



FALCON

Energy Materials plc

MANAGEMENT'S DISCUSSION AND ANALYSIS

FOR THE QUARTER ENDED ON SEPTEMBER 30, 2024

TSX-V: FLCN

INDEX

SCOPE OF MD&A AND NOTICE TO INVESTORS.....	2
FORWARD LOOKING STATEMENTS	2
COMPANY OVERVIEW.....	2
HIGHLIGHTS	3
PRELIMINARY ECONOMIC ASSESSMENT FOR MOROCCO ANODE PLANT	4
OVERALL PERFORMANCE.....	9
MINERAL PROPERTY PORTFOLIO	10
ENVIRONMENT, SOCIAL, GOVERNANCE	14
LIQUIDITY & CAPITAL RESOURCES	14
SELECTED FINANCIAL INFORMATION.....	14
RELATED PARTIES TRANSACTIONS.....	17
COMMITMENTS	17
OUTSTANDING SHARE DATA.....	18
OFF-BALANCE SHEET ARRANGEMENTS	19
CONFLICTS OF INTEREST	19
MATERIAL ACCOUNTING POLICIES.....	19
CRITICAL ACCOUNTING ESTIMATES AND JUDGMENTS.....	19
RISKS AND UNCERTAINTIES	19

Falcon Energy Materials plc

Management's discussion and analysis for the quarter ended September 30, 2024

SCOPE OF MD&A AND NOTICE TO INVESTORS

This management discussion and analysis of financial position and results of operations ("MD&A") is prepared as of November 27, 2024 and complements the unaudited condensed consolidated interim financial statements of Falcon Energy Materials plc (the "Company" or "Falcon"), which include: SRG Guinee SARL ("SRG Guinee"), SRG Graphite International Inc. ("SRG Intl") and SRG Liberia Inc. ("SRG Liberia"), its wholly owned subsidiaries, for the period ended on September 30, 2024. The unaudited condensed consolidated interim financial statements have been prepared in accordance with International Financial Reporting Standards, as issued by the International Accounting Standards Board ("IFRS Accounting Standards"). Except as otherwise disclosed, all dollar figures included therein and in the following MD&A are quoted in Canadian dollars. The Company has prepared this MD&A following the requirements of National Instrument 51-102, Continuous Disclosure Obligations.

The interim condensed consolidated financial statements and related notes have been prepared in accordance with IAS 34, Interim Financial Reporting, as issued by the International Accounting Standards Board. They do not contain all the information required to be disclosed in annual financial statements. Certain information and notes usually provided in the annual financial statements have been omitted or condensed when not deemed essential to the understanding of the interim financial information of the Company. Therefore, this MD&A should be read in conjunction with the information contained in the annual audited consolidated financial statements of the Company and the notes thereto for the year ended December 31, 2023.

Management of the Company is responsible for the preparation and presentation of the condensed consolidated interim financial statements and notes thereto, MD&A and other information contained in this MD&A. Additionally, it is management's responsibility to ensure the Company complies with the laws and regulations applicable to its activities.

The unaudited condensed consolidated interim financial statements and the MD&A have been reviewed and approved by the audit committee on November 27, 2024, as delegated by the Board of directors. These documents and more information about the Company are available on SEDAR+ at www.sedarplus.com.

FORWARD LOOKING STATEMENTS

Certain statements made in this MD&A are forward-looking statements or information. The Company is hereby providing cautionary statements identifying important factors that could cause the Company's actual results to differ materially from those projected in the forward-looking statements. Any statements that express, or involve discussions as to, expectations, beliefs, plans, objectives, assumptions or future events or performance (often, but not always, through the use of words or phrases such as "may", "is expected to", "anticipates", "estimates", "intends", "plans", "projection", "could", "vision", "goals", "objective" and "outlook") are not historical facts and may be forward-looking and may involve estimates, assumptions and uncertainties which could cause actual results or outcomes to differ materially from those expressed in the forward-looking statements. In making these forward-looking statements, the Company has assumed that the current market will continue and grow and that the risks listed below will not adversely impact the business of the Company. By their nature, forward-looking statements involve numerous assumptions, inherent risks and uncertainties, both general and specific, which contribute to the possibility that the predicted outcomes may not occur or may be delayed. The risks, uncertainties and other factors, many of which are beyond the control of the Company that could influence actual results are summarized below under the heading "Risks and Uncertainties".

Further, unless otherwise noted, any forward-looking statement speaks only as of the date of this MD&A, and, except as required by applicable law, the Company does not undertake any obligation to update any forward-looking statement to reflect events or circumstances after the date on which such statement is made or to reflect the occurrence of unanticipated events. New factors emerge from time to time, and it is not possible for management to predict all such factors and to assess in advance the impact of each such factor on the business of the Company, or the extent to which any factor or combination of factors may cause actual results to differ materially from those contained in any forward-looking statement.

COMPANY OVERVIEW

The Company was incorporated on April 16, 1996 under the *Canada Business Corporations Act*, and continued under the Abu Dhabi Global Market Companies Regulations 2020 on June 24, 2024 as a public company limited by shares.

Falcon Energy Materials plc

Management's discussion and analysis for the quarter ended September 30, 2024

Falcon Energy Materials plc common shares are currently listed on the TSX-V under the trading symbol "FLCN.V". The Company's head office is located at Level 7, Al Maryah Tower, ADGM Square, Al Maryah Island, Abu Dhabi, UAE.

Falcon Energy Materials plc is a UAE-based mining company focused on developing the Lola Graphite Project located in the Republic of Guinea, West Africa and an anode material plant in the Kingdom of Morocco ("Morocco"). The Lola Graphite Project has Proven and Probable Reserves of 40.9Mt at a grade of 4.14% Cg, for 1,7MT of contained graphite. Falcon aims to develop a fully integrated source of battery anode material to supply the lithium-ion and fuel cell markets. With attractive operating costs, proximity to end-markets and strong ESG credentials, Falcon is poised to become a reliable supplier while promoting sustainability and supply chain transparency. Falcon is committed to generating sustainable, long-term benefits that are shared with the host countries and communities where it operates.

The Lola Graphite project has a mining exploitation permit of 94 km² with a prospective surface outline of continuous graphitic gneiss extending over an 8.7km strike, hosting one of the largest graphitic surface areas in the world. Falcon owns 100% of the Lola Graphite Property. **Figure 1** presents the Company's Lola Graphite research permit and the surrounding village along with a map showing the deposit's location in the country and the possible import/export routes.

