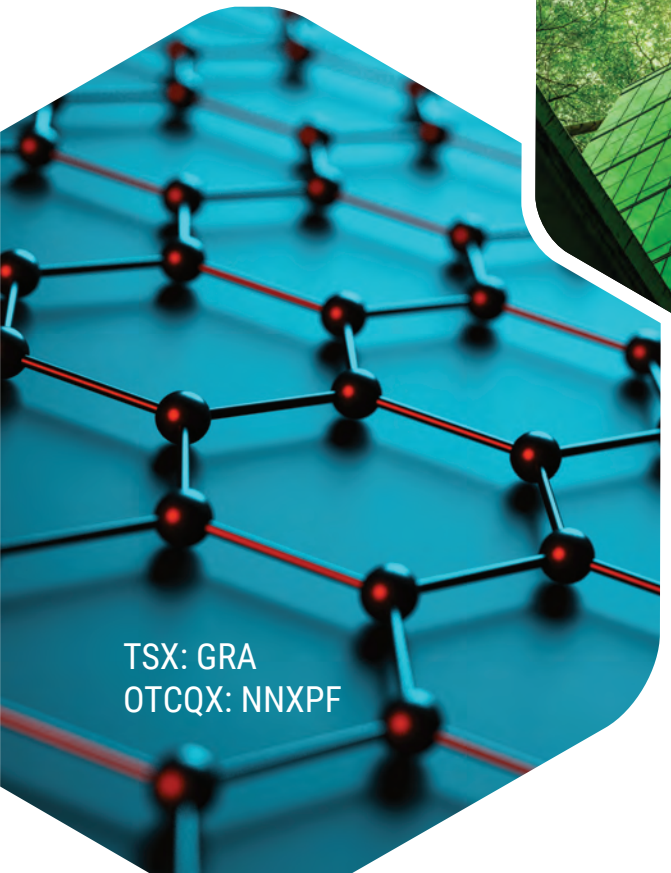


NanoXplore

Performance Through Carbon Chemistry

The Power to Transform

Enabling Energy Transition & Sustainability

TSX: GRA
OTCQX: NNXPF

Investor Presentation

February 2023

FORWARD-LOOKING STATEMENTS

This presentation contains express or implied forward-looking statements, which are based on current expectations of management. These statements relate to, among other things, our expectations regarding management's plans, objectives, and strategies. All statements other than statements of historical fact could be considered forward-looking, including, but not limited to, any projections of financial information; any statements about historical results that may suggest trends in our business and results of operations; any statements of the plans, strategies and objectives of management for future operations, including the timing, funding and construction of planned manufacturing facilities and sales offices; any statements of expectation or belief regarding future events, potential markets or applications, the sizes of addressable markets, expected technology developments, strategic partnerships and collaborations, or enforceability of our intellectual property rights; any statements about the projected or expected economic or other benefits of our products compared to petroleum-derived equivalents, future sales and any statements of assumptions underlying any of the foregoing.

Forward-looking statements are subject to a number of risks, assumptions and uncertainties, many of which involve factors or circumstances that are beyond our control.

Although we believe that the expectations reflected in the forward-looking statements are reasonable, we cannot guarantee that the events and circumstances reflected in the forward-looking statements will be achieved or occur and the timing of events and circumstances and actual results could differ materially from those projected in the forward-looking statements. Accordingly, you should not place undue reliance on these forward-looking statements. All such statements speak only as of the date made, and we undertake no obligation to update or revise publicly any forward-looking statements, whether as a result of new information, future events or otherwise.

NANOXPLORE AT A GLANCE

Ticker	TSX: GRA
Market Cap	$525 million *Feb 16*
Cash	$39 million
Total Debt	$10 million
Total Liquidity	$49 million
TTM* Revenue	$116 million
Headquarters	Montreal

Advanced material company founded in

2011

ESG vision

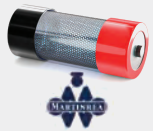
Health Canada

REACH COMPLIANCE

EPA certified
United States Environmental Protection Agency

VoltaXplore

Li-ion batteries 50/50 JV with



"Blue chip customers"

- Volvo
- Caterpillar
- Paccar
- GE
- Ford
- Solmax
- Daimler
- Itron
- Morgan Olson
- Gerdau

Largest Graphene Producer

~40% ** **share**

Worldwide Lowest Cost Producer

10 production plants

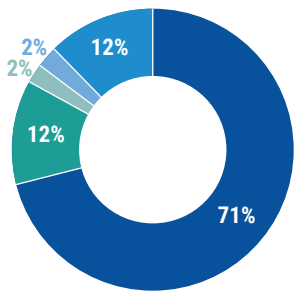
~500 employees

We pride ourselves on the quality & consistency of our branded powder

GRAPHENEBLACK™ A Product of NANOXPLORE

Strong IP portfolio & Know-how through years of R&D development

END MARKET SECTORS

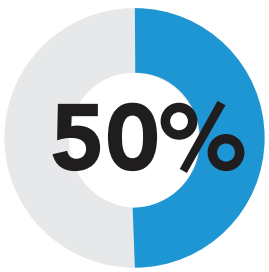


- Transportation
- Building, Construction & Industrial
- Agriculture
- Wind Energy
- Other

** Trailing Twelve Months*
*** 40% of worldwide nameplate capacity - IDTechEx Research, Dr. Richard Collins: Is the Tipping Point for Graphene Commercialization Approaching?*

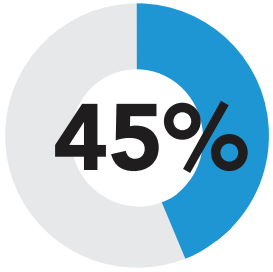
DIVERSITY, EQUITY & INCLUSION

Board of Directors

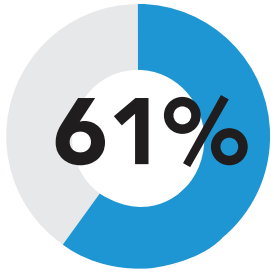


Multi-Cultural & Women

Corporate Workforce

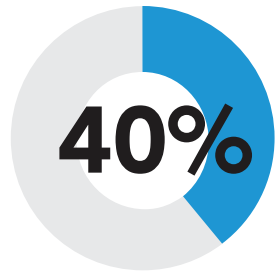


Women



Multi-Cultural Background

Management Team



Multi-Cultural & Women

THE POWER OF GRAPHENE

US$3 billion*
39% CAGR
2020 2027

Graphene Nobel Prize

Since its recent discovery in 2004, graphene continues to amaze scientists and researchers of the superlative properties the material exhibits.

