



Green Iron Ore & Steel Made in USA



MAGNUM MINING & EXPLORATION
BUENA VISTA, NEVADA USA
HIGHLIGHTS SUMMARY

ASX:MGU • ABN 70 003 170 376

Summary Information

The summary information contained herein has been provided by Magnum Mining and Exploration Limited (“Magnum” or the “Company”). No representation, expressed or implied, or warranty as to the accuracy or completeness of the information contained herein is made by any party and nothing contained herein shall be relied upon as a promise or representation as to the future. In all cases, recipients should conduct their own investigation and analysis of Magnum.

The information is neither an offer to sell nor a solicitation of an offer to buy any securities. The contents of this presentation are confidential and must not be copied, published, reproduced, distributed in whole or in part to others at any time by recipients. This presentation is being provided to recipients on the basis that they keep confidential any information contained herein or otherwise made available, whether oral or in writing, in connection with the Company.

All statements in this presentation, other than statements of historical facts, which address future production, reserve or resource potential, exploration drilling, exploitation activities and events or developments that the Company expects to occur, are forward looking statements. Although the Company believes the expectations expressed in such statements are based on reasonable assumptions, such statements are not guarantees of future performance and actual results or developments may differ materially from those in forward-looking statements.

Forward-looking statements involve and are subject to known and unknown risks, uncertainties and other factors which may cause the actual results, performance or achievements of the Company and/or its subsidiaries to be materially different from any future results, performance or achievements expressed or implied by the forward-looking information. Such factors include, among others, general business, economic, competitive, political and social uncertainties; the actual results of current exploration activities and feasibility studies; assumptions in economic valuations which prove to be inaccurate; possible variations of ore grade recovery or rates; climatic conditions; political instability; insurrection or war; arbitrary decisions by governmental authorities; delays in obtaining governmental approvals or financing or in the completion of development or construction activities.

To the extent permitted by law, the Company accepts no responsibility or liability for any losses or damages of any kind arising out of the use of any information contained in this presentation. Recipients should make their own enquiries in relation to any investment decisions.

Although the Company has attempted to identify important factors that could cause actual actions, events or results to differ materially from those described in forward-looking information, there may be other factors that cause actions, events or results to differ from those anticipated, estimated or intended. Forward-looking information contained herein is current as at the date of this presentation and the Company disclaims any obligation to update any forward-looking information, whether as a result of new information, future events or results otherwise. There can be no assurance that forward-looking information or statements will prove to be accurate, as actual results and future events could differ materially from those anticipated in such information or statements. Accordingly, readers should not place undue reliance on forward-looking statements.



Magnum - At a Glance

CORPORATE SNAPSHOT

Issuer	Magnum Mining and Exploration Limited
Code (shares)	ASX : MGU
Code	ASX: MGUO (Options with 5 cent exercise price)
Share Price	\$0.155 (as of 4 May 2021)
Market Cap	\$66M (as of 4 May 2021)
Shares on issue	424,667,991
Listed Options	159,829,606
Unlisted Options	60,500,000

BOARD OF DIRECTORS

Managing Director	Dano Chan
Non Executive Chairman	Don Carroll
Non Executive Director	Matt Latimore
Non Executive Director & Company Secretary	John Dinan



Magnum is to become a leading USA Iron Ore Exporter & Green Steel Producer

STRATEGIC LOCATION IN NEVADA, USA

- » Positioned to capture domestic USA market demand
- » Possible export of iron ore and HBI from West Coast USA to Asia Pacific markets

SHORT TERM CASH FLOW OPPORTUNITY IN 2021

- » Direct Ship Iron Ore in 2021
- » Fully permitted mine, high iron ore prices

LONG TERM OPPORTUNITY FOR GREEN STEEL

- » Add value to iron ore to produce higher margin product for the US domestic market

IRON ORE OPPORTUNITY IN 2021

GENERATE CASH FLOW FROM FAST TRACK LOW CAPEX

GREEN STEEL OPPORTUNITY Q2, 2022

EXCLUSIVE LARGE SCALE SUPPLY OF GREEN INPUTS FOR PRODUCTION OF HBI AND PIG IRON PRODUCTION

ALL LOCAL RAW MATERIALS AND SHORTEST DOMESTIC SUPPLY CHAIN. SHORT RAIL AND PORT ACCESS.