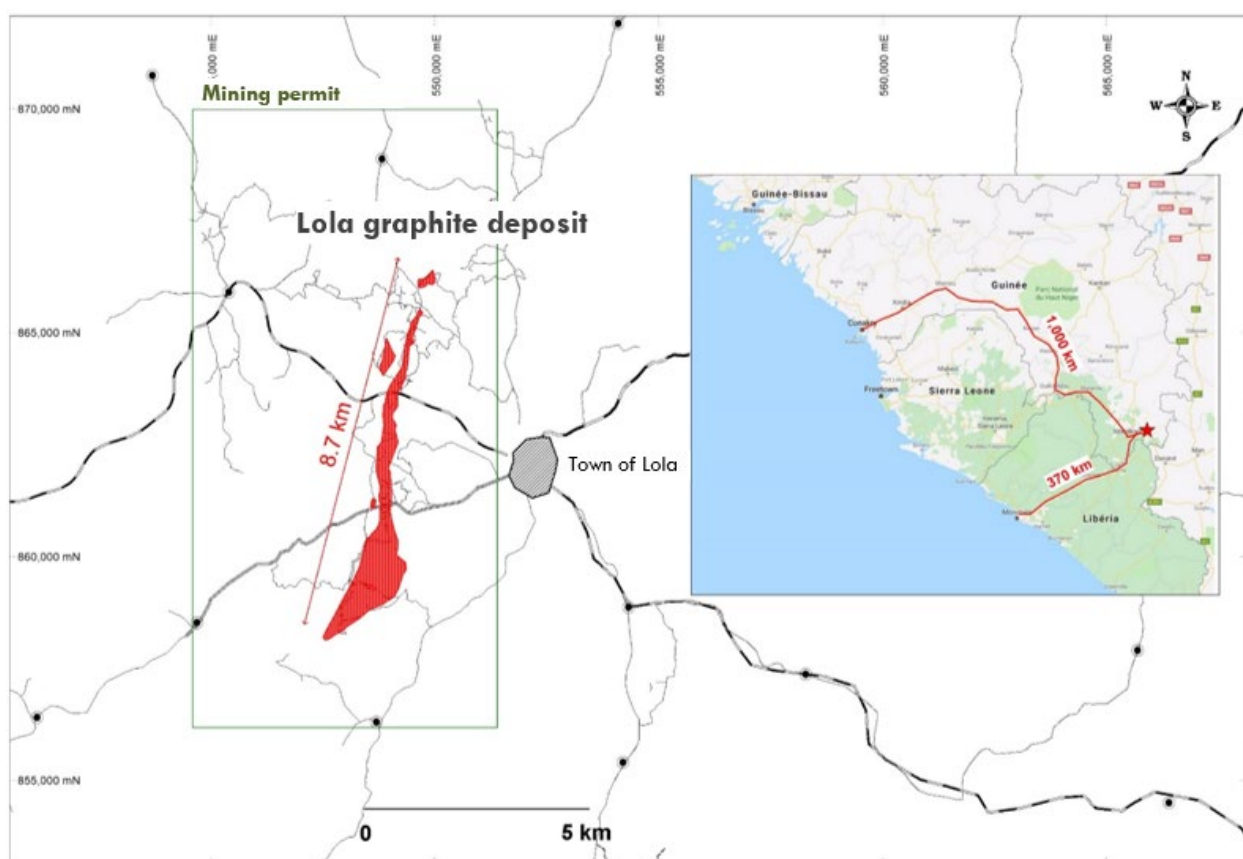


Figure 1 Exploration permits in Guinea

HIGHLIGHTS

- On July 2, 2024 the Company announced the completion of the Redomiciliation to the jurisdiction of Abu Dhabi Global Market in the United Arab Emirates (the "UAE Redomiciliation"). The UAE Redomiciliation will provide the Company with expanded strategic options as it advances its partnership discussions.
- On July 10, 2024, the Company announced the engagement of DS Market Solutions Inc. as market maker to provide equity trading advisory and liquidity provider services, as well as the appointment of a new Chief Financial Officer, following the Company's Redomiciliation.

Falcon Energy Materials plc

Management's discussion and analysis for the quarter ended September 30, 2024

- On July 31, 2024, the Company commenced trading under the new ticker symbol "FLCN" on the TSX Venture Exchange, transitioning from "SRG", with a new CUSIP number M4R68K103 and new ISIN number AE000A40HL14.
- On September 9, 2024, the Company announced the signing of a comprehensive technical and strategic partnership with Hensen Graphite & Carbon Corporation from China to jointly develop an anode plant in Morocco that will produce coated spherical purified graphite ("**CSPG**").
- On October 7, 2024, the Company announced a change in the board of Directors, as well as a grant of options to certain consultants of the Company, as well as Director DSU for service rendered during the calendar year 2024.
- On November 12, 2024, the Company announced positive results of the preliminary economic assessment for the Morocco anode plant.

PRELIMINARY ECONOMIC ASSESSMENT FOR MOROCCO ANODE PLANT

On November 12, 2024, the Company announced the positive results of the Preliminary Economic Assessment ("**PEA**") for the natural graphite spheroidization, purification and coating plant (the "**Anode Plant**") in Morocco. The PEA, prepared by Dorfner Anzaplan UK Limited ("**Anzaplan**"), showcases the strong financial and operational potential of Falcon's vision to anode material in Morocco at industry leading operating costs.

Highlights of the Preliminary Economic Assessment include:

- After-tax net present value ("**NPV**") at a real 8% discount rate of US\$1,149 million;
- After-tax internal rate of return ("**IRR**") of 82%;
- Pre-production initial capital costs, including contingency, estimated at US\$73 million;
- Average operating costs of US\$3,193 per tonne of CSPG; and
- Average CSPG production of 26,000 tonnes per annum ("**tpa**") and 18,000tpa fines

Leveraging Advanced Technology and Procurement with Hensen Partnership

The Anode Plant in Morocco will feature Falcon's integrated mine-to-market strategy, backed by a strategic partnership with Hensen Graphite & Carbon Corporation ("**Hensen**"). Hensen, a leading CSPG producer, brings years of operational expertise from its successful synthetic and natural graphite anode plants in China. Hensen is currently building a large-scale anode plant in Weihai, China (the "**Weihai Plant**"), expected to be commissioned in Q4 2024. Hensen and Falcon have leveraged the proven design, procurement and existing supply chain practices from Hensen's recently completed Weihai Plant to establish a highly competitive, cutting-edge facility in Morocco. The partnership allows Falcon to implement advanced technology and process efficiency to deliver high quality anode materials at scale and with competitive costs to the rapidly growing European and North American markets.

Falcon Energy Materials plc

Management's discussion and analysis for the quarter ended September 30, 2024

Figure 2: Illustration of Falcon's Morocco Anode Plant



Note: 1. Spheroidization plant; 2. Purification plant; 3. Coating plant; 4. Finishing plant ; 5. Acid storage; 6. Water purification.

Flow Sheet

Falcon's Anode Plant envisages the construction of three distinct production lines, using established and proven Hensen technology and design, focusing on the key steps to produce CSPG:

- **Spheroidization Plant:** Employing the latest, innovative processes to shape the graphite flakes into spheres, increasing the surface area density and energy density, to produce spherical graphite (“SG”);
- **Purification Plant:** Employing hydrofluoric acid alongside hydrochloric and nitric acid to remove impurities, producing >99.95% spherical purified graphite (“SPG”); and
- **Coating Plant:** Applying an amorphous carbon (pitch tar) coating on the SPG surface to enhance energy density and increase battery safety and longevity, producing CSPG.

Location and Infrastructure

The Anode Plant, which requires approximately 8 hectares of land, is strategically located in Morocco on the African continent, benefiting from access to critical port and energy infrastructure and free trade agreements with both the United States and the European Union. Falcon anticipates securing graphite feedstock for the Anode Plant from its 100%-owned Lola graphite project as well as third party concentrates.

