



**Solus Advanced  
Materials**

# **Solus Advanced Materials Co., Ltd. 2023 1Q Earnings Report**

**April 2023**

# Disclaimer

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The information herein is provided for your information purposes only and contains preliminary figures which may be materially different from the final figures.

Forecasts and projections contained in this material are based on current business environments and management strategies, and they may differ from the actual results upon changes and unaccounted variables. We make no guarantees and assume no responsibility for the use of information provided.

We trust your decisions will be based on your own independent judgment.

Financial data in this presentation is based on an IFRS-basis consolidated financial statements.

## **I. 2023 1Q Earnings & Plans**

## **II. Consolidated Financial Statements**

## **III. Appendix**

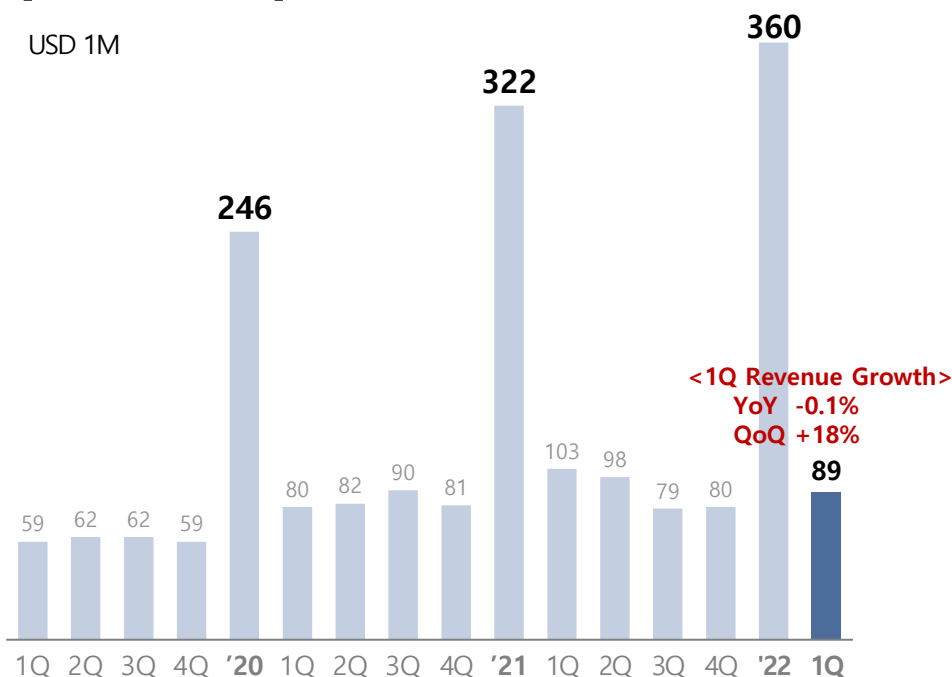
# 2023 1Q Earnings

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- **Revenue:** As a result of lowering power costs in EU, the original cost is reduced thus leading to increased supplies of battery copper foils. Copper foil sales increase despite sluggish semiconductor/5G industry. Amidst the sudden shrinking of the display market, there is an increase in revenue of TV model aETL items and so on, thus leading to an 18% increase in the revenue compared to the previous quarter (Excluding discontinued businesses).
- **EBITDA:** Due to the reduced power costs, the original cost for battery copper foils is reduced. An increase in the material costs for the electro-materials division and re-assessment of the stock compensation costs and other temporary costs reflected, thus leading to an increase by 56% compared to the previous quarter and turning into deficit compared to the same quarter of the last year (Excluding discontinued businesses).

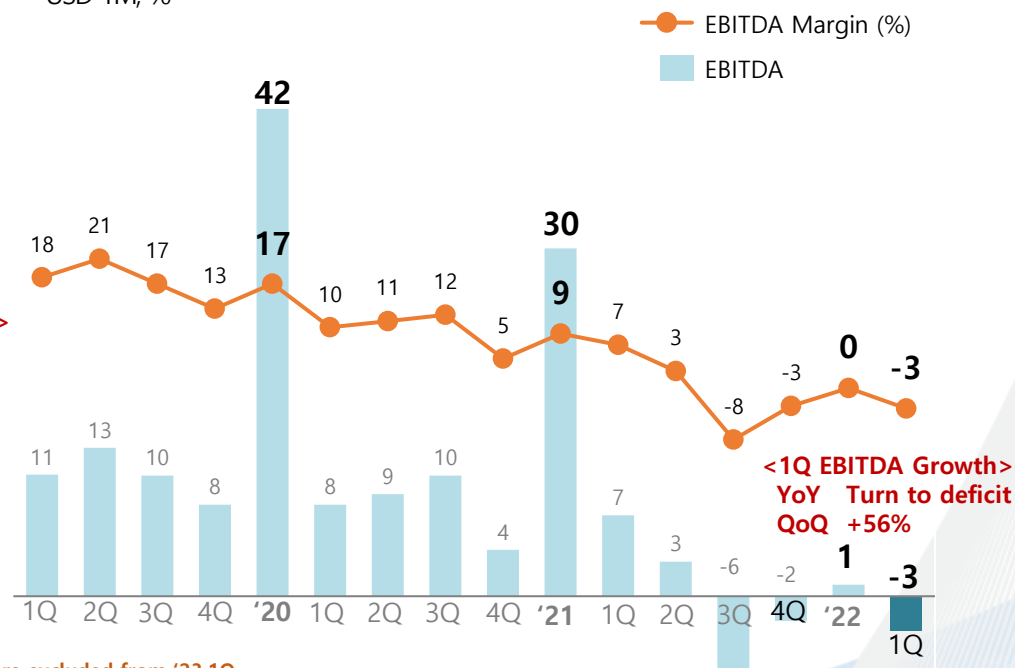
## [Revenue Trend]

