BCI Minerals (BCI)

Salt of the Earth

4 August 2020

Heath Andrews
handrews@pacpartners.com.au
+61 3 9114 7415

KEY POINTS

- BCI has just released its DFS on its 4.4mtpa salt and 120ktpa SOP project in the Pilbara. The DFS indicates a NPV_7 of $1.2bn (pre-tax).
- Mardie will be the largest salt project in Australia and with SOP credits, is lowest quartile cost. Tier one assets rarely trade at the quantum of discount that BCI is trading at. BCI is trading at an FY20 EV of just $36m (it has $42m cash at FY20).
- Environmental approvals are well advanced (3-year process) and are targeted for Q1 2021.
- ASX listed SOP peers have EV's 2-5x's BCI. In SOP, Mardie has a large portion of costs covered by its salt operations, it is 700-1000km closer to a port and is in our opinion, the lowest cost SOP project in Australia.
- China is the largest user of salt globally (~31%) and is a large importer. The supply/demand gap in Asia is expected to widen, which should see higher salt prices to stimulate more supply. New solar evaporation salt projects take up to 10 years to enter the supply chain from scoping study stage. We believe the timing of the Mardie projects first sales looks set to coincide with a supply shortfall and the risk to salt pricing appears to be to the upside.
- The Iron Valley royalty stream posted a record EBITDA in FY20 ($21.3m). We forecast Iron Valley still has three years of operations. The current iron ore price bodes well for solid returns in FY21.
- Possible royalty streams from other iron ore tenements are potentially larger than the current market cap. Timing of when they commence is uncertain, though they could be left field catalysts.
- The main risks for BCI and its Mardie project include:
  - Securing final environmental approvals; and
  - Securing sufficient debt and equity to finance the project.

INVESTMENT VIEW

Due to the long lead time to reach steady state production (FY28), we use DCF to value BCI. We factor in a $325m capital raising at $0.20/share in late FY21. This results in an un-risked valuation of $0.50/share. We factor in a 25% discount to account for the projects development stage. This results in a price target of $0.37/share, 90% above the current share price.

We sense check our DCF valuation by applying BCI's closest peer (Compass Minerals) EV/EBITDA multiple (discounted to FY28) and applied to steady state EBITDA. This results in an un-risked valuation of $0.45/share, validating our DCF valuation.

As BCI ticks off further milestones in the near term and the prospect of Mardie getting up starts to get factored in, we see material short term upside to the BCI share price.

On a longer-term view, Mardie looks set to generate very strong cashflows and peer comp EV/EBITDA multiple analysis indicates a fully ramped EV of ~$1.5bn. Whilst not until FY28, the potential returns between now and then are impressive.

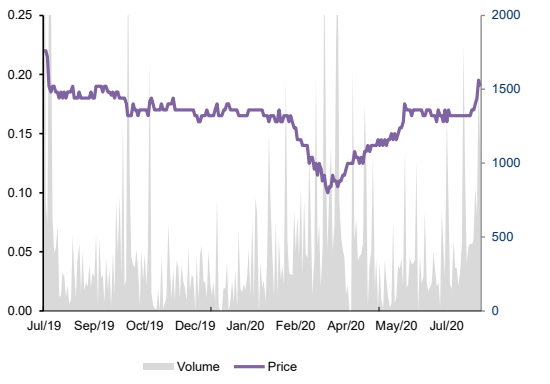
Recommendation	Speculative Buy
Previous Recommendation	Initiating Report
Risk Rating	Very High
Current Share Price	$0.195
12 Month Price Target	$0.37/share
Price target Methodology	DCF
Total Return (Capital + Yield)	90%
Mardie steady state EBITDA	$200m
Market Capitalisation	$78m
Liquidity	$0.1m/day

Financial Forecasts & Valuation Metrics

BCI Y/E Jun A$m	FY19A	FY20F	FY21F	FY22F
Revenue	54.2	84.2	72.3	59.5
EBITDA	-2.6	-8.9	-3.4	1.3
EPS Adj (c)	1.3	3.5	0.5	-0.1
EPS Growth	-136%	-176%	87%	-115%
DPS (c)	0.0	0.0	0.0	0.0
Yield (%)	0.0%	0.0%	0.0%	0.0%
EV/EBITDA (x)	(17.0)	(5.7)	66.3	(39.9)
PE Underlying (x)	15.3	5.6	42.3	-282.9
Gearing (%)	-48%	-41%	-317%	-48%

Source: PAC Partners estimates

12 Month Share Price and Volume



Key Milestones

- DFS publication, just released.
- Achieving environmental approval, expected Q1 2021
- Achieving FID, expected in late Q1 2021
- Announcing the amount of support (long term funding) to be provided from NAIF
- Raising equity and commencing construction (target Q2 2021)
- Further trial work and optimisation studies reducing the risk of cost overruns
- Re-rating as the prospect of Mardie gets factored in

BCI Overview

ABOUT BCI

BCI is set to become a soft commodity stock by developing its tier one salt and SOP project in the Pilbara

BCI originally developed the Nullagine iron ore operation in JV with Fortescue (FMG) and primarily the company was an iron ore house. Nullagine has since stopped operating. BCI acquired Iron Ore Holdings (IOH) in October 2014. This transaction was important, as the business known as BCI Minerals is essentially IOH:

- Alwyn Vorster (BCI MD) is the former MD of IOH;
- IOH owned Iron Valley (currently the main operating asset);
- The IOH business model was to develop large assets in JV or to sell them post permitting; and
- IOH acquired the Mardie tenements from Azimuth Resources in Oct 2011 for $0.2m. Mardie has 40km of coastline and is set to become the dominant operation in BCI.

BCI has been generating cash from royalties from Iron Valley mine since September 2014. Post the appointment of Alwyn Vorster to BCI in September 2016, BCI has been looking to diversify exposure away from iron ore. Since the PFS was completed in June 2018, developing Mardie has been the primary focus for BCI.

MARDIE SALT AND SULPHATE OF POTASH (SOP) PROJECT SUMMARY

Mardie is set to become the largest salt producing project in Australia

Located on the Pilbara coastline between Karratha and Onslow (at Cape Preston West), Mardie is a proposed 4.4mtpa salt and 120ktpa SOP project. The DFS was announced on the 1st July 2020, and a final investment decision (FID) is expected in Q1 2021.

This is a very large project and we believe it is a company maker. Key aspects announced in the DFS are:

- Forecast EBITDA of $197m pa when at steady state;
- No limit on resource (sea water), no raw material grade issues as sea-water is of consistent specification and an operating life of >60 years;
- Capex of $779m for the salt, SOP, port and contingency, with working capital on top of this;

The DFS has been comprehensive and indicates a long life of high returns

- IRR of 15.3**%** and NPV_7 of $1.2bn (pre-tax);
- Almost certainly the lowest cost SOP project in Australia and lowest quartile salt project when SOP credits are taken into account;
- Non-binding offtake MOU's for the first three years of production are in place;
- Native title agreement in place, other approvals are advanced and pending;
- Funded through to construction commencement (forecast for Q2 2021);
- The project includes a multi-user port facility in Cape Preston West. Should a third-party user be identified (likely in our view), it offers either a reduction in capex or an income stream; and
- First sales expected in early FY25.

IRON VALLEY

A royalty stream from Iron Valley provides a low risk source of cashflow for the medium term

BCI are the owners of the Iron Valley mine, located in the central Pilbara region. Mineral Resources (MIN) is the operator of the mine and they pay BCI a royalty per tonne sold, based on a sliding scale depending on the achieved A$ iron ore price at the time. The mine shipped 6.7mt in FY20, with nameplate capacity of 8mtpa.

The remaining mine life somewhat hinges on the iron ore price remaining above US$50/t, in our opinion. Production shortfalls in South America are likely to keep the iron ore market performing above expectations, as mine closures due to tailings dam issues are likely to persist longer than guided by Vale, and COVID-19 could also impact production in Brazil.

MIN has committed to spending on overburden removal that would provide up to four years of mine life. Whilst there is additional iron ore resource above four years production, this would require further commitment from MIN to remove additional overburden and extend the mine life.

Iron Valley is a medium-term cash-cow for BCI, that will help fund the Mardie Salt project through to first construction and potentially reduce the equity component required.

Mardie Salt and SOP Project

Figure 1: Mardie Project Summary

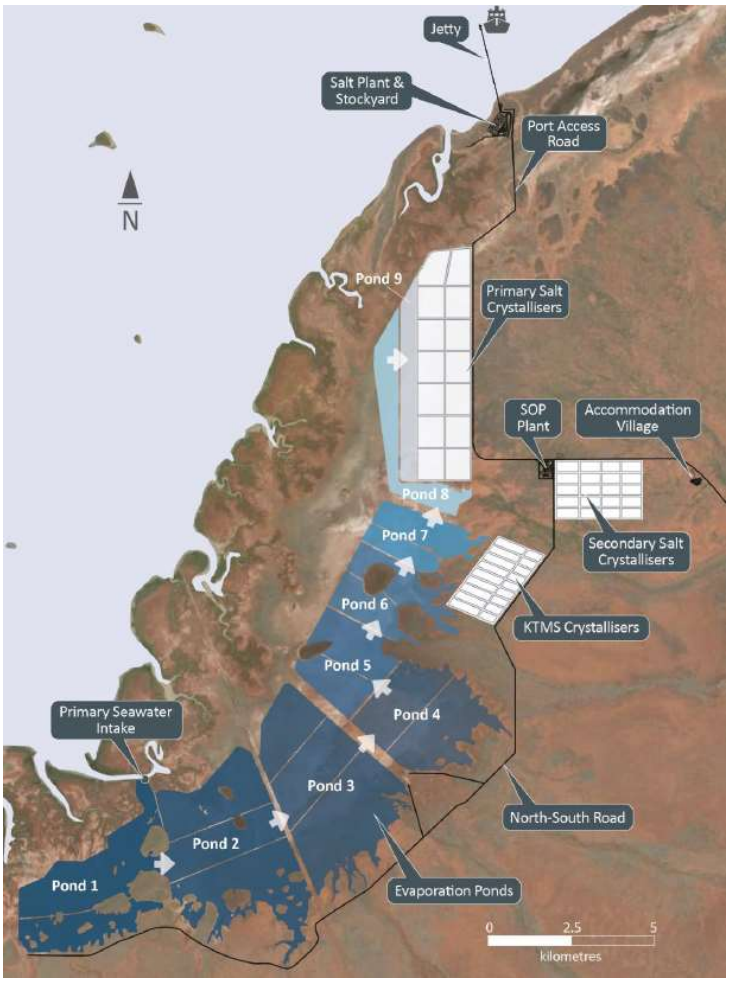
Key Project Parameters	
Production Rate	4.4Mtpa Salt (>99.5% NaCl) 120ktpa SOP (>52% K_2O) (with optimisation and expansion potential)
Operating Life	Minimum 60 years[1]
Site Conditions	Coastal location with ready access to seawater High temperature, low rainfall, low humidity and high wind – 2,895mm annual net evaporation Extensive mudflats (100km²) hosting clay soils ideal to retain water in ponds Availability of construction materials
Environmental Approvals	>3 years surveys and studies; Public review process underway Ministerial approval targeted by early 2021
Production Processes	9 evaporation ponds 34 salt crystallisers and 18 SOP crystallisers Salt plant and SOP plant
Port Facility	Multi-user port with third party access capability 2.3km trestle jetty 3,000tph shiploader
Shipping	Transhipping using 12,000dwt self-propelled, self-unloading transhipment vessel Supramax, Panamax and Capesize vessels loaded 28km offshore

Source: BCI

Other Pilbara salt operations have been operating for over 50 years

A material hurdle for competing new salt projects is securing sufficient coastal land with the right soil properties. We believe BCI is well placed to secure the environmental approvals

Figure 2: Birdseye view of the Mardie Project



Source: BCI

The purchase of additional land to the north could allow for the project to be expanded to 6.0mtpa of salt overtime (not factored in)

Substantial land is being set aside by the Pilbara Ports Authority to allow a third party to build a stockyard and access the port

LOCATION AND POINT OF DIFFERENCE

Mardie is likely to be the first Australian solar evaporation salt project to incorporate SOP production as a by-product. This should make Mardie the lowest cost salt producer in Australia post SOP credits

Much of Mardie is located on existing salt beds that have a clay base, resulting in low seepage rates and removing the need to line the evaporation ponds. Ponds are located ~5km inland. Several other large salt projects are located nearby, some have been operating for over 50 years (they are mostly owned by Dampier Salt, a JV owned by Rio Tinto, Marubeni and Sojitz).

