



**NANOFILM TECHNOLOGIES INTERNATIONAL LIMITED**

(Company Registration Number 199902564C)

(Incorporated in Singapore on 13 May 1999)

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**ANNUAL GENERAL MEETING TO BE HELD ON 28 APRIL 2022**

**RESPONSES TO QUESTIONS FROM THE SECURITIES INVESTORS ASSOCIATION (SINGAPORE)  
AND SUBSTANTIAL AND RELEVANT QUESTIONS FROM SHAREHOLDERS**

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The Board of Directors (the “**Board**”) of Nanofilm Technologies International Limited (the “**Company**”) and together with its subsidiaries, the “**Group**”) refer to the following:

- (a) the annual report of the Company for the financial year ended 31 December 2021 (“**FY2021 AR**”); and
- (b) the notice of the annual general meeting (“**AGM**”) dated 13 April 2022 informing shareholders of the Company that the AGM will be convened and held by way of electronic means on Thursday, 28 April 2022 at 10.00 am.

The Company has received certain questions from the Securities Investors Association (Singapore) (“**SIAS**”) and certain shareholders in relation to the FY2021 AR, and would like to set out in this announcement its responses to the questions from SIAS and the substantial and relevant questions from the shareholders. The Company would also like to thank shareholders for their co-operation in submitting their queries in accordance with the deadline set out in the notice of AGM.

**BY ORDER OF THE BOARD  
NANOFILM TECHNOLOGIES INTERNATIONAL LIMITED**

Lim Kian Onn  
Chief Financial Officer

23 April 2022

Credit Suisse (Singapore) Limited and Oversea-Chinese Banking Corporation Limited are the Joint Issue Managers for the initial public offering of shares in, and listing of, the Company on the Mainboard of the SGX-ST on 30 October 2020 (“Offering”). Citigroup Global Markets Singapore Pte. Ltd., Credit Suisse (Singapore) Limited and Oversea-Chinese Banking Corporation Limited are the Joint Global Coordinators for the Offering. Citigroup Global Markets Singapore Pte. Ltd., CLSA Singapore Pte Ltd, Credit Suisse (Singapore) Limited and Oversea-Chinese Banking Corporation Limited are the Joint Bookrunners and Underwriters for the Offering.

## **SECTION A. QUESTIONS FROM SIAS**

**Question 1:** With the commissioning of Shanghai Plant 2, the group now has 6 plants in 4 countries. Shanghai Plant 2 with a gross built-up area of 66,406 sqm is almost twice the size of Shanghai Plant 1. The addition of 59 coating equipment (now 235 at the group level) has significantly boosted the group's long-term production capacity.



(Adapted from Company annual report)

- (i) **With a significant proportion of the company's manufacturing facilities in Shanghai, what is the impact on the group caused by the lock down of Shanghai in the past weeks?**

Response:

The COVID-19 lockdown in Shanghai since end-March 2022 has affected the flow of logistics and labour, but the Group has so far been able to continue its operations in a closed-loop manufacturing arrangement with stringent health measures in place to ensure the safety and well-being of its employees. Should the situation be prolonged, there may be impact on the Group's operations. The Group will adapt and manage the situation accordingly.

- (ii) **Is the group facing supply chain and manpower constraints in Shanghai?**

Response:

As at the date of this announcement, any constraints on supply chain and manpower are fairly contained. However, in the event the situation is prolonged, there may be impact on the Group's operations.

- (iii) **Would the board/management be updating shareholders on the material development in Shanghai in a timely manner (via SGXNet)?**

Response:

The answer is "yes". Should there be material changes or developments affecting the Group's production, the Company will make the appropriate and timely announcements on SGXNet as well as on the Company's corporate website.

- (iv) **How much flexibility is there in the group's infrastructure? Are the other plants able to step up and increase production if and when needed?**

Response:

The Group's production facilities are long-term infrastructure which are strategically placed in the customers' supply chains. In line with the world-class production standards set by global customers, the Group's production facilities along with its production equipment are qualified by customers for mass production. In the short run, after also factoring in the lead time needed to set up production, there is limited flexibility in adjusting the Group's production infrastructure. Nonetheless, in the long run, such production infrastructure can be adjusted according to customers' needs, as the Group's production facilities and equipment are not restricted to any particular physical location.

