

# Gulf

MANGANESE



November 2019 • Investor Presentation • ASX : GMC

# Investor Information

This presentation has been prepared by Gulf Manganese Corporation Limited ("Gulf") for the exclusive use of the party to whom Gulf delivers it to. The presentation should not be regarded as a substitute for the exercise of their own judgement.

The valuations, forecasts, estimates, opinions and projections contained herein involve subjective judgment and analysis. Any opinions expressed in the material may be subject to change. The presentation contains forward looking statements and any estimates or projections are based upon the best judgement of Gulf and on currently available information. All currency referred to in this presentation is based on USD, unless otherwise stated.

The presentation has been prepared solely for informational purposes and should not be construed as an offer to buy or sell securities. The Recipient should not construe the contents of the matters presented as providing legal, tax, accounting or investment advice or recommendation. The Recipient should consult their own counsel, tax and financial advisors as to any matters related to the presentation. The presentation does not purport to be all inclusive or to contain all of the information that the Recipient may require to evaluate Gulf. No investment, divestment or other financial decisions or actions should be based solely on the information in this presentation.

The presentation has been prepared on a confidential basis for the use and benefit of the Recipient. Distribution to any other person other than the Recipient is not authorised and material should not be copied, reproduced, distributed or passed to others without the prior consent of Gulf.

Thank you.

# Corporate Snapshot



## Share Metrics

(as at  
18 November  
2019)

ASX Ticker	GMC
Issued Shares	5,184,364,998
Share Price	0.6¢
52 Week High/Low	0.10¢ / 0.5¢
Market Cap	\$ A 31 million

## GMC Share Price Performance



## Board & Management

<b>Non-Exec Chairman</b>	Craig Munro
<b>Managing Director &amp; CEO</b>	Hamish Bohannan
<b>Non-Exec Director</b>	Andrew Wilson
<b>Non-Exec Director</b>	Tan Hwa Poh
<b>Company Secretary</b>	Ian Gregory
<b>CFO</b>	Robert Ierace

## GMC Shareholder Structure

<b>Top 20 Shareholders</b>	46.71%
<b>Board &amp; Management</b>	5.22%
<b>Citicorp</b>	11.76%
<b>HSBC</b>	7.46%
<b>PT JTS Group</b>	3.50%
<b>Tan Hwa Poh</b>	2.93%
<b>BNP Paribas</b>	2.78%

# Who is Gulf Manganese Corporation?



- Gulf is a **smelting specialist**, involved in mining, smelting and trading of manganese products, offering exposure to the niche top end manganese space, essential to steel and batteries
- **Gulf is the only ASX listed company offering exposure to the unique Indonesian high grade ore**
- Gulf is developing a premium refined ferromanganese alloy production smelting hub in West Timor, Indonesia
- Headquartered in Australia, with offices in Perth, Kupang, Singapore and Dili



# Investment Opportunity



**Construction on track to be completed in H2 2019:**

- Construction over 60% complete with commissioning and first commercial alloy sales expected during Q1 2020

**Clear pathway to production ramp-up:**

- Low-cost, highly scalable production starting at 43,000<sup>1</sup> tpa, increasing to over 200,000<sup>2</sup> tpa of ferromanganese alloy with the addition of subsequent smelters

**DSO Licence secured:**

- Manganese Concentrate Export Permit (“DSO”) approval received to export up to 103,162 tonnes of high-grade manganese concentrate per year, with the licence secured through to January 2022

**Mine-gate to production acquisition strategy:**

- Actively assessing acquisition opportunities targeting high grade (+49%Mn) manganese mines in Indonesia

**Diversified revenue streams:**

- Export of refined ferromanganese alloys of Medium and Low Carbon, and export of Direct Shipping Ore (DSO)

**Strong in-country partnerships:**

- Strong Indonesian partnership with PT JTS, whose Chairman and CEO is Bapak Fofo Sariaatmadja, a highly regarded Indonesian business executive

**Strategic interest in Timor-Leste manganese explorer:**

- Planned acquisition of a 20% interest in Iron Fortune Pty Ltd provides a first to market exploration opportunity in Timor-Leste, significantly diversifying and de-risking supply chain

Notes: <sup>1</sup> 2 Units <sup>2</sup> 8 Units

# What is Manganese?

## Manganese is:

- The fourth most consumed metal behind iron, aluminium and copper
- A brittle, hard, silver-grey metal that looks like iron

