



# **IR Message**

Hello.

Greetings from the Solus Advanced Materials IR/PR team. The summer heat has subsided and the cool autumn is just around the corner. We hope that many investors who always support Solus Advanced Materials are enjoying a peaceful and happy time.

We are pleased to be publishing our third IR letter. Since the publication of the last issue of IR letter no. 2, Solus Advanced Materials has seen many achievements. First of all, we announced the expansion of the production capacity of Canadian battery copper foil plant PH1 in the last IR letter Vol. 2. In relation to this, a ground-breaking ceremony for the Canadian battery copper foil PH1 production plant was held on September 5, hosted by Volta Energy Solutions Canada (VESC), our battery copper foil subsidiary, and attended by officials from the Korean and Canadian governments. This ground-breaking ceremony marked the start of Solus Advanced Materials establishing the first battery copper foil production base in Canada, which is expected to signal that the excellent battery foil of Solus Advanced Materials will be active in the North American market.

On the same day, we also announced the conclusion of an expanded supply contract with ACC (France), one of our existing battery customers. The supply contract amount of KRW 194 billion originally signed for in April 2022 was increased by approximately 50%, and a revised contract worth KRW 296.2 billion was concluded. This conclusion of an extended contract with ACC is significant in that it has proved the excellence of the high-end battery copper foil of Solus Advanced Materials to customers and the market, and is recognition of our company's ability to supply better-quality battery copper foil to the market in the future.

In this IR letter, we look at the present and future of the copper foil business, which has been the technical focus of Solus Advanced Materials over 60 years. As the copper foil business is the basis of the battery copper foil business, and it is a business field that has shared our history, we hope that our investors will take note.

Thank you.

# **Solus News Highlights**

## (**J**) Ground-breaking ceremony for PH1 in Canada

### A signal that the battery copper foil of **Solus Advanced Materials is** advancing into North America

On September 5, 2023, the company held a ground-breaking ceremony at the Granby plant in Quebec (Canada), attended by key officials from the Korean and Canadian governments.

This is the third overseas battery copper foil production base of Solus Advanced Materials following plants in Luxembourg and Hungary (Europe), and will establish a mass production system of battery copper foil with a capacity of 25,000 tons, as the first battery copper foil plant for EV batteries in Canada.

Quebec (Canada) boasts a high proportion of renewable energy; notably, 99% of its electricity is generated by hydro-electric power. As a result, it is evaluated as the best location for an EV industry company, which must emphasize eco-friendliness throughout the value chain. At the same time, it is expected to be positive in terms of the US IRA policy.





#### (1) Expansion of ACC supply contract





**AUTOMOTIVE CELLS Co** 

# 50% increase in value of ACC battery copper foil supply contract

We revised the battery copper foil supply contract we concluded with French battery manufacturer ACC (Automotive Cells Company) in April 2022 to a new value of KRW 296.2 billion, which is approximately 50% higher than its original value of KRW 194 billion.

This is the result of the high evaluation of the outstanding battery copper foil production capacity of VES (Volta Energy Solutions, subsidiary of SAM) in Hungary as well as our competitive edge in delivery as the only battery copper foil production base in Europe.

As the contract amount has increased with this revised contract, the scale of cooperation between the company and ACC has also expanded; the battery copper foil that was previously planned to be supplied will be changed to a high-end product; and the amount supplied has also increased from the previous contract.

Through this opportunity, our customer base will diversify into global battery companies and the competitiveness in battery copper foil of Solus Advanced Materials is expected strengthened further.

# Status of Major External IR Activities (August ~ September 2023)

## Analyst meeting





# Analyst meeting held by **Electro-Materials Business Division**

September 18, 2023, we took the opportunity to explain the vision of the electromaterials division and the mid- to long-term road maps and patents of Solus Advanced Materials to our coverage analysts and analysts in charge of the display field at the Financial Investment Training Center located in Yeouido, after which we answered a range of their questions.

We plan to keep communicating actively with investors who are interested in Solus Materials, Advanced not only through quarterly performance presentations, NDRs, and conferences but also through various forms of IR activities.

# Analyst Report (August ~ September 2023)

### Further expansion of our coverage securities companies in 2023

After SK Securities and DB Financial Investment started coverage at the end of May, we began coverage on September 12 at IBK Investment & Securities.



