

BLACK SWAN GRAPHENE INC.
Management's Discussion and Analysis
For the years ended December 31, 2025 and 2024
(In Canadian dollars, unless otherwise noted)

Date: April 30, 2026

This Management's Discussion and Analysis ("MD&A") provides a discussion and analysis of the financial condition and results of the operations of Black Swan Graphene Inc. ("Black Swan" or the "Company"), to enable a reader to assess material changes in the financial condition and results of operations as at December 31, 2025. The MD&A should be read in conjunction with the audited consolidated financial statements for the year ended December 31, 2025 and 2024. All amounts included in the MD&A are expressed in Canadian dollars, unless otherwise specified.

The Company's consolidated financial statements have been prepared in accordance with International Financial Reporting Standards ("IFRS") as published by the International Accounting Standards Board. Please refer to Note 3 of the audited consolidated financial statements as at and for the year ended December 31, 2025 and 2024, for disclosure of the Company's significant accounting policies.

The Directors of the Company have reviewed this MD&A and the consolidated financial statements for the year ended December 31, 2025, and the Company's Board of Directors approved these documents prior to their release.

Corporate Background

Black Swan is focused on the large scale production and commercialization of patented high-performance and low-cost graphene products aimed at several industrial sectors, with a notable focus on polymers, which are expected to eventually require large volumes of graphene.

The Company is listed on the TSXV as a Tier 2 Industrial Issuer under the name "Black Swan Graphene Inc." The Common Shares trade on the TSXV under the symbol "SWAN".

The Company acquired certain intangible assets related to a patented graphene processing technology from Thomas Swan & Co. Ltd. ("**Thomas Swan**"), and a license from Trinity College Dublin for the production of exfoliated defect-free, non-oxidised 2-D materials in large quantities (the "**TCD License**"), which license was previously held by Thomas Swan. In addition, Black Swan and Thomas Swan have entered into a License Agreement and a Sub-License Agreement, pursuant to which Black Swan has granted Thomas Swan a license to graphene processing technology for the production of up to 1,000 tonnes per year and Black Swan has sub-licensed the TCD License to Thomas Swan, respectively.

The TCD License is subject to an incremental royalty rate ranging from 3.0% up to 9.0% of net sales when greater than €20,000,000 (\$30,000,000 at current exchange rates) and have lives of 15 or 20 years from the commencement of commercial sales related to such licenses.

To acquire the licenses, the Company paid Thomas Swan £3,000,000 (\$5,216,050) and issued 3,875,000 common shares of the Company valued at \$3,853,100, based on the value of the common shares in the previous private placement financing. Mason Graphite Inc., now Transoceanic Investments Inc. (TSXV: OCEN) incurred transaction fees totaling \$390,128, which have been recorded within intangible assets and as a contribution from owner and presented within equity.

Corporate Highlights and Overview

- The execution of a binding collaboration agreement with a key equipment supplier, which includes commercial details and minimum commitments for the procurement of longlead items required for large scale production of graphene;
- The grant by the Chinese Authorities of a Certificate of Invention Patent to Black Swan for apparatus and method for bulk production of atomically thin 2-dimensional materials including graphene, increasing the portfolio of patents and patent applications to 20 in 9 countries;
- Mr. Michael Edwards is the Company's Chief Operating Officer ("COO"). Mr. Edwards joins Black Swan from Thomas Swan & Co. Ltd., where he was the head of the Advanced Materials Division, where the company's graphene processing technology was originally developed;
- On September 14, 2023, the Company announced the results of the Scoping Study. The Scoping Study provides an initial evaluation, including processing plant specifications as well as conceptual mechanical, civil, structural, and electrical designs, for its proposed 40,000 square-foot first large-scale production facility, based on the same processing technology currently being used in the facility located in the United Kingdom. The annual production and self-sustaining ramp up of its industry-ready products have been established by taking into consideration customers and distributors' expected demand, as well as strategic partnerships, including the partnerships with Nationwide Engineering Research & Development ("Cobmore" formerly "NERD") and Arup. The Scoping Study also established capital and operating cost estimates, as well as financial analysis based on its strategy to build such facility in Québec, Canada, where the Company aims to leverage the emergence of a world class graphite industry as a raw material source and the province's low-cost renewable hydroelectricity. While the initial capacity target stands at 9,868 tonnes per annum in accordance with the Company's initial strategy, expansion beyond this figure will be driven by market dynamics and raw material access.
- On January 12, 2024, the Company announced a commercial agreement with Hubron International Ltd. ("**Hubron**"), specializing in customised solutions in plastic masterbatch and conductive compound manufacturing. This strategic partnership is set to hasten the commercialization of Black Swan's graphene products, leveraging Hubron's 80 years of compounding expertise and market access.
- On January 17, 2024, the Company announced a range of Graphene Enhanced Masterbatch ("**GEM**") products. These GEMs offer different performance and attributes of products aimed at multiple applications in the polymer industry. This announcement follows a recent commercial agreement ratified with Hubron, a global leader in black masterbatch manufacturing. *See press release dated January 16, 2024.*
- On January 24, 2024, the Company announced the establishment of a Distribution and Sales Agreement (the "**Agreement**") with Thomas Swan, effective as of January 23, 2024. This Agreement leverages the existing strategic partnership and positions Thomas Swan as a value-added non-exclusive distributor and reseller of Black Swan's innovative Graphene Enhanced Masterbatch ("**GEM**") products in the polymer additive market.
- On April 30, 2024 the Company announced the commercialization and release of GraphCore™ 01 family of graphene nanoplatelets products. These products, now in full production volume, are

