Potash West (PWN)

It's All About Food

Recommendation: Speculative ***BUY***

March 2014

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Company Information

ASX Code	**PWN**
Share Price	A$0.06
Ord Shares	107.45m
Options	13.02m
Market Cap	**A$7.23m**
Cash (Dec 13)	A$0.63m
Total Debt	A$0
Enterprise Value	**A$6.60m**

Directors

Non-Exec Chairman	Adrian Griffin
Managing Director	Patrick McManus
Non-Exec Director	George Sakalidis
Non-Exec Director	Gary Johnson

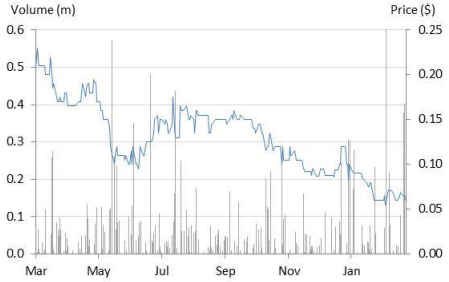
Company Details

Address	23 Belgravia Street Belmont WA 6104
Phone	+618 9479 5386
Web	www.potashwest.com.au

Top Five Shareholders

UOB-Kay Hian	8.9%
Robert Van Der Laan	5.9%
Adrian Griffin	4.7%
HSBC Nominees	3.8%
John Milward	3.5%

1 Year Price Chart



Key Points

- ***Dandaragan Trough project has returned a positive scoping study on a low start-up capital single superphosphate producing operation***
- ***Results indicate an NPV_8 of A$218m and an IRR of 26%, with scope for improvement***
- ***The project area has excellent access to infrastructure, and is close to export ports and growing markets***
- ***Dinner Hill phosphate Indicated resource of 90Mt @ 2.65% P_2O_5, 3.6% K_2O and 4.5% CaO - deposit remains open to the north and east, and with considerable exploration potential***

Potash West continues to advance its 100% owned Dinner Hill SSP project, which forms part of the overall Dandaragan Trough project in WA targeting greensands. A scoping study has shown the feasibility of a 20 year, +340,000tpa SSP production facility, supplying both domestic and Asian markets, based on forecast USD cfr SSP prices of A$383/tonne.

The keys to the project are a low ($144m) start-up capital, and relatively low operating costs due to the flat-lying, shallow simple mineralisation that is amenable to standard treatment options, and short transport distances. The Company is assessing further process improvements aimed at improving the project economics.

The location is close to a potential market in Asia, with demand for fertilisers expected to continue to grow with the need to continually increase crop yields to feed a growing population.

Company Overview

Potash West (ASX: PWN) holds 100% of the Dandaragan Trough project covering extensive greensand deposits that can be processed to produce a range of fertiliser and chemical products. Since listing in May 2011 considerable progress has been made, including the definition of indicated resources and scoping various development options.

The initial scoping study assessed the viability of treating the glauconite sands to produce a series of products using the Company developed "K-Max" pyro/hydrometallurgical process. This developed positive outcomes at the then economic conditions, albeit with high capital costs that would require a major partner. This option is being kept on the backburner, however can be reactivated should conditions allow.

More recently Potash West has been looking at an SSP operation, based on a phosphate resource of 90Mt @ 2.65% P_2O_5 which has been outlined at the Dinner Hill deposit. The October 2013 scoping study has indicated positive economics, and this option continues to be advanced.

We see potential in the company's activities, and hence rate Potash West as a **Speculative Buy**

Investment Thesis

Robust Scoping Study – Dinner Hill SSP Project

Potash West (the "Company") continues to progress the Dinner Hill single superphosphate ("SSP") option at its Dandaragan Trough Project, located approximately 200km north of Perth in Western Australia.

Dinner Hill has the potential to support a 20 year, 340ktpa SSP operation

The Company's tenements cover units of friable greensands, containing an Indicated resource of 90Mt @ 2.65% P_2O_5 at shallow depths and hence low strip ratios. The current resource has the capacity to support a 20 year operation producing around 340,000tpa of SSP with the potential for significant resource expansions which would add to mine-life or production capacity. The resource is on 10 km^2 of land at Dinner Hill, where the remaining 50 km^2 has a phosphate exploration target of 300 to 600 Mt @ 1.5 to 3% P_2O_5 (May 7 2013 ASX announcement). The potential for this mineralisation to be very widespread within the Dandaragan Trough is high.

Low start-up capital of A$144 million

The scoping study estimated a start-up capital of A$144 million, with an NPV_8 of A$218 million and an IRR of 26%. An average life of mine SSP selling price of $A383/tonne has been used – this has been derived from $US denominated forecasts provided by independent consultants, CRU in 2012.

Ready Access to Existing Infrastructure

The project has ready access to existing transport and utilities infrastructure

The low initial capital cost is partly by virtue of the project location and ready access to existing infrastructure, including rail and road transport, power, gas and export ports at Kwinana or Geraldton, less than 200km from the deposit.

This is in contrast to a number of other Australian phosphate projects, which are located in remote areas and require new infrastructure and hence substantial capital costs and transport operating costs, which drive an increase in scale.

Potential Low Cost Operation

Potential low operating costs, somewhat mitigating the relatively low grade

The simple metallurgy indicates that industry standard "off the shelf" technology can be used – there is nothing difficult about the processing route, which will include screening, magnetic separation, milling and flotation to produce a +30% P_2O_5 rock product, followed by acidulation to produce 18-20% P_2O_5 SSP. Sulphuric acid can be readily sourced and railed.

The relatively low grade of the deposit is mitigated by low operating costs – the friable nature and low strip ratio will keep mining costs low, and the ability to upgrade mill feed by simple screening will keep processing costs low. Short transport distances and hence costs are another important factor.

There is the potential to lower operating costs through optimisation of processing, with this being shown by recent success in treating the Gingin Chalk, which will help simplify mining operations.

Close to Global Markets

Close to Asian markets

The location, in Western Australia and less than 200km from an export port, is close in global terms to potential markets in South and East Asia.

