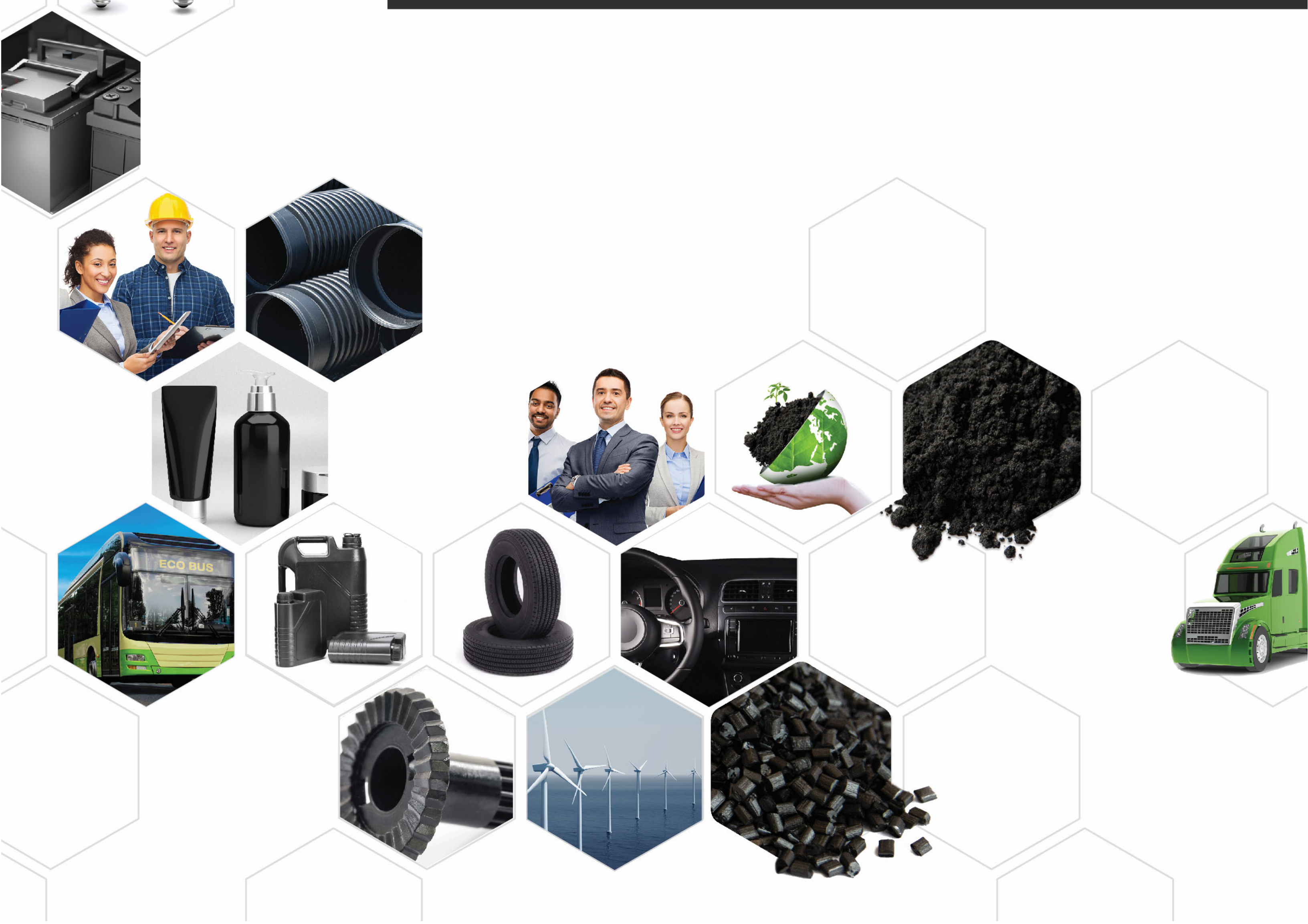
INTERIM MANAGEMENT'S DISCUSSION AND ANALYSIS

For the three and six-month periods ended December 31, 2022 and 2021



[Unless specified otherwise, all amounts are expressed in Canadian dollars]

This interim Management's discussion and analysis ("MD&A") provides a review of NanoXplore Inc.'s operations, performance and financial position for the three and six-month periods ended December 31, 2022 and 2021 and should be read in conjunction with the unaudited condensed interim consolidated financial statements for the three and six-month periods ended December 31, 2022 and 2021 and with the audited consolidated financial statements for the years ended June 30, 2022 and 2021. The purpose of this document is to provide information on our activities. The information contained herein is dated as of February 14, 2023, date on which the MD&A was approved by the Corporation's board of directors. You will find more information about us on NanoXplore's website at www.nanoxplore.ca and on SEDAR at www.sedar.com, including all press releases.

The financial statements have been prepared in accordance with International Financial Reporting Standards ("IFRS") applicable to the preparation of interim financial statements including IAS 34, Interim Financial Reporting. The Corporation has consistently applied the accounting policies used in the preparation of its IFRS financial statements, including the comparative figures. We occasionally refer to non-IFRS financial measures in the MD&A. See the Non-IFRS measures section for more information. The terms "we", "our", "us", ''NanoXplore'' or the "Corporation" mean NanoXplore Inc. and its subsidiaries, unless otherwise indicated.

