

# **Developing a Global Tier One Bauxite Asset**

February 2021





#### **Competent Person's Statement – Ore Reserves**

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

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

#### **Competent Person's Statement – Mineral Resources**

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

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

#### **Mineral Resource estimate**

The data in this announcement that relates to the Mineral Resource estimates for the Minim Martap Bauxite Project is based on information in the Resources announcement of 08 October 2020 and available to view on the Company's website and ASX. The Company confirms that it is not aware of any new information or data that materially affects the information included in the original market announcement and, in the case of estimates of Mineral Resources, that all material assumptions and technical parameters underpinning the estimates in the original market announcement continue to apply and have not materially changed. The Company confirms that the form and the context in which the Competent Person's findings are presented have not been materially modified from the original market announcement

#### **Pre-Feasibility Study**

The data in this announcement that relates to the Pre-Feasibility Study for the Minim Martap Bauxite Project and associated production targets and forecast financial information, is based on information in the PFS announcement of 01 July 2020. and available to view on the Company's website and ASX.

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

#### **Ore Reserve estimate**

The data in this announcement that relates to the Ore Reserve estimate estimates for the Minim Martap Bauxite Project is based on information in the maiden Ore Reserve announcement of 10 August 2020 and available to view on the Company's website and ASX.

The company confirms that the 2020 Mineral Resource estimate has no material impact to the Ore Reserve estimate. The Company confirms that it is not aware of any additional new information or data that materially affects the information included in the original market announcement and, in the case of estimates of Ore Reserves, that all material assumptions and technical parameters underpinning the estimates in the original market announcement continue to apply and have not materially changed. The Company confirms that the form and the context in which the Competent Person's findings are presented have not been materially modified from the original market announcement.

#### **Forward looking statements**

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

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

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

#### **References:**

ASX announcement 08 October 2020 ASX announcement 01 July 2020 ASX announcement 10 August 2020

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# Introduction to Canyon Resources

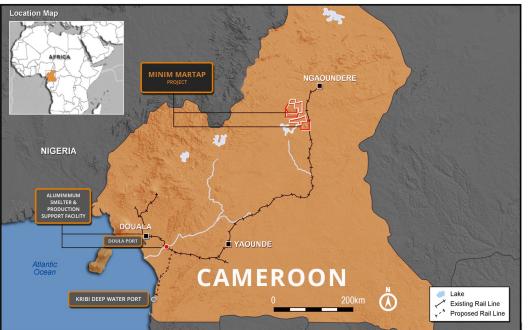
Overview



## **Executive Summary**

- Minim Martap is recognised as a world class high grade bauxite project
- Project located in Cameroon, West Africa
- Total JORC compliant resource base of 1.0 billion tonnes at 45.2% Al<sub>2</sub>O<sub>3</sub> with considerable upside potential
- Contains a high-grade resource of:
  - 484 Mt at 48.8% Al<sub>2</sub>O<sub>3</sub>

- Low reactive silica 2.6%
- Very high gibbsite content >90%, suitable for low temp alumina refining
- High alumina, low impurities: suitable for most refineries around the world
- Operating rail line runs from the Project area to the existing Douala Port
- The rail line and port both have the capacity for the Project
- Positive PFS released, BFS to be completed during Q3 2021
- Mining license application to be made in Q2 2021
- Strategic off-take and funding discussions advancing in parallel with the BFS & Government negotiations



Canyon's Minim Martap Project, Cameroon





#### Market Capitalisation and Enterprise Value

Market Details	Units	Value
Shares outstanding	m	623.9
Last close (15 Feb 2021)	A\$/share	0.12
Market Capitalisation	A\$m	74.9
Cash (31 December 2020)	A\$m	7.9
Debt (31 December 2020)	A\$m	-
Enterprise Value	A\$m	67.0

#### **Substantial Shareholders**

Name	Shares Held (m)	% of IC
AusGlobal Bauxite Pty Ltd	56.3	9.0%
Other shareholders	567.6	91.0%
Total	623.9	100%

#### Share price / volume history (A\$; millions)



#### **Board of Directors**

Cliff Lawrenson	Non-Executive Chairman
Phillip Gallagher	Managing Director
David Netherway	Non-Executive Director
Peter Su	Non-Executive Director
Steven Zaninovich	Non-Executive Director
Dimitri Bacopanos	Non-Executive Director



