



CAUTIONARY NOTE REGARDING FORWARD-LOOKING STATEMENTS

This presentation contains forward-looking statements within the meaning of Canadian securities legislation and other statements that are not historical facts. Forward-looking statements are included to provide information about management's current expectations and plans that allow investors and others to have a better understanding of Falcon's business plans and financial performance and condition. Forward-looking statements include words or expressions such as "aim", "develop", "project", "expand", "generate", "expedite", "grow", "increase", "trend", "attempt", "unlikely", "goal", "approach", "achieve", "maximize", "near-term", "underway", "strategy", "emphasis", "position", "advantage", "follow", "become", "building", "on track", "projection", "improve", "expand", "projected", "milestone", "ongoing", "target", "become" or variations of such words and phrases or state that certain actions, events or results "may", "could", "will", "would" or "might". Specific forward-looking statements in this presentation include, but are not limited to, statements and information with respect to (1) Falcon aiming to be the go-to natural CSPG supplier; (2) Falcon developing a natural CSPG plant in Morocco; (3) the lithium-ion battery section projected to exceed USD \$200 billion in value by 2030, with CSPG being a critical component for high-performance anodes; (4) growing industries for CSPG, including its use in aerospace, industrial lubricants, refractory materials, and high-temperature applications, expanding its market potential; (5) 25ktpa CSPG production facility to generate \$134M/year at a 55% margin; (6) Falcon assembling a unique consortium of experts to expedite the development timeline and lower costs for maximum shareholder returns; (7) growing applications for CSPG; (8) growing renewable integration, grid balancing, demand for large-scale energy storage; (9) increasing application diversity for CSPG in aerospace, defence, and medical devices; (10) China continuing to dominate the downstream EV battery supply chain, a trend which is unlikely to change; (11) the attempt of companies, including Falcon, to create their own production facilities to undercut supply from China; (12) projected commercial anode plant nameplate capacity of 25kt; (13) projected location for commercial anode plant in Jorf Lasfar. Morocco: (14) projected investment of \$106 million for commercial anode plant: (15) Falcon goal of creating high-margin CSPG production business that sells to western end-users: (16) Falcon's differentiator being its approach to achieve its goal: (17) assembling a unique consortium to leverage technical and commercial expertise along with financial capabilities to maximize value: (18) near-term for CSPG production from Moroccan Plant: (19) feasibility study being underway and its completion timeline: (20) production from Moroccan Plant of 25ktpa CSPG: (21) unique consortium positioning Falcon to execute its vertical integration strategy: (22) the composition of the consortium: (23) Falcon's aim to build the first natural CSPG production facility on the African Continent: (24) INNOVX being the host to the location of Falcon's commercial plant (Park X): (25) Falcon aim to create the first natural CSPG production plant outside of China by leveraging partnerships with an emphasis on refining over mining graphite to maximise margins; (26) the consortium to de-risk the graphite supply chain; (27) unique approach positioning Falcon as the most costefficient emerging producer in the market; (28) Falcon's investment intensity of \$4,240/t; (29) key drivers of low capital intensity, including based existing Hensen plant, Chinese procurement and supply chain and Moroccan construction costs; (30) Morocco to become a regional EV powerhouse; (31) 63% renewable energy by 2030; (32) Morocco building its automotive industrial ecosystem; (33) Morocco aiming to increase EV production as part of its broader automotive industry strategy; (34) Pilot plant being on track to produce natural CSPG in Q4 of 2025; (35) design of the anode plant; (36) projection of 25ktpa CSPG production at the anode plant; (37) construction period of 18 months; (38) anode plant projected annual cashflow of \$134M, 55% EBITDA margin and 82% after-tax IRR; (39) leveraging existing expertise improves project economics and derisk execution; (40) milestones and catalysts for 2025; (41) CSPG production projections; (42) anode plant initial 5ktpa coating line, expanding to 25ktpa after final product has been qualified by customers; (43) Falcon to become a fully-integrated CSPG supplier; (44) OEM sourcing strategy; (45) the future price of, and demand for, minerals including graphite, nickel and cobalt; and (46) Falcon's strategy, plans or future financial or operating performance.

