

GULF MANGANESE CORPORATION (GMC.ASX)

- **GAME ON – OPENING THE GATEWAY FOR PREMIUM MANGANESE – KUPANG SMELTING HUB CONSTRUCTION COMMENCES**
- **SPECULATIVE BUY - PRICE TARGET \$0.028**
- **GULF, INDONESIA'S FIRST FERRO- MANGANESE ALLOY DEVELOPER**

GULF Manganese Corporation Limited is an Australian registered company listed on the Australian Securities Exchange (ASX: GMC) with its head office in Perth, Western Australia. The company, through its 100% fully owned subsidiary **PT GULF Mangan Grup**, plans to build the first FerroManganese (FeMn) smelting hub in Timor, Indonesia.

PROJECT RECEIVES \$12M FUNDING – CONSTRUCTION COMMENCES- KEY MILESTONE ACHIEVED

- First mover advantage with **GULF** to build the first FerroManganese smelting complex in Timor.
- Acquisition of the two FerroManganese furnaces.
- West Timor has superior raw material with some of the highest grade Manganese ore in the world.
- 4 km from Kupang's world class Tenau port that has both bulk and container loading facilities.
- Low cost producer with projected operating margin of USD \$21.9 million per annum from only the initial 2 furnaces. .
- Kupang site approvals received from the Governor of East Nusa Tenggara.
- Offtake agreement signed with Renova Group for sale of up to 60% of Manganese alloy produced from the Kupang Smelting Hub Facility for the first three years of production.
- Near term cash flow and production with smelters already sourced from South Africa.
- Significant ramp-up with production starting at 22,000 tpa increasing to over 200,000 tpa FeMn Alloy.
- Triple C has updated their coverage on **GULF** as a result of the completion of recent Capital raise and the commencement of construction post the recent site approvals, with a **Speculative Buy recommendation with a 12 month share price target of 2.8 cents a share.**

Speculative BUY

Share Data

Share Price @1/08/17	\$0.008
Valuation	\$116.8 million
Price Target (12 month)	\$0.028

Corporate Structure

Shares on Issue	2,371,183,258
Listed Options	1,741,823,972
Market Cap-Undiluted	\$18.97m
Market Cap-Diluted	\$32.90m

52 Week High	\$0.042
52 Week Low	\$0.005

Board

Hamish Bohannan	Chief Executive Officer
Craig Munro	Non-Exec Chairman
Andrew Wilson	Non-Exec Director
Leonard Math	Company Secretary

12 Month Price Chart



THE COMPANY

It has long been recognised that there are many high grade, 48% Manganese outcrops in the islands of Indonesia and specifically in and around West Timor. The introduction by Indonesia of the “Value Adding” laws in 2009 prevents the export of minerals unless the mineral has been “upgraded” in Country.

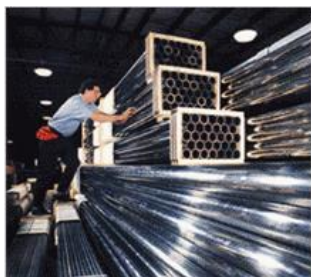
Whilst there are small silicon Manganese smelters in Indonesia, there is not any significant facility for the production of high grade FerroManganese alloy. **GULF** has identified the opportunity to build a FerroManganese smelting hub in Timor near the town of Kupang. This will involve the purchase of Indonesian Manganese ores at the smelter gate, processing and smelting into a FerroManganese alloy prior to selling to Global markets.

The high grade nature of the Indonesian ores and the opportunity to source all other inputs locally including limestone, coal and iron ore more than offsets the current FerroManganese alloy prices which continue to be at a low point in the cycle. The proposed smelting complex will comprise a total of 8 or more furnaces once fully complete. The complex will be built in stages utilising a modular design, this style of facility will allow for the expansion of the processing facility at minimal cost.

GULF is totally committed to the ongoing safety and welfare of its employees across all divisions of the business. Best practice safety standards will be in place for all employees and suppliers. **GULF** will be investing significantly in the development of training and education programmes for the local Kupang workforce to ensure safety procedures and standards are upheld, as well as educational programs for local miners in modern mining techniques to improve safety and reduce environmental impact.

WHAT IS MANGANESE?

Manganese is a little-recognised element yet it is the fourth most used metal in terms of tonnage, ranked behind iron, aluminum and copper.