1	Tier 1, globally significant, high grade bauxite deposit	<ul> <li>✓ One of the largest undeveloped, high grade direct shipping bauxite deposits held outside of the existing major industry players</li> <li>✓ JORC Resource of 1 Billion tonnes at 45.2% Al<sub>2</sub>O<sub>3</sub> with low silica (~2%)</li> </ul>
2	Superior bauxite product compared to peers	<ul> <li>Product has a high in-situ value (based on its high available alumina content and low reactive silica) compared with other bauxite projects globally</li> </ul>
3	A simple, advanced stage bauxite asset	<ul> <li>Simple mining method – continuous miners, minimal overburden and no processing requirements i.e. direct shipping ore</li> <li>Existing rail located adjacent to Project linking to the existing port of Douala</li> </ul>
4	BFS underway with strategic partners	<ul> <li>Appointed leading EPC company MCC-CIE to complete BFS works (excluding the rail BFS studies)</li> <li>MCC is one of China's major multinational conglomerates and is active in global bauxite mining and refining</li> </ul>
5	Major upcoming catalysts	<ul> <li>Mining license application to be made in Q2 2021</li> <li>Strategic off-take and funding discussions advanced in parallel with the BFS &amp; Government negotiations</li> </ul>
6	Recent appointments and strategic developments	<ul> <li>Recent of appointment of Cliff Lawrenson as Chairman to assist Canyon develop and commercialise Minim Martap</li> <li>Strategic \$5.6m investment from Mr Peter Su – whose family have held commercial interests in bauxite and alumina refining in China</li> </ul>



# Minim Martap bauxite offers a superior balance of critical characteristics compared with other seaborne bauxite sources. With high alumina content appearing mainly as gibbsite (>90%), and very low reactive silica.

**Minim Martap Product Specification** 

Minim Martap vs other seaborne bauxite sources

Product Analysis Total Al <sub>2</sub> O <sub>3</sub> Low Temperature Available Al <sub>2</sub> O <sub>3</sub>	<b>Typical</b> 52% 47%	Company / Deposit	Canyon Minim Martap	CBG Boke	Alufer Bel Air	Rusal Dian Dian	GAC Sangaredi	SMB-WAP Boke	Metro Mining (ASX: MMI)
Boehmite Total SiO <sub>2</sub>	<0.5% 2.0%	Location	Cameroon	Guinea	Guinea	Guinea	Guinea	Guinea	Australia
Low Temperature Reactive SiO <sub>2</sub>	1.4%	Status	BFS	Operating	Operating	Operating	Operating	Operating	Operating
Fe <sub>2</sub> O <sub>3</sub>	13.9%	Total Alumina	52%	50%	44%	45%	46%	42%	~49%
TiO <sub>2</sub> CaO	4.9% 0.01%	Available Alumina (~150C)	47%	45%	38% - 39%	n/a	n/a	~40%	~39%
MgO	0.04%	Total Silica	2.0%	2.5%	4-6%	3%	2%	~23%	~13%
K <sub>2</sub> O Free moisture	0.01% 10%	Reactive Silica	1.4%	1.0%	1.7%	1.7%	1.7%	n/a	~6%
Organic Carbon	0.03-0.15%	Iron	13.9%	12%	22% - 24%	n/a	20%	20%	n/a
		Moisture	10%	7%	10%	10%	10%	10%	n/a

References: Sternship Advisers research. February 2021.