Spheroidization Plant

The 45,000tpa spheroidization plant consists of three separate process steps: micronization, spheroidization of the micronized graphite to produce coarse primary SG, and secondary spheroidization to produce a fine secondary SG product. The overall yield of the spheroidization plant is 60% resulting in 27,000tpa of SG. The micronization and spheroidization process is designed to produce spherical particles of a size of 20 microns (categorized as “SG20”) and 10 microns (categorized as “SG10”). SG20, representing 86.7% of the feed, is collected into a main collector and sent to the purification plant by pneumatic transportation. SG10 is collected and sent to secondary spheroidization circuit,

Falcon Energy Materials plc

Management's discussion and analysis for the quarter ended September 30, 2024

which contains additional spheroidizers. SG10, representing 13.3% of the feed, is collected into a main collector and sent to a separate circuit in the purification plant by pneumatic transportation, while the remaining fines by-product particles are sent directly to the bagging station and sold separately.

Purification Plant

The 27,000tpa purification plant consists of a chemical treatment to increase the purity of the SG from 94.6% to 99.95% and SPG. The purification plant consists of four separate process steps: a thermally induced chemical reaction, pressure filtration, washing, and drying. The SG is washed with a mixture of hydrofluoric acid, hydrochloric acid, nitric acid (the "Key Acids") and steam to remove the main impurities (e.g., SiO_2 , Al_2O_3 , MgO , Fe_2O_3 , and CaO). Following the purification step the Key Acids are recovered in a filter press and reused. Finally, the SPG is washed to remove water-soluble impurities generated during the reaction and dried to reduce the moisture content below 1%.

Figure 3: Illustration of Falcon's Coating Plant



Coating Plant

The coating process is the final step of the CSPG production process. The objective of this step is to coat particles with a thin film of carbon precursor (3-25 nanometres thick), which is then crystallized. This involves milling pitch tar (10% wt.), mixing the milled pitch tar with SPG, and thermally treating the mixture in a coating furnace. The coating furnace lines are dedicated to coat primary SP20 and SP10, separately. The cooled CSPG is deagglomerated, demagnetized, sieved and bagged to ensure the final product meets stringent end-user specifications. The coating line is initially built with a 5ktpa capacity and expanded to 26ktpa following end-user qualification of the CSPG.

Gas and Water Treatment

The Anode Plant contains gas and water treatment systems. The gas scrubber cleans the off gasses from the purification and coating plant. A hydrated lime solution is fed into the scrubber to capture residual gas, and the purge is sent to the lime scrubber buffer tank. The clean gas is sent to a stack and released in the atmosphere. The water purification plant, which predominantly treats the effluents of the purification plant, has a capacity for 1,200 m^3 / day. All wastewater will be tested before discharge to the local sewage system and will meet Moroccan discharge limits.

The Anode Plant footprint and buildings are designed such that an production can be doubled by adding additional

Falcon Energy Materials plc

Management's discussion and analysis for the quarter ended September 30, 2024

spheroidization, purification and coating lines without erecting new buildings.

Capital and Operating Costs

The projected capital and operating costs for the project are presented below in Table 2 and 3. The capital and operational costs are estimated based on the actual costs of the Hensen Weihai Plant, adjusted for transport to and construction in Morocco. Estimations were performed in accordance with the Association for the Advancement of Cost Engineering ("AACE") Class 5, Recommended Practice 47R-11, with typical variation in low and high accuracy ranges of -20% to -50% and +30% to +100%, respectively.

Table 1: Capital Costs

Capital Costs	
Spheroidization Plant	\$19M
Purification Plant	\$13M
Coating Plant	\$18M
Land Acquisition	\$5M
Contingency	\$18M
Total Pre-Development Capital Costs	\$73M
Coating Plant Expansion	\$24M
Contingency	\$9M
Total Expansion Capital Costs	\$33M

Falcon Energy Materials plc

Management's discussion and analysis for the quarter ended September 30, 2024

Table 2: Operating Costs (US\$ per tonne CSPG)

Operating Costs in US\$ per tonne CSPG	
Spheroidization Plant	\$314
Purification Plant	\$829
Coating Plant	\$503
Waste Disposal	\$5
General & Administration	\$54
Sales & Marketing	\$36
Contingency	\$165
Direct Operating Costs	\$1,907
Concentrate Purchase Costs	\$1,286
All-In Operating Costs	\$3,193

Economic Analysis

With global demand for CSPG expected to surge, the Morocco Anode Plant is projected to yield annual revenues of approximately US\$246 million and an operating cash flow of US\$152 million at consensus CSPG pricing. Additionally, the plant includes advanced gas and water treatment systems, ensuring compliance with local environmental standards. Tanger Med Engineering SA ("TME") is currently completing a preliminary environment impact analysis of the Anode Plant.

Falcon Energy Materials plc

Management's discussion and analysis for the quarter ended September 30, 2024

Table 3: Preliminary Economic Assessment Results

Post-Tax Results	
Pre-development Capital	\$73M
Expansion Capital ⁽¹⁾	\$33M
Direct Operating Costs	\$1,907 / t CSPG
All-in Operating Costs ⁽²⁾	\$3,193 / t CSPG
NPV8% (US\$M) ⁽³⁾	\$1,149M
IRR (%)	82%
Payback (Years)	1.0

1. Incurred in year 2 of production to expand the coating line from 5ktpa to 25ktpa
2. Includes graphite concentrate purchase costs (US\$754 per tonne CIF Tanger)
3. Assuming long-term average US\$9,000 per tonne CSPG pricing

The Company expects a 9-month detail engineering and design period followed by a 15-month construction and commissioning period.

Next Steps

The complete NI 43-101 Technical Report pertaining to the PEA will be filed within 45 days of the November 12, 2024 press release and will be available on Falcon's website and on [ww.sedar.com](http://www.sedar.com).

Falcon and Hensen commenced work on a NI 43-101 compliant feasibility study (the "**Feasibility Study**"), which is expected to be completed in the first half of 2025. The Feasibility Study will also form the basis for the environment impact analysis and is required to complete the permitting process in Morocco.

OVERALL PERFORMANCE

Over the past 12 months, the Company has focused on the redomiciliation to the UAE, arranging financing required for construction, obtaining, and maintaining the necessary permits and finding a partner for its Lola graphite and Morocco Anode Plant projects.

BUSINESS OBJECTIVES AND MILESTONES

The demand for raw materials for anode battery materials, and graphite specifically, is expected to grow in the medium to long-term, becoming a strategic and critical element for years to come. The completion of the Updated Feasibility Study and the PEA has been a critical milestone to advance the finance and offtake discussions for the Lola Graphite Project and the Morocco Anode Plant.

Falcon Energy Materials plc

Management's discussion and analysis for the quarter ended September 30, 2024

MINERAL PROPERTY PORTFOLIO

The Company's exploration programs are designed, managed and reviewed by Marc-Antoine Audet, P. Geo, PhD, Lead Geologist for Falcon. The Company's technical reports and metallurgical tests are managed and reviewed by Patrick Moryoussef, P. Eng, COO for Falcon. Both individuals are 'qualified persons' ("QP"), as defined by National Instrument 43-101, Standards for Disclosure for Mineral Projects ("NI 43-101") in their respective fields.