The region has a proven track record of producing high quality evaporated salt. At 4.4mtpa, Mardie would be slightly larger than the nearby Dampier project which operates at ~4.2mtpa.

The concentration of Potassium in the brine post the removal of salt is significantly more concentrated at the point it enters the SOP operations when compared to the other Australian SOP projects

The primary difference between the Mardie project and existing salt operations in the region is that Mardie will also produce SOP from the brines available, post removal of the majority of the Sodium Chloride. Based on the DFS advised concentrations of SOP in the brine at the point it exits the salt operations and enters the SOP operations is estimated to be 44Kg/M^3. The highest resource of the other Australian SOP projects is 12.4Kg/M^3 over triple any of the other Australian SOP projects. With a much more concentrated brine at the point the SOP process starts and significantly lower haulage and shipping costs (all bulk), we feel Mardie SOP is likely to be the lowest cost SOP project in Australia.

The scale of Mardie is best represented by its footprint, the various ponds cover 93 Km^2:

- Evaporation ponds – 73.6 Km^2;
- Primary and Secondary salt crystallisers – 15.8 Km^2; and
- Kainite-type-mixed-salts (KTMS) crystallisers for SOP production - 3.7 Km^2

OFFTAKE MOU'S

BCI has 13 non-binding Memorandum of Understanding (MOU's) in place for its salt. Whilst specific companies have not been named, the following details have been provided:

- Seven Chinese chemical companies (end-users) have agreed to take ~3.1mtpa;
- Two Japanese trading houses are contracted for ~1.0mtpa; and
- Four chemical companies in Indonesia, Philippines and Malaysia are contracted for ~0.4mtpa.

Offtake agreements are generally a prerequisite to obtaining debt financing. Already having non-binding MOU's for 100% of its salt production indicates that selling the product is unlikely to be a material risk. Offtake agreements are likely to replace MOU's post FID, when more certainty around the timing of production exists. Two SOP MOU's are in place for 75% of production.

APPROVALS STATUS

BCI has a strong track record in securing approvals. It has previously secured native title, environmental and mining approvals for the following mines/ports:

BCI's track record in securing approvals is top shelf

- Phil's Creek (mined by MIN, sold on an approved basis);
- Nullagine (mined by BCI);
- Iron Valley (mined by MIN, owned by BCI);
- Buckland Iron Ore Project (not yet mined, recently sold to MIN); and
- A port development at Cape Preston East (a different location to the Mardie port location at Cape Preston West). The Cape Preston East port is undeveloped.

Mardie does not have any third-party royalty streams outside of Native Title and Government royalties

Native Title

Land use agreements (Native Title) have been granted and heritage surveys are complete. Apart from a Native title and a Government levy for SOP and salt, Mardie does not have any other third-party levies to pay.

BCI appears to be on the home straight in obtaining the hardest to achieve approval

Environmental Approvals

Over the course of three years, BCI has conducted extensive environmental surveys, which has resulted in the project footprint being adjusted. Environmental approval documentation has been submitted and is currently undergoing the public review process. WA EPA endorsement is expected in Q4 2020 and Ministerial approval expected in Q1 2021. Environmental approvals are about 12 months behind the original schedule, though now that documents are submitted and are under review, we believe approval is very likely in the time frame forecast by BCI.

Mining and Port Approvals

Mining lease applications have been submitted (63-year tenure expected).

50-year port lease term sheets have been agreed with the Pilbara Ports Authority (PPA) and is in formal documentation negotiation. Approval is expected in Q1 FY21. All PPA port proposals need to be able to cater for multi-users, Mardie complies with this requirement.

In our opinion, approvals are in the advanced stages and all are expected to be granted.

PROJECT CAPEX

Salt is a bulk commodity that trades at a low price. Low transport and handling costs are key to making a high return

The DFS indicates a direct capex cost of $580m, with the salt and port operations comprising the bulk of the direct capex. Due to the long ramp-up time of a salt project, production costs are capitalised until first production (guided as $53m) and are in addition to the capex numbers quoted.

A capex growth and contingency of $83m has been provided for (11% of the budget). We believe this to be an appropriate amount given the level of investigation into capex costs and trial work underway. GR Engineering has been the lead company preparing the DFS (they are seen as one of the best in the business at DFS studies). Other costs to fund include: BCI's overheads and other indirect costs total $116m. The total capex budgeted for Mardie that is to be funded from BCI (equity and debt) is $779m, see Figure 3.

BCI has taken a capex heavy, opex light approach to Mardie. This is due to building a port on site which achieves very low transport and handling costs

Figure 3: Mardie Capex Summary

Due to its +60-year life, the amount of capex is not the most material factor in the NPV of the project

Area	Capex $m	Capex %
Salt	210	27%
SOP	109	14%
Port	197	25%
Non-Process Infrastructure	51	6%
Services & Other	14	2%
Direct Capital Cost	**580**	**74%**
Other indirect costs	91	12%
Owners costs	25	3%
Growth and Contingency	83	11%
Indirect Capital Cost	**199**	**26%**
Total Capital Cost	**779**	**100%**

Source: BCI

Several capital-intensive items are expected to be provided on a contractor or BOO basis. The estimated capital value of these has not provided; however, the charge from the operator is factored into the operating costs. These items are:

- Salt, SOP harvesting and haulage fleet (similar to a contract mining contract);
- Transhipper;
- Accommodation village and desalination plant; and
- Gas fired power station.

In our opinion, it is common and common sense to outsource the supply and operation of the above items of plant to companies that specialise in operating and maintaining them.

In order to optimise the project, BCI has elected to use a capex heavy approach (i.e. build its own port) and optimise the operating costs (lower handling and shipping costs). Whilst this makes the upfront funding requirement larger, the project is likely to provide a better IRR, particularly when one considers the project life of >60 years.

FUNDING REQUIREMENTS

Guided debt/equity funding split

Salt markets are more stable than many other commodities and supply is hard to switch on. Mardie is a project that can carry high debt due to its long life

Due to the long duration of the project, BCI is proposing to fund the project with 65-70% debt and 30-35% equity. With a project capex bill of $779m, plus capitalised interest, raising costs, operating costs prior to first sale and working capital, BCI is likely to require funding capacity of ~$950m-$1,000m to build Mardie. As of the 30th June, BCI had $42m in cash and no debt.

This implies an equity project funding requirement of ~$300-$350m. Cash inflows from Iron Valley and the $42m already in place should fund further early works and corporate overheads until FID. We do not expect BCI to raise capital unless it achieves FID.

We estimate BCI would require debt funding facilities of between $600-$650m.

The merits of the Mardie project are very strong. Whilst raising $300-$350m is ~5x BCI's current market cap, we believe it has a strong chance of being able to do so.

Equity

Having a supportive large shareholder is a big advantage given the quantum of equity BCI is likely to need to fund Mardie

BCI's largest shareholder (Wroxby – 29%) is owned by Kerry Stokes. BCI indicated in the DFS that its existing shareholder base have capacity to support the project and are expected to do so, though new investors will also be required. Support from existing shareholders with the ability to retain their holding percentage or increase it, is an important part of the equity equation.

Northern Australia Infrastructure Fund (NAIF)

The Federal Government has indicated in the media that it expects NAIF to relax some lending standards, lend its $3bn of remaining funds and help Australia recover from the COVID-19 impacts by supporting projects in a more meaningful way

BCI has indicated it is progressing negotiations with NAIF. Apart from a $610m allocation of capital (30-year term) to the Genex (GNX) Kidston project (still to commence construction or achieve FID), NAIF has not released large licks of funding. It has tended to act as a supplementary debt funder, alongside traditional project finance.

This could be changing with COVID-19 likely to lead to NAIF being more supportive of projects. The AFR reported that the Liberal Government wants NAIF to relax its funding criteria (i.e. lend a higher proportion of the total debt package) to accelerate lending of the remaining $3bn in the fund. The intention is to help rebuild the economy post COVID-19 impacts.

In June 2020, NAIF provided a funding package of up to $150m on a 15.5-year term to Strandline's (STA) Coburn Mineral Sands project (out of an estimated $260m capex spend). This represents 57% of the total capex and is an early sign that NAIF is about to step up.

NAIF recently lent 57% of the capex for the Coburn Mineral Sands project. This level of lending from NAIF is unprecedented. Mardie could secure a large loan from NAIF

NAIF has form in the SOP sector. It has provided a $74m loan to Kallium Lakes (KLL) SOP project and is in discussions with Agrimin. The advanced nature of approvals and study work done implies that Mardie could commence construction in FY21.

The fact that Mardie is not constrained by the size of its resource, has a very long life, and operates in a mature industry with a relatively stable commodity price history; it suits the style of project that NAIF could fund with a high portion of long dated debt.

If BCI were able to secure a large funding package from NAIF (subject to conditions precedent) in the near term, it could be big catalyst for BCI.

NAIF debt is likely to carry an interest rate lower than bank project finance.

Other project finance

BCI has commenced engagement with large banks and project financiers. No details have been announced of any funding packages at this stage.

BCI expects to secure FID in Q2 2021, post receiving all major approvals, expected in early Q1 2021.

Potential port capex reduction

BCI has strong connections into Mineral Resources (MIN) and Baosteel. Both have iron ore tenements near Mardie and could utilise the port

Port assets are in high demand, particularly in the Pilbara where there are undeveloped iron ore assets nearby. As the Mardie port is designed to be multi-user, BCI has the option of either:

- Generating an income stream by charging another company to use and access the port facilities, to recover the capital cost of building the jetty; or
- Have the other user contribute a portion of the capital required to build the jetty and dredge the channel. This could potentially lower the capex of the Mardie project by between $60-100m (our rough estimate).

Capex timeline

Figure 4: Potential Sources and Outflows of Capital for Mardie

Description	FY21F	FY22F	FY23F	FY24F	FY25F	FY26F	Total
Capital Outflows							
Salt Processing	2	88	90	30			**210**
Infrastructure	17	34					**51**
Indirects	4	20	28	36	2		90
SOP Processing			19	88	2		**109**
Services				9			**9**
Owner's costs	3	7	7	7	1		**25**
Port		5	75	107	10		**197**
Other				4	1		**5**
Contingency		21	28	31	3		**83**
W. Cap, Interest & Other	20	10	15	40	111		**196**
Total Capex	**46**	**185**	**262**	**352**	**130**		**975**
Funding Sources							
Cash on hand	0						**0**
Free cashflow Iron Valley	14	6	5				**25**
Mardie Salt free cashflow					1		**1**
NAIF *			150	250			**400**
Bank Debt *				100	125		**225**
New Equity *	325						**325**
Total Funding Sources	**339**	**6**	**155**	**350**	**126**		**976**
Surplus Funds	**293**	**114**	**7**	**5**	**1**		**1**

Source: BCI and PAC Partners estimates

Capex is weighted towards the back end of the project, when spending on the processing plants and port increases

Figure 4 reflects the capex spend profile outlined in the DFS, plus our assumed other costs around capitalised operating costs, interest and working capital. It also shows the possible sources of funding. In our modelling, we assume an equity raise of $325m and total debt of $625m.

As the guided time frame for FID is Q2 2021, we assume the capital raise takes place in late FY21. We expect that Mardie should be factored into BCI's share price by then. We use $0.20/share as our predicted capital raising price, but note the actual price could be significantly different to our estimate.

BCI has several material catalysts between now and the time the expected capital raising occurs. These could influence the raising price. BCI has started to rally since the DFS was published, and has the following catalysts coming up before it needs to raise:

- Possibly securing a 2nd user of the port, which could lower the capex bill;
- Securing major approvals (environmental and port agreement);
- Putting in place fixed price construction contracts for key high-risk items such as the jetty and civil works (for the ponds); and
- Potential for the size of NAIF's contribution to debt gets announced before the raise.

Front End Engineering Design (Feed)

Between now and FID, BCI is continuing to perform test work that gives the capex budget greater certainty. Items it plans to do include:

The amount of test work and investigation into the Mardie project reduces the chances of a cost blow out

- Undertake more drilling where the jetty is to be positioned to provide more data on the type of pilings required for the jetty;
- Build a larger scale pond to test the construction technique of pond walls and prove the cost of construction; and
- Assess the flowsheet of other Australian SOP operations that are likely to commence production before BCI and incorporate any learnings into the design. BCI are close to Kallium Lakes (they are in a JV with them on a SOP project).