Hailed as a "**wonder material**", graphene is lauded for its durability, sustainability and potential applications that will be part of in the future.

HIGH THERMAL CONDUCTIVITY
Conducts heat & electricity better than copper

HIGH ELECTRICAL CONDUCTIVITY

THIN & LIGHTWEIGHT
Million times thinner than a piece of paper & lighter than feather

200X STRONGER THAN STEEL
Due to the strong carbon-carbon bonds

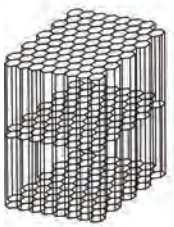
** Source: "Graphene Market Size, Share & COVID-19 Impact Analysis, By Product, By End-Use", Fortune Business Insights, August 2020*

OUR SOLUTION

We leverage our **patented technology**

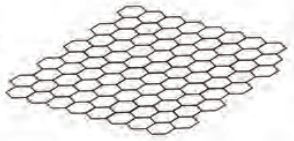
GRAPHENEBLACK™
A Product of NANOXPLORE

to provide **sustainable** alternative



Graphite
Natural flake graphite
(>100,000 layers of carbon)

EXFOLIATION
via a mechanical-liquid
proprietary process



Graphene
6-10 atomic layers
in thickness with 96-98% purity

CLEAN TECHNOLOGY

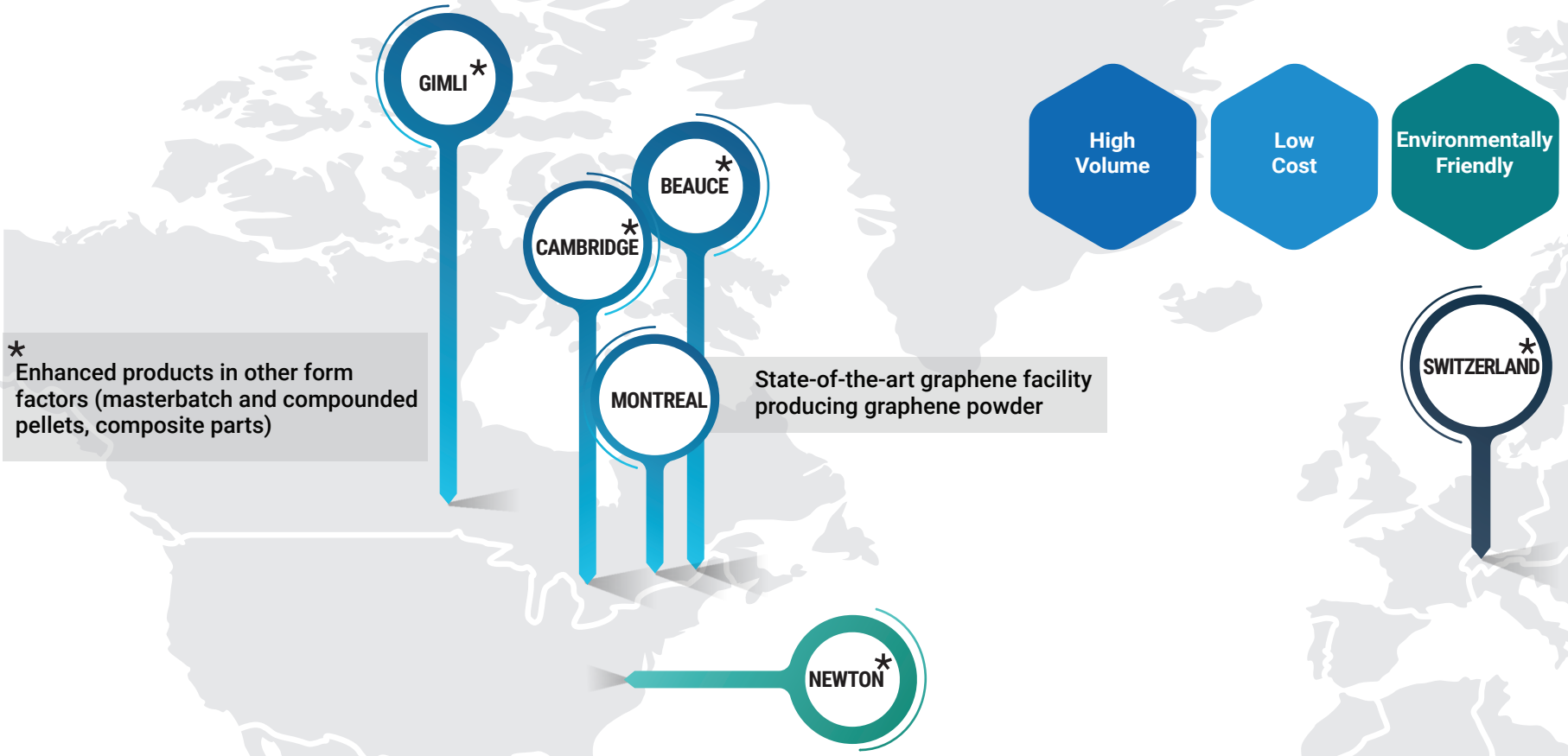
CO_2 EMISSION

No Carcinogen & Petroleum based material

More EFFECTIVE

SAFE

MANUFACTURING FOOTPRINT & PROCESS

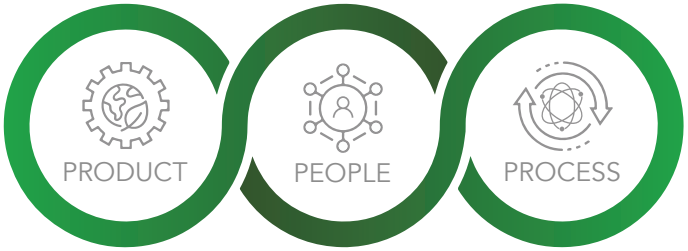


10 facilities in Canada, US and Switzerland

- Production of very consistent and high-quality graphene in volume in Montreal
- Capable of producing different grades of GrapheneBlack™
- Fully automated facility managed by Programmable Logic Controllers, ensuring product consistency and highest level of quality assurance

