



Emmerson

10th June 2020

Development of a world class potash mining asset in an outstanding location to provide fertiliser to help feed the planet

Emmerson first listed on the LSE in February 2017 as an investment company. In June 2018, the company was re-admitted following the RTO of Moroccan Salts Ltd which is developing the Khemisset Potash Project near Rabat in northern Morocco, a country where fertiliser giant OCP requires significant potash feedstock. Khemisset has a large JORC resource of Muriate of Potash (MOP), which is the most widely used and cheapest source of potassium.

■ Big agriculture investment drivers pushing up the MOP price

The United Nations believes that the world will need to produce 70% more food by 2050, not just to meet the needs of its fast-growing population but also for a burgeoning middle class that is seeking a higher protein diet. Fertilisers led by MOP are seen to be vital to improve the efficiency of farming.

Feasibility Study highlights the dramatic share price disconnect

Khemisset came through the Feasibility Study with flying colours demonstrating potential to be a world class, low capex, high margin potash mine. The post-tax NPV(8) came out at US\$1.4 billion, with a 38.5% IRR plus robust cash generation. With the FS in place, financing discussions can now be finalised and there is a clear pathway to allow production to start as early as 2022. These might look like ambitious plans but the Emmerson management team has always been ambitious and has not disappointed us yet.

Compelling low capex development – which is rare in potash projects

Management has extensive potash development experience, previously with ASX listed Highfield Resources, and believe Khemisset has the potential to be a low capital cost development which is very rare in potash with scope for impressive economics even at modest potash prices.

■ Risked conservative NPV suggests potential upside of over 300%

Our conservative valuation illustrates the clear potential. We update our coverage with a revised target price of 24.90p and **Conviction buy** stance.

Table: Financial overview						
Year to end Dec	2018A	2019A	2020E	2021E		
Revenue (£'000)	-	-	-	-		
PTP (£'000)	(1,784)	(1,132)	(1,250)	(1,500)		
EPS (p)	(0.49)	(0.17)	(0.18)	(0.22)		

This investment may not be suitable for your personal circumstances. If you are in any doubt as to its suitability you should seek professional advice. This note does not constitute advice and your capital is at risk. This is a marketing communication and cannot be considered independent research.

CONVICTION BUY Price Target 24.90p



Key data

EPIC EML
Share price 5.15p
52 week 6.32p/2.15p
high/low
Listing LSE
Shares in issue 686.13m
Market Cap £35.3m
Sector Mining

12 month share price chart



Analyst details

Dr Michael Green
michael.green@alignresearch.co.uk

IMPORTANT: Emmerson (EML) is a research client of Align Research. For full disclaimer information please refer to the last page of this document.

Business overview

Emmerson Operations

Emmerson Plc is a mineral development company with a Standard Listing on the London Stock Exchange which is focused on creating value from Muriate of Potash (MOP) assets in Morocco.

• Khemisset Potash Project — Upon re-listing Emmerson had a 100% interest in 40 tenements which cover 576km², with the company having the objective of Khemisset becoming a significant MOP crop nutrient source. Since then, an additional 15 research permits adjoining Khemisset have been granted, taking the total project area to 815km². The project has a relatively shallow deposit for potash and already boasts a large JORC compliant resource of 537Mt at 9.24% K2O following more than 90,000 metres of drilling. The company is targeting a minimum 20-year life of mine, producing at a rate of 750,000 — 1,000,000 tpa.

Agricultural Investment Drivers

Global megatrends are permanently reshaping agribusiness and providing compelling drivers for investment. These trends concern: demographic shift, accelerating urbanisation and resource scarcity. There is no doubt that feeding a world population of 9.1 billion people, which the United Nations (UN) has forecast for 2050, will be a huge challenge. This forecast implies a 34% increase in the current world population, but already millions of people around the world are starving.

This is not just a story about a growing global population, but also of the fast expanding middle class which, between 2015 and 2030, is forecast by the UN to rise by 76%. The increased spending power of the middle classes is leading to higher calorie diets and increasing yield demand from soils. The end result is that the UN believes that the world will need to produce 70% more food by 2050.

At the same time, the UN reckons that arable land available per capita will fall by 15% by 2050. All these factors mean that major productivity increases in agriculture are essential. Moving ahead, fertilisers are going to become more and more important for farmers to grow crops more efficiently to feed the world's rapidly growing population. This can only be achieved through the significant use of nitrogen phosphate potassium (NPK) fertilisers.

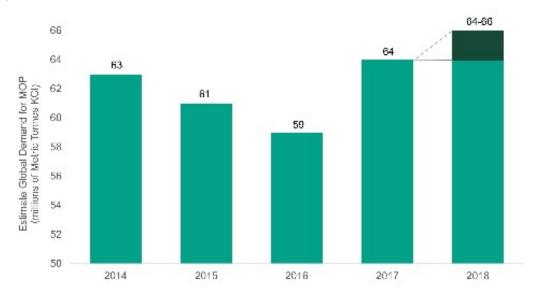
Muriate of Potash

NPK fertilisers contain these three macronutrients that all crops need. Potassium (potash) acts to improve colour size and sugar formation. In addition, potassium aids water transfer, makes crops drought resistant, as well as improving frost resistance. There are two primary sources of potassium, which are Muriate of Potash (MOP) and Sulphate of Potash (SOP). The mostly commonly used potash fertiliser is MOP which chemically is KCl and accounts for something like 95% of the world's potash production.

The minimum saleable grade for standard MOP for agricultural uses is 60% K2O, which is called K60. MOP is the cheapest and most important source of potassium for agriculture, so there is no risk of substitution. Historically, MOP prices in Emmerson's target markets have been between US\$350 - 430/t, with Sulphate of Potash (SOP) fetching a US\$120 - 200/t premium.



Demand for MOP has now reached record levels as farmers realise the benefits of using MOP to improve yield and which represents just a small amount of the overall cost of farming. In 2018, the major fertiliser producers are predicting that demand could rise to anywhere between 64.5 - 67.5Mt.



Record demand for MOP. Source: Argus FMB, Nutrien, Mosaic Co, IFA

The MOP price tends to follow metals price but lags a little behind. The price is cyclical like metals, with MOP hitting a peak of around US\$1,000/t in 2008/09, followed by a decline taking the FOB Vancouver price down to US\$220 in 2016. Ahead of the disruption caused by the spread of the COVID-19 infection, the price of MOP seemed to have been steadily increasing.

Africa

There is a huge unrealised market for fertiliser in Africa, which remains the most underfertilised continent in the world. Africa uses less than 25kg of fertiliser per hectare (kg/ha) which is way below the level of usage in the US, Europe, China and India which use more than 100kg/ha. In all, there are 600 million arable hectares in Africa plus the continent also has 60% of the world's uncultivated arable land. There is a potentially vast market on the doorstep of an African MOP producer.

In Africa, this all adds up to create a big driver for fertiliser demand, albeit starting from a very low base. The giant Moroccan fertiliser producer OCP Group is pursuing an aggressive African NPK strategy and has launched initiatives to boost agriculture on the continent and help African countries reach their food safety goals. OCP has doubled its NPK sales over recent years, taking its total production to 1.4Mt. That represents a growth rate of 30% CAGR, which is thought to be the sort of growth in demand for fertiliser that is being seen across the African continent.