Forward-looking information is based upon certain assumptions and other important factors and assumptions subject to significant business, geological, economic and competitive uncertainties and contingencies that, if untrue, could cause the actual results, performance or achievements of Falcon to be materially different from future results, performance or achievements expressed or implied by such information or statements. There can be no assurance that such information is based include, without limitation: (1) Falcon's capacity to execute on its strategic and operational plans, including its ability to develop the pilot plant and anode plant on the anticipated timeline and budget; (2) stable political, social, and legal conditions in Morocco and Republic of Guinea and the absence of significant disruptions affecting operations due to civil unrest, regulatory changes, or other external factors; (3) that economic and market conditions, including interest rates, inflation, exchange rates, and commodity prices, remain consistent with current expectations; (4) the ability of Falcon to secure additional financing or strategic investment on favorable terms, if and when needed, to fund projects development; (5) no material adverse events will occur that prevent Falcon from achieving its objective of becoming a fully integrated supplier of battery anode materials; (6) Falcon's management not identifying and pursuing other business objectives in future; (8) there will be no unexpected technological, economic, political or other disruptions that will affect supply or demand for minerals in manner that would have a material adverse effect on Falcon; (9) Falcon being able to obtain all required regulatory approvals without undue delay or subject to excessively burdensome conditions; (10) the results of current exploration activities being favorable; (11) the price of minerals to remain sufficiently high and the costs of advancing Falcon's projects sufficiently low so as to permit it to successfully implement its business p

Forward-looking information is subject to known and unknown risks, uncertainties and other factors that may cause the actual results, level of activity, performance or achievements of Falcon to be materially different from those expressed or implied by such forward-looking information, including but not limited to: (i) volatile stock price; (ii) the general global markets and economic conditions; (iii) the possibility of write-downs and impairments; (iv) the risk associated with explorations performance or achievements and impairments; (iv) the risk associated with explorations and projections and projections and projections; operations of Falcon whether due to artisanal miners, access to water, extreme weather events and other or related natural disasters, labour disruptions, supply disruptions, power disruptions, damage to equipment or otherwise; (vii) asset impairment (or reversal) potential, being consistent with Falcon's current expectations; (viii) the Government of Republic of Guinea's ability to revoke the Lola Graphite Project exploitation permit; and (ix) Falcon's ability to defend Falcon's rights and investment in the Lola Graphite Project. In addition, readers are directed to carefully review the detailed risks and uncertainties described or referred to in the section entitled "Risk and Uncertainties" in Falcon's management's discussion and analysis for its quarterly financial periods, each of which is filed on SEDAR+ at www.sedarplus.ca.

Forward-Looking Statement

Although Falcon believes its expectations are based upon reasonable assumptions and has attempted to identify important factors that could cause actual actions, events or results to differ materially from those described in forward-looking statements, there may be other factors that cause actions, events or results not to be as anticipated, estimated or intended. There can be no assurance that such forward-looking information will prove to be accurate, as actual results and future events could differ materially from those anticipated in such forward-looking information. Such forward-looking information has been provided for the purpose of assisting investors in understanding Falcon's business, operations and exploration plans and may not be appropriate for other purposes. Accordingly, readers should not place undue reliance on forward-looking information.

Forward-looking information is given as of the date of this presentation, and Falcon does not undertake to update such forward-looking information except in accordance with applicable securities laws. Falcon qualifies all of its forward-looking statements by these cautionary statements.

All amounts are in US dollars unless otherwise specified.

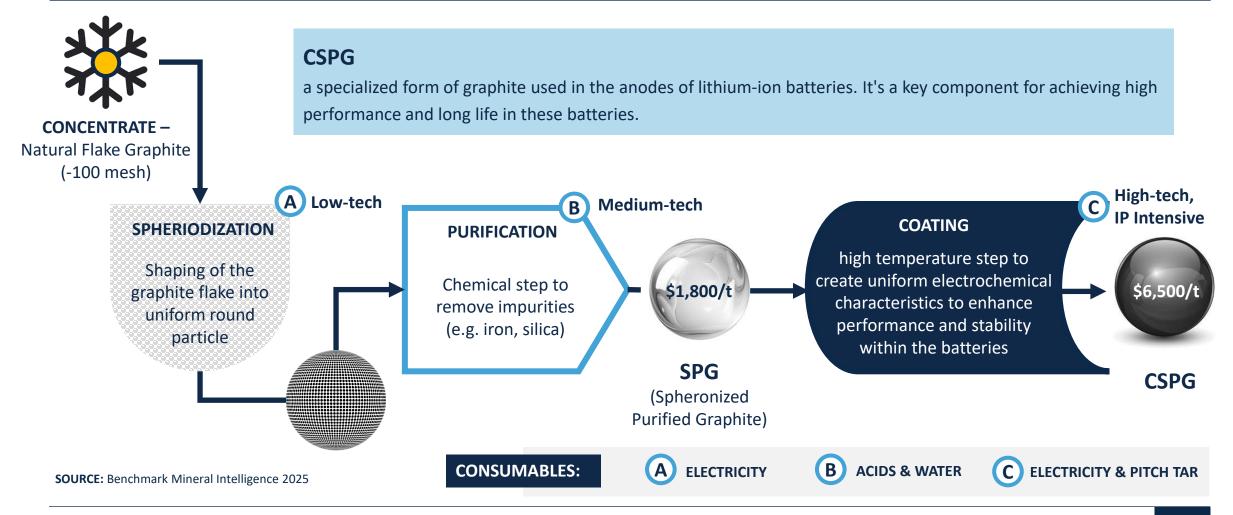
Falcon Energy Materials PLC (TSX.V: FLCN) is **Developing a Natural** CSPG Plant in Morocco. Why Invest?