LOLA GRAPHITE PROPERTY – MINING EXPLOITATION PERMIT

On November 6, 2019, the Government of Guinea awarded SRG Guinée, through presidential order N°D/2019/291/PRG/SGG the mining permit for its Lola graphite project near the town of Lola in eastern Guinea, West Africa. The fifteen (15) year renewable permit was officially granted by the Government of Guinea through presidential decree number D/2019/291/PRG/SGG. The mining permit covers an area of 94.38 square kilometers. SRG Guinée has agreed to develop the mine and has an obligation to invest US\$110,000,000 within the first year of the permit being granted. The mining permit is subject to the general obligations of the Guinean mining code. In June 2020, the Company asked the Government of Guinea for a deferment due to the ongoing Covid-19 crisis. A number of events since its receipt of the mining permit, namely the COVID pandemic as well as a Coup d'État, each of which the Company considers being a Force Majeure event, rendered impossible the fulfillment of certain obligations by the Company during a significant period of time. Furthermore, on June 5, 2021, the Company and the government of Guinea signed an agreement which stipulates that the Company must begin work on its Lola project within six months of being formally reissued the Gogota permit. The Company remains in active dialogue with the government of Guinea about the development timeline for the Lola Graphite Project.

PROJECT INFORMATION:

MINERAL RESOURCES

The resource estimate was established using data from boreholes drilled and sampled up to December 1, 2018. The total resource estimate of the Lola Project includes Measured and Indicated Resources of 54.0 Mt grading 3.98% Cg, and Inferred Resources of 12.3 Mt grading 3.60% Cg. The resource estimate has been prepared using a cut-off grade of 1.0% Cg for oxides and 1.4% Cg for fresh rock. **Figure 2** depicts the resource locations on the deposit.

Falcon Energy Materials plc

Management's discussion and analysis for the quarter ended September 30, 2024

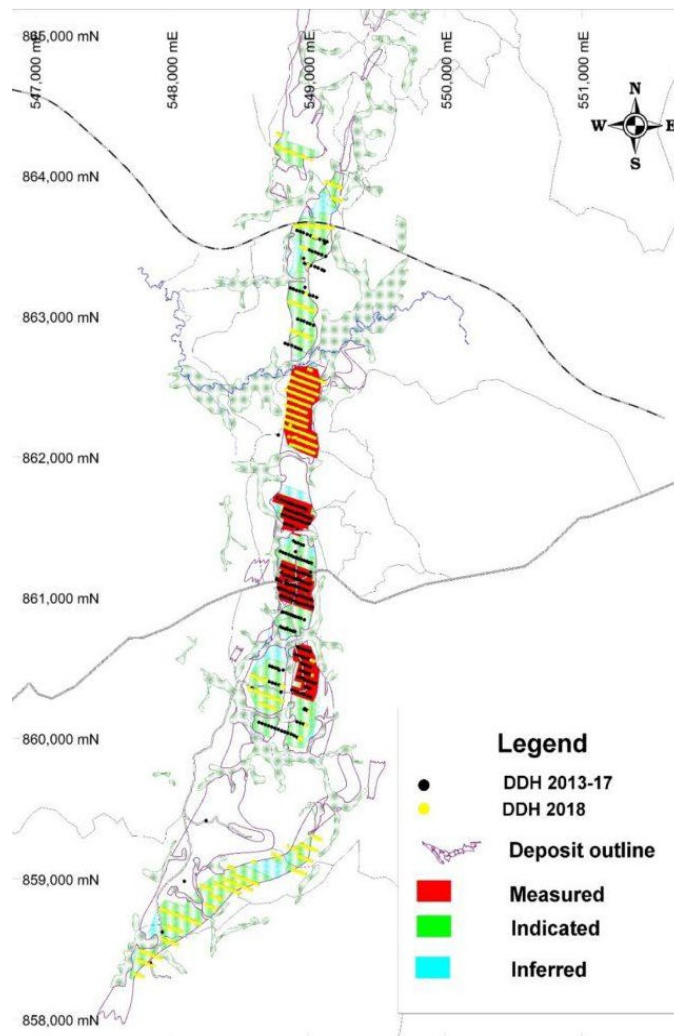


Figure 4 Map of the deposit with resource classification

MINERAL RESERVES

The Lola Graphite Project is characterized by its oxide surface mineralization, which continues along strike and at depth into the fresh rock bed. For the UFS, mining operations considered the mineralized material contained in the oxide weathered lateritic and saprolitic zones, as well as the mineralized material contained in the fresh rock formation. The total reserve estimate includes Proven and Probable Mineral Reserves of approximately 40.9 Mt grading 4.14% Cg. To access these Mineral Reserves, 35.9 Mt of overburden and waste rock must be mined, resulting in a low life-of-mine strip ratio of 0.88:1.

Falcon Energy Materials plc

Management's discussion and analysis for the quarter ended September 30, 2024

Table 4 Mineral Reserves

Category	Tonnage (Mt)	Grade (% Cg)	Contained Cg (kt)
Oxide	6.15	4.38	269.5
Fresh Rock	0.28	4.34	12.2
Proven Reserves	6.43	4.38	281.8
Oxide	20.38	4.10	835.5
Fresh Rock	14.12	4.08	576.2
Probable Reserves	34.50	4.09	1,411.1
Total Reserves	40.93	4.14	1,694.7

Notes:

1. Mineral Reserves has been estimated by the Reserves QP.
2. The Mineral Reserves are reported in accordance with the CIM Standards on Mineral Resources and Reserves, Definitions and Guidelines prepared by the CIM Standing Committee on Reserve Definitions and adopted by the CIM Council.
3. The effective date of the estimate is February 27, 2023.
4. Mineral Reserves are included in Mineral Resources.
5. Pit shell was developed using a 34-degree pit slope in oxide and 42-degree pit slope in fresh rock, concentrate sales price of US\$1,289/t concentrate, average mining costs of US\$3.25 /t ore oxide, US\$3.75 /t ore fresh rock, US\$2.75 /t waste oxide and US\$3.25 /t waste fresh rock, processing costs of US\$12.71 /t processed, G&A cost of US\$1.52 /t processed and transportation costs of US\$50/t concentrate, 84.2% process recovery and 95.4% concentrate grade and an assumed 100,000 tpa concentrate production.
6. The Mineral Reserves are inclusive of mining dilution and ore loss.
7. Contained graphite before processing recovery. Mining loss and dilution applied.
8. The open pit Mineral Reserves are estimated using an optimal cut-off grade of 1.9 % Cg.
9. The strip ratio for the open pits is 0.88 to 1.
10. The Mineral Reserves are stated as dry tonnes delivered at the crusher.
11. Totals may not add due to rounding.

MINING

The Lola deposit is characterized with its saprolite surface mineralization, which continues at depth into the fresh rock bed. For the UFS, mining operations are a mix of the weathered zone, and fresh rock. On average, the first 32 meters of the deposit represents the weathered material.