One of these markets is India, which is the world's 2nd largest phosphate consumer, and

with imports of 4.298Mt of contained P_2O_5 in 2011 it is the largest importer of phosphate products. SSP is used as a general fertiliser through much of the region, so there may be a ready export market.

K-Max Process

The previously developed and scoped K-Max process remains on the backburner. However Potash West will look at further developments should they attract a strategic partner to help develop it, or generate sufficient cash-flow out the proposed SSP operation to help fund development.

Peers

Potash West is one of a number of players in the phosphate space

Potash West is one of a number of small to mid-cap companies operating in the phosphate space – these are largely listed on the ASX and TSX.

Potash West Peer Group

Company	Code	Location	Market Cap Diluted (A$m)	Global Resource (MT)	P2O5 Grade (%)	Project Stage & Deposit Style
AUSTRALASIAN PROJECTS						
Chatham Rock Phosphate	CRP: NZ	New Zealand	$47.84	-	-	Offshore nodules
Rum Jungle Resources	RUM: ASX	Australia	$47.26	548 Mt	14.84%	Scoping Sedimentary
Minemakers	MAK: ASX	Australia	$32.87	1,406 Mt	13.48%	BFS Sedimentary
Strata Minerals	SMP: TSX	Australia	$13.03	-	-	Drilling Sedimentary
Legend International	LGD: US	Australia	$9.39	516 Mt	15.11%	Feasibility Sedimentary
Potash West	PWN: ASX	Australia	$7.32	90 Mt	2.65%	Scoping Greensands
OFFSHORE PROJECTS						
MBAC Fertilizer	MBC: TSX	Brazil	$159.00	180 Mt	7.31%	Producing Sedimentary
Arianne Phosphate	DAN: TSX	Canada	$135.76	764 Mt	6.85%	BFS Igneous
Great Quest	GQ: TSX	Mali	$101.42	50 Mt	24.30%	PEA Igneous
Stonegate Agricom	ST: TSX	Peru, USA	$53.89	520 Mt	12.30%	USA - permitting Sedimentary
PhosCan Chemical	FOS: TSX	Canada	$50.92	118 Mt	22.76%	Scoping Igneous
Sunkar Resources	SKR: AIM	Kazakhstan	$30.15	1,128 Mt	10.28%	Rock: Production Fertiliser: DFS Sedimentary
Fertoz Limited	FTZ: ASX	Canada Australia	$27.26	-	-	Exploration Sedimentary
DuSolo Fertilizers	DSF: TSX	Brazil	$15.16	19 Mt	6.45%	Drilling Sedimentary
Aguia Resources	AGR: ASX	Brazil	$13.78	84 Mt	5.68%	Scoping/Drilling Igneous (+sed)
GB Minerals	GBL: TSX	Guinea-Bissau	$9.03	111 Mt	28.67%	Development Sedimentary
Celamin Holdings	CNL: ASX	Tunisia	$7.16	159 Mt	18.78%	Scoping completed Sedimentary
Jourdan Resources	JOR: TSX	Canada	$3.39	-	-	Exploration Igneous
Minbos Resources	MNB: ASX	Angola, DRC	$0.64	371 Mt	12.17%	BFS/Scoping Sedimentary

Source: IRESS, Company reports

We have separated these into those companies with Australasian projects, and those with offshore projects and market capitalisation of the offshore listed companies have been converted to Australian dollars using current exchange rates.

The majority of Australian projects are located in the Georgina Basin, with long transport distances

The bulk of the Australian projects are located in the Georgina Basin, in Central Australia, and hence require significant infrastructure for development and involve long transport distances. Rum Jungle Resources has a number of other projects, and thus the market capitalisation will reflect this.

The majority of peers have suffered significant falls in value over the last twelve months – due both to the overall malaise in the junior resources sector, and slides in fertiliser prices.

Risks

As with any resources projects there are risks involved.

We see the key risk as being SSP prices and marketing

We see the key risk here as being SSP prices and marketing. Phosphate fertiliser prices have suffered significant falls subsequent to the 2012 CRU study prepared for Potash West (with SSP prices currently well below PWN's estimated cost of production), although they look as though they are now picking up again, with commentators seeing improvements over the next few years.

Although we see continued and growing demand for fertilisers is Asia, and thus a potential market for Potash West's products, SSP is currently only thinly traded internationally, however given the right pricing environment this could change. Potash West would need to be able to deliver the product at a cheaper price than local production to secure Asian customers.

Domestically, bulk SSP prices are at a considerable premium to quoted seaborne prices (currently +A$300 fot) – the key here is to develop market share, again which will require being able to sell product at more attractive prices than other suppliers.

Other financial factors include exchange rates and operating costs. The project financials will be highly geared to any changes (both positive and negative) of these parameters.

Most technical risks have been largely mitigated

Key technical risks, including resource and processing risks are all but mitigated. A large resource, with the potential for significant expansions, has been defined, and testwork indicates that the mineralisation is amenable to treatment by well proven industry standard technologies.

However this is not so with the K-Max process – this has only been developed to the bench scale. There are no new process steps involved, but glauconite has never been reached on an industrial scale before, and should this be progressed there may be considerable risk in commercialisation. The stage-wise approach of pilot plant and pre-feasibility lessens the risk, but adds to the development timeline.

Being located over freehold land should help the permitting process, due to Native Title being extinguished

Infrastructure, normally a risk for bulk commodities projects, is not a significant issue at Dinner Hill, with ready access to transport and utilities infrastructure.

