Ad hoc announcement pursuant to Art. 53 LR

# Ningbo Shanshan Co., Ltd.

# **Outward Investment Announcement**

### **Important Notice:**

• Name of the investment target: High-end Display Polarizers Production Lines of Shanjin Optoelectronics (Yangzhou) Co., Ltd.

• Investment amount: The total planned investment amount is not more than RMB6 billion (including the investment amount of the purchase price for the Company's proposed acquisition of LG Chem's SP business and related assets and the investment amount in subsequent relocation and renovation, which is subject to the actual investment amount). The investment in fixed assets is about RMB4.5 billion, and the investment in working capital is about RMB1.5 billion.

• Relevant risk alert: (1) The estimated total investment amount of this project shall not exceed RMB6 billion, which is subject to the actual investment amount. Owing to the large number of the total planned investment amount. If the overall operating cash flow or financing of the Company does not meet expectations, there is a risk that project funding cannot be raised in a timely manner. In addition, as the project progresses and external financing is gradually in place, the Company's debt scale and asset liability ratio will increase before the project benefits reach a large scale, which may bring certain pressure to the Company's operation and debt repayment. (2) There are risks regarding construction progress, time for reaching design capacity falling short of expectations and excess of actual investment amount over planned investment amount owing to multiple constraints on project construction and long construction preparation period. (3) If the downstream demand misses expectations, or if there are significant changes in market conditions, there is a risk that the economic benefits of the project may fall short of expectations. (4) The products of this project contain invehicle display polarizers, which shall meet the certification requirements of panel and vehicle manufacturers. Due to the long and difficult certification period, there is a certain risk of product certification. (5) If the suppliers of upstream raw materials experience major operational changes or there are significant changes in the foreign trade environment, the stable supply of raw materials and production costs of the Company will get affected, which will have a certain impact on the operating efficiency

of the project.

• This outward investment has yet to be submitted to the general meeting for consideration.

#### I. Overview of the Outward Investment

With the increasingly large size of display products and the rich downstream application scenarios, the demand for the area of display panels maintains steady growth. Meanwhile, Based on the efficient advancement of emerging core technologies such as 5G communications, big data, Internet of Things, artificial intelligence, etc., the application of display panels is also booming in multiple scenarios such as smart home, wearable devices, medical and automotive intelligence, and has called for a higher demand for display technology. This drives the accelerated industrialization of OLED display technology, further LCD display technology iteration and upgrade, and fast growing demand for high-end display panels. The development of the high-end display market has also promoted the rapid growth of market demands for high-end display polarizers around the world.

Currently, China's display panel production capacity continues to increase as a percentage of global capacity. According to Omdia, production capacity of China's LCD panels and OLED panels has exceeded the corresponding global capacity by 70% and 40% respectively, but the supporting production capacity of polarizer localization remains insufficient. In particular, polarizers for high-end laptops, cell phones and automobiles are largely dependent on imports from foreign manufacturers. According to the CINNO Research, the localization rate of high-end in-vehicle display polarizers is only 3%. Accordingly, as the production capacity of the panel industry continues to shift to China, it will drive significant growth in the demand for domestic supporting production capacity of high-end display polarizers for OLED and automobiles.

In September 2023, after deliberation by the General Manager's Office of Ningbo Shanshan Co., Ltd. (the "Company"), in order to improve the Company's polarizer business product layout, accelerate the breakthrough from LCD polarizers to LCD+OLED polarizers, and continue to consolidate the Company's leading position in the global polarizer business, the Company's subsidiary Shanjin Optoelectronics (Suzhou) Co., Ltd. and its wholly-owned subsidiary intend to acquire LG Chem's SP business and related assets in Mainland China, South Korea and Vietnam at an initial transfer price of RMB1,406,848,900. (Please refer to the announcement on disclosed

#### by the Company on the official website on September 27, 2023)

In view of the fast-growing demand for high-end display polarizers and vast potential for domestic substitution, coupled with the Company's polarizer business development strategy, the Company agreed to its subsidiary Shanjin Optoelectronics (Suzhou) Co., Ltd. for setting up a project company in Yangzhou and investing in the construction of a production line project with an annual output of 40 million square meters of high-end display polarizers. The total planned investment amount of the project is not more than RMB6 billion (including the investment amount of the purchase price for the Company's proposed acquisition of LG Chem's SP business and related assets and the investment amount in subsequent relocation and renovation, which is subject to the actual investment amount). The investment in fixed assets is about RMB4.5 billion, and the investment in working capital is about RMB1.5 billion. This aims to optimize the Company's product structure, enrich product applications, further meet the needs of downstream customers, and continue to enhance the polarizer market share.