# **Industry Thematics**



1	Growing import demand from China, the largest importer of bauxite in the world	<ul> <li>Major growth driver remains decline in both quality and quantity of domestic China bauxite supply</li> <li>Environmental restrictions on mining also impacting domestic China bauxite supply</li> </ul>	
2	Higher grade bauxite leads to more efficient and environmentally friendly alumina production	<ul> <li>High grade bauxite requires less caustic soda consumption and lower red mud disposal costs</li> <li>Speculation China could seek to restrict the import of low grade bauxite in a move to tighten the environmental impacts of alumina refining</li> </ul>	Bloomberg "European Aluminium Buyers Are Starting to Pay Up to Go Green" February 2021
3	China heavily reliant on Guinea bauxite supply	<ul> <li>Guinea tripled its bauxite output between 2015 and 2019 as mining projects came online, with most of it going to China</li> <li>In 2019, Guinean bauxite exports were ~66 Mt, representing 95% of the total bauxite exports from Africa</li> </ul>	"BMW AG and Emirates Global Aluminium PJSC have struck a deal for the first aluminium produced using solar power" <b>February 2021</b>
4	New Alumina refineries planned or in construction near Chinese ports	<ul> <li>Driving demand for imported bauxite supply</li> <li>Major such as Chalco are constructing or have announced plans to expand coastal alumina capacity</li> </ul>	
5	Aluminium demand forecast to grow	<ul> <li>Global demand for primary aluminium is expected to increase by 50% in the next thirty years</li> </ul>	"To meet emissions targets, the world is going to need a lot more alumining to need a lot more alumining to need a lot more alumining to the second second
6	The role of aluminium in substituting raw steel production	<ul> <li>China produced a record 1bn tonnes of steel in 2020</li> <li>Recent media stating China is seeking to reduce raw steel capacity in 2021</li> <li>Aluminium's light weight, corrosion resistance and recyclability are its major assets in becoming a metal choice in a low carbon global shift</li> </ul>	going to need a lot more aluminium," says going to need a lot more aluminium," says Armstrong. "As a recyclable metal, it's a perfect foundation for electric vehicles, aeroplanes and electronics, paving the way towards a circular economy" <b>Mining Review, January 2021</b>
7	Bauxite recognised as 'critical raw material' by the EU	<ul> <li>Inclusion recognises the strategic importance of the aluminium industry in supporting Europe's transition to a green economy</li> </ul>	

References: Sternship Advisers research. February 2021.



