

# Minim Martap Project Bankable Feasibility Study Update

## Highlights

- Detailed rail optimisation studies forecast significant and material improvements to the capacity of the rail line.
- Updated train simulation modelling predicts an increase of 20% rail traffic capacity on the existing rail line.
- BFS targeted for release in January 2022.

Canyon Resources Limited (ASX: **CAY**) ("**Canyon**" or the "**Company**") is pleased to provide an update on its Minim Martap Project (Project) Bankable Feasibility Study (BFS). The Company has identified some material opportunities to optimise the BFS and improve the project efficiency and economics. The BFS optimisation work has necessitated additional time, hence the current timing targeting BFS release in January 2022.

The key drivers for this revised BFS release date centre around opportunities realised for improved rail production capacity (which directly influences project throughput), and a superior port handling facility location and capacity.

As part of the BFS, Canyon engaged Vecturis, a West African-focused railway engineering consultant, to evaluate Cameroon's rail infrastructure and determine the necessary upgrades and respective costs, assess rolling stock requirements, model the rail traffic capacity, and ultimately provide an optimised operations schedule. The traffic capacity of the railway determines the throughput of the Minim Martap Project as the railway is the limiting factor in the value chain. Rail traffic capacity refers to the number of trains that can reasonably operate between two points in a particular period.

The existing Cameroon railway (*Camrail*, operated by Bolloré Logistics) is a multi-use network transporting freight and passengers from Douala, on Cameroon's coast, through the capital city of Yaoundé, to Ngaoundéré, in the North.



Figure 1: The Camrail rail line in Cameroon

## Minim Martap Project Bankable Feasibility Study Update

Following compilation of comprehensive rail traffic data, Vecturis developed a static traffic capacity model, followed by a dynamic simulation model using specialised railway modelling software. Initially targeting a 5 million tonnes per annum (Mtpa) production rate (throughput), as established in the Project's Prefeasibility Study (PFS), the Vecturis dynamic simulation model concluded that rail traffic capacity is significantly better than previously anticipated. As such, the Project's throughput has increased by more than 20% - a material improvement from the PFS assumptions.

In addition to the rail studies, a review of the rail operations methodology, with the support of the Cameroon Ministry of Transport and Camrail, has identified further opportunities to increase tonnage and improve rail efficiencies.

Separately, on-going negotiations with the Douala Port Authority (PAD) and Camrail have identified an alternative rail unloading and barge loading solution at the port that will facilitate operations and easily accommodate future increases in production.

Parallel to the railway studies, China Minmetals Corporation (MCC) subsidiary, Zhongye Changtian International Engineering Co., Ltd. (MCC CIE), developed the mining schedule, haul road, inland rail facility (IRF) and port designs. MCC is a multinational conglomerate, active in global bauxite mining and refining, and CIE is a major engineering firm accomplished in the development of international mining projects.

MCC CIE is now revisiting the mining schedule and designs to ensure capital and operating costs accurately reflect the Project's increased throughput in line with the increased rail capacity identified by Vecturis.

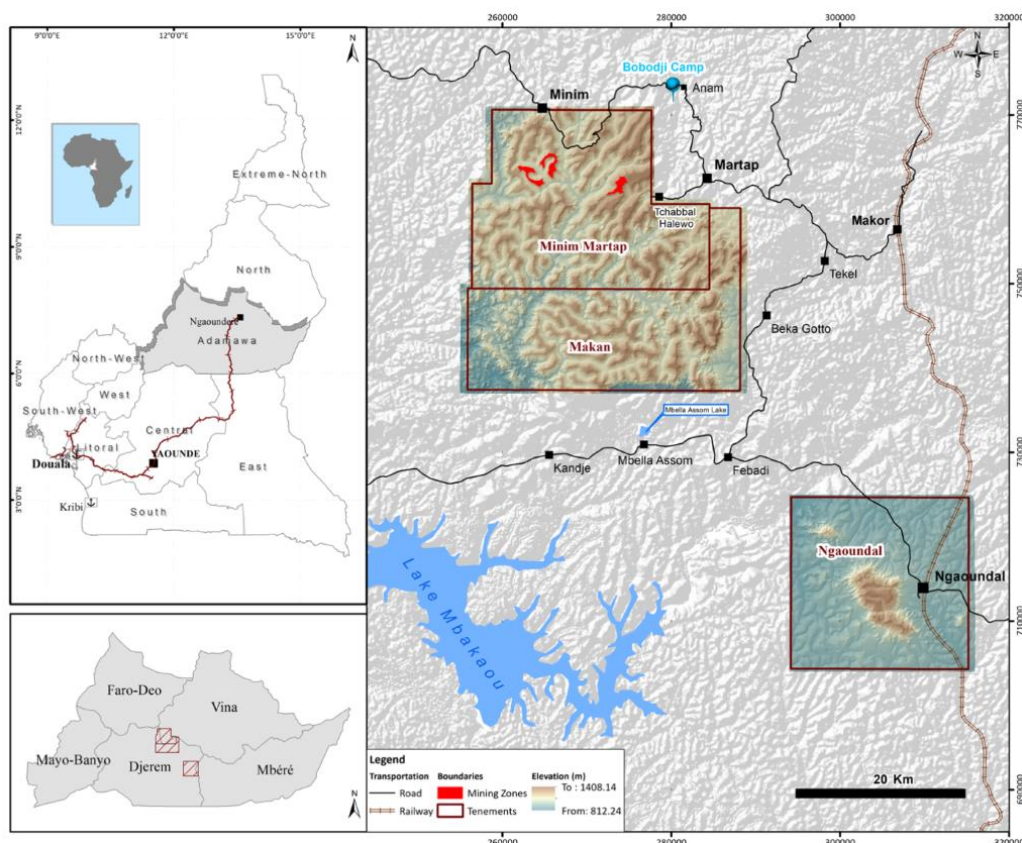
It is anticipated that these key areas of improvement in project logistics will result in much improved project economics over the PFS and the Company looks forward to advising the outcomes in the BFS release scheduled for January 2022.