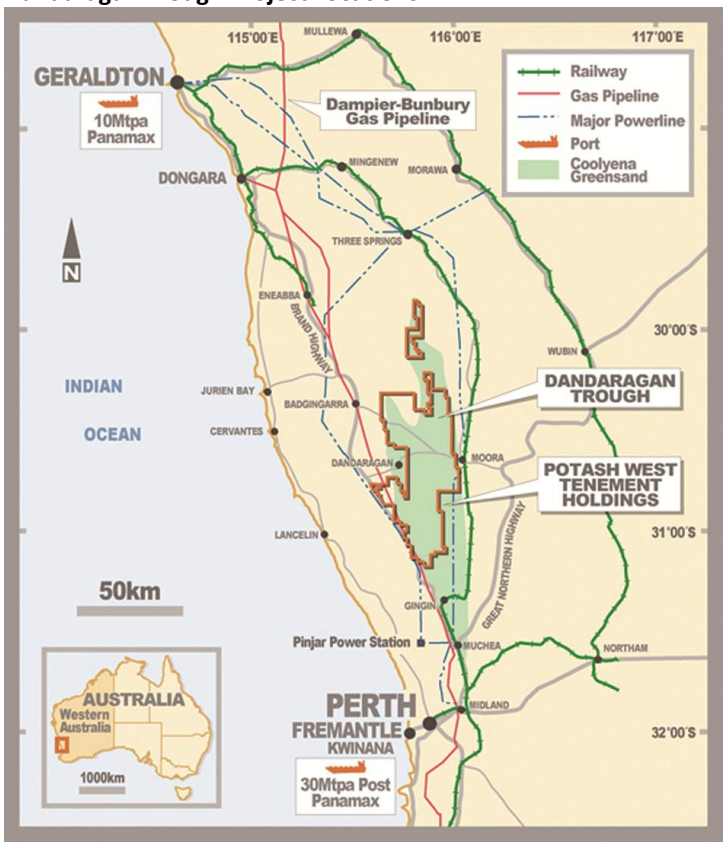
Permitting is also an ever present risk in new resources projects and the permitting process needs to be managed carefully. Being located in Western Australia and over freehold farming land should be positives – Western Australia is primarily a mining state and with the land being freehold Native Title will be extinguished, thus simplifying the approvals process.

Dandaragan Trough Project

The Dandaragan Trough project is centred approximately 200km north of Perth, with excellent access to infrastructure

The Dandaragan Trough project encompasses a land area of over 2,000km^2, comprising 15 exploration licences and licence applications. It has excellent access to infrastructure, including rail and road transport, power, gas and nearby towns. The key Dinner Hill prospect is located in the north of the project area, and approximately 200km from the Port of Kwinana.

Dandaragan Trough Project Locations



Source: Potash West

Work has concentrated on the Dinner Hill prospect

Work has been largely concentrated on the Dinner Hill prospect, for which initial activities were based around the cost intensive K-Max potash project, with the focus subsequently changing to phosphate. Resources and scoping studies have been completed for both options.

Initial work concentrated on the K-Max process, however has been shelved in favour of an SSP operation

The hydrometallurgical and pyrometallurgical K-Max process was originally proposed to extract potash and other products from glauconite, and has been developed to successful bench scale tests by Potash West. The scoping study for this operation delivered a high capex operation, well out of the funding scope for a junior. The Company will look at further developing the K-Max process either through attracting a strategic partner, or when cash flow is available from the SSP operation.

In October 2013 a scoping study for an SSP operation was delivered, with a low initial capital cost and robust financials. Being close to transport, and amenable to easy mining, this will be a relatively low cost operation.

Geology and Mineralisation

The tenements are located over units of the Dandaragan Trough, a Permian to Mesozoic deposition centre within the Perth Basin.

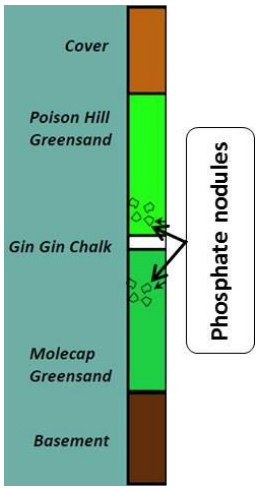
The target units are glauconitic greensands within the Permian to Mesozoic Dandaragan Trough

The area includes three greensand formations within the Cretaceous Coolyena Group, namely the Poison Hill Greensand, the Molecap Greensand and the Osborne Formation. The first two units are the main interest. Greensands are usually a type of sandstone containing the potassium rich mica glauconite, which gives the rock its green colour.

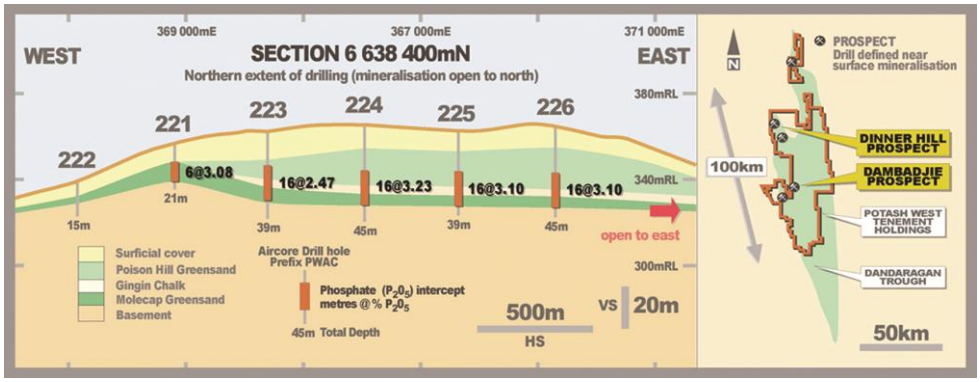
Glauconite has a low resistance to weathering; hence greensand units tend to be weak and friable. They have high iron and potassium contents; as well the greensands in the project area are phosphatic.

Phosphate mineralisation occurs as nodular and granular apatite within the greensands

Phosphate mineralisation in the project area is located from the top of the Molecap Greensand to the base of the Poison Hill Greensand, and includes the interbedded Gingin Chalk. The phosphate occurs as flat-lying bands of granular and nodular fluorapatite, with an average thickness of around 16 metres.



Dinner Hill Cross Section



Source: Potash West

The majority of the phosphate is in the +0,5mm fraction – this is a positive for treatment, as simple screening provides a low cost upgrade of the mill feed.