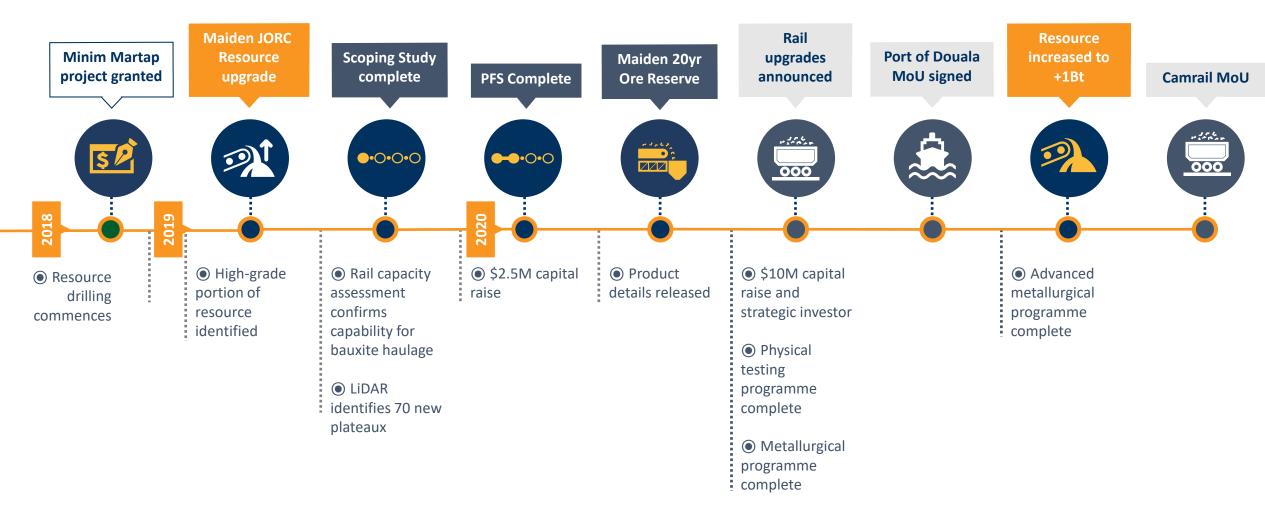
# **History and Future**

Review of milestones met and upcoming





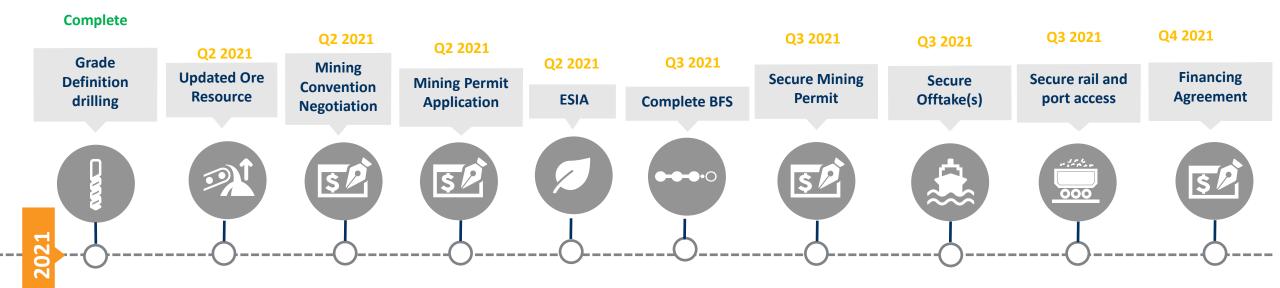
### Significant milestones have been met in a short time



References: CAY ASX announcements 19 December 2018, 12 March 2019, 26 March 2019, 26 November 2019, 16 December 2019, 01 July 2020, 08 July 2020, 10 August 2020, 31 August 2020, 17 September 2020, 01 October 2020, 08 October 2020 and 19 November 2020.



## The project will deliver significant milestones: catalysts for the company





# **The Project**

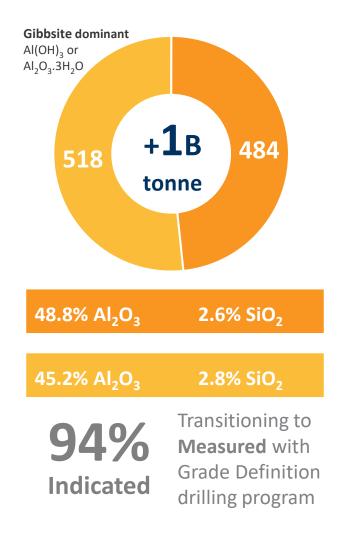
Defined by a PFS, supported by reserves and underpinned by high grade resources



## Resource is large, high grade and open



## High grade resource



## **Favorable geology**

- ✓ Mature laterite
- ✓ Gibbsite dominant
- ✓ Minimal Boehmite or Diaspore
- ✓ Plateaux hosted
- ✓ Well draining
- ✓ On surface



## Significant resource upside

- **12** Plateaux in Resource
- 2 Plateaux newly drilled
- 62 Plateaux not drill tested







## **Pre-Feasibility Study**

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

Realised price		Avg-20Yr
Realised price	USD/t FOB	(init. 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)	Years	4.2

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%

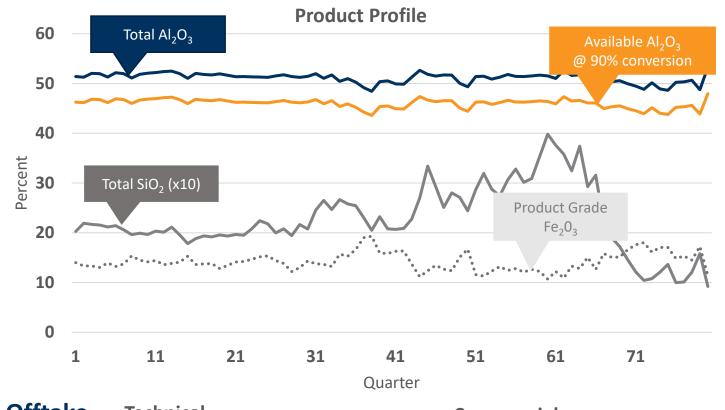
## Maiden Ore Reserve

Classification	Tonnes (Mt)	Al2O3	SiO2
Proven	-	-	-
Probable	97.3	51.1%	2.3%
Total Ore Reserves	97.3	51.1%	2.3%