## About Canyon Resources

### Summary

**Canyon Resources is focussed on the development of its 100% owned Minim-Martap Bauxite Project, a direct shipping ore (DSO) project development opportunity** in central Cameroon. The Project is situated adjacent to the main rail line linking the region to the Atlantic port of Douala. The rail line is currently underutilised and coupled with the existing port of Douala, supports a low capex, low opex solution to deliver high grade, low contaminant, seaborne bauxite to market to fuel the large and growing aluminium industry as described in the 2020 Pre-Feasibility Study. The country is planning a rail extension and is undergoing rail line debottlenecking upgrades, giving longer term potential for export through the newly built, deep-water port of Kribi.

**Canyon is planning the development of the bauxite Project in a 2 Stage, 2 Port execution programme with initial production exported through the port of Douala** utilising the existing rail and port infrastructure and Stage 2 unlocking tonnes and reducing costs by utilising the planned rail extension to access the deep-water port of Kribi.



## Resources and Reserves

The Project is validated by the **Ore Reserve estimate**, (ASX announcement 25 May 2021), prepared by a Competent Person, in accordance with the JORC Code (2012) and is presented as:

Reserve			
Classification	Tonnes (Mt)	Al <sub>2</sub> O <sub>3</sub>	SiO <sub>2</sub>
Proven	99.1	51.6%	2.4%
Probable	-		
Total Ore Reserves	99.1	51.6%	2.4%

The underlying **Mineral Resource estimate** (ASX announcement: 11 May 2021) prepared by a Competent Person, in accordance with the JORC Code (2012) is stated as:

Resource (35% Al <sub>2</sub> O <sub>3</sub> cut-off)			
	Tonnes (Mt) ore	Alumina	Silica
Total	1,027	45.3% Al <sub>2</sub> O <sub>3</sub>	2.7% SiO <sub>2</sub>
Measured	382	47.3% Al <sub>2</sub> O <sub>3</sub>	2.7% SiO <sub>2</sub>
Indicated	597	44.2% Al <sub>2</sub> O <sub>3</sub>	2.7% SiO <sub>2</sub>
Inferred	48	43.2% Al <sub>2</sub> O <sub>3</sub>	3.7% SiO <sub>2</sub>
Contained High Grade Resource (45% Al <sub>2</sub> O <sub>3</sub> cut-off)			
	Tonnes (Mt) ore	Alumina	Silica
Total	500	49.0% Al <sub>2</sub> O <sub>3</sub>	2.6% SiO <sub>2</sub>
Measured	268	49.7% Al <sub>2</sub> O <sub>3</sub>	2.6% SiO <sub>2</sub>
Indicated	218	48.3% Al <sub>2</sub> O <sub>3</sub>	2.5% SiO <sub>2</sub>
Inferred	14	47.3% Al <sub>2</sub> O <sub>3</sub>	2.8% SiO <sub>2</sub>

### Competent Person's Statement – Ore Reserves

The information in this report that relates to Ore Reserves is based on information compiled or reviewed by Mr John Battista, a Competent Person who is a Member and Chartered Professional (Mining) of the Australasian Institute of Mining and Metallurgy and is currently employed by Mining Plus (UK) Ltd. Mr Battista has sufficient experience relevant to the style of mineralisation and type of deposit under consideration and to the activity which they are undertaking to qualify as a Competent Person as defined in the 2012 edition of the Australasian Code for the Reporting of Exploration Results, Mineral Resources, and Ore Reserves (JORC Code).

Mr Battista consents to the disclosure of information in this report in the form and context in which it appears.

### Competent Person's Statement – Mineral Resources

The information in this announcement that relates to mineral resources is based on information compiled or reviewed by Mr Mark Gifford, an independent Geological expert consulting to Canyon Resources Limited. Mr Mark Gifford is a Fellow of the Australian Institute of Mining and Metallurgy and has sufficient experience which is relevant to the style of mineralisation and type of deposit under consideration and to the activity which he is undertaking to qualify as a Competent Person as defined in the 2012 edition of the Australasian Code of Reporting of Exploration Results, Mineral Resources and Ore Reserves (JORC Code).

