

# Ningbo Shanshan Co., Ltd.

## Feasibility Analysis Report on the Use of Proceeds from Private Placement of Shares in 2022

### I. Plan for the Use of Proceeds

The total proceeds from the Private Placement, which is no more than RMB 6,000 million (inclusive), shall be used for the investments in the following projects after deducting the relevant issuance expenses:

(In RMB 0'000)

No.	Project name	Total project investment	Amount of proceeds invested	Implementation entity
1	The lithium-ion battery anode material integration base project with the annual output of 300,000 tons of Yunnan Shanshan New Material Co., Ltd. (Phase 1)	792,710.64	420,000.00	Yunnan Shanshan New Material Co., Ltd.
2	Supplement to working capital	180,000.00	180,000.00	Shanshan
<b>Total</b>		<b>972,710.64</b>	<b>600,000.00</b>	-

If the actual amount of proceeds from the Private Placement after deducting the issuance expenses is less than the proposed amount of proceeds to be applied in the above projects, the Company will adjust the order of priority and specific investment amounts of each project based on the actual amount of net proceeds and the priority of each project, and any shortfall in the proceeds will be made up by utilizing the self-raised capital of the Company.

Prior to the receipt of the proceeds from the Private Placement, the Company may contribute self-raised capital in accordance with the actual progress of the projects, which will be replaced with the proceeds upon its delivery.

### II. Feasibility analysis on the projects invested with the Use of Proceeds

#### (I) The lithium-ion battery anode material integration base project with the

## **annual output of 300,000 tons of Yunnan Shanshan New Material Co., Ltd. (Phase 1)**

### **1. Basic information of the project**

The project is the phase 1 of the lithium ion battery anode material integration base project with the annual output of 300,000 tons of Yunnan Shanshan New Material Co., Ltd. With a planned investment of RMB 792,7106,400, the project will be constructed in Caopu Area of Anning Industrial Park, Yunnan Province, and the implementation entity is Yunnan Shanshan New Material Co., Ltd., a majority-controlled subsidiary of the Company.

With an annual output of 200 thousand tons of anode materials, the project covers an area of about 937.70 mu, with a building area of about 562,376 square meters and a total building area of 1,047,262 square meters. Production facilities such as milling workshop, modification workshop, pre-graphitization workshop, graphitization workshop, carbonization workshop, and other supporting facilities such as storage engineering, public auxiliary engineering, environmental protection engineering, office and living facilities will be built.

### **2. Necessity of project implementation**

(1) Fully grasping the historic opportunities brought by the development of new energy industry, to meet the growing needs of customers and continue to enhance the core competitiveness of the Company

As the global energy structure gradually undergoes profound changes, the new energy vehicle and energy storage markets maintain rapid development, driving the rapid growth of the lithium-ion battery industry. As one of the key raw materials for lithium-ion batteries, the cathode material will also usher in unprecedented development opportunities.

In the context of the rapid development of the new energy industry, as the Company continues to deepen its strategic cooperation with global top customers, its existing production capacity can no longer meet the growing needs of customers. By actively building an integrated base project, the Company can effectively alleviate the insufficient production capacity and enhance the stable supply of products. All these

efforts will further consolidate the Company's long-term and stable relationship with downstream customers, continue to expand its market share and thus enhance the core competitiveness.

(2) Necessary for enhancing the graphitization self-supply rate, reducing cost and improving efficiency constantly

As of the announcement date of the Plan, the Company had an effective anode material production capacity of 180,000 tons and a graphitization production capacity of 94,000 tons. There is a serious mismatch between the graphitization capacity of the Company and its production capacity of anode materials, leading to high proportion of outsourced processing, which is not only costly but also difficult to ensure quality. In order to reduce the proportion of outsourcing and reduce production costs, the Company needs to strengthen the construction of integrated base projects. The project is an anode material production line integrating all processes of raw material processing, low-temperature modification, graphitization, carbonization and finished product processing, etc. Upon completion, the project will help the Company strengthen the scale advantage of integrated production capacity, significantly reduce production costs and improve profitability.

### **3. Feasibility of project implementation**

(1) The project aligns with the support of the relevant national industrial policy

As a new type of green battery, lithium ion battery has gradually expanded its application field thanks to its unique performance advantages in the backdrop of increasing energy shortage and environmental pollution. In particular, with the rapid development of new energy vehicles, the demand for lithium-ion batteries has also risen rapidly.