"Q2-2023" and "Q2-2022" refer to the three-month periods ended December 31, 2022 and 2021 respectively, and "YTD 2023" and "YTD 2022" refer to the six-month periods ended December 31, 2022 and 2021 respectively.

1. FORWARD-LOOKING STATEMENTS

This MD&A contains certain forward-looking statements within the meaning of applicable Canadian securities laws with respect to the Corporation. Such forward-looking statements are dependent upon a certain number of factors and are subject to risks and uncertainties. Actual results may differ from those expected. The Corporation considers the assumptions on which these forward-looking statements are based to be reasonable, but it advises the reader that these assumptions with regard to future events, many of which are beyond the Corporation's control, could prove incorrect as they are subject to risks and uncertainties inherent in the Corporation's activities. Management does not assume any obligation to update or revise any forward-looking statements, whether as a result of new information of future events, except when required by the regulatory authorities.

This MD&A contains forward-looking statements. When used in this MD&A, the words ''may'', ''would'', ''could'', ''will'', ''intend'', ''plan'', ''anticipate'', ''believe'', ''seek'', ''propose'', ''estimate'', ''project'', ''expect'' and similar expressions are intended to identify forward-looking statements. In particular, this MD&A contains forward-looking statements with respect to, among other things, business objectives, expected growth, results of operations, performance, business projects and opportunities and financial results. These statements involve known and unknown risks, uncertainties and other factors that may cause actual results or events to differ materially from those anticipated in such forward-looking statements. Such statements reflect NanoXplore's then current views with respect to future events based on certain facts and assumptions and are subject to certain risks and uncertainties, including without limitation changes in the risk factors described under the section "*Risks and Uncertainties*" of this MD&A. The forward-looking statements are based on certain key expectations and assumptions made by NanoXplore, including expectations and assumptions concerning availability of capital resources, business performance, market conditions and customer demand. Although NanoXplore believes that the expectations and assumptions on which such forward-looking statements are based are reasonable, undue reliance should not be placed on the forward-looking statements since no assurance can be given that they will prove to be correct.

Many factors could cause NanoXplore's actual results, performance or achievements to vary from those described in this MD&A, including without limitation those listed above, those described under the section "*Risks and Uncertainties*" of this MD&A as well as the assumptions upon which they are based proving incorrect. These factors should not be construed as exhaustive. Should one or more of these risks or uncertainties materialize, or should assumptions underlying forward-looking statements prove incorrect, actual results may vary materially from those described in this MD&A as intended, planned, anticipated, believed, sought, proposed, estimated or expected, and such forward-looking statements should not be unduly relied upon. NanoXplore does not intend, and does not assume any obligation, to update these forward-looking statements except as required by law. The forward-looking statements contained in this MD&A are expressly qualified by these cautionary statements. Forward-looking statements contained in this MD&A about prospective results of operations, financial position or cash flows are based on assumptions about future events, including economic conditions and proposed courses of action, based on NanoXplore's management's assessment of the relevant information currently available. Readers are cautioned that outlook information contained in this MD&A should not be used for the purposes other than for which it is disclosed herein or therein, as the case may be.

2. BUSINESS OVERVIEW

CORPORATION OVERVIEW

NanoXplore is a graphene company, a manufacturer and supplier of high-volume graphene powder for use in transportation and industrial markets. Also, the Corporation provides standard and custom graphene-enhanced plastic and composite products to various customers in transportation, packaging, electronics, and other industrial sectors. The Corporation was formed by amalgamation under the *Canada Business Corporations Act* by Certificate of Amalgamation dated September 21, 2017 and is headquartered at 4500 Thimens Blvd, Montreal, QC, Canada.

On July 15, 2021, NanoXplore Inc. graduated from the Toronto Stock Exchange ("TSX") Venture Exchange to the TSX. NanoXplore is traded under "GRA" on the TSX and is also listed on the OTCQX and traded under "NNXPF".

The Corporation has the following subsidiaries:

- NanoXplore Switzerland Holding SA ("NanoXplore Switzerland"), based in Switzerland, with an equity interest of 100% [2021 – 100%]. NanoXplore Switzerland holds 100% of CEBO Injections SA ("CEBO").
- NanoXplore Holdings USA, Inc. ("NanoXplore Holdings USA"), based in the United States, with an equity interest of 100% [2021 – 100%]. NanoXplore Holdings USA holds 100% of NanoXplore USA, Inc.
- Sigma Industries Inc. ("Sigma"), based in Canada, with an equity interest of 100% [2021 – 100%]. Sigma has two active wholly owned subsidiaries; Faroex Ltd., based in Manitoba, and Rene Composite Materials Ltd., based in Quebec. Rene Composite Materials Ltd. has one active wholly owned subsidiary; RMC Advanced Technologies Inc., based in the United States.
- Canuck Compounders Inc. ("Canuck"), based in Canada, with an equity interest of 100% [2021 – 100%].