BCI should be able to learn from other SOP projects that are being built before Mardie, reducing the risk on this element

BCI is endeavouring to secure a portion of the construction contracts as fixed price. In order to do this, projects need to be well scoped, which we believe BCI is doing. The risk of cost overruns on a salt project appear to be less on a mining project or major infrastructure project, as the construction is less complex and it has no underground development. The port and the SOP plant appear the most complex items to construct.

In our opinion, BCI has been extremely thorough in its project development process. We feel that relative to Australian SOP projects under development, there is less risk of cost overruns due the long-time frame and diligence put into the planning stage of the project thus far.

Early works performed

Early works has already commenced. So far, the following has been constructed:

- A 1:40,000 scale version of the pond structure has been operating at steady state. This has provided samples that has confirmed the quality of the salt produced is similar to other nearby projects;
- A 36-bed accommodation village (a 400-bed camp is envisaged, downsizing to 200 post completion of construction); and
- Completion of DFS and associated studies in order to apply for all required approvals.

A 32 Ha large scale trail pond is planned to commence construction shortly. This is to test the construction technique, materials and cost of construction;

PROJECT TIME FRAME

The Mardie project has a lengthy construction period. The key factor is the rate at which sea water evaporates to the desired concentration in each pond. In practice, supporting infrastructure and pond 1 is built and filled. Whilst the evaporation process is under way pond 2 is constructed and other items are built on a just in time basis. Capex is skewed towards the end of the project.

The time frame to build and make first sale for a solar evaporation project is long. Lithium brine and SOP projects have a similar timeline, so should not be a surprise to investors

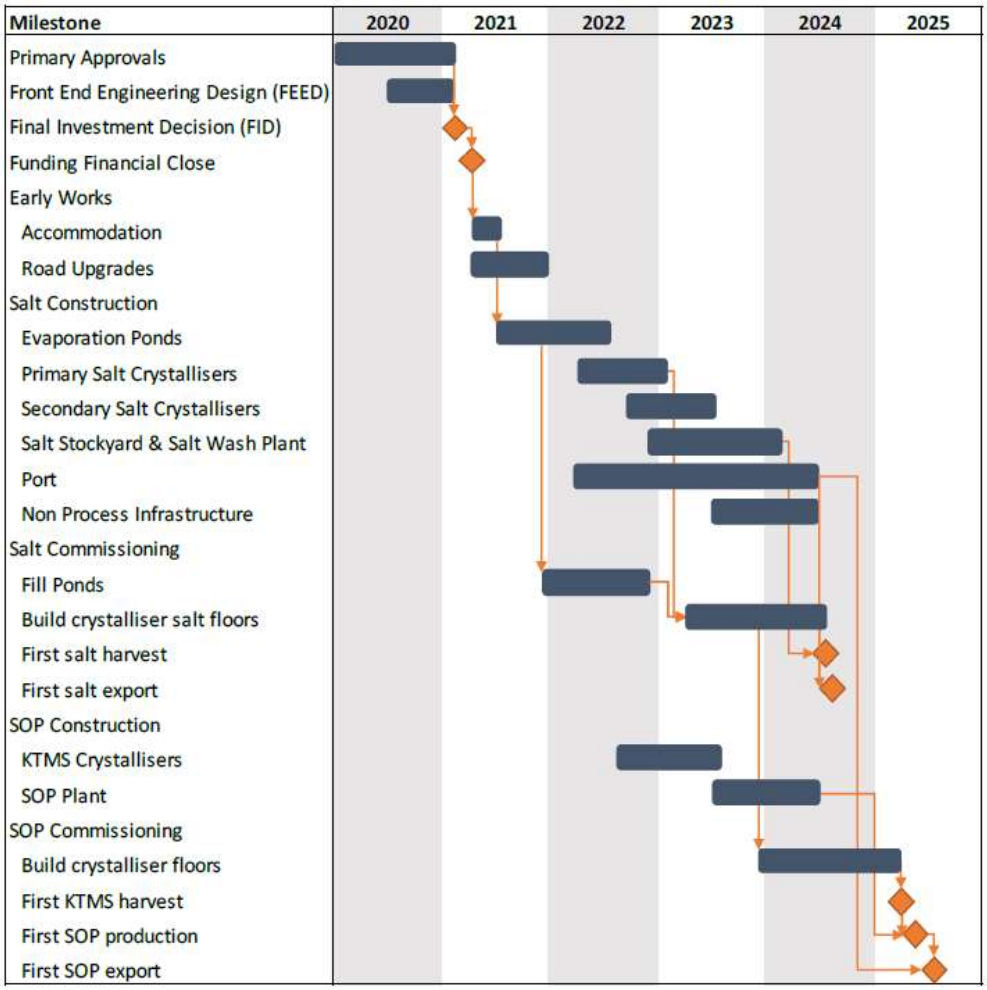
BCI guide that first salt shipment occurs 38 months (3.2 years) post construction of pond 1 and the associated pumping infrastructure. Name plate capacity is not achieved until 5.5 years from completion of pond 1, though the initial ramp up is relatively rapid. Salt crystalliser ponds need a bed of salt before harvesting can commence, which is part of the lengthy start-up timeframe (around 12 months is added to the start-up time frame due to this requirement).

Due to only needing to be ahead of the evaporation rate, meeting the construction timeframe appears low risk. The biggest risk to the project time frame appears to be commencing on time, which relies upon obtaining the necessary approvals and funding.

The project is behind the original schedule in the PFS. Approvals were the major cause of this, but we feel the chances of further material delays are low

A solar evaporation salt project has a long lead time from project scoping to operating at steady state. In the case of Mardie, the intention of commencing a scoping study was first announced to market in late 2016. First salt sales are likely during 2024, implying a 9-year lead time. There are very high barriers to entry for new salt projects and as demand increases, the market response is likely to lag demand.

Figure 5: Project timeframes (in calendar years)



Source: BCI

First salt exports are targeted for early FY25 and first SOP sales for early FY26

First salt sales are guided for the beginning of FY25 and first SOP sales the beginning of FY26.

PROJECT POSITIONING ON THE COST CURVE

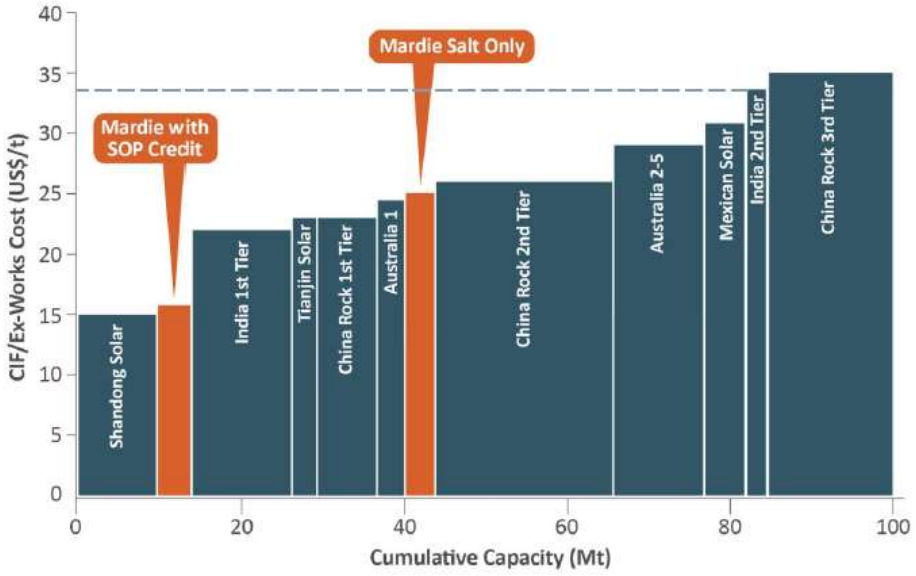
Including the SOP credit, Mardie is bottom quartile in terms of costs. In our opinion, Mardie is a tier one project

BCI guide that the Mardie project is comparable to the best performed salt project in Australia and if you add in the credits from the SOP project, it is a clear tier 1 project, see Figure 6.

Australia's other large salt projects are under majority ownership of RIO or Mitsui, they are competing with iron ore or other commodities for capital. Retro-fitting an existing salt project with an SOP capability is not as easy as building it new, hence why we believe other salt operations have not had SOP retrofitted. Mardie is likely to be the first Australian sea salt solar evaporation project to incorporate SOP processing.

Whilst Mardie may not be tier 1 without the SOP credits, Chinese and Indian projects generally have lower quality salt which is likely to sell at a discount, though have freight cost advantages on a CIF basis into China. Coastal land prices in China could threaten the life span of some of these projects.

Figure 6: Mardie's position on the cost curve



Source: Roskill, SMM and BCI

EXPECTED PROJECT COSTS – SALT

Mardie salt is guided as having an AISC of US$25/t CIF. The lowest sell price in the past 10-years has been US$33/t (24% EBITDA margin)

The operating cost estimates factor in services provided by contractors (or BOO operators), plus production staff employed by BCI, see Figure 7. Salt is usually sold CIF, hence shipping costs to Asia need to be added. These are guided as US$11/t (A$16/t) and results in an AISC of A$36/t (US$25/t).

Figure 7: Project operating cost estimates – salt A$

The 10-year average salt-price is US$47/t (47% EBITDA margin)

The 10-year highest salt price is US$62.5/t (60% EBITDA margin)

Even at the lowest salt price in the past 10 years, Mardie remains comfortably profitable

Area Description	$M per annum	$/t
Evaporation ponds	4.6	1.05
Salt crystallisers	17.3	3.93
Salt wash plant	15.7	3.56
General and administration	11.1	2.52
Salt sustaining capital	4.4	0.99
Salt cash cost (Ex-works)	**53.1**	**12.05**
Salt port handling and transhipping	29.4	6.67
Salt cash cost (FOB)	**82.4**	**18.72**
Marketing and royalties	5.0	1.14
Corporate and overheads	1.7	0.40
Salt AISC (FOB)	**89.2**	**20.26**

Source: BCI

The main swing factors in EBITDA for Mardie Salt are:

- FX rate;
- Salt price; and
- Costs.

BCI intends to sell a maximum of 50% to any one country. Selling less to China should lead to an overall higher price achieved, assuming it can secure offtake agreements outside of China

Assuming cost estimates are relatively accurate, Figure 8 shows potential EBITDA margins per tonne for salt under different sales price and FX assumptions. Roskill guides US$45/t CIF as its long-term salt price (we use US$48/t). With production set to ramp to 4.4mtpa, we estimate salt should generate ~$143m of EBITDA when at steady state production (before SOP). The DFS uses an FX rate of A$0.68, we use $0.70.

Figure 8: Potential EBITDA per tonne of salt

Salt Price US$/t CIF	33	38	43	48	48	48	53	58
FX A$:US$	0.70	0.70	0.70	0.65	0.70	0.75	0.70	0.70
AISC /A$t CIF	36	36	36	36	36	36	36	36
A$ EBITDA /t	11	18	25	38	33	28	40	47
Total EBITDA ramped	**49**	**80**	**112**	**167**	**143**	**123**	**175**	**206**

Source: PAC Partner estimates

Figure 8 highlights that Mardie salt is still profitable at US$33/t, with a $0.70 FX rate. The average price over the past decade has been US$47/t.

EXPECTED PROJECT COSTS – SOP

BCI guide its AISC for SOP as A$310/t FOB.

Figure 9: Project operating cost estimates – SOP A$

Area Description	$M per annum	$/t
KTMS crystallisers	3.5	29.3
SOP processing plant	18.9	157.8
Bitterns disposal	0.9	7.9
General and administration	5.3	44.1
SOP sustaining capital	1.8	15.0
SOP cash cost (Ex-works)	**30.5**	**254.1**
SOP port handling and transhipping	0.9	7.4
SOP cash cost (FOB)	**31.4**	**261.5**
Marketing and royalties	5.2	43.4
Corporate and overheads	0.6	4.8
SOP AISC (FOB)	**37.2**	**309.8**

Source: BCI

We factor in US$550/t as our long-term SOP price. If we used US$583 as guided, it would add $6m to EBITDA or $0.04/share to our DCF valuation

The price of SOP has varied from US$417 to US$630/t FOB in the past ten years, with the average price being US$532/t. Roskill indicates a long-term price of US$583/t. We show potential returns (on 120kt) using different SOP pricing (we use US$550/t long term) and assuming an FX rate of $0.70, production volume and the AISC remain the same, see Figure 10.