- THE LITHIUM-ION BATTERY SECTOR is projected to exceed USD \$200 billion in value by 2030, with CSPG being a critical component for highperformance anodes
- NATURAL CSPG is less cost and energy-intensive to produce than synthetic, and generates fewer carbon emissions
- GROWING INDUSTRIES: Besides batteries, CSPG is used in aerospace, industrial lubricants, refractory materials, and high-temperature applications — expanding its market potential
- 25ktpa CSPG PRODUCTION FACILITY will generate \$134M/year at a 55% margin¹
- **FALCON HAS ASSEMBLED A UNIQUE CONSORTIUM OF EXPERTS to** expedite development timeline and lower costs for maximum shareholder returns to become the 1st large-scale non-Chinese CSPG producer

¹At consensus long-term pricing

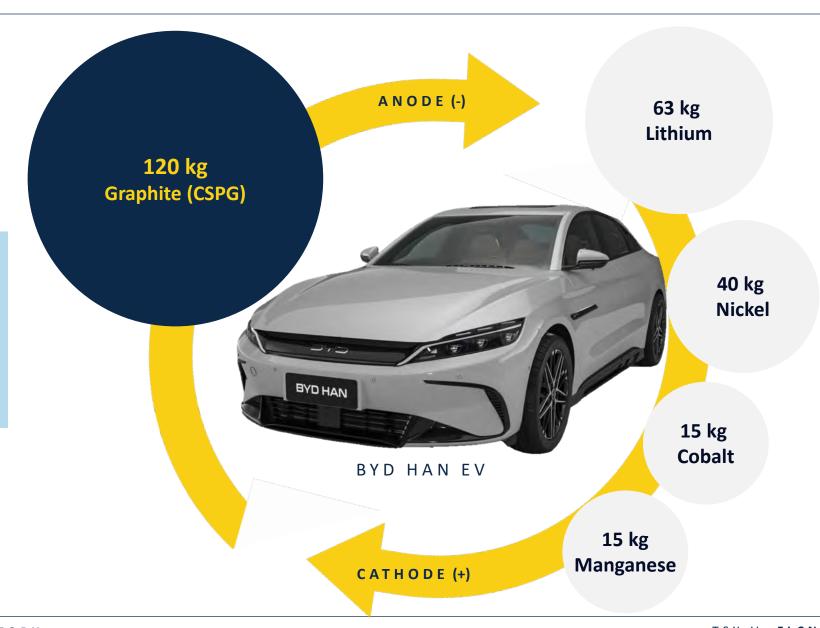
What is Coated Spheronized Purified Graphite (CSPG)?





The Role of Graphite

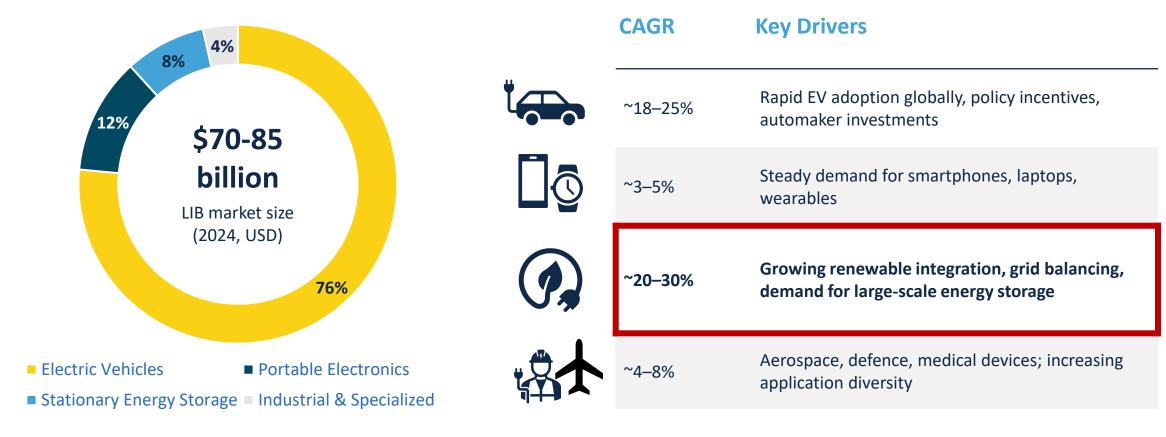
Often overlooked, graphite is the primary anode material in most commercial lithium-ion battery.



