



# Canyon delivers Pre-Feasibility Study for Minim Martap Bauxite Project

## Highlights

- **Robust Pre-Feasibility Study**, completed on time despite global impacts, demonstrates **Minim Martap Bauxite Project** as a potential **long-term producer of high quality, low contaminant bauxite** via multi-stage development.
- **Strategic partnerships and off-take agreement** discussions underway with potential to accelerate development timeline.
- **Minim Martap Stage 1 Project** outcomes:
  - **5 million tonnes per annum** production rate, exporting through Douala port<sup>1</sup>
  - **NPV<sub>10</sub> of US\$291M**
  - **IRR of 37%**
  - **Capex of US\$120M**
  - **Payback of 4.2 years**
  - LOM Average **Opex US\$35.1/t**
  - 2023 initial bauxite price of US\$43.5/t increasing to **an average of US\$51.2/t over 20 years**
- Detailed mine scheduling demonstrates **production profiles of 52% average total alumina and 2.3% average total silica for the first 20 years of operation**
- **Project will utilise 3<sup>rd</sup> party owner-operator rail infrastructure** lease arrangement derived from first principles and supported by industry benchmarking and interested parties
- **Stage 1 start up through Douala Port** provides a faster route to market, with future upside underpinned by expansion potential via the larger tonnage Stage 2 development through Kribi Deep Water Port
- Canyon has shipped **bulk samples** for third-party testing **to support offtake, equity and development** partnership discussions
- PFS underpinned by Minim Martap's 2019 Mineral Resource estimate of **892Mt at 45.1% Al<sub>2</sub>O<sub>3</sub>, 2.8% SiO<sub>2</sub>** (Cut-off Grade 35% Al<sub>2</sub>O<sub>3</sub>)<sup>2</sup>
- **Maiden Ore Reserve estimate** anticipated following the PFS release

<sup>1</sup> Approximately 0.2% of the total product scheduled for mining in the Pre-Feasibility Study for the first 20 year modelling period is underpinned by Inferred Mineral Resources. 98.8% of the total product scheduled for mining in the Pre-Feasibility Study for the first 20 year modelling period is underpinned by Indicated Mineral Resources. It must be noted that there is a low level of geological confidence associated with Inferred Mineral Resources. There is no certainty that further exploration work will result in upgrading the Inferred material to Indicated status or that the production target itself will be realised

<sup>2</sup> Refer to Table 3 for a breakdown of the Mineral Resource Estimate.

## Cautionary Statement

The Pre-Feasibility Study (PFS) referred to in this announcement has been undertaken to determine the potential viability of direct shipping of high quality bauxite ore from the Minim Martap Project in Cameroon through the port of Douala as Stage 1 of a 2-Stage DSO Project where Stage 2 envisions shipping at lower cost and higher rates through the deep water port of Kribi. The PFS is a preliminary technical and economic study of the potential viability of the Minim Martap Bauxite Project. The PFS estimate is costed to an accuracy level of +/- 25% and considered sufficient to support the estimation of Ore Reserves which will be the subject of a subsequent ASX announcement and based on the 5 Mtpa Stage 1 start-up. The estimate of an Ore Reserve is yet to be completed.

The PFS is based on the material assumptions outlined in this announcement, including assumptions about the availability of funding. While Canyon considers all the material assumptions to be based on reasonable grounds, there is no certainty that they will prove to be correct or that the range of outcomes indicated by the PFS will be achieved.

To achieve the range of outcomes indicated in the Pre-Feasibility Study, funding of in the order of US\$120 million in Project development capital will likely be required. Investors should note that there is no certainty that Canyon will be able to raise that amount of funding when needed. It is also likely that such funding may only be available on terms that may be dilutive to or otherwise affect the value of Canyon's existing shares. The Pre-Feasibility Study is also predicated on the supply of 3<sup>rd</sup> party owner-operator rail infrastructure. Although Canyon has factored into the Pre-Feasibility Study calculated commercial rates of usage for this infrastructure and commenced discussions with potential providers, there is no certainty that the such parties will be prepared to provide such infrastructure and if so on the terms contemplated.

It is possible that Canyon could pursue other 'value realisation' strategies such as a sale, partial sale or joint venture of the Project. If it does, this could materially reduce Canyon's proportionate ownership of the Project.

Given the uncertainties involved, investors should not make any investment decisions based solely on the results of this PFS.

Approximately 6% of the total Mineral Resources at the Project, and approximately 0.2% of the total product scheduled for mining in the Pre-Feasibility Study for the first 20 year modelling period is underpinned by Inferred Mineral Resources. 98.8% of the total product scheduled for mining in the Pre-Feasibility Study for the first 20 year modelling period is underpinned by Indicated Mineral Resources. It must be noted that there is a low level of geological confidence associated with Inferred Mineral Resources. There is no certainty that further exploration work will result in upgrading the Inferred material to Indicated status or that the production target itself will be realised.

## Canyon delivers Pre-Feasibility Study for Minim Martap Bauxite Project

Canyon Resources Limited (**Canyon** or the **Company**) is pleased to announce the results of a Pre-Feasibility Study (**PFS**) for the Company's 100%-owned Minim Martap Bauxite Project ("**the Project**" or "**Project**") in Cameroon, West Africa, confirming the project's ability to produce high quality, low contaminant bauxite over a long mine life of at least 20 years via a multi-stage development.

The PFS expanded on Canyon's Scoping Study<sup>3</sup> in November 2019, and is underpinned by Minim Martap's very high grade, low silica bauxite resource<sup>4</sup>, positioning the Minim Martap Bauxite Project as one of the highest quality bauxite deposits globally and providing diversification away from concentrated Guinea supply.

Canyon Managing Director Phillip Gallagher said: "The PFS outlines a fast-track to production at Minim Martap, and underlines the project's potential to supply strategic project partners with high quality bauxite over a long mine life. Interest in the project and demand for our product has been very encouraging, and delivery of the PFS will support more detailed discussions with a range of potential partners as we look to move forward with its development."

Minim Martap's PFS focused on commencing mining operations as quickly as possible and maximising tonnage through the Douala Port, whilst reducing project operating expenditure (opex). The PFS optimised the Stage 1 operation to fit within the capability of Cameroon's existing rail and port infrastructure, minimising the need for additional capex on infrastructure upgrades.

The PFS headline economics are shown in Table 1:

*Table 1 - Minim Martap Project headline economics (rounded).*

Minim Martap Project	Units	Stage 1
Annual Production Rate	Mtpa	5.0 <sup>5</sup>
Project Development Capital	US\$M	120
Average Operating Cost C1	US\$/t	35.1
Project NPV <sub>10</sub>	US\$M	291
Project IRR	%	37
Capital Intensity	US\$/t	24

The PFS has successfully developed the technical and commercial solutions for Stage 1 of a two-stage project development plan for the Minim Martap Project. The Stage 1 mining and Direct Shipping Ore (DSO) export operation of 5.0 million tonnes per annum exported through the existing Douala port utilises existing infrastructure to provide an economic and faster start up. This capacity has been identified through the optimisation of rail scheduling, integrating the mine development with ongoing in-country rail upgrades and allocating a more efficient rail fleet.

The mine will begin at 4Mtpa before ramping up to 5Mtpa in line with the rail axle load increase from 17 to 20 tonnes per axle, which is part of the ongoing rail upgrades currently under construction by the Cameroon Government. Stage 1 provides a foundation that enables ongoing operations of the mine through the potential Stage 2 development. Completion of Stage 2 is expected to provide increased tonnage and a decrease in operating costs by shipping through the Kribi Deep Water Port.

<sup>3</sup> ASX announcement 28 November 2019

<sup>4</sup> ASX announcement 27 September 2019

<sup>5</sup> Approximately 0.2% of the total product scheduled for mining in the Pre-Feasibility Study for the first 20 year modelling period is underpinned by Inferred Mineral Resources. 98.8% of the total product scheduled for mining in the Pre-Feasibility Study for the first 20 year modelling period is underpinned by Indicated Mineral Resources. It must be noted that there is a low level of geological confidence associated with Inferred Mineral Resources. There is no certainty that further exploration work will result in upgrading the Inferred material to Indicated status or that the production target itself will be realised

Mining and supply chain solutions defined in the PFS are simple, well understood and largely in place for the nominated volumes. It envisages very low strip ratio mining with surface miners, and the bauxite blended into an average grade of 52% total alumina and 2.3% total silica, which will be bulk hauled as DSO to a dedicated train load out area. Front end loaders will load the product into open top, lidded, rotating container boxes ready for rail transport. The trains will transport the bauxite ore to Douala port where the boxes will be lifted off the trains and unloaded, via conveyor, to the bulk storage shed at a designated berth. Front end loaders will reclaim the ore and load barges via conveyor ship-loaders for trans-shipping into capesize vessels for export to market.

Canyon's Director of Projects James Durrant said: "The PFS defines a technically and commercially robust project which offers definition of a long term, exceptionally high-grade bauxite product mined from Minim Martap. The consistent high quality of the bauxite mined offsets the cost of rail haulage, supports efficient refining by the end user and sets the platform for further upside potential in resource expansion and product development."



*Figure 1 - Community members being consulted as part of the ESIA. Some of the bauxite plateaux are visible on the horizon.*

## Minim Martap Bauxite Project

### Key Pre-Feasibility Study outcomes

**Financial evaluation highlights potential for a robust project leveraging existing infrastructure and high-quality product.** All figures provided in this Pre-Feasibility Study are real as of Q2 2020. Key economic modelling outcomes are shown in Table 2.

Table 2 - Economic modelling outcomes for Minim Martap Project.

Production		Avg-Yr	
Production rate	Mt	4.9	
Capital		Total	
Total	USD 000	119,600	
Capital intensity	USD/t capacity	24.5	
Operating Costs		Avg-Yr	
C1 costs	USD/t	35.1	
Product Grade		Avg-20Yr	
Available alumina grade	%	52.0%	
Reactive silica grade	%	2.3%	
Ore moisture content	%	10.0%	
Realised price		Initial Price	Avg-20Yr
Realised price	USD/t FOB	43.5	51.2
Cashflow		Total	
Cumulative undiscounted free cash flows	USD 000	988,500	
Average annual undiscounted free cash flows	USD 000	49,400	
Project payback (post tax)		4.2 Yr(s)	
Valuation	Discount rate	NPV (USD 000)	IRR
Project return - pre tax	10.00%	374,600	40%
Project return - post tax	10.00%	290,700	37%
Tax and Royalty		Duration	Rate
State royalty: Holiday		5.0 Yr(s)	-
State royalty: Nominal after holiday		-	5%
Corporate tax: Holiday		5.0 Yr(s)	-
Corporate tax: Nominal after holiday		-	30%



## Project overview

Canyon's 100% owned Minim Martap Bauxite Project in central Cameroon is a long term, high quality, direct shipping development opportunity with substantial upside, scheduled to produce at average grades of 52% Total Alumina and 2.3% Total Silica. The Project's long term, stable, high grade and low contaminant production profile positions it as one of the highest quality bauxite assets. The high alumina content improves product transport efficiencies and reduces fuel use and the low silica reduces caustic soda consumption during processing.

Product comparisons using Wood Mackenzie data sets suggest the Minim Martap bauxite could be one of the highest quality products in the world, including in West Africa where Guinea dominates the high quality bauxite seaborne market, demonstrated in the comparisons to Wood Mackenzie data in figure 1.

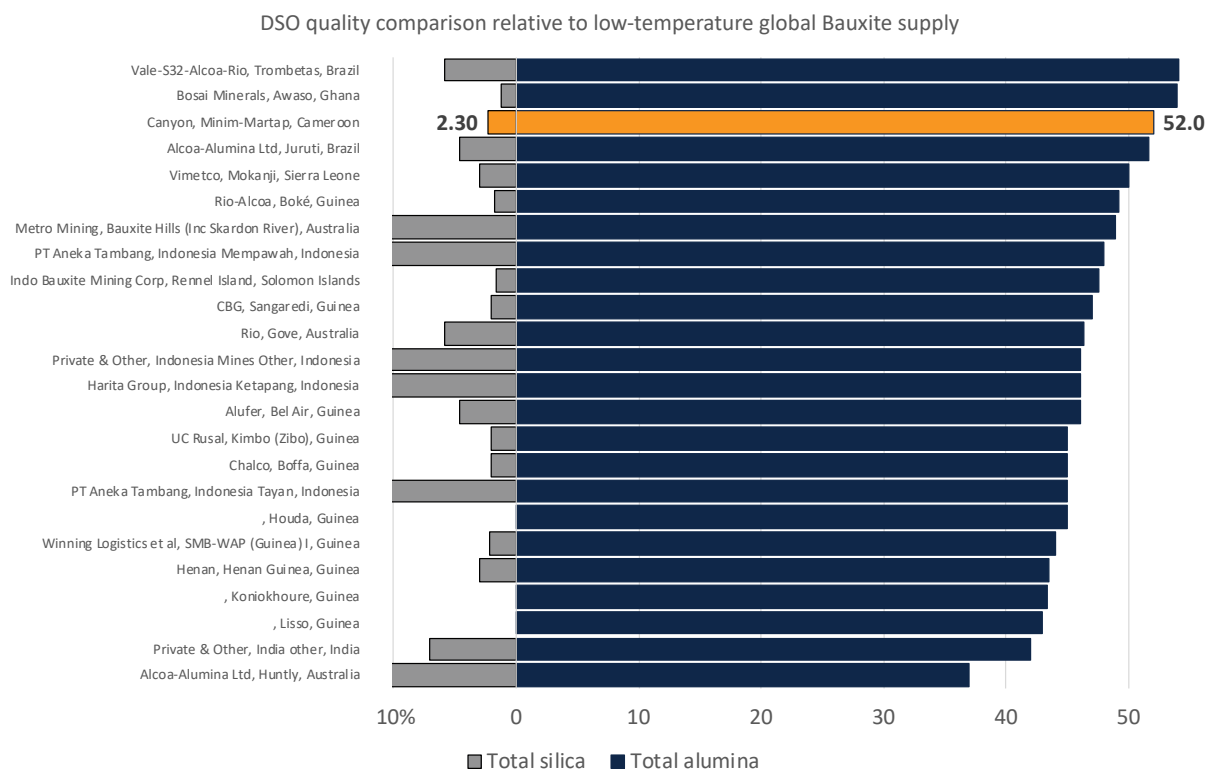


Figure 2 - Minim Martap bauxite product quality comparison against Wood Mackenzie database.