KEY FINANCIAL HIGHLIGHTS

- Record revenues from customers during Q2-2023 of $31,417,369 compared with $18,425,908 during Q2-2022, representing a 71% increase;
- Gross margin on revenues from customers improved from 7.7% in Q2-2022 to 17.8% in Q2-2023;
- Adjusted EBITDA[(1)] improved from -$3,139,026 in Q2-2022 to $141,300 in Q2-2023;
- Cash flows from operating activities were -$841,647 for YTD 2023 with positive operating cash flow of $3,289,078 during Q2-2023, a significant improvement over Q1-2023;
- Total liquidity of $48,938,091 as at December 31, 2022, including cash and cash equivalents of $38,583,691 following the repayment of $3,300,000 on operating loans during current period;
- Total long-term debt of $8,632,497 as at December 31, 2022.

BUSINESS HIGHLIGHTS

During the six-month period ended December 31, 2022, the Corporation continued to focus on developing markets for its graphene production facility in Montreal, Canada and to develop down stream pre-mixed additives and products that facilitate such introduction. The Corporation has been successful in integration of GrapheneBlack in a few streams of products, both internally and externally, some of which has been press released during the period. The Corporation continues its engagement with many potential customers that are currently validating GrapheneBlack and GrapheneBlack improved masterbatches, concentrates, and products.

During the quarter, the Corporation announced its 5-year strategic and investment plan and has begun executing it. The plan represents an increase in the production capacity of graphene, battery materials and graphene enhanced masterbatch, compound and composite products. The Corporation will provide a regular update to its shareholders on the progress of the plan.

The Corporation is actively working to set up its battery focused research and development facility. It has leased a location in the vicinity of its headquarters and is setting up pilot scale production systems for anode active materials and for conductive and performance additives.

(1) Adjusted EBITDA is a non-IFRS measure and that the reconciliation can be found in the section "Overall Results"

Macroeconomics and Supply chain issues

The COVID-19 pandemic and its negative collateral effects on the supply of materials and labour availability along with the armed conflict between Russia and Ukraine continue to be part of today's macro-economic landscape. In recent months, the resulting negative impacts have stabilized and are less disruptive to our operations than they have been. A material deterioration in any of the foregoing could have a material adverse effect on the Corporation's business and results of operations. The Corporation expects to be able to continue to respond to these external forces in a measured, prudent and decisive manner with continued emphasis on health and safety, cash conservation and the maintenance of its liquidity position.

S&P/TSX Small Cap Index Inclusion

On September 16, 2022, after the close of trading, the Corporation was added to the S&P/TSX Small Cap index as part of the semi-annual rebalancing.

Purchase of assets of XG Sciences Inc.

On August 25, 2022, the Corporation purchased a significant portion of the assets of XG Sciences Inc. ("XG" or "XG Sciences") for an amount of US$3,000,000 in a sale conducted by XG's senior secured creditor pursuant to Article 9 of Michigan's enactment of the Uniform Commercial Code. The Corporation and the senior creditor entered into an asset purchase agreement pursuant to which the Corporation acquired XG's mechanical milling platform, research and development lab and all issued and pending patents and trademarks, among other items.

As a result of the transaction, the Corporation now owns all patents and patent applications including a portfolio of 7 patents (6 issued and 1 pending) of silicon-graphene battery materials and all XG trademarks. This complements the Corporation's existing intellectual properties and know-how related to graphene and graphene-silicon composite materials for Li-ion batteries.

The Corporation has moved all the assets from Lansing, Michigan to Canada to establish a dedicated battery material R&D facility. The Corporation has leased a location in the vicinity of its headquarters and has already installed some of XG's R&D assets in this facility. This facility will include pilot scale production systems for anode active materials and for conductive and performance additives and will incorporate trade secrets and know how acquired from XG into existing knowledge of the Corporation. Moreover, the Corporation plans to use these assets to build a silicon-graphene anode material facility with a production capacity of 100-200 tons per year during 2023.

Total liquidity

As at December 31, 2022, the Corporation had total liquidity of $48,938,091, including cash and cash equivalents and availability under the Corporation's operating loans.

Long-term debt

The total long-term debt decreased from $9,450,814 as at June 30, 2022 to $8,632,497 as at December 31, 2022 for a variation of $818,317. Repayment amounted to $944,599 during the six-month period ended December 31, 2022.

3. OVERALL RESULTS

HIGHLIGHTS

The following table sets out certain highlights of the Corporation's performance for the three and six-month periods ended December 31, 2022 and 2021. Refer to the Corporation's unaudited condensed interim consolidated financial statements for the three and six-month periods ended December 31, 2022 and 2021 for a detailed account of the Corporation's performance for the periods presented in the tables below.