# **Product has been quantified**



# **CAMALCO** PREMIUM BAUXITE



## Offtake

## **Technical**

- Bulk sampling
- Mineralogy definition
- Technical marketing

### **Commercial**

- Offtakers testing samples
- MOUs prepared
- Strategic investor support

#### July 2020

**Bauxite Technical Specification** 



#### Metallurgical Grade Bauxite

Product name Mineralogy <sup>1</sup> Refining Availability <sup>2</sup>		Camalco Premiu Alumina Trihydr Low and High te	ate (>90%)			
Volume		Up to 5 Mtpa				
Year		2023 (estimated)				
Port		Douala. Cameroon. West Africa				
Vessel size		Capesize				
DSO primary o	hemical properties <sup>1</sup>		Typical <sup>2</sup>	Maximum	Minimum	
Total Alum	nina (Al <sub>2</sub> O <sub>3</sub> )		52%	52%	51%	
Total Silica	(SiO <sub>2</sub> )		2.0%	2.2%	1.8%	
Alumina to Silica ratio		26		24	21	
Total Iron	(Fe <sub>2</sub> O <sub>3</sub> )		13.9%	15.3% 5.8%	12.8% 4.4%	
Total Titan	ium (TiO <sub>2</sub> )		4.9%			
Loss on Igr	nition (LOI)		26.0%	26.8%	24.1%	
Total organic carbon (TOC)		0.03%-0.15%				
Monohydr	ate Alumina	< 0.5% – (Minim	al Boehmite or Dias	pore)		
Digestion (LT-145°c) <sup>1</sup>			Typical <sup>2</sup>	Maximum	Minimum	
Available A	Al <sub>2</sub> O <sub>3</sub> @ 90% <sup>3</sup>		47%	47%	46%	
Reactive SiO <sub>2</sub> @ 70% <sup>4</sup>		1.4%		1.5%	1.29	
Alumina to Silica ratio			34	31	38	
DSO secondar	y chemical properties <sup>1</sup>					
Oxide	Typical	Max	Oxide	Typical	Max	
Cr <sub>2</sub> O <sub>3</sub>	0.07%	0.08%	ZnO	0.01%	0.01%	
CaO	0.01%	0.01%	MnO	0.02%	0.03%	
P <sub>2</sub> O <sub>5</sub>	0.11%	0.12%	V <sub>2</sub> O <sub>5</sub>	0.07%	0.07%	
SO <sub>3</sub>	0.07%	0.07%	K <sub>2</sub> O	0.01%	0.01%	
ZrO <sub>2</sub>	0.10%	0.10%	MgO	0.04%	0.05%	
BaO	0.01%	0.01%	SrO	0.01%	0.01%	
Na <sub>2</sub> O	0.02%	0.02%				
Physical prope	erties <sup>5</sup>					
Moisture (wt)		10%	14% (Saturated)		AS 1038	
Dust extinction moisture (DEM)					AS 4156.6-2000	
Bulked density (S.G)		1.3 - 1.5	1.4 - 1.7 (DEM)			
Strength		40 Mpa (Typ)				
Angle of repose		37°	42° (DEM)	32° (Dynamic)		
Drawdown angle		55°	68° (DEM)	(-)///		

<sup>1</sup> As included within the 2019 Mineral Resource Estimate update: ASX announcement 27 September 2019.

<sup>2</sup> Based on first 5 years of PFS mining schedule: ASX announcement 01 July 2020.

<sup>3</sup> Results calculated at a 90% average conversion of total alumina <sup>4</sup> Results calculated at a 70% average conversion of total silica.

<sup>5</sup> Tunra report: Minim Martap Bauxite Handleability Testing Raymonde and Danielle Composite Samples.