USD 1M



## [EBITDA(%) Trend]

USD 1M, %



※ Following the sale process of Solus Biotech, revenue of discontinued business (Bio) and EBITDA are excluded from '23.1Q.

※ Excluding the discontinued business, sales of 94M USD in the same period last year ('22.1Q') / 3M USD in EBITDA, and 70M USD in sales of the previous quarter ('22.4Q') / -6M USD in EBITDA

※ The rate of change(%) is based on KRW

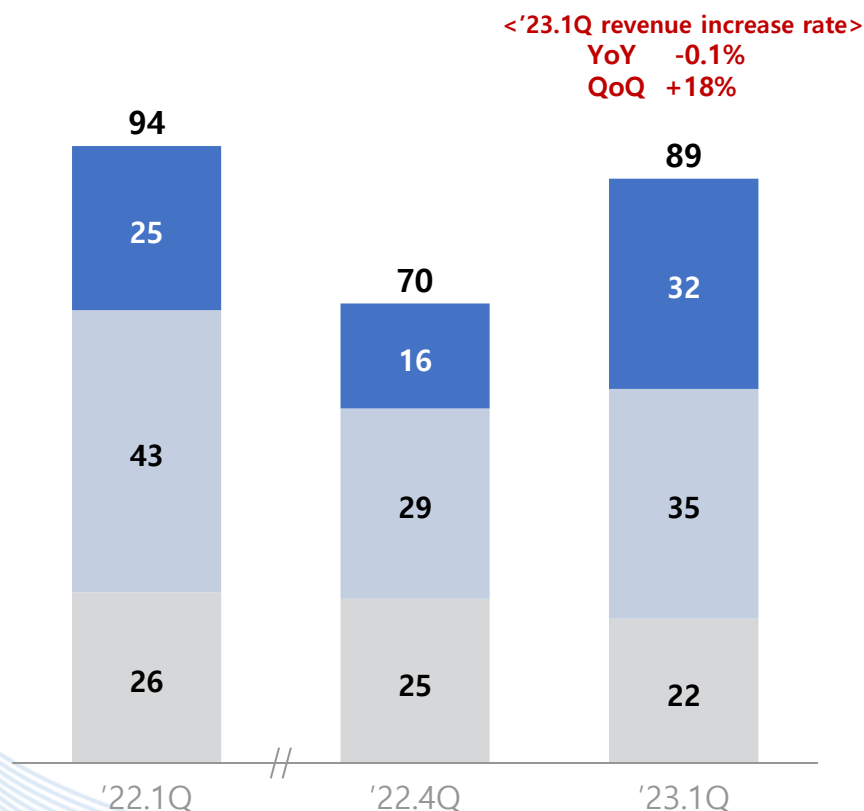
# 2023 1Q Achievements and Plans by Division

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## Status of Revenue for battery copper foils/ copper foils/electro-materials

(USD 1M)

- Battery Copper foil
- Copper foil
- Electro-materials



## [2023 1Q Achievements and Plans]

### • Achievements: YoY -0.1%, QoQ 17.7% increase

- Battery copper foil: As the EU power cost is on the downhill, there is a less burden of manufacturing costs, thus production is restored, and customers supplies are increased.
- Copper foil: Due to the sluggish frontier industry, customer demands are dwindling but there is an improvement in the sales compared to previous quarter.
- Electro-materials: Amidst the sluggish economical growth, the display market performs poorly and the low seasons arrives, thus revenue is decreased.

### • Plans:

- Battery copper foil: Increase the amount of supplies through consecutive expansions of production lines and starting of PH2 mass production in Hungary, and aggressively hedge the power costs, with an aim to consistently improve the original costs.
- Copper foil: High-end product sales reinforcement including Double-Thin foils(DTH) to acquire higher profitability
- Electro-materials: Highly refractive filler and non-light emitting material and Chinese site customers supplies increased.