BLACK SWAN GRAPHENE INC.
Management's Discussion and Analysis
For the years ended December 31, 2025 and 2024
(In Canadian dollars, unless otherwise noted)

tailored to meet a diverse range of needs within the polymer industry, offering various forms including powders and polymer-ready masterbatches.

- On June 18, 2024, the Company announced having initiated a commercial partnership for the supply of Black Swan's graphene used in the fabrication of GC Shield®, a patented ballistic protection technology. Furthermore, Black Swan is excited to report having received strong interest for its graphene enhanced masterbatch products (*see press release dated April 30, 2024*). Several promising initiatives involving high-profile customers are currently underway, and the Company expects to provide more details in the near future.
- On July 16, 2024, the Company unveiled its new GEM, GEM S27M, the latest innovation in the Company's GraphCore™-01 product line ("GraphCore"). This new offering is a 10% graphene nanoplatelet ("GNP") masterbatch in high-density polyethylene ("HDPE"), designed to deliver transformative benefits.
- On June 18, 2024 the Company announced a Commercial Agreement (the "Agreement") with Broadway Colours Ltd. ("Broadway"), a leading United Kingdom based manufacturer of colour and additive masterbatches, plastic compounds, and rotational moulding powders. Broadway supplies moulders across the United Kingdom, Europe and internationally. Notably, their high-quality materials are specified by a number of multinational consumer goods companies for use in their branded packaging. This strategic partnership aims to accelerate the commercialization of Black Swan's graphene products by leveraging Broadway's technical expertise, manufacturing capabilities, distribution and market reach.
- On February 10, 2025, the Company announced it will consolidate its common shares on the basis of one (1) new Share for every eight (8) currently outstanding shares. The Consolidation will reduce the number of outstanding Shares from 301,730,083 shares to approximately 37,716,260 post-consolidated Shares and the number of outstanding Shares held in escrow will be reduced from 103,875,793 Shares to 12,984,474 post-consolidated Shares, subject to adjustment for rounding, prior to the Offering.
- On February 14, 2025, following the Company's 8:1 share consolidation effective February 10, 2025, the Company announced it has closed its non-brokered private placement of units of the Company at a price of \$0.50 per Unit for gross aggregate proceeds of \$6,000,000.
- On May 8, 2025, the Company began trading on the OTCQX under the symbol "BSWGF".
- ON May 14, 2025, the Company announced the execution of a preferred compounder agreement with Modern Dispersions Inc. ("**MDI**"), a leading manufacturer of thermoplastic compounds and concentrates. This strategic partnership aims to promote MDI as a manufacturer of GEM for graphene applications, with Black Swan serving as a preferred supplier of Graphene Nanoplatelets ("GNP"). This agreement underscores Black Swan's commitment to fostering strategic partnerships that drive innovation and expand the applications of graphene across diverse industries.
- On June 3, 2025, announced that it has ordered its next-generation production unit, a significant milestone in the Company's industrial scale-up strategy and a key element of its broader effort to position itself as a global leader in graphene-enhanced materials. Prior to this expansion, the Company had the capacity to produce up to 40 tonnes of high-quality graphene annually. As part

BLACK SWAN GRAPHENE INC.
Management's Discussion and Analysis
For the years ended December 31, 2025 and 2024
(In Canadian dollars, unless otherwise noted)

of its growth initiative, the Company is undertook a significant expansion that increased its production capacity to 140 tonnes per annum, more than tripling its prior capacity.