	Q2-2023	Q2-2022	Variation		YTD 2023	YTD 2022	Variation	
	$	$	$	%	$	$	$	%
Revenues	**31,725,122**	18,801,487	12,923,635	69%	**58,957,647**	37,619,933	21,337,714	57%
Operating loss	**(1,749,728)**	(5,216,906)	3,467,178	66%	**(7,524,328)**	(10,034,843)	2,510,515	25%
Loss	**(2,422,949)**	(3,585,180)	1,162,231	32%	**(8,347,021)**	(8,315,811)	(31,210)	(0%)
Loss per share (Basic and diluted)	**(0.01)**	(0.02)			**(0.05)**	(0.05)		
Non-IFRS Measures *								
Adjusted EBITDA	**141,300**	(3,139,026)	3,280,326	105%	**(1,835,732)**	(6,899,432)	5,063,700	73%

Results of operations may include certain unusual and other items which have been separately disclosed, where appropriate, in order to provide a clear assessment of the underlying Corporation results. In addition to IFRS measures, management uses non-IFRS measures in the Corporation's disclosures that it believes provide the most appropriate basis on which to evaluate the Corporation's results.

* NON-IFRS MEASURES

This MD&A was prepared using results and financial information determined under IFRS. However, the Corporation considers certain non-IFRS financial measures as useful additional information in measuring the financial performance and condition of the Corporation. These measures, which the Corporation believes are widely used by investors, securities analysts and other interested parties in evaluating the Corporation's performance, do not have a standardized meaning prescribed by IFRS and therefore may not be comparable to similarly titled measures presented by other publicly traded companies, nor should they be construed as an alternative to financial measures determined in accordance with IFRS. Non-IFRS measures include "Adjusted EBITDA".

The following table provides a reconciliation of IFRS "Loss" to Non-IFRS "Adjusted EBITDA" for the three and six-month periods ended December 31, 2022 and 2021.

	Q2-2023	Q2-2022	YTD 2023	YTD 2022
	$	$	$	$
Loss	**(2,422,949)**	(3,585,180)	**(8,347,021)**	(8,315,811)
Current and deferred income tax recovery	**397,369**	(378,445)	**179,758**	(421,847)
Net interest expenses	**(58,214)**	174,256	**(2,561)**	394,692
Share of loss of a joint venture	**334,066**	173,734	**645,496**	231,475
Gain on disposal of property, plant and equipment	—	(1,601,271)	—	(1,923,352)
Foreign exchange	**(683,939)**	(25,890)	**930,101**	56,634
Canada Emergency Wage Subsidy ("CEWS")	**—**	(41,608)	**—**	(840,249)
Share-based compensation expenses	**374,892**	179,937	**597,724**	351,878
Non-operational items (1)	**76,000**	312,426	**76,000**	312,426
Depreciation and amortization	**2,124,075**	1,653,015	**4,084,771**	3,254,722
Adjusted EBITDA	**141,300**	(3,139,026)	**(1,835,732)**	(6,899,432)

The following table provides a reconciliation of IFRS "Loss" to Non-IFRS "Adjusted EBITDA" for the three-month periods ended December 31, 2022 (Q2-2023) and September 30, 2022 (Q1-2023).

	Q2-2023 $	Q1-2023 $
Loss	**(2,422,949)**	(5,924,072)
Current and deferred income tax recovery	**397,369**	(217,611)
Net interest expenses	**(58,214)**	55,653
Share of loss of a joint venture	**334,066**	311,430
Foreign exchange	**(683,939)**	1,614,040
Share-based compensation expenses	**374,892**	222,832
Non-operational items [(1)]	**76,000**	—
Depreciation and amortization	**2,124,075**	1,960,696
Adjusted EBITDA	**141,300**	(1,977,032)

[(1)] Non-operational items consist of professional fees related to business acquisition (Canuck in the last year period), to filing prospectuses.

RESULTS OF OPERATIONS VARIANCE ANALYSIS – THREE-MONTH PERIODS

Revenues

	Q2-2023	Q2-2022	Variation		Q1-2023	Variation	
	$	$	$	%	$	$	%
Revenues from customers	**31,417,369**	18,425,908	12,991,461	71%	27,147,167	4,270,202	16%
Other income	**307,753**	375,579	(67,826)	(18%)	85,358	222,395	261%
Total revenues	**31,725,122**	18,801,487	12,923,635	69%	27,232,525	4,492,597	16%

Revenues from customers increased from $27,147,167 in Q1-2023 to $31,417,369 in Q2-2023. This increase is mainly due to a positive product mix including graphene enhanced products, higher volume, a positive FX impact and higher tooling revenues.

Revenues from customers increased from $18,425,908 in Q2-2022 to $31,417,369 in Q2-2023. This increase is mainly due to a positive product mix including graphene enhanced products, higher volume, the acquisition of Canuck in December 2021, a positive FX impact and price increases partially offset by lower tooling revenues.

Other income increased from $85,358 in Q1-2023 to $307,753 in Q2-2023. The increase is due to grants received from R&D programs.

Other income decreased from $375,579 in Q2-2022 to $307,753 in Q2-2023. The decrease is mainly explained by the end of the CEWS program set up by the Canadian Federal government to help businesses deal with the COVID-19 pandemic. The Corporation received $ nil under this program during Q2-2023 compared to $41,608 in Q2-2022 as the program ended in October 2021.

Adjusted EBITDA

The adjusted EBITDA improved from -$3,139,026 in Q2-2022 to $141,300 in Q2-2023. The variation is explained as follows:

- Gross margin on revenues from customers increased by $4,163,840 compared to Q2-2022 due to higher revenues as describe above, higher margins product mix, improved productivity, and cost control; and
- Partially offset by higher administrative expenses (SG&A and R&D) of $620,870 mainly due to additional headcounts and higher wages, including higher accrued variable compensation.