Figure 10: Potential EBITDA per tonne of salt

SOP Price US$/t FOB	400	450	500	550	550	550	600	650
FX	0.70	0.70	0.70	0.65	0.70	0.75	0.70	0.70
AISC /A$t FOB	310	310	310	310	310	310	310	310
A$ EBITDA /t	261	333	404	536	476	423	547	619
Total EBITDA ramped	**31**	**40**	**49**	**64**	**57**	**51**	**66**	**74**

Source: PAC Partner estimates

Our estimated steady state EBITDA is $200m pa, higher than the DFS due to using US$48/t as our long-term salt price, offset somewhat by a higher assumed FX rate and lower SOP long term price

Based on our estimated long-term price, Mardie SOP should generate $57m pa in EBITDA.

When you add the salt and SOP together, you get $200m of EBITDA based on long term assumptions. This is slightly above the $197 guided by BCI due to using $0.70 FX forecast instead of $0.68 and a higher US$ salt price than in the DFS. In our opinion, the long-term salt price used in the DFS looks conservative.

PRODUCTION RAMP UP ASSUMPTIONS

Whilst not explicitly detailed, Figure 30 in the DFS gives a profile of estimated sales, which we interpret as per Figure 11 below. We incorporate these volumes into our modelling of BCI.

Due to recycling circuits, ramp up is quick to 90% of output, then the remaining 10% occurs

Figure 11: Sales ramp up profile estimates from DFS

Product Shipments	FY24	FY25	FY26	FY27	FY28	FY29
Salt mt	0.0	1.8	3.3	4.3	4.4	4.4
SOP kt	0	0	34	66	106	121

Source: BCI and PAC Partners

In terms of ramp-up, first sales are expected in the beginning of FY25 for salt and for operations to be fully ramped part way through FY27.

SOP first sales are expected in early FY26, with operations fully ramped in the middle of FY28. SOP start and full ramp-up is around one year behind the salt operations.

ADDITIONAL TENEMENTS ACQUIRED / EXPANSION OPTIONALITY

On the 15th May, BCI acquired further tenements adjacent to its existing Mardie tenements for $3.5m, with a 12-month option to acquire further adjacent tenements for $2.5m (we assume this is exercised in FY21). The combined area of these tenements is 112 Km^2. BCI indicated this could allow the project to be expanded to 6.0mtpa of salt and 0.16mtpa of SOP.

We expect minor tweaks to increase production get announced between now and construction commencement (not factored in)

The current approvals being sought do not include the additional tenements, this could be a future expansion project, but would take around three years to obtain approvals and a further 5 years to construct and ramp. We do not factor this expansion into our forecasts or valuation.

Longer term growth options exist

BCI is considering a minor change to the DFS plan. This could include adding pond 10 by utilising the newly acquired tenements. This is estimated to add 0.3mtpa of salt production capacity and 10ktpa of SOP capacity. This option is expected to be assessed before FID and could be incorporated into the construction plan. Whilst we do not model this change, we believe there is a high chance this improvement becomes part of the construction plan. This would lift salt production to 4.7mtpa and SOP to 130ktpa.

KEY OBSERVATIONS OF THE MARDIE PROJECT

Mardie is very large and due to high barriers to entry (permitting and finding suitable land in a high evaporation region), is very hard to replicate. It has scale that makes it low cost. Mardie's very long life adds appeal, noting that most peer projects have now been operating for over 50 years.

Once the market starts to factor Mardie into the share price, it could have a material upwards movement. The release of the DFS could see this happen in the near term

Salt is a growing and mature market (relative stable price). Due to supply constraints (discussed in the next section), we see upside to salt pricing, that could materially lift returns.

Mardie is a very large project for a small company. The track record of the BCI management team in securing approvals and the likely major financial backers (Stokes family, new investors and NAIF) give us confidence that they are likely to be successful in developing the project.

Once the market feels Mardie has a high chance of proceeding, it should get factored in to the share price. We believe that BCI is likely to appreciate in value as milestones on Mardie are ticked off and the project gets closer to starting. Key milestones (catalysts) coming up are:

Several catalysts are expected to occur over the next 9 months

- Obtaining environmental approvals;
- Announcing NAIF involvement and amount of funding;
- Other project financing with banks;
- Raising sufficient equity to support the project (providing a window for fund managers to take a position);
- Potentially adding a partner on the port (iron ore most likely), reducing capex;
- Announcing construction contractors;
- Minor improvements to the project post acquiring additional land (slightly larger project); and
- Firming offtake agreements.

It is hard to take BCI over given the blocking stake held by Wroxby (29%); however, that's not to say a someone can't try, but see it as unlikely.

Salt Industry overview

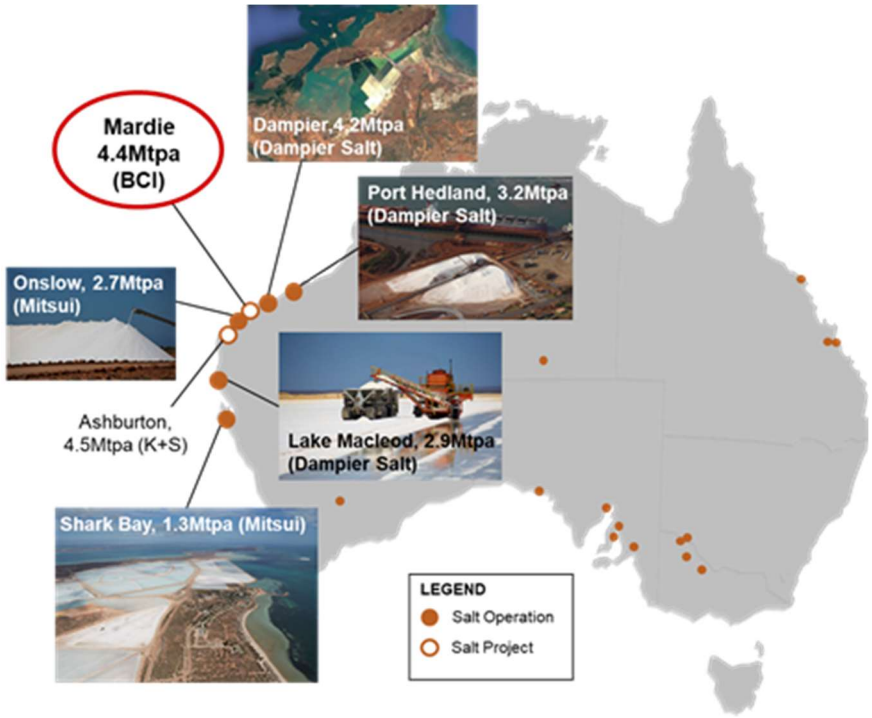
SALT PRODUCTION METHOD

Solar Evaporation

The only five salt operations of scale in Australia are located on the WA coast

In Australia, Salt is produced by evaporating salt water in ponds until the salt crystallises, called the solar evaporating method. This method accounts for ~40% of global salt production. Almost 95% of the ~15mtpa of salt produced in Australia is from the WA coast, see Figure 12.

Figure 12: Australian salt operations



Source: BCI

The advantages of solar salt evaporation are:

- High salt purity can be obtained;
- Long project life and in the case of sea salt, an unlimited consistent resource; and
- Low cost of production;

This method requires a considerable land footprint, is high capex and requires the right climate. Mardie has the footprint and climate to make this an ideal location for such an operation.

Hard Rock Mining

Of the three available methods to produce salt, solar evaporation provides the best balance of quality and cost. The limiting factor is finding suitable land

Buried salt deposits can be mined using underground mining techniques. This is also a low-cost method to produce salt, however quality is generally low. Hard rock mining accounts for 25% of global salt production.

Solution Mining

This method pumps water into underground salt deposits and brine is returned to the surface. The brine is evaporated in heated open pans or heated in a vacuum. Vacuum salt is the highest quality. Solution mining is also the most expensive method of salt production.

Freight is a key factor

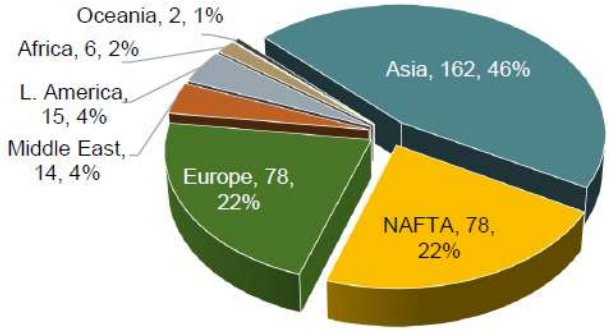
Salt is a bulk commodity that has a relatively low sale price. As a result, scale and freight are key factors. Mardie has scale and its location in Australia relative to Asian markets has it well positioned from a freight perspective. Higher cost solution mining can compete in regions where rock salt mining or solar evaporation projects are not nearby alternatives.

GLOBAL SALT DEMAND

China uses 31% of the worlds' salt production

Global demand for salt was 354mt in 2019 and demand is dominated by Asia which represents 46%, in particular China which used 110mt, see Figure 13. The Mardie project represents just 1.2% of 2019 global demand or 2.7% of Asian demand.

Figure 13: Global salt demand by region



Source: BCI Minerals, Roskill

AUSTRALIAN AND ASIAN SUPPLY

Current demand in Australia is for ~2mtpa of salt, vs. current production of 14-15mtpa. Approximately 12mtpa of salt is exported to Asia.

Like many commodities, once China becomes a net importer, demand for imports can increase rapidly

China is the world's largest salt producer (93mtpa), however is a net importer. Due to urbanisation, there is pressure on existing Chinese operations and limited new salt projects globally (particularly evaporation projects). China and Asia are likely to require greater volumes of imports.

India is the next largest supplier in the region, producing 31mtpa and exporting ~10mtpa.

The other main supplier into the Asian market is Mexico at 5mtpa. Mexico has an ~US$10/t freight disadvantage and are the marginal cost producer.

DEMAND FOR SALT BY END USE

Salt demand is closely correlated to global GDP, as it is mostly used in the manufacture of goods. Even if there is a global downturn due to COVID-19, by the time Mardie makes its first sale, the effects of the pandemic are likely to be past

The end use of salt determines what quality of salt can be used. Uses such as de-icing roads (US & Europe mainly) can use low grade salt and represents ~12% of demand. The chemical industry requires high quality salt, with low impurities. Asia in particular uses salt to manufacture three core products:

- Soda Ash (or Sodium Carbonate – Na_2CO_3), produced from salt and limestone;
- Caustic Soda (or Sodium Hydroxide – NaOH), and
- Chlorine (Cl - a member of the Halogen elements family).

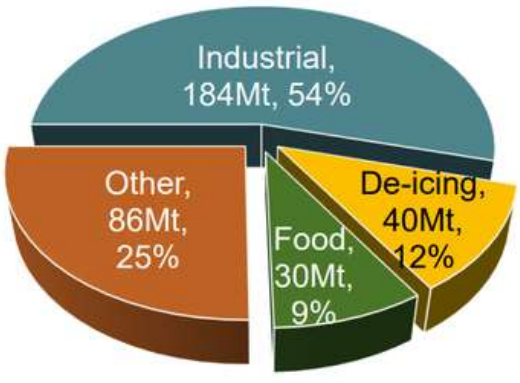
These are in turn used in the manufacture of many everyday items such as:

- Glass;
- Pulp and paper;
- Soaps and detergents;
- Paints;
- PVC;
- Plastics;
- Ceramics; and
- Numerous other high-volume products.

The Chloralkali process produces both caustic soda and chlorine.

Figure 14: Global uses of salt and volumes

Industrial demand is likely to see the largest increase. Mardie salt quality fits the specification sought for industrial use



Source: Next Mining Boom, Roskill

SUPPLY AND DEMAND BALANCE

Solution mining and supply from Mexico are the marginal cost producers in the Asian market. Regardless of changes in the economic environment, solar evaporation salt is likely to always remain in demand

According to Roskill (the leading expert on the salt industry), Asian demand for high quality salt is expected to increase from 162mt in 2019 to 217mt by 2028. This represents growth of 55mt over nine years or 6mtpa increase pa. This implies 1.5 Mardie sized projects are required every year.

