ASX: EV1 | 6 October 2022

ASX ANNOUNCEMENT
Independent life cycle assessment demonstrates Chilalo's low carbon footprint

HIGHLIGHTS

- **Evolution commissioned Minviro Ltd to provide an independent Life Cycle Assessment (LCA) of the environmental footprint of the Company's Chilalo Graphite Project, based on data from the 2020 Definitive Feasibility Study (2020 DFS).**
- **Results of the LCA estimate that 0.55 tonnes of CO_2 would be emitted per tonne of flake graphite concentrate produced from Chilalo, including Scope 1, 2 and 3 emissions.**
- **The LCA demonstrates that Chilalo flake graphite concentrate is estimated to emit approximately half the CO_2 of graphite production in China – note that China contributes 70-80% of global graphite supply.**
- **The LCA was conducted in accordance with ISO-14040:2006 and ISO-14044-2066 standards and included an independent critical panel review.**
- **The Company's updated DFS is incorporating renewable electricity, which is expected to reduce the expected carbon footprint.**
- **Evolution continues to investigate mitigating strategies and the potential for carbon offsets with the intention of Chilalo becoming the world's first net zero carbon graphite mine.**

Evolution Energy Minerals ("Evolution" or the "Company") (ASX: EV1, FSE: P77) is pleased to report the Company's first Life Cycle Assessment ("**LCA**") for flake graphite produced from the Chilalo Graphite Project in Tanzania.

LCA is a method to assess the environmental impacts associated with all stages of a product, process or activity.[1] Importantly, LCA makes it possible to evaluate indirect impacts that occur in the development of a product or process system over its entire life cycle, providing information that otherwise may not be considered.

The cradle-to-gate LCA for Chilalo assesses the life cycle impact of the production of 1 kg of flake graphite concentrate (95-97% C) produced from natural flake graphite ore extracted at the Chilalo project in south-east Tanzania. The total production chain includes mining, processing and transportation stages.

The LCA was based on the 2020 Definitive Feasibility Study ("**2020 DFS**") and therefore does not incorporate the carbon footprint reductions that will result from the decision to introduce renewable power in the upcoming DFS.

Phil Hoskins, Managing Director of Evolution Energy Minerals, commented:

"*Evolution's vision is to only supply sustainably sourced graphite products and battery materials. Completion of Minviro's initial LCA is the first stepping stone in our aspirations to develop Chilalo as a net zero carbon graphite mine.*

"We now understand our highest carbon footprint scenario based on the 2020 DFS, which had assumed diesel power generation. Reducing our carbon footprint has been front of mind during the optimisation of our DFS

[1] Finkbeiner, M., Tan, R. & Reginald, M. Life cycle assessment (ISO 14040/44) as basis for environmental declarations and carbon footprint of products. in ISO Technical Committee 207 Workshop, Norway (2011).

and we expect the introduction of renewables along with other operational efficiencies to deliver an industry-leading result when we update the LCA."

Figure 1 shows the contribution of each component of the mining, processing and transportation stage to the overall global warming potential measured as 0.55kg CO_2 eq per kg of flake graphite concentrate. Mining and processing contribute the highest levels due to the modelled use of diesel fuel in the 2020 DFS.