The average head grade over the 17-year mine life is 4.14% Cg, and the total average material mined per year is 4.7Mt (ore and waste) with an average strip ratio of 0.88. Mining costs were established at US\$3.28\$/t, considering preliminary pit design and access roads. **Table 2** provides a summary of Mining highlights.

Table 5 Mining highlights

Mining costs (US\$/t material mined)	3.28
Average graphite grade (% Cg)	4.14%
Stripping ratio (waste/mineralized)	0.88
Average graphite bearing material mined per year (t/y)	2,565,443
Average waste mined per year (t/y)	2,158,303
Mine of Life (years)	17 years

PROCESS

The processing plant and waste dump are located on a plateau, west of the main pit, where the land is already conveniently flat and barren of trees. It is currently less than one kilometer from the visual mineralization. This proximity will ensure short cycle times and contribute to the control of production costs.

Efforts were made to keep a simple flowsheet with limited polishing and flotation stages. Saprolite ore beneficiation process has an overall graphite recovery of 73.1%, producing a graphite concentrate grade of 95.4 % Cg. The addition of up to 45% of fresh rock in the feed blend improves the overall graphite recovery to 84.2%. A suitable process flowsheet able to handle saprolite as well as a feed blend with fresh rocks has been developed for the updated feasibility

Falcon Energy Materials plc

Management's discussion and analysis for the quarter ended September 30, 2024

study. Reagents used for processing are diesel as a collector and methyl isobutyl carbinol ("MIBC") as a frother, both commonly available and routinely used reagents in the graphite sector. The processing costs are US\$11.69/t of processed material resulting in US\$325/t of graphite concentrate. **Table 3** provides a summary of results.

Table 6 Process highlights

Processing costs (US\$/t plant feed)	11.69
Processing costs (US\$/t concentrate)	324.57
Average concentrate grade (%Cg)	>95%
Graphite plant recovery	84%
Average material fed to the plant (t/year)	2,565,443

PROCESS DESCRIPTION:

The mineral processing plant consists of a crushing area and a concentrator where material beneficiation and concentrate, dewatering, screening, and packaging takes place. The process flowsheet includes crushing, grinding, rougher flotation, polishing, and cleaner flotation. The back end of the concentrator includes tailings thickening, concentrate filtration and drying, dry screening and bagging of graphite products, and material handling. All the tailings from the concentrator will be thickened and pumped to the lined tailings ponds. Reclaiming water from the tailings ponds has been considered in the process design to minimize freshwater makeup to the concentrator.

The graphite concentrate will be recovered by a conventional flotation process at an overall recovery over the life of mine of 83.6 producing a graphite concentrate grade of 95.4 % Cg. The processing plant is expected to produce graphite concentrate divided into four standard-size fractions: +48 mesh, -48+80 mesh, -80+100 mesh and -100 mesh. **Figure 3** provides a summary of the Process flowsheet.

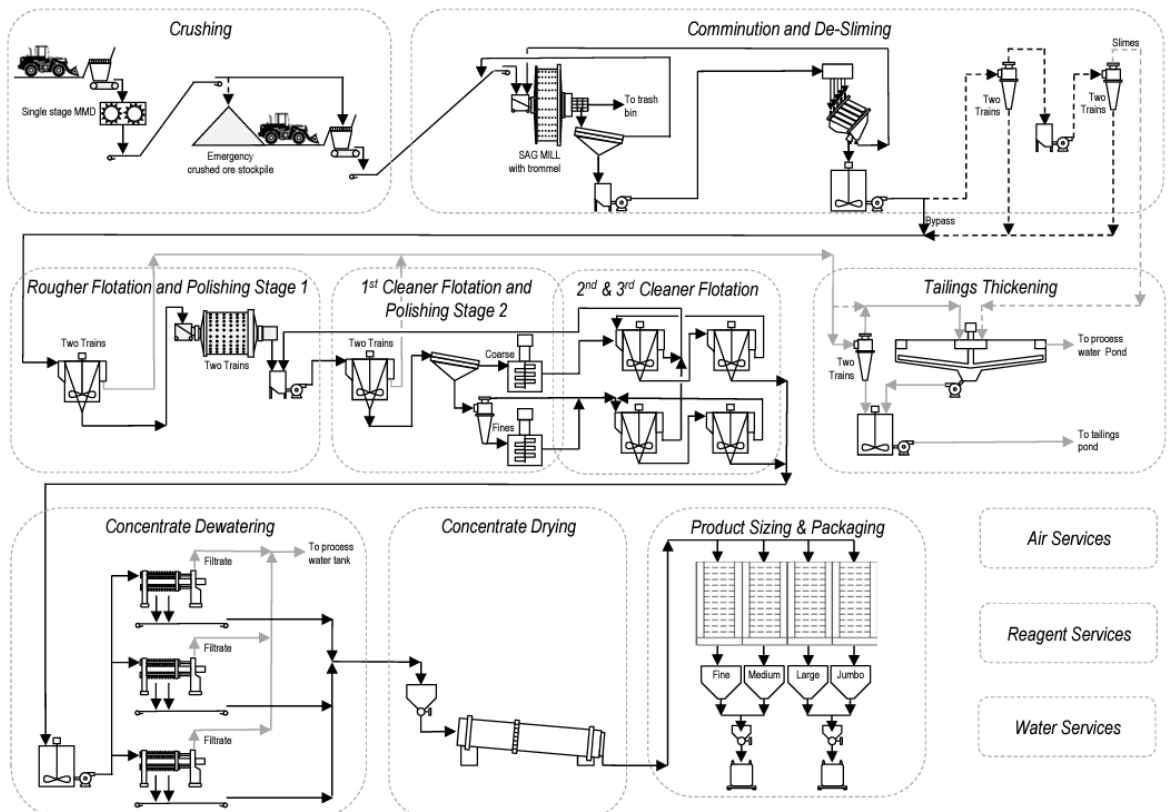


Figure 5 Process flowsheet

Falcon Energy Materials plc

Management's discussion and analysis for the quarter ended September 30, 2024

ENVIRONMENT:

The Environmental Baseline Study ("EBS") was launched March 10, 2017. The Company worked with external consultants and the Guinean Environment Services to produce a study which meets Guinea's standards and the International Finance Company's ("IFC") 2012 edition of the Environmental and Social Performance Standards. On March 22, 2019, the Company received its Environmental Conformity Certificate from the government of Guinea for its Lola Graphite project. The Company will also develop a resettlement action plan ("RAP"), which will follow IFC Performance Standards, namely PS5 pertaining to land acquisition and resettlement.

ENVIRONMENT, SOCIAL, GOVERNANCE

COMMUNITY ENGAGEMENT

The following list of activities conducted in 2023 and maintained in 2024, encapsulates Falcon's commitment to ESG principles, demonstrating a holistic approach to responsible resource development, stakeholder engagement, and community empowerment. Falcon emphasizes the benefits and positive impact on the community's approach to maintaining commitment to Corporate Social Responsibility (CSR):

- Purchased of 200 waste bins and cutting-edge cleaning equipment for the urban municipality;
- Provided critical agricultural materials;
- Establishment of pepper nurseries;
- Creation of forest plant nurseries;
- Promotion of educational excellence with the launch of an educational initiative aimed at providing school supplies to top performers.