Whilst it is possible to ramp up production from rock salt projects and solution mining, both have finite resources and operational lifespans. Solar evaporation production can fluctuate due to weather, but need to have increased pond acreage to produce higher quantities of salt.

Due to 75% of Asia's end use of salt being used by the Chemical industry (mostly the Chloralkali process), ~40mt of the increased demand is likely to need high quality salt. The price premium for high quality salt could expand (much like it has in iron ore).

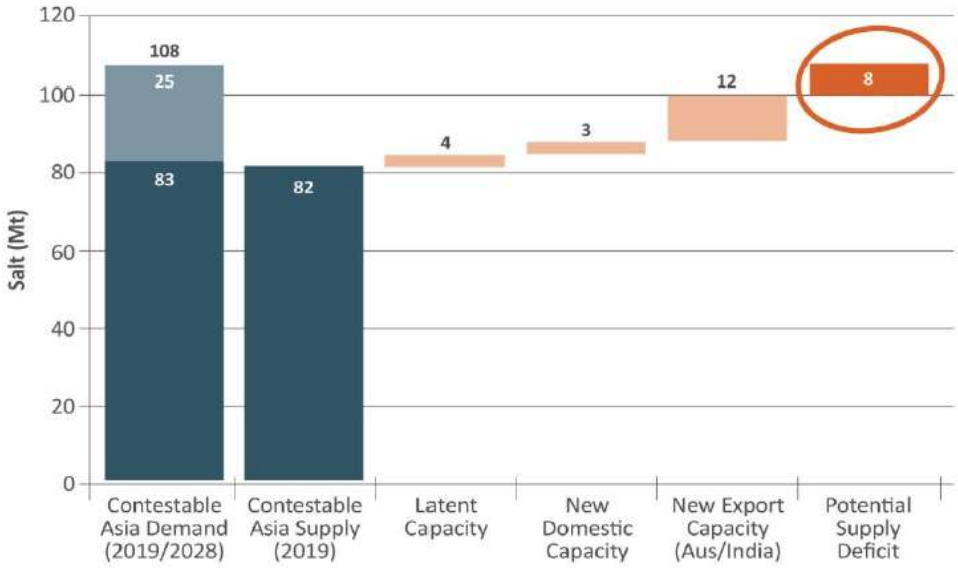
In our opinion, the Asian market will be looking to source salt from solar evaporation sources due to its low cost and high quality (i.e. more salt from solution mining is likely to push up the cost of production of salt in general) and consequently the global price of salt. Mined rock salt often does not meet the quality standards required.

There are significant hurdles to overcome to bring on new production from solar evaporation projects, namely in securing appropriate sites and approvals. Over time, demand is likely to see salt pricing increase to stimulate extra supply (potentially more than we forecast).

Figure 15 below shows the regions where Mardie salt can compete on cost and quality (i.e. coastal provinces that can accept cargoes of salt). This implies an 8mtpa supply deficit by 2028 (~7%). This analysis includes 12mt of new supply coming on line from Australia and India. We believe this includes the proposed 4.5mtpa Ashburton project (in WA, owned by K&S). We have significant doubt as to whether this project will be operating by 2028, potentially making the supply deficit larger.

Figure 15: Supply and demand analysis for Mardie to 2028

New export capacity of 12mt includes the 4.5mtpa Ashburton project. We doubt that it will be running in 2028



Source: Roskill, SMM, BCI

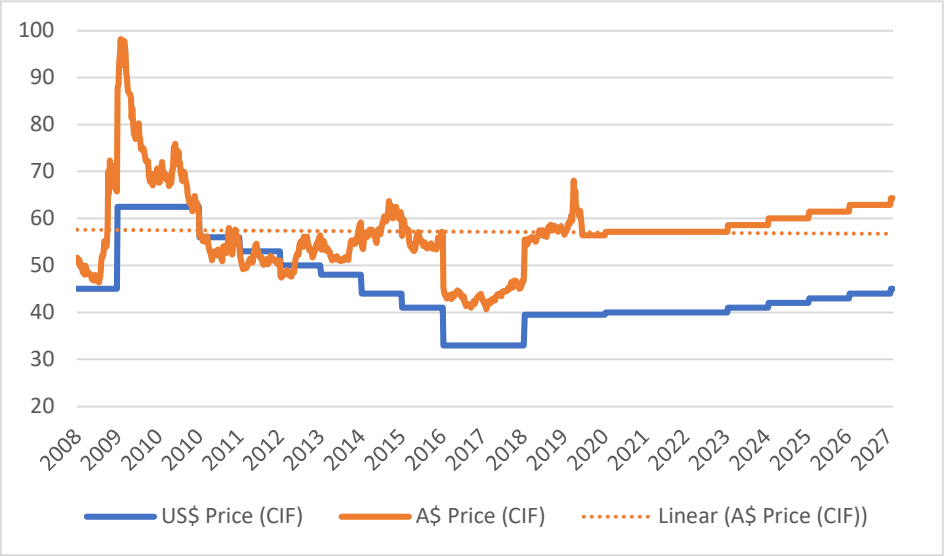
HISTORICAL AND FORECAST SALT PRICE

Following the price of salt is not easy, and there are different grades. Investors will need to rely on BCI to guide them on the price in the future

Salt is priced in US$. There is no salt price index. Prices are contracted and usually set for a 12-month period, though contract volumes are generally set for 2-3 year periods. The ten-year average price is US$47/t CIF and the 2019 price averaged US$39/t (it is on an upward trend after hitting 10-year lows of $33/t in 2018). BCI estimates that the average shipping cost of landing salt in China is US$11/t (this is subtracted to obtain the FOB price).

The salt price negotiated for Asian countries outside of China is likely to receive a small premium.

Figure 16: Salt price in US$ and A$ since 2008, with Roskill forecast price



Source: BCI, Roskill and PAC Partners

Record US$ prices occurred around the time the A$ was trading at parity or above the US$

Apart from 2009, the A$ price of salt has been relatively stable.

In A$ terms, the average price between 2008-2019 was A$57/t. In 2016, the salt price fell due to additional Indian supply. Pricing appears to have bottomed and has started to increase, in US$ terms. In A$ terms, due to the currency depreciation, salt prices are currently around the long-term average price.

Our long-term observation is that once China demand for imports kicks in, commodity pricing outperforms. In our opinion, long term salt pricing assumptions from Roskill appear conservative

Roskill predicts that the US$ salt price has a steady increase due to increasing demand. By the time Mardie commences sales, prices are forecast to be slightly above the long-term average in A$ terms, but still below in US$ terms. In our opinion, these forecasts appear conservative and we factor in a slightly higher salt price longer term (US$48/t). We also use an A$ FX rate of $0.70 long term, compared to $0.68 in the DFS.

The low oil price implies freight costs will at the lower end of range at present, but this could be very different by the time shipments commence at Mardie. BCI has guided US$11/t (A$16/t) for freight.

Assuming US$45/t CIF (A$64/t) is received for salt when production starts, this result in an FOB price of A$48/t. Less all in sustaining costs of $20/t (includes cash costs, sustaining capital and head office expenses), results in an EBITDA margin of $28/t.

SOP MARKET FUNDAMENTALS

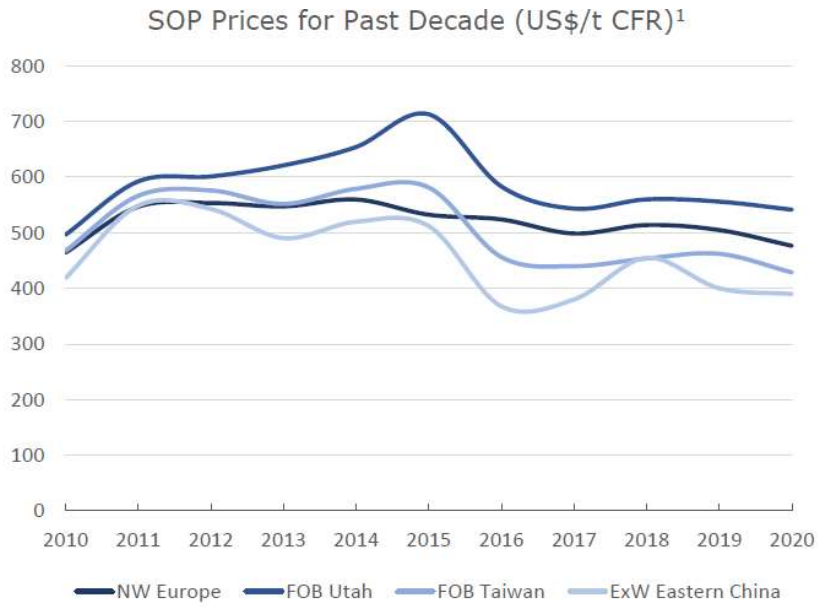
Recent events that have lowered SOP pricing are unlikely to be factors when Mardie starts selling into the market

Global consumption of SOP is forecast to be ~7.0mtpa and due to its very low chlorine content, is expected to grow faster than the traditional source of potassium fertiliser (MOP, 64mtpa). MOP represents ~90% of the global trade in Potassium. With Mardie forecast to produce 0.12mtpa of SOP from late FY25, it should not influence the global supply and demand equation.

Recent developments in potassium are:

- China stopped importing MOP in September 2018. High port inventories, internal production capability and reduced demand allowed for imports to be put on hold. China had previously imported 5-6mtpa. The first shipment since has been reported as occurring in April, 2020. A headline price of US$220/t was reported, down US$70/t from previous levels.
- On the 1st January, 2019, China removed all tariffs on SOP exports (it had previously consumed all of its own production). China is the lowest cost producer, but is considered Potassium constrained. This has likely led to a softening in SOP pricing, but due to high cost supply from the swing producers (using the Mannheim process and accounting for ~50% of SOP supply), there is a natural floor to the price. We may have seen the full impact of China exports already in the SOP price, see Figure 17.

Figure 17: SOP pricing, currently ranging from US$400/t China to US$550/t Europe



Source: Agrmin May presentation

KLL recently indicated a life of mine price of US$488/t CFR (from US$606/t) in its revised financial modelling, noting the recent reduction in pricing.

ABOUT SOP AND THE MARDIE RESOURCE

The Mardie SOP project requires less ponds for evaporation (lower capex), incurs no cost for salt removal unlike other SOP projects and is located on the coast with the lowest haulage costs

Potassium Sulphate or SOP, typically contains 50% K_2O and 17.5% Sulphur. Its main feature compared to other potassium fertilisers (i.e. MOP) is it only contains trace amounts of Chlorine, which is detrimental to some crops.

The cheapest method of producing SOP is via salt water solar evaporation. These projects rely on crystallising salt from brine. A typical Australian inland SOP project will crystallise Sodium Chloride first to remove it and treat this as a waste product (due to the high cost of freight to get to a port).

The resulting brine post removal of the majority of Sodium Chloride has a much higher concentration of Potassium and Sulphur. This undergoes further evaporation and processing in order to facilitate SOP crystallisation.

The DFS indicates that in a given year there is an expected 150kt of SOP equivalent tonnes in 3.4Gl of brine as it enters the Pre-KTMS Crystallisers (the first stage of the SOP production line). This is equivalent to 44Kg/M3 of SOP concentration (a M^3 is equivalent to 1,000l). The next best published potassium content of a brine used in Australian SOP project is 12.4 Kg/M^3 (Kallium Lakes Beyondie Project).

The cost of the initial evaporation and Sodium Chloride removal is covered by the salt project. The starting brine for the Mardie SOP project is more concentrated than comparable projects and requires less ponds to convert to SOP (lower capital) and the cost of removing the salt has already been recovered.

With the advantages above, we believe that Mardie is likely to be the lowest cost SOP project in Australia

Due to its higher concentration at the start of the SOP process for Mardie and its large freight advantages, we believe Mardie is very likely the lowest cost SOP operation, though it is not as large as some of the other projects in terms of SOP production.

First sales of SOP from Mardie is expected to occur in early FY26.