- On June 27, 2025, the Company announced that it has entered into a non-exclusive distribution and sales agreement with METCO Resources (“**METCO**”), a leading Indian supplier of specialty materials and polymers, to supply Black Swan’s GEM for a wide range of polymer applications.
- On July 9, 2025, the Company secured a U.S. patent for breakthrough continuous graphene production process. The patent titled: “Process for the Continuous Production of Sub-Micron Two-Dimensional Materials Such as Graphene” was granted and assigned to the Company and remains in force until January 5, 2039.
- On August 12, 2025, the Company announced it has entered into a non-exclusive distribution and sales agreement with Ferro South Africa (“**Ferro**”). Under the terms of the Agreement, Ferro will distribute and resell Black Swan’s GEM products and graphene nanoplatelet (“**GNP**”) solutions across South Africa.
- On August 19, 2025, the Company announced it entered into a non-exclusive distribution, reseller and warehouse agreement (“TS Agreement”) with Thomas Swan. This TS Agreement leverages the existing strategic partnership and positions Thomas Swan as a value-added non-exclusive distributor and reseller of Black Swan’s GNP and GEM products for the polymer additive market.
- On September 9, 2025, the Company reported compelling performance results from production-scales trials conducted by on of its partners, a global masterbatch manufacturer, including testing at end-customer facilities.
- On September 23, 2025, the Company announced the issuance of a Canadian patent titled, “Apparatus and Method for Bulk Production of Atomically Thin 2-Dimensional Materials Including Graphene” (the “Patent”). The Patent solidifies Black Swan’s intellectual property leadership in the field of advanced nanomaterials and scalable graphene production technologies. The patent has an anticipated expiration in October 2037.
- On March 18, 2026, The company announced the completion of the capacity expansion originally announced in June 2025.
- On March 23, 2026, The Company announced the acquisition of Quebec-based injection molding specialist Falpaco Rubber & Plastics Inc. (“Falpaco”), a well-established Québec-based manufacturer specializing in the custom molding of plastic and rubber components, for total consideration of C\$12.6 million. This Acquisition represented a key step in Black Swan’s strategy to accelerate the commercialization of graphene products by vertically integrating downstream manufacturing capabilities and moving closer to end customers. By combining Black Swan’s proprietary graphene materials and formulation expertise with Falpaco’s injection molding know-how, customer relationships, and industrial scale, the Company believes it is now uniquely positioned to shorten development cycles and transition more rapidly from product validation to commercial adoption.

BLACK SWAN GRAPHENE INC.
Management's Discussion and Analysis
For the years ended December 31, 2025 and 2024
(In Canadian dollars, unless otherwise noted)

- On April 17, 2026, The Company announced the closing of the acquisition of Falpaco.

Liquidity and Capital Resources

As at December 31, 2025, the Company had working capital of \$7,977,826 (December 31, 2024 - \$3,337,757) which included a cash balance of \$8,219,144 (December 31, 2024 - \$3,003,901), including amounts receivable of \$224,743 and prepaid expenses of \$39,116 offset by accounts payable and accrued liabilities of \$505,177.

Results of Operations

Quarterly information:

	2025 Fourth	2025 Third	2025 Second	2025 First
Revenues	Nil	Nil	Nil	Nil
Net comprehensive income (loss)	\$(2,093,960)	\$(1,987,971)	\$(1,089,683)	\$(2,349,914)
	2024 Fourth	2024 Third	2024 Second	2024 First
Revenues	Nil	Nil	Nil	Nil
Net comprehensive income (loss)	\$(3,393,895)	\$(2,332,274)	\$(1,654,120)	\$(643,384)

For the year ended December 31, 2025:

During the year ended December 31, 2025, the Company recorded a loss of \$7,521,528 or \$0.15 per share. Expenses incurred during the year ended December 31, 2025 included \$1,577,356 (2024 - \$847,272) in project development expenses, as the Company continued on its strategy of distributing low-cost graphene products aimed at several industrial sectors, with a notable focus on polymers, which are expected to require large volumes of graphene. Management, director and consulting fees were \$2,450,956 (2024 - \$1,135,155) and investor relations were \$329,177 (2024 - \$193,842) due to increased corporate activity. The Company incurred \$355,422 in professional fees (2024 - \$293,693) comprised of legal fees for services in connection with the transactions discussed, as well as audit fees and listing and filing fees. Share based compensation was \$1,058,811 (2024 - \$nil) due to stock options granted in 2025. Corporate costs were offset with interest income of \$161,637 (2024 - \$124,936) due to the increase in the cash balance. A loss on the fair value adjustment of the long-term investment of \$795,249 was recognized.