On 19 April 2022, the Group provided an update on operational conditions as part of its 1Q2022 business update. Despite the lockdown in Shanghai, the Group has kept its Shanghai facility operational in a closed-loop manufacturing arrangement. The Group has been recognised by one of its major customers as a model facility in terms of pandemic management measures. Logistics and labour are key short-term constraints arising from the lockdown. The Group will continue to provide timely updates as the situation evolves.

Given the nature of the 3C industry where the main supply chain is in China, the ability of the rest of the supply chain to shift to an alternate location is limited. The Group will continue to monitor any supply chain shifts and adjust our manufacturing footprint accordingly.

**Question 2: As highlighted by the chairman, the group is a Deep-Tech company with industry leading technology in material science and nanotechnology. Leveraging the group's proprietary filtered cathodic vacuum arc (FCVA) advanced technologies and proprietary equipment, revenue and profit after tax grew 13% to \$218 million and 8% to \$63 million respectively.**

**The group has a proven track record of commercialising the proprietary Deep-Tech's advanced materials and nanofabrication. The group offers customers materials with characteristics needed in their products, such as high hardness, strength, strong corrosion resistance, and other properties.**

**Revenue contribution from other end customers (excluding the single largest end customer) increased to 39.3% of the group's revenue (from 32.1%).**

- (i) **FVCA: Does management see competitors catching up in 2-3 years or in the mid-term?**

Response:

In the space of FCVA, which the Group holds proprietary rights in equipment, processes, advanced materials solutions and applications, the Company is currently not aware of any other company that possesses the same capabilities as the Group in the areas of innovation, fundamental research, engineering and product development, as well as the breadth and depth of mission critical applications that meet specific performance requirements (often single source) with mass production capabilities of high mix high volume products. On the other hand, there are competitors in the decorative coating market, especially in the areas of conventional deposition methodologies, such as Physical Vapour Deposition (e.g., sputtering) and Chemical Vapor Deposition. In this area, the Group provides the market with its hybrid FCVA-PVD solutions that offer better performance and cost effectiveness.

Commercialisation of FCVA is non-trivial. Beyond the technological moat, the Group's installed base of equipment and operational excellence form high barriers to entry, allowing it to be competitive against new entrants.

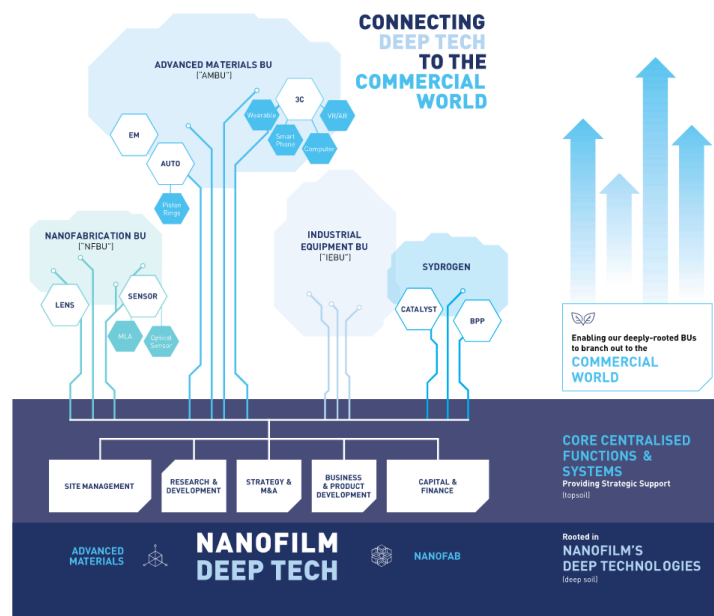
- (ii) **Advanced materials: How is the group reaching out to (more and new) end users to increase the applications of its advanced materials, such as TAC-ON®, iTAC® and MiCC®? How long is the typical development cycle, such as proving the use case of iTAC® in piston rings in internal combustion engines? In addition, how long was the development cycle for the group’s advanced materials, such as STAR-TAC and aluminium chromium nitride?**

Response:

The typical development cycle differs depending on use cases and applications, where we typically see a shorter cycle in the consumer electronics space as products are refreshed and introduced more regularly. In contrast, development and qualification cycles in the automotive and hydrogen fuel cell industries are generally longer.

