

Evolution's commitment to USA focused downstream strategy

HIGHLIGHTS

- Following a detailed international site selection process, Evolution has committed to the US as the jurisdiction for its downstream battery anode strategy.
- Testwork with a US technology partner has confirmed the suitability of Chilalo fine flake graphite for the production of coated spherical graphite for lithium-ion batteries.
- The US Government's commitment to establishing security of supply of battery anode materials, supported by key policy initiatives, provides Evolution with an opportunity to become a strategic US partner.
- Policy initiatives include the Inflation Reduction Act, Bipartisan Infrastructure Law and US Mineral Security Partnership.
- Incorporation of US subsidiary company – Evolution Energy Solutions LLC – as the Company's downstream processing entity.

Evolution Energy Minerals ("Evolution" or the "Company") (ASX: EV1, FSE: P77) is pleased to provide an update on its downstream processing strategy to produce coated spherical purified graphite ("CSPG") in the USA.

The US Department of Energy ("DOE") forecasts the US will reach 796GWh of battery capacity by 2026¹, which will require 700,000 tonnes per year of active anode materials (see Appendix 1). This demand requirement, together with the various policy initiatives to incentivise the supply of critical minerals into the US market and the manufacture of battery anode materials, makes the US an ideal location to establish Evolution's downstream facility for processing Chilalo fine flake graphite.

The US designated graphite as a strategic critical mineral. The combination of strategic importance of graphite and the US Government's commitment to both securing the supply of strategic critical minerals and developing domestic anode manufacturing capacity, presents Evolution with an exceptional opportunity for vertical integration. Evolution's Chilalo Graphite Project in Tanzania will provide the feedstock for the downstream operations, and the US facility will use environmentally sustainable processes to produce graphite for US markets.

Evolution's Managing Director, Phil Hoskins, commented: *"We have already confirmed the superior performance of Chilalo fine flake graphite for the production of CSPG and committing to a downstream processing strategy is the obvious next step. The US has numerous states with low cost renewable power grids ideally suited to environmentally friendly thermal purification of graphite as well as a favourable political environment for new critical mineral processing."*

"Establishing ex-China mine-to-anode supply, as with other critical minerals, is one of the most compelling market opportunities in the critical minerals space right now, evidenced by the extensive range of Government range of policy initiatives."

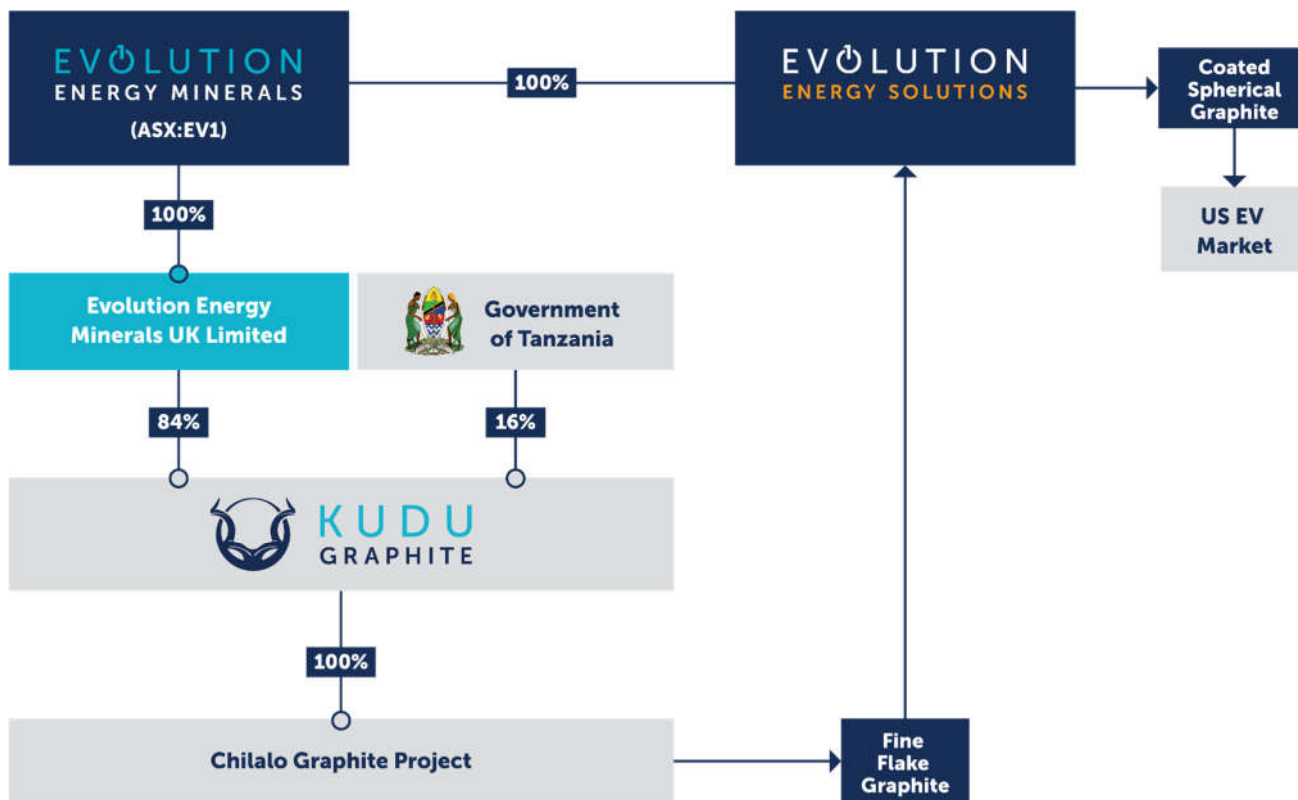
"Whilst Chilalo's fine flake graphite is keenly sought after by offtakers, we are firmly focused on establishing a vertically integrated business in which our Chilalo Project supplies fine flake graphite to an Evolution processing facility in the US. Not only does this provide a compelling opportunity for value addition, but it provides other potential sources of funding for Chilalo itself."