※ The rate of change(%) is based on KRW

# Battery Copper Foil/Copper Foil\_Production Capacity Status & Plan

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## Hungary (Battery Copper Foil)



1.5 PH1	2.3 PH2	6.2 PH3	10.0
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- Plan to hold 100K tons of capacity in Hungary (Targeting Europe)
- PH1 (15K tons) : First shipment in Nov '20
- PH2 (23K tons) : Plans to mass-produce in the 2Q of '23
- PH3 (62K tons) : Plans to mass-produce in the '26

### [Battery copper Foil Div. - Overview]

#### • Products

- Manufacture of battery copper foil products to individual customer specifications
- Manufacture of a wide range of battery copper foil products, (e.g., thickness of 8μm or 6μm, high-strength or high-elongation characteristics)

#### • Customers

- Global top-tier battery manufacturer
- Global OEM company

#### • Product supply status and plans

- Hungary PH2 partial line customer approved
- Additional supply contracts reflecting price increases acquired
- New and additional supply contracts constantly sought

## Canada (Battery Copper Foil)



1.8 PH1	4.5 PH2	6.3
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- Completed site purchase with capacity of 63K tons (Targeting North America)
- Extension/Reconstruction of factories equipped with a copper foil production infrastructure (Construction starts in July '22)
- PH1 (18K tons): Plans to mass produce in the 2H of '24

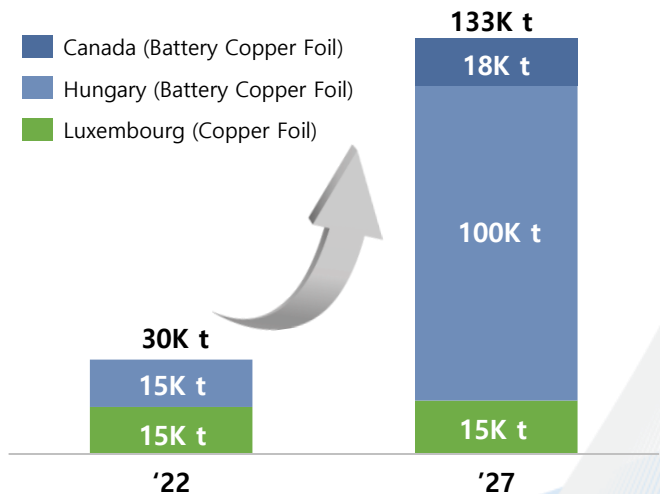
## Luxembourg (Copper Foil)



1.5	1.5
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- 15K tons of capacity in Luxembourg
- Manufacturing copper foil for 5G communication equipment and semi-conductor PCB
- Plan to expand supply of ultrathin copper foil

PH1	PH2	PH3
(Unit : 10K ton, Gross Capa.)		