Resources

The Company originally calculated resources at Dinner Hill for the proposed potash project, however subsequently calculated phosphate resources as used in the phosphate scoping study.

Indicated resources of 90.2Mt @ 2.65% P_2O_5 have been identified

Dinner Hill Phosphate Resource – 1.85% P_2O_5 cutoff

Category	Tonnes (Mt)	P_2O_5 (%)	Contained P_2O_5 (Mt)	K_2O (%)	CaO (%)
Indicated	90.2	2.65	2.39	3.59	4.54

Source: Potash West

The phosphate resources are restricted to those blocks with a CaO to P_2O_5 ratio of less than 2.5 (thus largely not including the Gingin Chalk) – original metallurgical testwork indicated that higher CaO contents would result in uneconomic acid consumption in processing.

Subsequent metallurgical work has demonstrated that the chalk can be treated using selective floatation, and hence Potash West is currently reviewing the resource to include the chalk, and reconfiguring the mining block model.

Potash resources for the originally proposed K-Max operation are shown below.

Original resources were calculated for the K-Max process

Dinner Hill K-Max Resource

Unit	Category	Tonnes (Mt)	K_2O (%)	P_2O_5 (%)
Molecap Greensand	Indicated	120	4.6	1.8
	Inferred	2	4.4	2.2
	Total	**122**	**4.6**	**1.8**
Poison Hill Greensand	Indicated	121	1.5	1.4
	Inferred	1	1.6	1.1
	Total	**122**	**1.5**	**1.4**
Total Resources	Indicated	241	3.0	1.6
	Inferred	2	3.6	1.9
	Total	**244**	**3.0**	**1.6**

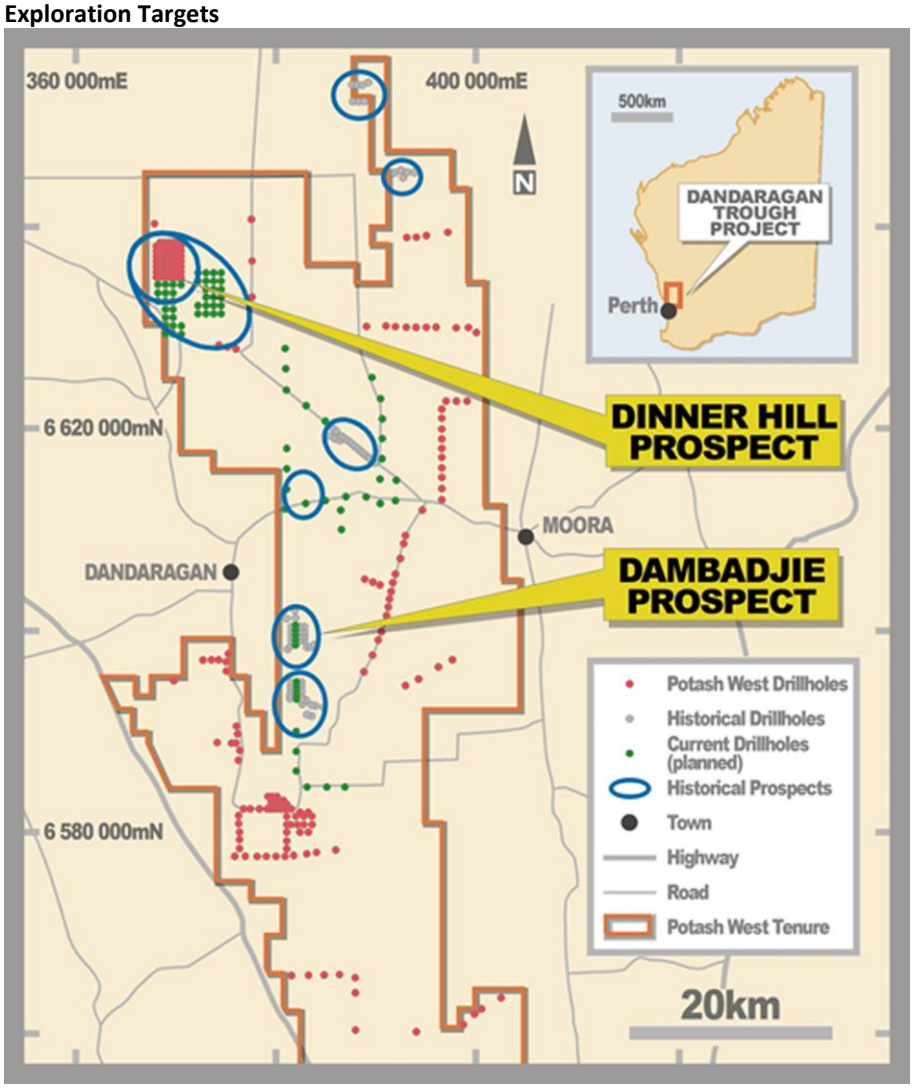
Source: Potash West

There is significant scope for resource expansion within the project area

Only 20% of the target areas at Dinner Hill have been adequately drill tested. An exploration target of 1,000 to 1,500Mt of greensands grading at 4.0% to 4.8% K_2O, and including 300-600Mt grading at 1.5% to 3.0% P_2O_5 has been calculated for this area.

There are also a number of other exploration targets within the tenements.

Exploration Targets



Source: Potash West

Metallurgy and Processing

Phosphate/SSP Project

SSP production can be achieved using well proven industry standard techniques

Initial testwork has determined that the phosphatic material can be concentrated to a +30% P_2O_5 product using a simple industry standard flotation and magnetic separation process route, and using standard reagents. The mineralisation is simple, largely including the phosphate bearing mineral fluorapatite, calcite, goethite, silica and glauconite, with the apatite being largely liberated and dominantly within the +0.5mm fraction.

The sizing of the apatite is a positive for the project – it will allow simple screening prior to milling. This, as well as de-sliming and magnetic separation recovers 70% of the phosphate to 36% of the mass, thus allowing for smaller downstream processing units. Testwork to date has achieved flotation recoveries of 88%, thus resulting in an overall process recovery of 61.3% to phosphate rock.