AGREEMENT EXECUTED TO MARKET IRON ORE AND GREEN STEEL PRODUCTS WITH M RESOURCES



Cash Flow Opportunity - Direct Shipping Ore in 2021

MAGNUM PLANS TO SHIP IRON ORE IN 2021.

LARGE OPPORTUNITY TO GENERATE CASH FLOW IN THE SHORT TERM.

MAGNUM IS A FULLY PERMITTED MINE, LOW CAPEX, EXCELLENT INFRASTRUCTURE.

HIGH IRON ORE PRICES, STRONG DEMAND.

**+40%
IRON ORE
EX MINE**

**CRUSH
5-10MM**

**DRY
MAGNETIC
SEPARATION**

**61-62% FE
DSO**

**RAIL
LOADING
COLEDO /
HUXLEY**

**PANAMAX
LOADING
SFO PORT**

**ESTIMATED TYPICAL DSO QUALITY BASED ON TESTS RESULTS BY
BEIJING SHOUGANG INTERNATIONAL ENGINEERING TECHNOLOGY CO., LTD - (BSIET)**

% Fe	% SiO₂	% Al₂O₃	% CaO	% MgO	% P	% S	% TiO₂	% V	% LOI
62	2.5	1.5	0.6	0.5	0.01	0.01	0.30	0.30	3.15



Buena Vista Iron Ore Summary

BUENA VISTA IS AN ADVANCED MAGNETITE IRON ORE PROJECT.

All major development permits have already been secured.

TOTAL REPORTED MINERAL RESOURCES

232Mt (JORC 2012 compliant)

+69.5 % FE MAGNETITE CONCENTRATE

with no deleterious impurities

40 KM FROM

mine gate to railway

POTENTIAL EXPORT VIA PORTS

of Stockton / Richmond / San Francisco

AN AVERAGE 16 DAY OCEAN VOYAGE

from West Coast USA to Asia customers

Cut off Fe %	Deposit	Indicated			Inferred			Total		
		Mt	Fe %	DTR %	Mt	Fe %	DTR %	Mt	Fe %	DTR %
10.0	Sect 5	34	17.4	21.0	8.0	16	18	42	17.1	20.5
	West	117	19.5	23.9	40	17	21	157	18.9	23.2
	East				33	19	23	33	19.0	23.0
	Total	151	19.0	23.2	81	18	22	232	18.6	22.7
15.0	Sect 5	21	20.2	25.1	3.8	19	24	25	20.0	24.9
	West	90	21.4	26.7	26	20	24	116	21.1	26.1
	East				25	21	26	25	21.0	26.0
	Total	111	21.2	26.4	55	20	25	166	20.9	25.9
20.0	Sect 5	9.1	24.1	30.9	1.3	23	29	10	24.0	30.7
	West	40	26.5	34.4	9.6	25	32	50	26.2	33.9
	East				13	24	31	13	24.0	31.0
	Total	49	26.1	33.8	24	24	31	73	25.5	33.0
25.0	Sect 5	2.8	28.6	37.7	0.3	27	36	3.1	28.4	37.5
	West	19	31.5	41.9	3.5	30	39	23	31.3	41.4
	East				3.6	29	38	3.6	29.0	38.0
	Total	22	31.1	41.4	7.4	29	38	29	30.7	40.6

*DTR% IS THE ESTIMATED PROPORTION OF THE ROCK MASS RECOVERABLE BY SIMPLE MAGNETIC CONCENTRATION ON THE BASIS OF THE DAVIS TUBE RECOVERY ANALYSES FOR DRILL HOLE SAMPLES. IT IS STRONGLY CORRELATED TO IRON GRADES.



Ports ready for Export

Colado Rail Load Out

Huxley Rail Load Out

Reno

The Ponderosa

BUENA VISTA PROJECT

Port of West Sacramento

Port of Richmond

Stockton Port

Port of San Francisco



Buena Vista - the perfect mine to ship Iron Ore now and then produce Green Steel

THE BUENA VISTA IRON ORE MINE HAS BEEN IN PRODUCTION SINCE 1950'S. 232 MILLION TONNES OF HIGH GRADE MAGNETITE IRON ORE (JORC 2012 COMPLIANT)