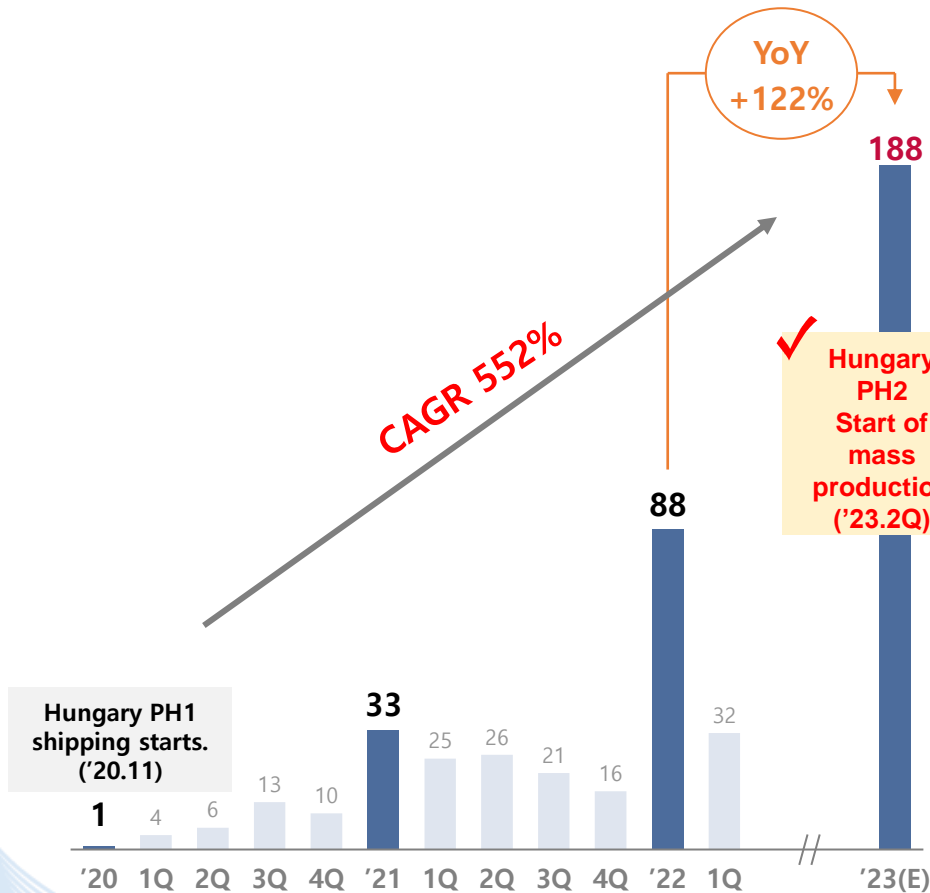


# Battery Copper Foil\_Hungary PH2 Status and Plans

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## Quarterly and annual revenue status and goals for battery copper foils

USD 1M



## Expansion of operational capacity for Battery copper foil

- **Completion of PH2 by the end of '22 (23K tons capacity)**
- **Main phase of mass production starting in 2Q of '23**
- **'23 battery copper foil revenue forecast of 188M USD (YoY +122%)**
  - PH1 15K tons capacity in operation
  - PH2 23K tons capacity: Production line to be expanded gradually
  - Completed approval from customer on partial line of PH2
- **Improved productivity and profitability for better manufacturing competitiveness**
  - Proceeding with optimization of production manpower for each line
  - Currently improving the profitability with lowered power costs compared to the previous year.
  - Maintain the same profitability through aggressive hedging of power costs.
- **Pursue steady additional and new supplies.**
  - Will obtain approval from main customers on all PH2 production lines by the end of the year.
  - Consistent pursuits of new and additional supply contracts for North American and EU customers

# Copper Foil\_Product Portfolio Expansion Plan

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## • Sales Mix advancement to Increase Mid-to Long-Term Sales of High-end Copper Foil

- Plans to maintain high market share of flagship products (Low Loss, High-Frequency) and expand thin foil market share for semiconductors
- Enhancement DTH (Double-Thin) business: Timely supply DTH for mobile/IT products such as smartphones and tablets in line with market trends

### Solus Advanced Materials\_Copper Foil Portfolio

High-end copper foils	Low Loss	Copper foil that can minimize signal losses which is used for communication equipment etc.
	High Frequency	High frequency copper foil with low losses used for communication equipment etc.
	Thin foils (DTH)	Thin copper foil with thickness of 2μm or less that can be widely used for semiconductor chips such as various DRM, CPU and GPU etc.
Standard copper foils		Very thin copper foil with thickness of 10μm or less which is obtained through electrolysis of sulfuric copper acid



#### ▪ Owns thin foils with high quality and price competitiveness

- Completed approval on mass production/material of ultra thin foils for semiconductors applicable to MASP of next generational IC.  
(A company mass production approval in October '20, B company material approval in December '21 and C company mass production approval in March '23)

#### ▪ Will try to expand the thin foil market shares

- Will aggressively expand the scope of applicable products and promotion of customers
- Entering the mass production phase for memory and system semiconductors following product approval

**Sales Mix advancement for higher profitability**



# Electro-materials\_R&D Status and Plans

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- **Securing a Foundation for Sustainable Growth: Strengthening R&D capabilities in electro-materials business**
  - Light emitting and non-light emitting R&D facilities supplemented
    - Introduction of new lab facilities such as deposition machines as well as area size expansion of 2.5 times compared to the existing facilities
    - Investments in various lab equipments with an aim to expand the new business in macromolecular industry
  - Expansion from existing aETL oriented business to light emission material item diversification and non-light emission business including filters etc.

## Main goals of the electro-materials R&D

Light emission material		Non-light emission material	
HL (aETL)	High efficiency/long life material development	Filler	Expansion of the range of application (QD TV → AR/VR)
ETL	Low voltage/long life material development	TFE	TFE characteristics maximization Product and customer line diversification
Phosphorescence Green Light emission material	Low voltage/high efficiency material development for market exploration	QD Ink	High efficiency QD Ink development and material development optimized for the customer's lines

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# Consolidated Financial Statements

Investor Relations 2023

(Unit: USD 1M)