Morocco

The Kingdom of Morocco is located in NW Africa and is the ancestral home of the Berber people. The country has a population of more than 35 million and covers an area of 710,000km², which is almost three times the size of the UK. The capital is Rabat, but the largest city is Casablanca.

The country has a constitutional monarchy and an elected parliament, which was previously a French protectorate. The current king Mohammed VI became monarch in 1999 and has initiated political and economic changes. The Arab Spring in 2010 provided pressure for reform which led to the introduction of a new constitution and more powers for parliament.



Morocco location. Source: Company presentation

King Mohammed VI wants to attract foreign investment to develop the country's mineral wealth and so has ensured that there is the necessary transparency and pro-mining regulation required to attract such funds. Morocco is thought to host around 75% of the world's phosphate reserves, which is a bigger export earner. Most of the country's metal mining is in the hands of ONA Group, through its mining holding company MANAGEM which has interests in cobalt, zinc, lead, copper, silver, gold and fluoride.

Foreign mining companies in operation are rather thin on the ground, represented by tin miner Kasbah Resources (ASX:KAS), Maya Gold and Silver Inc (TSX:MYA) and diamond explorer Metalex Venture (TSX-V:MTX). Recent years have seen SDX Energy (AIM:SDX) and Sound Energy (AIM:SOU) become involved in hydrocarbon projects in the country.

Morocco is very stable and fairly easy to do business in, but still definitely Africa. The country has a favourable fiscal regime, with nominal royalties of less than 0.1%, a 5-year tax holiday for new mining projects and a 50% reduction in corporate income tax for exported products.



Importantly, Morocco was voted the number one overall jurisdiction for mining in Africa in the Mining Journal Risk Report 2018. In this report, Morocco was ranked as being less of an investment risk than countries like Italy, South Africa, Poland and Brazil and almost considered to have the same level of investment risk as Portugal and Japan. On top of that, the country was deemed to have the highest opportunity index in Africa plus the best infrastructure in Africa.

Background

The company was incorporated in March 2016 in the Isle of Man under the name Emmerson Plc. In February 2017, Emmerson was admitted to the standard listing segment of the Official List of the London Stock Exchange. The IPO was accompanied by a placing at 3p per share which raised £913,000. On admission, the company had a market capitalisation of £1.45 million at 3p per share and had adopted an investment policy focused on acquiring one or more target companies. The focus of attention was the resources sectors in SE Asia, Africa and the Middle East.

In October 2017, Emmerson announced a binding agreement with Moroccan Salts Limited (MSL) to acquire a 100% interest for £10 million through the issue of 333.33 million shares at 3p each. Such a deal constituted a reverse takeover (RTO) under the Listing Rules and so the shares were suspended pending an application by the company to have the enlarged ordinary share capital admitted to the Official List.

MSL was set up by a private natural resources incubator fund based in Hong Kong called Starboard Global Ventures, where Director Dr Robert Wrixon is a Principal. Starboard Global take early stage projects and incubate them, bring in a management team and then list these vehicles. Over a 4-5-year period Starboard Global has pieced together the licences which cover the Khemisset Basin and then brought in Hayden Locke and Phil Clegett from potash mine developer Highfields Resources to run the business.

MSL is the holding company of a group of Moroccan companies which are developing the Khemisset Potash project which is located near Rabat in northern Morocco. A Competent Persons Report (CPR) completed by SRK, which formed part of the RTO document, clearly set out the potential for a long life, low capital cost and high margin potash mine in Morocco.

In June 2018, Emmerson was re-admitted to the London Stock Exchange following a significantly over-subscribed placing which raised £6 million at 3p per share. The readmission followed the acquisition of the Khemisset Potash Project where there was an accelerated pathway targeting the development of a low-capex, high margin mine, with a Scoping Study completed in November 2018.

At the time of re-admission, the company welcomed Hayden Locke (CEO) and Rob Wrixon (COO) to the board, two directors who have extensive experience of both the potash market and international capital markets. The board was further strengthened in July 2018 with the appointment of mining industry veteran Mark Connelly to become Chairman. Mark Connelly has enjoyed a successful career in the resources industry as CEO, MD and Chairman, including development and building multiple mines in Africa.

The Feasibility Study (FS), which builds on the findings of the Scoping Study, commenced in 2019. The company raised £2.25 million at 3.75p per share in July 2019, to enable the team to continue rapidly advancing the project and discussions with potential parties, without the pressure of impending short-term capital requirements.

The FS was released on 1st June 2020 and showed that Emmerson's 100%-owned Khemisset Potash Project was forecast to generate a post-tax NPV(8) of US\$1.4 billion and an IRR of 38.5% over an initial 19 year mine life.



Operations

Emmerson is focused on its 100% interest in the Khemisset Potash Project in Morocco. This is a large resource with strong growth potential where the objective is to become a significant MOP crop nutrient source.

Khemisset Potash Project

The project lies 80 kilometres east of Rabat and covers an area which is 60km by 20km in the Khemisset Basin which lies adjacent to the city of Khemisset (population: 132,000). The remainder of the licence area is sparely populated and used for subsidence farming.



Location of the Khemisset Potash Project in Morocco. Source: Company

No potash mining has taken place at Khemisset. However, there has been a long history of exploration in this large sedimentary basin which includes substantial historic drilling campaigns.

Stratum	Logging	Sub-	Thickness	Description	
	Code	Unit	(m)		
Upper Clay	UCU		20-170	Red-brown sandy mudstone with traces of anhydrite, gypsum &	
Formation				marl	
Upper Salt	USU		50-650	Bedded halite, gypsum, anhydrite, dolostone and silicicalstic	
Formation				mudstone, sub-economic potash occurrences	
Basalt	BST		30-100	Basalt lavas with local lenses of claystone, limestone and	
Formation				evaporite	
Lower Salt	LSU	L2.2		Massive banded salt with principle economic potash layer (sylvite	
Formation				and carnalite)	
		L2.1	Up to 190	Black chaotic massive banded salt with potash inclusions	
		L1		Red-brown mudstone salt interbedded with red beds.	
Lower Clay	LCU		Over 250	Red-brown shale with traces of gypsum and halite.	
Formation					

In the centre of the Khemisset Basin, the Late Triassic to Early Liassic Strata can be subdivided into five formations. Source: CPR June 2018

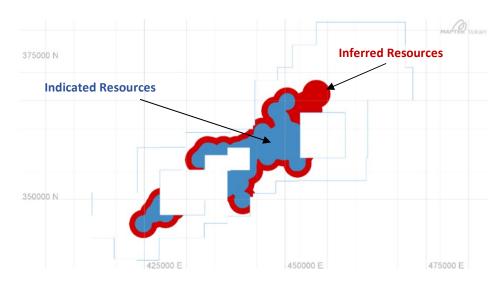
Past exploration in the Khemisset Basin includes regional geophysical surveys, 2D seismic surveys, topographical surveys and drilling. In the 1950s and 1960s, a total of 133 holes were drilled. In 1974, a Preliminary Feasibility Study (PFS) was completed by Parsons Engineering for the Moroccan government which showed that the project was technically and economically viable. In essence, it was a different project to that which Emmerson is considering, but it is encouraging that the project was seen to be viable at much lower potash prices.

