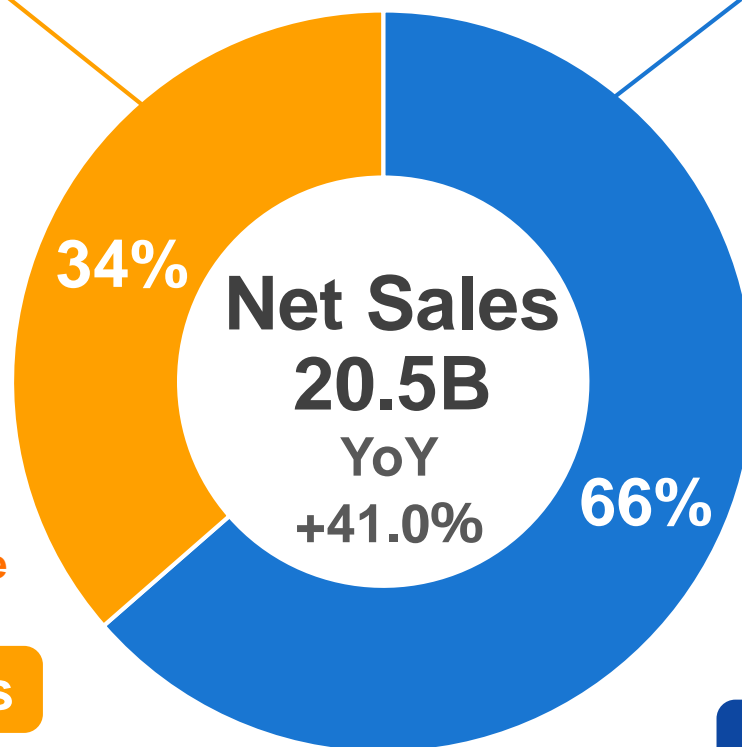
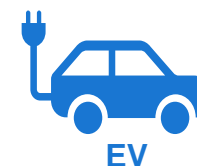


Uses

Lithium-Ion Batteries (LIB)



Major End-Products



EBITDA¹ JPY 2.2B
EBITDA margin 11.1%

History of Business Results (Quarterly, Consolidated)

(Million Yen)	FY2021 Q1	FY2021 Q2	FY2021 Q3 (A)	FY2021 Q4	FY2022 Q1	FY2022 Q2	FY2022 Q3 (B)	Difference (B - A)
Net Sales	4,895	5,176	5,397	5,088	4,419	4,356	3,941	△1,456
EV battery Copper Foil	3,274	3,381	3,463	3,469	2,729	2,965	2,769	△694
Circuit Board Copper Foil	1,621	1,794	1,933	1,619	1,690	1,390	1,172	△761
Cost of Net Sales	4,329	4,599	4,860	4,737	4,426	4,252	3,923	△937
Gross Profit on Sales	566	576	536	351	△7	103	18	△518
Gross Profit Margin (%)	11.6%	11.1%	9.9%	6.9%	△0.2%	2.4%	0.5%	△9.4pt
SG&A	255	263	269	237	330	332	322	53
SG&A Margin (%)	5.2%	5.1%	5.0%	4.7%	7.5%	7.6%	8.2%	3.2pt
Operating Profit	311	313	266	113	△337	△228	△304	△570
Operating Profit (%)	6.4%	6.0%	4.9%	2.2%	△7.6%	△5.2%	△7.7%	△12.6pt
Ordinary Profit	283	322	268	101	△318	△264	△471	△739
Profit Attributable to Owners of Parent	196	242	192	216	△294	△315	△384	△576
Depreciation	303	314	318	337	307	310	314	△4
EBITDA	614	627	585	451	△29	81	9	△576
EBITDA Margin (%)	12.6%	12.1%	10.8%	8.9%	△0.7%	1.9%	0.2%	△10.6%
Production Volume (Mt)	3,053	3,181	3,073	2,627	2,074	2,172	2,345	△728

Our Commitments to ESG

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 ESG 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 ESG targets



Social

CSR

We proactively commit to CSR for social contribution such as cleaning litters around our factory, recycling plastic bottles, Pat-Run activity and purchasing handmade buns made in local social welfare facility. We aspire to become the corporation that thrives with a local community through our CSR activities above.



Our environment ESG targets



Governance

Obtained certification for excellent health management

We aim to rise corporate health management and obtained certification called “Gin no Nintai” for excellent health management in June, 2022. We continuously create a positive work environment while attempting “Kin no Nintai”.

Our environment ESG targets



Kin = Gold
Gin = Silver

Disclaimer

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Nippon Denkai, LTD.