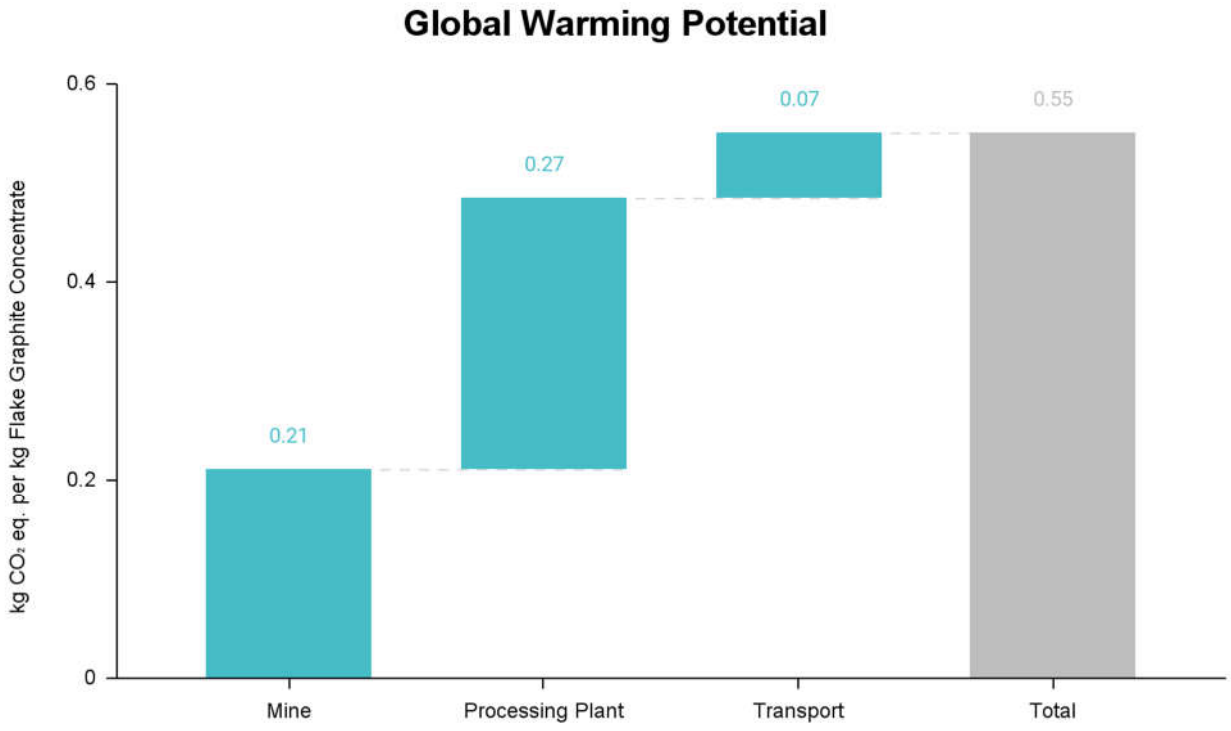

Figure 1: Chilalo's Global Warming Potential (2020 DFS)

The global warming potential broken down by scopes (1, 2 and 3)[2] is presented in Figure 2. The top contributors of scope 1 emissions are the combustion of diesel for the haulage fleet and co-generation sets within the mining and processing stages.

There are zero scope 2 emissions for the Chilalo project due to no energy being imported to site.

The top contributors of scope 3 emissions are the embodied impact of producing diesel used for the haulage fleet and electricity source as well as the embodied impact of producing the reagents consumed within the concentration process. Transport contributes to the downstream scope 3 emissions of transporting the flake graphite concentrate to the port of Dar es Salaam.

[2] Scope 1 emissions – Direct Greenhouse Gas (**GHG**) emissions.
Scope 2 emissions – Indirect GHG emissions from consumptions of purchased electricity, heat or steam.
Scope 3 emissions – Other indirect emissions such as the extraction and production of purchased materials and fuels, transport-related activities in vehicles not owned or controlled by the reporting entity, electricity-related activities (e.g. transmission & distribution losses) not covered in scope 2, outsourced activities, and waste disposal.

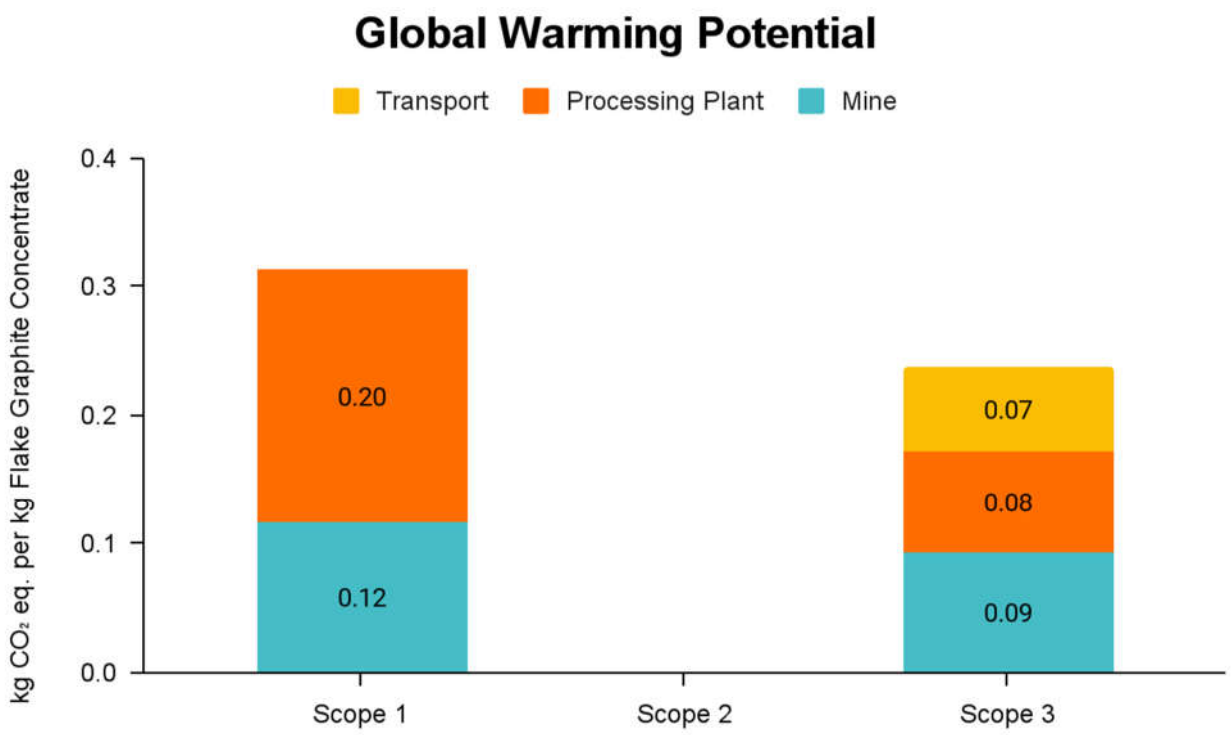

Figure 2: Global Warming Potential Contribution Analysis by Scope of Emissions

Discussion and Comparative Review

The results above provide a benchmark that the Company assesses as the peak measure given that it is based on the use of diesel fuel for energy generation. The Company believes that mitigation initiatives, including the introduction of renewable power, will likely result in lower emissions in subsequent reviews.