¹ Source: Benchmark Minerals Intelligence Battery Megafactory Assessment, March 2023

Incorporation of US subsidiary

Evolution has incorporated a wholly owned US subsidiary, Evolution Energy Solutions LLC (“EES”), the entity that will carry out all work on the Company’s downstream related activities in the US, including feasibility studies, site selection, obtaining government funding support and developing relationships with end users.

The figure below shows the relationship of EES within the Evolution group.



US strengthening ties with Tanzania

In March 2023, US Vice President Kamala Harris visited Tanzania as part of a strengthening of economic ties between the US and Tanzania, and with Africa more broadly. With US backing, Tanzania is building a processing facility at the Kabanga nickel project in north-western Tanzania, that is targeted to deliver battery-grade nickel to the United States and global markets by 2026.

With the US Government prioritising security of ex-China critical minerals supply, this strengthening of economic ties between the US and Tanzania further validates Evolution’s commitment to a vertically integrated business with its Chilalo graphite providing feed for a US based downstream processing facility.

International policy developments

In a bid to secure supply of critical minerals for the clean energy transition and to establish large-scale onshore critical minerals processing capacity, both the US and Europe have introduced significant policy initiatives, including:

- *Inflation Reduction Act*¹ – passed into law in August 2022, the IRA proposes that the US Government will invest approximately \$300 billion in deficit reduction and \$369 billion in energy security and climate change programs over the next ten years. The US Government has mandated that by 2027, 80% of critical minerals in US-made EV batteries must come from US miners or recycling plants, or mines in countries with free trade arrangements with the US. Under the IRA, foreign entities of concern² are excluded from assistance with the focus on Allied Nations that includes the EU, UK, Australia, Japan, South Korea and other aligned countries.

- *Bipartisan Infrastructure Law: Battery Materials Processing and Battery Manufacturing & Recycling (“BIL”)*³ – introduced by the US Government in 2022, the BIL provides US\$7 billion of funding opportunities in the form of grants. On 19 October 2022, the DO E announced the first rounds of grants under the BIL, which totalled US\$2.8 billion.
- *EU Critical Raw Materials Act (“CRMA”)*⁴: The CRMA is focused on reducing dependency on foreign entities of concern for supply of critical minerals and improving self-sufficiency with respect to critical minerals processing. The CRMA has set a self-sufficiency objective of 40% by 2030 for processing of critical minerals.
- *Mineral Security Partnership (“MSP”)*⁵ – under the MSP, the member countries – Australia, Canada, Finland, France, Germany, Japan, the Republic of Korea, Sweden, the United Kingdom, the United States and the European Commission – have agreed to collaborate to mobilise investment to secure supply of critical minerals that adheres to leading environmental, social and governance standards.

In effect, these policy initiatives provide significant financial incentives for the critical minerals mining and processing industries to respond. With its Chilalo project and developing US based downstream processing strategy, Evolution is well positioned to take advantage of this opportunity.