Mr Gifford consents to the inclusion in the announcement of the matters based on his information in the form and context in which it appears.

### Mineral Resource estimate

The data in this announcement that relates to the Mineral Resource estimates for the Minim Martap Bauxite Project is based on information in the Resources announcement of 11 May 2021 and available to view on the Company's website and ASX.

The Company confirms that it is not aware of any new information or data that materially affects the information included in the original market announcement and, in the case of estimates of Mineral Resources, that all material assumptions and technical parameters underpinning the estimates in the original market announcement continue to apply and have not materially changed. The Company confirms that the form and the context in which the Competent Person's findings are presented have not been materially modified from the original market announcement

### Pre-Feasibility Study

The data in this announcement that relates to the Pre-Feasibility Study<sup>4</sup> for the Minim Martap Bauxite Project and associated production targets and forecast financial information, is based on information in the PFS announcement of 1 July 2020. and available to view on the Company's website and ASX.

The Company confirms that all the material assumptions underpinning the production target and forecast financial information derived from the production target continue to apply and have not materially changed.

### Ore Reserve estimate

The data in this announcement that relates to the Ore Reserve estimate<sup>5</sup> estimates for the Minim Martap Bauxite Project is based on information in the Ore Reserve update announcement of 25 May 2021 and available to view on the Company's website and ASX.

The Company confirms that it is not aware of any new information or data that materially affects the information included in the original market announcement and, in the case of estimates of Ore Reserves, that all material assumptions and technical parameters underpinning the estimates in the original market announcement continue to apply and have not materially changed. The Company confirms that the form and the context in which the Competent Person's findings are presented have not been materially modified from the original market announcement

## Forward looking statements

All statements other than statements of historical fact included in this announcement including, without limitation, statements regarding future plans and objectives of Canyon, are forward-looking statements. When used in this announcement, forward-looking statements can be identified by words such as ‘anticipate’, ‘believe’, ‘could’, ‘estimate’, ‘expect’, ‘future’, ‘intend’, ‘may’, ‘opportunity’, ‘plan’, ‘potential’, ‘project’, ‘seek’, ‘will’ and other similar words that involve risks and uncertainties.

These statements are based on an assessment of present economic and operating conditions, and on a number of assumptions regarding future events and actions that are expected to take place. Such forward-looking statements are not guarantees of future performance and involve known and unknown risks, uncertainties, assumptions and other important factors, many of which are beyond the control of the Company, its directors and management of Canyon that could cause Canyon’s actual results to differ materially from the results expressed or anticipated in these statements.

Canyon cannot and does not give any assurance that the results, performance or achievements expressed or implied by the forward-looking statements contained in this announcement will actually occur and investors are cautioned not to place undue reliance on these forward-looking statements. Canyon does not undertake to update or revise forward-looking statements, or to publish prospective financial information in the future, regardless of whether new information, future events or any other factors affect the information contained in this announcement, except where required by applicable law and stock exchange listing requirements.

**This announcement has been approved for release by the Board**

**Enquiries:**

PHILLIP GALLAGHER | Managing Director | Canyon Resources Limited T: +61 8 6382 3342

E: [info@canyonresources.com.au](mailto:info@canyonresources.com.au)



**CANYON RESOURCES LIMITED – INTEREST IN MINERAL PROPERTIES**

Permits	Location	Interest at 30 December 2020	Interest at 30 September 2020
<u>MINIM MARTAP PROJECT</u>			
Ngaoundal	Cameroon	Own 100%	Own 100%
Minim Martap	Cameroon		
Makan	Cameroon		
<u>BIRSOK BAUXITE PROJECT</u>			
Birsok	Cameroon	Agreement to earn up to 75%.	Agreement to earn up to 75%.
Mandoum	Cameroon		
Mambal (application)	Cameroon	Agreement to earn up to 75%.	Agreement to earn up to 75%.
Ndjimom (Mayouom Project)	Cameroon	Own 100%	Own 100%
<u>TAPARKO NORTH PROJECT</u>			
Karga 2	Burkina Faso	Own 100%	Own 100%
Bani	Burkina Faso		
Diobou	Burkina Faso	Rights to 100%	Rights to 100%
Tigou	Burkina Faso		
<u>TAO PROJECT</u>			
Tao	Burkina Faso	Own 100%	Own 100%
<u>PINARELLO PROJECT</u>			
Sokarani	Burkina Faso	Own 49% (sale of 51% to Acacia Mining plc)	Own 49% (sale of 51% to Acacia Mining plc)
Niofera	Burkina Faso		
Baniera	Burkina Faso		
Sokarani 2	Burkina Faso		
Soukoura 2	Burkina Faso		
<u>KONKOLIKAN PROJECT</u>			
Konkolikan	Burkina Faso	Own 49% (sale of 51% to Acacia Mining plc)	Own 49% (sale of 51% to Acacia Mining plc)
<u>DEROSA PROJECT</u>			
Bompela	Burkina Faso	15% interest in joint venture with Rumble Resources Ltd	15% interest in joint venture with Rumble Resources Ltd
Sapala	Burkina Faso		