SOURCE: Nexus PMG & Resource Erectors

Growing applications for CSPG



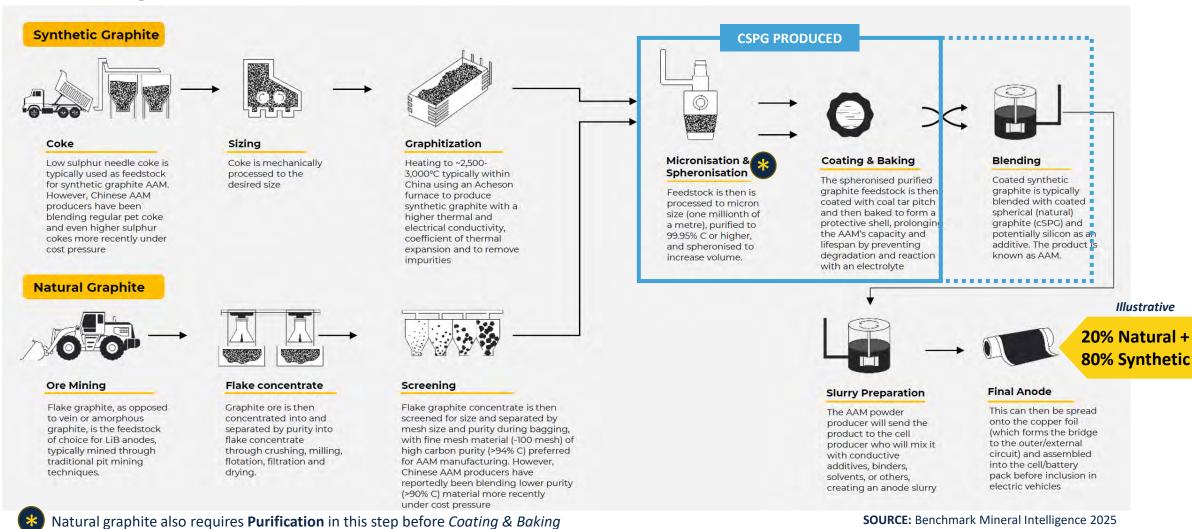


SOURCE: Benchmark Mineral Intelligence 2025

RETHINKING THE GRAPHITE STORY

TSX.V: FLCN

The Making of an Anode

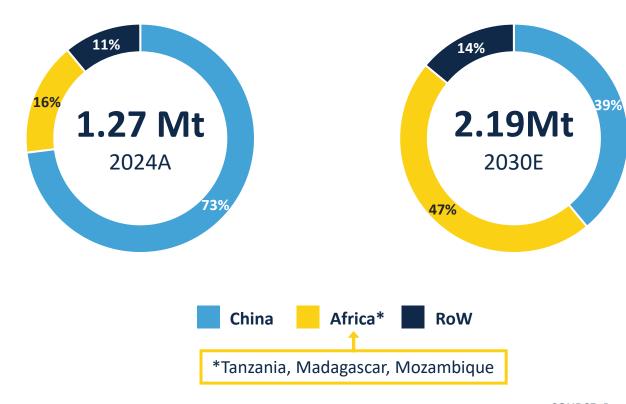


Abundance of Natural Graphite Feedstock Available Globally



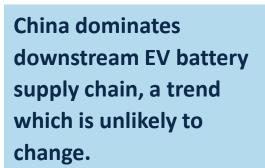
TOTAL CONCENTRATE PRODUCTION:

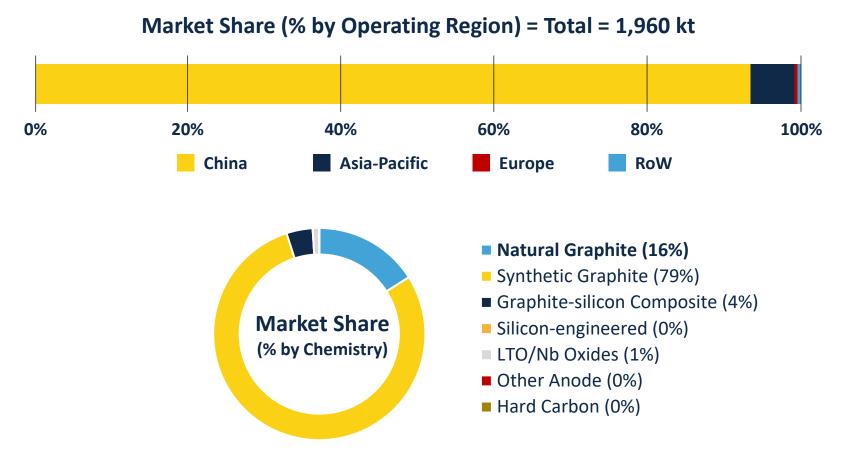
Graphite mines and projects exists around the globe, but 90+% of graphite is processed in China...



2024 Global Anode Industry







Industry Leaders Fully Recognize the Importance Of China





Executing to a Chinese standard is now going to be the most important priority.

- Jim Farley, CEO Ford



Cutting ties with China would be "unthinkable"

- Ola Källenius, Head of Mercedes Benz

China is undeniably at the forefront of the EV revolution.



China is "many years" ahead with EV development

- Carlos Tavares, Former CEO Stellantis



We need to prove that we can match Asian suppliers in execution....

- Peter Carlson, former CEO Northvolt



China is center of global auto future

- Oliver Blume, CEO of Volkswagen Group

SOURCE: 2024 Quotes

Companies are Attempting to Create Their Own Production Facilities to Undercut Supply From China



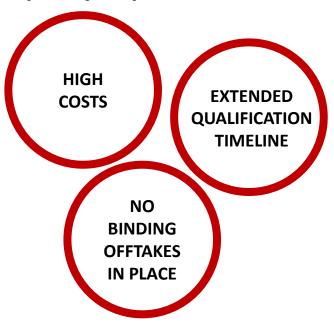
Selected Peers	Investment	NG/SG	Location	Current Capacity	Nameplate Capacity
Nouveau Monde	\$911M	NG	Quebec, Canada	1.5kt	44kt
Westwater Resources	\$271M	NG	Alabama, USA		13kt
Epsilon Advanced Materials	\$650M	NG	North Carolina, USA		30kt
Syrah Resources	\$538M	NG	Louisiana, USA	11.25kt	45kt
Graphite One	\$394M	SG	Ohio, USA		25kt
Falcon EM	\$106M	NG	Jorf Lasfar, Morocco		25kt

NG: Natural Graphite; **SG**: Synthetic Graphite

SOURCE: Benchmark Mineral Intelligence 2025 & Corporate Websites

THE CHALLENGE:

Most lack the technology, partners and skills to CSPG quality requirements



Collaboration is the DIFFERENTIATOR in Filling the Gap in the Global Supply Chain



Our goal is similar to our peers: To create a high-margin CSPG production business that sells to western end-users.

Falcon's differentiator is OUR APPROACH to achieve our goal:



We have assembled a unique consortium to leverage technical and commercial expertise along with financing capabilities to maximize value.

Near-term CSPG production from Moroccan Plant, with a PEA completed and feasibility study underway, to produce 25ktpa CSPG.

Vertical integration strategy from mine-tomarket, using Falcon and third-party concentrates and part of a larger Moroccan Battery Ecosystem. **Accelerate Timeline**

Derisk Process

Lower Cost

Unique Consortium Positions Falcon to Execute its Vertical Integration Strategy





FALCON ENERGY MATERIALS

Abu Dhabi-headquartered, TSX Venture-listed industrial materials company aiming to build the first natural CSPG production facility on the African Continent.



LA MANCHA | FINANCIAL PARTNER

Global investment firm of Naguib Sawiris focused on precious and energy transition metals sectors, with \$1.4bn under management.



HENSEN | TECHNICAL PARTNER

Chinese company with significant expertise in CSPG and existing producing factory in China. Hensen works closely with Falcon on the engineering, design and qualification of its products



SHANSHAN | COMMERCIAL PARTNER

The world's largest producer of synthetic graphite anode materials with a market share of 17% in 2024. Industry leading R&D department (700+ researchers), working closely with Falcon on the qualification of its products.