Even on this peak basis, the LCA for Chilalo demonstrates that the Project will have lower emissions than comparative production in other parts of the world, namely China, in particular the Heilongjiang Province where more than 50% of the world's graphite is produced. This is shown in Figure 3 below where Minviro compared Chilalo with other known production. The impact of transporting graphite concentrate from Chilalo to Port has been removed, so the system boundaries of the comparison scenarios are sufficiently similar and comparisons can be made on a like-for-like basis.

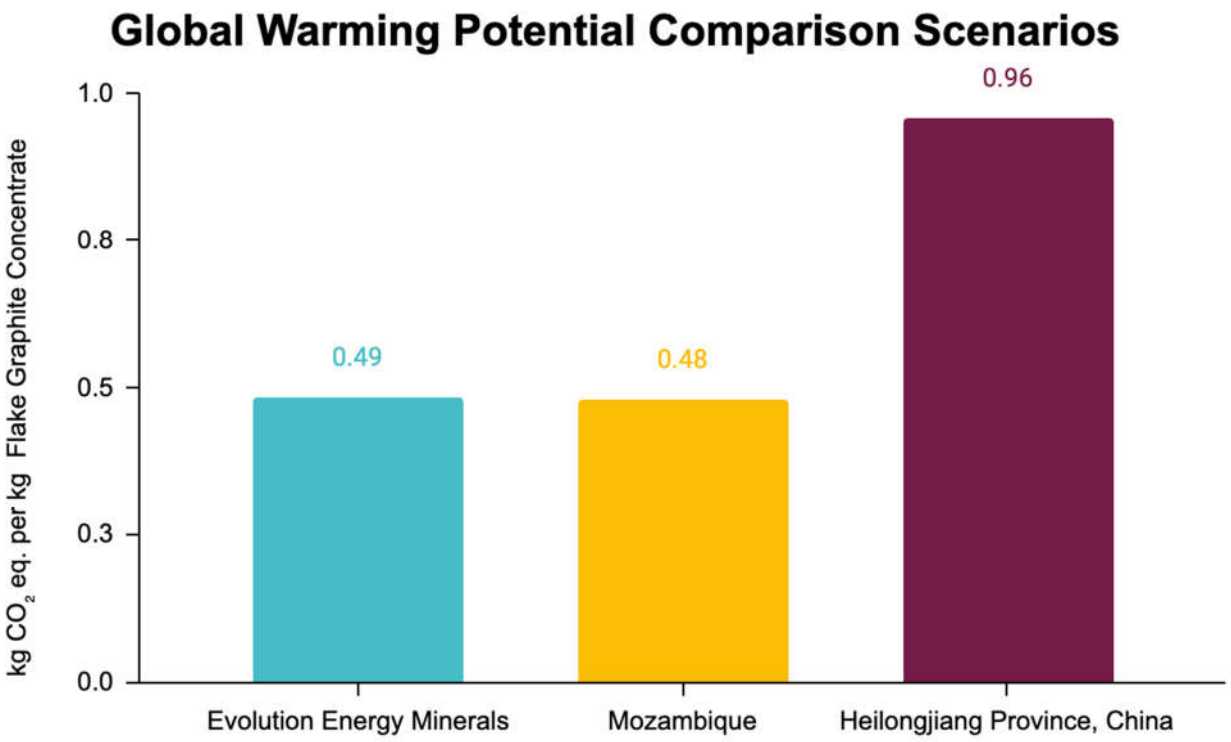

*Figure 3: Global Warming Potential – Peer Comparison (*Minviro adjusted Evolution's figure to reflect the same system boundaries as comparatives)*

This announcement has been approved for release by the Evolution Board of directors.

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ABOUT EVOLUTION (ASX:EV1)

Development ready
Chilalo Graphite Project in Tanzania

58% > 80 Mesh
World leading flake size = highest margins

Unique offtake and downstream collaboration
Extensive product qualifications with YXGC, global leader for EG and foil

Framework agreement
To provide Tanzanian government certainty

FID by H1 2023
Strategic ESG fund cornerstone support

Sustainable battery anode strategy
Superior performance, environmentally friendly thermal purification

Carbon neutrality
Pursuing net zero carbon from day one

Evolution's vision is to become a vertically integrated company that will only supply sustainably sourced graphite products and battery materials.

This will be achieved by combining our unique graphite source with industry-leading technology partners, working closely with customers and producing diversified downstream products in both Tanzania and strategically located manufacturing hubs around the world. Evolution is committed to being global leaders in ESG and ensuring its operations support the push for decarbonisation and the global green economy.

EVOLUTION ENERGY MINERALS

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