A series of strategies and plans have been released in the field of energy storage in China, which clearly put forward the tasks and goals of accelerating the development of efficient energy storage, innovation of advanced energy storage technology, actively promoting the research, development and application of energy storage technology, and conquering key energy storage technologies. Featuring long life, high energy density

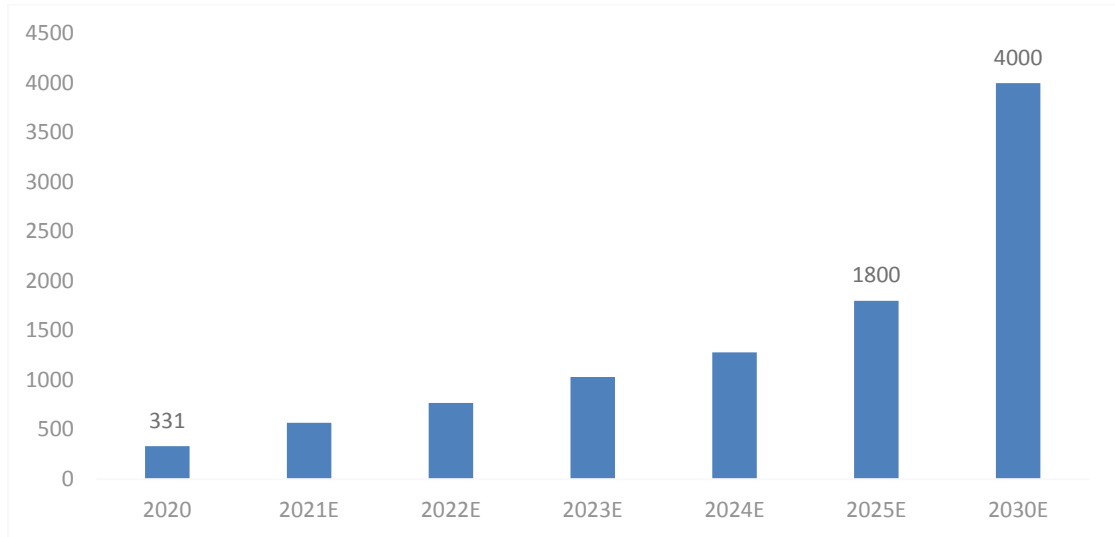
and strong environmental adaptability, lithium-ion batteries have gradually become the mainstream of electrochemical energy storage with the gradual maturity of the commercialization route and the continuous reduction of the cost, embracing a promising prospect.

According to the Proposal of the CPC Central Committee on Formulating the 14th Five-Year Plan and 2035 Long-Term Goals for National Economic and Social Development, which was issued by the State in 2020, strategic emerging industries, such as new energy, new materials and new energy vehicles, will be one of the major development directions of China in the next five years. The Company actively promotes the project construction of the integration base of lithium-ion battery anode materials, which can contribute to the healthy and fast development of the lithium ion battery industry. It is in line with the policies of "carbon peaking" by 2030 and "carbon neutrality" by 2060 as well as the development direction of China's new energy vehicle and energy storage industries.

(2) Driven by the strong demand in the end markets of new energy vehicles and energy storage, the lithium-ion battery cathode materials market has a promising prospect and will continue to grow at a high rate in the future

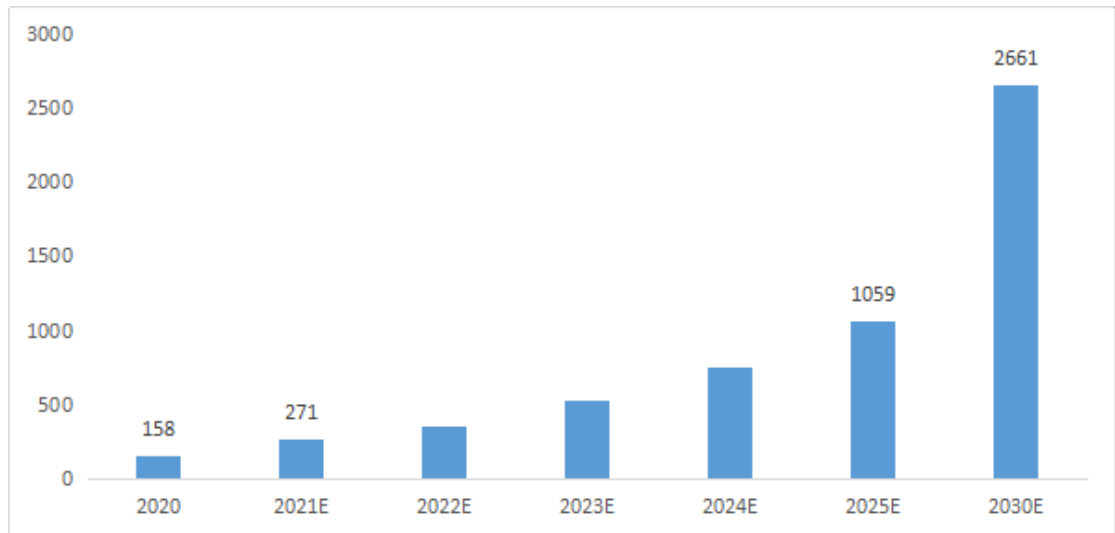
Under the backdrop of low carbon economy, energy conservation and emission reduction, new energy vehicles represent the development direction of the future automobile industry, and a new starting point for China's automobile industry to catch up with the world's automobile industry. Lithium-ion battery is the core component of new energy vehicles, and the industrialization of new energy vehicles will directly drive the rapid growth of the lithium-ion battery market.