INNOVX | MOROCCAN INCUBATOR

An industrial innovation platform and subsidiary of Mohammed VI Polytechnic University that incubates Fluoralpha. INNOVX will host the location of Falcon's commercial plant (Park X) next to OCP's Jorf Lasfar.



FLUORALPHA | MOROCCAN PARTNER

Leading producer of anhydrous hydrofluoric acid ("AHF"), a key ingredient and critical reagent CSPG production and hosts location for Falcon's Pilot Plant.

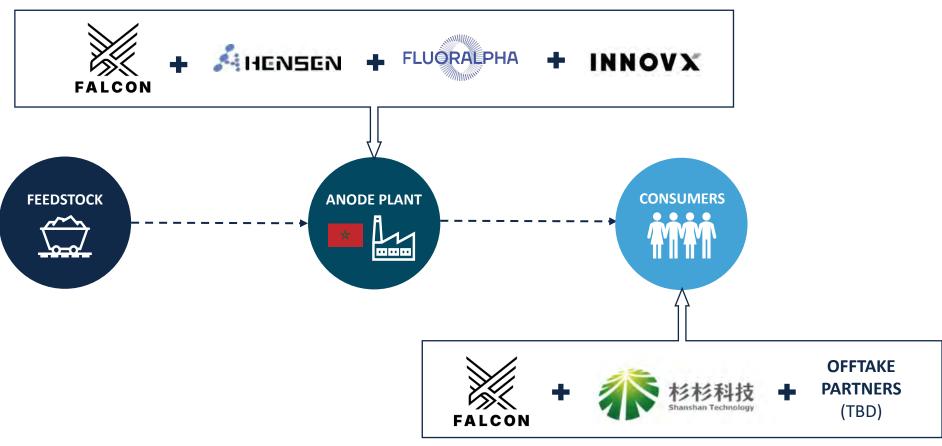
1

Working Together to De-risk of the Graphite Supply Chain



IP, CONSTRUCTION, OPERATIONS, LAND & UTILITIES

Falcon aims to create the first natural CSPG production plant outside of China by leveraging partnerships with an emphasis on refining over mining graphite to maximize margins.



R&D, QUALIFICATION, MARKETING & DISTRIBUTION

Falcon's Advantage: Lowest Capital Intensity Compared to our Peers



EDGE OVER PEERS:

Falcon's unique approach positions us as the most cost-efficient emerging producer in the market.

Selected Peers	NG/SG	Investment	Nameplate Capacity	Investment Intensity
Nouveau Monde	NG	\$911M	44kt	\$20,700/t
Westwater Resources	NG	\$271M	13kt	\$21,680/t
Epsilon Advanced Materials	NG	\$650M	30kt	\$21,670/t
Syrah Resources	NG	\$538M	45kt	\$11,950/t
Graphite One	SG*	\$394M	25kt	\$15,760/t
Falcon EM	NG	\$106M	25kt	\$4,240/t

NG: Natural Graphite; SG: Synthetic Graphite

KEY DRIVERS:



2 CHINESE PROCURMENT & SUPPLY CHAIN



^{*} NG to follow commissioning of AG facility **SOURCE:** Benchmark Mineral Intelligence 2025 & Corporate Websites

- 1!

Kingdom of Morocco is poised to become a regional EV powerhouse



- Morocco is a strategic location on global trade routes
 - Port of Tanger is largest port in the Mediterranean
 - Ports and transportation networks optimized for export and distribution of EV components.
- Free-trade agreements with Europe, USA and UAE
- Attractive government incentives:
 - Direct subsidy percentage of capex
 - Tax-free zones 5-year tax exemption, 0% VAT
 - Special economic zones no export duties
 - Fast-track permitting process
- **63% renewable energy** by 2030
- Car production: 1 million in 2024





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Morocco Keeping an Eye on EV while Building its Automotive Industrial Ecosystem



- Morocco aims to increase EV production as part of its broader automotive industry strategy
- Launched its national electric mobility initiatives and supporting programs in 2018 to promote sustainable transportation and EV adoption.
- Actively investing and positioning itself as a key player in the EV supply chain, focusing on manufacturing, raw materials, and infrastructure development

Leading EV Manufacturers and Suppliers in Morocco:



















