

# ASX: CXO Announcement

29 June 2021

## Greenhouse Gas Assessment of Finniss Lithium Project

### Highlights

- Leading global environmental and sustainability consultants ERM Group completes Greenhouse Gas (GHG) Assessment of Finniss Project
- The Finniss Project has lower Scope 1 and Scope 2 GHG emissions relative to its WA peers on average of the first 5 years of production
- The Finniss Project has the lowest emissions from the transport of spodumene concentrate compared with any other Australian Lithium project
- GHG assessment includes mining, power, haulage and downstream processing operations and forms part of Core Lithium's push towards greater ESG transparency
- ERM Group has been engaged to complete a Life Cycle Analysis (LCA) and a Sustainability Assessment of the Finniss Project
- Core Lithium is focussing on low-carbon optimisation footprint opportunities associated with lower energy use, net carbon credits and process by-products

Emerging Australian lithium developer, Core Lithium Ltd (ASX: CXO) ("Core" or "Company"), is pleased to announce a partnership with global environmental and sustainability consultants ERM Group to provide a carbon footprint evaluation, Life Cycle Analysis and Sustainability Assessment of the Finniss Lithium Project.

Core is pleased to advise that it has completed a greenhouse gas (GHG) assessment for the life (7.5 years) of the Proposed Finniss Lithium Project (Finniss Project) in the Northern Territory. The assessment evaluated estimated Scope 1, Scope 2 emissions

associated with all operations at the mine (land clearing, fuel consumption, electricity usage and blasting) and Scope 3 emissions including transport of products and consumables, business travel and employee commutes.

Each scope considered carbon dioxide (CO<sub>2</sub>), nitrous oxide (N<sub>2</sub>O) and methane (CH<sub>4</sub>). Scope 1 and 2 were calculated using the National Greenhouse and Energy Reporting emission estimation methodology (Australian Government 2017), while Scope 3 emissions were estimated using the Greenhouse Gas Protocol (UK government 2020).

The assessment identified that the Finnis Lithium Project aligns well when compared on an emission intensity level (total emissions per tonne of product produced) to published emission intensities for other spodumene concentrate production facilities in Western Australia for Scope 1 and 2.

This comparison is further improved when Scope 3 emissions are included in the assessment due to the limited distance to transport the SC6 product from the site to the refining facilities.

Figure 1 below shows the intensities for the Scope 1, 2 and 3 emissions, including those associated with the transport of the spodumene concentrate product from the sites to the refining facilities.