POWERING 2 KEY GLOBAL MEGATRENDS

Our vision is to create a better tomorrow by providing innovative, sustainable products and solutions across multiple industries and applications



ENERGY TRANSITION

SUSTAINABILITY

GRAPHENEBLACK™
A Product of NANOXPLORE

~80%
Carbon footprint vs. OTHER SOLUTIONS

LONG-TERM DRIVERS

EV Adoption

Sustainability

Capacity Expansion

High Return on R&D spend

Market Share Growth

FQ2 2023 CORPORATE HIGHLIGHTS

Quarterly Key Developments

Transportation

- Large commercial OEM approved graphene in all existing and potentiel future programs
- Large passenger OEM approved graphene enhanced plastic for exterior applications

Drilling Fluid

Large specialized drilling fluid company received strong results, in late-stage trial, which speeds up drilling process by mitigating fluid loss

Insulation Foam

Large global chemical company, in late-stage trial, shows strong performance and, with a combination of cost, make graphene attractive

Concrete

Major concrete manufacturer saw 20% improvement in compressive strength

Recycled Plastics

Began commercialization with sustainable packaging company in Latin America

TOTAL REVENUES

$31.7M up 69%

DRIVERS:

- Positive product mix including graphene-enhanced products
- Higher volume
- Canuck acquisition in December 2021
- Positive FX impact
- Price increases

Partially offset by lower tooling revenues

ADJUSTED EBITDA

2nd Positive Adjusted EBITDA in 3 quarters

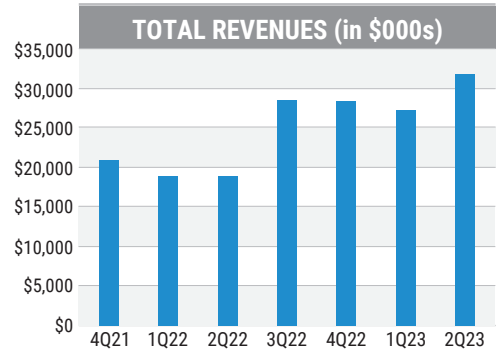
$0.1M up $3.3M

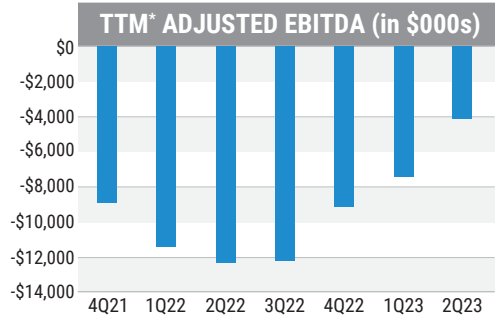
DRIVERS:

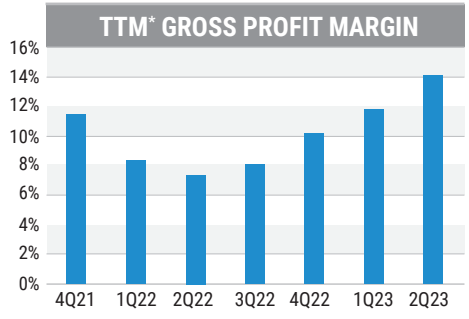
- Gross margin expansion driven by:
  - Higher revenues
  - Higher margins product mix
  - Improved productivity
  - Cost control
- Partially offset by higher administrative expenses