Chilalo fine flake suited to the production of coated spherical graphite

Evolution has completed a commercial verification program with its US technology partner that has confirmed the suitability of Chilalo fine flake graphite for the production of CSPG for use in lithium-ion batteries. The testwork found that Chilalo fine flake graphite:

- Can produce 99.9995% C via thermal purification, exceeding the qualification criteria for batteries.
- Can generate a yield of approximately 64% spherical graphite from spheroidisation milling, which when compared to the industry average of 40%, will have a substantial impact on revenue and overall economics of a downstream operation.
- Is highly suited to the production of CSPG, which has delivered exceptional electrochemical performance and is expected to be highly sought after by battery manufacturers.
- Outperforms leading synthetic graphite in electrical conductivity applications (note the product tested was the non-spherical by-product of the spheroidisation milling process to produce CSPG).

Next steps

Substantial testwork has already taken place and site selection within the US is advancing. Evolution is in the process of building the team to deliver the US strategy.

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

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Further information on international policies referred to in this announcement

¹ The IRA defines critical minerals to be graphite, lithium, cobalt, nickel, aluminium and manganese. For further information on the IRA, see <https://home.treasury.gov/news/press-releases/jy1379>.

² Under the US Department of Commerce's proposed definition, a U.S. based or incorporated entity—of which a Chinese person/company directly or indirectly holds at least a 25% voting interest would be deemed a foreign entity of concern.

³ For further information on the *Bipartisan Infrastructure Law*, see <https://www.whitehouse.gov/briefing-room/statements-releases/2021/11/06/fact-sheet-the-bipartisan-infrastructure-deal/>.

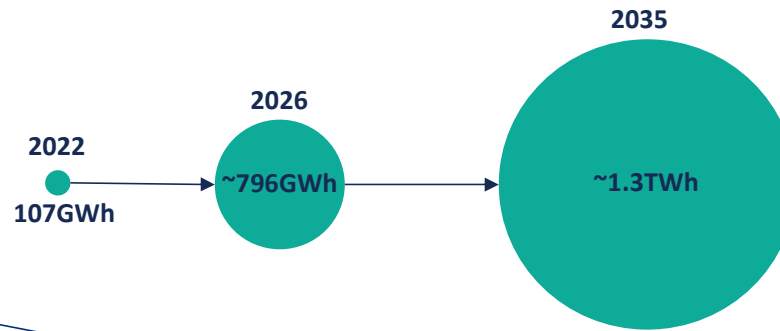
⁴ For further information on the *EU Critical Raw Materials Act*, see https://ec.europa.eu/commission/presscorner/detail/en/ip_23_1661.

⁵ For further information on the *Mineral Security Partnership*, see <https://www.state.gov/minerals-security-partnership-convening-supports-robust-supply-chains-for-clean-energy-technologies/>

APPENDIX 1. US GIGAFACTORY CAPACITY

NORTH AMERICAN EV BATTERY MARKET

Rapidly maturing EV manufacturing base



LOCATION: CA SIZE: 10 GWh STATUS: Operating	LOCATION: TX SIZE: 250k EVs STATUS: Operating	LOCATION: NV TYPE: 100 GWh / High volume Semi trucks STATUS: Planning
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Panasonic

LOCATION: NV SIZE: 37 GWh STATUS: Operating	LOCATION: KS SIZE: 30 GWh STATUS: Under construction / 2025	LOCATION: OK SIZE: TBC STATUS: Planning
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ultium cells

LOCATION: OH SIZE: 40 GWh STATUS: Operating	LOCATION: TN SIZE: 35 GWh STATUS: Planning / 2023	LOCATION: MI SIZE: 50 GWh STATUS: Planning / 2024
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ENVISION

LOCATION: KY SIZE: 40 GWh STATUS: Planning/2025	LOCATION: TN SIZE: 10 GWh STATUS: Operating construction / 2025	LOCATION: SC SIZE: 10GWh STATUS: Planning / 2025
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LOCATION: KY SIZE: 129 GWh STATUS: Constructing / 2025	LOCATION: TN SIZE: 129 GWh STATUS: Constructing / 2025
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STELLANTIS

LOCATION: IN SIZE: 33 GWh STATUS: Planning/2025 With Samsung SDI
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LOCATION: MI SIZE: 5 GWh STATUS: Operating	LOCATION: AZ SIZE: 43 GWh STATUS: Planning / 2025
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LOCATION: MI SIZE: 35 GWh STATUS: Planning/2026



