

GreenRoc Strategic Materials Plc / EPIC: GROC / Market: AIM / Sector: Mining

17 September 2026

GreenRoc Strategic Materials Plc
("GreenRoc" or the "Company")

Initial carbon footprint assessment for Amitsoq graphite active anode material

GreenRoc Strategic Materials Plc (AIM: GROC), a company focused on the development of critical mineral projects in Greenland, is pleased to announce the results of a cradle-to-gate climate change impact assessment of graphite from its Amitsoq Graphite Project through to coated spherical purified graphite ("CSPG"), also known as Active Anode Material ("AAM"), a key component for lithium-ion battery production.

Key highlights

- Amitsoq modelled to have an estimated 1.60 kg carbon dioxide equivalent per kg ("CO₂e/kg") CSPG cradle-to-gate footprint, at lower end of selected Benchmark estimates included in GreenRoc's 2024 AAM Plant Pre-Feasibility Study (PFS)
- 68% of the contribution is attributed to electricity used during processing graphite concentrate to CSPG
- Mining and production of graphite concentrate feedstock only contributes 9% of the footprint
- The model identifies electricity sourcing and sodium hydroxide production as key opportunities for reducing CO₂ emissions
- The modelling uses ISO 14067:2018-aligned methodology
- The model will be updated as the project progresses towards DFS
- The model has not undergone external review and should therefore be considered indicative and used primarily as a baseline to support future project development and carbon-reduction initiatives.

Details

GreenRoc commissioned an independent LCA specialist consultancy to undertake a product carbon footprint assessment of its planned integrated graphite supply chain. The assessment uses a cradle-to-gate system boundary, with the functional unit defined as 1 kg of graphite AAM (CSPG). Both the extraction and production of graphite concentrate at the planned Amitsoq Graphite Mine in southern Greenland, and intermediate transport and downstream processing into CSPG are covered by the assessment. Capital goods and infrastructure, minor ancillary inputs, use phase and end-of-life treatment are excluded from the assessment.

The assessment draws on data from GreenRoc's Preliminary Economic Assessment for mining and Prefeasibility Study for a CSPG processing plant, supplemented by background data from the *Ecoinvent 3.12 Database* and the *Environmental Footprint 3.1 Impact Assessment* methodology. *Ecoinvent* is founded and governed by leading Swiss research institutions and universities and the world's most widely used and transparent environmental database. *Environmental Footprint 3.1 (EF 3.1)* is an official European Union method used to measure the total environmental impact of products and organizations across their entire lifecycle.

For the purposes of the present study, the electricity component is modelled over a Scandinavian electricity supply, reflecting GreenRoc's strategy of developing its downstream processing business within the Scandinavian region.