The Project is underpinned by a large, shallow resource dominated by gibbsite with minor boehmite, and low levels of reactive silica. The resource is hosted in a series of plateaux. Digestion test work to date has shown the bauxite to be very reactive when treated at lower temperature levels in the Bayer process.

The Total Mineral Resource<sup>6</sup> estimate for the 15 tested plateaux is stated as:

**892 Mt at 45.1% Al<sub>2</sub>O<sub>3</sub>, 2.8% SiO<sub>2</sub> (Cut-off Grade 35% Al<sub>2</sub>O<sub>3</sub>)**

The estimate contains a high-grade Indicated portion of the resource at:

**410 Mt at 48.9% Al<sub>2</sub>O<sub>3</sub>, 2.6% SiO<sub>2</sub> (Cut-off Grade 45% Al<sub>2</sub>O<sub>3</sub>)**

Substantial zones within the resource present at greater than 50% Al<sub>2</sub>O<sub>3</sub> with very low contaminants.

<sup>6</sup> Refer to Table 3 for a breakdown of the Mineral Resource Estimate. Refer ASX announcement 27 September 2019. The Company is not aware of any new information or data that materially affects the information included in that announcement and all material assumptions and technical parameters underpinning the Mineral Resource estimates in that announcement continue to apply and have not materially changed.

**Minim Martap's deposits are within 50km of the main rail line linking the region to the Atlantic port of Douala.** The PFS concluded that the rail line is currently underutilised and coupled with the existing port of Douala, represents an effective solution to deliver high grade, low contaminant, seaborne bauxite to market to support the large and growing aluminium industry. The deep-water port of Kribi represents a second export option, anticipated to lower operating expenses and provide the basis for increased capacity (Stage 2).

**The mining and supply chain solutions are simple, well understood and largely in place.** Low strip ratio mining (0.3:1 waste: bauxite) will be conducted with surface miners and the bauxite blended into an average grade of 52% Total Alumina and 2.3% Total Silica which will be bulk hauled to the train load out near the town of Makor. Loaders will load the product into open top, lidded, rotating container boxes ready for lifting onto the dedicated trains. The trains will transport the product to Douala where the full boxes will be lifted off the trains, upturned to unload and transported, via conveyor, to the bulk storage shed at the designated berth. Front end loaders will reclaim the product from storage and load barges which will tranship, via a floating crane, into capesize vessels for export to market.

**Commercial offtake and infrastructure access agreement processes are advancing following the appointment of Rick Smith as Chief Development Officer.** Bulk offtake samples are being shipped to counterparty nominated labs to support potential strategic offtake, equity and development partnerships in Europe and China and discussions are advancing with parties in the Middle East, SE Asia, Russia and North Africa with additional offtake samples planned to be sent in the coming weeks. Cooperation agreements for rail and port partners have been presented and are being complemented by the Rail and Port Concept of Operations documents, setting the foundation for formal access agreements.

**The Project will generate local community and fiscal dividends to a country motivated to kick start its mining industry.** It is anticipated that during operations at least 650 direct local Cameroonian jobs will be created along with many times this number in indirect employment through supporting industries. Employment and industry creation, in addition to the local development fund, in the region will substantially improve the local economy and at a national level the Project will realise average tax and royalty revenue of approximately US\$28m per year<sup>7</sup>.

**The Company has assumed that the required rail rolling stock and rail infrastructure will be acquired, owned and operated separately to the Project.** The Company has modelled from first principles the capital and operating costs of the rail and rolling stock requirements and has included a capital return and operating margin to the owner-operator. The margins to the owner-operator have been modelled and the rate of return benchmarked to similar operational arrangements. Canyon has commenced discussions with appropriate companies, including specialist African rolling stock providers and logistics operators who have expressed interest in the financing and operation of the rolling stock and associated infrastructure.

### Production rate and Life of Mine (LOM)

**The PFS presents the Project utilising existing rail networks and integrating with upgrade rail projects currently underway, increasing the probability of a fast start-up.** The PFS shows Stage 1 initial production rates of 4 million tonnes per annum ramping up to 5 million tonnes per annum by 2026 in line with an expedited increased axle load upgrade project currently being undertaken by the rail operator and the Government of Cameroon. The 5 Mtpa production rates are enabled by focussed upgrades to the trail infrastructure, integrating the Project with exiting rail upgrade projects and by utilising a fit-for-purpose train fleet operating on an optimised rail schedule.

**The nominated modelling period of 20 years reflects pricing forecast confidence and artificially truncates the operation after the development of three mining areas on three separate plateaux.** 77 plateaux remain within the

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<sup>7</sup> Average calculated post tax holiday.

Project tenements, 62 of which have not yet been drill-tested and the 892Mt Mineral Resource estimate<sup>8</sup> is made up of only 15 plateaux in total, highlighting the vast extent and potential of this project. There is reasonable probability that further high grade mineral resources will be identified across the tenements and the Project will have a multi decade mine life.

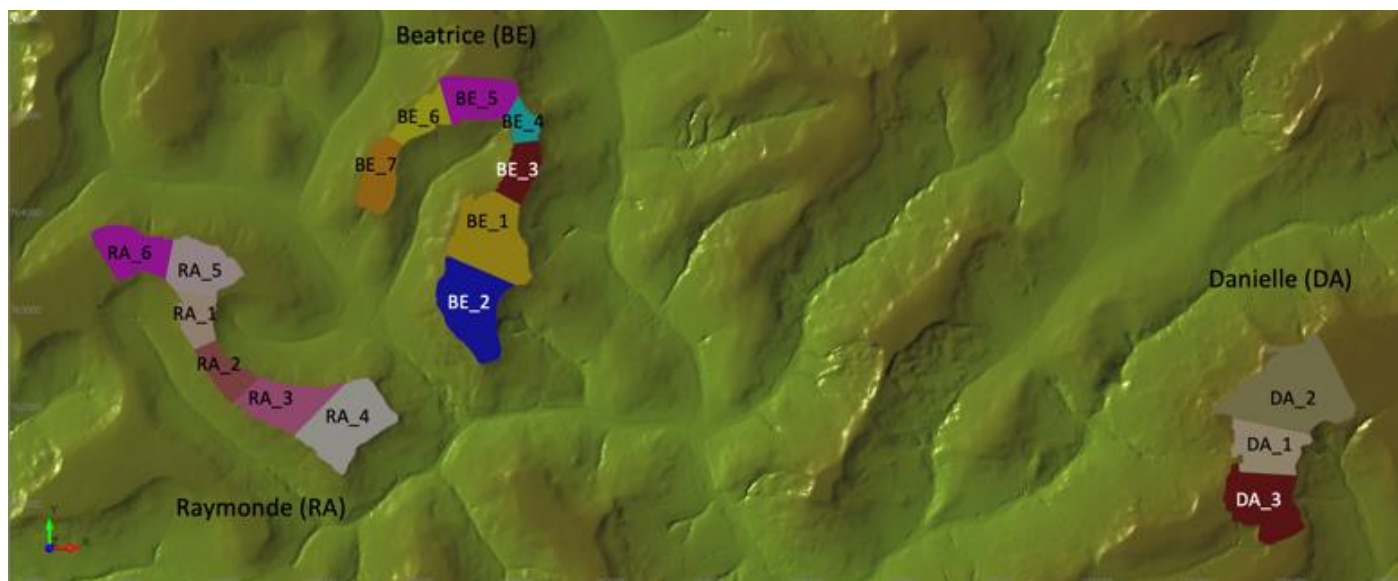


Figure 3 - Life of Mine mining areas.

### Market and pricing

The seaborne bauxite market is dominated by China, which imports 100 million tonnes per annum. This represents two thirds of the global seaborne bauxite supply of 150 million tonnes. About 50% of China's imported bauxite is from Guinea. Whilst China represents a potential offtake market, offtake and strategic partnership discussions have been developing with companies from outside of China, including companies planning the construction of new alumina refineries. The reduced costs of refining by utilising long term supply of very high grade low silica bauxite highlights the strategic value of the Minim Martap Bauxite Project and the strategic geopolitical diversification from the currently very concentrated supply jurisdictions.

Particular interest has been expressed from new refinery builders, including those from European Middle East and SE Asian countries whose governments have mandated aluminium supply chain security. Refinery builders value the quality of the bauxite and, through the long term stable grade profile, are potentially able to reduce capital infrastructure and improve the environmental footprint of future installations where typical standard grade bauxite requires upwards of three-times the caustic soda capital infrastructure than the anticipated high-grade Minim Martap product, due to the exceptionally low silica.

Product pricing has been adjusted down relative to the Scoping Study, and profiled, to reflect the latest forecast pricing curves whilst recognising the product quality margins from higher Alumina and lower Silica relative to standard bauxite. Bauxite prices, CIF China, are currently suppressed due to the COVID-19 pandemic and forecast short to medium-term oversupply. However, freight rates are also at historical lows which results in the China FOB price, West Africa, maintaining attractive product margins. The Project has used internal analysis and data from Wood Mackenzie to forecast a suppressed, quality adjusted, starting price of \$43.5/t FOB ramping up to the long term, average of 51.2/t FOB.

<sup>8</sup> ASX announcement 27 September 2019. The Company is not aware of any new information or data that materially affects the information included in that announcement and all material assumptions and technical parameters underpinning the Mineral Resource estimates in that announcement continue to apply and have not materially changed.



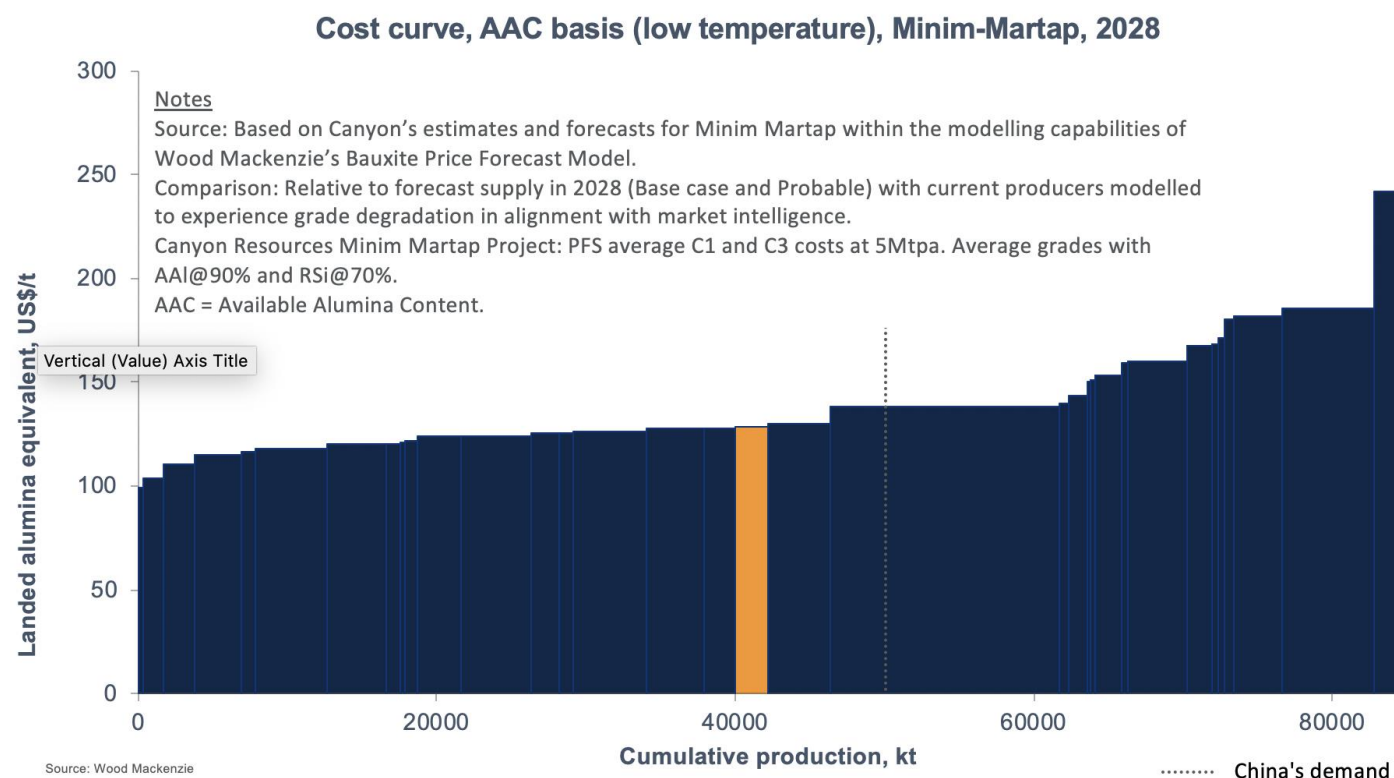


Figure 4 - Cost curve showing Minim Martap Project's average costs relative to forecast producers.