On December 13, 2023, at the Sixth Meeting of the Eleventh Session of the Board of Directors of the Company, the Proposal on the Subsidiary's Proposed Investment in the Construction of Polarizer Production Line Project for High-end Display was considered and approved with the voting result of 11 votes in favor, 0 vote against,0 vote abstained and 0 vote avoided. The Board of Directors of the Company requested the general meeting to authorize the management to deal with the specific matters related to this outward investment, including but not limited to the signing agreements and documents related to this investment (if any).

This outward investment has yet to be submitted to the general meeting for consideration. This outward investment does not constitute a connected transaction or a material asset restructuring.

#### **II. Information on Investing Entity**

Shanjin Optoelectronics (Suzhou) Co., Ltd.: Founded on October 10, 2020; Registered capital: RMB7,105,225,600; Legal representative: Zheng Ju; Residence: Room 1 & 2 & 3, 2 Tangqiao Middle Road, Tangshi Subdistrict, Yangshe Town, Zhangjiagang City, Suzhou City; Scope of business: licensed items: import and export agency (items subject to approval according to the law shall not be operated before getting the approval of relevant authorities; the specific operating items shall be based on the approval document or license issued by relevant authorities). General items: sale of optoelectronic devices; sale of special electronic materials; procurement agency services; information technology consulting services; technical services, technology development, technology consulting, technology exchanges, technology transfer and technology promotion; information consulting services (excluding licensing information consulting services); market marketing planning; sales agency; general cargo warehousing services (excluding hazardous chemicals and other items requiring licensing approval); business management consulting; financial consulting (except for the items subject to approval according to law, the investing entity independently carries out business activities according to law with the business license). The Company holds 100% of its equity and the investing entity is a wholly-owned subsidiary of the Company. Key financial indicators for the most recent year and period:

Unit: RMB0'000

Period	Total Assets	Total Liabilities	Net Assets	Operating Revenue	Net Profit	Asset- liability Ratio
Year 2022	888,043.67	174,803.88	713,239.79	10,993.90	2,260.44	19.68%
January- September 2023	863,135.28	149,441.77	713,693.51	5,906.07	453.72	17.31%

Note: The data for 2022 has been audited, the data for 2023 has not been audited.

#### **III. Information on Investment Target**

To smoothly implement this project, Shanjin Optoelectronics (Suzhou) Co., Ltd. plans to establish a project company in Yangzhou with cash contribution, which is named tentatively as Shanjin Optoelectronics (Yangzhou) Co., Ltd., with a proposed registered capital of RMB1.5 billion. The relevant registration information of the project company is to be approved by or filed with the competent government authorities, subject to the final approval of the relevant authorities at that time. The basic information of the project to be invested by the project company is as follows:

(I) Project name: High-end Display Polarizers Production Lines of Shanjin Optoelectronics (Yangzhou) Co., Ltd.

(II) Project place: Jiangdu Economic Development Zone, Yangzhou, Jiangsu Province

(III) Investment amount and source of funds: the total planned investment amount

is not more than RMB6 billion (including the investment amount of the purchase price for the Company's proposed acquisition of LG Chem's SP business and related assets and the investment amount in subsequent relocation and renovation, which is subject to the actual investment amount). The investment in fixed assets is about RMB4.5 billion, and the investment in working capital is about RMB1.5 billion. Source of funds includes own funds (mainly owned by Shanjin Optoelectronics (Suzhou) Co., Ltd.) and financing (including but not limited to project loans from banks, working capital loans, refinancing, etc.)

(IV) Construction works and scale: two production lines of display polarizers for high-end consumer electronics (including display polarizers for OLED and LCD IT/Mobile), R&D of related materials, production equipment, power and environmental facilities, with a planned annual capacity of 30 million square meters; a production line of high-end in-vehicle display polarizers, R&D of related materials, production equipment, power and environmental facilities, with a planned annual capacity of 10 million square meters.