## Metallurgical:

- Over 90% of demand comes from steelmaking. No suitable substitute for the metal exists, it cannot be recycled.
- Manganese is usually added in the form of ferroalloys: ferromanganese ( $\text{FeMn}$ ) and silicomanganese ( $\text{SiMn}$ )
- Manganese ferroalloys are added to deoxidise molten steel, remove sulphur and act as hardening agent
- It is also used in batteries, chemicals and the aluminium industry



## Low Carbon FeMn – Highest Value Alloy

### Gulf's Low Carbon Alloy:

- Niche, high value segment
- Special product – Ultra Low Carbon combined with very high manganese content
- Process maximises margins
- Highly profitable



**Manganese Ore**



**Manganese Alloy**

Silicomanganese Alloy

**SiMn**

Construction Steels



High Carbon Ferromanganese Alloy

**HCFMn**

Flat Steels



**Refined Ferromanganese Alloy**



Medium Carbon Ferromanganese Alloy

**MCFMn**

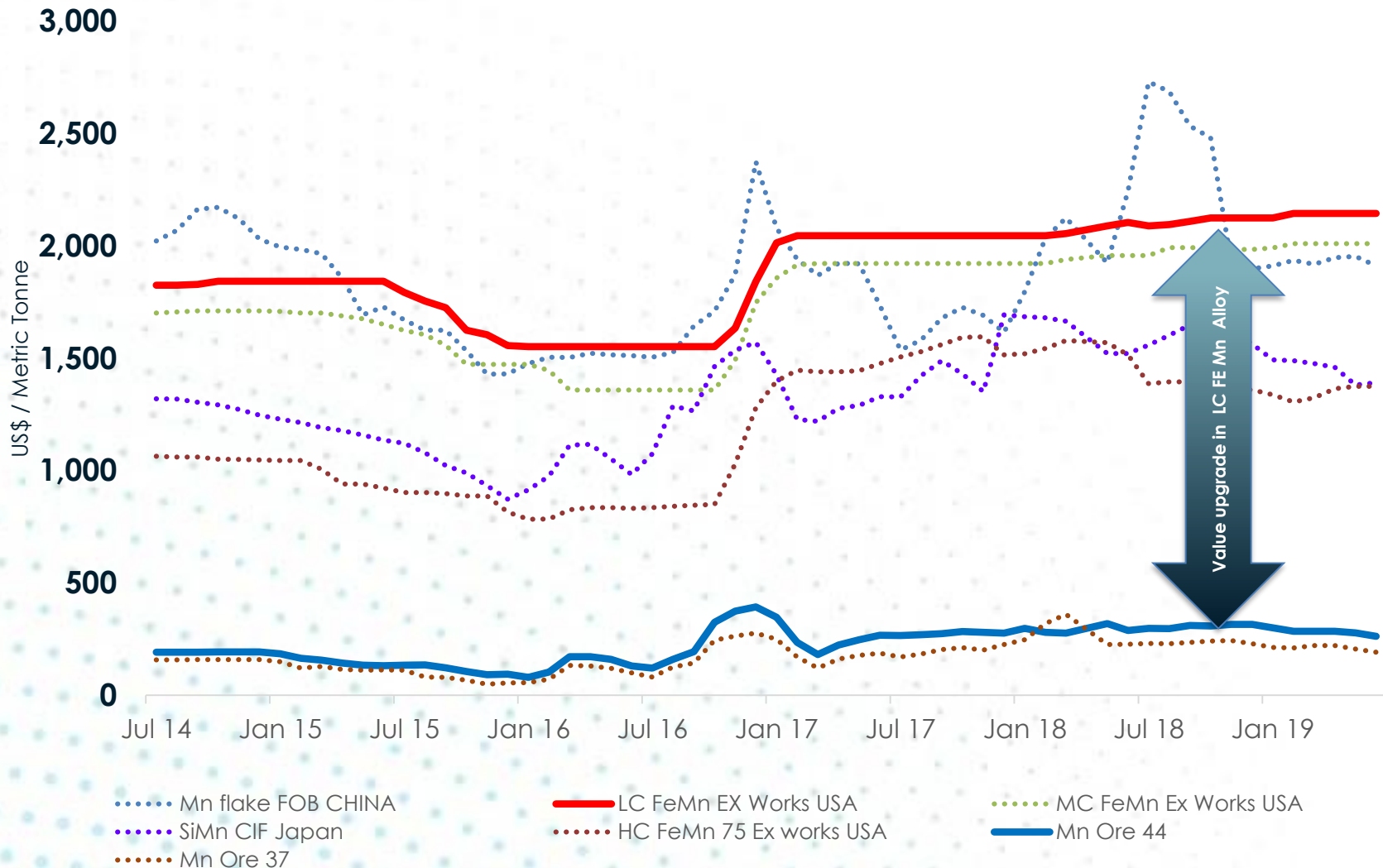


Low Carbon Ferromanganese Alloy

**LCFMn**

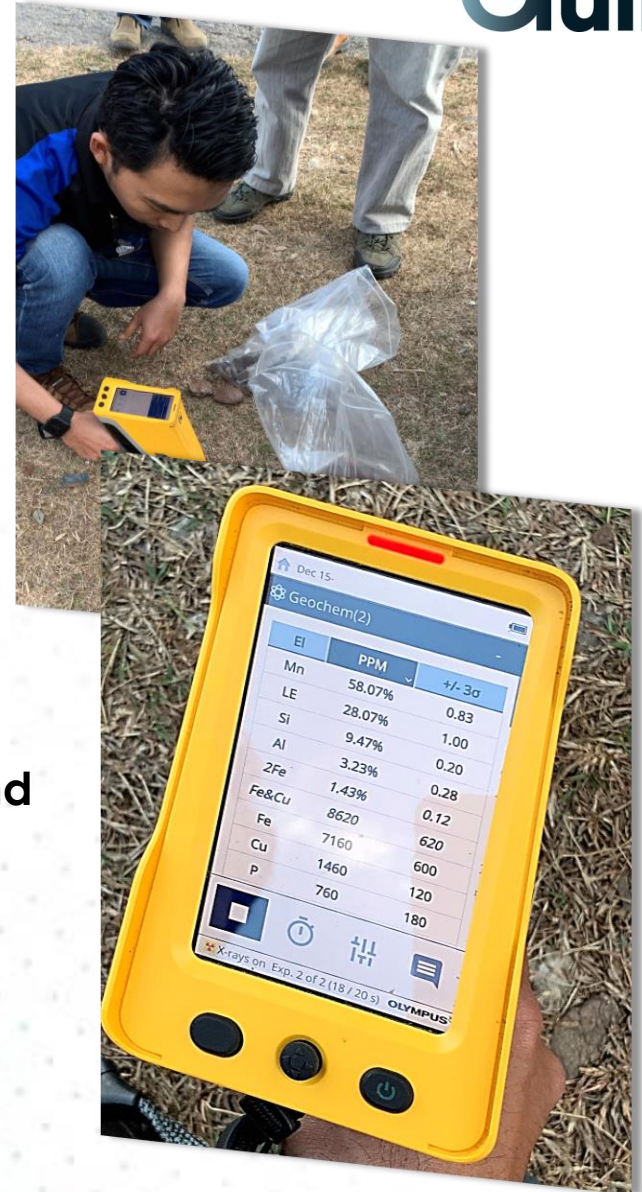
**Specialty Steels and High Alloy Steels**