EXPECTING A LOW CAPEX AND OPEX - STEEL WORKS AND HYDROGEN PLANT TO BE INSTALLED ONSITE WITH LOW TRANSPORT COST

VAST INFRASTRUCTURE, SHORT TRANSPORT DISTANCES, SKILLED LOCAL LABOUR AND FAVOURABLE CLIMATE

FULLY PERMITTED IRON ORE MINING AND PROCESSING FOR GREEN STEEL START SHIPPING IRON ORE IN 2021

SIGNED AN EXCLUSIVE GREEN HYDROGEN SUPPLY WITH AVF ENERGY AT DISCOUNT

ZERO STATE ROYALTIES, LOW CORPORATE TAXES, POTENTIAL FOR CARBON CREDITS

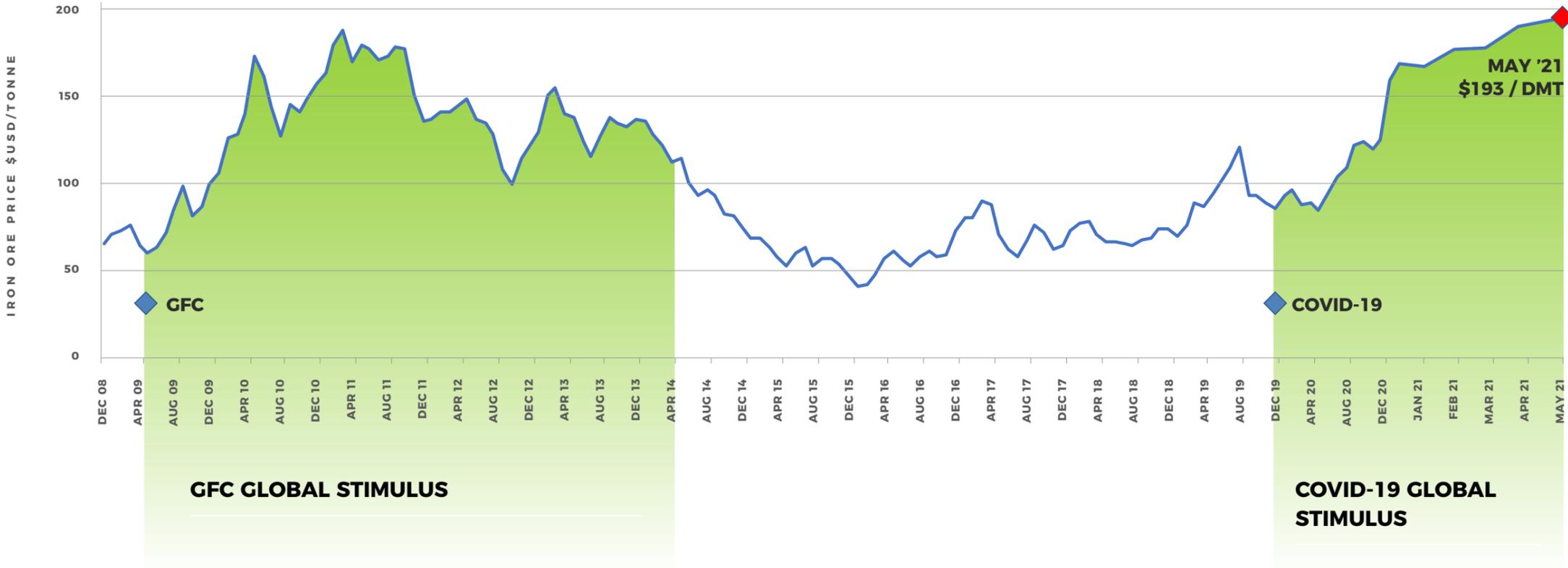
OPPORTUNITY TO BE A FIRST MOVER ON LOW COST GREEN STEEL PRODUCTION IN NORTH AMERICA

PLANS TO USE PROVEN TECHNOLOGY AND USE LOCAL BIOMASS FOR HBI AND PIG IRON

CREATING LOCAL JOBS



Timely Opportunity



Magnum Accelerating Green Hydrogen/Biomass to make Green Steel Products

MGU SIGNED AN AGREEMENT WITH AVF ENERGY LLC to build and fund a Green Hydrogen plant on site at the Magnum facility.

AVF USES LANDFILL WASTE FOR HYDROGEN GENERATION. Landfills are third largest source of greenhouse gas emissions.

AVF IS A REGISTERED COMPANY IN WYOMING that will produce Green Hydrogen from landfill waste on a commercial scale for the Magnum steel-making facility.

AVF TO FULLY FUND the Green Hydrogen plant and also provide Magnum with a 10% discount to market rates.