With its Business Unit (“**BU**”) centric strategy, the Group has focused teams within each BU that enable it to better identify and capture opportunities that may be unique to each BU. Each BU (“**tree**”) is deeply rooted by the Group’s deep technology platform (“**deep soil**”) and supported by the Group’s centralised support functions and systems (“**topsoil**”) which include Site Management, R&D, Strategy, Mergers and Acquisitions (“**M&A**”), Business & Product Development, and Capital & Finance.

This allows the BUs, each with their own different market dynamics to simultaneously grow and bear fruit independently, while accelerating commercialisation pathways in multiple industries, customers, applications and products.



The Group approaches commercialisation by industry and thus organises its business operations in a BU-centric model. This allows its respective BUs to match the adoption cycles of various industries and develop market reach in different industries simultaneously.

- (iii) **Industrial equipment: Would the board/management help shareholders to understand reasons to increase equipment sales to external customers in the renewable energy industry? Is this a deviation from the preferred avenue of providing technology in-house (as a service) instead of selling equipment to these customers?**

Response:

The Industrial Equipment BU (“IEBU”) sells production-ready equipment to the Group’s customers, where know-how and processes are developed by the Group for integration into customers’ manufacturing lines. The IEBU also provides after-sales support services in spares and maintenance to the Group’s customers. This is in line with its strategy to penetrate selective markets where providing coating services may not be feasible or possible due to the manufacturing processes of these markets. The renewable energy industry fits into such market. This is a conscious strategic move into the renewable energy industry, and will not cannibalise the Group’s coating services in the other industries.

The Chinese solar PV market is undergoing a significant push into the Building Integrated Photovoltaic (BIPV) market. The Group has latent thin film coating capabilities relevant to the BIPV market. This can represent a substantial growth area for the IEBU should the Chinese BIPV market take off as one of the solutions for China to achieve its carbon neutral goal.

- (iv) **Sydragen: Is the group taking on significant risks relating to the development and adoption of hydrogen fuel cell technology via Sydragen? What is the amount committed to support Sydragen?**

Response:

Sydragen is a joint venture between the Company and Venezia Investments Pte Ltd (a Temasek subsidiary) in 2021. Both parties had jointly contributed a total of S\$50 million cash to the first phase of the development in the hydrogen energy and hydrogen fuel cell business.

While Sydragen was only incorporated in 2021, the Group’s development work in this space started a couple of years prior. Preliminary results of the Group’s advanced materials application in the hydrogen fuel cell are encouraging. Sydragen should be able to see its first revenue in the second half of 2022 and progressive increase in revenue through 2023, for mass production scale in 2024.

The energy transition is accelerating, aided by increasing awareness and regulatory push for clean energy. The Company is confident that Sydragen is well positioned to capture opportunities in the hydrogen energy economy.

- (v) **R&D: In FY2021, the group spent \$17 million (approximately 7% of revenue) in R&D and engineering, with a longer-term goal of 10% of revenue. How does management allocate its R&D budget? How does the board/management evaluate the success/returns of the group’s R&D efforts?**

Response:

R&D and engineering budget is allocated based on targeted percentage of sales. Once a R&D project is initiated, the budget will be tracked closely via the Group’s proprietary project tracking system which set out clear project objectives and outcomes. For fundamental science research, the success will be determined by the objectives defined for the project. For development research, with higher engineering content, the success will be determined by commercialisation objectives set for the project.

It is worthwhile to note that the majority of the Group's projects are customer-driven, hence increasing the possibility of commercialisation.

Given the potential of the Group's vacuum coating and nanofabrication technologies, the investment into R&D is an important initiative to ensure that the Group captures the varied opportunities in multiple industries and be positioned for future growth. The strong track record, capability and focus on commercialisation will allow the Group to reap good returns on its R&D investments.