# LC FeMn Project Value Proposition



# Why Indonesia?

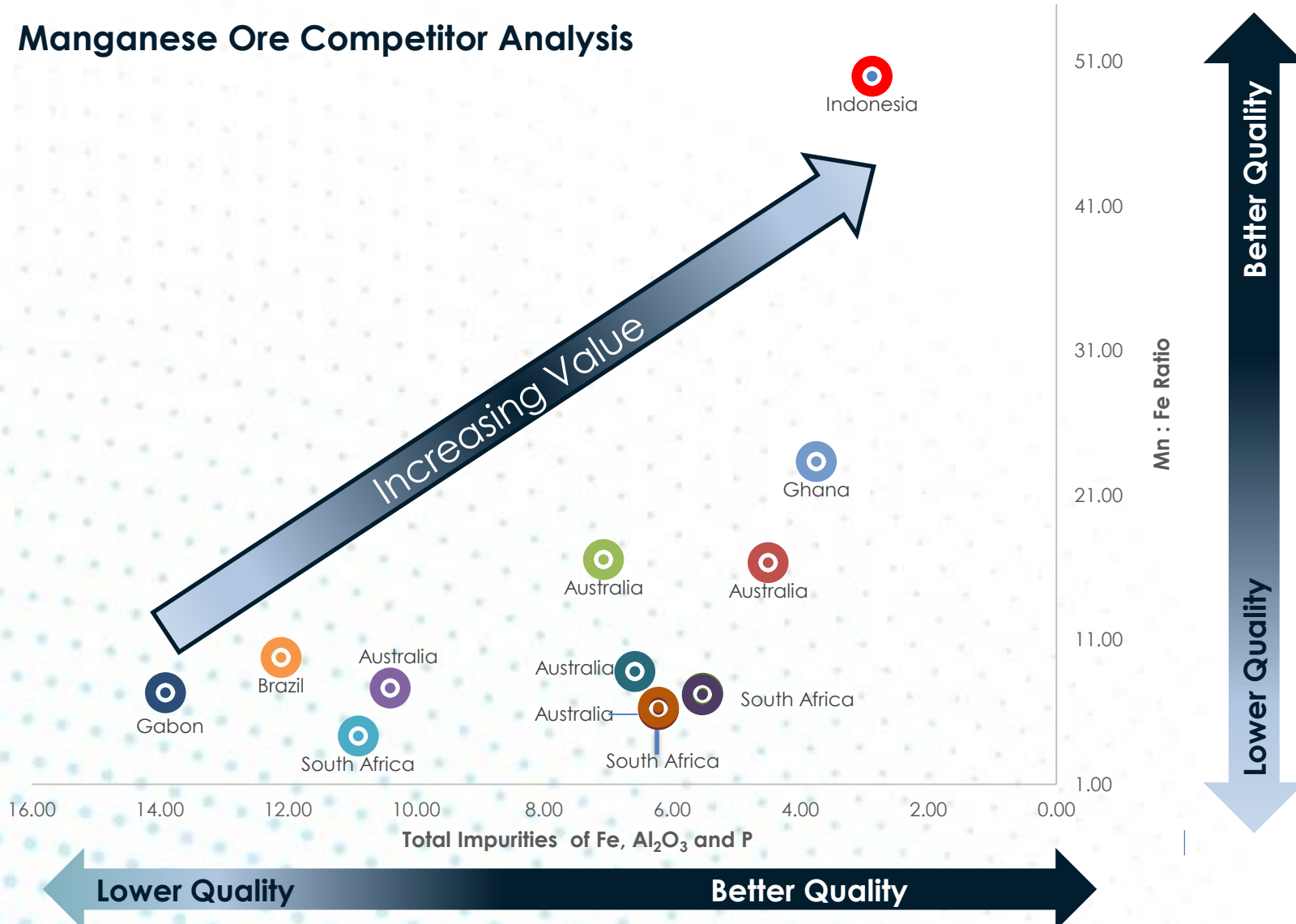
- Super high-grade ore >49% manganese (Mn)
- Very low iron (Fe) content
- Extraordinary Mn:Fe ratio, typically greater than 50:1
- Indonesia law does not allow for exporting of 'untreated ore' without a Direct Shipping Ore licence (DSO)<sup>1</sup>
- Gulf provides a route to market to local miners and realises additional value through the smelting process
- DSO now secured and Gulf can also export manganese concentrate



<sup>1</sup> The government is currently only allowing DSO until April 2022 after which the ban may be reinstated

## Key Value Drivers for Manganese Ore

### Manganese Ore Competitor Analysis



## Project Overview – Smelting Hub

### Development of Smelting Hub in West Timor

Initially 2 x 7MVA smelters treating 110,000 tonnes of ore, producing up to 43,000 tonnes FeMn alloy per annum



### Flexibility allowed by batching; mitigates market risk

Production of Low Carbon FeMn using FeSi natural hedge

Production of Medium Carbon FeMn using coke



### Low Carbon FeMn Alloy - A Unique process

Produce Ultra Low Carbon, High Mn FeMn alloy

Maximising metallurgical value adding



### Expansion Plan

Initial expansion to 4 smelters within 3 years

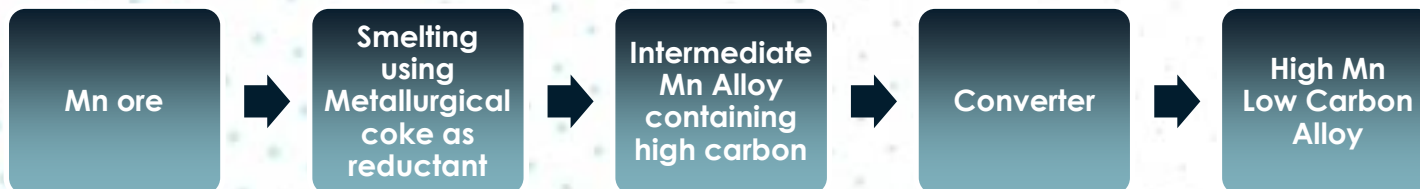
# Project Overview – Unique One Step Process



## Gulf's Smelting Process



## Typical Smelting Process



Indonesian high grade and very high Mn:Fe ratio ore enables Gulf to use a SINGLE STEP process to produce very high-grade alloy, whereas Gulf's competitors use 2 step process (converter) thus using less power per Mt of final product and increased production efficiencies.