2023 REVENUE GUIDANCE RAISED

$115-120M up 22-27%
from $110M previously

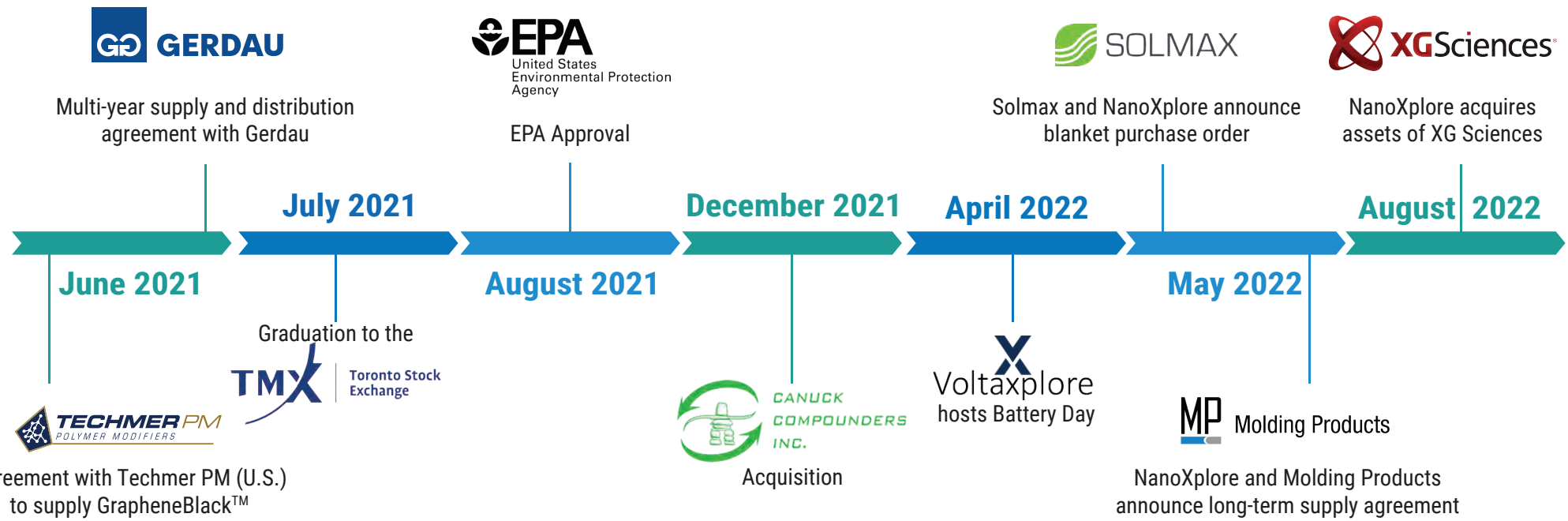






** Trailing Twelve Months*

HIGHLIGHTS OF RECENT DEVELOPMENTS



EXAMPLES OF COMMERCIAL SUCCESS

- **LARGE GLOBAL OEM**
  Graphene-enhanced plastics
- **LARGE COMMERCIAL OEM**
  Graphene-enhanced composite parts
- **MID-SIZED LATIN AMERICAN PACKAGING COMPANY**
  Graphene-enhanced plastics
- **MULTIPLE GLOBAL AGRICULTURAL FLOORING USERS**
  Graphene-enhanced plastics
- **MID-SIZED NORTH AMERICAN AGRICULTURAL COMPANY**
  Graphene-enhanced composite parts
- **MID-SIZED NORTH AMERICAN CONSTRUCTION COMPANY**
  Graphene-enhanced composite parts
- **LARGE ASIAN ELECTRONIC COMPANY**
  Graphene powder
- **MID-SIZED NORTH AMERICAN PIPE COMPANY**
  Graphene-enhanced plastics
- **MID-SIZED NORTH AMERICAN HOUSING COMPANY**
  Graphene-enhanced plastics
- **MID-SIZED NORTH AMERICAN CONSTRUCTION COMPANY**
  Graphene-enhanced plastics
- **MID-SIZED NORTH AMERICAN PACKAGING COMPANY**
  Graphene-enhanced plastics

THE POTENTIAL EVOLUTION AS A LEADING GRAPHENE PRODUCER

THE SET-UP PHASE 1

2017-2022

DE-RISKED & POSITIONED FOR SUCCESS

- ✓ Strengthened our balance sheet
- ✓ Positioned our company as a leading industrial scale graphene producer
- ✓ Successful at lowering our cost per unit to improve adoption

OUR PLAN PHASE 2

2023-2026

CAPEX EXECUTION

- $120M graphene and battery materials plant
- $50M GrapheneBlack SMC™ (Sheet Molding Compound) plant
- Total investments of $170M financed with cash on hand, grants, debt and equity (only if needed)
  - The company will focus to minimize or eliminate equity financing

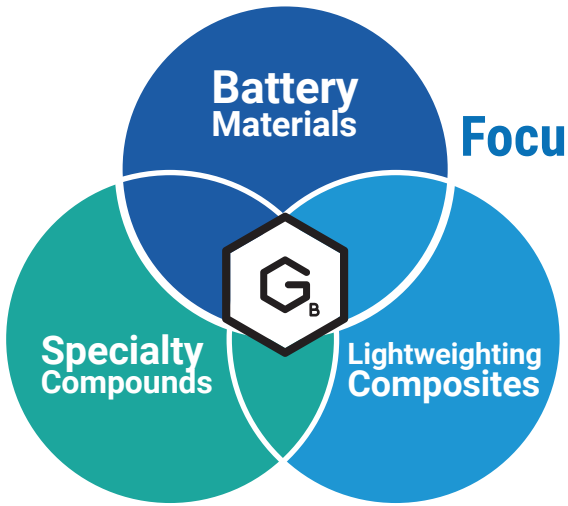
OUR VISION PHASE 3

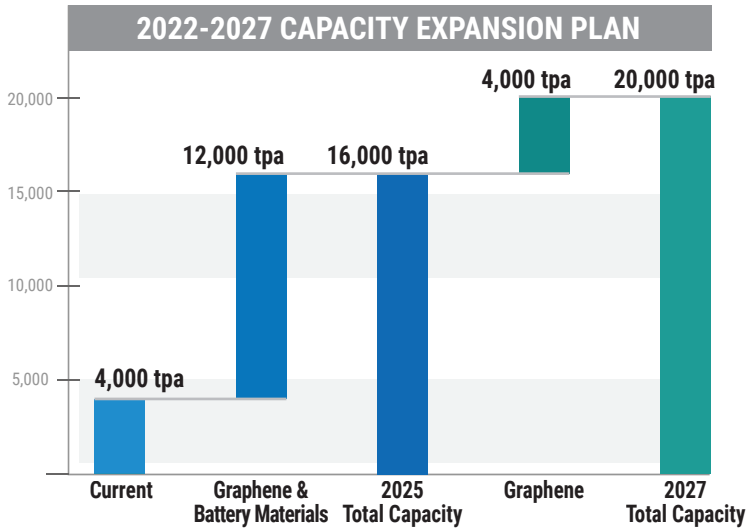
2026+

GROWTH & POSITIVE YIELDING RESULTS

- Benefit from our investments
- Focusing on sustainability and energy transition
- Bring new applications to graphene
- Extending our battery materials initiatives