**Canyon's Minim Martap Bauxite Project presents centrally in the alumina equivalent cost curve for low temperature bauxite** (Figure 4). Due to the long-life of the Project and high quality of the bauxite product, on a quality adjusted basis, the alumina equivalent costs are favourable relative to current producers, buffered against the impacts of additional supply and able to take advantage of grade depletion across existing suppliers. China's low temperature merchant supplied alumina-equivalent bauxite demand sits at about 48 million tonnes relative to a global low temperature supply-demand of nearly 60 million tonnes. Alumina-equivalent bauxite represents a normalisation for grade differentials across different suppliers, derived from Wood Mackenzie's Bauxite Price Forecast Model. Analysis is based on Canyon's estimates and forecasts for Minim Martap within the modelling capabilities of Wood Mackenzie's Bauxite Price Forecast Model.

### Development approach

**The PFS aimed to define an effective, rapid start, stand-alone project to provide stable, high-grade product supply potential and to act as a foundation for multi-stage, transformative, asset development.** This was achieved by maximising capacity through the existing supply chain and investing in capital infrastructure to reduce operating cost and de-risk the Project. PFS optimisation focussed on identifying the path to unlock supply chain capacity, with particular emphasis on the rail line.

**Project funding is modelled as 100% equity funded for the purposes of the PFS.** Given the market capitalisation of Canyon this is thought to be an appropriate and achievable funding path. However, the Company recognises the benefit of alternate solutions and intends to explore different financing structures, during the upcoming feasibility study phase, including a potential combination of debt and equity.

**The PFS defines Stage 1 producing 5 million tonnes per annum whilst integrating with rail de-bottlenecking projects currently underway.** Stage 1 ramps up from 4 to 5 million tonnes through the port of Douala. The Project is anticipated to progress to feasibility studies at a production rate of 5 million tonnes. Stage 2, through Kribi deep-water port, is conceivable once the planned Kribi rail link is installed<sup>9</sup>.

	1H2020	2H2020	1H2021	2H2021	1H2022	2H2022	1H2023	2H2023
Baseline studies and ESIA								
Feasibility Study								
Geotech and geological drilling								
Infrastructure access agreements								
Approvals and permitting								
Bankability and financing								
EPCM and critical contracts								
Long-lead fabrication								
Construction								
Production commencement								

Figure 5 - Development timeline

**The Project has the potential to be in operation by 2023.** The Feasibility Study and ESIA culminate in the award of mining licenses under a mining convention (agreement) anticipated to be completed mid-2021. A draft mining convention is currently under negotiation. Infrastructure access agreements coupled with approvals and technical updates for bankability provide financing options allowing a final investment decision to be made in the second half of 2021. Contract awards allow for long-lead fabrication to begin early whilst on-site construction commences during the second half of 2022, resulting in operations in mid to late 2023. Development timelines are subject to variable external influences however an indicative execution schedule is presented in Figure 5.



Figure 6 - PFS team with infrastructure stakeholders

<sup>9</sup> Stage 2 Project capex components have been factored for transitioning to Kribi and the Kribi rail link is anticipated to be funded by a third party.

## PFS Project elements

### Summary

**The PFS defines the first stage of the Minim Martap Bauxite Project and draws on the key learnings from the Scoping Study delivering a PFS at an accuracy of +/- 25% for the export of metallurgical grade bauxite.** The PFS meets the primary objective of defining an effective, standalone project by optimising what is currently available whilst identifying upgrade potential. Stage 2 switches the exports from Douala to deep water port of Kribi which is expected to reduce export costs. The Kribi rail link is assumed to be developed by the Cameroon Government as defined in their strategic project pipeline.

**Stand-alone economic feasibility is demonstrated, and product scheduling highlights, the ability of the Project to deliver long term, stable, high grade produce.** The company believes this product quality profile will catalyse joint venture and strategic partner agreements which have been in discussions for several months. Particular interest has been shown by refinery operators who require long term, stable, high-grade bauxite and the Project offers a hedge against market and political volatility.

**As a platform for growth, Stage 1, underpinned by the large and high-grade resource, provides a foundation for expansion and further asset development.** Whilst being able to deliver immediate, high-quality, bauxite to market the location and product quality set the scene for capacity growth and potential future, brown-field, refinery development where the existence of gas and hydro-electric power and industrial hubs present opportunities for metallurgical and non-metallurgical beneficiation. Previous studies have shown the potential viability of beneficiation in Cameroon and these potential future developments are the subject of ongoing technical investigations and commercial discussions.

### Key changes since Scoping Study

**The Scoping Study provided key insights into the Project's sensitivities and risks which have been incorporated into the PFS.** Whilst only a single technical solution was presented at the Scoping Study, multiple alternatives were analysed allowing re-configuration within the PFS. Each component of the supply chain was assessed to ensure the optimal technical solution was selected to meet the requirements identified from sensitivity analysis. The main differences between the scoping Study and PFS are as follows:

**Capacity increase to a nominal rate of 5 Mtpa.** The rail network was identified as the bottleneck and unlocking rail capacity became a priority for the PFS. Rail schedules were re-mapped unlocking schedule capacity within the current rail traffic. Train sets were designed to optimise to the rail schedule gaps and the passing loops, with some below-rail upgrades designed to enable the increase. Current rail upgrade projects, by the rail operator and owner, were integrated to form the final production rate profile. The ramp up to 5 Mtpa is possible by integrating with the increase in axle load capacity currently scheduled to be completed by the rail operator and Government of Cameroon by 2028. Discussions with the rail upgrade project funders and rail operator have shown the opportunity for this to be completed by 2026 to maximise the output of the rail.

- **Rail fleet has been designed and the unit rate charged to the Project has been calculated based on the capital repayments on the rollingstock and rail infrastructure, operating costs and benchmarked operating margins.** The optimised train configurations were designed and costed by a supplier. Operating costs of the new fleet, including capital repayments, were incorporated within the Project's operating costs. Although the Company has assumed a 3<sup>rd</sup> party supplier of rollingstock and rail infrastructure, the Government of Cameroon has also stated that it is actively seeking public-private partnership<sup>10</sup> arrangements via the World Bank for the development of logistics solutions and the Minim Martap Bauxite Project has the potential to facilitate the unlocking of funding for these developments.

<sup>10</sup> <https://pppknowledgelab.org/countries/cameroon>

- **Port equipment fully capitalised.** Due to the increase in production capacity of the Project it was determined to fully capitalise the Port equipment rather than relying on underutilised capacity of the current port material handling fleet. This includes the capitalisation of conveyance, storage and rehandling facilities between the rail unloading station and the loading berth. Loading and unloading operations are anticipated to be continuous with capesize vessel ship arrivals every 2-3 weeks. The Stage 1 port equipment will be transferrable for the Stage 2 development at the Kribi Port if required.
- **Port terminal identified.** During the PFS contractor and consultant site visit in February 2020<sup>11</sup> the Port Authority of Douala (PAD) invited the Canyon delegation to inspect three potential Bauxite loading berths. Two were considered favourable to the Project and the PFS team designed infrastructure for both locations. One of these has been selected for the purpose of the PFS however both have been identified as potential solutions and put forward in a Concept of Operations document, summarising the development of the port terminal and presented to the Port of Douala.
- **Detailed mine scheduling and product profiling.** Strategic mining schedules have been re-run with optimisation software using updated cost assumptions following the Scoping Study. These schedules refined the initial mining to three plateaux in a tight cluster: Raymonde, Danielle and Beatrice plateaux. The resulting direct shipping ore product grade profiles demonstrate a consistently high grade product with low contaminants. This is being used to develop product technical specifications.
- **Transshipment quote from leading contractor and potential strategic partner.** Designs were developed for an owner-operated transshipment operation between the Douala berth and the deep water transshipment location. However, following on from, and potentially to be integrated with, strategic partner and offtake discussions, the requirements were passed to an experienced transshipment operator and the resulting commercial solution was identified as lower risk and more effective than owner operations and became the base case for the PFS.

### Project elements

**The Minim Martap Bauxite Project will consist of conventional operating methodologies and simple technical solutions whilst utilising existing rail and port infrastructure.** Stage 1 focusses on export from Douala port. The following elements summarise the Project's key components:

- Three open cut mines extracting DSO Bauxite from discrete plateaux in a sub-horizontal mining approach beginning at Beatrice South, then Raymonde-East and subsequently Danielle-Central.
- Supporting infrastructure near the mine site including run-of-mine (ROM) blending stockpiles, workshop, warehouse and fuel farm, offices and administration, power generation and accommodation camp.
- An upgraded government road and a road extension linking the mining area to the inland rail facility (IRF) near the existing Makor railway station.
- A train loadout facility including stockpiles and train loading infrastructure.
- Port facilities within the Douala port including train un-loading, laboratory facilities, stockpiling and transshipment.
- Transshipment between the Douala berth and a deep-water transshipment location.

### Project location and access

**The Minim Martap Bauxite Project is made up of three tenements referred to as Minim Martap, Makan, and Ngaoundal all located within the Vina and Djerem Departments of the Adamawa region in central Cameroon.** The mining areas of the Minim Martap and Makan tenements sit within 50km of the railway station of Makor, whereas the town and railway station of Ngaoundal sits within the Ngaoundal tenement putting potential mining areas within

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<sup>11</sup> ASX announcement 19 February 2020.



5km of the rail head. Current access to the proposed mining areas of the Minim Martap tenement is via an 80km public road from the railway village of Makor including a short spur into the plateaux before the town of Martap (Figure 7).

The mining areas, defined by the strategic scheduling and subsequent detailed scheduling and pit designs, are within three plateaux within the Minim Martap tenement as show in red in the map below. The Company's Bobodji exploration camp is within 20km of the mining areas and is expected to be retained as base camp for the ongoing ESIA and baseline studies and the future feasibility study and construction programmes.