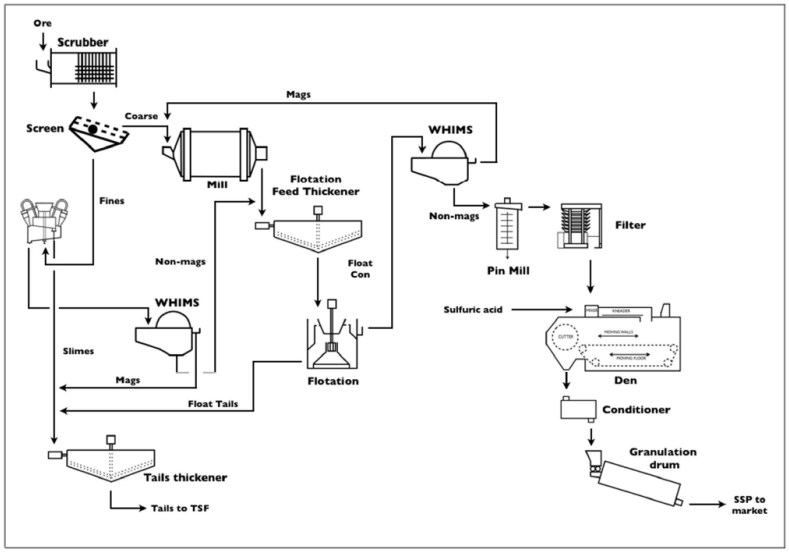
Further testwork will be targeted at optimising recoveries

Further testwork is to be targeted at optimising recoveries, largely from the slimes fraction in which most of the losses occur. As mentioned earlier Potash West has now shown that the phosphate can be recovered from the Gingin Chalk by selective flotation. Although this lowers overall recoveries to 58.1%, the economic impact will be positive resulting from simpler mining and a lower strip ratio.

SSP will be produced from acidulation of the phosphate rock; with 100% recovery of the phosphate in rock to SSP. Cheap sulphuric acid is readily available to be railed to site.

The processing route as used in the scoping study is shown below.

Proposed SSP Flow Sheet – Phosphate Plant



Source: Potash West

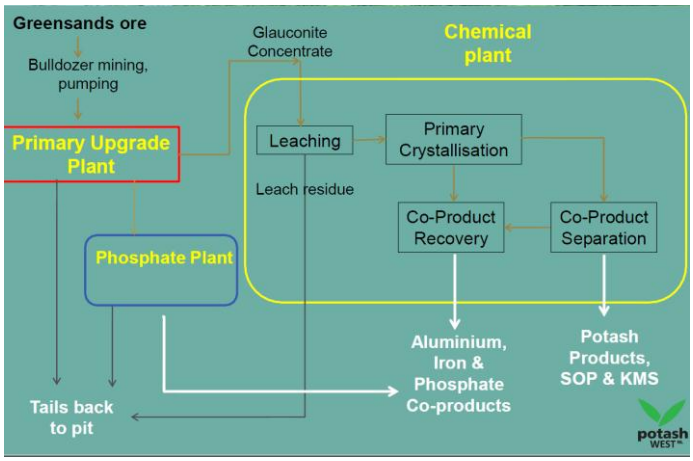
K-Max Project

The originally proposed K-Max project was planned to produce a number of products

As stated earlier, Potash West has developed, to a bench scale, a mixed hydrometallurgical and pyrometallurgical process to treat the glauconite to recover K, P, Mg, Fe and Al, that can then be converted into other chemicals, including sulphate of potash, high magnesium sulphate of potash, SSP, alum and hematite.

This process was part of a previous scoping study, that provided positive financial results, but given the high capital costs and current market conditions it was decided not to progress at the time.

Proposed Greensands Flow Sheet – 'K-Max' Chemical Plant



Source: Potash West

Phosphate Scoping Study

The SSP scoping study has delivered positive numbers, with a low start-up capital

Potash West has delivered a positive scoping study for their proposed SSP operation at the Dinner Hill prospect. The study is based on a 20 year, 3.8Mtpa operation (based on the current Dinner Hill resource), to produce over 340,000tpa of SSP. Initial plans are to sell 100,000tpa domestically, and export the rest to Asia; with India, Malaysia and Indonesia being the key target markets.

The capital requirement of A$144 million is significantly less than the estimates for the previous K-Max operation which had a capex of $880M for a 4.0Mtpa scenario and $650M for a 2.4Mtpa scenario. The key outcomes of the Phosphate Scoping Study are summarised below:

Phosphate Scoping Study Outcomes

Metric	3.8Mtpa
Mine Life	20 years
Average revenue per year	A$131m
Average CFR SSP product price (CRU)	A$383/tonne
AUD: USD exchange rate	0.90
Operating cash costs per year	A$97.6m
Operating cash flows per year	+A$30m
IRR	26.2%
NPV_{10}	A$218m
Capital Costs	A$144m
Payback Period	4 years

Source: Potash West

Simple mining operation, similar to regional heavy mineral sands projects

The envisaged mining operation, similar to heavy mineral sands operations, will include:

- Removing topsoil and stockpiling for rehabilitation
- Remove overburden by bulldozer
- Mine using bulldozer, feeding into an in-pit slurry unit
- Slurry pumped to a pre-treatment plant, where it will be upgraded to +10% P_2O_5 by screening and magnetic separation. This product will then go to a concentrator, where it will be upgraded to a +30% P_2O_5 phosphate rock
- Rock to be converted to SSP by acidulation using purchased sulphuric acid.
- Pits to be rehabilitated by backfilling using the removed overburden and the benign tailings, and topsoil replaced.

There are opportunities for capital and operating cost reductions through process improvements

The current resource will support a 20 year mine life based on a 3.8Mtpa operation and will generate +$30m of free cash flow per year. Opportunities exist for capital and operating cost reductions through continued process improvements, as well as through potential delineation of higher grade and broader widths of mineralisation.