JORC Resource

MSL completed a verification drilling programme of three drill holes in 2016, which were drilled within 300 metres of existing drill holes. One hole was drilled in each of the North, Central and NE deposits. Following MSL's work, a total of 136 holes have been drilled at the project for 80,000 metres, which represents a lot more drilling than usually undertaken at mining projects and certainly for potash projects.

In the CPR, SRK outlined a grade varying between 5-20% K2O for an average of 10.2%. The potash is a reasonable thickness ranging from a minimum of 1.5 metres to between 4-5 metres, with an average in the north of 2.5 metres. Consultants SRK believed that the historical drilling and the then recent drilling was of sufficient quality to support the declaration of a JORC-compliant Inferred Mineral Resource of 311.4Mt at 10.2 % K2O.

Part of the work for the Feasibility Study saw the drilling of 9 infill drill holes for 6,485m which provided new geological data in the area of the Oued Beht Basin, which is considered to be the location for the initial mining operations. The results of this successful drilling campaign allowed the Mineral Resource Estimate (MRE) for Khemisset to be increased by 72% to 537Mt at 9.24% K2O, which was announced in October 2019. This revised MRE equates to an in-situ value of contained potash of around US\$30 billion. Importantly, 70% of the resource was upgraded to higher confidence Indicated category.



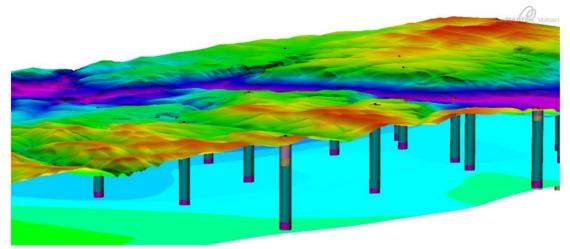
Plan view of Mineral Resource area. Source: Company

Classification	Tonnage	K2O
	(Mt)	(%)
Inferred	375.2	9.36
Inferred	161.8	8.96
Total	536.9	9.24

JORC resource at Khemisset. Source: Company



Significant resource upside remains as the basin remains open towards the northeast. In addition, the economic (breakeven) cut-off grade was substantially below the cut-off used to define the updated MRE, all of which suggests that there is significant further upside potential to MRE and mine life. Based on this new information consultants Golder was able to create a 3D geological stratigraphy model to update the MRE. This latest model for Khemisset provides a far more accurate representation of both the potash horizon and the overlying strata.



Oblique view of the geological model showing topography, drill traces and the potash seam at depth. Source: Company

Potassium in place in the Khemisset Basin is estimated to equate to billions of tonnes of which 500 – 900Mt is economic and 300Mt mineable with a 600Mt exploration target.

Mining plans

Khemisset represents a large resource with strong growth potential. The company is not looking at a large project by potash standards, but one with a production rate of 750,000 – 1,000,000 tpa and a minimum 20-year life of mine. A project of this size would allow a company like Emmerson to successfully finance it and put it into production under its own steam. Obviously, this is subject to the conclusions of the current FS.

The management team heading up Emmerson has spent 4-5 years in developing potassium projects and has made an in-depth study of the whole potash industry. Having analysed the economics of potash global projects, they have realised that the overriding considerations are the capital cost to production and location relative to end markets. For a number of reasons this project has the potential to be low capex with high margins, and so does not need to be a 3-4M tpa production project to justify the capex.

Low capex potential

The project has the potential to be a low capex development, which is very rare in the potash mining industry. This is due to the resource being shallow and having no unconstrained aquifers present which both allow for inexpensive decline access, coupled with the lower cost benefits of conventional mining and processing. In addition, good infrastructure is available, so the company does not have to finance the building of a railway and a port, as is the case with some potash projects in Canada.

As far as potash mines go, Khemisset represents a relatively shallow deposit starting from 450 metres below the surface. By and large, potash mines have huge capex costs due to the cost of accessing the mineralisation. The presence of an aquifer would mean that a ground freezing exercise would be required before sinking a shaft. A much cheaper solution is access via a decline, which is a roadway heading down to orebody which could not be used in instances where an aquifer is present above the orebody.

Company	Depth - metres	Access required	Capex - US\$m
Highfield Resources	350	2 declines	22
Kore Potash	300	2 shafts	175
Passport Potash	380	2 shafts	327
Average Saskatchewan	1,000	2 shafts	1,700
ВНР	1,000	2 shafts	2,500

The cost of decline or shaft access at various projects. Source: Company

Potash is a bulk commodity and so good available infrastructure is also necessary to keep the capex low. Infrastructure in Morocco is impressive and seen to be on a par with European countries like Spain. Power and water are also available. There are electrical substations and high voltage power lines nearby the project and there are no issues in connecting to grid power. The established infrastructure also includes a network of toll roads and deep-water ports within close distance of Khemisset. Khemisset is located in northern Morocco, 90km from the capital Rabat and between 90 – 140km away lies the ports of Casablanca, Mohammedia and Kenitra Atlantique, with Casablanca being the largest port with enormous capacity.



Selected site location. Source: Emmerson FS June 2020



High margin potential

The location of Khemisset provides the potential for the project to generate high margins over the life of the mine. The high margin potential stems from the expectation that the project will involve conventional underground mining with power, labour and transport costs likely to be low. Also essential is the location close to export ports and local customers as well as close proximity to premium price end markets such as Brazil, Western Europe, and Eastern North America.

There is a large domestic market. On the coast, OCP operates a vast NPK blending facility at Jorf Lasfar which is 300km away by rail. This facility represents a big export plant where US\$8 billion has been spent on building an NPK mega-plant from which OCP is focused on supplying the African market. Potassium could be trucked to Jorf Lasfar at \$30/t, but by rail the costs would be under \$15/t. Currently, it is understood that OCP sources its MOP from far-flung locations including Canada, Belarus, and Russia.

It does seem that OCP might represents a big part of the Emmerson story going forward. OCP is strategically vertically integrated and makes an annual EBITDA of \$1.5 billion and \$1 billion of profits from manufacturing fertilisers. Out of the NPK constituents of the fertiliser, OCP has control of the P (as Morocco hosts around 75% of the world's phosphate reserves) and has a guaranteed supply of N through a deal with Abu Dhabi. However, OCP has little control over its supply of K (potassium), which is where Khemisset could fit in quite neatly.

By and large, rail costs normally represent around 20% of trucking costs for the same distance. There is little point in the company spending €200 - 250 million on building a spur line when the product can be trucked at a reasonable price to either the port of Casablanca or Mohammedia using local contract trucking.

High potential netbacks

It must be pointed out that looking at Khemisset's potential operating costs, the mine gate price might be expensive compared to existing potash producers. This assumption is due to the grade and thickness of the mineralisation both being middle of the road. However, this negative will clearly be more than compensated by the low logistics and royalty costs as a result of its location, but also due to Khemisset's location relative to its customers and the high price that those natural customers pay. It is worth noting that, for Canadian producers, which represent around 33% of global supply, more than 70% of their operating cost, delivered to customer, is in royalties, transport and logistics. For the Russians and Belarussians, who also represent around 33% of global supply, this figure is around 60% of total cost delivered to customer.



Premium netback compared to its peers due to location. Source: Argus July 2018.

The plan at Khemisset is to export potash to Brazil, NW Europe, South Africa and NOLA (New Orleans – Louisiana to supply the central cornbelt). Brazil currently pays the highest price for potash, with China and Vancouver paying the lowest price. This strategy will allow Emmerson the chance of enjoying premium netbacks compared to its peers.