Manganese has numerous applications which benefit our daily lives, whether it be through steel foundations, portable batteries, or even aluminum beverage cans. In each case, Manganese plays a vital role in improving the properties of the alloys and compounds involved in each specific application. Manganese has played a key role in the development of various steel making processes and its continuing importance is indicated by the fact that about 90% of all Manganese consumed annually goes into steel as an alloying element. No satisfactory substitute for Manganese in steel has been identified which combines its relatively low price with outstanding technical benefits. After steel, the second most important market for Manganese (in dioxide form) is for portable dry cell batteries. Other uses include Manganese sulphates as an agricultural fertilizer, in water purification, health vitamins, gasoline additives and colouring glass.



BOARD OF DIRECTORS



Craig Munro – Non-Executive Chairman

- Strong track record with over 35 years experience in finance and corporate governance.
- Recent experience with copper smelting in Congo.



Hamish Bohannon - Managing Director & CEO

- Brings a wealth of experience to the Board having held a number of CEO and MD roles with listed companies in both Australia and overseas.
- Previously MD of Koba Tin, with mining & smelting operations in Sumatra, Indonesia.



Andrew Wilson– Non-Executive Director

- B Comm (Marketing) and a Masters of Law with 30 years of legal experience.
- Extensive experience including being President Director of PT BHP Indonesia, a director of various public companies inc. Herald & Robust Resources.



Leonard Math – Company Secretary & CFO

- Bachelor of Business majoring in Accounting and Information Systems
- Member of the Institute of Chartered Accountants. Has worked with Deloitte as an auditor with public company experience in ASX and ASIC compliance and statutory financial reporting.

INDONESIAN AND ASIAN ALLOY HUB

Kupang Hub Smelting Facility Overview

- Kupang Smelter Complex will comprise of at least Eight Furnaces, built in stages as the ore supply chain develops
- First two smelters secured from South Africa – arrival at site Q4 2017
- Early sales of Mn concentrate to provide near-term cash flows
- Initial Power supplied by state power utility on unit cost basis from power station adjacent to smelter site
- Cost of first two smelter installation and working capital USD \$17 million
- Construction through 2017, with commissioning and positive operating cash flow from mid 2018

*One of the two
smelters in situ at
Transalloys in South
Africa*



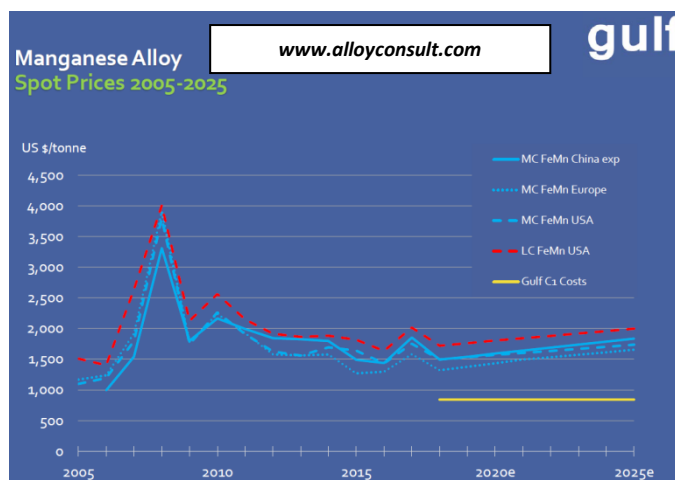
SUPPLY AND DEMAND

The demand for Manganese is primarily driven by the steel industry which consumes the majority of the Manganese ore produced. Demand for steel is ever increasing due to increased rate of infrastructure growth in developing nations such as China, Asia and India. The Manganese market is highly concentrated with limited global suppliers providing a natural pricing floor for Manganese. Rising global crude steel production is driving up demand for Manganese ore, especially reserves of high grade ore. China's reported Manganese reserves are limited and expected to last for less than 15 years at current production rates. Demand for imported Manganese ore in China has more than doubled in the last decade and now accounts for 62% of ore supplied into China (CRU, Deutsche Bank Research, Macquarie Bank). The demand for Manganese is projected to soar 40% in the next 10 years through China's increasing urbanisation and continued industrialisation. (CRU, Deutsche Bank Research, Macquarie Bank).

MANGANESE PRICING

Mid-term pricing prospects for medium to high grade Manganese ores should remain very favourable, being mainly the result of:

- Increased consumption of steel in developing world.
- Market for steel products to increase.
- Higher grade ores attract a premium price due to its **"Value-in-use"** during the steel making progresses.