GOVERNANCE

All approved corporate governance policies can be found on the Company's website.

ENVIRONMENT

The Company proudly secured validation of the Environmental and Social Impact Assessment (ESIA), along with the certificate of environmental conformity from the Bureau Guinéen d'Études et Évaluations Environnementales (BGEEE). This marks a testament to our unwavering commitment to environmental responsibility.

LIQUIDITY & CAPITAL RESOURCES

While the Company works towards a strategic partnership, the current estimate for expenditures on the Lola Graphite Property and the Morocco anode plant (both corporate and capitalized expenditures) for the next year is approximately \$3,000,000. The estimated expenditures will be used for the following work:

- Anode material plant Feasibility Study (FS);
- EPC (Engineering Procurement and Construction) propositions for the development of the Lola Graphite Project;
- Corporate and local general and administration.

SELECTED FINANCIAL INFORMATION

FINANCIAL POSITION ANALYSIS

	September 30, 2024	December 31, 2023
	\$	\$
Total assets	5,741,054	9,385,011
Total liabilities	640,822	674,958
Total equity	5,100,232	8,710,053
Working capital*	4,852,272	8,415,478

*Working capital is a measure of current assets less current liabilities.

Falcon Energy Materials plc

Management's discussion and analysis for the quarter ended September 30, 2024

ASSETS

Total assets as at September 30, 2024 were \$5,741,054 compared to \$9,385,011 at December 31, 2023, a decrease of \$3,643,957, mainly due to a decrease of \$3,670,534 in cash and investments, of which proceeds were used in operating activities, in sales taxes receivable of \$15,866 and in property and equipment of \$72,858, offset by an increase in prepaid expenses and deposits of \$115,301.

LIABILITIES

Total liabilities as at September 30, 2024 were \$640,822 compared to \$674,958 at December 31, 2023, a decrease of \$34,136. The decrease is related to the payment of \$7,026 of accounts payable and a decrease of \$27,110 in lease liabilities.

EQUITY

As at September 30, 2024 the Company had an equity balance of \$5,100,232 compared to \$8,710,053 at December 31, 2023, a decrease of \$3,609,821, due to the comprehensive loss for the period of \$5,401,769, offset by the amortization of share-based payments to contributed surplus of \$1,791,948.

OPERATING RESULTS ANALYSIS

	Three-month periods ended		Nine-month periods ended	
	September 30,		September 30,	
	2024	2023	2024	2023
	\$	\$	\$	\$
Revenues	-	-	-	-
Net loss	1,515,833	1,194,390	5,401,769	4,030,137
Net loss per share	0.01	0.01	0.05	0.04

THREE-MONTH PERIOD ENDED SEPTEMBER 30 2024, COMPARED TO THE THREE-MONTH PERIOD ENDED SEPTEMBER 30, 2023

For the three-month period ended September 30, 2024, the Company recorded a net loss of \$1,515,833 compared to \$1,194,390 for the same period in 2023, an increase of \$321,443.

Exploration and evaluation expenses increased by \$141,193 from the same period in 2023, mainly due to an increase in engineering study by \$196,791, as the Company received a reimbursement of \$135,000 for metallurgical test work Q3 2023, offset by a decrease in exploration expenses by \$36,599 and in amortization by \$19,021.

General and administrative expenses increased by \$37,943 from the same period in 2023, mostly due to the increase in professional and consulting fees by \$124,463, as some employees became contractors during the period and in travel and representation by \$35,357, offset by a decrease in salaries and benefits by \$89,806 for the previously mentioned reason and in share-based payments by \$43,113.

Other expenses increased by \$142,307, mostly due redomiciliation fees of \$91,631 incurred during the period, a decrease in interest revenue by \$30,945 and in foreign exchange income by \$20,556.

NINE-MONTH PERIOD ENDED SEPTEMBER 30, 2024, COMPARED TO THE NINE-MONTH PERIOD ENDED SEPTEMBER 30, 2023

For the nine-month period ended September 30, 2024, the Company recorded a net loss of \$5,401,769 compared to \$4,030,137 for the same period in 2023, an increase of \$2,571,070.

Exploration and evaluation expenses decreased by \$603,193 from the same period in 2023, mostly due to a decrease in engineering study by \$459,089, as the Updated Feasibility Study for the Lola project concluded during Q3-2023, in exploration expenses by \$104,388 and in amortization by \$55,403.

Falcon Energy Materials plc

Management's discussion and analysis for the quarter ended September 30, 2024

General and administrative expenses increased by \$1,213,364 from the same period in 2023, mostly due to the increase in share-based payments by \$981,397, caused by the accelerated vesting of the cancelled restricted share units and the April 12, 2024 management annual options grant amortization, an increase in professional and consulting fees by \$257,438, caused by a write-off of historical accounts payable in legal fees and by some employees becoming contractors during the period, and an increase in accrual for audit fees for the 2024 period. These are offset by a decrease in salaries and benefits by \$60,561 and in travel and representation fees by \$22,352.

Other expenses increased by \$761,461 from the same period in 2023, mostly due to redomiciliation fees of \$841,016, offset by an increase in interest income of \$64,206.

CASH FLOWS ANALYSIS

	Three-month periods ended		Nine-month periods ended	
	September 30,		September 30,	
	2024	2023	2024	2023
Cash required by operating activities	(976,394)	(660,382)	(3,597,268)	(3,544,918)
Cash generated (required) by investing activities	104,592	(31,388)	4,104,592	(40,103)
Cash generated (required) by financing activities	(32,897)	(13,123)	(88,470)	1,973,058

THREE-MONTH PERIOD ENDED SEPTEMBER 30, 2024, COMPARED TO THE THREE-MONTH PERIOD ENDED SEPTEMBER 30, 2023

Operating Activities

For the three-month period ended September 30, 2024, operating activities required cash flows of \$976,394 compared to \$660,382 for the same period in 2023, an increase in cash consumption of \$316,012. The variation is due to an increase in the net loss after adjustments for items not affecting cash, which went from \$695,122 in Q3 2023 to \$900,087 in Q3 2024 and in the change in non-cash working capital items, which went from generating \$34,740 in Q3 2023 to requiring \$76,307 in Q3 2024.

Investing Activities

For the three-month period ended September 30, 2024, investing activities generated cash flows of \$104,592 compared to requirement of cash flows of \$31,388 for the same period in 2023, as a portion of short-term investments were liquidated and converted to cash.

Financing Activities

For the three-month period ended September 30, 2024, financing activities required cash flows of \$32,897 compared \$13,123 for the same period in 2023, related to lease liabilities.

NINE-MONTH PERIOD ENDED SEPTEMBER 30, 2024, COMPARED TO THE NINE-MONTH PERIOD ENDED SEPTEMBER 30, 2023

Operating Activities

For the nine-month period ended September 30, 2024, operating activities required cash flows of \$3,597,268 compared to \$3,544,918 for the same period in 2023, an increase in cash consumption of \$52,350. The variation is due to an increase in the net loss after adjustments for items not affecting cash, which went from \$3,059,265 in 2023 to \$3,490,807 in 2024, offset by a decrease in the change in non-cash working capital items, which went from requiring \$485,653 in 2023 to requiring \$106,461 in 2024.