Scoping Study

The Scoping Study was announced in late-November 2018 and confirmed the potential for a low capex, high margin potash mine. This study was managed by global independent mining and engineering consultant, Golder Associates with designs and estimates prepared in line with Australian Institute of Mining and Metallurgy (AusIMM) guidelines.

The Scoping Study determined a post-tax NPV(10) of US\$795 million and an IRR of 29.8% over a 20 year mine life, based on the assumption of a flat real price of US\$360/tonne CFR Brazil price. However it was pointed out that using forecast prices from independent market consultants Argus Media would see this NPV(10) rise to US\$1.14 billion.

This study highlighted bottom quartile projected all-in sustaining delivered costs to all Emmerson's target markets including Brazil, NW Europe, Morocco and South Africa. Also, there was top quartile projected cash margins based on analysis conducted by Argus FMB, with average steady-state post tax cash margins of 50% at current potash prices and average steady state EBITDA margins of nearly 64% at current potash prices.

Robust cashflow generation at a broad range of potash price assumptions was demonstrated with average, steady state, post-tax cashflow of US\$184 million per annum assuming a flat, real, potash price of US\$360/tonne CFR Brazil; and less than 3.25 years capital payback period.

The initial mine life was 20 years with significant potential to increase from existing in-situ resource (outside of Inferred Mineral Resource Estimate) and ongoing exploration in North East Khemisset. Over this period, it was assumed that 6Mtpa run of mine ore delivering nearly 800,000 tonnes of K60 MOP per annum on average over the life of mine.

The Scoping Study determined total pre-production capital cost of US\$405 million including US\$90 million of contingency. This highlighted bottom quartile capital intensity per tonne of product produced, less than half of global peer average capital intensity.

Feasibility Study

With the Scoping Study completed in late 2018, Emmerson wasted no time in pursuing its strategy of rapidly de-risking the project and progressing Khemisset towards production. On 1st June 2020, Emmerson release a summary of its recently completed Feasibility Study (FS) for Khemisset. Design and estimates were completed by independent engineers according to AusIMM guidelines.

The FS showed that Khemisset has the potential to be a world class, low capital cost, high margin potash mine. The project was forecast to generate a post-tax NPV(8) of US\$1.4 billion and an IRR of 38.5% over an initial 19 year mine life (nominal NPV(8) with 3.0% escalation applied to both operating costs and revenues) using industry expert Argus FMB price forecasts. Below we comment on a number of the highlights of the FS.

Parameter	Value
Initial operating life	19 years
Annual run of mine extraction rate	6Mtpa
Average Life of Mine grade to mill	8.6% K2O
Average metallurgical recovery (Life of Mine)	85.2%
Average annual MOP production rate	~735,000 metric tonnes
Average annual salt production rate	1 million metric tonnes
Average flat real MOP Price CFR Brazil	US\$412/tonne
Average flat real salt price CFR East Coast US	US\$60/tonne
Capital cost (including US\$45.5 million contingency)	US\$387 million
Total cash costs FOB Port of Casablanca	US\$125.3/tonne
All-in-sustaining cash FOB Port of Casablanca	US\$158.0/tonne
Average steady state EBITDA	US\$307 million
Average steady state EBITDA margin	61.5%
Average steady state annual post-tax cash flow	US\$235 million
Average steady state post tax cash margin	47.1%
Post Tax NPV(8) (nominal)	US\$1.4 billion
Post tax IRR (nominal)	38.5%
Post-tax payback period	2.6 years

Key assumptions and results. Source: Emmerson FS June 2020

Mine life - Initial mine life of 19 years with significant potential to increase from existing JORC compliant mineral resources. The current mine plan includes only 43% of the total mineral resource estimate of 537 million tonnes with an average grade of 9.24% K2O, which equated to an in-situ value of contained potash of around US\$30 billion. This new MRE was determined following an infill drilling programme which focused on confirming and expanding the mineral resources at Khemisset. The drilling was designed to gain more geological information on the area which is expected to be target of initial mining operations, as well as providing sufficient sample material for the met tests.

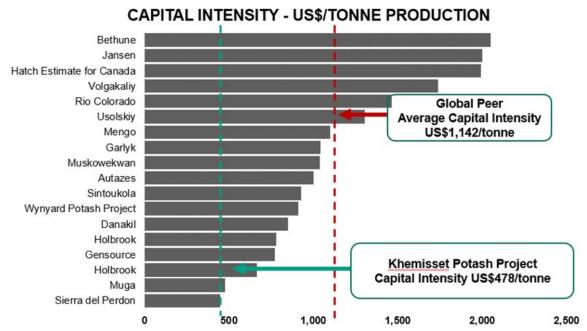
Capex - The total pre-production capital costs for potash came out at U\$\$387 million including contingency, which represents a 4.7% reduction from the Scoping Study. This shows that the project lies in the bottom decile (lowest 10%) capital intensity per tonne of product and is less than half of global peer average capital intensity. Additional capital for a salt plant designed to produce de-icing specification salt for sale into the east coast US deicing salt market is estimated to cost U\$\$24 million (including contingency). Offsetting salt by-product credits, Khemisset is one of the lowest cost producers to Emmerson's target markets.



Production - Peak production is seen as being approximately 810,000tpa of K60 MOP and 1,000,000 tpa of de-icing salt, with average steady state production of 735,000tpa of K60 MOP and 1,000,000tpa of de-icing salt.

Capital cost item	US\$ million
Mining	89.6
Processing plant	146.6
Surface infrastructure	17.9
Tailings storage	30.5
Total Direct	284.6
Engineering, Procurement and Construction Management (EPCM)	32.8
Indirects	47.9
Contingency (16%)	45.5
Total pre-production capital cost	410.9
Capital intensity (US\$/tonne product)	507.4

Pre-production capital costs summary. Source: Emmerson FS June 2020



Pre-product capital intensity for potash projects globally. Source: Emmerson FS June 2020

Low capex mine access - Khemisset benefits from having low capex mine access. The same development approach used has been previously employed in the Scoping Study, with the mining horizon proposed to be accessed by twin declines constructed using underground mining machinery which will later be used in mining production. The estimated costs for mine access place Emmerson's project comfortably within the lowest 10% for mine access costs for potash developments on a global basis as mine access is typically via a shaft – this is 95% lower than the average Canadian potash development which on average requires US\$1.1 billion of capex for two shafts 1,000m deep.

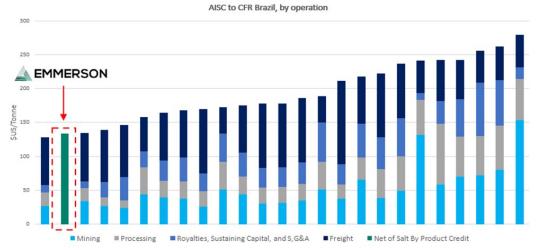
Recoveries - Detailed metallurgical test work programme results have demonstrated improved metallurgical recoveries based on a weighted average Life of Mine (LOM) recovery of 85.2% compared to 83.6% used in the Scoping Study.

The key metallurgical tests included comprehensive brine phase chemistry, decomposition rates at various particle sizes of Khemisset ores, liberation analysis and magnetic separation testing. The results of these tests confirmed that the proposed process flow sheet from the Scoping Study would allow the upgrading of ore from Khemisset into saleable quality MOP.