GREEN HYDROGEN will help to replace Carbon as reagent for iron ore reduction.

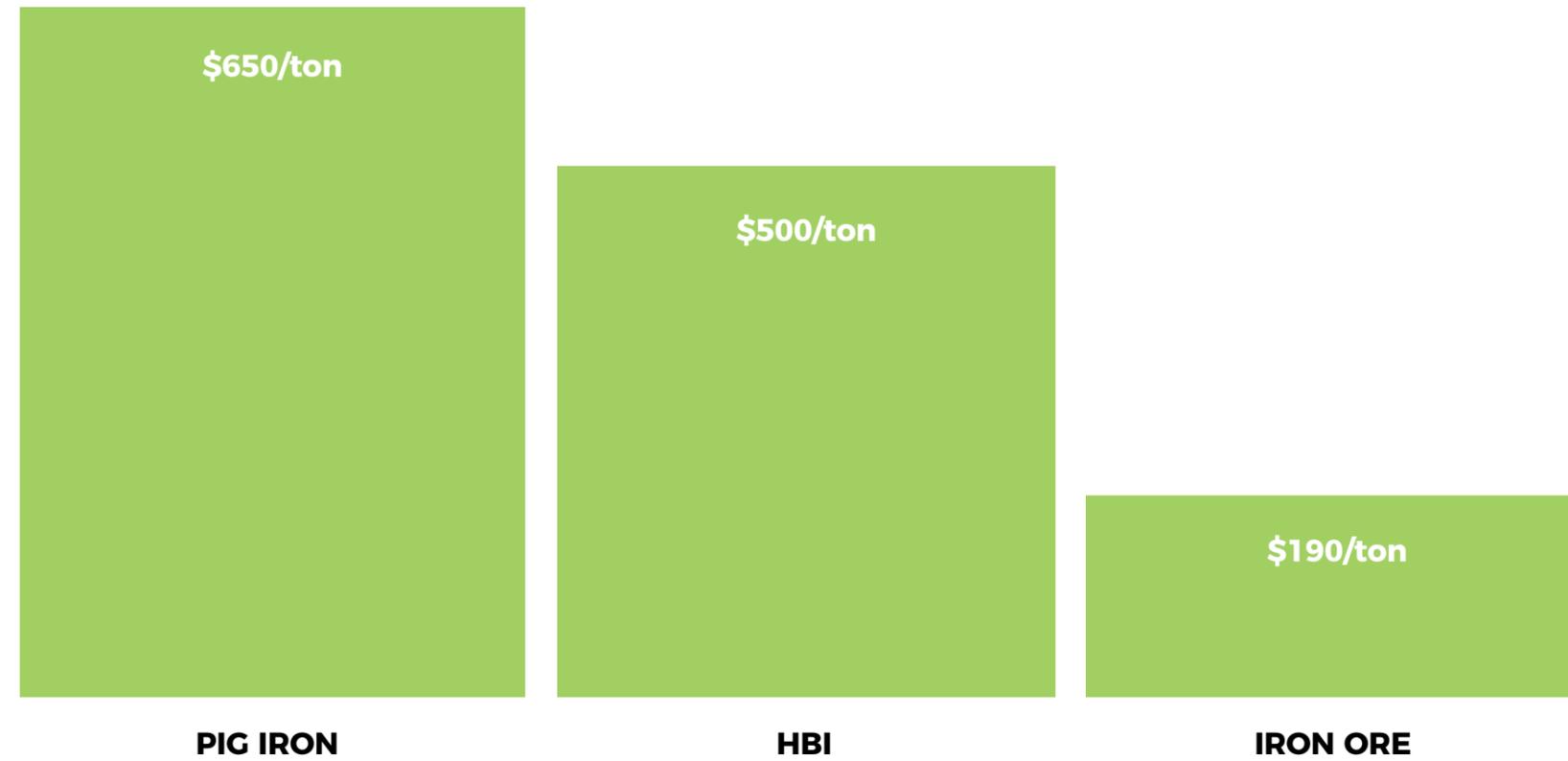
AVF SUBSIDIARY ALSO SUPPLY LOCAL BIOMASS as a green carbon and heat source in HBI and Pig iron production process to replace coal.