Loss

The loss decreased from $3,585,180 in Q2-2022 to $2,422,949 in Q2-2023. The variation is mainly explained as follows:

- An increase in adjusted EBITDA of $3,280,326 as explained above;
- Higher gain on foreign exchange on derivative contracts of $1,065,823 as explained below;
- Partially offset by:
  - In Q2-2022, the Corporation recognized a gain on disposal of property, plant and equipment of $1,601,271 resulting from the sale of the property held for sale located in Quebec;
  - Deferred income tax expense of $357,208 in Q2-2023 compared to a recovery of $302,024 in Q2-2022; and
  - Higher depreciation and amortization of $471,060 due mainly to the acquisition of Canuck and to the assets of XG.

Foreign exchange

	Q2-2023	Q2-2022	Variation		Q1-2023	Variation	
	$	$	$	%	$	$	%
Foreign exchange from operations	**506,372**	98,598	407,774	(414%)	(952,178)	1,458,550	(153%)
Foreign exchange on derivative contracts	**(1,190,311)**	(124,488)	(1,065,823)	856%	2,566,218	(3,756,529)	146%
Total foreign exchange	**(683,939)**	(25,890)	(658,049)	2542%	1,614,040	(2,297,979)	142%

The Corporation had a negative impact on foreign exchange from operations of $506,372 in Q2-2023 and of $98,598 in Q2-2022 due to the decrease of the US rate at the end of the quarter. In Q1-2023, there was a gain of $952,178 due to a spike of the US rate at the end of the quarter.

The foreign exchange on derivative contracts is a non-realized gain of $1,190,311 in Q2-2023 compared to a loss of $2,566,218 in Q1-2023. The gain during Q2-2023 is due to the decrease of the US rate from 1.3833 as of September 30, 2022 to 1.3544 as of December 31, 2022.

The foreign exchange on derivative contracts is a non-realized gain of $1,190,311 in Q2-2023 compared to $124,488 in Q2-2022. The gain during Q2-2023 is higher due to a higher level of coverage over the next two years compared to Q2-2022 and to a larger impact of the fluctuation of the US rate on the fair value of these contracts.

RESULTS OF OPERATIONS VARIANCE ANALYSIS – SIX-MONTH PERIODS

Revenues

	YTD 2023	YTD 2022	Variation	
	$	$	$	%
Revenues from customers	**58,564,536**	36,255,925	22,308,611	62%
Other income	**393,111**	1,364,008	(970,897)	(71%)
Total revenues	**58,957,647**	37,619,933	21,337,714	57%

Revenues from customers increased from $36,255,925 in the last year period to $58,564,536 in the current period. This increase is mainly due to a positive product mix including graphene enhanced products, the acquisition of Canuck in December 2021, higher volume, a positive FX impact and price increases partially offset by lower tooling revenues.

Other income decreased from $1,364,008 in the last year period to $393,111 in the current period. The decrease is mainly explained by the end of the CEWS program set up by the Canadian Federal government to help businesses deal with the COVID-19 pandemic. The Corporation received $ nil under this program in the current period compared to $840,249 in the last year period as the program ended in October 2021.

Adjusted EBITDA

The adjusted EBITDA improved from -$6,899,432 in the last year period to -$1,835,732 in the current period. The variation is explained as follows:

- Gross margin on revenues from customers increased by $6,787,873 compared to the last year period due to higher sales as describe above, higher margin product mix, improved productivity and cost control; and
- Partially offset by higher administrative expenses (SG&A and R&D) of $1,357,099 mainly due to additional headcounts and higher wages, including higher accrued variable compensation.

Loss

The loss increased slightly from $8,315,811 in the last year period to $8,347,021 in the current period. The variation is mainly explained as follows:

- In the last year period, the Corporation recognized a gain on disposal of property, plant and equipment of $1,923,352 resulting from the sale of the properties held for sale located in Quebec and in Newton;
- A decrease of $840,249 in government assistance received from the Canadian federal government through its CEWS program;
- Higher depreciation and amortization of $830,049 due mainly to the acquisition of Canuck and to the assets of XG;
- Higher loss on foreign exchange on derivative contracts of $1,065,356 as explained below;
- Deferred income tax expense of $179,758 in the current period compared to a recovery of $421,847 in the last year period; and
- Largely offset by an increase in adjusted EBITDA of $5,063,700 as explained above.

Foreign exchange

	YTD 2023	YTD 2022	Variation	
	$	$	$	%
Foreign exchange from operations	**(445,806)**	(253,917)	(191,889)	76%
Foreign exchange on derivative contracts	**1,375,907**	310,551	1,065,356	(343%)
Total foreign exchange	**930,101**	56,634	873,467	(1542%)

The Corporation had a positive impact on foreign exchange from operations of $445,806 in the current period compared to $253,917 in the last year period due to the increase of the US rate at the end of each period.