TSX.V: FLCN

Falcon's Pilot Plant in Jorf Lasfar, Morocco



CSPG PILOT PLANT DESIGN

Pilot plant on track to produce natural CSPG in Q4 2025



Fast-Tracking Towards Building Full-Scale CSPG Plant



ANODE PLANT DESIGN



KEY AREAS

- Spheriodization Plant
- Purification Plant
- Coating Plant
- Finishing Plant
- **(5)** Acid Storage
- Water Treatment Plant

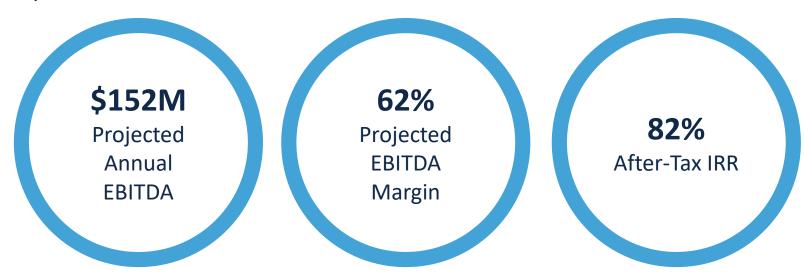
TSX.V: FLCN

25ktpa CSPG Production Projections



Leveraging existing expertise significantly improves project economics and derisks execution

- Construction period of 18 months
- Based on existing design of Hensen Weihai CSPG plant
- Processing flow sheet based on conventional Chinese, CSPG production methods
- Initial 5ktpa coating line, expanding to 25ktpa (1) after final product has been qualified by customers



NOTE: See *Appendix* – side 24 for details

Executive Team





BENOIT LA SALLE | FCPA, FCA, MBA
Chairman of the Board

Founder, President & CEO of Semafo, Current President & CEO of AYA Gold & Silver Inc. and Executive Chairman of Sama Resources Inc.



MATTHIEU BOS | MSc

President and Chief Executive Officer

Former Executive VP, Africa for Ivanhoe Mines; Previously worked for BMO Capital Markets. Current Chairman of Sama Resources Quebec Inc. and Director of Elemental Altus Royalties Corp.



PATRICK MORYOUSSEF | P.Eng
Chief Operating Officer

Former VP, Mining Operations of Semafo; Senior Vice-President Technical Services and Operational Performances at Endeavour Mining. Previously worked for Noranda, Falconbridge, Placer Dome.



JEAN-DANIEL JOLY | CPA

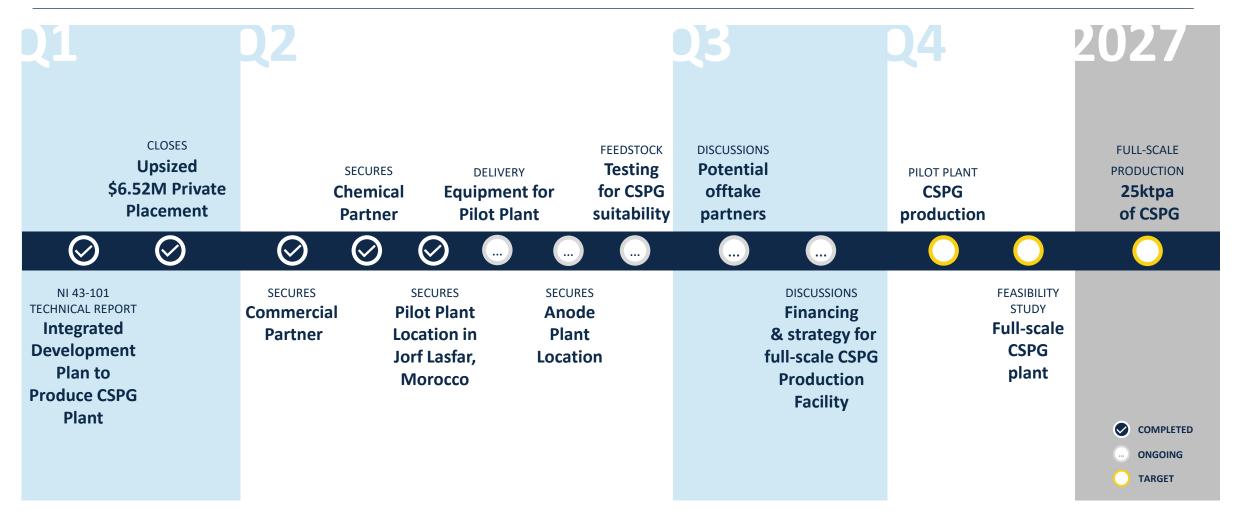
Chief Financial Officer

Former VP, Finance Shared Services at BNP Paribas and head of FP&A for Averna Technologies Inc.