Classification	Dec. 2020	Mar. 2021	Jun. 2021	Sep. 2021	Dec. 2021	Mar. 2022	Jun. 2022	Sep. 2022	Dec. 2022	Mar. 2023
Current assets	414	335	331	316	332	347	541	414	409	379
Non-current assets	359	380	441	480	520	635	691	721	745	803
<b>Total assets</b>	<b>773</b>	<b>715</b>	<b>772</b>	<b>796</b>	<b>852</b>	<b>982</b>	<b>1,232</b>	<b>1,135</b>	<b>1,154</b>	<b>1,182</b>
Current liabilities	154	162	211	237	241	349	287	218	270	383
Non-current liabilities	169	110	113	113	171	204	192	193	162	96
<b>Total liabilities</b>	<b>323</b>	<b>272</b>	<b>324</b>	<b>350</b>	<b>412</b>	<b>553</b>	<b>479</b>	<b>411</b>	<b>432</b>	<b>479</b>
Capital stock	4	4	4	3	3	3	3	3	4	3
<b>Total shareholders' equity</b>	<b>450</b>	<b>443</b>	<b>448</b>	<b>446</b>	<b>440</b>	<b>429</b>	<b>753</b>	<b>724</b>	<b>722</b>	<b>703</b>
Debt ratio	72%	61%	72%	79%	94%	129%	64%	57%	59%	68%
[Borrowings]										
Borrowings	228	139	180	208	253	385	308	273	277	307
Cash	281	178	166	141	118	85	296	175	128	71
<b>Net borrowings</b>	<b>-53</b>	<b>-39</b>	<b>14</b>	<b>67</b>	<b>135</b>	<b>300</b>	<b>12</b>	<b>98</b>	<b>149</b>	<b>236</b>

※ The above data for Mar.2023 is based on unaudited financial statements.

※ Mar. 2023 classifies Non-Current Assets/Liabilities due to be called as subsidiary (SOLUS BIOTECH) sales procedure

※ The above date calculated based on the corresponding each quarterly FX rate.

# Consolidated Statement of Comprehensive Income

Investor Relations 2023

(Unit: USD 1M)

Classification	2021					2022					2023
	Q1	Q2	Q3	Q4	Total	Q1	Q2	Q3	Q4	Total	Q1
<b>Sales</b>	<b>80</b>	<b>82</b>	<b>90</b>	<b>81</b>	<b>322</b>	<b>103</b>	<b>98</b>	<b>79</b>	<b>80</b>	<b>338</b>	<b>89</b>
Battery copper foil	4	6	13	10	32	25	26	21	16	83	32
Copper foil	48	46	45	39	172	43	39	30	29	132	35
Electro-materials	20	19	21	24	81	26	23	23	25	92	22
Bio	8	11	11	8	37	9	10	5	10	31	-
Cost of sales	63	66	71	65	256	88	84	73	77	305	85
Net sales income	16	16	19	16	66	15	14	6	3	33	4
SG&A	16	14	16	20	64	17	19	20	14	67	19
<b>Operating profit</b>	<b>0.4</b>	<b>2</b>	<b>3</b>	<b>-4</b>	<b>2</b>	<b>-2</b>	<b>-5</b>	<b>-14</b>	<b>-11</b>	<b>-34</b>	<b>-15</b>
<b>(%)</b>	<b>0.5%</b>	<b>2.3%</b>	<b>3.6%</b>	<b>-4.3%</b>	<b>0.5%</b>	<b>-2.0%</b>	<b>-6.2%</b>	<b>-18.5%</b>	<b>-14.3%</b>	<b>-9.8%</b>	<b>-16.9%</b>
Gains/losses on interest	-2	-1	-1	-0.3	-4	-1	-1	-1	-2	-5	-3
Gain/losses on foreign currency transactions	5	2	0.7	-0.2	7	0	7	4	1	8	0.2
Gain/losses on foreign currency transactions	2	-2	2	-0.2	1	2	7	2	-6	4	0.1
<b>Earnings before interest and taxes</b>	<b>3</b>	<b>-0.3</b>	<b>2</b>	<b>-4.4</b>	<b>0.5</b>	<b>-1</b>	<b>5</b>	<b>-11</b>	<b>-20</b>	<b>-26</b>	<b>-18</b>
Income taxes	4	-3	2	-2.5	0.4	3	6	2	-2	9	-1
Profit/loss from continuing operations	-1	3	0.6	-0.4	1.4	-4	-1	-13	-18	-35	-17
Profit/loss from discontinued operations	-	-	-	-1.5	-1.5	-	-	-	-2	-2	-0.1
<b>Net income</b>	<b>-1</b>	<b>3</b>	<b>0.6</b>	<b>-2</b>	<b>0.1</b>	<b>-4</b>	<b>-1</b>	<b>-13</b>	<b>-20</b>	<b>-37</b>	<b>-17</b>
Income for controlling shareholder	<b>2</b>	<b>5</b>	<b>2</b>	<b>1</b>	<b>10</b>	<b>0</b>	<b>4</b>	<b>-7</b>	<b>-7</b>	<b>-10</b>	<b>-9</b>

※ The above data for 2023 Q1 is based on unaudited financial statements.

※ The above data calculated based on the corresponding each quarterly FX rate

※ Operating profit rate(%) based on KRW

※ The total amount for each business year was calculated based on the FX rate for the 4Q of each year.