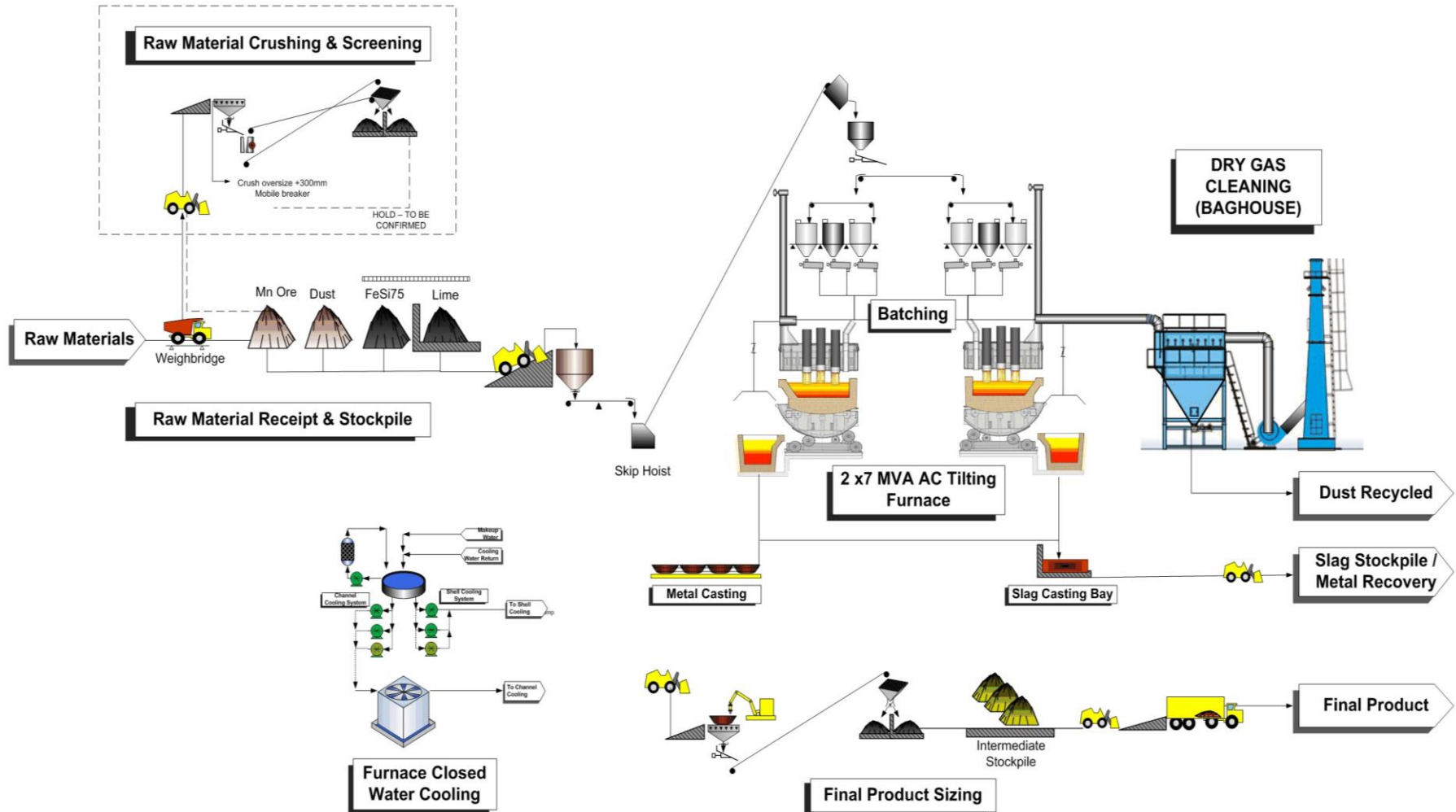
## Project Overview – Advantages

- ✓ **First mover advantage**
- ✓ **Permits in place**
- ✓ **Power agreements secured**
- ✓ **30 year land lease secured on industrial estate**
- ✓ **Port facilities close by**
- ✓ **Direct Shipped Ore licence obtained**
- ✓ **Smelters and transformers fully refurbished and on site**
- ✓ **Steelwork 60% complete**
- ✓ **Ore supply MOUs in place**
- ✓ **Strong in-country Indonesian partner (PT JTS)**