TSX.V: FLCN

Milestones & Catalysts - 2025 is a pivotal year for Falcon





TSX.V: FLCN



CSPG Production Projections



PROJECTED ANNUAL CASHFLOW OF \$134M AT A MARGIN OF 55%

Leveraging existing expertise significantly improves project economics and derisks execution

Investors are cautioned to solely make an investment decision based on the full Integrated Development Plan preliminary economic assessment (as detailed in the January 2025 NI 43-101 PEA) and not base their investment decisions on either the Phase I (Mine) or Phase II (Anode Plant) economic assessment.

INSTALLED	CAPACITY:	25ktpa
		·

CAPEX	SG Plant	\$20M
	Purification Plant	\$14M
	Coating Plant	\$18M
	Other	\$5M
	Contingency	\$16M
	Phase I Total ⁽¹⁾	\$73M
	Phase II Expansion	\$33M
OPEX ⁽²⁾	Concentrate Costs	\$1,286 / t
	Operating Costs	\$1,907 / t
	Total	\$3,193 / t
RESULTS ⁽³⁾	CSPG Selling Price	\$9,000 / t
	NPV _{8%}	\$1,149M
	IRR	82%
	Pay-Back	1.0 years

HIGHLIGHTS

- Construction period of 18 months
- Based on existing design of Hensen Weihai CSPG plant
- Processing flow sheet based on conventional
 Chinese, CSPG production methods
- Initial 5ktpa coating line, expanding to 25ktpa (1)
 after final product has been qualified by customers

KEY REQUIREMENTS

Surface	8 hectares
Water	1,200 m ³ / day
Electricity	30MW
Hydrofluoric Acid (HF 20%)	9,500 tpa
Hydrochloric Acid (HCl 35%)	17,550 tpa
Nitric Acid (HNO ₃ 25%)	4,000 tpa

Corporate Structure



CAPITAL STRUCTURE (1)

Listing / Incorporation TSX -V/ UAE **Basic Shares Outstanding (M)** 128.4 Options (M)⁽²⁾ 15.1 DSU's (M) 1.1 Warrants (M) 10.9 **Fully Diluted Shares Outstanding (M)** 155.5 **Market Capitalisation (C\$)** 60M Cash (C\$) \$6.7M

\$530K

Liabilities (C\$)

MAJOR SHAREHOLDERS

La Mancha Fund	24.6%
Sama Resources	11.8%
Coris Bank	9.8%



Falcon is well-capitalized and has successfully assembled a consortium of partners to advance its plan to become a fully-integrated CSPG supplier.

Note:

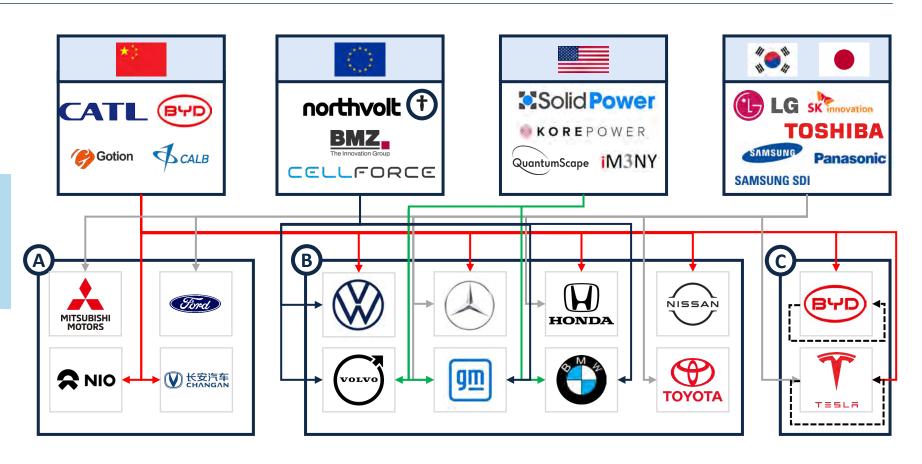
As of June 30th, 2025

2. Average strike price of C\$0.63

OEM Sourcing Strategy: De-risking is Better Than De-coupling



De-risking through partnerships is the solution to complex supply chain realignment.





A Single-Region / Vendor Sourcing B Multi-Region / Vendor Sourcing C Vertical Integration † Chapter 11





SOURCE: RedChalk Group