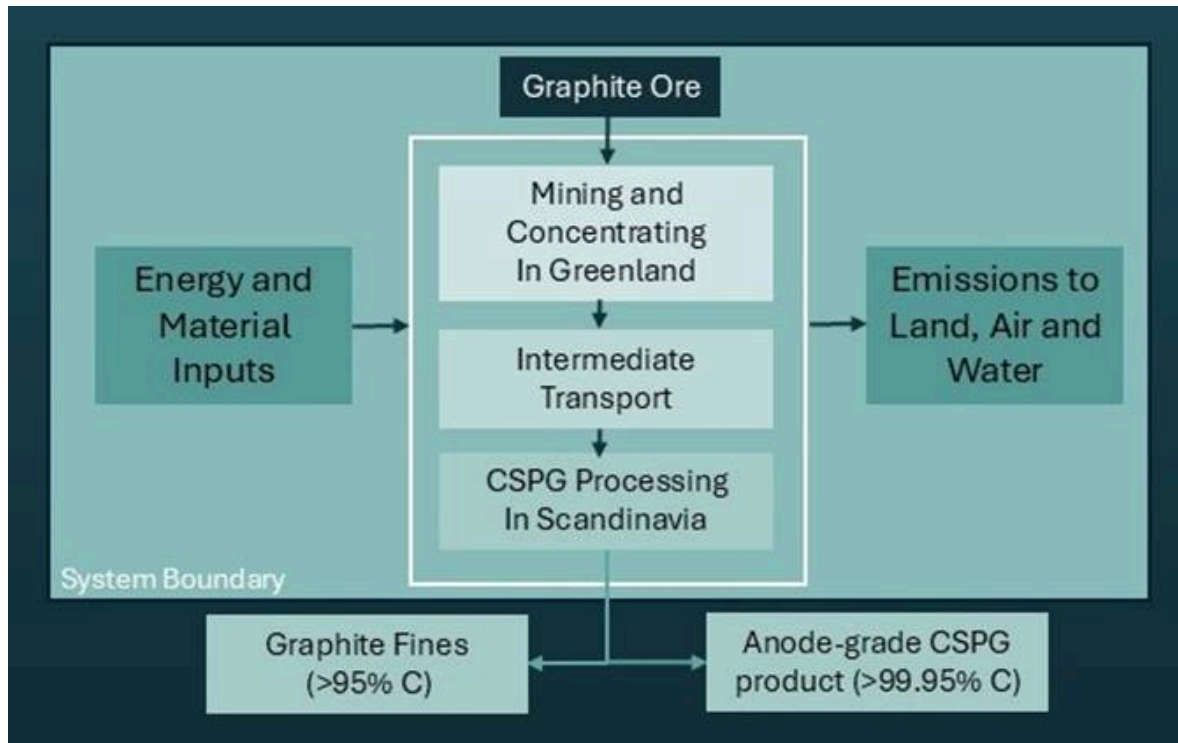


Figure 1. Flow diagram showing the system boundaries of the study.

Results

The independent initial assessment calculates a total climate change impact of 1.60 kg CO₂e per kg of CSPG under the current model assumptions.

Downstream CSPG processing is the dominant contributor, accounting for approximately 87% of the total impact. Mining and production of graphite concentrate feedstock at Amitsoq contribute approximately 9%, while intermediate transport contributes approximately 4%.



Figure 2. Climate change impact across the three areas: mining, transport from mine to processing, and CSPG processing

The largest individual contributors are:

- 24% - Electricity used in micronising and shaping
- 23% - Electricity used in coating
- 21% - Electricity used in purification
- 7% - Nitrogen gas, used in the coating process
- 5-6% - Diesel used in mining

The results indicate that electricity consumption and its associated carbon intensity are the principal drivers of the downstream processing footprint. This provides GreenRoc with a clear opportunity to reduce the carbon intensity of its future CSPG production through the procurement of low-carbon electricity, process optimisation and improvements in energy efficiency.

Opportunities for future carbon reductions

The assessment provides GreenRoc with an initial carbon footprint for its planned vertically integrated graphite-to-anode-material supply chain and identifies electricity consumption and the source of sodium hydroxide production as the principal areas where further reductions may be achieved.

As the project advances through pre-feasibility, feasibility and detailed design stages, GreenRoc plans to refine the underlying assumptions and use the model to assess alternative energy sources for both the mine and the AAM processing plant, reagent choices and process configurations. GreenRoc now owns a decision-making model that can be updated as the project develops.

How does Amitsoq anode material compare to selected benchmark estimates?

In a report delivered to GreenRoc for its 2024 Anode Plant Pre-feasibility Study (PFS), Benchmark Mineral Intelligence Ltd. provided emissions estimates for four other AAM products, planned or in production, as illustrated in Figure 3. On an illustrative basis, the modelled GreenRoc footprint of 1.60 kg CO₂e/kg emissions is at the lower end of the selected Benchmark estimates shown below; methodologies and underlying assumptions may differ.

Global warming potential – per kg of cSPG/AAM

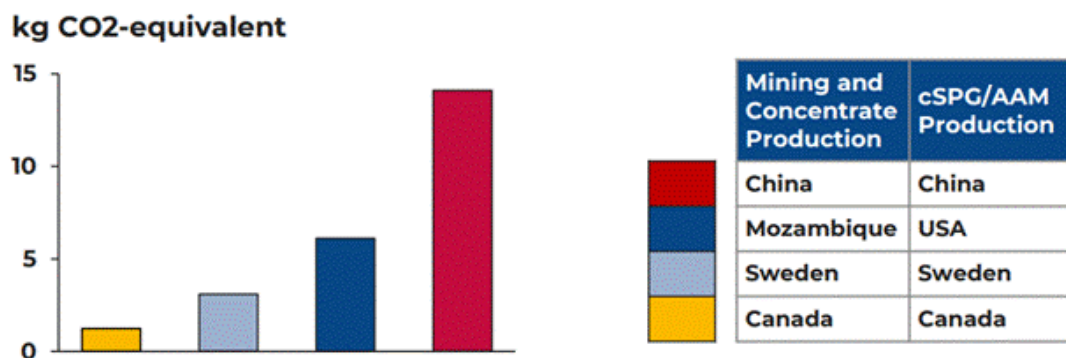


Figure 3. Figure from Benchmark Mineral Intelligence Ltd. in a report delivered to GreenRoc for its PFS in 2024. AAM and CSPG are synonymous.