LOCATION

Kupang is the capital of the East Nusa Tenggara (ENT) province and the capital of West Timor. After a recent site visit, Triple C identified that the location is a key advantage for operating a Smelting Hub. The company welcomes investors to attend a site meeting to see first hand the infrastructure and logistical nature of the location.

The Bolok Industrial Estate is located approximately 4 km South West of Kupang. The 23.5 Hectare block of land is directly adjacent to the Government owned Power Station and only five kilometres from the main Tenau port. Following the ground blessing ceremony held in July 2017, the civil works land clearance program at the Kupang Smelting Hub site in the Bolok Industrial Estate commenced. The site clearance program has been completed and will be followed by detailed survey works and further construction activities such as site fencing, foundation preparations and construction of factory buildings.

The site preparation work is managed by **GULF's** operational team while EPCM contractor XRAM continues to provide engineering and pyrometallurgical support.

*Bolok Industrial
Estate- Pre Clearing
June 2017*



*Bolok Industrial
Estate- Completed Land
Clearing July 2017*



KUPANG, WEST TIMOR

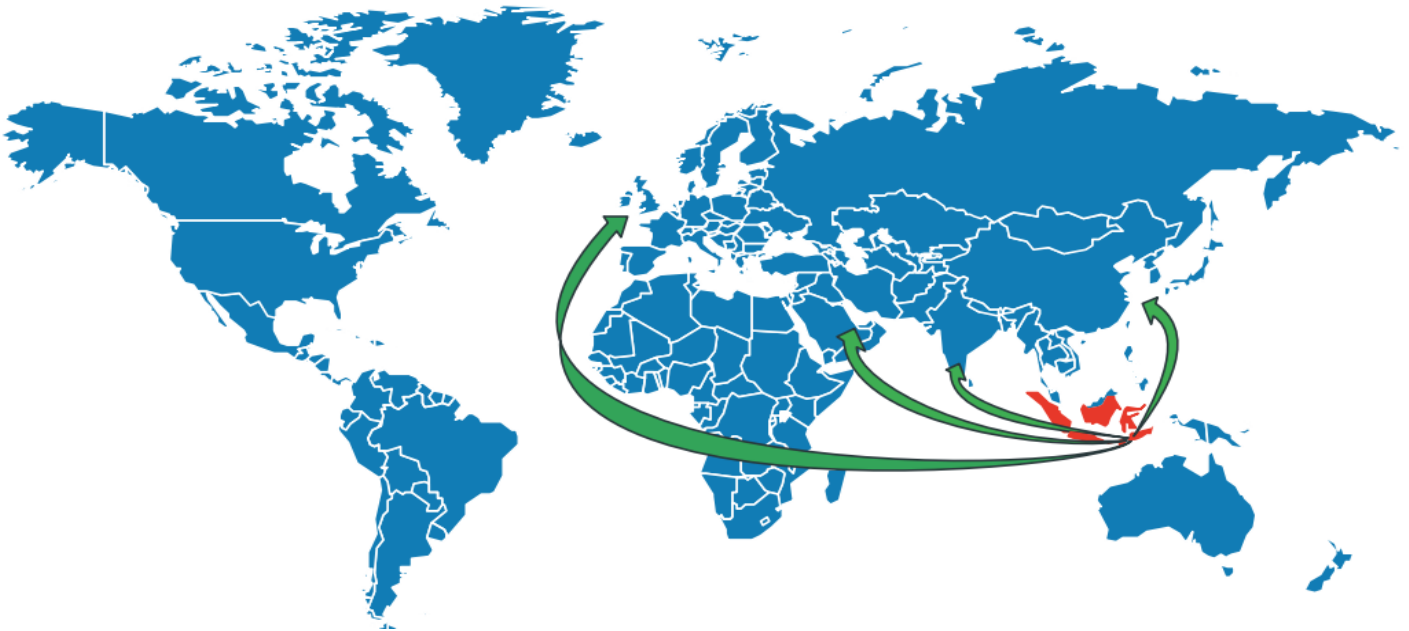


TRANSFORMER BEING REMOVED IN PRETORIA, SOUTH AFRICA & TENAU PORT, KUPANG, WEST TIMOR



GULF'S MARKETING NETWORK

FerroManganese Alloy (High carbon is typically Mn 70-78%, Medium Carbon is typically Mn 80%-83%) is used in manufacturing normal, low/medium carbon and high-carbon steel. On average 9.71kg of Manganese alloy is used in making one tonne of steel. Manganese alloy used per tonne of steel tends to vary across region with Europe accounting for as low as 8.51kg per tonne of steel and China for more than 10.5kg per tonne. The +/- 1% Manganese in basic steel does vary slightly from country, but the real variation is that the percentage increases by up to 13% in speciality steels with the highest being used in super-tough military grade applications. It is only rebar and construction steel that uses 1% and engineering steels can be 2-3%.