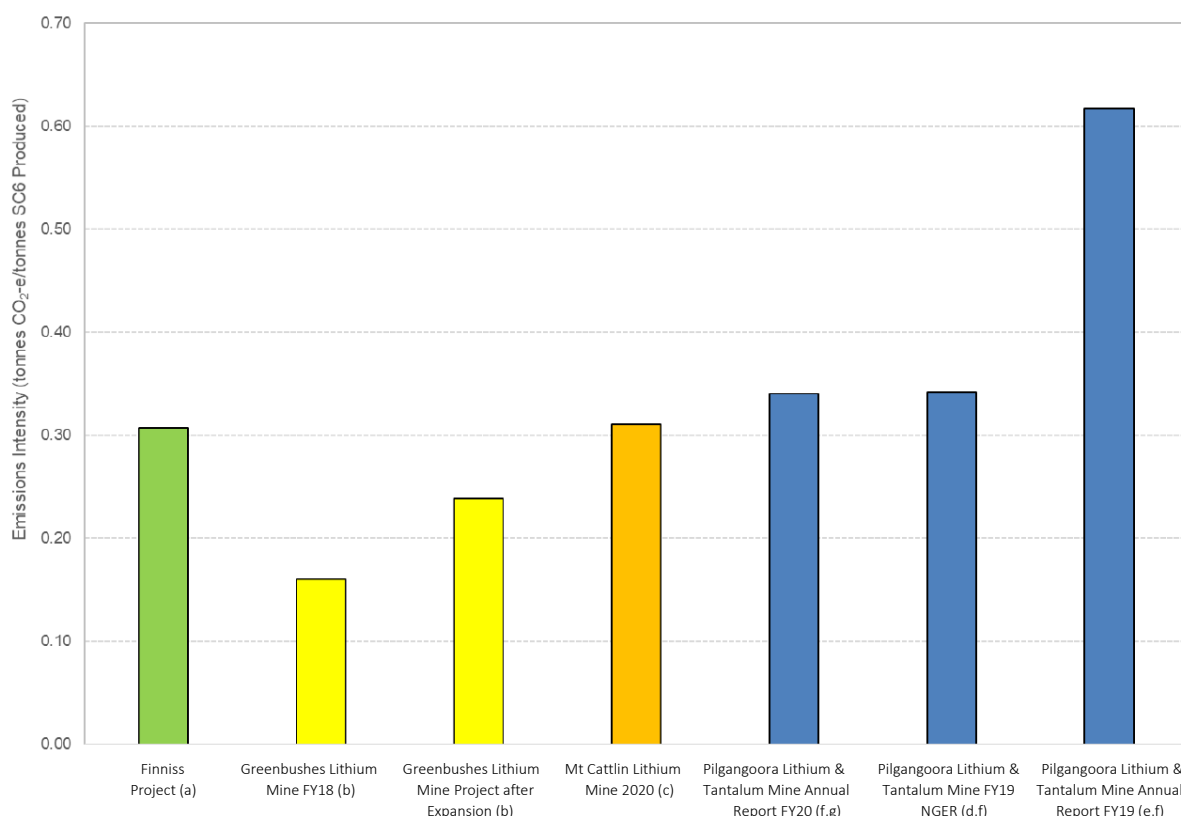
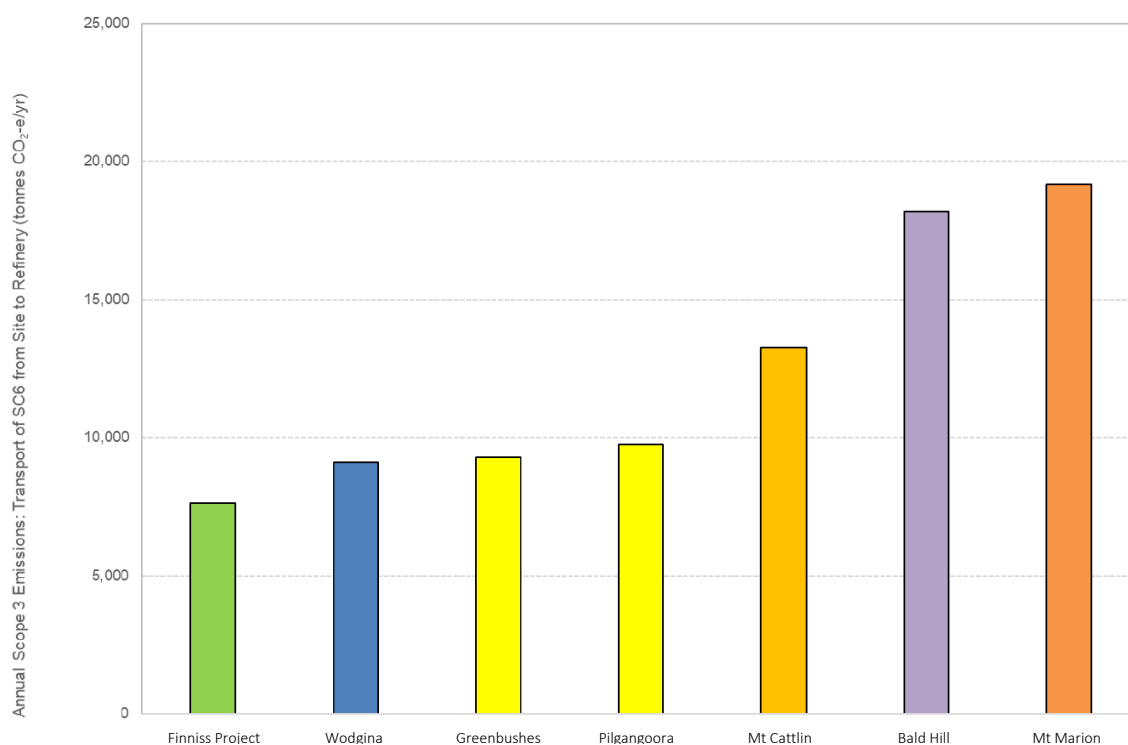