Focus Markets





BATTERY MATERIALS - EXECUTIVE SUMMARY

KEY DRIVERS

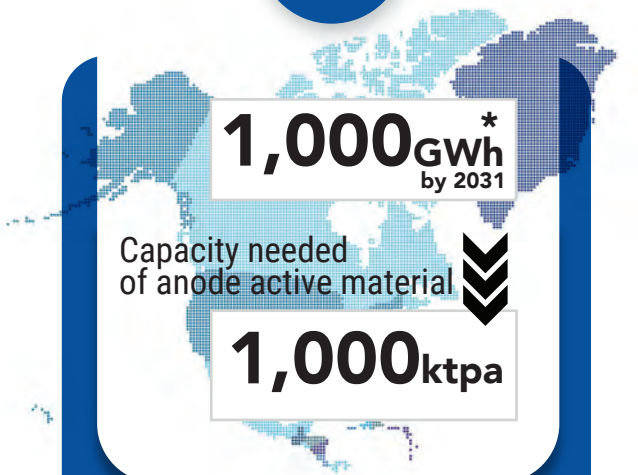
- **EV Adoption**
- **Energy Transition/ Sustainability**
- **Inflation Reduction Act**
- **IoT Adoption/Electronic Devices**

TARGETED PRODUCTS

- **Anode Active** Material
- **Anode Performance** Additive (Gn + Si)
- **Cathode Conductive** Additive

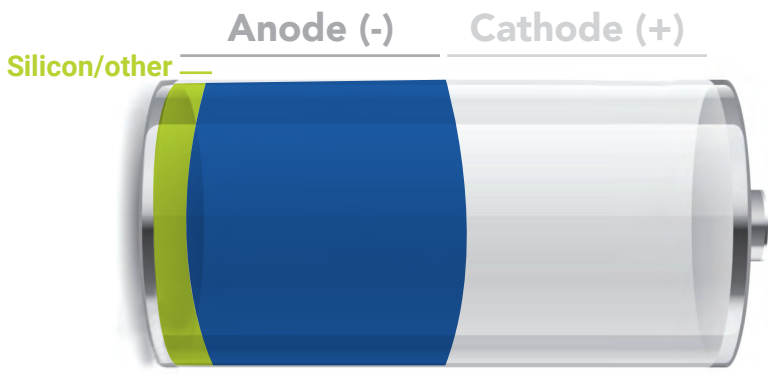
MARKET SIZE

NORTH AMERICA RAMPING UP CAPACITY



* BMI - Benchmark Minerals Intelligence

BATTERY MATERIALS - NANOXPLORE VALUE PROPOSITION



Anode:

Enhanced capacity versus other anodes

Enhanced conductivity resulting in faster charging time

More consistent anode performance in hot and cold temperature versus already existing anodes

Improved safety due to **enhanced heat dissipation properties**

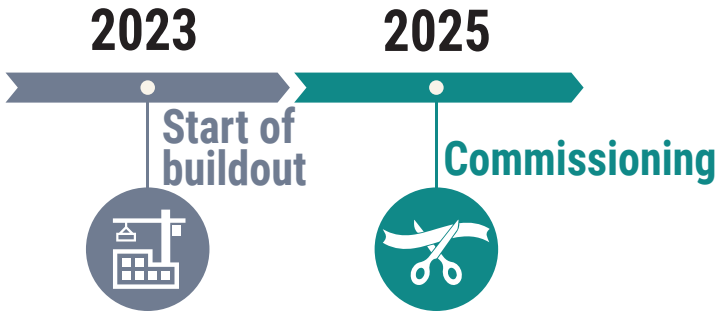
BATTERY MATERIALS - CAPEX & RETURNS

ASSETS:
- **12,000 tpa** graphene and battery materials facility
- **100-200 tpa** graphene-silicon line
- R&D Facility

CAPEX: $100 million

POTENTIAL ANNUAL REVENUE: $100 million

IRR: 25%+



REASONS TO INVEST/STRATEGY:
- Large and growing addressable market
- Strong fundamentals with undersupplied market
- Attractive returns
- Flexible manufacturing process

LIGHTWEIGHTING COMPOSITES - EXECUTIVE SUMMARY

SMC KEY DRIVERS

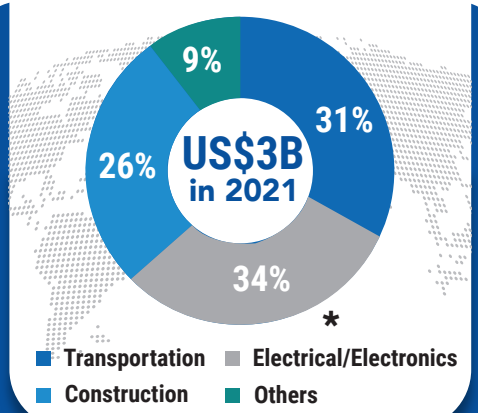
- **EV Adoption**
- **Sustainability**
- **Transportation industry CO_2 Reduction Regulations**