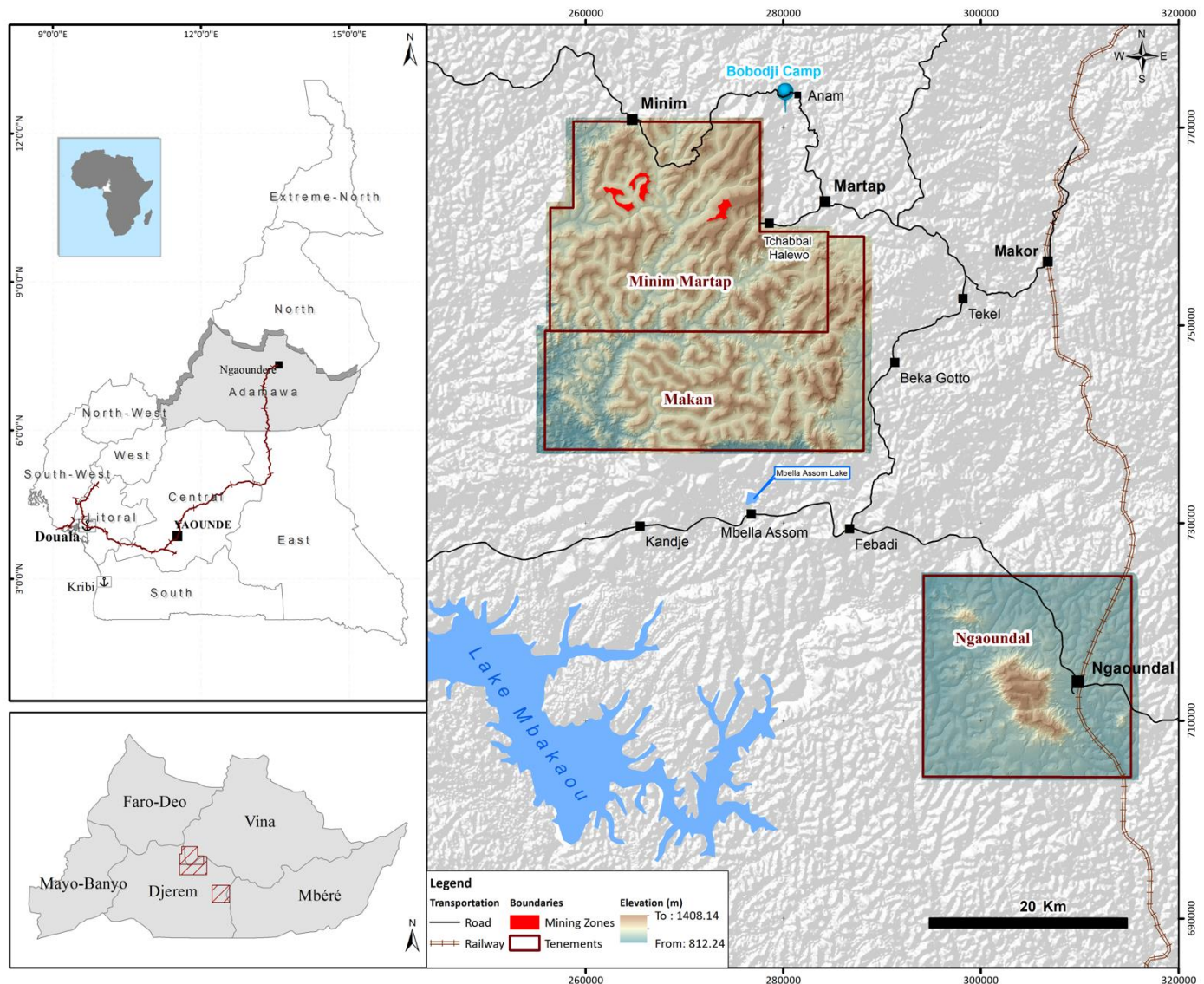


Figure 7 - Minim Martap Project location.

### Company structure and ownership

The Project is 100% owned by Camalco SA, a Cameroon company and a wholly owned subsidiary of Canyon Resources Limited an Australian company listed on the Australian Securities Exchange (ASX: CAY). At the granting of a Mining License, in accordance with Section 59 of the Mining Code, the state will be granted 10% ownership of Camalco free of charge. Up to an additional 25% may be requested under terms and conditions mutually consented by the parties, and with the same rights and obligations as the other shareholders.



## Leases and Permits

**The Project is made up of three tenements referred to as Minim Martap, Makan, and Ngaoundal.** The three, three-year, tenements were granted on the 11<sup>th</sup> July 2018. To maintain the tenements Camalco SA, Canyon Resources wholly owned Cameroon subsidiary company, is to complete a minimum work program and to ensure the environmental and social licence conditions are met. To-date all conditions have been met and Canyon plans to continue to meet all tenement conditions.

**A mining permit requires a mining convention, an approved feasibility study and ESIA.** Canyon is on track to deliver the pre-requisites for a mining convention (agreement) by mid-2021. The mining convention is a pre-requisite for the granting of an industrial mining permit which provides exclusive entitlement to mineral exploitation for an initial period of twenty years, renewable for an unlimited succession of ten-year periods. Under the mining permit provisions are applicable for land use, water abstraction and infrastructure access. The mining permit requires development to begin within two years and operations within five from the granting of the permit.

## Geology and Resources

**Exploration completed between 2009 and 2019 has estimated a significant bauxite resource.** The resource is located within the mineralised Plateaux of Northern Cameroon and is referred to as the Cameroon Bauxite Resource within the September 2019 Resource Statement. There is no current bauxite mining in Cameroon, a nation with little mining history or activity, however this resource is of considerable significance due to its relatively high Alumina grades and low Silica grades.

**Resource estimation work completed upon the bauxite ores shows all of the bauxite ore is at or near surface and contains minimal levels of lower grade bauxite within the ore profile.** The Competent Person has noted that all results to date in all areas indicated quantifiably that the bauxite present was of a high grade and quality, and that the estimation volumes and grades presented were robust. This is despite some minor issues with regards to surveying of the ground surface, incompleteness of drilling to depth for estimation purposes (especially within high-grade areas on Minim Martap), and preliminary test work completed on density, digestibility and mineralogy.

**The JORC code 2012 compliant Mineral Resource estimate is 892Mt at 45.1% Al<sub>2</sub>O<sub>3</sub> and 2.8% SiO<sub>2</sub>.** The resource has been estimated using ordinary kriging, and a total resource (above 35%Al<sub>2</sub>O<sub>3</sub> cut-off grade) with its higher-grade component (at above 45% Al<sub>2</sub>O<sub>3</sub> cut-off grade), has been classified as shown in Table 3:

Table 3 - Mineral Resource estimate<sup>12</sup>.

Resource (35% Al <sub>2</sub> O <sub>3</sub> cut-off)			
	Tonnes (Mt) ore	Alumina	Silica
<b>Total</b>	892	45.1% Al <sub>2</sub> O <sub>3</sub>	2.8% SiO <sub>2</sub>
<b>Indicated</b>	839	45.2% Al <sub>2</sub> O <sub>3</sub>	2.8% SiO <sub>2</sub>
<b>Inferred</b>	53	43.8% Al <sub>2</sub> O <sub>3</sub>	3.1% SiO <sub>2</sub>
High Grade Resource (45% Al <sub>2</sub> O <sub>3</sub> cut-off)			
	Tonnes (Mt) ore	Alumina	Silica
<b>Total</b>	431	48.8% Al <sub>2</sub> O <sub>3</sub>	2.6% SiO <sub>2</sub>
<b>Indicated</b>	410	48.9% Al <sub>2</sub> O <sub>3</sub>	2.6% SiO <sub>2</sub>
<b>Inferred</b>	21	47.4% Al <sub>2</sub> O <sub>3</sub>	2.0% SiO <sub>2</sub>

<sup>12</sup> Refer ASX announcement 27 September 2019. The Company is not aware of any new information or data that materially affects the information included in that announcement and all material assumptions and technical parameters underpinning the Mineral Resource estimates in that announcement continue to apply and have not materially changed.

**Additional strength, moisture and density testing confirm the original assumptions following a large physical testing programme.** No material change to strength or density parameters has been identified as yet however it is anticipated that a revision of the resource model will be completed during the feasibility study phase. Any updates to the resource model will include the multi element analysis results, utilised in the product specification profiling, to give a more detailed view of the resource. Preliminary multi element grade estimation was conducted during 2020 to bring more elemental estimation into the mining block models.

### Metallurgy and Product

**Indicative product technical specifications are being defined and are expected to be released upon completion.** These will provide a basis for ongoing offtake and strategic partnership negotiations as well as the technical studies, including the feasibility study (FS). The technical specifications result from a preliminary multi element update to the resource block models, the completion of detailed quarterly mine scheduling for the PFS - based on the initial strategic schedules, the completion of the Tunra material testing programme and the integration of metallurgical testing programme and historical data sets within the current Mineral Resource Estimate.

**Three metallurgical programmes are at varying degrees of progression and are designed to progressively define the resource as a product and to complement offtake negotiations.** SGS laboratories and CSIRO have worked with the Company's Competent Person to design the programmes as follows:

- **The Basic Metallurgical Programme** designed to add to the existing metallurgical data to form a broad view of the performance of the product in a range of refinery conditions. This programme was conducted at SGS laboratories in Perth, West Australia, using random pulps from one of the priority plateaux;
- **The Advanced Metallurgical Programme** designed to increase the level of metallurgical and digestion definition within the first 10-15 years of mined ore. Testing is being completed on nearly 400 samples, at SGS in both Perth and South Africa using samples from across the priority plateaux; and
- **The Offtake Metallurgical Programme** designed by CSIRO to provide detailed insight into the refinery parameters required to maximise Alumina recovery from the bauxite to inform refinery users and builders of recommended design specifications. This programme will complement the offtake partner workstreams led by Chief Development Officer, Rick Smith.

**A physical properties programme has been completed to define the product's technical specifications.** This programme was designed to bolster the strength, density and moisture content data of the in-situ bauxite to support Ore Reserve and mine productivity estimations.

**Digestion results to date are in line with expectations and show typical conversion ratios which have been applied to the anticipated product pricing calculations.** Total Alumina converts to available Alumina at approximately 90% whilst the low total Silica converts to reactive Silica at around 75%. There is little collective gain in Alumina recovery at high temperature digests.

**The multi element update to the block model introduced additional elements to the product profiles from the mining schedules.** The grades for the following elements were completed: BaO, CaO, Cr<sub>2</sub>O<sub>3</sub>, K<sub>2</sub>O, MgO, MnO, Na<sub>2</sub>O, P<sub>2</sub>O<sub>5</sub>, SO<sub>3</sub>, SrO, TiO<sub>2</sub>, V<sub>2</sub>O<sub>5</sub>, Zn, ZrO<sub>2</sub> and LOI. Mining Plus performed a Nearest Neighbour estimate, and



Figure 8 - Canyon's team conducting bulk sampling

validated these estimates using Inverse Distance Squared and Ordinary Kriged estimates for comparison. The results, whilst preliminary, confirmed the low contaminate potential of the Project.

## Mining

**The PFS strategic mine schedules utilised inputs derived from the Scoping Study to refine the optimal mine areas.** This resulted in a consolidated mining area about the three sub-plateaux of Beatrice South, Raymonde-East and Danielle-Central. Detailed, quarterly, mining schedules were derived from the strategic schedules based on the mining rates of 4 million tonnes per annum and provided a base for product grade profiles (Figure 9). For the PFS outcomes, costs and mining schedules were scaled and extrapolated to represent the ramp up to 5 million tonnes per annum.

**The high-grade ore and near surface nature of the bauxite deposits lends itself to simple, industry typical mining methods, at low cost and with low strip ratios.** The three mining areas will be largely sequentially operated with Beatrice South operating for approximately 4 years before transitioning to Raymonde-East. Due to the simple nature of mining it is anticipated to be conducted as an owner operation using conventional mechanised equipment including surface-miners, bull dozers, front end loaders, haul trucks and other typical ancillary mining equipment. The potential for mining contract operations will continue to be investigated as development progresses.

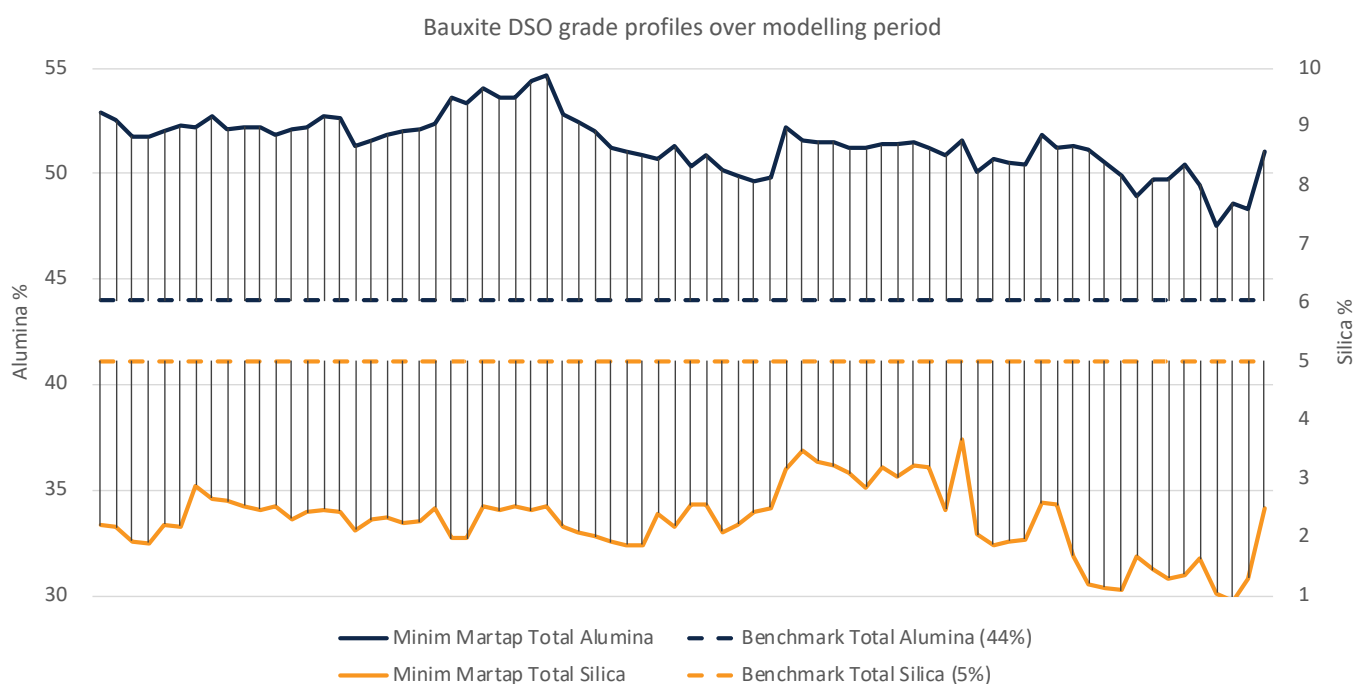


Figure 9 - Minim Martap Project product grade profile.