Falcon Energy Materials plc

Management's discussion and analysis for the quarter ended September 30, 2024

Investing Activities

For the nine-month period ended September 30, 2024, investing activities generated cash flows of \$4,104,592 compared to requirement of cash flows of \$40,103 for the same period in 2023, as a portion of short-term investments were liquidated and converted to cash.

Financing Activities

For the nine-month period ended September 30, 2024, financing activities required cash flows of \$88,470 compared to generation of cash flows of \$1,973,058 for the same period in 2023, as warrants were converted during the 2023 period.

QUARTERLY RESULTS TRENDS

The operating results for each of the last eight quarters are presented in the following table. Management considers that the information for each of those quarters was determined in the same way as for our financial statements for the period ended September 30, 2024.

	Sep 30, 2024	Jun 30, 2024	Mar 31, 2024	Dec 31, 2023	Sep 30, 2023	Jun 30, 2023	Mar 31, 2023	Dec 31, 2022
Revenues	-	-	-	-	-	-	-	-
Net loss	(1,515,833)	(2,405,013)	(1,480,923)	(1,460,680)	(1,194,390)	(1,115,420)	(1,720,327)	(1,941,521)
Net loss per share	(0.01)	(0.02)	(0.01)	(0.01)	(0.01)	(0.01)	(0.02)	(0.02)

RELATED PARTIES TRANSACTIONS

REMUNERATION OF KEY MANAGEMENT PERSONNEL

Key management personnel are the members of the Board of Directors, and executive officers of the Company. During the three and nine-month periods ended September 30, 2024 and 2023, the remuneration awarded to key management personnel is as follows:

	Three-month periods ended September 30,		Nine-month periods ended September 30,	
	2024	2023	2024	2023
	\$	\$	\$	\$
Salaries and benefits	17,876	16,417	50,709	49,250
Consulting and professional fees	308,656	208,517	759,399	625,550
Share-based payments	364,133	134,996	1,578,837	577,740
	690,666	359,929	2,388,946	1,252,540

TERMINATION AND CHANGE OF CONTROL PROVISIONS

Certain agreements between the executive team and the Company contain termination without cause and change of control provisions. Assuming that these agreements would be terminated without cause during the year ending December 31, 2024, the total amounts payable in respect of severance would amount to \$1,768,750. If a change of control would occur during the year ending December 31, 2024, the total amounts payable in respect of severance, if elected by the executive members, would amount to \$3,000,000.

COMMITMENTS

The Company must pay US\$7,079 in superficial rights every year for the next eleven years to the government of Guinea to retain the rights of its mining title.

Falcon Energy Materials plc

Management's discussion and analysis for the quarter ended September 30, 2024

Minimum annual payments relating to the above commitments in the next five fiscal years and thereafter are as follows:

Year	US\$
2025	7,079
2026	7,079
2027	7,079
2028	7,079
2029	7,079
Thereafter	28,314

OUTSTANDING SHARE DATA

	Number of Shares Outstanding (Diluted)
Outstanding as of November 27, 2024	117,513,895
Shares reserved for issuance pursuant to stock options outstanding	13,432,213
Shares reserved for issuance under the deferred stock unit plan	1,112,801
Shares reserved for issuance under the restricted stock unit plan	-
	132,058,909

As at the date of this MD&A, the Company had outstanding stock options enabling holders to acquire common shares of the Company as follows:

	Number outstanding	Number exercisable	Exercise price \$
February 20, 2027	1,877,007	1,877,007	0.365
April 25, 2027	100,000	100,000	0.50
June 14, 2027	25,000	25,000	0.36
November 22, 2027	325,000	325,000	1.30
January 14, 2028	125,000	125,000	1.72
August 8, 2028	2,085,000	2,085,000	1.10
May 11, 2030	1,108,493	1,108,493	0.37
June 19, 2030	950,000	950,000	0.51
February 9, 2031	440,000	440,000	0.69
March 1, 2032	1,300,000	1,300,000	0.70
April 12, 2024	4,096,713	2,048,354	0.48
October 4, 2024	850,000	150,000	0.68
October 4, 2024	150,000	37,500	1.25
	13,432,213	10,571,354	

As at the date of this MD&A, the Company has no outstanding warrants enabling holders to acquire common shares of the Company.

DEFERRED STOCK UNIT PLAN

The Deferred Share Units ("DSU") plan provides for the payment of directors' compensation with DSUs. Each DSU is a right granted by the Company to an eligible director to receive an equivalent of the value of one common share on termination of service. The Company may make payments due under the DSU Plan by issuing one common share for each DSU. The number of DSUs to be granted under the DSU Plan is determined by dividing the director's compensation by the average closing price of the common shares on the TSXV, for 5 trading days immediately

Falcon Energy Materials plc

Management's discussion and analysis for the quarter ended September 30, 2024

preceding such date. Under the DSU Plan, a maximum number of common shares available and reserved for issuance is 22,764,466 shares of the Company, less any shares reserved for issuance under the Plan and the RSU Plan

To date, 1,112,801 DSUs were granted to directors.

RESTRICTED STOCK UNIT PLAN

The RSU Plan provides for a maximum number of common shares available and reserved for issuance to 22,764,466 shares of the Company, less any shares reserved for issuance under the Plan and the RSU Plan. The RSUs are time-based awards and all the amount of RSUs granted will vest upon the continuous employment of the Participants on the third anniversaries of the RSU grant, starting from the date of the grant or such other period not exceeding three years determined by the Board of Directors.

To date, there are not outstanding restricted stock units grants.

OFF-BALANCE SHEET ARRANGEMENTS

The Company has no off-balance sheet arrangements.

CONFLICTS OF INTEREST

The Company's directors and officers may serve as directors and/or officers, or may be associated with, other reporting companies, or have significant shareholdings in other public companies. To the extent that such other companies may participate in business or asset acquisitions, dispositions or ventures in which the Company may participate, the directors and officers of the Company may have a conflict of interest in negotiating and concluding terms respecting the transaction. If a conflict of interest arises, the Company will follow the provisions of the Abu Dhabi Global Market Companies Regulations 2020 dealing with conflict of interest. These provisions state that where a director has such a conflict, that director must, at a meeting of the Company's directors, disclose his or her interest and refrain from voting on the matter unless otherwise permitted by the Companies Regulations 2020. In accordance with the federal laws of UAE, the directors and officers of the Company are required to act honestly, in good faith, and in the best interests of the Company.

MATERIAL ACCOUNTING POLICIES

The preparation of financial statements in conformity with IFRS requires management to apply accounting policies and make estimates and assumptions that affect amounts reported in the financial statements and accompanying notes. There is full disclosure of the Company's material accounting policies in Note 2 of the audited consolidated financial statements for the year ended December 31, 2023.

CRITICAL ACCOUNTING ESTIMATES AND JUDGMENTS

The preparation of the consolidated financial statements in conformity with IFRS requires management to make judgments, estimates and assumptions that affect the application of accounting policies and the reported amounts of assets, liabilities, income and expenses. Significant changes in the underlying assumptions could result in significant changes to these estimates. Consequently, management reviews these estimates on a regular basis. Revisions to accounting estimates are recognized in the period in which the estimates are revised and in any future periods affected. Information about these significant judgments, assumptions and estimates that have the most significant effect on the recognition and measurement of assets, liabilities, income and expenses are disclosed in Note 3 of the audited consolidated financial statements for the year ended December 31, 2023.