TARGETED VERTICALS

Transportation
External parts of vehicles
Battery enclosures

Construction
Commercial and
Residential Applications

SHEET MOLDING COMPOUND GLOBAL MARKET SIZE

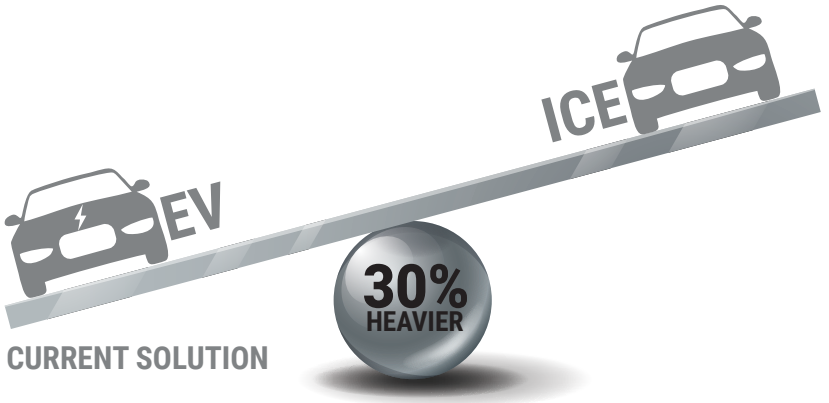


* Source Lucintel

LIGHTWEIGHTING COMPOSITES - NANOXPLORE VALUE PROPOSITION

Stronger, Lighter, Higher Quality Parts Using

GRAPHENEBLACK SMC™
A NANOXPLORE Product



LIGHTWEIGHTING IS A PRIORITY FOR OEMs

up to **25%** Lightweighting Potential

Sustainability & **Reduced** Emissions

Lower Painting Cost

LIGHTWEIGHTING COMPOSITES - CAPEX & RETURNS

ASSET: 10M lbs SMC facility

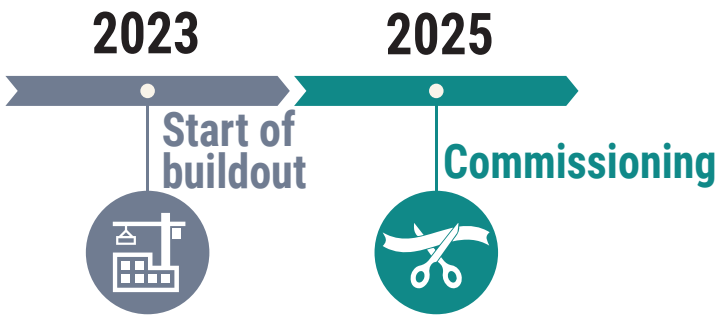
CAPEX: $50 million

POTENTIAL ANNUAL REVENUE: $80 million

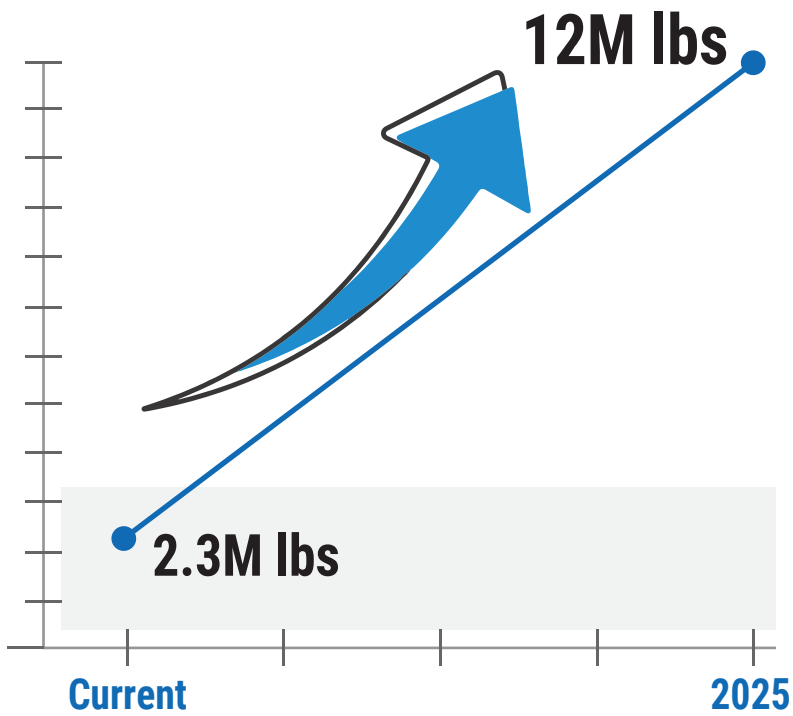
IRR: 25%+

REASONS TO INVEST/STRATEGY:

- Large and growing addressable market
- Attractive EV adoption market
- Undersupplied market
- Further capacity expansion potential (organic and/or inorganic)



SMC Nameplate Capacity



SPECIALTY COMPOUNDS - EXECUTIVE SUMMARY

GRAPHENE KEY DRIVERS

- Sustainability
- Market Penetration
- Low-Cost Alternative

TARGETED VERTICALS

- Concrete
- Polyurethane (PU) Foam
- Drilling Fluids
- Polyethylene (PE)/ Polypropylene (PP) Compound

SPECIALTY COMPOUNDS - NANOXPLORE VALUE PROPOSITION

	VALUE PROPOSITION			GRAPHENE ADDRESSABLE MARKET SIZE
Concrete	CO2 EMISSION	COST SAVINGS	PERFORMANCE & DURABILITY	**6,000 ktpa[1]**
Drilling Fluids	FASTER DRILLING SPEED	EXTENDED TOOL LIFE	REDUCED FLUID LOSS	**256 ktpa[2]**
PU Foam	BETTER THERMAL INSULATION	FLAME RETARDANCY	SUSTAINABILITY	**170 ktpa[3]**
PE/PP Compound	MORE RECYCABLE PLASTIC	MECHANICAL PERFORMANCE	COST REDUCTIONS	**90 ktpa[4]**

1- The Graphene Council & NanoXplore
2- Fortune Business Insights & NanoXplore
3- MarketsandMarkets & NanoXplore
4- MarketsandMarkets, PPI, Straits Research & NanoXplore

SPECIALTY COMPOUNDS - CAPEX & RETURNS

ASSET: 4,000 tpa GrapheneBlack™ module (in addition to existing 4,000 tpa)

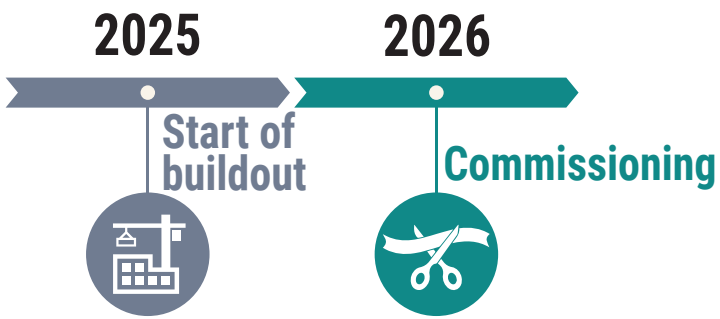
CAPEX: $20 million

POTENTIAL ANNUAL REVENUE: $40 million

IRR: 40%+

REASONS TO INVEST/STRATEGY:

- Narrowing the scope to focus on highest probability of success applications
- Focus on applications with large graphene powder consumption
- Increase return on R&D



VOLTAXPLORE AT A GLANCE

VoltaXplore

MARTINREA

(TSX:MRE)

50%

NANOXPLORE

(TSX:GRA)

50%

- VoltaXplore benefits from NanoXplore's proprietary graphene anode technology
- VoltaXplore commissioned a 1 MWh demonstration battery facility in March 2022
- Technology has been validated
- Customer discussions are progressing well
- Proposed 2 GWh 21700 battery plant

VoltaXplore is a **Canadian manufacturer of proprietary designed and graphene-enhanced cylindrical lithium-ion batteries** supporting the energy transition across several industries

ADVANTAGES OF GRAPHENE-ENHANCED BATTERY CELLS

18650 Battery Cell KPIs*	Regular Anode with NMC Cathode	Graphene Enhanced Anode with NMC Cathode	
Energy Density Increase	X	**Up to 10%**	**Improved range performance** for the EV market
Cycle Life at Normal Charge Rate *(@80% capacity retention)*	**Up to 1500**	**Up to 2000**	**Energy stability** and **extended life for battery packs** even at lower temperatures
Cycle Life at High Charge Rates *(@80% capacity retention)*	**Up to 300**	**Up to 450**	**Improved charging time** without compromising battery performance
Internal Resistance (mΩ)	**<30**	**<28**	**Fast charging improvement** with reduced safety concerns
Maximum Weight of Battery Cell	**48g**	**45g**	**Lower vehicle weight** and **improved energy efficiency**
Temperature at High Charge Rate	**Under 30°C**	**Under 26°C**	**Reduced load on BMS** and **improved cooling properties** on pack level
Anode Electrode Expansion Rate *(@100% state of charge)*	**Up to 60%**	**Up to 40%**	**Reduced risk of thermal runaway** with graphene / silicon technology

** Source: VoltaXplore*

BENCHMARKING LITHIUM-ION BATTERIES

KPIs*	COMPETITOR 1	COMPETITOR 2	VoltaXplore
Capacity (mAh)	2500-2600	2500-2600	**2500-2600**
Energy Density (Wh/Kg)	204	196	**214**
Cycle Life (@80%)	300 (@ 4A Charge Rate)	250 (@ 4A Charge Rate)	**450 (@ 4A Charge Rate)**
Internal Resistance (mΩ)	<30	<20	**27.5**
Mass (g)	45.8	47.8	**43.7**
Temperature (°C)	Under 30° (@ 4A Charge Rate)	Under 30° (@ 4A Charge Rate)	**Under 26° (@ 4A Charge Rate)**

VoltaXplore's Graphene-Enhanced Batteries Offer Clear Performance Advantages in Terms of Energy Density, Temperature and Cycle Life Under a Lower Weight

** Source: VoltaXplore*

LEADERSHIP TEAM

Dr. Soroush Nazarpour, Ph.D.
Founder & Chief Executive Officer

Ph.D in Nanotechnology from the University of Barcelona;

Serial entrepreneur and the founder of NanoXplore President & CEO since 2011 and serves as a director on the board of directors;

Acknowledged expert in the field of graphene and co-author of "Graphene Technology From Laboratory to Fabrication" published by Wiley & Co in 2016;

CEO of VoltaXplore, an electric vehicle battery manufacturing company.

Rocco Marinaccio
Chief Operating Officer

More than 20 years of experience within operations;

Vice President of Flexible Manufacturing Group at Martinrea;

Occupied multiple senior positions at Martinrea International Inc. including Material Production and Logistics Manager, General Manager and Director of Modules;

Formerly responsible for over-seeing the construction of key Martinrea facilities located in Ramos Arizpe, Mexico and Riverside, Missouri as well as the relocation of two facilities in Canada.

Pedro Azevedo
Chief Financial Officer

Extensive experience in manufacturing and operations, as well as M&A;

Former CFO of Tarkett Sports, a division of publicly traded global manufacturing company Tarkett S.A.;

Occupied a variety of positions starting from a cost accountant to different corporate controller functions.

Nima Moghimian
Global Director of R&D

Ph.D. in Mechanical Engineering from the University of Victoria;

Master's in Nanotechnology from the University of Barcelona;

Materials and battery scientist;
+8 yrs of product development leadership experience in graphene and battery materials;

Extensive materials regulation experience: TSCA, REACH, CEPA, FDA;

Government grants: Managed several program IRAP, SDTC, TechnoClimat;
Inventor of 6 Patents in graphene and batteries;

Author of >30 peer reviewed scientific articles.

Vincent Livoti
Global VP Sales & Marketing

Over 20 years of experience in sales and marketing for specialty chemicals and advanced materials;