Iron Valley Iron Ore Operation

IRON VALLEY FACTS

Peak production was 8mt in FY17 and that is the nameplate capacity of the plant installed. Iron ore is trucked ~330km to the Utah Point berth in Port Hedland, where it is shipped in mini-capes (up to 120kt capacity) to Asia. We estimate the trucking cost to port varies between $25-30/t (fuel cost dependent), making this a high cost mine.

The iron ore mined is 58% grade, with mix of lump (~40%) and fines (~60%). The iron ore has a high Phosphorus content, which leads to a higher discount than that received by low impurity 58% grade iron ore.

The last stated (October 2019) reserve at Iron Valley was 89mt (190mt resource) at 58.3% Fe content, with 0.18% phosphorus (up to 0.1% is considered a normal impurity level).

As MIN is the operator, it incurs all costs and pays BCI a royalty that references the A$ FOB price of the iron ore sold. The royalty rate has a sliding scale that works on the pain/gain principal, depending on the prevailing price received for the iron ore. This sliding scale is not published. By analysing quarterly data, with have attempted to estimate the different royalty rates, see Figure 18.

Figure 18: Estimated royalty rates at Iron Valley before the 40% rebate

Sales Price A$/t FOB	Estimated Royalty	Approx. Royalty/$t
> A$140	12.0%	16.8
A$130 -140	10.0%	13.5
A$120 - 130	8.0%	10.0
A$105 - 120	6.0%	6.7
A$90 - 105	4.5%	4.4
A$70 - 90	3.0%	2.4
A$50 - 70	1.5%	0.9
< A$50	1.0%	0.5

Mininum payment of $1.5m per quarter

Source: PAC Partners estimates

With the low A$ and high US$ iron ore price, FY20 EBITDA from Iron Valley is a record, coming in at $21.3m ($12.2m FY19) from 6.7mt sold (7.4mt pcp). This includes a $2.8m rebate to MIN in Q4 FY20. FY20 Q4 production was 1.7mt, implying a FY21 run-rate of 6.8mtpa. There is also an agreed minimum payment of $1.5m per quarter from MIN; Iron Valley has a $6m EBITDA pa floor should prices materially decrease.

HISTORICAL PRODUCTION AND EARNINGS

Iron Valley commenced operating in Q2 of FY15. It continued to operate, even when 62% benchmark iron ore pricing hit US$50/t (~A$70/t) in May 2016. BCI report quarterly Iron Valley production and EBITDA see Figure 19.

FY20 EBITDA of $23.1m is a record. With a 40% rebate back to MIN, FY21 is expected to be lower

Figure 19: Annual production and EBITDA from Iron Valley

	FY15A	FY16A	FY17A	FY18A	FY19A	FY20A	Total
Tonnage Shipped	3.0	6.5	8.0	6.1	7.4	6.7	37.7
EBITDA	4.6	10.1	18.3	5.8	12.2	21.3	72.3
Av. EBITDA/t	1.53	1.55	2.29	0.95	1.65	3.18	1.92

Source: BCI

In Q4 shipments were ~0.1mt above production. We believe there are still stockpiles of up to 0.5mt that could increase shipments in FY21. The key point from the Q4 MIN quarterly is that the iron ore price received US$84/t, from US$74/t in Q3. Whilst this price is a blend from two mines (both 58% grade), it highlights that the discount for 58% grade iron ore has narrowed relative to benchmark pricing.

BCI is responsible for paying the WA State Government iron ore royalty payment. EBITDA shown in table 19 is net of this royalty payment and the rebate to MIN.

MINE LIFE AND REVISED AGREEMENT

Iron Valley is now a below the water table mine and MIN indicated in November 2019 that it planned to spend $50m on additional overburden removal and infrastructure to support a mine plan spanning 2-4 years. Further capital spend could extend the life further, however MIN has other lower cost undeveloped iron ore assets that we forecast caps the mine life at Iron Valley under the current arrangement to up to four years.

On the 31st March 2020, BCI agreed to share the costs of extending the mine life as follows. BCI will rebate a 40% portion of its net royalties to MIN until the total rebated amount reaches $25m. The royalty rebate is subject to BCI receiving a minimum net royalty of A$1.5m per quarter, and in the event that MIN suspends Iron Valley operations, the minimum $1.5m net royalty to BCI will continue to be payable for at least the next two quarters. The new arrangements commenced in Q4 FY20, which saw $2.8m rebated back to MIN.

We note that the iron ore price could also shorten or extend the life of the mine. If the iron ore price were to materially fall, MIN could decide to close the mine sooner than forecast.

IRON VALLEY FORECASTS

The iron ore price remains over US$100, which bodes well for FY21

We already forecast Iron Valley for Mineral Resources and we use the same assumptions in terms of production and sales price to calculate the EBITDA contribution for BCI, see Figure 20. We assume Iron Valley stops production at the end of FY23. This ensures Iron Valley only includes cashflows in our DCF valuation, with no terminal value ascribed.

Our FY21 volumes are higher than FY20 due to a production delay. MIN is incentivised at the current iron ore price to run the mine as hard as possible. Our FY23F of $6.0m EBITDA is equivalent to four quarters at $1.5m minimum payment.

In our opinion, tailings dam related issues are likely to curtail Vale production and supply issues could persist for longer than forecast. COVID-19 in Brazil is also likely to be a factor

Figure 20: EBITDA contribution of Iron Valley for BCI

Details	FY18A	FY19A	FY20F	FY21F	FY22F	FY23F	1H20	2H20
Tonnes Sold mt	6.2	7.4	6.7	7.5	7.5	7.5	3.6	3.1
Revenue A$m	415	571	699	669	583	501	353	346
Av. Price/t A$	66.9	77.1	104.3	89.2	77.7	66.8	98.2	111.3
BCI Royalty Rate	1.4%	2.1%	3.4%	3.0%	2.0%	2.0%	3.1%	3.8%
Gov. Royalty rate	6.6%	7.3%	9.0%	9.0%	9.0%	9.0%	8.0%	10.0%
BCI Actual royalty	27.4	41.9	62.9	60.2	52.5	45.1	28.2	34.6
BCI EBITDA	5.8	12.2	24.1	20.1	11.7	10.0	10.9	13.2
Less 40% rebate	0.0	0.0	(2.8)	(8.0)	(4.7)	(4.0)	0.0	(2.8)
Net EBITDA	**5.8**	**12.2**	**21.3**	**12.0**	**7.0**	**6.0**	**10.9**	**10.4**

Source: PAC Partners estimates

The importance of Iron Valley is that it has funded BCI to allow it to produce a DFS report and continue with early works on the Mardie project without having to raise capital. As BCI incurs no operating costs on Iron Valley, it has provided a cashflow stream. In our opinion, BCI does not need to raise equity until it decides to proceed (FID) with Mardie.

Financials

COMMODITY ASSUMPTIONS

We show forecasts out to FY29, the year we believe Mardie enters steady state production, though it becomes fully ramped during FY28. Production ramps earlier than sales due to the requirement to build a bed of salt in the crystalliser ponds before harvesting can occur.

Our production ramp up mirrors that detailed in the DFS. Our price forecasts for salt are slightly higher than guided due to our assessment of the demand shortfall in Asia and mix of customers outside of China. This is partially offset by using a higher assumed FX than the DFS. We use $0.70 as our long-term FX rate, see Figure 21 for our commodity assumptions.

Figure 21: BCI Commodity Assumptions

	Units	FY20F	FY21F	FY22F	FY23F	FY24F	FY25F	FY26F	FY27F	FY28F	FY29F
Iron Ore 62% Price	US$/t	99.7	87.0	80.0	70.0						
FX rate	A$:US$	0.65	0.70	0.70	0.70	0.70	0.70	0.70	0.70	0.70	0.70
Discount to Benchmark	%	70.7%	71.8%	68.0%	66.8%						
Iron Valley Price	A$/t FOB	104.3	89.2	77.7	66.8						
Iron ore sales	mt	6.7	7.5	7.5	7.5						
Salt Price	US$/t CFR	40	40	41	42	44	45	46	47	48	48
Salt Sales	mt	0.0	0.0	0.0	0.0	0.0	1.8	3.3	4.3	4.4	4.4
SOP Price	US$/t FOB	468	475	485	495	505	515	525	535	545	550
SOP Sales	kt	0	0	0	0	0	0	34	66	106	121

Source: BCI and PAC Partners

PROFIT AND LOSS

Due to the long lead time for earnings to come from Mardie, there is a relatively high forecast risk for BCI, mostly around production volumes, FX and sales price.

We estimate steady state EBITDA of $200m pa, this should provide the basis for a future high dividend yield

In FY19 and FY20, BCI has been expensing all costs relating to Mardie, rather than capitalising them. We assume they capitalise costs once FID is achieved, expected part way into FY21. We calculate normalised EPS after adding back expensed Mardie costs in FY19 to FY21.

Depreciation in FY20-FY23 mostly relate to depreciation of mine properties. We assume sales at Mardie commences early FY25, which leads to a large increase in depreciation. The ponds and jetty represent a large portion of the capex for Mardie, and are expected to be depreciated at just 5% pa.

Positive Abnormals relate to sale of mine properties. We assume $2m in FY20 from the sale of Buckland.

BCI has tax losses (retained earnings of -$169m at FY19) that can be used to reduce future tax payable. We do not factor this into our forecasts, as the amount available is not disclosed.

Company overheads are factored into the AISC of Mardie; hence we capture them in the operating cost of Mardie and don't show them separately once Mardie commences sales.

Figure 22: BCI Profit and Loss to FY29 – steady state

($m)	FY19A	FY20F	FY21F	FY22F	FY23F	FY24F	FY25F	FY26F	FY27F	FY28F	FY29F
Iron Valley	54.2	84.2	72.3	59.5	51.1	0.0	0.0	0.0	0.0	0.0	0.0
Mardie	0.0	0.0	0.0	0.0	0.0	0.0	115.2	244.8	341.1	385.6	397.8
Other Revenue	0.5	0.5	1.7	0.4	0.2	0.1	0.1	0.1	0.1	0.1	0.1
Total revenue	**54.7**	**84.6**	**74.0**	**59.9**	**51.3**	**0.1**	**115.2**	**244.9**	**341.2**	**385.6**	**397.9**
% change (on pcp)	*63%*	*55%*	*-13%*	*-19%*	*-14%*	*-100%*	*205733%*	*113%*	*39%*	*13%*	*3%*
Gross Profit	**(8.2)**	**(25.0)**	**(10.0)**	**0.0**	**0.0**	**0.0**	**36.9**	**103.8**	**165.3**	**193.8**	**200.2**
GP Margin %	*-15.0%*	*-29.5%*	*-13.5%*	*0.0%*	*0.0%*	*0.0%*	*32.0%*	*42.4%*	*48.5%*	*50.3%*	*50.3%*
Iron Valley	12.3	21.3	12.0	7.0	6.0	0.0	0.0	0.0	0.0	0.0	0.0
Mardie	(8.2)	(25.0)	(10.0)	0.0	0.0	0.0	36.9	103.8	165.3	193.8	200.2
Overheads & Other	(6.7)	(5.2)	(5.5)	(5.7)	(6.0)	0.0	0.0	0.0	0.0	0.0	0.0
EBITDA	**(2.6)**	**(8.9)**	**(3.4)**	**1.3**	**0.1**	**0.0**	**36.9**	**103.8**	**165.3**	**193.8**	**200.2**
Depreciation & Amort.	(2.6)	(2.4)	(2.6)	(2.9)	(3.2)	(1.9)	(40.7)	(40.2)	(38.2)	(36.3)	(34.5)
Total EBIT	**(5.2)**	**(11.3)**	**(6.0)**	**(1.6)**	**(3.2)**	**(1.9)**	**(3.9)**	**63.5**	**127.1**	**157.5**	**165.7**
Net Interest	0.6	0.5	1.7	0.2	(2.4)	(12.0)	(20.0)	(19.8)	(14.8)	(10.8)	(9.4)
Profit before tax	(4.6)	(10.8)	(4.4)	(1.4)	(5.6)	(13.9)	(23.9)	43.7	112.4	146.7	156.3
Tax	1.5	0.0	0.0	0.0	0.0	0.0	0.0	(12.2)	(31.5)	(41.1)	(43.8)
Abnormals	16.0	2.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Reported NPAT	**12.9**	**(8.8)**	**(4.4)**	**(1.4)**	**(5.6)**	**(13.9)**	**(23.9)**	**31.5**	**80.9**	**105.6**	**112.5**
Normalised NPAT	**5.1**	**14.2**	**5.6**	**(1.4)**	**(5.6)**	**(13.9)**	**(23.9)**	**31.5**	**80.9**	**105.6**	**112.5**
% change (on pcp)	*-137%*	*-177%*	*-60%*	*-125%*	*302%*	*146%*	*72%*	*-232%*	*157%*	*31%*	*7%*
Normalised EPS (cps)	**1.3**	**3.5**	**0.5**	**(0.1)**	**(0.3)**	**(0.7)**	**(1.2)**	**1.6**	**4.0**	**5.2**	**5.5**

Source: BCI and PAC Partners

We forecast $200m of EBITDA in FY29. This is close to the guided steady state EBITDA of $197m detailed in the DFS. Whilst salt pricing, production and FX rates can vary, the relatively stable salt price and growing demand in Asia for salt; we believe our forecasts are more on the conservative side.