**The ore presents with favourable physical properties and requires no beneficiation, washing or screening.** Test-work conducted with bulk samples on wet and dry washing processes<sup>13</sup> and to define material handling parameters<sup>14</sup> confirms the mine can produce DSO with world class grades, without any beneficiation. Material testing outcomes (Table 4) have been used to confirm the suitability of the supply chain solution and inform the physical technical specification of the product for potential off takers and shipping.

<sup>13</sup> Source: 2019 Beneficiation test work programme, BHM.

<sup>14</sup> Source: 2019 Material testing programme, Tunra.

Table 4 - Minim Martap Project physical product properties.

<b>Moisture</b>	10%	14% ( <i>Saturated</i> )	AS 1038
<b>Dust extinction moisture (DEM)</b>	7.4%		AS 4156.6-2000
<b>Bulked density (S.G)</b>	1.3 - 1.5	1.4 - 1.7 ( <i>DEM</i> )	
<b>Strength</b>	40Mpa		
<b>Angle of repose</b>	37°	42° ( <i>DEM</i> )	32° ( <i>Dynamic</i> )
<b>Drawdown angle</b>	55°	68° ( <i>DEM</i> )	

**Rock strength testing on over 500 samples across the priority mining areas and throughout the depth profile confirms suitability of surface miners and negates the need for drill and blast.** The physical testing programme included strength testing using a point load testing machine and has confirmed the rock strength to be at the optimal range for efficient operations of surface miners. The surface miners are expected to mill thirty to fifty-centimetre (30-50cm) cuts along the highly homogenous and sub-horizontal orebody and deposit 75mm top size milled material in windrows along the mining bench. Front end loaders (FELs) will load mining trucks which will dump at plateau specific ROM pads, stockpiled in accordance to grade profiles. This method eliminates the need for blasting and decouples the on-plateau mining equipment from the road haulage trucks whilst minimising rehandle.



Figure 10 - Example of surface miner.

**The mine design is simple, edge-to-edge strip mining, open-pit and resulting in very low structural geotechnical risk.** The bauxite will be mined from the tops of plateaux and as such the development of significant pit walls is not a feature. As such it is not anticipated that significant structural geotechnical investigations or pit slope stability analysis will be required for this project. Mining productivity has been based on benchmarked data and equipment manufacturer input.

**Groundwater conditions have been assessed from the ongoing infield water monitoring and testing programme for the assessment of pit dewatering methodologies.** Current baseline and

hydrology assessments by specialist sub-consultants confirm perched water tables within the plateau with the bauxite mostly remaining above the zone of saturation. High permeability rates suggest rapid draining of any saturated bauxite. It is intended to advance dewater the plateaux immediately prior to mining and drainage designs have been integrated with the mine plans. Acid-base accounting analyses from the acid rock drainage programme showed only two sites are possible locations for limited acidic water generation. The alkalinity of the soils and bauxite appear to successfully buffer any acid generation.

### Mine site Infrastructure

**The Mine Site Infrastructure (MSI) facility provides support for all activities and services for the mining operation.** There will be three main MSI facilities over the course of the modelled operational period. The first and more comprehensive facility, which includes the camp is located at Beatrice plateau, which is set to be mined first. The second will be located at the Raymonde plateau that starts operation in year 5, and the third at the Daniele plateau starting operation only at year 14.



**As operations move to subsequent plateaux certain facilities will be relocated or constructed to ensure operational efficiencies.** The initial MSI area will maintain administration and camp facilities however, once operations move to the Raymond Plateaux and Daniele Plateaux HV Maintenance Workshops, HV Fuel Facilities and Warehouses will be relocated to the operational plateaux. All buildings and facilities are modular style facilitating rapid construction and ease of expansion and relocation.

### Road to Inland Rail Facility (IRF)

**A new road section coupled with an upgraded existing road delivers the optimal solution between the mine and the inland rail facility for the nominated production rates.** A route survey was completed during the PFS and designs have utilised the extensive LIDAR data available to the Project from an earlier programme of work. Quarry locations with suitable roadbuilding and construction materials have been identified by the Canyon geology team in the region. Deferred capital allocations have been provided for, in order to link in the new mining pits as they come online. The overall road length between the furthest mine site and the IRF near Makor is approximately 65km. Upgrades required of the existing public road is assumed to be government funded whilst the project will fund the new road build and the ongoing maintenance costs of the whole route.



Figure 11 - Example of front end loader loading road going bulk haulage trucks.

**Bulk road going trucks will be loaded from the ROM to haul the bauxite product to the inland rail facility.** CAT 988 (or equivalent) front end loaders will reclaim from the blended ROM stockpile into the haulage fleet and will be supported by a grade control function to ensure correct product grade categories are adhered to. After the product truck is fully loaded, the truck will be weighed at a dedicated weighbridge prior to leaving the MSI

area. The road haulage fleet will be supported by a dedicated road maintenance team including operational quarries and dedicated equipment. The bulk haulage B-double trucks will haul to a new facility near the town of Makor which hosts a railway station and sidings.

### Inland rail facility (IRF)

**Bauxite will be side tipped onto stockpiles adjacent to the existing rail siding and loaded into waiting, open-top, rotating container boxes in readiness for loading onto the next train.** In between train arrivals, front end loaders will fill empty containers with bauxite to expedite the train loading operation. When a train arrives, a reach stacker will swap empty containers with the pre-loaded containers. In cases where a train arrives, and containers are not ready for the loading operation the front end loaders can direct load empty containers positioned on the train wagon.

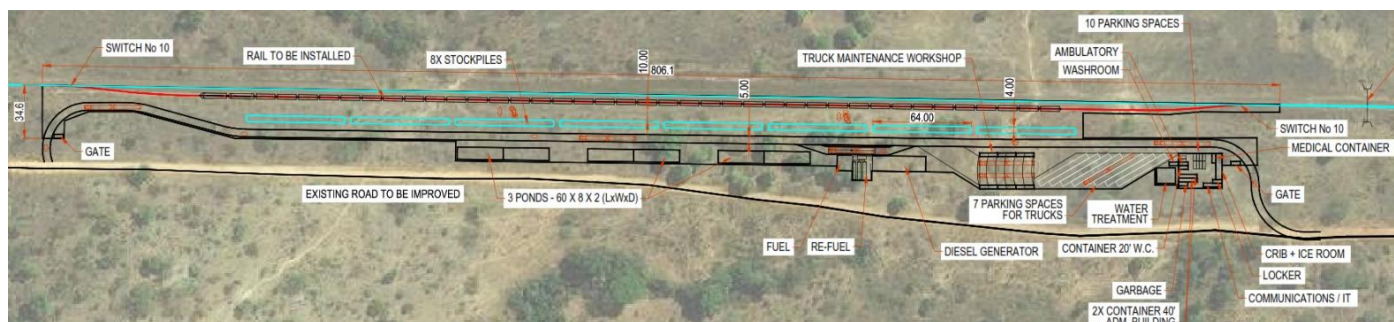


Figure 12 - Inland Rail Facility (IRF) design, just north of Makor.



**The IRF is located approximately 150m north of the existing Makor station and includes a new 800m rail siding.** The new siding is suitable for 600m long trains and it is dedicated for Camalco trains. The IRF site will be provided with a workshop facility for light vehicles and fuel distribution facilities along with office and crib facilities. Operational efficiencies are achieved by developing the IRF as a satellite hub to support the train, road haulage and road maintenance activities.

## Rail

**The consultant and contractor site visit conducted in early 2020 led to an alignment on the approach to the rail access agreement.** The Cooperation Agreement lays out this commercial strategy and provides the road map for securing access agreements. Developing the Rail Concept of Operations was a key deliverable of the PFS and underpins the commercial negotiations.



Figure 13 - Example of train hauling specialised rotating container boxes.

The rail system has been optimised to unlock capacity by scheduling improvements and fixed and mobile equipment upgrades, whilst maintaining within the major constraints of the network. A range of optimised rail schedules were completed, unlocking incremental capacity, and providing the scheduling windows within which the Project's trains were designed to effectively utilise

the realised latent capacity. Train lengths were restricted to 600 metres, to align with the length of existing passing loops for meeting and passing other trains. Rail upgrade and procurement requirements have been integrated within the current rail upgrade plans and are either funded as part of the 3<sup>rd</sup> party owner-operator or reflect scheduled and ongoing rail upgrades.

**Rail operations are planned for 310 operating days per year with each of the Project's trains initially moving 3,116 tonnes, in 38 skeleton wagons each on a 20-tonne axle load.** Two specialised containers with 41 tonnes of product (35 tonnes when the track is limited to 17-tonne axle loads) will sit on each wagon and the train will be pulled by twin locomotives. Ten trains need to depart stations every 4-5 hours, within the scheduling windows, in a cadence that will facilitate efficient and predictable operations without impacting current, or planned, rail traffic.

**Upgrades to the track, currently scheduled for completion in 2028 will increase allowable axle loads to the nominal 20 tonnes per axle.** The Project's operations will optimise to this capacity increase through appropriate equipment selection distributed between initial development capital, deferred capital and as part of the sustaining capital



Figure 14 - Example of reach stacker operations.

process. It is anticipated that the 20-tonne axle load rail project will be completed in 2026 as confidence in the Minim Martap Bauxite Project's execution plans increase.

**Trains will initially arrive at Gare Centrale station in Douala before being split in half and shuttled to the unloading area in the Douala port facility.** During this decoupling, shuttling and unloading process the locomotives will be serviced or swapped out, fuelled and the crews changed before the return run to the mine site.

**The system capacity of the rail can be increased with additional passing loops to approximately 14Mtpa allowing for 10Mtpa production rates from the mine.** To achieve this throughput, the number of train passing loop locations will need to increase from 30 (the basis of the PFS) to approximately 50 locations over the total rail distance to Port. This would nominally mean a passing loop every 20km. If bridges are upgraded to facilitate higher axle loads, an automated control system is added, and passing loops are lengthened and ultimate capacity could be significantly higher as benchmarked for narrow gauge track in North America and Australia.

## Port and transshipping

**The unloading operation at the Port of Doula is designed to be constructed in a new dedicated area for Canyon operation that is located midway between the pier area and the train arrival area at Gare Centrale.** The product will

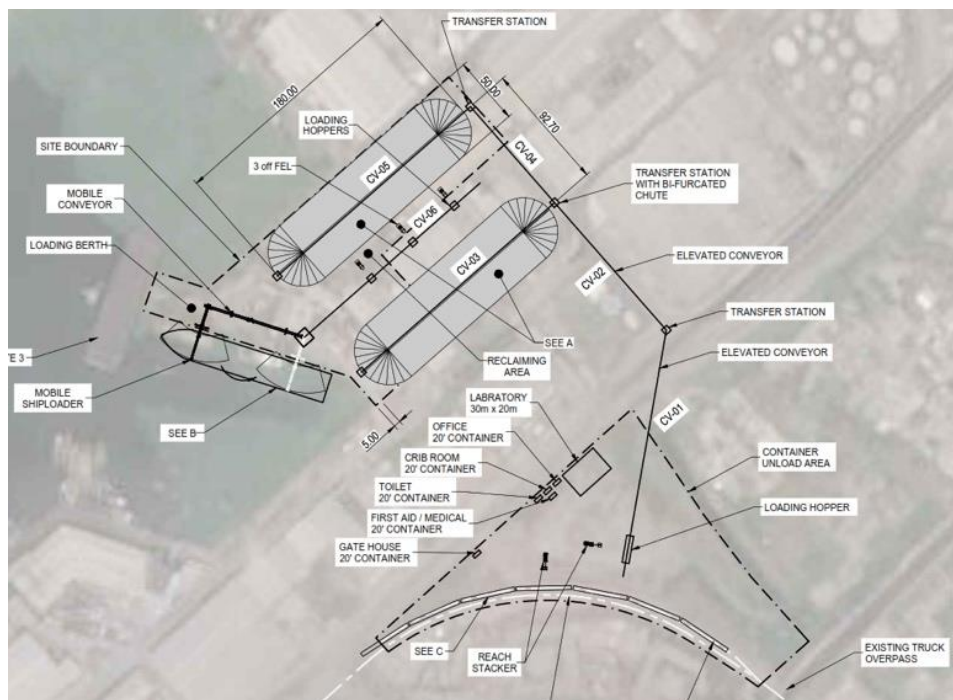


Figure 15 - Train unloading, stockpiling and barge loading design at Douala port.

be received at the port of Douala at the new rail spur line unloading area. A new line will be built parallel to the existing rail track. The loaded railcars will be positioned in the siding, which will be able to accommodate 19 railcars (half of one train). The specialized container boxes will be unloaded from the train and rotated into belt feeder hoppers for conveyance to the bulk storage area. Empty boxes will be ready to load onto the train facilitating a rapid turn-around time.