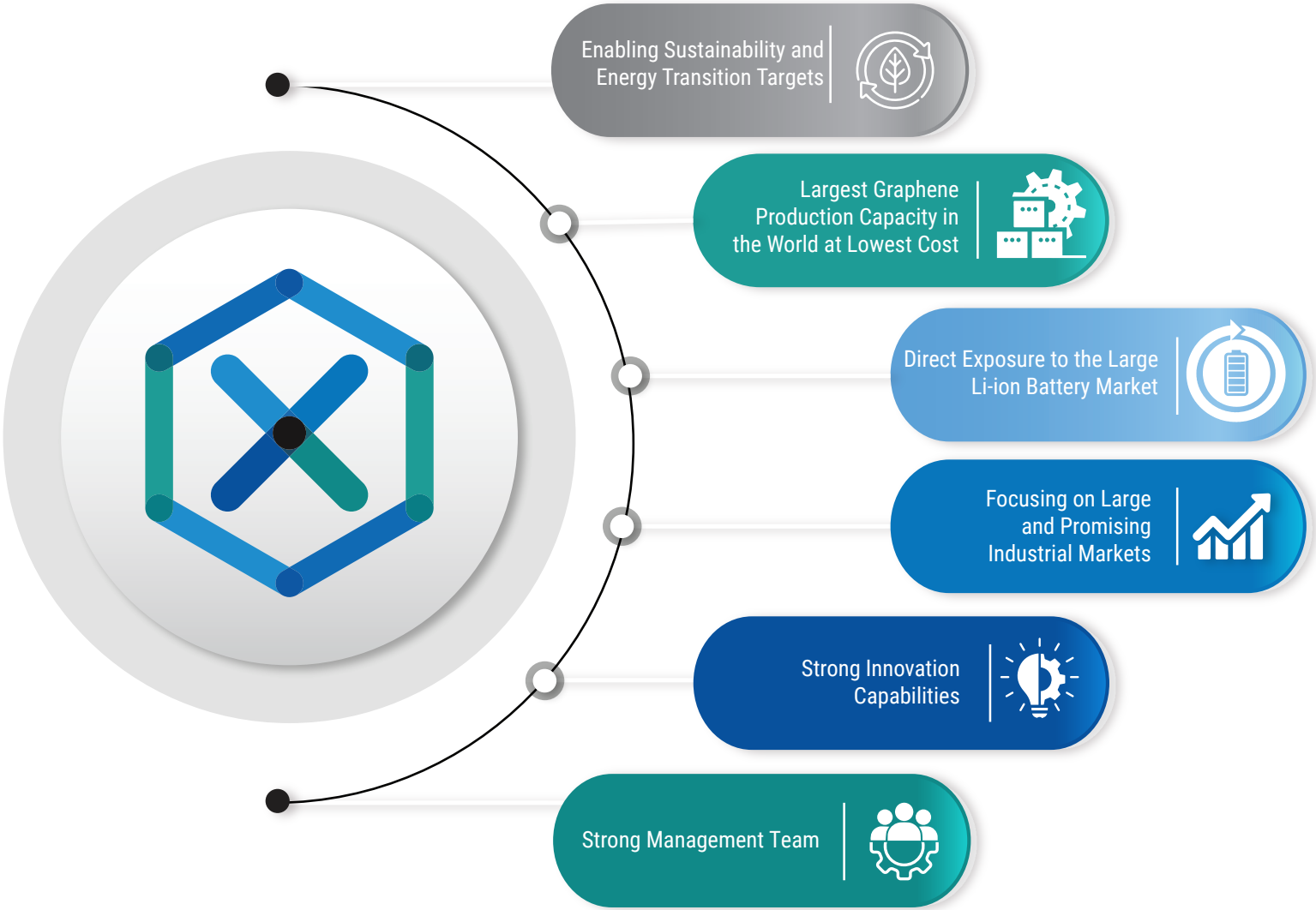
Former Vice President of Sales and Business Development at Daikin America (Chemical Division);

Former Head of Specialty Ingredients / Microbial Control at Lonza Inc.;

Former Director of Business Development at BASF;

Occupied multiple senior positions at Ciba Specialty Chemicals including Director of Business Development, Global Marketing Manager, and Sr. Global Account Manager.

KEY TAKEAWAYS



APPENDIX

ANALYST COVERAGE

NATIONAL BANK FINANCIAL MARKETS	Rupert Merer
ECHELON WEALTH PARTNERS	Amr Ezzat
CORMARK SECURITIES INC.	MacMurray Whale
BEACON Securities Limited	Ahmad Shaath
PARADIGM CAPITAL	Marvin Wolff
RAYMOND JAMES®	Michael Glen
PI FINANCIAL experience. driven.	Ben Jekic

XG SCIENCES - ASSET PURCHASE

XGSciences®

Specialized in the production of graphene nanoplatelets

US$3 million
Majority of Assets

Acquisition - August 2022

Founded in **2006**

in process

100-200 tpa line
at our Graphene & Battery material facility

R&D lab

END MARKETS

Partnered with market leading companies in key end markets such as:

LITHIUM ION BATTERY ANODE MATERIALS

AUTOMOTIVE

PACKAGING

COMPOSITES

CONCRETE

DEAL RATIONALE

Strong patent portfolio in attractive end markets, especially in battery anode material & PU foam

Support our next generation solid state battery solutions with their silicon-graphene patents

Strong relationships with market leading companies

Patent Name	Applications	Patent number
Si-Gn for electrochemical applications	Battery	10,079,389
Si-Gn composite anode material & manufacturing	Battery	US 2022-0115646 A1
LiF embedded Si-Gn powder for lithium-ion battery	Battery	10,644,309
Electrodes for capacitors from mixed carbon compositions	Energy Storage	9,472,354
2-dimensional thermal conductive materials	Thermal Interface Materials	10,568,544
Graphene-modified Polymeric foam	Foams	WO2021167881 A1

CANUCK COMPOUNDERS ACQUISITION

$9 million

Acquisition - December 2021

Paid 5x EBITDA

Founded **35 years ago**

40M lbs annually

CANUCK
A NANOXPLORE COMPANY

Canuck is a **plastic recycling compounder** providing **sustainable and engineered** compounds

NanoXplore is currently **selling graphene-enhanced recycled plastic to customers in:**

NANOXPLORE
Performance Through Carbon Chemistry

END MARKETS

AUTOMOTIVE

HOUSE & GARDEN

OFFICE FURNITURE

INDUSTRIAL & COMMERCIAL

AGRICULTURAL

DEAL RATIONALE

Increasing graphene compounding capabilities, especially with recycled plastics

Bringing more sustainable solutions by using recycled plastics

Forming strategic partnerships with end customers especially in transportation

Performance Through Carbon Chemistry

4500 Thimens Blvd, Montreal, QC H4R 2P2
www.nanoxplore.ca
TSX: GRA | OTCQX: NNXPF

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