A future opportunity may eventuate to build side-by-side phosphate and K-Max plants to produce additional potash and alum products from the same feed material. This could be expected to lead to reduced downstream operating costs.

Capital and Operating Costs

Design criteria and capital costs for the phosphate project, based on a 3.8Mtpa throughput rate, have been provided by independent consultants Strategic Metallurgy Pty Ltd ("SMet"), at an order of accuracy of ±35%.

Access to existing infrastructure will help keep capital costs reasonable low – the site is well served by power, gas and transport infrastructure.

Low capital costs of A$144 million are indicated

Phosphate Scoping Study Capital Costs

	AUD $ millions
Process Plant	$72.9
Infrastructure	$34.7
Indirect costs (including contingency)	$36.7
TOTAL	**$144.2**

Source: Potash West

Unit operating costs are expected to be low, offsetting the relatively low grade of the deposit, due to a number of factors:

- Soft, friable nature of the mineralisation, allow for free dig mining operations
- Ability to upgrade plant feed by simple screening
- Available infrastructure, and short transport distances resulting in low transport costs

Operating costs of A$285/tonne of SSP

Phosphate Scoping Study Operating Costs

	A$/tonne of feed	A$/tonne of product
Mining and Rehabilitation	$8.79	$97.75
Process Plant	$13.25	$147.25
Railing and project shipping	$3.62	$40.19
TOTAL	**$25.66**	**$285.19**

Source: Potash West

Ongoing Activities

Ongoing activities include further resource drilling, and process flowsheet optimisation

Potash West will continue to progress the Dinner Hill Phosphate project, with activities in the short term including:

- Further drilling at Dinner Hill to increase and ultimately close off mineralisation to the north – this will allow a mining footprint to be determined for permitting purposes
- Recalculate the resource to include the Gingin Chalk resources, followed by an update of the financial model
- Flowsheet optimisation

The Company has an indicative timeline to commissioning in early 2018, as shown below.

Looking for commissioning early 2018

Dinner Hill – Indicative Timeline

Activity	2013	2014	2015	2016	2017
Phosphate scoping study					
updated JORC resource					
updated scoping study					
JORC measured resource					
flowsheet finalisation					
OPEX, CAPEX and financial assessment					
Permitting					
Plant Construction					
Commissioning					

Source: Potash West

Breakaway's View

Potash West has been pro-active in responding to market conditions, developing its SSP production strategy which we believe has technical and financial merit.

Although low grade, the project has advantages in being located close to infrastructure and a port

Although low grade when compared to peers, the Dinner Hill project has advantages in being located near infrastructure, close to an export port and having a free dig, low strip resource. Processing is also simple, being able to use well proven "off the shelf" technology.

Potentially robust project by virtue of low start-up capital and relatively low unit operating costs

One key point is the low start-up capital cost estimated at A$144 million; when allied with a low operating cost makes for a potentially robust project. There is also the scope to improve economics through process optimisation – this has already been demonstrated by the successful testwork on the Gingin Chalk.

There is still plenty of scope for resource expansion, both at Dinner Hill and other prospects within the Company's tenements which could then feed into an enlarged operation.

The Company will keep the K-Max potash project as a future option, should changing market conditions make it viable else a strategic partner be brought in.

The location, in Western Australia, close to growing East and South Asian markets, makes it attractive from a marketing perspective. Our view, given a growing demand for better crop yields to feed a continuously growing population, is that fertiliser demand will continue to grow steadily for the foreseeable future; however SSP pricing is a key concern – the viability of Dinner Hill does rely on significant improvements in SSP prices over the medium term

We rate Potash West as a Speculative Buy

Given the potential of Dinner Hill and the Dandaragan Trough project we rate Potash West as a **Speculative Buy,** however noting our concerns on pricing**.**

Fertilisers

The main fertiliser nutrients are N, P and K, which cannot be substituted

In addition to a number of trace elements, three main nutrients are required for plant growth, being nitrogen (N), phosphorous (P) and potassium (K), collectively known as NPK. These elements have no substitutes, and are provided naturally by the soil or else by the application of fertilisers in naturally nutrient poor soils or those depleted by continual cultivation.

Increasing population and decrease in arable land per person requires fertilisers to increase yields

Increasing world populations and the coincident decrease in arable land per person to grow food will continue to put pressure on growers to increase crop yields on available land. This pressure in turn increases the need for fertilisers. In addition the increasing production of bio-fuels is also a factor in the increased requirements for fertilisers.

As an example, in the period 1961 to 2011 worldwide rice production (which provides the bulk of staple crops in Asia) increased 342% (annual rate of ~ 2.7%) from 212 to 725 million tonnes, with area under cultivation only increasing 43% from 115 to 164 million hectares, indicating an increase in yields from 1.8 to 4.4 t/ha (FAO).

In the same period the NPK contents of fertilisers used (for all agricultural production) has risen approximately 5-fold from 32Mtpa to 176Mtpa, an average annual rate of 3.3% (IFA).

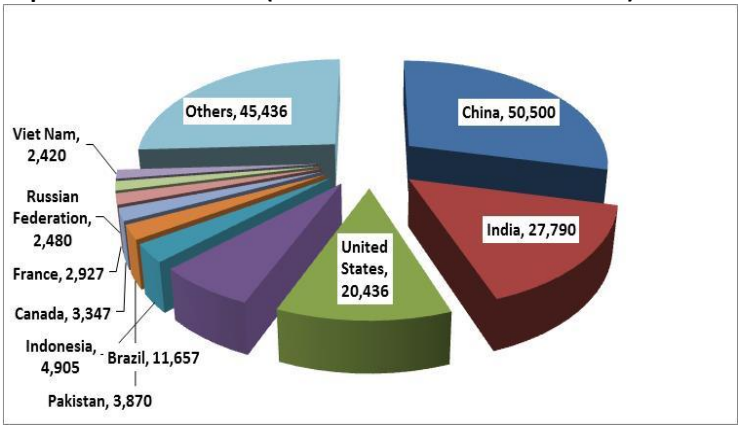
This is a situation that will continue – demand for food will continue to outgrow the supply of arable land, thus necessitating higher yields to meet the demand.