GULF's FerroManganese alloy business in Indonesia is ideally located to take advantage of its proximity to the major consumer markets in Asia.

THE PROJECT PROCESS

GULF is planning to develop a FerroManganese smelting and sales business to produce the higher value low and medium carbon FerroManganese alloys in West Timor, Indonesia. The business will comprise of the following components all based in Indonesia;

1. Ore purchasing
2. Ore Transport to Processing Plant
3. Ore processing to Concentrate
4. Concentrate smelting to Alloy
5. Sales & marketing
6. Final product FerroManganese Alloy

The annual FerroManganese alloy production is set at 155,000 tonnes per annum, generating on today's prices, some USD\$ 170,500,000. The Smelter feed will comprise of local Indonesian Manganese ores (48%+ Mn). The initial production will commence with two smelters to generate early cash flow and establish an FeMn ore supply. Once the process has been proven, **GULF** plans to stage the build out of the operation with the overall target of 8 furnaces or more in the facility.

SWOT ANALYSIS: STRENGTHS, WEAKNESSES, OPPORTUNITIES & THREATS – BUSINESS MODEL

	STRENGTHS	WEAKNESSES
INTERNAL	- Database of geological knowledge	- Limited Indonesian proven mineral resource base (JORC) to underpin development
	- Supply agreements in place to under-pin Manganese ore supply	- Final project funding to be secured
	- Multi-level government support	
	- Complies with licences and approvals	
	- High grade Manganese ore available	
	- Close to port (African / Australian mines are typically 400+ Km from ports)	
	- Proximity to most Asian Mn markets	
	- Start-up power supply available and economical	
	- Power costs are reasonable compared to Australia but power is a major cost	
	OPPORTUNITIES	THREATS
EXTERNAL	- No competitor in Processing or Smelting in Timor	- First smelter to market will gain a strong hold on ore supply
	- Local small scale Mn Supplier can mine and sell Mn ores once a processing route is established	- Other companies entering the smelting business
	- High unemployment in Timor will provide a ready source of labour	- Potential loss of export of other permits if milestones not achieved.
	- Scalability – the operation can be developed in a staged manner	
	- Early start-up of Cash flow using low cost processing and Mn lump sales	

THE ROAD AHEAD: PROPOSED WORK PROGRAM

The **GULF** Manganese team is solely focused on prudently managing the development of the Kupang Smelter Hub Project.

Third Quarter 2017 (Current)

- Commence dismantling and refurbishment of furnaces
- Establish power contracts
- Complete Civil & Structural Engineering
- Commence Site Construction
- Secure initial ore supply contracts
- Commence operator recruitment and training program
- Asian Investor Promotional Roadshow

Fourth Quarter 2017

- Arrival of furnaces in Kupang
- Continue evaluation of Indonesian ore sources

First Quarter 2018

- Establish Community programs
- Continue site construction

Second Quarter 2018

- Complete Site Construction
- Commence furnace commissioning

PROGRESSIVE EXPANSION

- First two units refurbished from South Africa, recently decommissioned
- Provides rapid path to production, and positive cash flow
- Following units built as supply chain of Indonesian ore established
- Even in current depressed market, substantial production margin

Financials

High Value:MC FeMn, High Quality Niche Producer

Current MC FeMn - 78% Mn FOB China, Export Spot Price at June 2017.