# Project Overview – Kupang Infrastructure



# Project Overview – Process

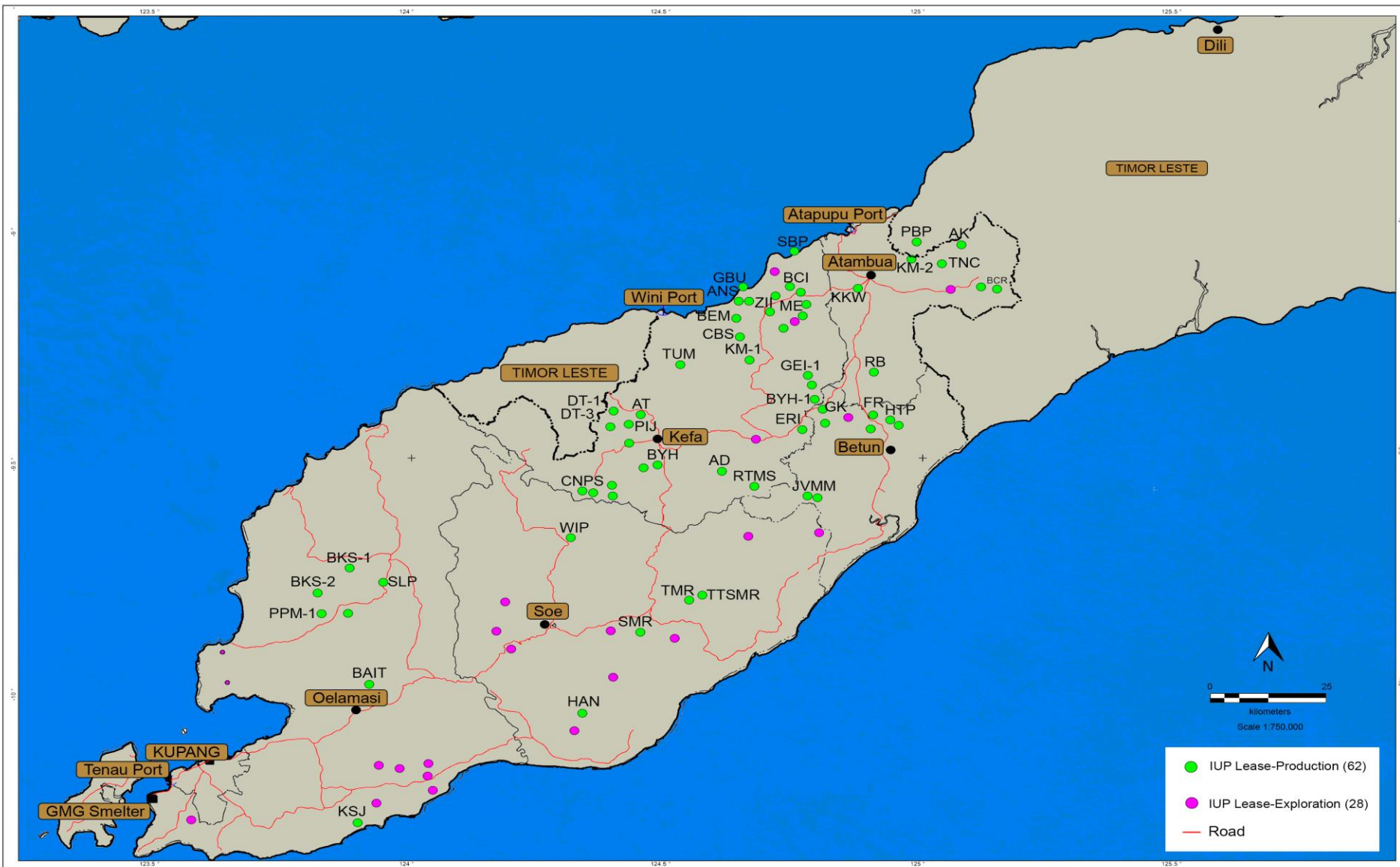


## Project Overview – Ore Supply

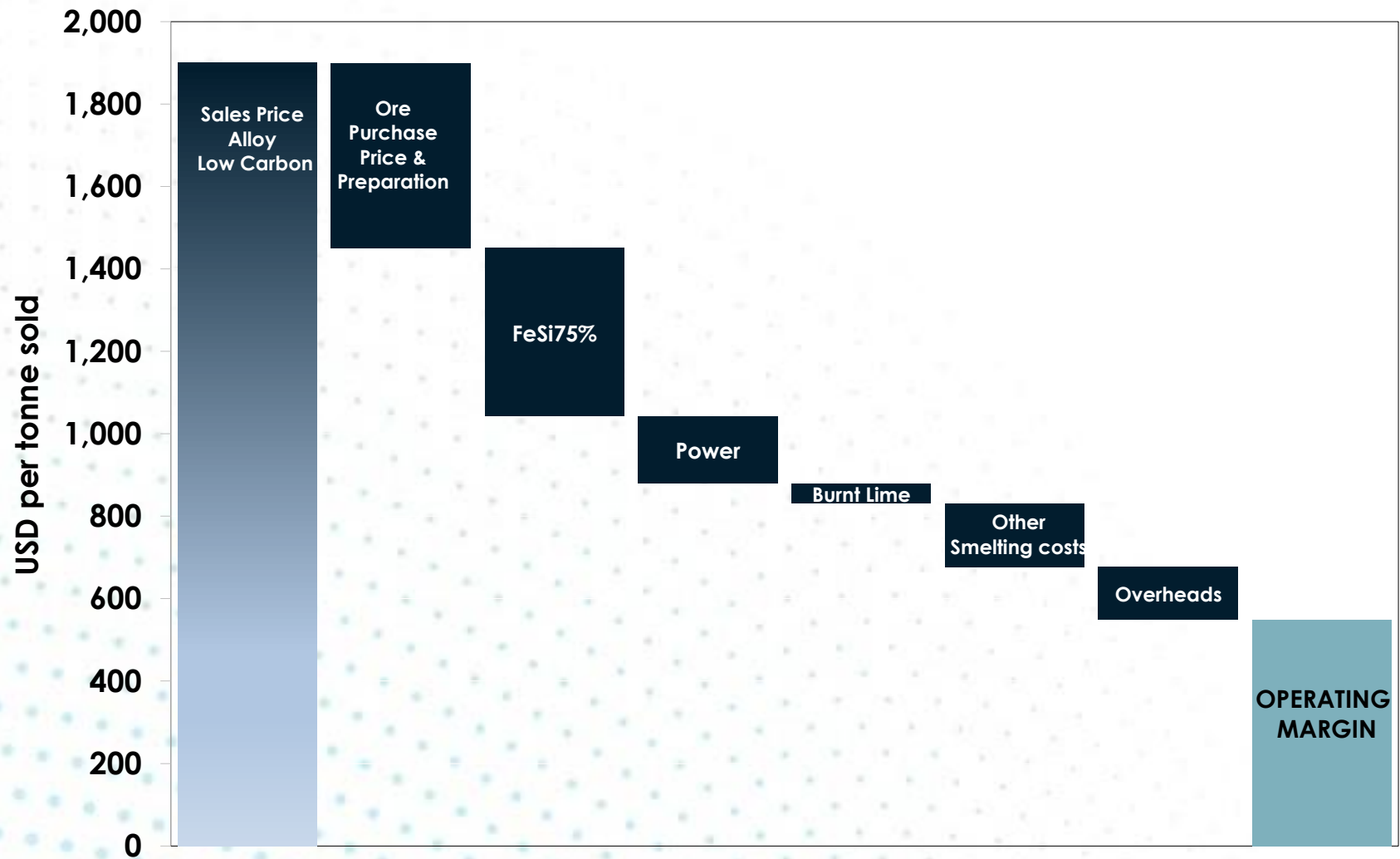
- NTT focussed procurement strategy with 20 MOU agreements in place with NTT miners.
- Gulf committed to purchase manganese ore only from suppliers who demonstrate they have all required permits, licences, certificates and approvals as required by Government regulations (clean and clear).
- Strategic interest in Timor-Leste manganese explorer (Iron Fortune). Mineralisation expected to continue into Timor-Leste.
- Discussions with international manganese ore suppliers.