Cash flows

During the year ended December 31, 2025, the Company had a decrease of \$4,069,823 (2024 - \$2,319,992) in cash flows from operating activities due to corporate spending.

During the year ended December 31, 2025, the Company generated \$nil (2024 - \$nil) in cash flow from investing activities.

BLACK SWAN GRAPHENE INC.
Management's Discussion and Analysis
For the years ended December 31, 2025 and 2024
(In Canadian dollars, unless otherwise noted)

During the year ended December 31, 2025, the Company generated \$9,285,066 (2024 - \$nil) in cash flow from financing activities. The Company raised \$6,000,000 gross less share issue costs of \$39,934, from a private placement, \$3,100,000 from warrant exercises and \$225,000 from stock option exercises.

The Company manages and adjusts its capital structure based on available funds in order to support the development of its business. The Board does not establish quantitative return on capital criteria for management, but rather relies on the expertise of the Company's management to sustain future development of the business. The Company considers its capital to consist of common shares.

Management reviews its capital management approach on an ongoing basis and believes that this approach, given the relative size of the Company, is reasonable. There were no significant changes in the Company's approach to capital management during the years ended December 31, 2025 and 2024.

The Company is not subject to any capital requirements imposed by a lending institution or regulatory body, other than of the TSX Venture Exchange ("TSXV") which requires adequate working capital or financial resources of the greater of (i) \$50,000 and (ii) an amount required in order to maintain operations and cover general and administrative expenses for a period of 6 months.

As of December 31, 2025, the Company believes it is compliant with the policies of the TSXV.

FINANCIAL INSTRUMENTS

Financial instruments recorded at fair value on the statement of financial position are classified using a fair value hierarchy that reflects the significance of the inputs used in making the measurements. The fair value hierarchy has the following levels:

- a) Level 1 - Unadjusted quoted prices in active markets for identical assets or liabilities;
- b) Level 2 - Inputs other than quoted prices that are observable for assets or liabilities, either directly or indirectly; and
- c) Level 3 - Inputs for assets and liabilities that are not based on observable market data.

The fair value hierarchy requires the use of observable market inputs whenever such inputs exist. A financial instrument is classified to the lowest level of the hierarchy for which a significant input has been considered in measuring fair value.

The Company's financial instruments include cash and cash equivalents, amounts receivable, investment, and accounts payable and accrued liabilities. The carrying values of these financial instruments reported in the statements of financial position approximate their respective fair values (with the exception of the investment) due to the relatively short-term nature of these instruments. As at December 31, 2025 and 2024, the Company classifies their investment as a Level 3 financial instrument.

Within Level 3, the Company includes private company investments that are not quoted on an exchange. The key assumptions used in the valuation of these instruments include (but are not limited to) liquidity of the investee, results of business operations, company-specific information, trends in general market conditions and the share performance of comparable publicly-traded companies. The following table presents the fair value, categorized by key valuation techniques and the unobservable inputs used within Level 3 as at December 31, 2025.

BLACK SWAN GRAPHENE INC.
Management's Discussion and Analysis
For the years ended December 31, 2025 and 2024
(In Canadian dollars, unless otherwise noted)

Description	Fair Value	Valuation Technique	Significant Unobservable input(s)	Range of significant Unobservable input(s)
December 31, 2025	\$nil	Operating performance	Marketability of shares	0% discount

As valuations of investments for which market quotations are not readily available, are inherently uncertain, may fluctuate within short periods of time and are based on estimates, determination of fair value may differ materially from the values that would have resulted if a ready market existed for the investments. Given the size of the private investment portfolio, such changes may have a significant impact on the Company's financial condition or operating results.