**Question 3: The company marked the first full year as a listed company since its listing in October 2020. There has been a transition to a new team during this period.**

**Dr Shi Xu assumed the role of interim CEO between 22 June 2021 and 31 December 2021 following the resignation of Mr Lee Liang Huang, the former CEO and ED of the company due to health reasons. The then-chief commercial officer of the group, Mr Gary Ho Hock Yong, was appointed as CEO with effect from 1 January 2022. Mr Gian Yi-Hsen was also appointed as the chief commercial and strategy officer of the company with effect from 1 January 2022.**

**The then-chief operating officer of the group, Mr Ricky Tan Chong Ho, resigned in August 2021 following a reorganisation in the group.**

**There were also changes to the board with the cessation of Mr James Rowan and the appointment of Mr Russell Tham Min Yew.**

**The nominating committee (NC) has stated that potential candidates are "sourced through contacts or recommendations from directors" although an external consultant may be engaged to source for qualified candidates, if required.**

**(i) With the new management team in place for the past 4 months, what additional insights can the newly appointed CEO share with shareholders?**

Response:

In Nanofilm's Chinese name "纳峰", the Chinese character "峰" represents the Group's foundation that is anchored by its core deep technologies which the Group steadily builds upon to scale new heights in its growth. Indeed, in FY2021, the Group continued to scale new heights with several exciting growth avenues, led by its BU-driven strategy.

The Group's progress in FY2021 demonstrates its resilience and the strength of its business model as a Deep-Tech company. The Group is in a stronger position today and will continue to build on its foundations for growth. The Group has seen a good start in FY2022 with all BUs performing. Notwithstanding the dynamic operating environment, its BU-driven strategy is delivering growth momentum as the Group continues to uncover more applications for its nanotechnology solutions, and work with existing and new customers in bringing these applications to mass production.

**(ii) What is the depth of the group's leadership bench strength (and future pipeline) in the core functions of the group, such as R&D, commercialisation, operations, sales, manufacturing, supply chain etc?**

Response:

The renewed management team has strong professional and business skills across various functions and specialties, each possessing strong track record from current and past work experiences. More details of the key management team can be found on pages 26 to 31 of the FY2021 AR.

In addition to key management, the Group has recruited a number of, and is continually recruiting high quality R&D personnel, including scientists in the relevant fields as well as personnel in operations, sales and other critical functions. When integrated as a team, the highly

complementary skill sets will magnify the team members' strengths and qualities. By leveraging on each of their strengths and experiences, the Group is in a stronger position, with the management team driving the Group into its next phase of growth.

- (iii) In addition, can the NC help shareholders understand how the use of personal/directors' contacts and recommendations for new directors achieves the board's diversity policy?**

Response:

The Company's Directors have wide-ranging experiences and expertise across different industries and geographies. Please refer to pages 26 to 29 of the FY2021 AR for more information on the Directors. Through their diverse backgrounds, experiences and skills, they bring with them a wide network of contacts of different educational background, personal, professional and business experience as well as age, race and gender from which the Company can draw upon in its search for potential candidates that can increase diversity on the Board.

By complementing the Directors' networks as well as engaging external consultants, where necessary, it increases the probability of finding suitable candidates on the Board to achieve its diversity policy.

## **SECTION B. QUESTIONS FROM SHAREHOLDERS**

**Question 1: Many companies consider supply chain security, what is the Company's strategy to rationalise its manufacturing footprint?**

Response:

The Group's production facilities are long term infrastructure which are strategically placed in our customers' supply chains. In line with the world class production standards set by our global customers, the Group's production facilities along with its production equipment are qualified by customers for mass production. As such, in the short run, after factoring in also the lead time needed to set up production, there is limited flexibility in adjusting the Group's production infrastructure. However, in the long run, such production infrastructure can be adjusted according to customers' needs, as the Group's production facilities and equipment are not restricted to any particular physical location.

The Group's global manufacturing footprint is highly intertwined with the supply chain of its customer base. The Group will continue to rationalise and expand its footprint in tandem with its entry into other regions or sites.

**Question 2: The company's growth strategies include venturing into many verticals and technologies, what's the company's strategy to achieve profitable growth? I.e. be able to maintain high profit margin.**

Response:

With its Business Unit ("BU") centric strategy, the Group has focused teams within each BU that enable it to better identify and capture opportunities that may be unique to each BU.

Particularly for applications into new industries or products, the relevant BU team will focus on applying Nanofilm's nanotechnology solutions in mission critical parts and components, enabling key features or characteristics required by customers (e.g., increased durability, improved corrosion resistance, unique interference colours or aesthetic appeal, etc).