AVF IS VERY ACTIVE IN THE GREEN HYDROGEN MARKET HAVING EXECUTED MOU AGREEMENT WITH NYSE LISTED DOMINION ENERGY (D) (U\$62 BILLION DIVERSIFIED UTILITY HOLDING COMPANY WITH ELECTRICAL ASSETS/OPERATIONS AND NATURAL GAS ASSETS/OPERATIONS IN 16 STATES) FOR A GREEN HYDROGEN PRODUCTION PROJECT IN THE USA.



Price of Pig Iron, HBI & Iron Ore

SOURCE: METAL BULLETIN



Clear Path to Cash Flow - Iron Ore Phase 1

	2021				2022				2023			
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
MAGNUM BVNV												
Permitting	COMPLETED											
Mining and processing permit updates												
Iron concentrate plant design update												
Bankable feasibility study updates												
Utility supply application												
Port and railway contract renew												
Iron Ore Product off take												
Ore beneficiation plant construction												
Iron Ore shipment (DSO Grade)												
Iron Ore shipment (Concentrate)												



Clear Path to Cash Flow - Green Hismelt Phase 2

	2021				2022				2023			
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
MAGNUM BVNV												
HISMELT plant design												
Permitting												
Green Hydrogen supply	COMPLETED											
Local Biomass supply												
Bankable feasibility study												
Utility supply application												
HBI Product off take												
HISMELT plant construction												
Start operation (turn key)												



Peer Analysis - ASX Steel & Iron Ore

RANK	COMPANY NAME	MKT CAP
1	BHP	\$224.4B
2	RIO TINTO	\$181.1B
3	FORTESQUE METALS GROUP	\$66.69B
4	BLUESCOPE STEEL LTD	\$11.0B
5	CHAMPION IRON	\$3.4B
6	DETERRA ROYALTIES LTD	\$2.3B
7	MOUNT GIBSON IRON	\$1.06B
8	CORONADO GLOBAL RESOURCES INC	\$955M
9	GRANGE RESOURCES LTD	\$683M
10	BROCKMAN MINING LTD	\$631M

RANK	COMPANY NAME	MKT CAP
11	FLINDERS MINES	\$200M
12	IRON ROAD LTD	\$184M
13	BCI MINERALS LTD	\$184M
14	MAGNETITE MINES LTD	\$181M
15	FENIX RESOURCES LTD	\$144M
16	LEGACY IRON ORE	\$115M
17	GENMIN LT	\$74M
18	MAGNUM MINING AND EXPLORATION LTD	\$66M
19	EQUATORIAL RESOURCES	\$43M



Cautionary Statements

FORWARD-LOOKING STATEMENTS

This document may include forward-looking statements. Forward-looking statements include, but are not limited to, statements concerning Magnum Mining & Exploration Limited's planned exploration or development program and other statements that are not historical facts. When used in this document, the words such as "could," "plan," "estimate," "expect," "intend," "may", "potential," "should," and similar expressions are forward-looking statements. Although Magnum Mining & Exploration Limited believes that its expectations reflected in these forward-looking statements are reasonable, such statements involve risks and uncertainties and no assurance can be given that actual results will be consistent with these forward-looking statements.

COMPETENT PERSONS STATEMENT

The information in this presentation that relates to Exploration Results and Mineral Resources complies with the 2012 Edition of the Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves (JORC Code) and has been compiled and assessed under the supervision of Mr Howard Dawson. Mr Dawson is a member of the Australian Institute of Geoscientists and has sufficient experience that is relevant to the style of mineralisation and type of deposit at Buena Vista and to the activity being undertaken to qualify as a Competent Person as defined in the 2012 Edition of the JORC Code. Mr Dawson consents to the inclusion in this announcement of the matters based on his information in the form and context in which it appears.



Appendix



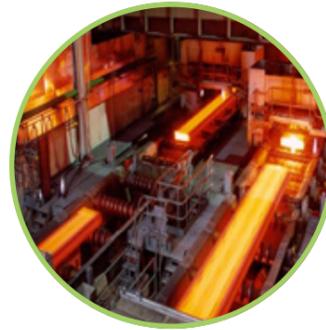
Magnum Magnetite - The Green Iron Ore of the future



STEELMAKERS ARE SEEKING EFFICIENCIES to better manage, reduce and control emissions released during the steel making process.



THE USE OF MAGNETITE IN THE PLACE OF HEMATITE/ AND GOETHITE/ LIMONITE can reduce the steel making emissions intensity by as much as 30% during the overall steel making process.