All-in-sustaining costs - Bottom quartile projected all-in-sustaining delivered cost to all Emmerson's target markets including Brazil, NW Europe, Morocco, South Africa. Top quartile projected cash margins according to analysis conducted by Argus FMB. Average, steady state post-tax cash margins of 47.1% and average, steady state, EBITDA margins of 61.5%.

Operating Cost Item	US\$/t ROM	US\$/t MOP
Mining (including contract mining)	7.8	60.2
Processing	5.5	42.7
Other site operating costs	0.7	5.6
Administration	0.4	2.8
Total cash cost to mine gate	14.4	111.2
Trucking to Port of Casablanca and port charges	2.0	14.1
Sustaining capital	4.2	32.7
All-in-Sustaining cash cost (FOB Casablanca)	20.6	158.0
Freight to Brazil	1.4	10.0
All-in-Sustaining cash cost to Brazil	22.0	168.0

Operating costs summary for the first year of full production. Source: Emmerson FS June 2020



Industry all-in-sustaining delivered cost curve to CFR Brazil.

Source: Emmerson FS June 2020

Robust cashflow generation was demonstrated at a broad range of potash price assumptions with an average steady state EBITDA of US\$307 million per annum and a capital payback period of less than 2.6 years.

NPV US\$ million		Flat Real MOP price - US\$/t						
Discount rate	288	288 350 412 473 536						
4%	1,151.0	1,719.6	2,288.3	2,857.0	3,425.7			
6%	855.5	1,316.0	1,776.5	2,237.0	2,697.5			
8%	634.9	1,012.9	1,390.9	1,768.9	2,146.9			
10%	468.1	782.4	1,096.7	1,410.9	1,725.2			

NPV sensitivity to potash price and discount rate. Source: Emmerson FS June 2020



Salt by product - Metallurgical test results showed that a salt by product from the potash operations at Khemisset was of sufficient grade to be sold as de-icing salt into the East Coast US market, which is estimated to be more than 10Mtpa.

Operating cost item	US\$/t NaCl
Process plant	5.8
Labour and materials handling	1.1
Compacting	1.7
Total cash cost to mine gate	8.6
Trucking to Port of Casablanca and port charges	14.1
All-Sustaining cash cost (FOB Casablanca)	22.7
Freight to East Coast USA	10.0
All-in-Sustaining cash cost to East Coast USA	32.7

Salt operating costs summary. Source: Emmerson FS June 2020

Port - The FS assumed the use of existing storage and loading facilities in Port of Casablanca (PoC), which is one of the largest ports in Africa and is equipped to handle larger vessels with higher loading rates. PoC is fully equipped to handle potash and salt, and so no investment is expected to be required from Emmerson.

Low capex SOP production

November 2019 saw the release of results from a then recently completed PEA for Sulphate of Potash (SOP) in Morocco. This study assessed the economics of producing SOP via the Mannheim process, in the Port of Jorf Lasfar in Morocco. Such a development has the potential to deliver a significant uplift in margins to Emmerson, taking the average, potential EBITDA across its portfolio of assets to over US\$300 million per annum based on a very low total pre-production capital costs of US\$97 million (or US\$119 million including 30% contingency) based on a flat SOP price of US\$675/t over the life of the mine giving a NPV(10) of US\$411 million.

Good comparison

Emmerson is seen to compare favourably to its lowest capex peers in the market. Hayden Locke (CEO) previously worked at Highfield Resources which is developing its Muga and Sierra del Perdon projects in Spain. This is a very similar project to Khemisset for four main reasons: depth, access to mineralisation, location to ports and infrastructure.

	Emmerson	Highfield Resources
JORC Mineral	Khemisset: 537Mt	Muga: 253Mt
Resource/Reserves		Sierra del Perdon: 82Mt
Grade	9.24% K2O	Muga: 11.5% K2O
		Sierra del Perdon: 10.6% K2O
Capital cost to production	US\$411m	US\$382m
Capital intensity	US\$507.4/t	US\$570/t
Infrastructure in place	✓	√
Location	Morocco	Spain
	premium netbacks	premium netbacks
	potash consumption growing	potash consuming location
	rapidly	
Distance from port	Kenitra Atlantique – 90km	Pasajes – 150km
Depth	Shallow from 450m	Shallow from 400m
No aquifer present	√	√

Khemisset compared to the Highfield's project. Source: Company

Highfield's project is slightly larger at 1.1Mtpa for 30 years with capex of US\$382 million but is the lowest capital cost of all global potash development projects by a mile. Its capital intensity at US\$570/t is less than half of the competition. These look like attributes that Khemisset could successfully emulate.



Strategy for growth

Khemisset is a development stage project where there is a well-planned strategy which could add substantial value. The FS has outlined a project with very robust economics. It should be pointed out there is relatively low technical risk here as both the underground mining method and the processing method are well-understood.

Following the release of the Scoping Study, Emmerson continued to pursue its strategy of rapidly de-risking the project and progressing Khemisset towards production. Met test results were so impressive that the company has been able to leapfrog the Pre-Feasibility Study (PFS) stage and moved straight into a FS, which has been a long and arduous process. The FS that has been recently announced does not represent a Definitive Feasibility Study as some areas still need nailing down, including drilling geotechnical holes for the decline. However, the FS is definitely bankable based on the team's experience of other projects.

Management is really happy with the result, which seems to have even surpassed their own expectations. It is very rare for projects to improve upon the Scoping Study as often some capital item blows up and becomes significantly larger during feasibility studies. However, the potash only capex came in at less than the Scoping Study, whilst recoveries improved from 83% to 85% as met testing was very favourably and has flowed through to lower costs. It has to be pointed out that this project offers the opportunity of really robust cash generation. The same price deck was used as in the Scoping Study and looking at the sensitivities in the FS the downside at \$227/t to Brazil (which is lower than it is now due to the disruption to the market caused by COVID-19) still delivers US\$130 million EBITDA and US\$87 million post-tax free cash flow. It has to be said that it is rare to see a project with these metrics. This just goes to show how economically robust this project is.

	Flat Real MOP price - US\$/t						
	227 288 350 412 474 536						
EBITDA US\$ million	130.4	189.3	248.3	307.2	366.1	425.0	
Post-Tax FCF US\$ million	87.5 136.8 186.0 235.2 284.5 333						
IRR	14.7%	23.3%	31.1%	38.5%	45.5%	52.3%	

Sensitivity analysis to potash price results. Source: Emmerson FS June 2020

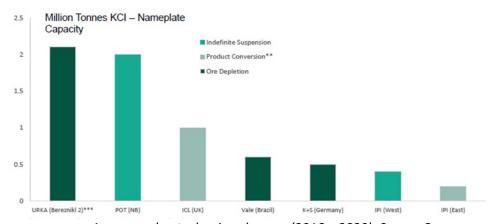
With the FS completed, the application for the Mining Licence could be submitted later on this year with a good chance of it being awarded in early 2021. This Mining Licence application process is a well-worn path in Morocco and the company's Manager Logistics and Operations, Lahcen Alloubane, looked after the process for Moroccan tin developer Kasbah Resources. With the Mining Licence in place, mobilisation could begin in early 2021. The build process is slightly less than two years and so Khemisset could realistically be in production as early as 2022, with full production targeted for the end of 2023.