As expected the largest fertiliser consumers tend to be the more populous or agriculturally intensive countries, with the top 10 shown below. The top 10 consumed around 75% of the total global production of 176Mt in 2011.

Top 10 NPK Consumers ('000 tonnes contained nutrients)

Largest fertiliser users are the most populous and agriculture intensive countries

Total global NPK consumption of 176Mt in 2011



Source: IFA

Phosphate

Phosphate is traded as a number of different raw and fertiliser products globally

Phosphate is traded as a number of different raw and fertiliser products globally. The bulk is the seaborne trade in rock phosphate and phosphoric acid, with North Africa and the Middle East being the main producers, supplying most global regions. Like the overall NPK figures, the largest consumers are the most populous or agriculturally intensive countries, as shown on the chart below.

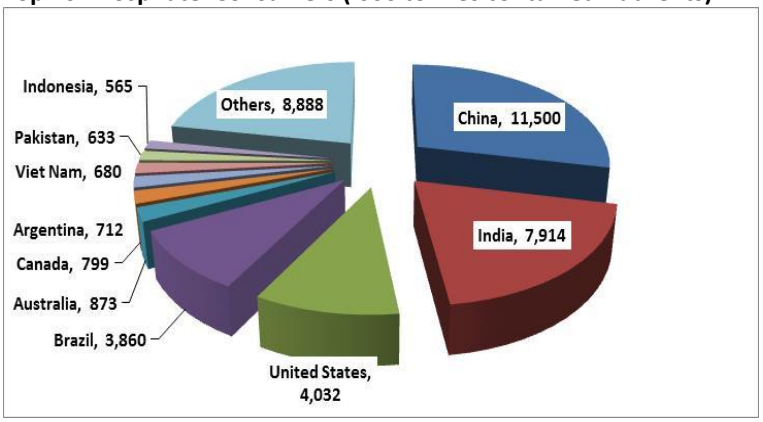
Australia has a ready market on its doorstep for phosphate products, with four of the top 10 phosphate consumers and a number of smaller consumers located in the region. Of these China is a net exporter – the others are net importers.

Asian markets (targets for Potash West) imported 7Mt of contained P_2O_5 in 2011

Total South and East Asian (target markets for Potash West) imports of contained P_2O_5 totalled 7.042Mt in 2011, with 4.298Mt (or 61%) being imported by India alone. A breakdown of these by countries (excluding India) is shown below. The bulk of this is in rock phosphate or higher value processed fertilisers (such as MAP or DAP). The lower value (and cost to the consumer) SSP tends to be produced domestically, with thin international trade. However rising fertiliser prices tend to drive the smaller landholders and more marginal producers away from the more expensive complex fertilisers to cheaper SSP.

Top 10 Phosphate Consumers ('000 tonnes contained nutrients)

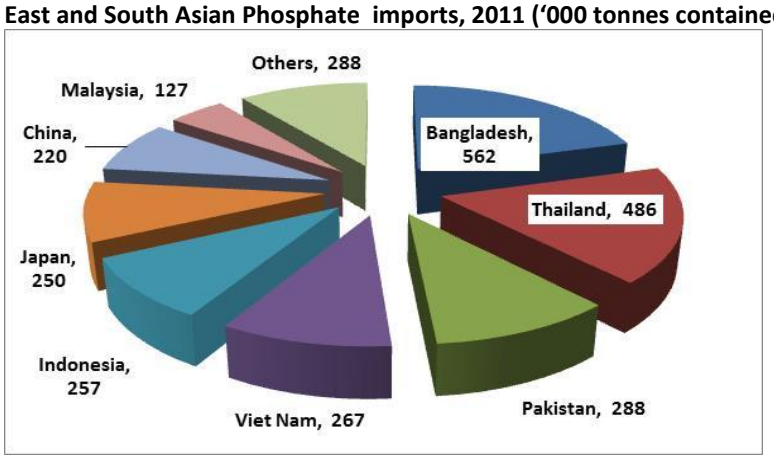
2011 global phosphate consumption was 40.5Mt



Source: IFA

East and South Asian Phosphate imports, 2011 ('000 tonnes contained nutrients)

East and South Asian 2011 imports were 7Mt, including 4.3Mt by India alone

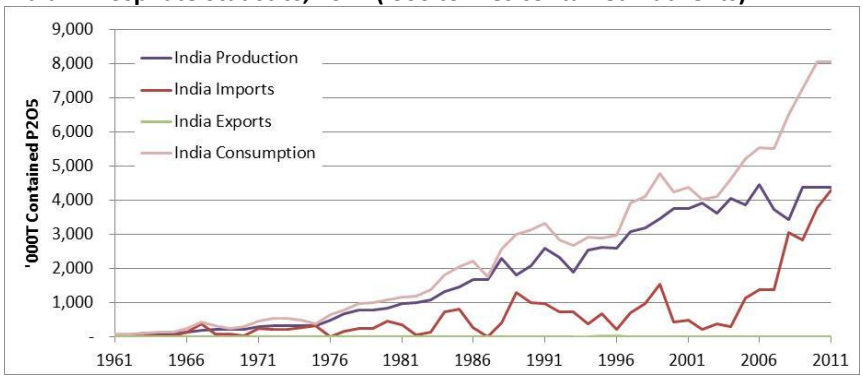


Source: IFA

India is a key driver of the global phosphate trade

India, one of the markets PWN is targeting, imports a number of phosphate products, and According to HDFC Securities, in 2012 the country accounted for ~45% of the phosphoric acid global trade and ~16% of the phosphate rock trade, and thus is a key driver in global phosphate markets.