RISKS AND UNCERTAINTIES

The Company is in the business of acquiring and exploring mineral properties. It is exposed to a number of risks and uncertainties that are common to other mineral exploration companies in the same business. The industry is capital

Falcon Energy Materials plc

Management's discussion and analysis for the quarter ended September 30, 2024

intensive at all stages and is subject to variations in commodity prices, market sentiment, exchange rates for currency, inflation and other risks. The Company currently has no source of revenue other than interest on cash balances. The Company will rely mainly on equity financing to fund activities on its mineral properties.

The risks and uncertainties described in this section are not inclusive of all the risks and uncertainties to which the Company may be subject.

Impact of Epidemics

Falcon's operations are subject to the risk of emerging infectious diseases or the threat of viruses or other contagions or epidemic diseases, including COVID-19. Any outbreak or threat of an outbreak of a virus or other contagions or epidemic disease could have a material adverse effect on the Company's business, results of operations and financial condition.

Early Stage – Need for Additional Funds

The Company has no history of profitable operations, and its present business is at an early stage. As such, the Company is subject to many risks common to other companies in the same business, including under-capitalization, cash shortages and limitations with respect to personnel, financial and other resources and the lack of revenues. There is no assurance that the Company will be successful in achieving a return on shareholders' investment and the likelihood of success must be considered in light of its early stage of operations.

Exploration and Evaluation

Mineral exploration and evaluation is a speculative business, characterized by a number of significant risks including, among other things, unprofitable efforts resulting not only from the failure to discover mineral deposits, but also from finding mineral deposits that, though present, are of insufficient size and/or grade to return a profit from production.

The mineral claims to which the Company has a right to acquire an interest are in the exploration stages only and are without a known body of commercial ore. Upon discovery of a mineralized occurrence, several stages of exploration and assessment are required before its economic viability can be determined. Development of the subject mineral properties would follow only if favorable results are determined at each stage of assessment. Few precious and base metal deposits are ultimately developed into producing mines.

Supplies, Health and Infrastructure

The Company's property interests are often located in remote, undeveloped areas and the availability of infrastructures such as surface access, skilled labor, healthy labor, fuel and power at an economic cost cannot be assured. These are integral requirements for exploration, production and development facilities on mineral properties. In Guinea, power may need to be generated onsite.

Mining Title Risks

Although the Company has exercised the usual due diligence with respect to determining title to its mining properties in which it has a material interest, there is no guarantee that title to such mining properties will not be challenged or impugned. The Company's mineral property interest may be subject to prior unregistered agreements, transfers, or native claims, and title may be affected by undetected defects.

Environmental Regulations, Permits and Licenses

The Company's operations are subject to various laws and regulations governing the protection of the environment, exploration, development, production, taxes, labor standards, occupational health, waste disposal, safety and other matters. Environmental legislation in most countries provides restrictions and prohibitions on spills, releases or emissions of various substances produced in association with certain mining industry operations, such as seepage from tailings disposal areas, which would result in environmental pollution. A breach of such legislation may result in the imposition of fines and penalties. In addition, certain types of operations require the submission and approval of environmental impact statements. Environmental legislation is evolving in a direction of stricter standards and enforcement, and higher fines and penalties for non-compliance. Environmental assessments of proposed projects carry a heightened degree of responsibility for companies and their directors, officers and employees. The cost of compliance with changes in governmental regulations has the potential to reduce the profitability of operations. The Company intends to fully comply with all environmental regulations.

Falcon Energy Materials plc

Management's discussion and analysis for the quarter ended September 30, 2024

The Company believes that it is in compliance with all material laws and regulations which currently apply to its activities. However, there can be no assurance that all permits which the Company may require for its operations and exploration activities will be obtainable on reasonable terms or on a timely basis, or that such laws and regulations would not have an adverse effect on any mining project which the Company might undertake.

Competition and Agreements with Other Parties

The mining industry is intensely competitive in all its phases and the Company competes with other companies that have greater financial resources and technical capacity. Competition could adversely affect the Company's ability to acquire suitable properties or prospects in the future.

The Company may, in the future, be unable to meet its share of costs incurred under such agreements to which it is a party and it may have its interest in the properties subject to such agreements reduced as a result. Also, if other parties to such agreements do not meet their share of such costs, the Company may not be able to finance the expenditures required to complete recommended programs.

Political and Economic Risks of Doing Business in Guinea

The Company's mineral properties are currently located in Guinea. The fiscal laws and practices are well established and generally consistent with Western rules and regulations. However, there is no assurance that future political and economic conditions in this country will not result in its government adopting different policies respecting foreign development and ownership of mineral properties. Any changes in laws, regulations or shifts in political attitudes regarding investment in the Guinea mining industry are beyond its control and may adversely affect its business. The Company's exploration and evaluation activities may be affected in varying degrees by a variety of economic and political risks, including cancellation or renegotiation of contracts, changes in Guinean domestic laws or regulations, changes in tax laws, royalty and tax increases, restrictions on production, price controls, expropriation of property, fluctuations in foreign currency, restrictions on the ability to repatriate earnings and pay dividends offshore, restrictions on the ability to hold foreign currencies in offshore bank accounts, environmental legislation, employment practices and mine safety. In the event of a dispute regarding any of these matters, the Company may be subject to the jurisdiction of courts outside of UAE which could have adverse implications on the outcome.

Dependence on Management

The Company is very dependent upon the personal efforts and commitment of its existing management. To the extent that management's services would be unavailable for any reason, a disruption to the operations of the Company could result, and other persons would be required to manage and operate the Company.

Information Systems Security Threats

Although the Company has not experienced any material losses to date relating to cyber-attacks or other information security breaches, there can be no assurance that the Company will not incur such losses in the future. The Company's risk and exposure to these matters cannot be fully mitigated because of, among other things, the evolving nature of these threats. As a result, cyber security and the continued development and enhancement of controls, processes and practices designed to protect systems, computers, software, data and networks from attack, damage or unauthorized access is a priority. As cyber threats continue to evolve, the Company may be required to expend additional resources to continue to modify or enhance protective measures or to investigate and remediate any security vulnerabilities.

Operating Hazards and Risks

Mining operations involve many risks which even a combination of experience, knowledge and careful evaluation may not be able to overcome. In the course of exploration, development and production of mineral properties, certain risks, and in particular unexpected or unusual geological operating conditions, including rock bursts, cave-ins, fires, flooding and earthquakes, may occur. Operations in which the Company has a direct or indirect interest will be subject to all the hazards and risks normally incidental to exploration, development and production of mineral deposits, any of which could result in damage to or destruction of mines and other producing facilities, damage to life and property, environmental damage and possible legal liability for any or all damage.

Although the Company maintains liability insurance in an amount which it considers adequate, the nature of these risks is such that liabilities could exceed policy limits, in which event the Company could incur significant costs that could have a materially adverse effect upon its financial conditions.