(V) Project preparation and construction period: project preparation is scheduled to start in January 2024; the construction period will begin by September 2025 (inclusive), with a total preparation and construction period of approximately 39 months.

#### **IV. Impact of Outbound Investment on the Listed Company**

This project aligns with the Company's strategic development plan. The market demands for high-end display polarizers are growing rapidly, and there is ample room for domestic substitution. Upon completion, this project will improve the layout of the Company's polarizer products, enrich product applications, effectively enhance the Company's position in the high-end display polarizer market, and increase its global market share, and continuously consolidate the Company's leading position in the global polarizer business; therefore, it meets interests of the Company and all shareholders.

This project will rely on the existing technological accumulation of Shanjin Optoelectronics and technological resources from the LG Chem's SP business (including assets, business and patents related to polarizers for vehicle, OLED, and high-end IT displays) to be acquired. Improvements and optimizations to the production lines may be made based on market demands to ensure advanced processes and facilitate smooth commissioning and operation of the project.

According to Omdia, LG Chem's SP business is at the forefront of the world, with its OLED TV polarizers accounting for 40% of the global market share in 2022, ranking second in the world. Polarizers for in-vehicle display have accounted for 25% of the global market share and have established long-term and stable cooperative relationships with mainstream upstream and downstream customers worldwide. According to CINNO Research, the total growth rate of OLED polarizers is expected to be about 102% by 2025, with a compound annual growth rate of about 13%.

Company is a leading global enterprise in LCD polarizers. By implementing this project, the localization level of high-end display polarizers for vehicle, OLED, high-end IT, and other high-end displays will be significantly improved, which will help China's display industry chain achieve stable and sustainable development. At the same time, it will also accelerate the Company's expansion speed in high-end display polarizer business, expand the Company's product layout, further enhance the Company's polarizer business development space and long-term competitiveness, and promote the stable and sustainable development of the Company's polarizer business.

## V. Risk Analysis for the Outbound Investment

(I) Risk of fundraising

The total estimated investment amount for this project is not more than RMB6 billion, which is subject to the actual investment amount. Source of funds of this project includes own funds (mainly owned by Shanjin Optoelectronics (Suzhou) Co., Ltd.) and financing (including but not limited to project loans from banks, working capital loans, refinancing, etc.). Owing to the large number of the total planned investment amount, in addition to the owned funds of the subsidiary, Shanjin Optoelectronics (Suzhou) Co., Ltd., and there are other project financing activities. If the Company's overall operating cash flow or financing does not meet expectations, this project is exposed to the risk of failure to raise sufficient funds in a timely manner.

In addition, as the project progresses and external financing is gradually in place, the Company's debt scale and asset liability ratio will increase before the project benefits reach a large scale, which may bring certain pressure to the Company's operation and debt repayment.

(II) Risk of project advancement falling short of expectations

The main equipment for this project needs to be custom-ordered and imported from abroad. Some equipment will be relocated from the production lines of the SP business in South Korea to be acquired by the Company. These equipment may need to be modified or maintained according to market demand, and this requires a certain production cycle. There is also a risk that the delivery and integration of SP business may not meet expectations. There are risks regarding construction progress, longer time for reaching design capacity and excess of actual investment amount over planned investment amount owing to multiple constraints on construction and long preparation period.

(III) Market risk

Thanks to the market development trends of larger and more diverse vehicle displays and advancements within the consumer electronics industry, the market demand for vehicle displays and flexible OLEDs is expected to maintain stable growth. However, if the downstream demand does not meet expectations or if there are significant changes in market conditions, there may be a risk that the project's economic benefits will fall short of expectations.

(IV)Product certification risk

Products for this project include vehicle display polarizers, which are characterized by high durability, complex shapes, and the need for customization. They must meet the certification requirements of panel and vehicle manufacturers, and the certification process is long and challenging, presenting a certain level of product certification risk.

(V) Risk of raw material supply

Polarizer raw materials are mainly concentrated in relevant enterprises in Japan and South Korea, especially PVA films and TAC films. The possible great change to the operation of upstream raw material or the foreign trade environment will affect the stable supply of the Company's raw materials and the production cost, and further damage the economic benefits of this project to certain extent.

It is hereby announced.

Board of Directors of Ningbo Shanshan Co., Ltd.

13 December 2023