The following table presents the changes in Level 3 instruments for the year:

	Amount	
Balance, December 31, 2023 and 2024	\$	795,249
Total losses recognized	\$	(795,249)
Balance, December 31, 2025	\$	-

As at December 31, 2025, a +/- 10% change in the fair value of CONCRETENE will result in a corresponding +/- \$nil (2024 – \$79,525) change in the carrying amount. While this illustrates the overall effect of changing the values of the unobservable inputs by a set percentage, the significance of the impact and the range of reasonably possible alternative assumptions may differ significantly between investments, given their different terms and circumstances. The sensitivity analysis is intended to reflect the significant uncertainty inherent in the valuation of private investments under current market conditions, and the results cannot be extrapolated due to non-linear effects that changes in valuation assumptions may have on the estimated fair value of these investments. Furthermore, the analysis does not indicate a probability of changes occurring and it does not necessarily represent the Company's view of expected future changes in the fair value of these investments. Any management actions that may be taken to mitigate the inherent risks are not reflected in this analysis.

The Company's risk exposures and the impact on the Company's financial instruments are summarized below:

(a) *Credit risk*

Counterparty credit risk is the risk that the financial benefits of contracts with a specific counterparty will be lost if a counterparty defaults on its obligations under the contract. This includes any cash amounts owed to the Company by those counterparties, less any amounts owed to the counterparty by the Company where a legal right of set-off exists and also includes the fair values of contracts with individual counterparties which are recorded in the financial statements.

a. *Trade credit risk*

The Company is not exposed to significant trade credit risk.

b. *Cash*

In order to manage credit and liquidity risk the Company's policy is to invest only in highly rated investment grade instruments that have maturities of three months or less. Limits are also established based on the type of investment, the counterparty and the credit rating.

BLACK SWAN GRAPHENE INC.
Management's Discussion and Analysis
For the years ended December 31, 2025 and 2024
(In Canadian dollars, unless otherwise noted)

(b) *Currency risk*

Currency risk is the risk that the fair value of, or future cash flows from, the Company's financial instruments will fluctuate because of changes in foreign exchange rates. The Company's foreign currency risk arises primarily with respect to UK sterling and US dollars from operations. Fluctuations in the exchange rates between these currencies and the Canadian dollar could have a material effect on the Company's business, financial condition and results of operations. The Company does not engage in any hedging activity to mitigate this risk.

As at December 31, 2025, the Company had accounts payable of \$346,853 denominated in UK sterling (December 31, 2024 - \$nil) (expressed in Canadian dollars):

A 10% strengthening (weakening) of the Canadian dollar against the UK Sterling would increase (decrease) net loss by approximately \$34,700 (December 31, 2024 - \$nil).

As at December 31, 2025, the Company had cash of US dollars of \$19,748 and accounts payable of \$133 denominated in US dollars (expressed in Canadian dollars):

A 10% strengthening (weakening) of the Canadian dollar against the United States dollar would decrease (increase) net loss by approximately \$2,000 (December 31, 2024: \$542).

(c) *Liquidity risk*

Liquidity risk is the risk that an entity will encounter difficulty in meeting obligations associated with financial liabilities. The Company's approach to managing liquidity risk is to ensure that it will have sufficient liquidity to meet liabilities when due. As at December 31, 2025, the Company had a cash balance of \$8,219,144 (December 31, 2024 - \$3,003,901) to settle current liabilities of \$505,177 (December 31, 2024 - \$272,632). The Company's trade payables have contractual maturities of less than 30 days and are subject to normal trade terms.

RELATED PARTY TRANSACTIONS

Compensation of key management personnel of the Company

In accordance with IAS 24, key management personnel are those persons having authority and responsibility for planning, directing and controlling the activities of the Company directly or indirectly, including any directors (executive and non-executive) of the Company. During the year ended December 31, 2025, the remuneration of directors and other key management personnel was \$1,073,555 (2024 - \$954,000). For the years ended December 31, 2025, a total of \$440,048 was recorded in share-based payments expense for stock options and RSU's issued to directors and officers (2024 - \$nil).

As at December 31, 2025 \$60,000 (2024 - \$24,000) was owed to certain directors for director fees. The amounts owing to related parties are unsecured, non-interest bearing and due on demand.

On February 10, 2025, a director of the Company subscribed for 300,000 units of a private placement financing for gross proceeds of \$150,000. Each unit consisting of one common share of the Company and one-half common share purchase warrant, entitling the holder to acquire one common share at a price of \$1.00 for a period of 18 months.