The foreign exchange on derivative contracts is a non-realized loss of $1,375,907 in the current period compared to $310,551 in the last year period. The loss is due to a spike increase of the US rate to 1.3544 as of December 31, 2022 with a higher level of coverage over the next two years. Since December 31, 2022, the Canadian dollar has strengthened and with current level of contracts, each 100 bps movement in the US to CAD rate will be an impact of approximately $400,000.

FINANCIAL OUTLOOK

Given the performance in the first half of the year, the Corporation now expects total revenues between $115 and $120 million for the year ending June 30, 2023.

SUMMARY OF QUARTERLY RESULTS

The table below presents selected financial data for the eight most recently reported quarters. This unaudited quarterly information has been prepared in accordance with IFRS.

		Revenues $	Loss $	Basic and diluted loss per share $	
Q2-2023	December 31, 2022	31,725,122	(2,422,949)	(0.01)	**Note 1**
Q1-2023	September 30, 2022	27,232,525	(5,924,072)	(0.04)	**Note 2**
Q4-2022	June 30, 2022	28,280,476	(2,708,675)	(0.02)	**Note 3**
Q3-2022	March 31, 2022	28,406,750	(4,516,108)	(0.03)	**Note 4**
Q2-2022	December 31, 2021	18,801,487	(3,585,180)	(0.02)	**Note 5**
Q1-2022	September 30, 2021	18,818,446	(4,730,631)	(0.03)	**Note 6**
Q4-2021	June 30, 2021 (1)	20,886,168	(4,437,041)	(0.03)	
Q3-2021	March 31, 2021	18,421,736	(3,873,781)	(0.03)	

Note 1 The revenues were higher due to higher volume and price increases. Loss was lower due to higher margins and positive foreign exchange on derivative contracts.

Note 2 The loss was higher due to a negative impact of foreign exchange on derivative contracts, lower margin and higher administrative expenses.

Note 3 The loss was lower due to positive product mix, improved productivity and cost control.

Note 4 Higher revenues are mainly explained by positive product mix including graphene enhanced product, the acquisition of Canuck, price increase and new sales program.

Note 5 The loss was lower than usual given a gain on disposal of property, plant and equipment of $1,601,271.

Note 6 The loss was higher than usual given less CEWS received and lower gross margin on total revenues due to increases in raw material and labour costs.

(1) Since the initial net assets acquired from CSP Newton Plant were estimated and the valuation was completed during Q4-2021, the fair value of the property, plant and equipment has been increased by $1,125,450 and this adjustment has been reflected retrospectively to the acquisition date as a gain on a bargain purchase in conformity with IFRS 3, *Business Combinations*.

4. FINANCIAL POSITION, LIQUIDITY AND CAPITAL RESOURCES

CONSOLIDATED FINANCIAL POSITION

	As at December 31, 2022 $	As at June 30, 2022 $	Variation $	Main reasons for significant variation
Assets				
Cash and cash equivalents	**38,583,691**	51,232,068	(12,648,377)	Refer to section Cash Flows
Accounts receivable and Contract asset	**19,239,959**	21,077,868	(1,837,909)	Timing in cash receipt
Inventory	**17,754,201**	17,507,812	246,389	
Investment in a joint venture	**3,593,277**	4,238,774	(645,497)	
Right-of-use assets	**8,487,418**	8,381,031	106,387	
Property, plant and equipment, and equipment deposits	**56,009,866**	54,329,195	1,680,671	Mainly due to acquisition of the asset of XG Sciences
Intangible assets	**7,975,967**	7,256,340	719,627	Mainly due to acquisition of the asset of XG Sciences
Goodwill	**1,919,673**	1,919,673	—	
Other assets	**1,153,060**	1,315,688	(162,628)	
Total assets	**154,717,112**	167,258,449	(12,541,337)	
Liabilities and Shareholders' Equity				
Liabilities				
Accounts payable, accrued liabilities and income taxes payable	**16,614,699**	17,029,869	(415,170)	
Contract liability	**1,002,095**	536,060	466,035	
Operating loans	**1,466,100**	4,648,900	(3,182,800)	Cash flows management
Defined benefit liabilities	**481,966**	296,817	185,149	
Balance of purchase price of business acquisition	**—**	956,014	(956,014)	Repayment for the acquisition of Canuck
Lease liability	**15,027,043**	15,232,915	(205,872)	
Long-term debt	**8,632,497**	9,450,814	(818,317)	Mainly due to repayment of debt
Deferred taxes liabilities	**1,626,261**	1,575,665	50,596	
Total liabilities	**44,850,661**	49,727,054	(4,876,393)	
Shareholders' Equity				
Share capital	**169,846,092**	169,354,272	491,820	
Reserve	**4,632,488**	4,185,185	447,303	
Foreign currency translation reserve	**(87,642)**	12,070	(99,712)	
Deficit	**(64,524,487)**	(56,020,132)	(8,504,355)	
Total shareholders' equity	**109,866,451**	117,531,395	(7,664,944)	
Total liabilities and shareholders' equity	**154,717,112**	167,258,449	(12,541,337)	