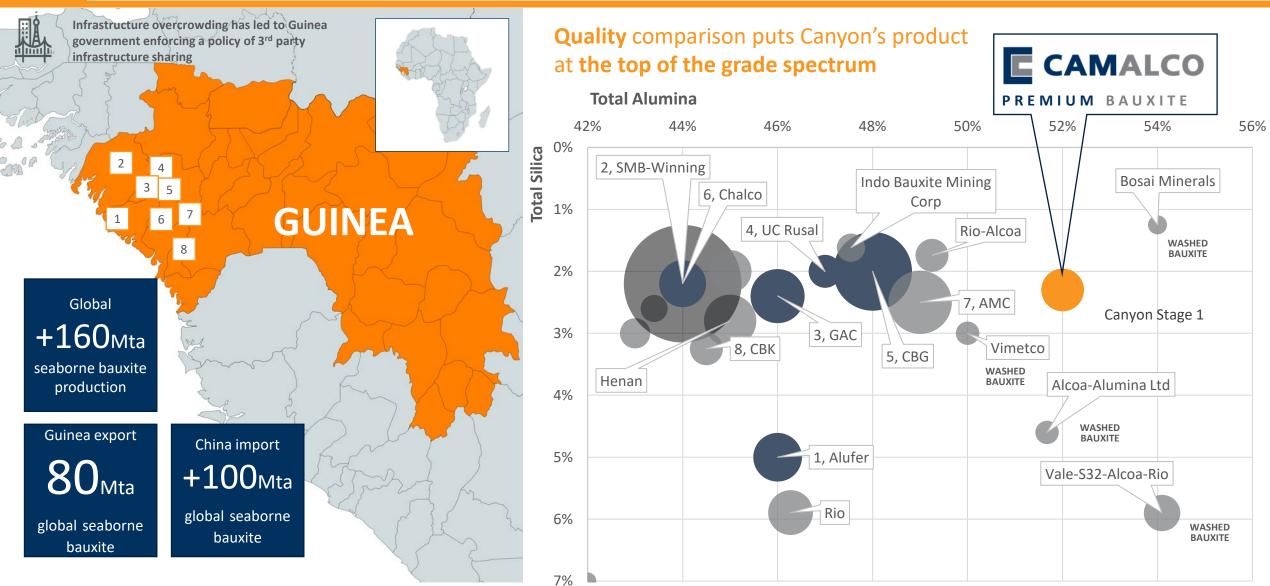


Camalco is a subsidiary of Canyon Resources Ltd. (ASX:CAY)

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## **Canyon DSO is better than most peers**



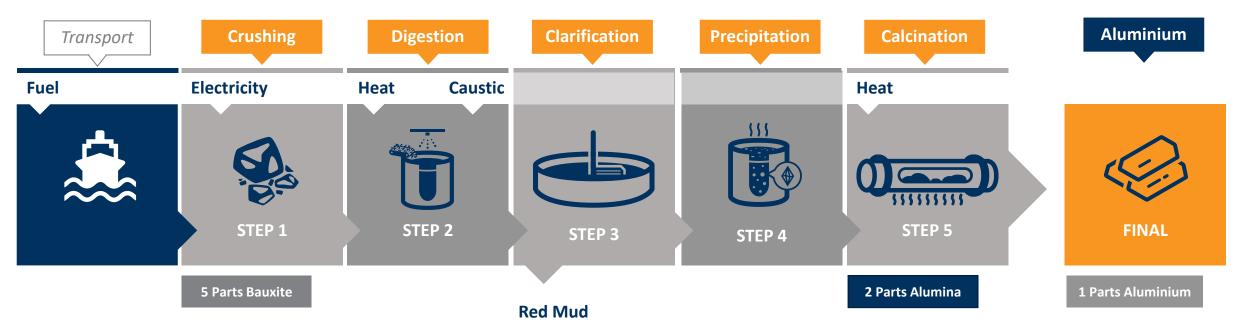


Bubble size represents annual production rate



# **CAMALCO** PREMIUM BAUXITE

**Camalco Premium Bauxite** is ideally suited to the Low-Temperature Bayer process refineries the most prolific and lowest cost