The Group focuses on commercialising its core technologies of vacuum coatings and nanofabrication in key enabler applications with customers to ensure strong alignment with customers and good margins.

**Question 3: When does management expect Sydrogen to contribute to earnings?**

**Response:**

Sydrogen is on track to commence its pilot production for its Chinese OEM customer in 2H2022. However, the Group does not expect meaningful contribution in FY2022.

The Group is confident that Sydrogen is well positioned to capture opportunities in the hydrogen energy economy, beyond its launch application in the hydrogen fuel cell automotive industry.

**Question 4: The Company has also received questions from shareholders on the rationale for the share issue mandate (Ordinary Resolution 11) as well as the authority to issue shares pursuant to the Company's share schemes (Ordinary Resolutions 12, 13 and 14).**

**Response:**

***Share Issue Mandate***

As set out in the Explanatory Notes in the Notice of AGM, Ordinary Resolution 11, if passed, will empower the Directors, until the conclusion of the next AGM of the Company, or the date by which the next AGM of the Company is required by law to be held, or such authority is revoked or varied by the Company in a general meeting, whichever is the earlier, to issue Shares, make or grant Instruments convertible into Shares and to issue Shares pursuant to such Instruments, up to a number not exceeding, in total, 50% of the total number of issued Shares (excluding treasury shares and subsidiary holdings, if any), of which up to 20% may be issued other than on a pro-rata basis to Shareholders ("**Share Issue Mandate**").

Under the Listing Rules, the issuance of Shares pursuant to the authority of a Share Issue Mandate may not be made at a discount of more than 10% to the volume weight average price ("**VWAP**") of the Shares traded on the SGX-ST for the full market day on which the related agreement is signed, without specific shareholders' approval. In addition, in respect of the issuance of more than 20% and up to 50% of the total issued Shares under the authority of the Share Issue Mandate, such issuance may be made only to shareholders on a pro-rata basis.

The Directors are of the view that the interest of shareholders is protected by the shareholders' pre-emptive rights and restriction on the share issue price stated above. Having regard to such protective mechanism, the Directors are of the view that the Share Issue Mandate sought is reasonable and would allow the Company greater flexibility to pursue opportunities that requires it to enter into any transaction involving the issuance of Shares, in particular if such transaction is time-sensitive in nature. The Share Issue Mandate will also avoid the costs and expenses associated with the convening of general meetings from time to time. Notwithstanding the Share Issue Mandate, the Company will still seek shareholders' approval in respect of any transaction which requires specific shareholders' approval under the Listing Rules.

***Authority for Directors to issue Shares pursuant to Company's share scheme/plan***

- (i) **Could you also throw some colour on the discount provided for the ESOS 2020 plan (Annual Report says the max discount provided can be 20%).**

For the grant of options under the Employee Share Option Scheme 2020 ("**Options**"), the acquisition price of such Options is set at (i) the three-day VWAP (preceding the date of the grant of the Option) ("**Market Price**") or (ii) a maximum discount of 20% to the Market Price. The authority to grant Options at a discount to the Market Price provides the Company more flexibility in the manner remuneration packages and performance incentives of Group employees may be structured so as to retain and motivate key employees and attract potential employees with the relevant skills that can contribute to the growth of the Group.

Notwithstanding the grant of authority in the past to issue Options at a discount to Market Price, the Options granted by the Company to-date are all Market Price Options.



- (ii) **Also, regarding the members of the RC, who manage ESOS2020 and RSU2021 plans being the beneficiaries of the same plans.**

Most of the Options granted or to be granted each year are reserved for Group employees. Only a small number of the total Options granted were for Non-executive Directors, as a token of appreciation for their contributions to the Group. No award of Shares under the Restricted Share Plan 2021 (“**Awards**”) to Non-executive Directors has been granted to date. Even if such Awards are to be granted, it will only be a small number compared to the total Awards that will be granted.

To avoid any potential conflicts of interest, a member of the Remuneration Committee will recuse from voting in respect of any grant of Options or Awards to himself/herself.

The grant of Options and Awards are essential instruments for the Company to attract, motivate and retain high performing employees who can contribute to the growth of the Group.