GreenRoc's CEO, Stefan Bernstein, commented:

"This initial carbon footprint assessment provides an important baseline for GreenRoc as we develop an integrated European graphite-to-anode-material supply chain. The results demonstrate the importance of low-carbon electricity in the processing stage and give us a clear framework for identifying further reductions as the project moves into detailed design. Importantly, the model is now established and can be updated as our process design, location and supply chain assumptions are refined. The fact, that our product is modelled to be at the lower end of the independent estimates set out in our 2024 PFS, is a solid foundation for providing Europe with a highly competitive product in terms of carbon emissions"

ENDS*

For further information, please contact:

Investor questions on this announcement We encourage all investors to share questions on this announcement via our investor hub	https://greenrocplc.com/s/0b5773
GreenRoc Strategic Materials Plc Stefan Bernstein, CEO	info@greenrocplc.com +44 20 3950 0724
Cairn Financial Advisers LLP (Nomad) Sandy Jamieson / Louise O'Driscoll	+44 20 7213 0880
Oberon (Broker) Nick Lovering/Adam Pollock	+44 20 3179 5300

This announcement contains inside information for the purposes of the UK Market Abuse Regulation and the Directors of the Company are responsible for the release of this announcement.

Forward Looking Statements

This announcement contains forward-looking statements relating to expected or anticipated future events and anticipated results that are forward-looking in nature and, as a result, are subject to certain risks and uncertainties, such as general economic, market, financial and business conditions, competition for and availability of qualified staff and contractors,

regulatory processes and actions, technical issues, new legislation, uncertainties resulting from potential delays or changes in plans, uncertainties resulting from working in a new political jurisdiction, uncertainties regarding the results of exploration, uncertainties regarding the timing and granting of prospecting rights, uncertainties regarding the timing and granting of regulatory and other third party consents and approvals, uncertainties regarding the Company's or any third party's ability to finance, execute and implement future plans and programmes, and the occurrence of unexpected events. Actual results achieved may vary from the information provided herein as a result of numerous known and unknown risks and uncertainties and other factors.

About GreenRoc

GreenRoc Strategic Materials Plc is an AIM-quoted UK public company focused on developing the Amitsoq Graphite Project in Greenland into a producing mine to meet critical demand from Electric Vehicle ('EV') manufacturers in Europe and North America for new, high grade and conflict-free sources of graphite.

Amitsoq is one of the highest-grade graphite deposits in the world with a combined Measured, Indicated and Inferred JORC Resource of 23.05 million tonnes (Mt) at an average grade of 20.41% graphite, sufficient to sustain more than 20 years of mining. GreenRoc received an Exploitation Licence from the Government of Greenland in December 2025, valid for 30 years.

The plans for the Amitsoq Project include the construction of a facility to further process the mined graphite into active anode material ("AAM") - an indispensable component of Li-ion batteries - and these plans have been independently and positively evaluated to pre-feasibility study stage.

The Amitsoq Project was designated a Strategic Project by the EU in June 2025. The Project has also been ESG rated by Digbee™, an independent platform which provides sustainability assessments for the mining industry.

In October 2025, GreenRoc signed a binding secured loan facility for EUR 5.2 million from the Export and Investment Fund of Denmark ("EIFO"), for the financing of the Company's work programme at Amitsoq and the AAM pilot plant.

In December 2025, GreenRoc, together with its consortium partners DTU and IPU, was awarded up to DKK 10,448,826 (c. £1.2m) by the Energy Technology Development and Demonstration Programme ("EUDP"), a Danish government funding programme, for the project entitled "EU Graphite: Building European production of graphite active anode material".

This information is provided by RNS, the news service of the London Stock Exchange. RNS is approved by the Financial Conduct Authority to act as a Primary Information Provider in the United Kingdom. Terms and conditions relating to the use and distribution of this information may apply. For further information, please contact rns@lse.com or visit www.rns.com.

RNS may use your IP address to confirm compliance with the terms and conditions, to analyse how you engage with the information contained in this communication, and to share such analysis on an anonymised basis with others as part of our commercial services. For further information about how RNS and the London Stock Exchange use the personal data you provide us, please see our [Privacy Policy](#).

END

STRLFMLTMTMBBRF