**The berth area selected for the Project's storage and barge loading operation was nominated by the Port Authority of Douala (PAD).** During the PFS contractor

and consultant site visit in February 2020 the PAD invited the canyon delegation to inspect three potential Bauxite loading berths. Two were considered favourable to the Project and the PFS team designed infrastructure for both locations. One of these was selected for presenting within the PFS however both have been identified and put forward in the Port Concept of Operations.

**The berth area is approximately 7.2 hectares distributed between receiving, stockyard and shipping zones and was nominated by the Douala Port Authority.** The receiving zone has a dedicated rail spur line and an area for container handling. The connection from the receiving area to the stockpile is via an elevated belt conveyor. The stockyard is divided in two main piles of 80,000 tonnes each. Barges will be loaded with mobile conveyor systems on the quay side. The shipping operation uses the existing berth to load barges that are used in the transshipment system.



**Capesize vessels will be loaded every 1.5 weeks via traditional transhipment methodologies.** The transhipment operation accounts for a fleet of barges and tugboats including an offshore floating vessel and crane. The barging system considers the use of five dumb barges that will rely on dedicated tugboats for conveyance from the Port of Douala to the Transhipment area. In addition, two assisting tugboats will support berthing and unberthing operations at both ends. Cost have been derived from first principles and supported by a transhipment contractor.



Figure 16 - Example of telestacker loading barges with bauxite.

**The impact of local weather and wave height on the port and transhipment operation was analysed for operational impacts.** Metocean modelling was completed for the proposed transhipment location approximately 50km from the Port of Douala in 20m chart depth offshore of the Estuaire du Cameroon. Data for local wind and deep-water wave conditions was combined with seabed bathymetry to determine the expected conditions and inform transhipment time-usage models. Statistical analysis

of the data indicates that winds in the transhipment location are generally mild and will have only minor impact on the loading availability which has been taken into account in the PFS. Weather impacts have been included in the design basis for the Project as the region can experience significant rain events.

### Environmental & Social Impact Assessment

**The Minim Martap Project is being developed in accordance to the Equator Principles and relevant World Bank and IFC requirements.** Canyon is currently undertaking an environmental and social impact assessment (ESIA) for the Project which is anticipated for approval by the Cameroon government in mid-2021 in line with the tenement licensing requirements. The scope of work for the ESIA is based on a gap analysis conducted in 2018. Baseline assessments are currently underway.

**The Project will integrate with the impact assessments to balance project requirements whilst minimising adverse impacts and optimising to beneficial outcomes for the community and environment.** Alternate technical solutions have been assessed on social and environmental grounds to ensure the most appropriate infrastructure arrangement and development approach is included in the PFS.

**Baseline studies and community engagement are progressing well despite COVID-19 limitations.** The site based team have been conducting ongoing data collection across a range of metrics and maintaining continual dialogue with local and broader stakeholders.

As part of maintaining tenement access for and supporting local community priorities roads and bridges have been built and maintained across the three tenements. COVID-19 limitations have slowed baseline monitoring progress due to the limitations of international travel however the ESIA is still expected to be complete by mid-2021.



Figure 17 - Canyon team supporting the community with road and bridge building.

## Market and pricing

The market is dominated by China which imports 100 million tonnes per annum, representing two thirds of the global seaborne bauxite supply of 150 million tonnes, 50% of China's imports is Guinea bauxite. Whilst China represents a fall-back market, offtake and strategic partnership agreements are being advanced with non-China groups, including companies constructing new Alumina refineries. This highlights the strategic value of the anticipated product quality from the Minim Martap Bauxite Project and the strategic geopolitical diversification from concentrated supply jurisdictions.

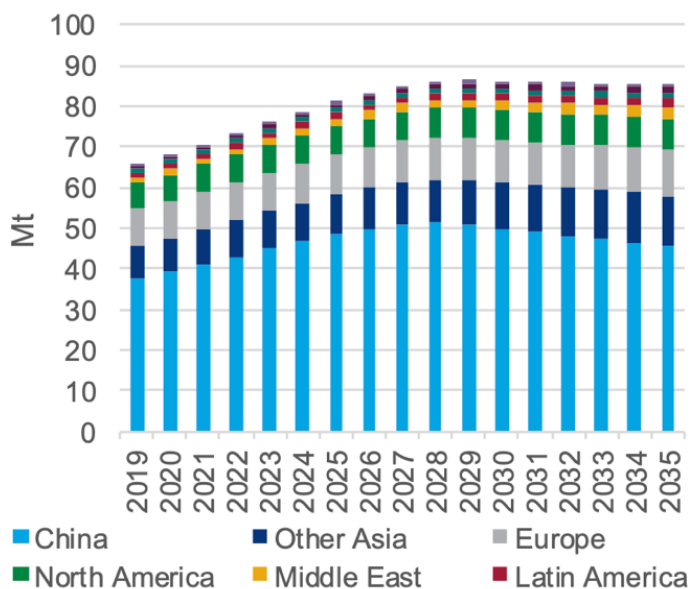


Figure 18 - China bauxite sources. Source: Wood Mackenzie.

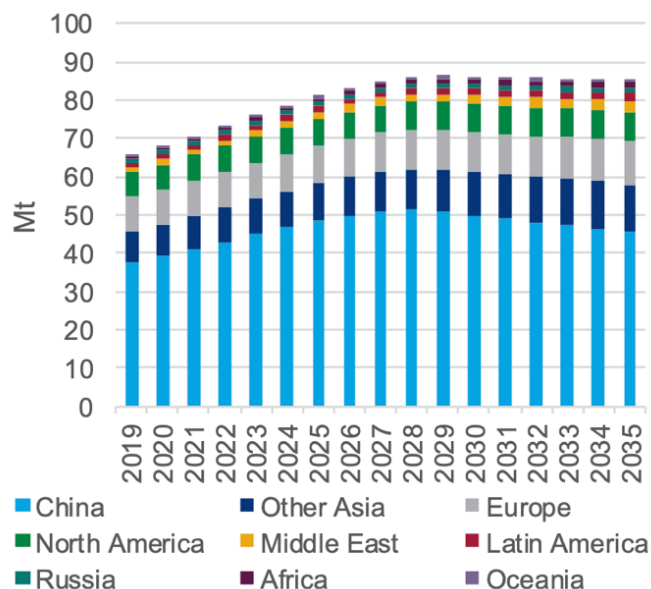


Figure 19 - Global primary aluminium consumption. Source: Wood Mackenzie.

Interest has been expressed from new refinery builders, including those from European, Middle East and SE Asian countries whose governments have mandated aluminium supply chain security. Refinery builders value the quality of the bauxite and, through the long term stable grade profile, are potentially able to reduce capital infrastructure and improve the environmental footprint of future installations where typical standard grade bauxite requires upwards of 300% additional caustic soda capital infrastructure than the anticipated high-grade Minim Martap product, due to the exceptionally low Silica.

Product pricing has been adjusted down relative to the Scoping Study, and profiled, to reflect the latest forecast pricing curves whilst recognising the product quality margins from higher Alumina and lower Silica than standard bauxite. Bauxite prices, CIF China, are currently suppressed due to the COVID-19 pandemic and short to medium-term oversupply. However, freight rates are also at historical lows which results in the China FOB price, West Africa, maintaining attractive project margins. The Project has used internal analysis and data from Wood Mackenzie to forecast a suppressed, quality adjusted, starting price of \$43.5/t FOB ramping up to the long term average of \$51.2/t FOB.

Bauxite is the primary input used to make Aluminium and global demand for aluminium is growing faster than any other mining commodity. Consumption in 2018 being 3.6% higher than the previous year. From 2019 to 2025 the consumption for primary aluminium is expected to grow by 3.5% CAGR. The major driver of this growth is Asia, with Chinese consumption growing at 4.4% CAGR from 2019-25 and the rest of Asia growing at 3.0% CAGR over the same period<sup>15</sup>. In China, which accounts for 73% of anticipated global growth by 2025, the transport sector is expected to see the largest volume gain in aluminium demand driven by the increase in vehicle production and the increase in

<sup>15</sup> Source: Wood Mackenzie

aluminium component use per vehicle. The packaging and consumer goods sectors follow. Construction will see strong growth to 2025, but these decline again out to 2035 partly due to increasing use of secondary aluminium.

**Future bauxite supply is firmly in the hands of the seaborne market.** Chinese aluminium smelters are primarily supplied by domestically produced Alumina from refineries which are heavily dependent on the import market for bauxite supply (Figure 18 and Figure 19) Chinese Alumina production is expected to grow from 75 Mt in 2019 to 93 Mt by 2035 while the dependency on imported bauxite is expected to increase from 52% in 2019 to 69% by 2035. As a result, future bauxite supply is firmly in the hands of the seaborne market

## Funding

**The PFS shows the Project as having robust economics and a strong potential to become a large-scale, long-life producer.** To achieve the range of outcomes indicated in the PFS, funding of in the order of US\$119.6 million in direct project development capital will likely be required. The Company has assumed that the required rail rolling stock and public access rail infrastructure with an expected cost of US\$121.6 million will be acquired, owned and operated separately to the Project. The operating costs to the Project for the rolling stock and rail infrastructure upgrades incorporate benchmarked operator margins in order to provide a return on capital returns and profit margin to the rail operator.

**All sustaining capital will be funded from free cashflows.** By maintaining an appropriate minimum cash balance before dividend distributions, no additional equity requirements for cashflow shortfalls are anticipated to be required over the 20-year modelled period.

**The Cameroon Government has expressed a preference for partnership models regarding key rail infrastructure in the country that ensures the State's involvement in key infrastructure development.** Cameroon has a public-private partnership (PPP) model, sponsored by the World Bank as part of its Public Private Infrastructure Advisory Facility (PPIAF) initiative. The objective of PPIAF support is to build a more conducive PPP framework in Cameroon. Through a modernized PPP legal and institutional framework, the Government in Cameroon is improving its position to attract private sector participation in infrastructure development. The National PPP Strategy developed by CARPA (Support Council for the Realization of Partnership Contracts) is being strengthened to provide this assistance with a particular focus on transport projects, specifically in relation to Douala port activities<sup>16</sup>. Canyon intends to explore these funding opportunities for port and rail elements of the project concurrently to the feasibility study which follows the PFS. The Company has also been in discussions with various firms who have expressed an initial interest in providing either the funding for the rolling stock or directly supplying the rolling stock for the Project. Discussions are ongoing and subject to commercial negotiation.

**The Company currently believes that there are reasonable grounds to assume that the Project can be financed as envisaged in this announcement,** on the following basis:

- The Board and Management have a strong track record in financing and developing resource projects.
- Various groups and potential strategic partners have expressed interest in development funding for the Project. The assumed funding structure for the direct Project development capital is 100% equity funded
- The rail infrastructure and rolling stock cost is assumed to be financed through a typically structured owner-operated model with appropriate costs amortized and charged to the project on a unit rate basis.
- The PFS is expected to provide the basis for the maiden JORC Ore Reserve estimate for the Project.
- Canyon's board believes that the funding requirements for the Project are manageable (US\$120 million) in relation to the Company's currently market capitalisation (AUD\$80-90 million).

<sup>16</sup> <https://pppknowledgelab.org/countries/cameroon>



## Capital cost

**Capital cost estimates have been compiled from first principles, quotations and database pricing.** The Project has been divided into elements as part of the work breakdown structure (WBS) which will be the basis of cost estimation through the current and future studies (Table 5). Each element has been assessed and estimated to a level commensurate to a Scoping Study and is in the accuracy range of  $\pm 25\%$ , and is consistent with a Class 4 estimate as defined by the Association for the Advancement of Cost Engineering (AACE).

Table 5 - Capital cost summary

WBS	Cost Element	Capital incl. Growth (USD 000)	Split (%)
2000	Mine and mine-site infrastructure	32,700	27.3%
3000-5000	Road Haulage	12,800	10.7%
6000-8000	Inland Rail Facility	15,400	12.9%
7000-8000	Douala Port	20,600	17.2%
10000	Project Delivery	4,400	3.7%
11000	Owners Costs	26,500	22.2%
12000	Contingency	7,200	6.0%
	<b>Total</b>	<b>119,600</b>	<b>100.0%</b>

**The capital estimate includes appropriate contingency and growth allocation.** Contingency is applied at the rate of 12% of engineered EPCM costs and 5% of non-engineered EPCM costs. Both engineered and non-engineered EPCM costs are estimated as a percentage of the direct costs. This EPCM percentage is also validated by comparing against the personnel required to Engineer and support that WBS level. A contingency, as percentage of EPCM (12% of Engineered vs 5% of Non-Engineered or Turn-key packages), has been applied to the non-mining cost elements. For mining set-up and equipment, contingency has been applied as a 5% growth allowance and a 10% contingency on the pre-growth cost inclusive of installation.