Figure 1. (a) Finnis Lithium Project's spodumene concentrate Emissions Intensity (using Scope 1 emissions, Scope 2 emissions and Scope 3 emissions associated with the transport of the spodumene concentrate product from the site to the refining facilities) and comparison with lithium mines in Australia (Sources: GHD (2018), Pilbara Minerals (2019, 2020) and Galaxy Resources (2020))

Figure 2 shows Annual Scope 3 emissions associated with the transport of the spodumene concentrate product from the site to the refining facilities in China comparison with other Australian lithium mines.

Figure 2 shows the emission intensities from Figure 1 above after the inclusion of Scope 3 emissions associated with the transport of the spodumene concentrate from the sites to the refining facilities. The Scope 3 emissions shown are calculated for the transportation of the same quantity of tonnes from each mine to focus purely on the difference in emissions associated with the different transport legs (including both trucking and shipping legs).



*Figure 2. Annual Scope 3 emissions associated with the transport of the spodumene concentrate product from the site to the refining facilities for the Finnis Lithium Project and comparison with other lithium mines in Australia.*

Core Lithium remains committed to investigating innovative approaches to further reducing its carbon footprint. For example, the Finnis Lithium Project site will undergo significant revegetation as part of the development and rehabilitation strategy. The Company has undertaken a preliminary study on potential Pumped Hydropower Energy Storage for the first Open Pit Mine at the Finnis Lithium Project and Core is considering options related to renewable energy generation and utilisation of electric vehicles.

Core Lithium Managing Director Stephen Biggins said:

*“Core Lithium has always been aware of the inherent Environmental, Social and Infrastructure advantages associated with the Finnis Lithium Project. Work performed to date by ERM Group supports the Company’s push towards greater*

*sustainability transparency and greater focus is being placed on improving the Company's relatively low-carbon footprint.*

*"Core Lithium is actively assessing further optimisation opportunities associated with lower energy use, renewable energy alternatives and investigating other innovative approaches to further reducing its carbon footprint and its push towards sensible Social and Environmental responsibilities."*

This announcement has been approved for release by the Core Lithium Board.

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## About the Finnis Lithium Project

The Finnis Lithium Project is Australia's most advanced new lithium projects on the ASX and places Core Lithium at the front of the line of new global lithium production.

Finniss has Federal Government Major Project Status and is also one of the most capital efficient lithium projects in Australia and has arguably the best logistics chain to markets of any Australian lithium project.

The Project lies within 25km of port, power station, gas, rail and one hour by sealed road to workforce accommodated in Darwin and importantly to Darwin Port - Australia's nearest port to Asia.

Lithium is the core element in batteries used to power electric vehicles, and the Finnis Project boasts world-class, high-grade and high-quality lithium suitable for this use and other renewable energy sources.

## Sources of data for Figure 1

a. Source: (ERM, 2021)

b. Source: (GHD, 2018) - Greenbushes Lithium Mine Expansion: Environmental Referral - Additional Information

c. Source: (Galaxy Resources, 2021) - Sustainability Report for the Year Ended 31 December 2020

d. Source: (Pilbara Minerals, 2019) - Note that this emissions intensity was estimated using the FY19 production reported in the 2019 Pilbara Minerals Annual Report and the FY19 Scope 1 and 2 emissions for the Pilgangoora Lithium and Tantalum Mine downloaded from the NGER website.

e. Source: (Pilbara Minerals, 2019) - Note that this emissions intensity was estimated using the FY19 production and FY19 emissions reported in the 2019 Pilbara Minerals Annual Report. It is not clear why there is an inconsistency in the Scope 1 and 2 emissions reported in the Pilbara Minerals Annual Report and on the NGER website. However, both values are shown here for completion.

f. Note that while SC6 is the primary product of the Pilgangoora mine, there was also some minor tantalum production at the site. Therefore, it is likely that some of the emissions included in the emission intensity estimation are associated with the Tantalum production.

g. Source: (Pilbara Minerals, 2020) - 2020 Pilbara Minerals Annual Report