BALANCE SHEET

BCI indicated in its DFS that it was net cash $42m at the end of June 2020. Currently BCI has no debt.

We assume that in total, BCI raises $325m equity and $625m debt to fund the construction of Mardie. We assume the equity is raised in Q4 FY21, post reaching FID. We assume that equity is raised at $0.20/share (around 40% of our un-risked DCF valuation of BCI). Whilst this is marginally higher than the current share price, companies often increase in value as a company making project gets closer to FID and other milestones like approvals are ticked off.

The chances of BCI securing a high portion of long tenure debt from NAIF appears high. We see this as a future large catalyst for BCI

In terms of debt, we forecast that BCI is able to secure $625m of debt at ~4% overall interest rate:

- ~$400m from NAIF (noting it should be at lower rate than bank debt and long dated); and
- ~$225m from other banks.

We forecast peak gearing to be 59%. We estimate that two thirds of the debt will be long dated from NAIF. From an investor's perspective, it is worth looking at gearing excluding NAIF debt. On this basis, net gearing peaks at ~20%. We are comfortable that a long-life asset such as Mardie can carry a high level of debt, particularly given the likely presence of NAIF debt.

Once the project is ramped, we assume BCI commences paying dividends with a high pay-out ratio. BCI has the option of repaying the NAIF long term debt sooner, though we expect they will opt to pay a dividend and utilise the likely long-term tenure of NAIF debt.

Our assumptions on NAIF debt have been estimated by looking at the amount of debt provided to Strandline's Coburn mineral sands project. The Government has called for NAIF to be more supportive of projects and Strandline is a recent example where they provided almost 60% of the capex in debt.

Debtor days are currently high at BCI. This is due to iron ore royalties being paid quarterly, in the month following completion of the quarter. We expect debtor days to revert to normal levels post our assumed closure of Iron Valley in FY23. Creditor days are also high due to paying Government iron ore royalties quarterly.

We factor in a stock build in FY25 of $30m to account for inventory at the port and work in progress (WIP) in the evaporation ponds.

Figure 23: BCI Balance Sheet to FY29F

($m)	FY19A	FY20F	FY21F	FY22F	FY23F	FY24F	FY25F	FY26F	FY27F	FY28F	FY29F
Cash	33.7	27.4	303.4	129.5	19.5	19.5	19.5	19.5	19.5	19.5	19.5
Receivables	22.3	31.3	25.9	18.6	7.7	0.0	16.1	34.3	47.8	54.0	55.7
Inventory	0.0	0.0	0.0	0.0	0.0	10.0	20.0	30.0	30.0	30.0	30.0
Property Plan & Equip	0.2	0.2	24.6	203.5	456.5	784.7	804.1	764.1	726.0	689.8	655.5
Intangibles	23.5	23.5	23.5	23.5	23.5	23.5	23.5	23.5	23.5	23.5	23.5
Other Assets	50.7	41.9	41.8	39.2	18.7	18.7	18.7	18.7	18.7	18.7	18.7
Total Assets	**130.4**	**124.3**	**419.2**	**414.4**	**525.9**	**856.4**	**901.9**	**890.0**	**865.4**	**835.5**	**802.9**
Payables	18.1	18.5	14.5	10.7	8.2	0.0	15.0	31.8	44.3	50.1	51.7
Borrowings	0.0	0.0	0.0	0.0	119.5	471.8	525.1	463.1	383.7	336.7	290.9
Provisions	8.7	11.0	5.6	5.9	6.1	6.4	7.5	9.3	11.1	11.8	12.0
Other	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Liabilities	**26.8**	**29.6**	**20.1**	**16.6**	**133.7**	**478.2**	**547.5**	**504.2**	**439.1**	**398.6**	**354.6**
Total Equity	**103.6**	**94.8**	**399.1**	**397.7**	**392.1**	**378.3**	**354.4**	**385.9**	**426.3**	**436.9**	**448.3**
Gearing (ND/ND+E)	**-48%**	**-41%**	**-317%**	**-48%**	**20%**	**54%**	**59%**	**53%**	**46%**	**42%**	**38%**
Gearing Excl. NAIF debt						**12%**	**23%**	**10%**			
Debtor days	149	135	128	113	55	51	51	51	51	51	51
Creditor days	121	80	71	65	58	0	47	47	47	47	47

Source: BCI and PAC Partners

CASHFLOW

Due to interest and tax, we expect Mardie to convert ~70% of its EBITDA into operating cashflow, though tax could be lower in the first few years of operation.

Once the project is operating, operating cashflow should be predictable and the project becomes a high cashflow generator

Maintenance costs has been factored into the AISC in the DFS. We have assumed that maintenance runs through the P&L as an expense and impacts the cashflow statement as reduced EBITDA, therefore is not shown separately in investing cashflow. Due to the corrosive nature of salt, sustaining capex has been guided as $6.2m pa, though will likely start off low as the equipment will be new. This has been factored into the AISC.

In FY29, we forecast Mardie to produce over $150m of operating cashflow. Initial cashflows are likely to be used to pay down bank debt, but after that, BCI is likely to commence paying dividends, and should become a high yielding stock. We forecast dividends to commence in FY27.

The capex hump is a big one, with construction capex following the time frames shown in the capex forecasts in Figure 4 earlier. In total, we assume $850m of capex (which factors in contingencies and cost expansion, though when you add interest, working capital, the total amount of funding required for Mardie is closer to $1bn.

Figure 24: BCI Cashflow to FY29

($m)	FY19A	FY20F	FY21F	FY22F	FY23F	FY24F	FY25F	FY26F	FY27F	FY28F	FY29F
EBITDA	(2.6)	(8.9)	(3.4)	1.3	0.1	0.0	36.9	103.8	165.3	193.8	200.2
Interest & Tax	2.1	0.5	1.7	0.2	(2.4)	(12.0)	(20.0)	(32.1)	(46.2)	(51.9)	(53.1)
Working Capital	(5.7)	(4.3)	(4.1)	3.9	8.6	(10.2)	(10.1)	(9.5)	0.9	0.3	0.1
Operating Cashflow	**(6.2)**	**(12.7)**	**(5.8)**	**5.4**	**6.2**	**(22.2)**	**6.8**	**62.2**	**120.0**	**142.2**	**147.1**
OCF/EBITDA							*18.5%*	*59.9%*	*72.6%*	*73.4%*	*73.5%*
Maintenance Cap-ex	(0.2)	(0.2)	(0.2)	(0.2)	(0.2)	(0.2)	(0.2)	(0.2)	(0.2)	(0.2)	(0.2)
Expansion Cap-Ex	27.0	6.5	(26.8)	(179.1)	(235.5)	(330.0)	(60.0)	0.0	0.0	0.0	0.0
Dividends	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	(40.5)	(95.1)	(101.1)
Free Cash Flow	**20.6**	**(6.4)**	**(32.8)**	**(173.9)**	**(229.4)**	**(352.3)**	**(53.3)**	**62.0**	**79.4**	**47.0**	**45.8**
Equity raised	0.0	0.0	325.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Equity costs	0.0	0.0	(16.3)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Net Cashflow	**20.6**	**(6.4)**	**276.0**	**(173.9)**	**(229.4)**	**(352.3)**	**(53.3)**	**62.0**	**79.4**	**47.0**	**45.8**
Closing Debt Position	0.0	0.0	0.0	0.0	119.5	471.8	525.1	463.1	383.7	336.7	290.9

Source: BCI and PAC Partners

Peer Comparisons

BCI has several classes of peers, being:

- Australian SOP start-up companies (AMN, KLL and SO4); and
- Global salt producers, with Compass Minerals and K&S AG being the closest peers (both sell Salt and Potassium (SOP and MOP) as their primary business activity.

AUSTRALIAN SOP PEERS

We are surprised at the extent of the discount that BCI trades at relative to its closest SOP peers. See the NPV/EV ratio (last line in Figure 25)

Either peers need to fall a lot in price or BCI needs to appreciate. We feel it is the later

Australia has half a dozen companies in the process of developing SOP projects, mostly deep inland in WA. These projects produce salt first and then SOP, similar to BCI. However, due to the distance from the coast (between 700-1,000km), the economics of transporting the salt to port means that salt production at these projects is a waste product that is not sold.

Whilst the Potassium content within the water at inland salt lakes is higher than sea water, the Potassium content of the brine at BCI's project is exponentially higher at the point it enters its SOP processing operations. The costs of concentrating the brine have already been recovered via its salt operations, BCI is able to further evaporate this to then harvest SOP.

We compare BCI's SOP project to Agrimin (AMN), Kallium Lakes (KLL) and Salt Lake Potash (SO4), as they are most advanced in their projects. Based on published numbers, BCI is not the lowest cost. Factors to bear in mind when comparing projects are:

- BCI It has no 3rd party royalties (i.e. if 2% of revenue then ~$15/t which applies to some of the projects and not included in the AISC);
- BCI SOP product is expected to be granular and have a higher Potassium content (i.e. sell at a premium of up US$30/t);
- BCI's AISC assumes a 2.5% Government royalty (several projects assume $0.73/t);
- BCI can ship SOP in larger vessels, providing a shipping cost advantage.

Figure 25: Mardie compared to Agrimin (AMN), Kallium Lakes (KLL) and Salt Lake Potash (SO4)

Details / Company	BCI	AMN	KLL	SO4
Enterprise Value (using 1H20 net cash)	36	111	83	217
Project Name	Mardie	McKay Potash Project	Beyondie Sulphate of Potash Project	Lake Way Project
Distance from port by road - Km	<5 Km	940 km to Wyndham Port, WA	1088 km to Fremantle or Kwinana Ports, WA	780 km to Geraldton Port, WA
Annual Salt sales	4.4mt	0.0 mt	0.0 mt	0.0 mt
Annual Potash Sales	120kt	450kt	90kt (phase 1), 180kt (phase 2)	245kt
DFS Completed	Yes, June 2020	Yes, July 2020	Yes, September 2018	Yes, October 2019
Environmental Approvals in place	No, but advanced	No, impact assessment not yet submitted	Yes, all approvals obtained in 2H 2019	EPA approval still pending
Native Title	Signed, 0.5% royalty budgeted	Signed, royalty not announced	Signed, 0.75% royalty	Signed, royalty not announced
Target date for all permits	Expected in early 2021	Not announced	Completed	Expected in 2020
FID	No, negotiating with NAIF and banks	No, funding details not yet announced	Yes, however cost overrun lead to $61m raising	US$150m debt secured, not yet fully funded.
NAIF involvement expected	Yes, in late stage negotiations	Major project status, likely NAIF involvement	Yes, $74m provided	No, does not qualify due to project location.
Resource - Measured/Indicated/Inferred	**Unlimited**	3.9mt / 19.5mt / 99.9mt	1.7mt / 9.2mt / 17.9mt	2.0mt / 4.0mt / 11.4mt
Concentration of SOP in Brine	44 Kg/m^3	8 Kg/m^3	12.4 Kg/m^3	8.7 Kg/m^3
Company guided DFS NPV	WACC), PAC $1060 post tax for BCI	US$655m (8% WACC)	A$362m (8% WACC)	A$479m (8% WACC)
SOP price used (FOB)	US$520/t	US$500/t	US$487/t	US$550/t
All in sustaining costs *	**A$20/t Salt, A$310/t SOP**	**US$185/t / A$285/t**	**US$200/t / A$294/t**	**US$241.4 / A$355.1**
FX rate used	$0.68	$0.65	$0.65	$0.68
Capex	A$779m (SOP $109m)	A$415m	A$404m (phase 1 & 2)	A$254m
Offtake agreements in place	Yes, MOU's	No, in early discussions	Yes, all with K&S	Yes for 90% of SOP production - 224ktpa
Estimated construction date start date	Early works started, March 2021 for project	July 2021 target start date	40% complete, $100m spent so far	First ponds constructed
Estimated first shipment date	July, 2024	2024	August, 2021	October, 2021
Project Lifespan	60 years +	40 years	30 years +	20 years
Ability to leverage infrastructure	Yes, iron ore could share the port	No	No	No
Recent capital raisings	None	May'20, 1 for 19 entitlement, raised $3.0m	$61m raised in May 2020	Apr'20, $20m placement & Dec'19 $23m
Estimated Potassium Recovery rate	74%	80%	77%	84%
Road haulage and shipping cost	A$7/t port handling costs, no road haulage	A$64/t road, $11/t Handling & Shipping	A$40/t (backloading rates), $28/t port charges	A$62/t (not shipping or port handling charges)
Payback Period (post tax)	N/A	4.2 years	7.0 years	3.5 years
Average rainfall	275mm	280mm	238mm	260mm
Project NPV/1H20 EV (x)	**28.1**	**8.5**	**4.4**	**2.2**