**Owner's costs include the owner's project execution team, operational readiness and environmental costs.** Work-force modelling defined a project execution team on-boarding at the beginning of the project execution schedule, 24 months prior to operations. Additionally, the modelling ramps up the operational team sequentially until the operational team is fully on-board 3 months in advance of operations. Environmental costs were assessed based on anticipated impact of the project on the environment and communities along the haul road.

## Operating cost

**Operating costs have been compiled for the economic modelling period of 20 years.** Operating costs have been prepared by activity and cost element and further between fixed and variable categories (Table 6).

Table 6 - Operating cost summary.

WBS	Cost Element	Opex (USD/t Product)
2000	Mine and mine-site infrastructure	2.7
3000-5000	Road Haulage	2.4
6000	Rail to Douala Port	16.5
7000	Douala Port	5.8
8000	Transshipment	5.0
11000	Owners Costs	2.6
	<b>Total</b>	<b>35.1</b>

**Estimations are considered to have an accuracy of accuracy range of  $\pm 25\%$ , consistent with a Class 5 estimate as defined by AACE** Estimations have been validated in reference to first principle estimations, quotations and database

pricing. All costs have been prepared on an owner operated basis with the exceptions of mining, rail haulage and transshipment.

### Sustaining capital

**Sustaining capital allocations have been applied based on equipment usage calculations.** Estimates for equipment replacements have been integrated within the capex assumptions (Table 7) for all mobile and fixed material handling equipment. Buildings have been allocated a periodic provision.

Table 7 - Sustaining capital summary.

Sustaining Capital Period	Sustaining Capital (USD '000)
First 5-years	24,400
Total over 20-year modelling period	81,000

### Financial analysis

**Financial evaluation has been completed using a discounted cash flow model developed by a specialist consultant with Cameroon fiscal regime experience.** The financing assumptions have been included in the economic evaluation, and modelling is consistent to the applicable fiscal regime. All figures provided in this PFS release are real as of Q2 2020. The economic modelling outcomes are shown in Table 8.

**Sensitivity analysis shows key sensitivity by order of hierarchy: Price (highest), Opex, Capex (lowest).** The sensitivity outcomes (Figure 20, Figure 21) suggest the Project can carry additional capex with manageable valuation impact and is sensitive to price and operating costs.

Figure 20 - NPV sensitivity post-tax (US\$).

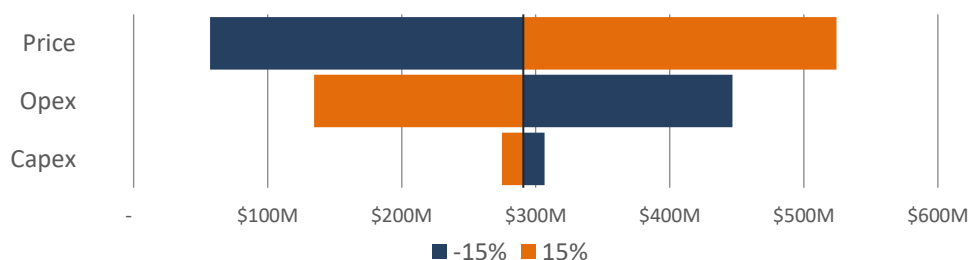
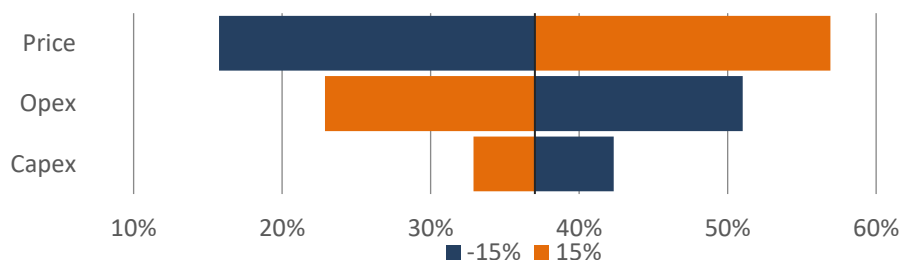


Figure 21 - IRR sensitivity post-tax.



The detailed economics resulting from the discounted cash flow model are presented in Table 8.

Table 8 - Detailed economic outcomes.

Production		Avg-Yr		
Production rate	Mt	4.9		
Ore mined	Mt	4.9		
Waste mined	Mt	1.6		
Strip ratio W:O	x	0.3		
Production period modelled		20.0 Yr(s)		
Capital		Total		
Development capital	USD 000	119,600		
Capital intensity	USD/t capacity	24.5		
Operating Costs		Avg-Yr		
C1 costs	USD/t	35.1		
C2 costs	USD/t	37.2		
C3 costs	USD/t	39.6		
Product Grade		Avg-20Yr		
Alumina ore grade	%	52.0%		
Total silica grade	%	2.3%		
Ore moisture content	%	10.0%		
Realised price		Initial Price	Avg-20Yr	
Realised price	USD/t FOB	43.5	51.2	
Cashflow		Total		
Cumulative undiscounted free cash flows	USD 000	988,500		
Average annual undiscounted free cash flows	USD 000	49,400		
Project payback (post tax)		4.2 Yr(s)		
Valuation		Discount rate	NPV (USD 000)	IRR
Project return - pre tax		10.00%	374,600	40%
Project return - post tax		10.00%	290,700	37%
Tax and Royalty		Duration	Rate	
State royalty: Holiday		5.0 Yr(s)	-	
State royalty: Nominal after holiday		-	5%	
Corporate tax: Holiday		5.0 Yr(s)	-	
Corporate tax: Nominal after holiday		-	30%	

## PFS Project team

The PFS team remains unchanged from the Scoping Study team and consists of Ausenco and Mining Plus as lead consultants with input from Canyon Resources and industry specialists. Supporting consultants specialise in areas including rail operations, bauxite mining, bulk commodities and socio-environmental sustainability (Table 9).

Table 9 - PFS project team

Principal Area	Main Consultant(s) / Stream Leads
Geology (resource modelling)	Mining Plus
Mineral Resource Competent Person	Mark Gifford
Mining and Reserves	Mining Plus Minemax
Metallurgy	Mark Gifford SGS
Infrastructure, rail and port	Ausenco Beacop SGS
ESIA (2019)	Environmental and Social Sustainability Ramboll
ESIA Gap Analysis	Moore Stephens
ESIA (2010)	VIMTA Labs Limited Rainbow Environment Consult
Marketing, pricing and offtake	Chief Development Officer; Rick Smith Wood Mackenzie <sup>17</sup>
Financial Modelling	Chief Financial Officer; Nick Allan Mazars



Figure 22 - PFS team at priority mining area.

<sup>17</sup> Analysis is based on Canyon's estimates and forecasts for Minim Martap within the modelling capabilities of Wood Mackenzie's Bauxite Price Forecast Model

## Material Assumptions

Material assumptions used in the Pre-Feasibility Study which determined the production target and financial outcomes presented in this announcement are summarised below:

Criteria	Explanation
<b>Mineral Resources</b>	The Mineral Resource estimate announced on 27 <sup>th</sup> September 2019 was used for the PFS. These Mineral Resources have been prepared by a Competent Person in accordance with the requirements of the 2012 JORC Code as advised in the Competent Person's Statement included within this announcement. The Company is not aware of any new information or data that materially affects the information included in that announcement and all material assumptions and technical parameters underpinning the Mineral Resource estimates in that announcement continue to apply and have not materially changed.
<b>Site visits</b>	The site has been visited by the key members of the PFS team including the PFS report author, Project Director James Durrant, the Resource Competent Person (Mark Gifford), PFS lead (Ausenco), mining PFS geologists and engineers (Mining Plus), infrastructure supporting partners and sub-consultants, and Environmental and Social baseline study leads and ESIA project managers (ESS and sub-consultants).
<b>Study status</b>	This announcement is based upon the June 2020 PFS.  All relevant Modifying Factors including mining, infrastructure, environment, legal, social and commercial have been considered in the PFS.
<b>Cut-off parameters</b>	A mining cut-off was applied in the modelling: All bauxite within the resource was considered as potential product across a range of potential product grade profiles. The product grade profile was assigned an FOB (Cameroon) price based on marketing, pricing and end-user data from Wood Mackenzie.  The cut-off grades for scheduling which are anticipated to form the basis of the future Ore Reserves are as follows: <ul style="list-style-type: none"> <li>• All material above 50% Al<sub>2</sub>O<sub>3</sub> is Ore, regardless of SiO<sub>2</sub> grade is considered as Ore.</li> <li>• All material between 44% Al<sub>2</sub>O<sub>3</sub> and 50% Al<sub>2</sub>O<sub>3</sub>, and below a maximum of 2.5% SiO<sub>2</sub> is considered as Ore.</li> <li>• All other material is considered waste for the purposes of scheduling within the modelling period.</li> </ul>
<b>Mining factors or assumptions</b>	Strategic schedule optimisation was completed for the PFS utilising cost calculations for the supply chain (materially the same as those underpinning the economics presented within this document) and pricing scenarios across the product specification profile which determined an extraction schedule based on the economics of individual product grade blocks defined from the resource block model.  Optimisation software identified the most value accretive extraction and product schedules based on the resource block model generated as part of the Mineral Resource estimate announced on 27 <sup>th</sup> September 2019.  Detailed pit designs were completed for the PFS and consider rock strength and hydrogeological constraints. The mine presents low geotechnical risk due to the nature and design of the pits where the plateaux are mined sub-horizontally in progressive increments utilising the full width of the resource and not resulting in high pit walls.  Conventional surface mining methodologies and costings were used in this PFS and included utilising industry benchmarking and material testing to determine equipment productivity.  Inferred mineral resources have been included in the calculation of the Production Target: Less than 0.2% of the 20-year product tonnes are sourced from inferred mineral resources. Canyon is satisfied that the proportion of inferred mineral resource is not a determining factor in project viability and the inferred resources do not feature as a significant portion in the early mine plan.
<b>Metallurgical factors</b>	Metallurgical factors are typical of high grade bauxite following two programmes of metallurgical and digestibility tests. It is noted by the Competent Person that all results to date in all areas indicated quantifiably that the bauxite present is of a high grade and quality, and that the estimation volumes and grades presented are robust relative to their resource classification.  Further work, currently underway, will provide specific input into offtake negotiations.



<b>Social and Environmental</b>	<p>The 2010 Environmental and Social Impact Assessment (ESIA) completed on behalf of the former owner of the Project has been used as a basis, along with additional assessments underway for the 2020 ESIA currently in progress. The Project design presented in the PFS utilises information derived from prior social and environmental definition and aims to minimise any adverse impact.</p> <p>Community engagement has been ongoing with a dedicated team of community liaison officers to ensure the Company understands the priorities and concerns of the communities. Feedback is overwhelmingly positive.</p> <p>The ESIA has been underway since 2019 and is required to be completed and submitted to the Government of Cameroon in mid-2021.</p> <p>Closure costs have been excluded from this assessment, however, due to continuous rehabilitation and the long mine life the impact to the economics is considered negligible.</p>
<b>Infrastructure</b>	<p>The mine site is accessible by road and rail from the capital Yaounde. The existing rail network passes within 50km of all potential mining areas. The rail currently connects to the port of Douala and will potentially connect to the port of Kribi subject to the completion of a 140km rail link.</p> <p>The Project will fund and develop the majority of the infrastructure required for the Project. The rail infrastructure will be installed by a 3<sup>rd</sup> party owner-operator and the existing public road will be upgraded by the Government of Cameroon.</p> <p>The mine will be developed with integrated water management facilities and mined in a strip-mining fashion with continuous backfill and rehabilitation. The mining area will consist of all the facilities to support a remote operation including accommodation, for a portion of the work force, power, water, administration and maintenance facilities. The accommodation will house 100% of the small expatriate workforce and 50% of the Cameroonian workforce with the remaining 50% of Cameroonians assumed to be employed from local population centres.</p> <p>A new road linking the mine to the existing public road will be developed to support the bulk product haulage trucks. The upgrade to the existing road, between the mine and the rail, is assumed to be government funded. The project will design this upgrade and will provide the ongoing maintenance of the whole route including quarrying of road maintenance materials which have been identified as part of the road build survey. The road going bulk haulage trucks will dump into bulk stockpiles at a new train loading facility just north of Makor station where front end loaders will load open-top, lidded, rotating container boxes in readiness for an arriving train. Forklifts will swap the empty containers of the incoming train with loaded containers allowing a train to depart every 4-5 hours.</p> <p>The rail will be operated by a 3<sup>rd</sup> party owner-operator. The rollingstock and rail infrastructure upgrades have been costed from first principles and integrated with the known rail upgrade schedule of the current rail operator. The rollingstock is considered to be purchased new and the locomotives second hand. The Project will supply the rotating containers and all container handling equipment. The costs to the Project for the rolling stock and rail infrastructure upgrades include benchmarked operator margins for capital returns and profit margin.</p> <p>The Project's operations will increase to a 20 tonne axle load capacity in line with rail upgrades currently underway and final stage scheduled for 2028, through appropriate equipment selection distributed between initial development capital, deferred capital and as part of the sustaining capital process. The Company will work with the rail operators and existing funding providers and the Company believes that the 20-tonne axle load rail project will be expedited to 2026.</p> <p>Douala and Kribi ports are currently operating and the Project will focus on utilising the Douala port for Stage 1 as outlined in this PFS. At the port of Douala the trains will be split in half and shuttled into the port for unloading in a dedicated area. Conveyors will transfer the loose product to the bulk stockpiles on the quayside nominated by the Douala Port Authority. Reclaim will be by front end loaders feeding telestacker conveyors which will load dumb barges operated by a transshipment contractor. Barges will shuttle the product to an offshore transshipment location approximately 50km from the quay where a floating crane will load capsize vessels.</p>