※ Following the sale process of Solus Biotech, it is classified as discontinued business (bio) sales excluded from 23.1Q and discontinued operating profit or loss

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# Company & Business Introduction

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## [Company Introduction]

<u>Company Name</u>	<b>Solus Advanced Materials Co., Ltd.</b>
<u>CEO</u>	<b>Daeje Chin &amp; Kwangpyuk Suh</b>
<u>Established</u>	<b>2019. 10. 01</b>
<u>Listed</u>	<b>2019. 10. 18 (KOSPI)</b>
<u>Total Assets</u>	<b>USD 1,182M (As of end of Mar '23)</b>
<u>Employees</u>	<b>1,349 (As of end of Mar '23)</b>
<u>Based</u>	<b>627 Seodong-ro, Iksan-si, Jeollabuk-do</b>
- <u>Battery Copper Foil</u>	<b>Hungary, Canada (R&amp;D/Production/Sales)</b>
- <u>Copper Foil</u>	<b>Luxembourg (R&amp;D/Production/Sales)</b>
- <u>Bio</u>	<b>Sungnam (R&amp;D/Sales), Iksan (Production)</b>
- <u>Electro-Materials</u>	<b>Sungnam (R&amp;D/Sales), Iksan (Production), China (Production/Sales)</b>

## [Business Introduction]

 <b>Battery Copper Foil Division</b>	<b>Battery Copper Foil</b>	<p>Copper foil for EV batteries</p>	
 <b>Advanced Materials Division</b>	<b>Electro-Materials</b>	<p>Copper foil for 5G Networks &amp; electronic devices (PCB)</p>	
		<p>OLED and display materials for smartphone, TV, laptop, etc.</p>	
	<b>Bio</b>	<p>Natural-based materials for cosmeceutical, pharmaceutical and nutraceutical</p>	

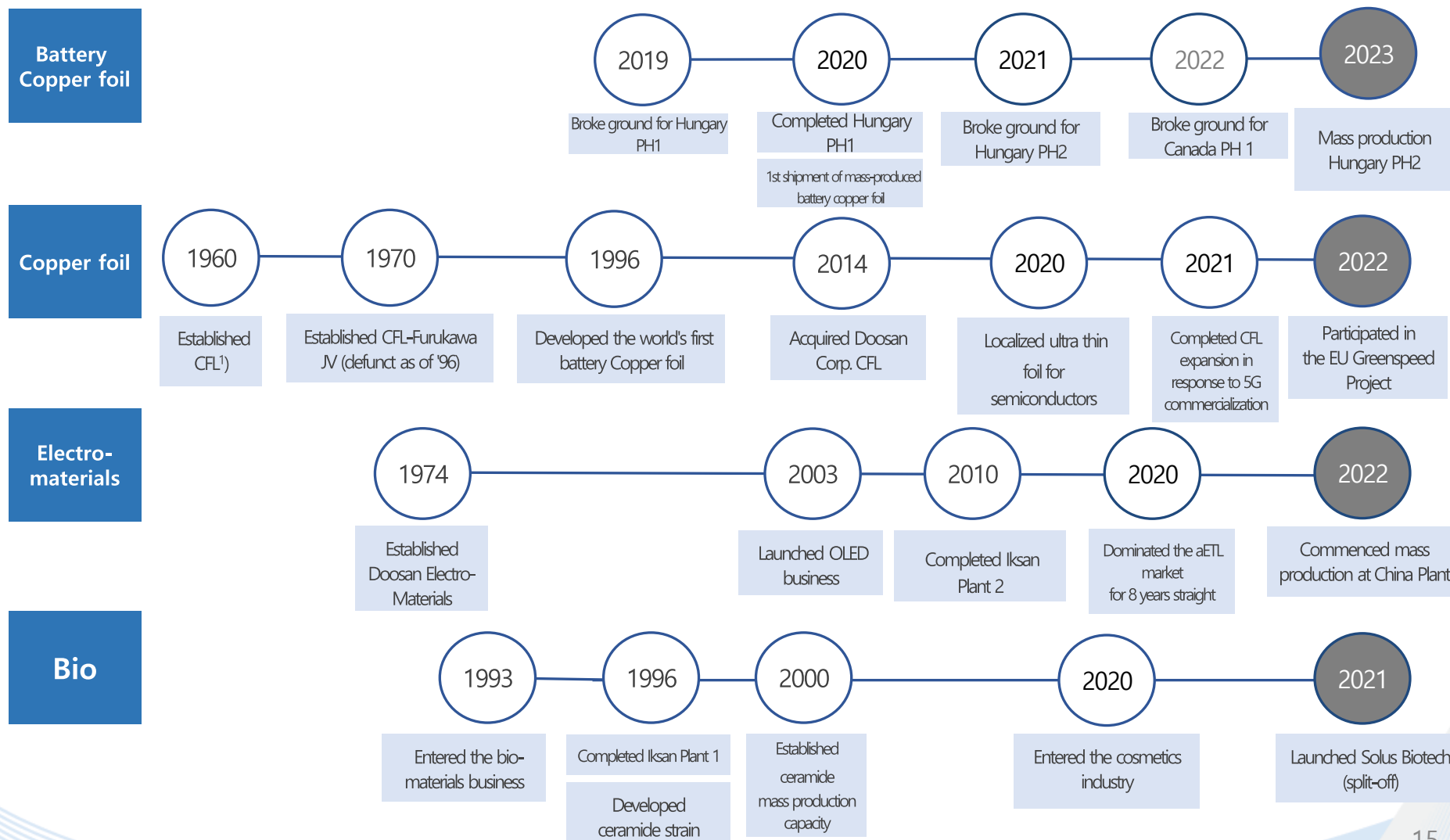
※ The above data for 'Total Assets' (As of end of Mar '23) is based on unaudited financial statements.