HIGH GRADE MAGNETITE CONCENTRATES contain very low levels of impurities such as silica, phosphorus, alumina and Sulphur. This means that during the steel making process less energy is required for blast furnaces to “slag off” the impurities thereby reducing unwanted emissions and waste products.



MAGNETITE CONCENTRATE PRODUCES MORE STEEL FOR EACH TONNE USED. This creates the added benefit of reducing steel making costs through lower energy requirements and raw material inputs (such as coking coal).



THE USE OF MAGNETITE CONCENTRATE for steel making in sinter feed blends and pellet feed is widespread and growing.



MULTIPLE MARKETS (not just China) are available to magnetite concentrate producers.



Juniper Tree Biochar - High Energy Biochar Advantages

**JUNIPER TREE IS DRY
WITH AROUND 18%
MOISTURE**

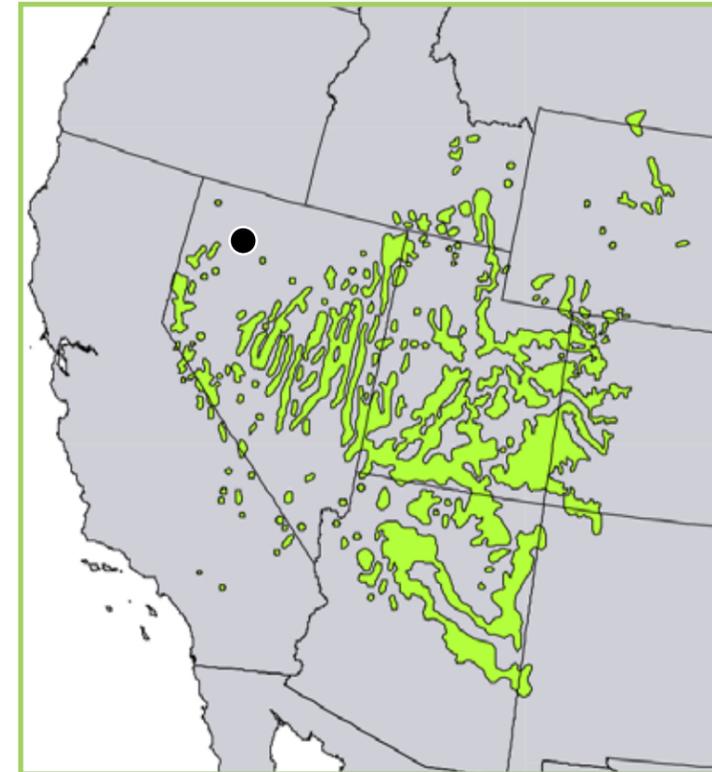
**JUNIPER TREE BIOCHAR
IS UP TO 8,000KCAL/KG
BETTER THAN MOST OF
THERMAL COAL**

**CARBON CREDIT FOR
NEGATIVE GREENHOUSE
GAS EMISSION USING
BIOCHAR**

**BIOCHAR IS ALSO
LOW ON SULPHUR
AND IMPURITIES FOR
GOOD QUALITY STEEL
PRODUCTS**

**READILY AVAILABLE
LOCALLY WITH MINIMUM
LOGISTICS CARBON
FOOTPRINT**

**RESTORE NATURE
BALANCE WHILE
PROVIDING LOCAL JOBS**



SOURCE: U.S. GEOLOGICAL SURVEY - DIGITAL REPRESENTATION OF
"ATLAS OF UNITED STATES TREES" BY ELBERT L. LITTLE, JR.



Juniper Tree Biochar - Facts

JUNIPER TREE IS AN INVASIVE SPECIES

**LARGE PARTS OF THE WESTERN USA
ARE OVERGROWN WITH JUNIPER TREES,
MAKING LITTLE ROOM FOR OTHER TREES**

**A SINGLE JUNIPER TREE USES UP TO
40 GALLONS OF WATER PER DAY,
DEPLETING THE WATER TABLE IN AN
INCREASINGLY ARID AREA**

**A FIRE HAZARD WITH POTENT
GREENHOUSE GAS EMISSION**



Investor Information

FOR MORE INFORMATION, CONTACT

Dano Chan, Managing Director
+852 9304 6282
dano@mmel.com.au

REGISTERED OFFICE

Suite 2, Churchill Court
234 Churchill Avenue
Subiaco WA 6008

Telephone: +61 8 6280 0245
Fax: +61 8 9381 2855
Email: info@mmel.com.au

ASX:MGU
ABN 70 003 170 376