LOCATION: NC SIZE: 40 GWh STATUS: Constructing / 2025



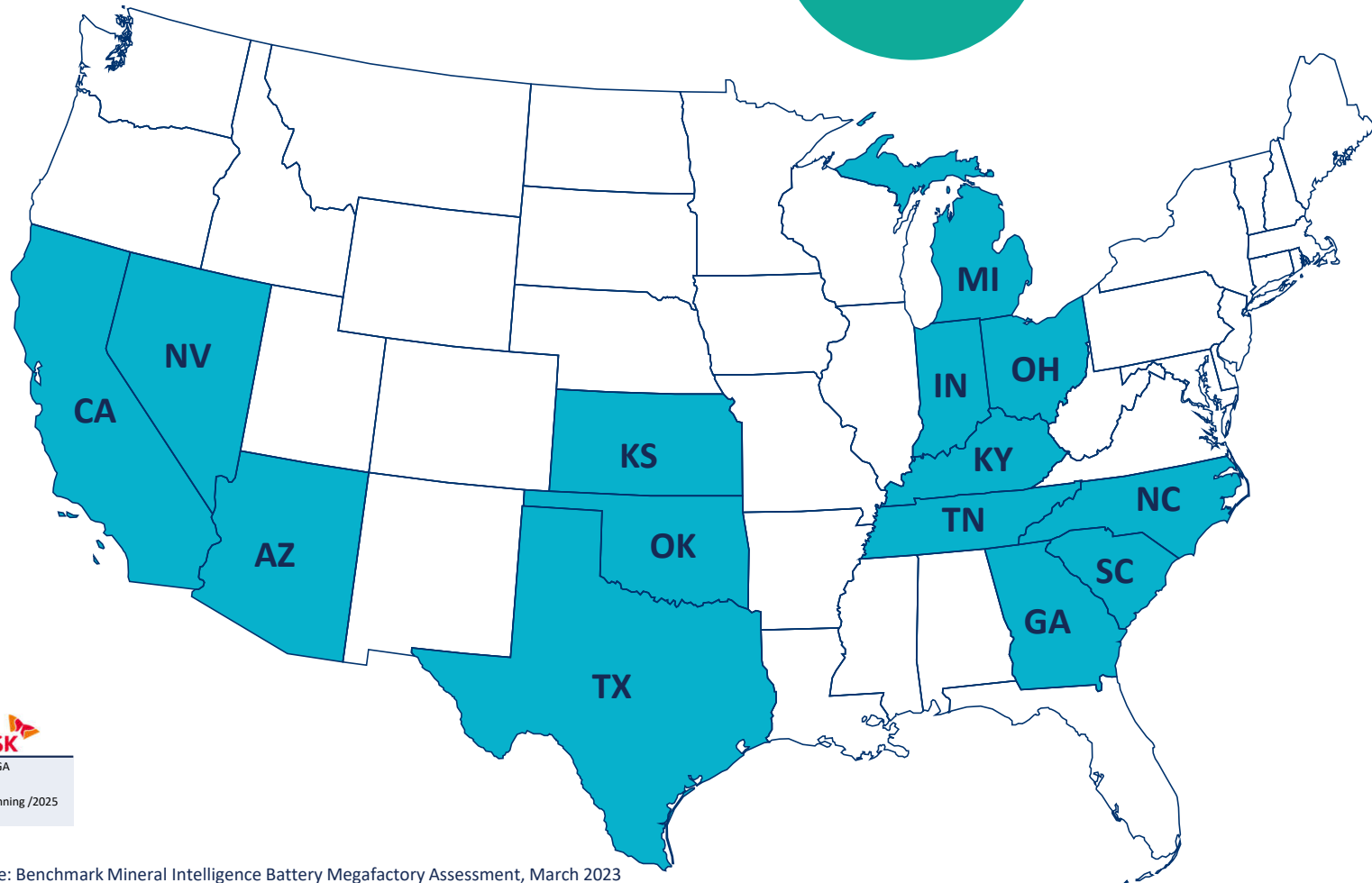
LOCATION: OH SIZE: 40 GWh STATUS: Planning/2025



LOCATION: GA SIZE: 300k EVs STATUS: Constructing / 2025



LOCATION: GA SIZE: tba STATUS: Planning / 2025
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Source: Benchmark Mineral Intelligence Battery Megafactory Assessment, March 2023

ABOUT EVOLUTION (ASX:EV1)



Development ready
Chilalo Graphite Project in Tanzania



Robust DFS
High-margin, low capex



Framework agreement finalised
Provides Tanzanian government certainty



Binding offtake
With global leader for expandable graphite and foil



Battery suitability
Premium quality CSPG produced from fines



Vertically integrated strategy
Downstream processing in US using proven technology

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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