ASX:EV1 | 9 December 2021

# ASX ANNOUNCEMENT
# Chilalo economics expected to improve through continuing value engineering studies

## HIGHLIGHTS

- **Value engineering continuing, led by ex-Syrah Resources project manager, Michael Bourguignon**
- **Expected to enhance Chilalo NPV and reduce carbon emissions**
- **Key areas identified as having potential for cost savings include mining and power**
- **Tenders being prepared for Front End Engineering and Design to commence after the completion of final vendor testwork confirming the DFS flow sheet**

**Evolution Energy Minerals ("Evolution" or the "Company")** is pleased to announce that a series of value engineering studies have commenced and are expected to improve the economics and reduce the carbon footprint of the Chilalo Graphite Project **("Chilalo")** in Tanzania. Value engineering will be a continual exercise and progression towards a construction decision by H2 2022, which is not conditional on the outcomes of such studies.

**Evolution Executive Director, Michael Bourguignon, commented:** *"With the benefit of my previous experience in graphite, we have identified a number of opportunities to improve the economics of the Chilalo Project. It is clear that there are several opportunities for cost savings, particularly in relation to mining costs and electrical power. Like most projects, Chilalo's NPV is most sensitive to commodity price and the strong positive trend in graphite prices is also expected to contribute to more favourable economics. We look forward to providing updates regarding further enhancements to the Chilalo Project in the coming months ahead of a construction decision by H2 2022."*

Mining costs have been identified as one of the more significant opportunities for improvement in Chilalo economics and a review of the mine plan is underway. Furthermore, the Company commenced exploration in June 2021 to identify undrilled high-conductance exploration targets on its tenement holdings. Ground electromagnetics is being used to identify high-conductance targets with a focus on high-grade, near surface, coarse flake graphite deposits. The discovery of additional graphite deposits at surface has the potential to deliver a reduced strip ratio, lower mining costs, extended mine life and an improved NPV.

The Company has engaged MinViro to assess the carbon footprint associated with the proposed mining operation at Chilalo as part of a process being undertaken by Evolution to investigate the establishment of a net zero carbon operation at Chilalo. The Company is also in advanced discussions with independent power providers to convert Chilalo's proposed diesel generated power supply to a hybrid solar/diesel solution, which is expected to substantially reduce the carbon footprint and deliver operating cost savings. Additionally, a recent visit to the Mtwara Port facility to view the upgraded facilities provided insight into the possible operational utilisation of this facility, with the scope to further improve Chilalo economics and reduce carbon emissions.

The ongoing value engineering, which is central to the Company's approach to continuous improvement, is not expected to delay progress towards making a construction decision by H2 2022. The existing DFS is executable as it stands and the Company will progress project finance discussions in parallel with implementation of the recently announced ESG Framework which is designed to meet the requirements of key stakeholders including financiers and graphite customers.

The Company is making preparations to tender a Front-End Engineering Design (FEED) package for the Chilalo Project, aimed at advancing the design sufficiently to identify and mitigate against potential risks to the schedule, and further define the project cost estimate. Engineering firms from three separate continents have expressed a desire to be considered for this work and the Company intends to run a pre-qualification process in order to shortlist the most suitable applicants. FEED work is expected to commence in Q2 2022 and is envisaged to take four months.

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

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## ABOUT EVOLUTION

Evolution is committed to supplying sustainable graphite solutions for the global green economy and in doing so, create the first net zero carbon graphite mine. A DFS confirmed the opportunity to produce high-quality flake graphite at Chilalo and the Company intends to apply Chilalo flake graphite to downstream processing to produce battery anode material, expandable graphite, micronised graphite and graphite foil.

The Chilalo Project hosts a high-grade mineral resource of 20.1Mt at 9.9% total graphitic carbon (TGC) for 1,991 Kt of contained graphite, as shown in the table below.


### Chilalo Mineral Resource Estimate[1]

| Domain | JORC Code Classification | Zone | Million Tonnes (Mt) | TGC (%) | Contained Graphite (Kt) |
|---|---|---|---|---|---|
| High Grade | Indicated | Main | 9.2 | 10.6 | 982 |
| | | North-East | 1.0 | 9.5 | 100 |
| | | **All** | **10.3** | **10.5** | **1,082** |
| | Inferred | Main | 7.4 | 9.5 | 704 |
| | | North-East | 2.3 | 8.8 | 205 |
| | | **All** | **9.8** | **9.3** | **908** |
| | Indicated + Inferred | **All** | **20.1** | **9.9** | **1,991** |
| | | | | | |
| Low Grade | Inferred | Main | 37.8 | 3.4 | 1,282 |
| | | North-East | 9.5 | 4.1 | 394 |
| | | **All** | **47.3** | **3.5** | **1,677** |
| | | | | | |
| **High Grade + Low Grade** | **Indicated + Inferred** | **All** | **67.3** | **5.4** | **3,667** |

*The Mineral Resource was estimated within constraining wireframe solids using a core high-grade domain defined above a nominal 5% TGC cut-off within a surrounding low-grade zone defined above a nominal 2% TGC cut-off. The mineral resource is quoted from all classified blocks above a lower cut-off of 2% TGC within these wireframe solids. Differences may occur due to rounding.*

[1] The Chilalo Mineral Resource estimate was reported by Evolution in the prospectus dated 28 September 2021, as supplemented by a supplementary prospectus dated 6 October 2021 (collectively, the Prospectus). Evolution confirms that it is not aware of any new information or data that materially affects the Chilalo Mineral Resource estimate included in the Prospectus and that all material assumptions and technical parameters underpinning the Chilalo Mineral Resource estimate in the Prospectus continue to apply and have not materially changed.