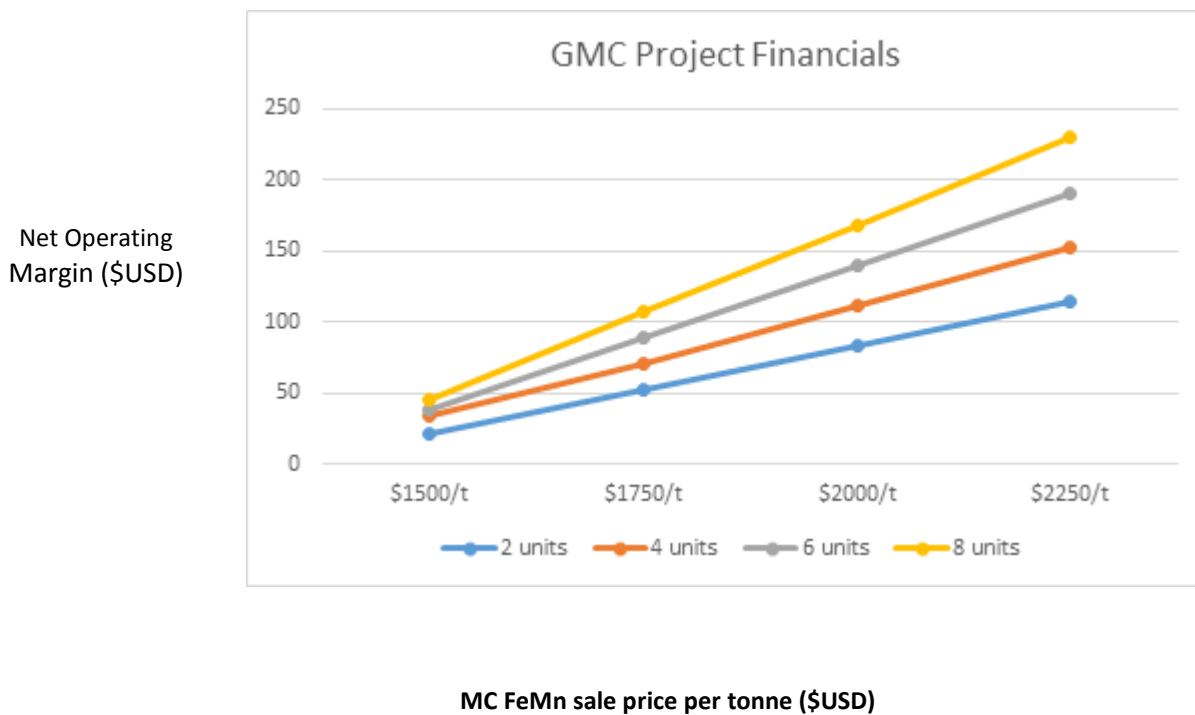
USD \$1,707/ tonne

Kupang Smelter Project		Annualised Performance			
		2 units	4 units	6 units	8 units
Installed Smelter Capacity	MVA	14	32	50	68
Physicals					
Mn Ore Purchased	t	65,847	150,507	235,167	319,827
FnMn Alloy Sold	t	31,640	72,320	113,000	153,680
Costs					
Ore Purchase & Preparation	USD(m)	6.8	15.7	24.5	33.3
Smelting	USD(m)	17.8	38.1	58.2	78.7
Overheads	USD(m)	0.9	2	3.1	4.2
MC FeMn Sale price per tonne					
\$1,500					
Total Operating Costs	USD(m)	25.5	55.8	85.8	116.2
Revenue From Sales	USD(m)	47.5	108.5	169.5	230.5
Net Operating Margin	USD(m)	21.9	52.7	83.7	114.3
Net Present Value (NPV)	USD(m)	\$125.11	\$264.87	\$363.03	\$425.53
\$1,750					
Total Operating Costs	USD(m)	25.5	55.8	85.8	116.2
Revenue From Sales	USD(m)	55.4	126.6	197.8	268.9
Net Operating Margin	USD(m)	33.5	70.8	112	152.7
Net Present Value (NPV)	USD(m)	\$176.50	\$365.84	\$499.43	\$585.22
\$2,000					
Total Operating Costs	USD(m)	25.5	55.8	85.8	116.2
Revenue From Sales	USD(m)	63.3	144.6	226	307.4
Net Operating Margin	USD(m)	37.8	88.8	140.2	191.2
Net Present Value (NPV)	USD(m)	\$227.90	\$466.81	\$635.82	\$744.91
\$2,250					
Total Operating Costs	USD(m)	25.5	55.8	85.8	116.2
Revenue From Sales	USD(m)	71.2	162.7	254.2	345.8
Net Operating Margin	USD(m)	45.7	106.9	168.4	229.6
Net Present Value (NPV)	USD(m)	\$279.30	\$567.79	\$772.22	\$904.59