A key component of the Mining Licence application is the Environmental and Social Impact Assessment (ESIA) which is being completed in partnership with Moroccan-based Phénixa, a company which has been involved in all the environmental and social studies carried out at Khemisset. Already all the baseline studies have been completed and the other areas are currently being built up. To complete, the EISA needs stakeholder engagement, which takes something like 30-60 days and is planned to begin after COVID-19 lockdown in Morocco ends. With the stakeholder engagement completed in June and July, there looks to be a clear pathway to delivering the EISA by the end of 2020.

Importantly, the company is fully funded to deliver key permitting workstreams including EISA and had £1.2 million of cash at the end of April 2020. While the FS has been underway the company has been able to announce a number of strategic alliances with local port operators as well as gas and electricity suppliers, along with negotiations concerning an offtake agreement with a global fertiliser giant to work towards a long-term sales agreement for up to 800,000tpa of K60 MOP, focusing on the Brazilian, African and NW European markets.

The new flowsheet in the FS has been designed and tested which simplifies the original process outlined in the Scoping Study. Importantly, this test work has revealed that there is a saleable by-product stream in the form of salt, which looks to be of a purity that exceeds road de-icing specifications. There is clear potential for Emmerson to mine 1Mtpa of de-icing salt. This product is practically in for free, which means that it represents the cheapest production that could be delivered to the East Coast of the US. Looking at the peer group in salt, companies like Canada-based K&S Windsor and Kansas-based Compass Minerals over the last five years seem to have been selling such salt a price of \$60-65 per tonne. The cost for Emmerson to deliver is US\$32.70 per tonne, so a 50% cash margin is realistic. Salt production could be more than doubled, but 1Mtpa is a very believable amount to get into the market.

The FS has served to revise all the various input costs highlighted that Khemisset has the potential to be a world class, low capital cost, high margin potash mine, which is a very rare asset in the global fertiliser industry. It seems that financing discussions with banks have gone well and a new term sheet should be available once the FS is in place. There are a lot of alternative sources of finance for the development of this project. Strategic discussions have already involved a lot of groups which to get control of the project would write the full equity check if they wanted. Finance might also be provided by some kind of a royalty streaming deal or a strategic investor. With such a high margin project a 5-6% royalty on a US\$350/t project would be highly attractive to a royalty streaming financing partner.



Announced potash mine closures (2016 – 2020). Source Company

It is important to note that the development of Khemisset is being played out against a background of forecast rising demand for MOP, while at the same time potash supply is becoming tighter as around 7Mt of capacity is expected to be closed by 2020. The spotlight seems to be increasingly focused on global mega trends and the need to feed the world's rapidly growing population. As the cheapest source of potassium, it is not surprising that MOP is experiencing a consistent increase in demand annually. MOP prices are enjoying a resurgence but are still some way off previous levels. It does look as though Emmerson could be developing Khemisset with impressive timing, which will allow substantial value to be added consistently over the next few years.



All strategic partners have done the first pass and reviewed the Scoping Study, but their real level of interest will be dependent on their analysis of the powerful outcomes that have been demonstrated by the FS. Negotiations take a while, along with answering various questionnaires from interested parties. During the year, we expect there to be further optimisations of the FS as there are a number of areas which can be improved as well as a little bit of work on the ground in order to make the project shovel ready. The focus will be on permitting in parallel with financial discussions. The board is seeking to nail down the financing by the year-end, get the permit by early 2021 and begin construction. This represents an ambitious plan, but it has to be pointed out that to date the team heading up Emmerson have always been ambitious and have delivered.

Financials & Current Trading

Emmerson was set up as a shell company in March 2016, looking to making an acquisition in the resources sector. Results announced to date reflect administration costs ahead of announcing the RTO.

£'000 Year end 31 December	2017¹	2017²	2018	2019
Revenue	-	-	-	-
Pre-tax profit (loss)	(200)	(207)	(1,784)	(1,132)
Net profit/(loss)	(200)	(207)	(1,703)	(1,164)

¹ 13 months to 31 March 2017 ² 9 months to 31 December 2017

Emmerson's four-year trading history. Source: Company accounts

2019 results

The 12 months ending 31st December 2019 represented a very busy period for the company. Ahead of 2019, Emmerson had just announced a Scoping Study which demonstrated that the Khemisset Project had a potential post-tax NPV(10) of US\$1.14 billion based on industry expert price forecasts and an average EBITDA over the 20 year life of mine of over US\$230 million per annum. During this period, the company built on this economic value with preliminary studies on two additional projects which were the sale of salt by product and the production of Sulphate of Potash (SOP). Taking these projects into consideration served to boost the NPV(10) attributable to Emmerson to more than US\$1.8 billion, with life of mine average annual post tax free cash of around US\$300 million per annum.

The financials showed a pre-tax loss of £1.146 million due to £0.985 million of administration costs and a £0.161 million net foreign exchange loss. After some small financing costs, the company recorded a pre-tax loss of £1.132 million and a total comprehensive income attributable to equity owners of £1,164 million. This equated to a loss per share of 0.17p.

Recent news

On 1st June 2020, Emmerson released a summary of its recently completed Feasibility Study (FS) for Khemisset. The project was forecast to generate a post-tax NPV(8) of US\$1.4 billion and an IRR of 38.5% over an initial 19 year mine life. At the time, Hayden Locke CEO commented that the "....Feasibility Study has confirmed the findings from the Scoping Study, which showed that Khemisset has the potential to be a world class, low capital cost, high margin potash mine, which is a very rare asset in the global fertiliser industry. The strong agricultural investment thematic remains firmly in place driven by ever increasing global population and shrinking arable land, which necessitates the need for fertiliser and, in particular, potash....".



Risks

Geological risks

There are a series of risk factors concerning the amount of understanding of the geology of the project areas, the mineralisation being targeted and its distribution.

Political risk

There are political risks involved in companies operating in Morocco. The mining industry is arguably the most susceptible sector of the market to political risk largely due to its importance to the host county's economy.

MOP pricing risks

MOP prices look to be highly cyclical and follow the metals and mining market. Changes in the MOP price could have a negative or positive impact on the valuation of the company's projects and revenue from the sales of metals. Over the past ten years or so, the price of MOP has been volatile, trading in the range of US\$1,000 (2008/09 peak) to US\$220 (2016 low FOB Vancouver) per tonne and currently trades around the US\$360 CFR Brazil.

Exchange rate risks

Movements in the value of currencies will have an effect on the company's accounts from the translation of sales of MOP, SOP and salt internationally in US dollars and locally in Moroccan dirham, and costs in the local currency into sterling. Fluctuations in the value of these currencies against the pound may have an effect on the valuation that Emmerson is awarded by the UK stock market.

Future funds

The market for raising funds for small cap companies looks to have had improved from the worse conditions a couple of years ago, however the global spread of the COVID-19 infection has meant that equity markets have become extremely difficult. Even ahead of the arrival of this pandemic, some recent fund raisings in the resources sector have seen share prices being undermined by incoming investors demanding substantial discounts to provide the necessary capital.

Board of Directors

Mark Connolly – Chairman

Mark is an internationally experienced financial and commercial executive with thirty years' experience in the financing and development of mining projects. He has worked with a number of multinational companies and across multiple jurisdictions including Africa, Europe, Australia and the Americas. Most recently he served as MD and CEO of Papillon Resources Limited that was sold in 2014 for nearly US\$600 million.