# History

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Business expansion & growth into global no.1 material company with over 60 years of experience & know-hows

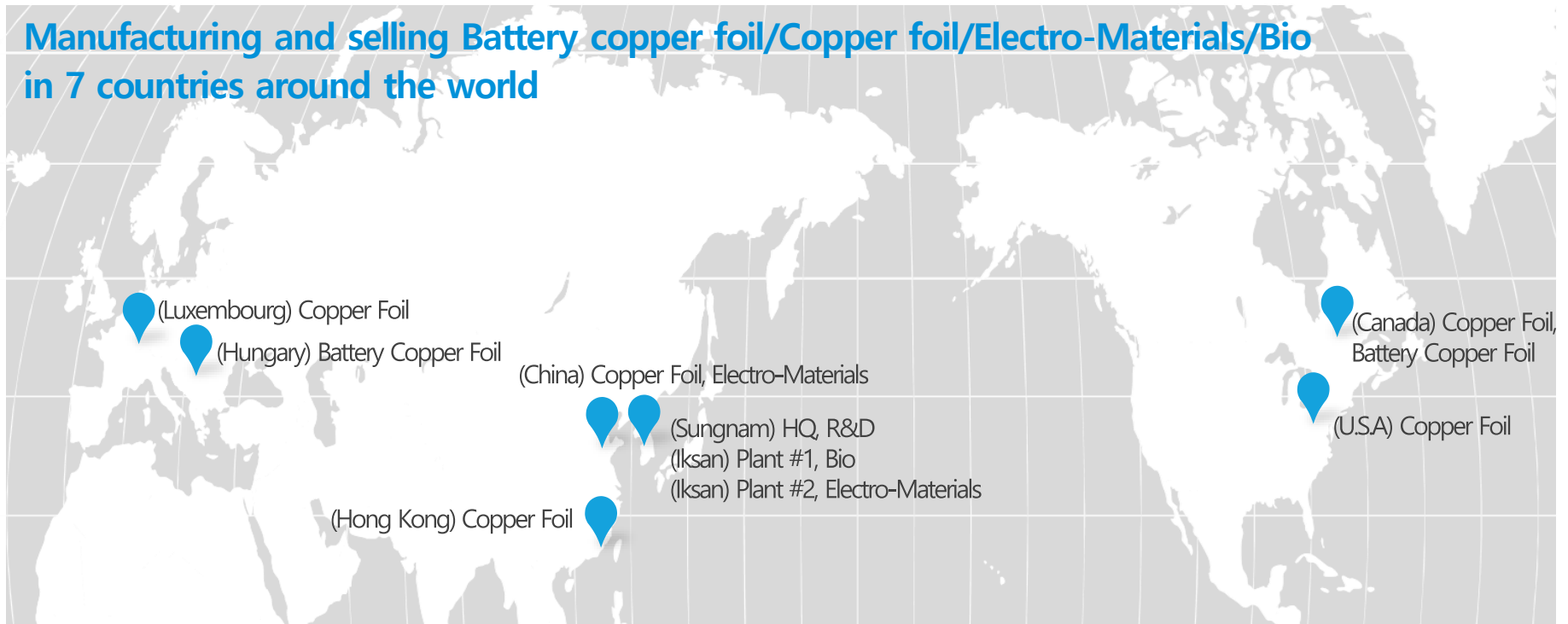


1) Circuit Foil Luxembourg

# Business Sites

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Manufacturing and selling Battery copper foil/Copper foil/Electro-Materials/Bio in 7 countries around the world



Iksan, Korea (Electro-Materials & Bio)



Luxembourg (Copper Foil)