# Analyst Report

#### **IBK Investment Securities**

Turnaround is expected in 2024 (2023.09.12)

# Major Press Releases (August ~ September 2023)

#### Solus Advanced Materials begins construction of Canada's first battery copper foil plant in Quebec (2023.09.06)

- Ground-breaking ceremony attended by key members of the Canadian government was completed successfully
- Planned to have production capacity up to 63,000 tons per year on a site of 129,714m ... Mass production to begin in

#### Solus Advanced Materials installs drinking water purification system in three elementary and secondary schools in Vietnam (2023.09.12)

- Benefits for more than 1,000 students by installing a drinking water purification system and 35 drinking water fountains, and providing sanitary kits
- Solus Advanced Materials executives & employees and the company arrange and support social contribution fund on

#### Solus Advanced Materials completed the approval of thin foil for SK Hynix semiconductors, a first in Korea. (2023.09.25)

- Thin foil applied with world-leading copper foil technology was approved as SK Hynix material followed by product
- Supply of copper foil for memory semiconductors to SK Hynix for the first time in Korea

# Solus Business Story\_Copper Foil

## 60 years of technical concentration of Solus Advanced Materials - Copper foil

High-end copper foil achieved with advanced original technology

Providing customized solutions with various copper foils ranging from 1.5 μm to 200 μm

Copper foil is a product made micrometers thin (1/100 million meters) through electroplating by dissolving copper. As the uniformity of its surface is very important, advanced process control techniques are required. Solus Advanced Materials has the only copper foil production base in Europe, and is recognized for its competitiveness in the global market thanks to its years of manufacturing experience in copper foil and the know-how it has accumulated over 60 years. Copper foil is widely used in a range of fields including semiconductors, telecommunication equipment, smartphones, smart cards, autonomous vehicles, and aircraft, and its uses are expanding with the development of IT.

In this IR letter, we will introduce the present and future of copper foil, which represents 60 years of technical concentration on the part of Solus Advanced Materials.

# The Present and Future of Solus' Copper Foil

# High-end copper foil technology built with over 60 years of manufacturing experience and know-how

The history of the copper foil division, the source of battery copper foil and technology in Solus Advanced Materials, began with the birth of Circuit Foil Luxembourg. With the establishment of CFL in 1960, it developed the world's first battery copper foil for EV batteries in 1996, and completed a 3,000-ton expansion of its copper foil production base in Luxembourg in 2021, solidifying its position as the world's best high-end copper foil materials company with a total capacity of 15,000 tons.

Currently, CFL, a subsidiary of Solus Advanced Materials, is a market leader in high-end copper foils, and provides customized solutions through various copper foils, even including thin foils for low loss (low signal loss) high frequency telecommunications equipment, and semiconductor packages.

Notably, we are recognized in the global market for the excellent quality and competitiveness of our high-end copper foil, which has been achieved by leveraging technologies that are difficult for competitors to match, such as excellent roughness manufacturing technologies that maintain constant surface uniformity, high-strength / high-elongation copper foil manufacturing technology, and special surface treatment technologies that prevent damage to copper foil from the external environment.

# Solus ever-evolving next-generation copper foil technology – Mass production of Ultra Thin Foil

We are continuing to develop Solus copper foil technology, which has been built with existing low loss and high frequency copper foils, rather than resting on our laurels, to supply Ultra thin foils in a timely manner considering the full-fledged development of the AI semiconductor market and the miniaturization/lightweight trend of ever-evolving IT products such as smartphones and tablet PCs.

Ultra thin foil refers to an extremely thin copper foil of less than  $2\mu$ m, which is one-fiftieth the thickness of a human hair, and its market entry barrier is high because it is very thin and has low surface profile (roughness) and even uniformity.

With this ultra-thin technology, Solus is reorganizing the market structure that had been monopolized by Japanese companies, and achieving meaningful results by taking the lead in the localization of thin foil materials.

These thin foil products are expected to be profitable flagship products of Solus Advanced Materials in the future as they are expected to be widely used in a range of industrial fields, including non-memory semiconductors as well as memory semiconductors.

In particular, following the acquisition of material approval for SK Hynix semiconductor in 2021 last year, we accomplished the inspiring challenge of obtaining product approval last September based on excellent product test results, becoming the first in Korea to supply ultra thin foils to a global semiconductor manufacturer.

Through this, Solus's outstanding ultra thin foil technology has been recognized in the market, and we are being asked actively for sample testing from various industries, which makes us look forward to our future performances.