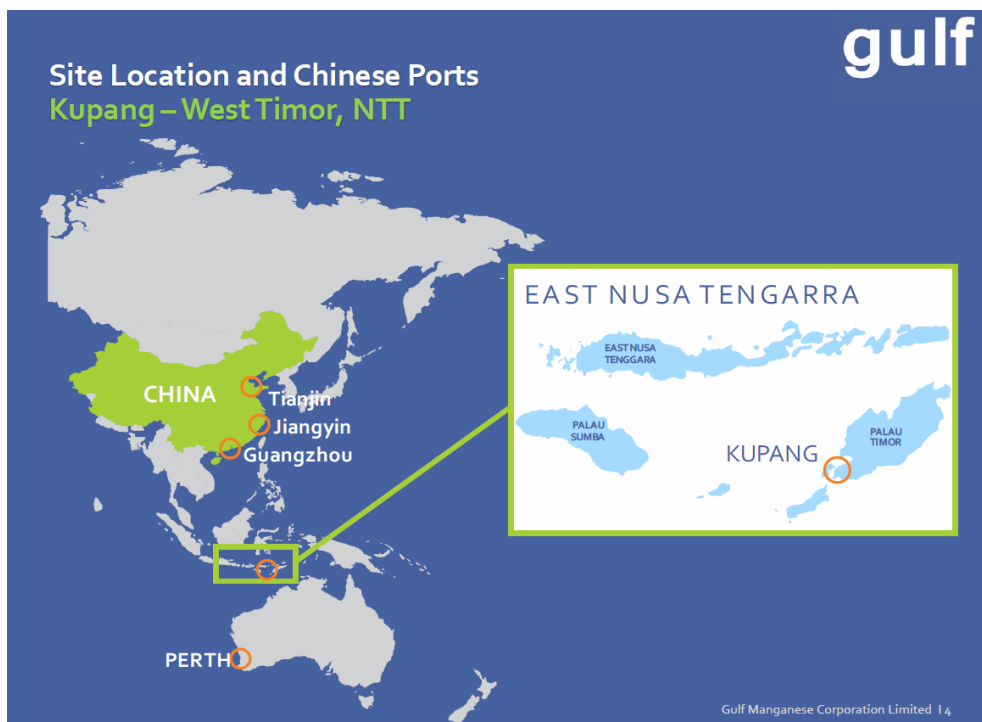
Model Assumptions:

- ⇒ These are project costs only and do not include Australian Corporate and development expenditures
- ⇒ NPV @ 8% Discounted Cash Flow (10 years)
- ⇒ Model assumes progressive expansion of project. Initially 2 furnaces operating from 2018 with ramp up of an additional 2 furnaces every 2 years (Expansion program is dependant upon the recovery of the Indonesian Manganese mining industry which stopped in 2012 when the government implemented the law banning the export of unprocessed material) up to full capacity of at least 8 units
- ⇒ Power costs USD \$0.11/kwhr
- ⇒ Coal cost USD \$85/tonne
- ⇒ Limestone USD\$ \$20/tonne

GMC PROJECT FINANCIALS-OPERATIONAL



KUPANG LOCATION MAP



WHY TO BUY

- ✓ High Quality Board and Management with experience in both Manganese and Indonesia
- ✓ Sound project economics (80% industry average operating cost)
- ✓ Indonesian ore is some of highest commercial grade in the global market
- ✓ Producing premium Low/Medium Carbon FerroManganese alloy (78%+ Mn)
- ✓ Established port and infrastructure
- ✓ Full Government support with fiscal incentives and at present a 10 Year tax holiday
- ✓ Global sales network
- ✓ Modest staged capital requirement, early cash flow

VALUATION

Our valuation and price target for **GULF** assumes a base case of USD \$1500.00 revenue per tonne of McFeMn and also assumes that only 2 furnaces are operational in 2018. The valuation also assumes full \$12 million capital raise is honoured as per GMC announcement 23/06/2017. Expected operating margin for 2 furnaces is \$21.9 million USD. Assuming AUD/USD is \$0.75, operating margin is \$29.2 million AUD. This operating margin on a multiple of 4 gives a valuation of AUD \$116.8 million. As an indicator to upside potential, it is to be noted that that **GULF** plans to progressively expand with, The Kupang Smelter Complex comprising of at least eight Furnaces, built in stages as the ore supply chain develops. It also to be noted that the spot price for MC FeMn - 78% Mn FOB China, Export as at June 2017 is **USD \$1,707 a tonne**.

PRICE TARGET

Triple C believe **GULF** Manganese is well positioned to build the first FerroManganese smelting complex in Timor, Indonesia and as a result update coverage with a **SPECULATIVE BUY** recommendation with a **12-month price target of AUD\$0.028/share**.



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Interest in Securities 80,274,578 shares and 127,028,334 listed options.

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