# Project Overview – Ore Supply



# Alloy Operating Margin (Per Tonne Sold)



# Financials

Kupang Smelter Project		Annualised Performance	
		2 Units	4 Units
Installed Smelter Capacity	MVA	14	32
<b>Physicals</b>			
Mn Ore Purchased	†	112,000	247,000
FeMn Alloy Sold	†	43,000	95,000
<b>Costs</b>			
Ore Purchase & Preparation	USD	19.3	42.6
Smelting	USD	33.3	73.6
Overheads	USD	5.5	12.2
<b>Total Operating Costs</b>	<b>USD</b>	<b>58.1</b>	<b>128.4</b>
<b>Revenue from Sales</b>	<b>USD</b>	<b>81.7</b>	<b>180.5</b>
<b>Operating Margin</b>	<b>USD</b>	<b>23.6</b>	<b>52.1</b>

## Notes:

1. Does not include revenue from Direct Shipped Ore “DSO” Sales
2. Based on 100% of project. GMC will have 74.9% with JTS 25.1% ownership of project.
3. Before Tax and Interest

4. All financials in millions
5. Assumes all ore purchased from local Indonesian miners in NTT and adjacent provinces
6. Refer to Slide 22 for Assumptions on annualised performance figures
7. Based on Current Pricing

# Plant Construction

**Gulf**

## Cost to Complete USD (million)

Spend to Date US \$13

Still to Spend

Crusher & Screen	\$0.2
Laboratory	\$0.2
EPCM Contractor	\$0.4
Mechanical & Electrical	\$8.8
Civils & Structural	\$1.0
First Fill (Raw Materials)	\$1.7
Power & Connection	\$0.3
Other & Contingency	\$0.4

US \$13

Total

US \$26



# Long Term Strategy



# Kupang Smelting Hub - Assumptions



Kupang Smelter Project			LCFeMn Alloy(LP)			
Smelters		each	2	4		
Installed Capacity	2,260 t/MVA	MVA	14.0	32.0		
Physicals						
Mn Ore Purchased		tpa	112,000	247,000		
FeMn Alloy Sold		tpa	43,000	95,000		
			USDm	USDm	USD/t	
Ore Purchase & Preperation	\$172.01 /t purch		19.3	42.6	448.84	33.2%
FeSi75%	0.341 t/t FeMn		17.6	38.9	409.30	30.3%
Burnt Lime	0.713 t/t FeMn		2.1	4.6	48.84	3.6%
Electrode Paste	0.023 t/t FeMn		0.6	1.3	13.95	1.0%
Power	\$0.089 /kWh		7.0	15.5	162.79	12.0%
Salaries/Wages			1.7	3.8	39.53	2.9%
Laboratory			0.4	0.9	9.30	0.7%
Smelter Consumables			2.0	4.4	46.51	3.4%
Logistics			0.7	1.5	16.28	1.2%
Maintenance			1.0	2.2	23.26	1.7%
Fuels/Oils			0.1	0.2	2.33	0.2%
Environmental			0.1	0.2	2.33	0.2%
Smelting			33.3	73.6	774.42	57.3%
General & Administration			2.1	4.6	48.84	3.6%
Sales & Marketing			3.0	6.6	69.77	5.2%
Overheads			0.4	0.9	9.30	0.7%
Overheads			5.5	12.2	127.91	9.5%
Total Op Costs			58.1	128.4	1,351.16	
Revenue	\$1,900 U\$/t		81.7	180.5	1,900.00	
Net Operating Margin			23.6	52.1	548.84	

# Riding the Commodity Wave



Operational Experience	Strategic Flexibility	Access to Raw Materials	High Value Products	Strong Fundamentals	Excellent Local Infrastructure
<ul style="list-style-type: none"><li>• Experienced Board and Management</li><li>• Strong in-country partnerships</li><li>• Local expertise</li></ul>	<ul style="list-style-type: none"><li>• Multiple revenue streams</li><li>• Ability to change alloy production (LC vs MC) to mitigate market risk</li><li>• Scalable production</li></ul>	<ul style="list-style-type: none"><li>• Local supply of some of the world's highest grade Mn ore</li><li>• Sited along a major sea route</li><li>• Developing new ore supply channels in Timor-Leste</li></ul>	<ul style="list-style-type: none"><li>• Highest grade manganese ore</li><li>• Low Carbon – high value added product</li><li>• Low FeMn ratio – minimal impurities</li></ul>	<ul style="list-style-type: none"><li>• Low cost production</li><li>• Strong margins</li><li>• Unique Low Carbon FeMn Process – one step process</li></ul>	<ul style="list-style-type: none"><li>• Reliable, competitive power supply in close proximity</li><li>• Deep water port facility nearby</li><li>• International airport</li><li>• Kupang city well established</li></ul>

**Gulf Manganese Corporation Ltd**

T4, 152 Great Eastern Highway

Ascot WA 6104

Ph: +61 8 9367 9228

Fax: +61 8 9367 9229

E: [info@gulfmanganese.com](mailto:info@gulfmanganese.com)

**[www.gulfmanganese.com](http://www.gulfmanganese.com)**