Hayden Locke – Executive Director & CEO

Hayden is an experienced mining executive with 15 years' experience in mining, private equity and investment banking. Most recently he was Head of Corporate and Technical Services (Geology, Mining and Processing) at ASX listed potash developer Highfield Resources. Prior to this, Hayden was Head of Corporate for ASX listed Papillon Resources which was sold to B2Gold in 2014. Hayden studied engineering, commerce and geology.

Dr Robert Wrixon - Executive Director

Robert led Moroccan Salts Limited since its inception in 2013. Rob has 18 years' commercial experience in mining including five years with Xstrata in various strategy roles, and as MD and CEO of ASX listed Manhattan Corporation Limited and Haranga Resources Limited. He is a Director and founding partner of Starboard Global, a natural resource Private Equity group based in Hong Kong and holds a PhD in Mineral Engineering from the University of California, Berkeley.

Edward McDermott - Non-Executive Director

Edward is a former investment banker with 15 years' experience in the management and financing of small companies. Currently a Non-Executive Director of AIM listed companies Fishing Republic Plc and FastForward Innovations Ltd. He has previously served as a Director of AIM listed Stellar Resources Plc and Noricum Gold Ltd. He is part of the corporate finance team at Optiva Securities Limited, which was formerly the company's corporate broker.



Management

Phil Clegett – Head of Corporate Development

Phil is a qualified accountant with 10 years' experience in mining and investment banking. Most recently, he was the Manager of Corporate Strategy at ASX-listed potash developer Highfield Resources.

Lahcen Alloubane – Manager Logistics and Operations

Lahcen is a Moroccan national with a Masters of Business Administration and nearly 10 years' experience in the mining sector including with Moroccan based tin developer Kasbah Resources.

Mohamed Ouabid - Project Geologist

Mohamed is a geologist and a Moroccan national with over 15 years' experience in a variety of commodities including potash. He previously worked for ASX-listed Kasbah Resources as well as a number of Moroccan mining entities including MANAGEM.

Enrique Sanz PhD - Consultant Geologist

Enrique is a geologist with 20 years' experience in industrial minerals, primarily evaporite minerals. He was formerly Project Geologist for worldwide exploration for Rio Tinto. Enrique has extensive experience in the Khemisset Basin and other Triassic-Liassic salt basins in Morocco.

Said Hamdioui - Advisor

Said is a Moroccan national and PhD electrical engineer and is Chair Professor at Delft University of Technology in the Netherlands. He has been involved with the Khemisset Project since 2014, focusing on local stakeholder engagement and management.

Forecasts

We update our coverage of Emmerson with forecasts for the financial years ending 31st December 2020 and 2021.

For 2020, as well as delivering the FS, the company is seeking to complete the EISA, commence the mine permitting process, continue strategic financing discussions and begin negotiating key supply partnerships in Morocco. Also, there is expected to be the beginning of final technical works prior to commencing detailed design and engineering in preparation for construction. Emmerson will also engage with potential Engineering, Procurement and Construction (EPC) groups and contract mining partners. With rising consultant fees, we have estimated administration costs of £1.25 million, which results in a loss for the year of £1.25 million and a loss of 0.18p per share.

In 2021, we would expect that Emmerson will be granted the Mining Licence and commence the mobilisation for the construction of the mine and processing facility. With the increasing workload both from consultants and internally we estimate that administration costs will rise to £1.5 million, which is also the loss for the year. The loss per share on this basis would be 0.22p.

Year End 31 December (£'000s)	FY2018a	FY 2019a	FY 2020e	FY 2021e
Administration expenses	(1,131)	(985)	(1,250)	(1,500)
Net foreign exchange (loss)/gain	196	(161)	-	-
Reverse acquisition cost	(698)	-	-	-
Operating loss	(1,633)	(1,146)	(1,250)	(1,500)
Finance revenue	7	14	-	-
Finance expense	(158)	-	-	
Loss before tax	(1,784)	(1,132)	(1,250)	(1,500)
Income tax	-	-	-	
Loss for the year attributable to equity owners	(1,784)	(1,132)	(1,250)	(1,500)
Other comprehensive income Items that may be subsequently reclassified as profit or loss Exchange (loss)/gain on translating foreign				
operations	81	(32)	-	-
Total comprehensive income attributable to equity owners	(1,703)	(1,164)	(1,250)	(1,500)
Basic and diluted loss per share (p)	(0.49)	(0.49)	(0.18)	(0.22)
Weighted average number of shares	361,230,854	654,484,033	686,132,385	686,132,385
Total shares plus options and warrants	680,020,717	734,532,385	734,532,385	734,532,385

Source: Company/Align Research



Valuation

Our financial model covers the currently forecast nineteen year mine life and is based largely on information contained in the FS backed up with data from the CPR, presentations and discussions with management. We have revised our financial model and as previously, we have approached the matter of placing a value on the company from a highly conservative stance, with our determined figures risked twice. Firstly, we use a 12% discount rate, which is far tougher on the economic result of projects rather than the more commonly used 10%, 8% or even 5% rates. Secondly, the NPV figure determined has been subsequently risked based on the stage of development of this project. Below we highlight some of the assumptions that have been made.

Resource - In October 2019, the MRE for Khemisset increased by 72% to 537Mt at 9.24% K2O which equated to an in-situ value of contained potash of around US\$30 billion and significant resource upside remains. The Khemisset Potash Project is at the developmental stage, but it can already be seen that this enormous basin could contain billions of tonnes of potassium in place. Of this total, 500 – 900Mt may be economic, with 300Mt being mineable, plus a 600Mt exploration target. We are seeking to place a valuation on the project ahead of the latest round of drilling and the FS being completed, which will give us an opportunity to amend our analysis. We have chosen to adopt a fairly conservative approach which is based on less than a 50% extraction ratio of the current JORC-complaint resource.

Timing – We assume that production will commence in late-2022, with the ramp up to full production being achieved by the end of the first year of production in 2023.

MOP and salt prices - We have assumed that all MOP production is sold to the domestic market in Morocco and exported to NW Europe and Brazil in equal proportions. Looking at the forecasts from well-respected sources we have increased the average price received in these markets and now assumed to be a flat price per tonne of MOP of US\$375 CFR. Currently all metals and minerals prices are under pressure and we would ignore MOP prices of today. The outlook for MOP is good and so we believe our flat price is likely to be on the cautious side.

We have used a salt price of US\$65/t over the life of the project. Looking at the peer group in salt, companies like Canada-based K&S Windsor and Kansas-based Compass Minerals over the last five years seem to have been selling such salt a price of \$60-65 per tonne as de-icing salt into the East Coast US market. In our analysis, the all-in-sustaining cash cost to the East Coast USA has been assumed to be US\$32.70/t, as determined in the FS.

Operating metrics – Run-of-mine (ROM) production is assumed to be 6Mtpa, with plant recovery of 85.2% providing average annual production of 735,000tpa of MOP (with peak production of 810,000tpa) and 1Mtpa salt for a 20 year life of mine.

Operating costs – The operating costs used in our financial model were largely based on those outlined in the FS.