CASH FLOWS

	YTD 2023 $	YTD 2022 $	Variation $	 %
Cash used in operating activities prior to changes in non-cash working capital items	**(1,833,893)**	(6,333,096)	4,499,203	71%
Changes in non-cash working capital items	**992,246**	(7,065,088)	8,057,334	114%
Operating activities	**(841,647)**	(13,398,184)	12,556,537	94%
Financing activities	**(5,496,513)**	(3,684,717)	(1,811,796)	(49%)
Investing activities	**(6,340,517)**	(2,262,116)	(4,078,401)	(180%)
Net effect of currency exchange rate on cash and cash equivalents	**30,300**	38,350	(8,050)	(21%)
Net change in cash and cash equivalents	**(12,648,377)**	(19,306,667)	6,658,290	34%

Operating activities

Cash flows used in operating activities prior to changes in non-cash working capital items were $1,833,893 in the current period compared to $6,333,096 in the last year period. The variation is mainly explained by an improvement of the adjusted EBITDA of $5,063,700 partially offset by a reduction of $840,249 in the amount received from the CEWS program.

Changes in non-cash working capital items amounted to $992,246 in the current period, which is explained as follows:

- A decrease in accounts receivable and contract asset of $2,164,224 mainly due to timing in cash receipts;
- A decrease of accounts payable and accrued liabilities of $1,783,538 mainly due to payment of variable compensation related to previous year and to timing in payment; and
- An increase of contract liability of $447,775 due to timing of projects.

Financing activities

Cash flows used in financing activities were $5,496,513 in the current period compared to $3,684,717 in the last year period. In the current period, the operating loans decreased by $3,300,000 and repayment of $2,537,912 was completed on long-term debt and lease liability. These were offset by stock options exercised for proceeds of $341,399.

In the last year period, repayment of $5,661,072 was completed on long-term debt and lease liability, which included debt repayment of $1,948,398 in advance. This was offset by lease incentive received of $1,253,921, by an increase of $87,797 on operating loans and by stock options exercised for proceeds of $634,637.

Investing activities

Cash flows used in investing activities were $6,340,517 in the current period compared to $2,262,116 in the last year period. In the current period, the Corporation paid $5,342,095 for capital expenditures, mainly related to the acquisition of the assets of XG Sciences, and paid $1,000,000 related to the balance of purchase price of the acquisition of Canuck.

In the last year period, the Corporation paid $6,468,840 for the acquisition of Canuck, net of cash acquired, $2,051,304 for the repayment of balance of purchase price of the assets of CSP Newton Plant, and $1,944,522 for capital expenditures which were mainly related to composites equipment. These were offset by the sale of three buildings for an amount of $8,325,052.

USE OF PROCEEDS

Use of Proceeds Reconciliation

i) February 2021

On February 12, 2021, the Corporation raised gross proceeds of $46,000,000 by issuing a total of 11,500,000 Common Shares pursuant to a short form prospectus offering (the “February 2021 Offering”). The net proceeds of the February 2021 Offering were $43,382,567, after deduction of underwriters' fees and other expenses.

The net proceeds of the February 2021 Offering are expected to be used by the Corporation within 24 months following the closing of the February 2021 Offering, as follows.

	Use of proceeds as described in the Short Form Prospectus dated February 5, 2021	Revised estimate of the use of proceeds as of the date hereof
Battery initiatives	4,000,000	5,000,000
Sales and marketing of graphene	20,000,000	20,000,000
Debt reduction	15,000,000	14,100,000
General corporate purposes	4,320,000	4,220,000
Total	**43,320,000**	**43,320,000**

The increase in planned expenditure for battery initiatives is mainly explained by higher-than-expected costs of equipment.

With respect to the reduction of the Corporation's debt, the Corporation expects to continue to gradually reduce its debt obligations, to provide a fertile ecosystem for growth. The Corporation is aware of the potential early payment fees resulting from repayment of debt before maturity and will take a balanced approach to minimize such fees.

With respect to the potential negative economic impacts of the COVID-19 pandemic on our business, the Corporation will continue to respond in a measured, prudent and decisive manner with continued emphasis on health and safety, cash conservation and the maintenance of its liquidity position.

The Corporation had negative cash flows from operating activities for the year ended June 30, 2022 and for the six-month period ended December 31, 2022. The Corporation cannot guarantee if it will have positive or negative cash flow from operating activities in future periods. To the extent that the Corporation has negative cash flows in any future period, certain of the proceeds from the February 2021 Offering or future offerings may be used to fund such negative cash flows from operating activities.

ii) February 2022

On February 24, 2022, the Corporation raised gross proceeds of $30,001,200 by issuing a total of 6,522,000 Common Shares pursuant to a short form prospectus offering (the “February 2022 Offering”). The net proceeds of the February 2022 Offering were $27,996,232, after deduction of underwriters' fees and other expenses.

The net proceeds of the February 2022 Offering are expected to be used by the Corporation within 24 months following the closing of the February 2022 Offering, as follows.