	<p>All infrastructure required to be constructed for the technical solutions outlined in the PFS has been costed within the economics of the Project. The economics of the 3<sup>rd</sup> party owner-operated rail infrastructure have been derived from first principles and benchmarked. Canyon is in discussions with various parties who have expressed an interest in supporting the Project through this mechanism.</p>																																				
Capital costs	<p>Capital costs are supported by inputs from consultants Ausenco (infrastructure, rail and transshipment), and Mining Plus (mining). Capital costs have been based on equivalent project costs, benchmarked data, industry knowledge, first principle estimates and extrapolation where required.</p> <p>Project capital costs represent the capital required for the mine, haulage, train load out, port and transshipment and are as follows:</p> <table><tr><th>WBS</th><th>Cost Element</th><th>Capital incl. Growth (USD 000)</th><th>Split (%)</th></tr><tr><td>2000</td><td>Mine and mine-site infrastructure</td><td>32,700</td><td>27.3%</td></tr><tr><td>3000-5000</td><td>Road Haulage</td><td>12,800</td><td>10.7%</td></tr><tr><td>6000-8000</td><td>Inland Rail Facility</td><td>15,400</td><td>12.9%</td></tr><tr><td>7000-8000</td><td>Douala Port</td><td>20,600</td><td>17.2%</td></tr><tr><td>10000</td><td>Project Delivery</td><td>4,400</td><td>3.7%</td></tr><tr><td>11000</td><td>Owners Costs</td><td>26,500</td><td>22.2%</td></tr><tr><td>12000</td><td>Contingency</td><td>7,200</td><td>6.0%</td></tr><tr><td></td><td><b>Total</b></td><td><b>119,600</b></td><td><b>100.0%</b></td></tr></table> <p>The capital cost of upgrading the existing public road has been derived from first principles and is assumed to be funded by the government.</p> <p>Project contingency was added to the overall capital cost estimate to account for variances between the specific items contained in the estimate and the final actual Project cost. The contingency covers additional costs that will be incurred as a result of unforeseen items such as; error/omissions, design unknowns, abnormal weather conditions, abnormal currency fluctuations, a major equipment transport event or significant damage during construction.</p> <p>The contingency costs on the Minim Martap Project were estimated as a proportion of EPCM costs. The EPCM costs were allocated depending on effort required to managed scopes of Engineered and Non-Engineered (turnkey) packages. A percentage was applied to the total direct EPCM costs including associated costs for growth to estimate the contingency. This varied from 12% for scopes requiring management, design and procurement efforts versus 5% for turnkey packages that are less complicated or requiring less management efforts.</p> <p>Mining set-up and equipment contingency has been applied as a 5% growth allowance and a 10% contingency on the pre-growth cost.</p> <p>Cost estimates are made in Q2 2020 US Dollars (USD).</p>	WBS	Cost Element	Capital incl. Growth (USD 000)	Split (%)	2000	Mine and mine-site infrastructure	32,700	27.3%	3000-5000	Road Haulage	12,800	10.7%	6000-8000	Inland Rail Facility	15,400	12.9%	7000-8000	Douala Port	20,600	17.2%	10000	Project Delivery	4,400	3.7%	11000	Owners Costs	26,500	22.2%	12000	Contingency	7,200	6.0%		<b>Total</b>	<b>119,600</b>	<b>100.0%</b>
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Operating costs	<p>Operating costs are supported by inputs from consultants Ausenco (infrastructure, rail and transshipment) and Mining Plus (mining). Operating costs have been based on equivalent project costs, database pricing, industry knowledge, first principle estimates and extrapolation where required.</p> <table><tr><th>WBS</th><th>Cost Element</th><th>Opex (USD/t Product)</th></tr><tr><td>2000</td><td>Mine and mine-site infrastructure</td><td>2.7</td></tr><tr><td>3000-5000</td><td>Road Haulage</td><td>2.4</td></tr><tr><td>6000</td><td>Rail to Douala Port</td><td>16.5</td></tr><tr><td>7000</td><td>Douala Port</td><td>5.8</td></tr><tr><td>8000</td><td>Transshipment</td><td>5.0</td></tr><tr><td>11000</td><td>Owners Costs</td><td>2.6</td></tr><tr><td></td><td><b>Total</b></td><td><b>35.1</b></td></tr></table>	WBS	Cost Element	Opex (USD/t Product)	2000	Mine and mine-site infrastructure	2.7	3000-5000	Road Haulage	2.4	6000	Rail to Douala Port	16.5	7000	Douala Port	5.8	8000	Transshipment	5.0	11000	Owners Costs	2.6		<b>Total</b>	<b>35.1</b>												
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	<p>Rail operating margins have been applied at rates consistent with industry benchmarked data and consider first principle operating costs, capital repayment and operating profit and are modelled to provide industry acceptable rates of return. The Cameroon government retains a 5% royalty tax, a 1% community development fund and 30% corporate tax. A 5-year tax and royalty holiday has been assumed consistent with industry norms from equivalent projects in Cameroon.</p> <p>Cost estimates are made in Q2 2020 US Dollars (USD).</p>
<b>Revenue factors</b>	<p>Product pricing is based on Canyon's estimates and forecasts for the Minim Martap Project within the modelling capabilities of the 1Q2020 Wood Mackenzie's Bauxite Price Forecast Model for the period 2019-2040. Forecasts have been determined from using Minim Martap product grades and metallurgical factors and include consideration for current supply and anticipated future supply, grade degradation forecasts for existing suppliers and future refinery input costs including, freight, fuel and caustic soda. The Cameroon FOB price has been derived from a value in use-adjusted marginal tonne supply curve on a delivered basis to the end use market.</p> <p>The value-in-use (VIU) adjustment recognises product grades which have been determined by assuming available Alumina is 90% of the total and reactive Silica is 70% of the total Silica. VIU pricing includes recognition of the grade and the average moisture content.</p> <p>Modelled pricing is forecast as commencing at \$43.5/t FOB and increasing up to the long term, average of 51.2/t FOB.</p>
<b>Market assessment</b>	<p>Wood Mackenzie and Canyon's Chief Development Officer, Rick Smith, have contributed to the PFS in market analysis, future demand and product pricing.</p> <p>The market is forecast to be in oversupply for the short to medium term before returning to a more balanced and rational market before 2030. The PFS recognises suppressed prices, at the bottom of the cost cycle, between 2020 and 2025, with a price growth up curve following in the economic analysis.</p> <p>Aluminium fundamentals support strong demand for bauxite to support the growing aluminium industry being largely balanced by new and expanding projects with premiums attached to higher grade bauxite products. The largest and growing end use market is China.</p> <p>China currently imports two thirds of the total global seaborne bauxite supply (150 million tonnes) importing 100 million tonnes per annum, 50% of which is from Guinea. The proportion of Guinean imports to China is growing and the need for source diversification is an industry priority. Bauxite demand into China is forecast to continue to grow rapidly for another decade at least.</p>
<b>Economic</b>	<p>The financial model for the Project was initially prepared by Mazars and has been refined by the Company.</p> <p>The PFS has been completed on a 100% Project ownership basis for the financial assessment. Funding of the Project is modelled as 100% equity funded for the purposes of the PFS.</p> <p>An after-tax discount rate of 10% has been used for the Project financial analysis. All costs and prices are stated in real terms as at Q2 2020. The modelling period is 20 years.</p> <p>Sensitivity of the Project to changes in the key drivers of sale price, operating cost and capex was carried out and showed the Project NPV and IRR to be most sensitive to changes in product pricing and least sensitive to changes in capex.</p> <div style="display: flex; justify-content: space-around;"> <div style="text-align: center;">  <p><i>Project NPV sensitivity post-tax (US\$)</i></p> </div> <div style="text-align: center;">  <p><i>Project IRR sensitivity post-tax</i></p> </div> </div> <p>Project funding is modelled as 100% equity funded for the purposes of the PFS. Given the market capitalisation of Canyon (c. AUD \$80-90m as at June 2020) this is thought to be an appropriate and achievable funding path. The Company recognises the benefit of alternate solutions and intends to</p>

	explore different financing structures, during subsequent study phases, including a potential combination of debt and equity.																												
Rail	<p>The Company has assumed that the required rail rolling stock and public access rail infrastructure will be acquired, owned and operated separately to the Project. The Company has modelled from first principles the capital and operating costs of the rail and rolling stock requirements and has included payment of a capital return and operating margin to the owner-operator. The margins to the owner-operator have been modelled and the rate of return benchmarked to similar operational arrangements. Canyon has commenced discussions with appropriate companies, including specialist African rolling stock providers and logistics operators who have expressed a high degree of interest in participating in the purchase, funding and operation of the rolling stock and associated infrastructure.</p> <p><i>Rail Rolling Stock and Public Access Rail Infrastructure Cost (US\$)</i></p> <table><tr><th>WBS</th><th>Cost Element</th><th>Capital incl. Growth (USD 000)</th><th>Split (%)</th></tr><tr><td>6000</td><td>Locomotives</td><td>54,600</td><td>44.9%</td></tr><tr><td>6000</td><td>Flatbed wagons</td><td>49,000</td><td>40.3%</td></tr><tr><td>3000</td><td>Rail Access Infrastructure</td><td>10,600</td><td>8.7%</td></tr><tr><td>10000</td><td>EPCM - Non Engineering</td><td>900</td><td>0.7%</td></tr><tr><td>12000</td><td>Contingency</td><td>6,500</td><td>5.3%</td></tr><tr><td></td><td><b>Total</b></td><td><b>121,600</b></td><td><b>100.0%</b></td></tr></table>	WBS	Cost Element	Capital incl. Growth (USD 000)	Split (%)	6000	Locomotives	54,600	44.9%	6000	Flatbed wagons	49,000	40.3%	3000	Rail Access Infrastructure	10,600	8.7%	10000	EPCM - Non Engineering	900	0.7%	12000	Contingency	6,500	5.3%		<b>Total</b>	<b>121,600</b>	<b>100.0%</b>
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Other	<p>This PFS has confined itself to determining the economic viability of developing the Project, and its potential material impacts on the environment and community.</p> <p>Canyon holds 3 current Exploration Licences over the area, within which the Mineral Resource is estimated. Canyon also has interests in the surrounding areas. Access to the site is not subject to any restrictions.</p> <p>Project development funding will be required and would occur after completion of the final bankable feasibility study, along with tendering for suitable contractors to construct the mine and associated infrastructure.</p> <p>A range of governmental agreements and licences are required prior to the decision to commence construction can be made, in particular the Mining Agreement and the rail and port access agreements</p>																												
Classification	<p>The underlying Mineral Resource classification consists of Indicated and Inferred Mineral Resources.</p> <p>Inferred mineral resources have been included in the calculation of the Production Target: Less than 0.2% of the 20-year product tonnes are sourced from inferred geology. Canyon is satisfied that the proportion of inferred mineral resource is not a determining factor in project viability and the inferred resources do not feature as a significant portion in the early mine plan.</p> <p>Ore Reserves have not been estimated to date and are planned to be compiled on the basis of this PFS.</p>																												
Audits or reviews	<p>Expert external consultants have contributed to this PFS and the various elements of the contributing data and reports have been internally reviewed, but no external audits or independent peer reviews of the consolidated PFS have been completed.</p> <p>The Project Director responsible for the PFS is an employee of the Company and is a mining and mechanical engineer with thirteen years of bulk commodity mining experience in large operating assets and in project development in Australia and Africa.</p>																												
Study accuracy	The estimates in this PFS are based on a ±25% level of accuracy in technical studies and costings.																												



## 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 December 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.

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 27 September 2019 and available to view on the Company's website and ASX.

For the purposes of the PFS study, the Company confirms that it is not aware of any new information or data that materially affects the information included in the original<sup>18</sup> 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.

## 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)

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<sup>18</sup> ASX announcement 27 September 2019