In July 2021, EV Tank released the Mid - and Long-term Development Outlook for Global New Energy Vehicle Market (2030), which predicts that global sales of new energy vehicles will reach 18 million units by 2025 and 40 million units by 2030, with a penetration rate of about 50%. According to the estimates of EV Tank, global power battery demand will reach 1,059GWh in 2025, officially entering the TWh era, and reach 2,661GWh in 2030.



Global sale estimates of new energy vehicles (10,000 units)

Sources: EV Tank



Estimates of global installed capacity of power battery (in GWh)

Sources: EV Tank

In the energy storage field, according to the White Paper on the Development of China's Energy Storage Lithium-ion Battery Industry (2022) jointly released by EV Tank and China YiWei Institute of Economics, in 2021, the global total shipment of energy storage lithium-ion batteries was 66.3GWh, up 132.4% year-on-year. In terms of industry applications, power systems remained the largest application market for Lithium-ion batteries, accounting for 71% in 2021.

Under the backdrop of carbon peaking and carbon neutrality, with the gradual decrease of the cost of energy storage lithium-ion batteries, the business model will

become clearer, and the demand for energy storage batteries in many application scenarios, including power system energy storage, base station energy storage and home energy storage, will gradually increase. According to the estimates of EV Tank, global shipments of energy storage batteries will reach 244GWh by 2025, with a CAGR of 39% during 2021-2025.

Driven by the rapid growth for demand of power batteries and energy storage batteries, lithium-ion battery anode materials maintain a high growth trend. According to the data from the GGII, in the first half of 2022, the domestic shipment of lithium battery anode materials was 540,000 tons, up 68% year on year. The market space of lithium battery anode materials keeps increasing.

(3) The sound R&D system and rich technical experience have laid a solid technical foundation for the project

The Company has a high-level research and development team with industry leading technical experts as the core, and its subordinate enterprises have three post-doctoral workstations, national enterprise technology centers and other research and development platforms. After years of high-quality R&D investment and cultivation of independent R&D ability, the Company has developed a comprehensive R&D and innovation system. Our anode material business leads the industry in the research and development of high-end products, graphitization technology, raw material development and evaluation technology, and process equipment development.

In terms of high-end products, the high energy density low expansion technology, fast filling and coating technology, and silicon-based anode precursor synthesis technology independently developed by the Company are in the forefront of the industry. In terms of graphitization technology, the Company has been committed to the improvement and innovation of graphite chemical process. Our box furnace technology leads the industry in quality and cost control, supported by constant process optimization and improvement.

The process route of this project is roughly the same as the Company's 100,000-ton integrated base project in Baotou, Inner Mongolia, which has been fully verified. The equipment processing and installation manufacturers of this project are the

suppliers of long-term cooperation, and the drawings for non-standard equipment are provided by the Company, which can effectively ensure that the civil construction of the project will start on time and the project will be put into production smoothly.

#### **4. Project investment estimate**

The expected total investment of the project is RMB7,927.1064 million, and the specific investment arrangement is as follows:

(In RMB 0'000)

<b>No.</b>	<b>Investment content</b>	<b>Investment amount</b>
1	Project cost	567,053.67
1.1	Construction engineering	92,867.71
1.2	Equipment and installation	474,185.96
2	Other expenses for project construction	41,770.30
3	Preparation expenses	30,441.20
4	Working capital	139,570.47
5	Loan interest during the construction period	13,875.00
<b>6</b>	<b>Total project investment</b>	<b>792,710.64</b>

#### **5. Project construction period**

According to the characteristics of the project and the situation of similar construction projects in China, after the preliminary work of the project is completed and the approval of the relevant authorities is obtained, the construction period of the project is estimated to be 16 months.