	Use of proceeds as described in the Short Form Prospectus dated February 24, 2022	Revised estimate of the use of proceeds as of the date hereof
Acquisition of assets or companies, partnerships and General corporate purposes	27,996,232	27,996,232
Total	**27,996,232**	**27,996,232**

LIQUIDITY AND CAPITAL RESOURCES

Throughout the COVID-19 pandemic, the Corporation has taken controlled and measured actions to preserve liquidity, including flexing and reducing its cost base, eliminating discretionary spending across its global footprint and delaying capital spending where and when appropriate. In addition, the Corporation enhanced its liquidity position with public financing for net proceeds of $27,996,232 during the financial year 2022. As at December 31, 2022, the Corporation had total liquidity of $48,938,091, including cash and cash equivalents and availability under the Corporation's operating loans.

Management believes that the Corporation has sufficient funds to meet its obligations, operating expenses and some development expenditures for the ensuing 12 months as they fall due. The Corporation's ability to continue its development activities is dependent on the impact of COVID-19, supply chain issues and the speed of introduction of graphene products into different industries. Although graphene products have generated revenues, the graphene commercial activity is still in the commercial introduction stage and, as a result, the Corporation could be dependent on external financing to fund its continued development program, if the commercial introduction of the graphene is delayed. The Corporation's main sources of funding have been the issuance of equity securities for cash, debt, cash flow from operations and funds from the government of Quebec with respect to R&D tax credits and other programs, such as Sustainable Development Technology Canada ("SDTC").

OFF-BALANCE SHEET ARRANGEMENTS

As of the date of this MD&A, the Corporation did not have any off-balance sheet arrangements, except for the commitment disclosed in the unaudited condensed interim consolidated financial statements for the three and six-month periods ended December 31, 2022 and 2021.

Management believes that the Corporation will be able to meet its obligations with cash on hand, cash flows from operations and drawdowns under existing credit facilities.

FINANCIAL INSTRUMENTS AND RISK MANAGEMENT

For a detailed description of the financial instruments and risk management associated with the Corporation and its activities, please refer to the consolidated financial statements for the years ended June 30, 2022 and 2021. These identified financial instruments and risks are consistent through the periods.

OUTSTANDING SHARES

As at February 13, 2023, the Corporation has:

- 165,733,025 common shares issued and outstanding;
- 3,175,000 options outstanding with expiry dates ranging between December 19, 2023 and November 13, 2027 with exercise prices between $1.22 and $6.44. If all the options were exercised, 3,175,000 shares would be issued for cash proceeds of $7,579,750.

5. RELATED PARTY TRANSACTIONS

For a detailed description of all related party transactions, please refer to the note 7 "Related party transactions" in the unaudited condensed interim consolidated financial statements for the three and six-month periods ended December 31, 2022 and 2021.

6. RISKS AND UNCERTAINTIES

The operations of the Corporation are speculative due to the high-risk nature of its business, which is the acquisition, financing, technology and manufacturing. These risk factors could materially affect the Corporation's future operating results and could cause actual events to differ materially from those described in forward–looking information relating to the Corporation.

For a detailed description of risks and uncertainties, refer to the annual management's discussion and analysis for the years ended June 30, 2022 and 2021.

7. ACCOUNTING POLICIES

CRITICAL ACCOUNTING JUDGMENTS AND ESTIMATES

The preparation of consolidated financial statements requires management to make estimates and judgments about the future. Management periodically reviews these estimates, which are based on historical experience, changes in the business environment and other factors, including expectations of future events, that management considers reasonable under the circumstances. The estimates involve judgments we make based on the information available. However, accounting estimates could result in outcomes that require a material adjustment to the carrying amount of the asset or liability affected in future periods.

The Corporation based its assumptions and estimates on parameters available when the consolidated financial statements were prepared. However, existing circumstances and assumptions about future developments may change due to market events or to circumstances beyond the Corporation's control. Such changes are reflected in the assumptions when they occur. This discussion addresses only those estimates that we consider important based on the degree of uncertainty and the likelihood of a material impact if we had used different estimates. There are many other areas in which we use estimates about uncertain matters.

For a detailed description of the critical accounting judgments and estimates associated with the Corporation and its activities, please refer to the section "Significant management estimates and judgments in applying accounting policies" in the note 2 in the consolidated financial statements for the years ended June 30, 2022 and 2021. The Corporation was not required to make significant judgments, estimates and assumptions in areas other than those mentioned in the consolidated financial statements for the years ended June 30, 2022 and 2021.

FUTURE CHANGES IN ACCOUNTING POLICIES

Certain standards and amendments to existing standards have been published, and their adoption is mandatory for future accounting periods. Refer to the note 3 in the consolidated financial statements for the years ended June 30, 2022 and 2021 and to the note 2 in the unaudited condensed interim consolidated financial statements for the three and six-month periods ended December 31, 2022 and 2021 for the details of these standards and amendments.

8. CONTROLS AND PROCEDURES

In accordance with National Instrument 52-109 of the Canadian Securities Authorities, the Corporation has filed certificates signed by the Chief Executive Officer and the Chief Financial Officer that, among other things, attest to the design of the disclosure controls and procedures ("DC&P") and the design and effectiveness of internal controls over financial reporting.

No changes were made to the Corporation's internal controls over financial reporting during Q2-2023 that have materially affected, or are reasonably likely to materially affect, internal controls over financial reporting.