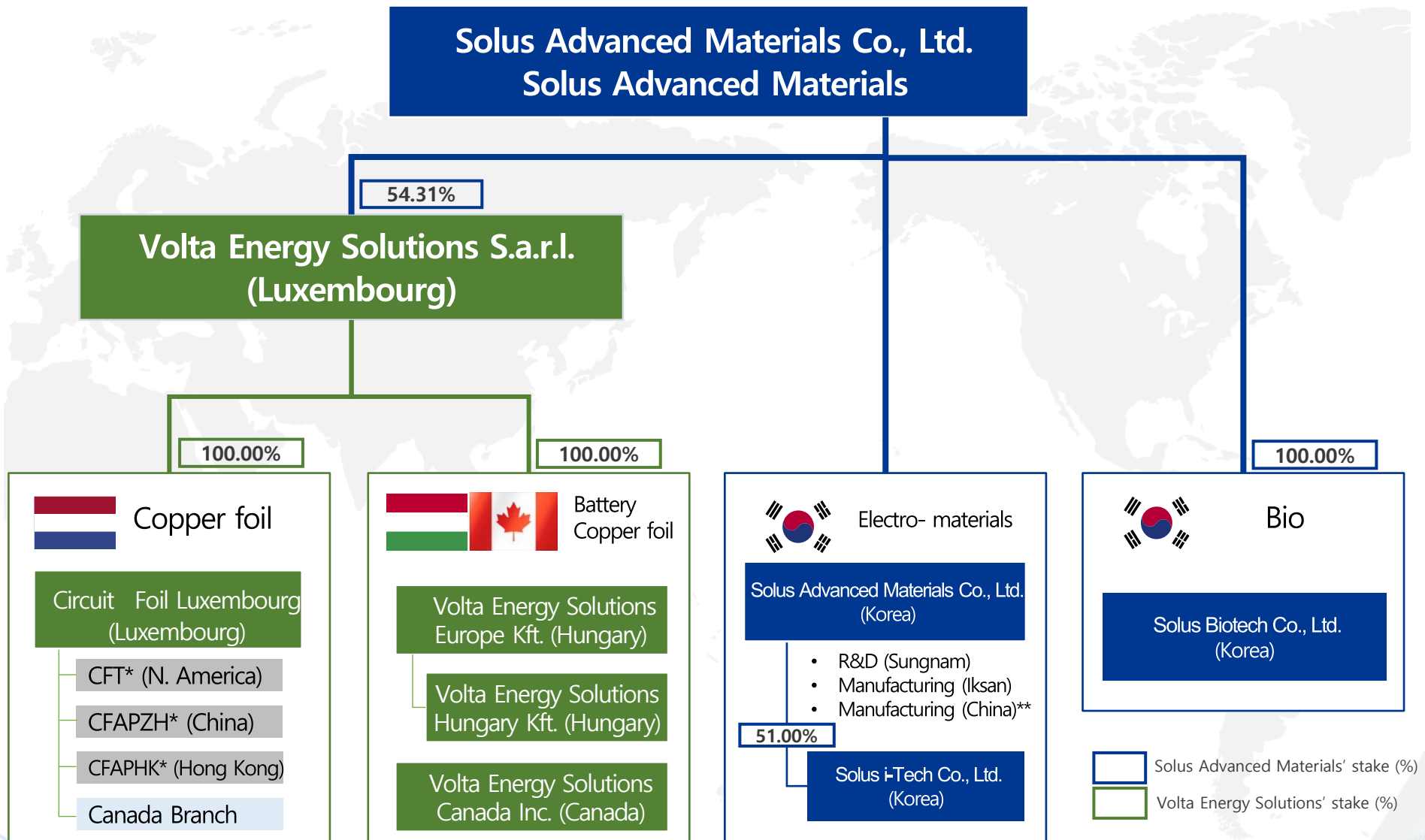
Hungary (Battery Copper Foil)



Canada (Battery Copper Foil)

# Domestic & Overseas Corporations

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\* CFT (Circuit Foil Trading Inc.) / CFAPZH (Circuit Foil Asia Pacific Zhangjiagang) / CFAPHK (Circuit Foil Asia Pacific Hong Kong)

\*\* Solus Advanced Materials (Changshu) Co., Ltd.

# FX Rate

Items	'19.1Q	'19.2Q	'19.3Q	'19.4Q	'20.1Q	'20.2Q	'20.3Q	'20.4Q
B/S	1,137.80	1,156.80	1,201.30	1,157.80	1,222.60	1,200.70	1,173.50	1,088.00
I/S	1,124.97	1,145.78	1,161.94	1,165.46	1,193.03	1,206.70	1,200.52	1,179.96

Items	'21.1Q	'21.2Q	'21.3Q	'21.4Q	'22.1Q	'22.2Q	'22.3Q	'22.4Q	'23.1Q	2023(P)
B/S	1,133.50	1,130.00	1,184.90	1,185.50	1,210.80	1,292.90	1,434.80	1,267.30	1,303.80	1,330.00
I/S	1,113.62	1,121.33	1,157.95	1,183.14	1,204.46	1,259.85	1,339.14	1,362.33	1,274.57	1,330.00

- Source : First notified basic exchange rate from Hana Bank
- Source : Internal materials for projections

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