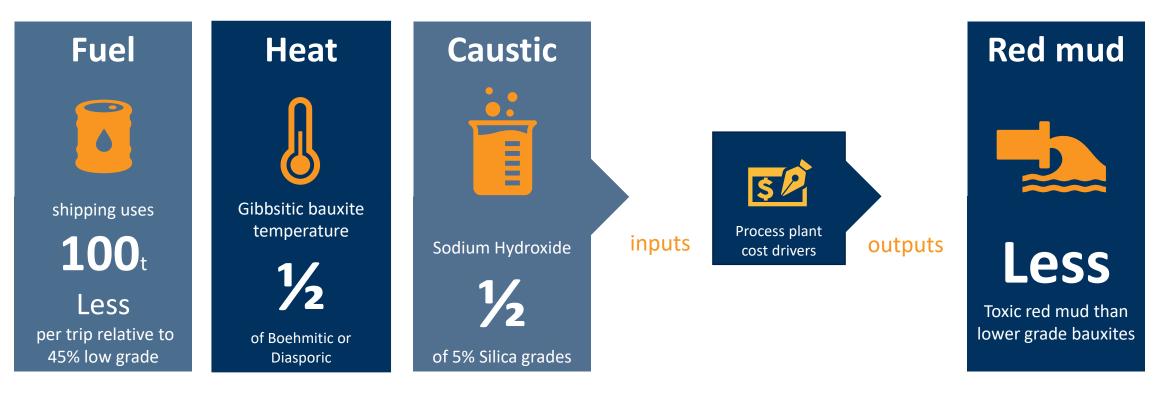


Grade is king and green aluminium needs the highest-grade bauxites



# **CAMALCO** PREMIUM BAUXITE

Camalco Premium Bauxite: Less transport fuel, less heat, less caustic and less red mud



2

Grade is king and green aluminium needs the highest-grade bauxites



# The Path To Mining

Canyon Resources is preparing to mine



# **Canyon is preparing to mine**

2021



## The transition to mining permits is underway with the BFS and partners in support

Exploration Permit

Conditions:

3 year permit

### Annual commitments

- Year 1:
- ✓ Drilling
- ✓ Resource update

#### Year 2:

- ✓ Drilling
- ✓ Pre-feasibility
- ✓ Baseline studies initiated
- $\checkmark$  Impact assessments initiated

#### Year 3:

Final Feasibility Study Financing options

#### Mining convention commencement

## **Mining Convention**

To be agreed with the Government of Cameroon.

#### **Pre-requisites**

- DFS/BFS in development
- ESIA in development

#### **Content includes**

- Taxes and royalties
- Local content
- Social and environmental
- State participation
- Health Safety Security and Hygiene
- Rehabilitation
- Land access
- Shared infrastructure
- Training and development

## **Mining Permit**

#### **Pre-requisites:**

- Draft Mining Convention
- DFS/BFS and ESIA

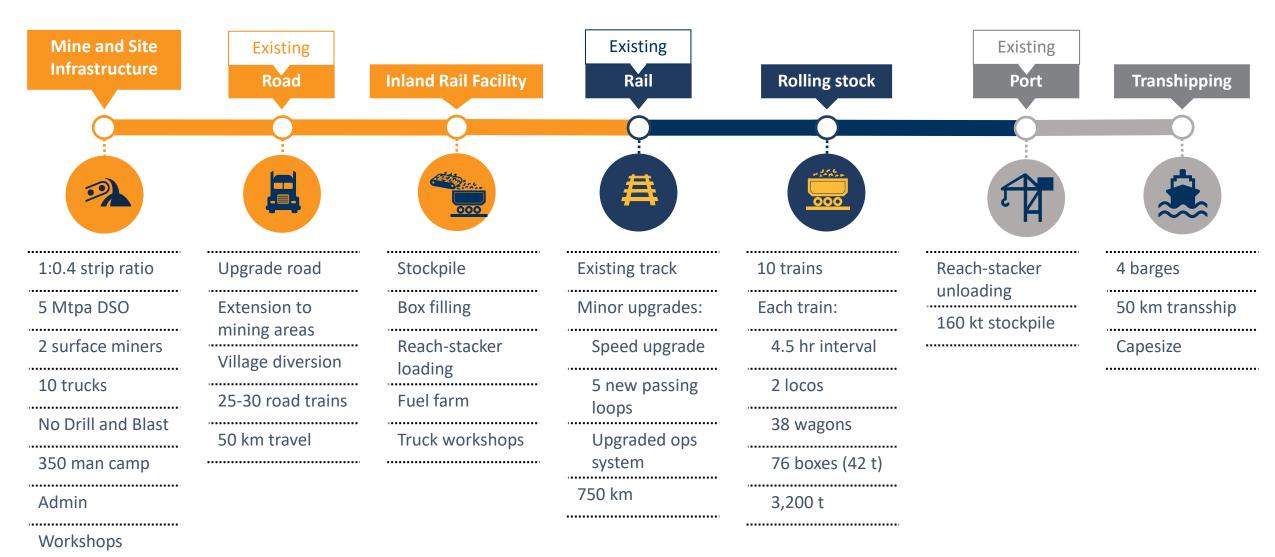
#### **Conditions:**

- 20 year permit
- Renewable on 10. year increments
- Development within 2 years
- Operations within 5 years