Indian Phosphate Statistics, 2011 ('000 tonnes contained nutrients)



Source: IFA

There was a 14-fold increase in Indian phosphate consumption between 2004 and 2011

As shown above Indian phosphate consumption has increased markedly over the last 10 years. This has led to a 14-fold increase in imports from 307Kt of contained P_2O_5 in 2004 to 4,298Kt in 2011 – an average 46% annual increase.

Being located in Western Australia, Potash West is well located to supply these growing markets.

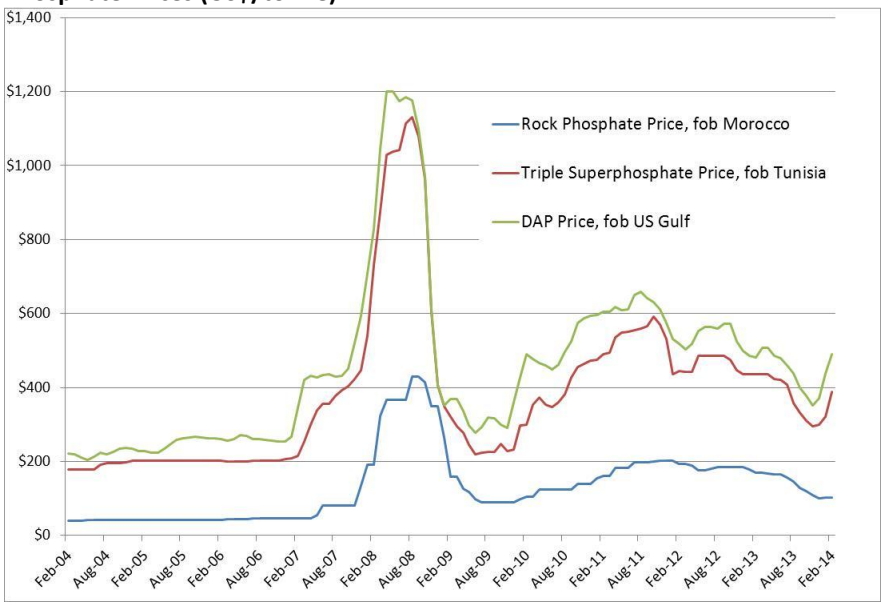
Phosphate Pricing

Historic SSP prices are not readily available; however prices of other products are, as presented in the graph below. SSP (fob, Middle East) has traded under US$200/tonne over the last few years, and has tended to trade at around 35-40% of the US Gulf fob DAP price. However Australian domestic prices are at a considerable premium (as expected) to the Middle East fob prices – current free on truck/train prices are above A$300/tonne.

Phosphate pricing can be volatile

As can be seen below prices can be volatile.

Phosphate Prices (US$/tonne)



Source: World Bank via Index Mundi

The decrease in prices during 2012-2013 has been attributed to a slowdown in the world economy, and increase in wheat production, thus, lowering wheat prices and hence the inputs for production.

At the end of 2013 a number of commentators forecast a pickup in demand for nutrients through 2014-2015 – this pickup can be seen with a sharp turnaround commencing in early 2014 in value added product prices.

Board and Management

Non-Executive Chairman

Adrian Griffin

Adrian Griffin specialises in mine management and production and has had exposure to metal mining and processing worldwide during a career spanning over 30 years. He has helped develop extraction technologies for a range of minerals over the years.

Previous positions held include former CEO of Dwyka Diamonds Limited, an AIM- and ASX-listed diamond producer, a founding executive director of Washington Resources Limited and also a founding director of Empire Resources Limited, Ferrum Crescent Limited and Reedy Lagoon Corporation. Currently he is a founding non-executive director of ASX-listed Northern Uranium Limited and managing director of ASX-listed Midwinter Resources NL, an African focused iron ore project developer.

Managing Director

Patrick McManus

Patrick McManus has a degree in mineral processing from Leeds University and an MBA from Curtin University. He has been involved with the mining sector for more than 30 years. Over this period, he has worked in operational, technical and corporate roles for Rio Tinto, RGC Limited and Bemax Resources Limited. He was a founding director and, from January 2007 to March 2010, managing director of ASX-listed Corvette Resources Limited.

Non-executive Director

George Sakalidis

George Sakalidis is an exploration geophysicist of more than 20 years. His career has encompassed extensive exploration for gold, diamonds, base metals and mineral sands and, with others, he compiled one of Australia's largest aeromagnetic databases held by Image Resources. Using this database, he has contributed to a number of discoveries, including gold discoveries such as the Three Rivers and the Rose deposits in Western. He is a director of Magnetic Resources, North Star Resources NL, Image Resources and the unlisted Imperium Minerals Limited.

Non-executive Director

Gary Johnson

Gary Johnson is a metallurgist with more than 30 years of broad experience in all aspects of the mining industry. In his early career, he gained operational and project expertise with a range of metals in operations in Africa and Australia. Later, he was a member of the team operating the metallurgical pilot plant at the giant Olympic Dam copper, gold and uranium project in South Australia.

In 1998, after 10 years as chief metallurgist for a large gold producer, he formed his own specialised hydrometallurgical consulting company. During this period he worked closely with LionOre Mining International to develop the Activox® process for treating sulphide concentrates. In 2006, LionOre acquired Gary's company and he joined LionOre as a senior executive. In 2007, LionOre was taken over by MMC Norilsk Nickel and in 2009 became managing director of the MMC's Australian operations.

Mr Johnson runs his own consulting company, which specialises in high-level metallurgical and strategic advice. He also holds several patents in the field of hydrometallurgy and is a director of the TSX-listed Hard Creek Nickel Corporation.

Analyst Verification

We, Grant Craighead and Mark Gordon, as the Research Analysts, hereby certify that the views expressed in this research accurately reflect our personal views about the subject securities or issuers and no part of analyst compensation is directly or indirectly related to the inclusion of specific recommendations or views in this research.

Disclosure

Breakaway Investment Group (AFSL 290093) may receive corporate advisory fees, consultancy fees and commissions on sale and purchase of the shares of Potash West and may hold direct and indirect shares in the company. It has also received a commission on the preparation of this research note.

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