Operating Cost Item	US\$/t ROM	US\$/t MOP
Mining (including contract mining)	7.8	60.2
Processing	5.5	42.7
Other site operating costs	0.7	5.6
Administration	0.4	2.8
Total cash cost to mine gate	14.4	111.2
Trucking to Port of Casablanca and port charges	2.0	14.1
Sustaining capital	4.2	32.7
All-in-Sustaining cash cost (FOB Casablanca)	20.6	158.0
Freight to Brazil	1.4	10.0
All-in-Sustaining cash cost to Brazil	22.0	168.0

Operating costs summary for the first year of full production.

Source: Emmerson FS June 2020

Capital expenditure – The capital expenditure costs used in our financial model were largely based on those outlined in the FS.

Capital cost item	US\$ million
Mining	89.6
Processing plant	146.6
Surface infrastructure	17.9
Tailings storage	30.5
Total Direct	284.6
EPCM	32.8
Indirects	47.9
Contingency (16%)	45.5
Total pre-production capital cost	410.9
Capital intensity (US\$/tonne product)	507.4

Pre-production capital costs summary. Source: Emmerson FS June 2020

We have assumed that the capex is funded by project finance on a similar basis to that which Highfield Resources gained for its potash project. That was 60% leverage, so 60% debt/40% equity with below 5% for all costs including a 2% arrangement fee. We have used a 6% figure over the current life of the project.

Royalty and taxes - Morocco has a favourable fiscal regime, with nominal royalties of less than 0.1%. The country has a 5-year tax holiday for new mining projects and a 17.5% corporate tax rate on exported product 50% as had been assumed in the DCF model preciously.

We have ensured that our financial model is fairly conservative. Based on the above-mentioned assumptions a Net Present Value for the project was determined at discount rates of 10% and 12%. The DCF valuations that we have determined are seen to be lower than those that the company determined using the technical outputs of the FS, which is due to us adopting a more conservative approach and incorporating the funding of the capital expenditure in our analysis. In order to remain conservative, we selected to use the NPV(12) figure of US\$580.71 million (£457.25million).



Discount rate	10%	12%
NPV US\$ million	732.15	580.71
NPV £ million	576.50	457.25

Net Present Value for Khemisset Potash Project. Source: Align Research

Following the completion of the Scoping Study, we chose to further de-risk the valuation to derive a figure which we believe is highly conservative and credible. In our November 2018 report we used a 12% discount rate, which already de-risked the valuation, but then the project has been further de-risked to the tune of 75%.

Now with the FS completed and detailed released, we have once again used a 12% discount rate which already de-risked the valuation but then the project has this time been further de-risked by 60%, which we believe properly reflects the current stage of development. This gives a highly-risked valuation figure of US\$232.28 million (£182.90 million) which equates to 26.67p per share based on the current number of shares in issue (686,132,385) and 24.90p on a fully diluted basis (734,532,385).

Conclusion

The Khemisset Potash Project is a world class mining asset which looks to be in the bottom two for capital intensity as well as being comfortably within the lower quartile of operating costs.

We believe that the Emmerson investment case is highly compelling. Not only does the Khemisset Potash Project have the potential to be a low capex operation, based on independent MOP price forecasts over the life of the project, the project could receive impressive netbacks from sales both locally in Morocco and from exports to NW Europe and Brazil. It could be the best location in the world given not only the access to multiple world markets but also the local markets. In addition, there is the opportunity to supply 1 -2Mtpa of salt to the East Coast US market for de-icing, plus the potential for low capex SOP production. It is a very robust project and can be strongly profitable even at the current potash price, which is a far better position than most of the industry.

Importantly, Khemisset's strategic location and relatively low capex means that the project is expected to be very competitive compared its peers and developers. Khemisset can be profitable at US\$227/t and highly profitable at US\$375/t, whilst the majority of the peer group require US\$500/t and so at lower price levels, there is no incentive for competitors to get into production. Due to its favorable location (royalties and transport costs) Emmerson has something like a US\$100/t advantage over the Canadian producers at a price of US\$300/t, which represents an enormous benefit. Now that all the detailed technical work is over, we look forward to the team moving into the financing negotiations and deal making stages which ought to provide a decent news flow.

There seems to be no shortage of potentially interested parties for this world class mining asset. One obvious strategic buyer for Emmerson has to be OCP which has firm supplies of N and P to blend to create NPK fertilisers but does not have control over the K (potassium/potash) which it currently imports from Russia and the Dead Sea (Arab Potash in Jordan and Israel Chemicals). The more you look at this situation, the more obvious it becomes that the Khemisset Potash Project could be the missing piece in the jigsaw for OCP.

There is no doubting that Emmerson has a large JORC-compliant resource at Khemisset, which means that already the exploration risk has been mitigated. There is tremendous potential for the development of a low capex, high margin project to be developed over a period when rising potash prices look to be on the cards. Management has a well-defined strategy to build a mid-tier multi-nutrient fertiliser company and Khemisset looks to represent a solid foundation from which to achieve this goal. We therefore update our coverage of Emmerson with a Conviction Buy stance and a revised target price of 24.90p.



DISCLAIMER & RISK WARNING

It is the policy of ALIGN Research to only cover companies in which we have conviction in the investment case. Our "Conviction Buy" recommendation is derived from our conviction in either taking equity as payment for our research services, or applying our fee to the purchase of equity in a covered company whilst absorbing the cash cost of our freelance analyst payments. Emmerson is a research client of Align Research. Full details of our Company & Personal Account Dealing Policy can be found on our website http://www.alignresearch.co.uk/legal/

ALIGN Research has made every reasonable effort to ensure the accuracy of the information in our research reports and on our website, although this can not be guaranteed. Our research reflects the objective views of our team of analysts. As we actively seek to take the majority of our fees by the way of equity payment in the companies we cover, we believe that we are aligned with both investors and the subject company. Additionally, we only write about those companies that we have conviction in. However, as a consequence of this alignment, our vested interest is in an increase in value of the subject company's equity. As such, we can not be seen to be impartial in relation to the outcome of our reports.

ALIGN Research has both a personal & company dealing policy (covering staff & consultants) in relation to the dealing in the shares, bonds or other related instruments of companies that we follow & which adhere to industry standard personal account dealing (PAD) rules. ALIGN Research may publish follow up notes on these securities/companies but has no scheduled commitment and may cease to follow these securities/companies without notice. Our reports are not subject to any prohibition on dealing ahead of their dissemination by staff members. Additionally, you should assume, given that we look to take our fees almost wholly in equity, that Align will actively manage its cash position, not least for general administration and taxation purposes and that equity divestments will take place as and when we deem, in our sole discretion, it appropriate.

Your capital is at risk by investing in securities and the income from them may fluctuate. Past performance is not necessarily a guide to future performance and forecasts are not a reliable indicator of future results. Nothing in this report should be construed as an offer, or the solicitation of an offer, to buy or sell securities by us. As we have no knowledge of your individual situation and circumstances the investment(s) covered may not be suitable for you. You should not make any investment decision without consulting a fully qualified financial advisor. The marketability of some of the companies we cover is limited and you may have difficulty buying or selling in volume. Additionally, given the smaller capitalisation bias of our coverage, the companies we cover should be considered as high risk.

ALIGN reports may not be reproduced in whole or in part without prior permission from ALIGN Research. This financial promotion has been approved by Align Research Limited, which is authorised & regulated by the Financial Conduct Authority. FRN No. 768993. © 2020 Align Research Limited.