## **Development** and operations

Ongoing compliance and reporting





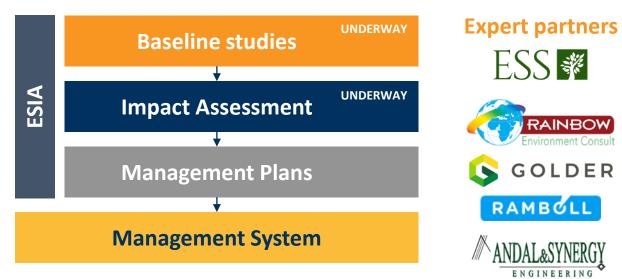
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# **Canyon has integrated ESG from the start**



### **Environmental, Social and Governance**

Integrating appropriate management and metrics so that ESG risks are treated with the same relative importance as economic concerns.











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### Economic:

- +20 permanent employees
- AUD 12.8M spent on the project
- Prioritising local suppliers
- Supporting Cameroon industry

#### **Environmental**

- Waste and recycling managed
- Land disturbance permitting process implemented
- Hazardous material storage

### **Social**

- Internships fostered
- Local school support
- Cultural heritage respected
- Community road maintenance

## A country with the fundamentals for mining

#### Relative abundance of natural resources.

Besides oil and gas, minerals that are found in the country include aluminium, bauxite, cobalt, diamonds, gold, and iron ore.

### Significant industry potential.

As the state of infrastructure improves, it is expected that mining in Cameroon, especially iron ore and bauxite extraction, will prosper.

### Existing infrastructure to support growing industry potential.

Cameroon already has a two ports (Kribi and Douala), a hydropowered aluminium smelter as well as gas production, an oil pipeline and refinery in-country.



As a future JV partner and with resource industrialisation a national imperative the government continues to support Canyon.

# 

The World Bank's Country Partnership Strategy in Cameroon focuses on increasing the country's competitiveness and improving service delivery.



## Cameroon

Population:	27.7m
GDP:	US \$35b
President:	Paul Biya
Prime Minister:	Joseph Dion Ngute
Language:	French & English
Government:	Republic

References: Company research

# **Existing infrastructure supports the value chain**



#### **CAMALCO** PREMIUM BAUXITE **Existing**, enabling infrastructure **Stage 1** - Minimum-viable DSO bauxite project for fast start-up and proof of concept Stage 2 - Expansion upside through Kribi deepwater port Scoping ( PFS { Funding BFS Execution **Operations** Ports: Douala **Rail and** Kribi operators Significant upside in partnerships with value chain developers: The high quality bauxite and access to industrial brownfield sites and existing infrastructure, presents significant opportunities broader development and integration. **ALUMINA** Transition to coastal, gas powered, refining of bauxite into alumina Fuel: Industrial ALUMINIMUM Gas & Oil Sites SMELTER & PRODUCTION SUPPORT FACILITY DOUALA **ALUMINIUM** DOULA PORT Integration with existing hydro-electric powered refinery at Edea Aluminium Hydro Atlantic electricity smelter Ocean KRIBI DEEP WATER PORT



# The Team

Meet Canyon Resources



# **Canyon's organisation is capable**



### **Board**



Cliff Lawrenson Chairman



David Netherway Non-Executive Director



Steve Zaninovich Non-Executive Director



**Dimitri Bacopanos** Non-Executive Director



Peter Su Non-Executive Director

Mining Exploration Finance Project development M&A IPO Fund raising Corporate governance Mining operations

### **Senior Executive**



Phillip Gallagher Managing Director





James Durrant Director of Projects

Rick Smith Chief Development Officer

Project identification Project development Project funding Bulk mining operations Technical marketing Fund raising Corporate marketing Corporate finance

## 

## Technical Services & Business Administration



Tech services Geology, hydrogeology, geotech Database and GIS Community Health Safety Security and Environment Camp operations Business administration Human Resources Government liaison



# Thank you

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