#### **6. Economic benefit evaluation for the project**

The after-tax IRR of the project is 24.68%, and the after-tax payback period is 6.33 years (including the construction period). The project has good economic benefits.

#### **7. Reports and approvals for the project**

As of the announcement date of the plan, the project filing and registration were completed, but the approval of environmental assessment and the land use right certificate for the project have not been obtained.

### **(II) Supplement to working capital**

#### **1. Basic information of the project**

The Company intends to use RMB 1,800 million of the proceeds from the Private Placement to supplement the working capital, so as to meet its capital needs for future business development, improve the sustainable profitability, optimize the capital structure, reduce financial expenses, and improve the ability to resist risks.

## **2. Necessity of the project**

(1) To meet the demand for working capital for the continuous expansion of business scale and enhance market competitiveness

The Company achieved revenue of RMB8,679.9110 million, RMB8,215.8967 million and RMB2,0699.3826 million respectively in 2019, 2020 and 2021, with a CAGR of 54.43%. With the expansion of business scale, the Company needs to constantly invest HR, equipment and funds in production, research and development to ensure the realization of long-term business development goals. Therefore, relatively sufficient working capital is an important guarantee for the steady development of the Company. After the supplement to working capital, it will effectively meet the new working capital demand brought by the continuous expansion of the Company's business scale, which is conducive to enhancing the capital strength of the Company, providing financial support for the development of various business activities of the Company, flexibly responding to the future development trend of the industry, helping the company develop bigger and stronger main business, and enhancing its market competitiveness.

(2) To optimize the capital structure, and enhance the ability to resist risks

Part of the proceeds will be used to supplement the working capital, which can effectively reduce the assets liability ratio of the Company, optimize the capital structure, improve the liquidity indicators, reduce the financial risk and operation risks of the Company, enable the Company to improve its anti-risk ability in the changing market competition environment, adhere to the long-term development strategy, and safeguard the interests of all the shareholders.

## **3. Feasibility of the project**

The use of the proceeds from the Private Placement to supplement the working capital is in line with the relevant industrial policies and industry status quo as well as



the current actual development situation of the Company, and good for the Company to improve its economic benefits, achieve sustainable development, enhance its capital strength, satisfy the operating capital needs, and realize its development strategy. The use of the proceeds from the Private Placement to supplement the working capital complies with the provisions on use of proceeds set out in the Administrative Measures on the Issuance of Securities, and the Implementation Rules, Q&A on Issuance Supervision -- Supervision Requirements on Directing and Regulating the Financing Acts of Listed Companies (Revision). The Plan is feasible.

### **III. Impact of the Private Placement on the operation management and financial position of the Company**

#### **(I) Impact of the offering on the operation management of the Company**

The project invested with the proceeds from the Private Placement is in line with the relevant national industrial policies as well as the overall development plan of the Company. With good market development prospect and economic benefits, the plan for the use of proceeds is reasonable and feasible. After the successful implementation of the project, the Company will further strengthen its main business advantages, which is conducive to enhancing its market influence. The Private Placement is in line with the interests of the Company and all the shareholders.

#### **(II) Impact of the offering on the financial position of the Company**

Upon the completion of the Private Placement, the total assets and net assets of the Company will be increased, its assets liability ratio will be reduced, the capital structure will be further optimized, financial cost and financial risks will be reduced, and its capital strength will be enhanced. Because certain investment and construction period is required for the proceeds-funded project, the Company's return on equity may be affected to some extent in the short term after the offering. However, in mid and long term, when the project is completed and generates economic benefits, the Company's revenue and profit level will gradually rise, further improving its financial position.

### **IV. Conclusion of feasibility analysis**

In conclusion, the project invested with the proceeds from the Private Placement

is in line with the relevant national industrial policies as well as the future development plan of the Company, featuring good market development prospect and economic benefits. The implementation of the projects invested with the proceeds will further optimize the Company's strength and competitiveness, which is conducive to the long-term sustainable development of the Company and in line with the interests of all the shareholders. Therefore, the projects invested with the proceeds from the Private Placement are necessary and feasible.

Board of Directors of Ningbo Shanshan Co., Ltd.

17 October 2022