** BCI AISC includes native title, 3rd party & Government royalties, in our opinion, the other projects do not properly include these in their published costs*

Source: Company announcements and Pac Partners

Several of the pure play SOP projects trade at higher materially higher EV's than BCI, though their projects appear at either a similar stage or about 12 months more advanced. This is probably due to several factors, being:

- Low level of understanding of the merits of a large salt project, coupled with a SOP project;
- Mardie has only recently released the DFS, a lot of uncertainty has existed;
- The longer construction timeframe to production and higher overall capex; and
- BCI has not engaged much with the investment community, as it has focused on making sure they had the facts of the project well known before doing so.

The really telling metric in Figure 25 is project NPV / EV. BCI is comes in at 29.7x, versus the next cheapest at 8.8x. Clearly this valuation gap has room to materially narrow.

We also compare capex per tonne of SOP production and all in sustaining costs in A$.

Figure 26: Mardie SOP Capex and AISC versus peers

Mardie has the lowest capex per tonne and payback period of the SOP projects

Details	BCI	AMN	KLL	SO4
Production ktpa	120	426	180	245
Capex $m	109	415	404	254
Capex $k/t	0.9	1.0	2.2	1.0
AISC A$/t	310	285	294	355
EBITDA @ A$600/t $m	35	134	55	60
Payback period years	3.1	4.2	7.3	4.2

Source: Pac Partners

We believe that the Mardie SOP project has at a minimum of $75/t freight advantage (assuming a conservative $0.10 cost per tonne per Km) over both AMN and SO4, equivalent to removing ~30% of the C1 cost of production, making Mardie the likely lowest cost SOP project in Australia. AMN also removed an incredible A$91/t of costs between the DFS and the PFS. BCI also has the shortest payback period.

GLOBAL SALT PEERS

Of the global peers:

Compass minerals is a very close peer, though its operations are larger

- Compass Minerals appears the closest peer, it produces ~11mtpa of salt and ~1.2mtpa of SOP, and based on future estimated steady state revenue, is approximately 3x's bigger than BCI; and

K&S is looking to sell its US salt operations (it has high debt) and is more weighted to MOP

- K&S (i.e. Potassium and Salt) is the world's largest salt producer (it acquired Morton Salt in the US, though is now trying to sell Morton Salt to reduce debt) and is the 5th largest Potassium supplier (SOP and MOP). It also is planning on building a 4.5mtpa salt project (Ashburton) near Onslow (Pilbara) in WA and is on a time frame around two years behind the Mardie project. Ashburton previously failed to achieve environmental approvals. A ban by China on MOP imports in early 2020 has seen K&S downgrade, several times, hence multiples are slightly depressed.

Other Australian salt operations are either unlisted or are a very small part of RIO or Mitsui. One has to look for overseas companies to find peers, see Figure 27.

Figure 27: Global Peer Comparisons

	Share Price A$	Mkt Cap A$m	Gearing ND/ND+E	Net Debt A$m	EV/EBITDA (x) FY21F	EV/EBITDA (x) FY22F	PER (x) FY21F	PER (x) FY22F	Div. Yield (%) FY21F	Div. Yield (%) FY22F
Compass Mineral	73.16	2,481	77%	2,019	7.7x	7.8x	14.0x	14.5x	5.5%	5.5%
K&S AG	0.00	1,819	43%	5,824	6.6x	5.8x	n/m	n/m	0.0%	0.0%
Average					**7.1x**	**6.8x**	**14.0x**	**14.5x**	**2.8%**	**2.8%**

Source: Sentieo, Pac Partners estimates

Compass Minerals is the closest peer to BCI. They provide a guide of what sort of multiples we should expect BCI to trade when in steady state production in FY28. Back of the envelope, BCI could potentially have a $1.5bn EV should it trade on 7.7x EBITDA, in around 8 years-time (assuming our estimated $200m steady state EBITDA is achieved).

To set out our multiple for the EV/EBITDA valuation for BCI, we use 7.7x (Compass Minerals FY21 multiple) and discount it over 8 years (the time we expect it to take for the Mardie project to fully ramped up. This results in an EV/EBITDA multiple of 4.3x (the discount factor is 0.57 using a 7.0% WACC).

Key Risks

FUNDING MAY NOT BE OBTAINED

If Mardie was a project in a much larger company, securing funding would likely to be much easier

With a capex price tag of $779m, Mardie has financing risk. Likely involvement of NAIF helps with the debt side of things, though some bank presence is also expected.

BCI is likely to require significant equity, we estimate ~$300m - $350m.

Fortunately, salt harvesting is a well-established process and the Pilbara region is a known low-cost region to harvest salt, making the project execution lower risk than most mining projects. With COVID-19 issues and many companies seeking capital at present, securing funding is not certain and without it, the project would not be developed until funding is in place.

Whether BCI can provisionally secure NAIF funding before the capital raise could influence the price of the raise

BCI could sell equity in the project to a third party, reducing its ownership of the project and reduce the amount of equity required.

On the equity side, BCI's largest shareholder with 29% is effectively the Stokes family. It is expected that they will support BCI in terms of funding for the Mardie project. This somewhat lowers the equity funding risk component.

SALT PRICE COULD FALL

Salt is a commodity and its price is generally set for a 12 month period in US$. BCI can influence its costs, but is essentially a price taker. Should the global price of salt fall, BCI would be impacted once it is in production. Currently, salt is at its long-term average in A$ terms, but below average in US$ terms.

IRON VALLEY COULD SHUT SOONER THAN FORECAST

We see this risk as having a fair chance of occurring

MIN has indicated it is committed to remain at Iron Valley for 2-4 years, where they land in this range depends on the iron ore price and the profitability of the mine. They have options to mine other tenements that are lower cost, but requires capex and time to build. At this point we assume iron ore pricing remains viable for Iron Valley to operate until the end of FY23.

TARGET CONSTRUCTION TIME FRAMES COULD BE MISSED

Even if this were to occur, it is not that relevant to the long-term value of the Mardie project

Delays to projects often occur. It could be delays to gaining approvals, funding, weather, unforeseen delays in equipment delivery. Delays to a project with the life span of Mardie are immaterial to the bigger picture, but when they occur, they can impact the share price.

UNUSUAL WEATHER EVENTS COULD IMPACT SALT PRODUCTION

History indicates that unusual rain fall does not occur very often, but it will occur

Cape Preston has a wet season (average 250mm of rain, January to July) and a dry season (average of 25mm of rain, August to December) or 11 inches in total on average on the old scale. This is a low level of rainfall; however, Cape Preston has occasionally had very high rainfall in the wet season, it once received 675mm of rain in a single month. High rainfall will lower salt production and this is likely to occur at some point in the future.

On the positive, Cape Preston is an extremely hot place. Day time temperatures in the wet season average between 27.7 to 38.1ºC and 29.4 to 37.7ºC in the dry season. It also has high wind speed (20km/h average), which aids evaporation. Humidity is generally in the low 40's percentage wise.

AUD APPRECIATION

The price of salt is set in US$ and as Australia produces just 4% of the world's supply, the US$ price is independent of the A$ pricing level. Should the A$ appreciate against the US$, the price received for salt is very likely to fall, with costs remaining the same.

CAPEX OVERRUNS

If a project costs materially more than originally budgeted, it impacts the long term returns to investors. Capex overruns may or may not happen, they would appear less likely on a salt project than an underground mine, as there are less variables. Whether BCI is able to lock in fixed price contracts with its construction contractors could also reduce this risk. These contracts are not yet awarded.

OPERATING COSTS COULD BE TOO LOW

We have adopted the cost structure published in the DFS statement. Costs could be higher than forecast, reducing returns.

Investment view and valuation. Speculative Buy $0.37 Price Target

We use DCF to value BCI. DCF captures Mardie, Iron Valley and also ascribes a value for future iron ore royalties not yet in operation. We use EV/EBITDA multiples to sense check our DCF valuation.

DCF

Due to the long construction lead time of Mardie, DCF appears the best method to value BCI

Since Mardie has a very detailed DFS published, but is still to reach FID and secure all the necessary approvals, we discount our DCF valuation by 25% to represent risks around its stage of development on Mardie. We model BCI for 10 years, then use a terminal value. We use a terminal growth rate of 2.5%, which is likely to represent commodity price increases due to predicted supply shortfalls.

A WACC of 7% is potentially high for a +60-year project, though appears low compared to the industry standard of 8% for commodity projects

Figure 28: DCF assumptions

Beta (x)	1.10	Salt is a well known predictable industry, though has project development risk
Cost of debt (after tax)	4%	Assumed rate for BCI, lowered by NAIF
Assumed level of debt	45%	Very long life in stable industry supports debt
LT growth rate	2.5%	In line with estimated inflation
WACC	**7.0%**	**Low, reflecting the long life of the Mardie project and capacity for debt**
Discount Factor	25%	Project stage uncertainty discount

Source: PAC Partners estimates

Our WACC is relatively low, reflecting the very long life of the Mardie project (very much like an infrastructure project), unhindered by resource limitations, grade and is not reliant upon third party infrastructure.

We feel the grounds for having a discount will be diluted in the next 9 months

We also apply a 25% discount to our valuation to reflect the main two risks with the project:

- Securing remaining key approvals (environmental is the main one); and
- Reaching Final Investment Decision (FID) and securing the necessary project funding.

We would look to lower the discount on achieving the above milestones.

The amount of equity raised and the price at which it is raised influences the DCF valuation. There is there is a lot of uncertainty around the raising price (we use $0.20/share). A +/- $0.05/share raising price results in a +/- un-risked NPV/share change of $0.09/share.

We expect that Wroxby (BCI's largest shareholder at 29.2%) is highly likely to maintain its ownership level or even increase it via the likely raising, hence they are not too impacted by the share price at which the raising is done at.

Figure 29: DCF valuation

Present value of cashflows FY20 to FY29	(550)
Present value of terminal year cashflow	1,502
Net Cash at 1H20A	34
NPV of royalties, risk discounted 75%	19
Present value of equity	1,005
Diluted Shares on issue (post raisings)	2,023
Present value per share	**$0.50**
25% discount factor	-$0.12
Discounted DCF Valuation	**$0.37**

Source: PAC Partners

We calculate an un-risked NPV of $0.50/share for BCI. This also incorporates Iron Valley and $19m of value for royalty streams

Our price target of $0.37/share represents at TSR of 90%

We set our price target in line with our discounted DCF valuation, which results in a price target of $0.37/share. This is 90% higher than the current share price. Due to the project yet to reach FID, we rate BCI as Speculative at this stage. Post approvals and FID, we believe BCI would no longer be Speculative. Due to the long lead time to ramp production, the majority of the value in the project is measured in the terminal year, as would be expected.

EV/EBITDA VALUATION

We take the current EV/EBITDA multiple of BCI's closest peer (Compass Minerals) and we apply a time value of money discount factor up to FY29 (0.57), our assumed first year of steady state earnings. This results in an EV/EBITDA multiple of 4.3x. We add the NPV of Iron Valley and other iron ore royalties, see Figure 30.

Our sense check EV/EBITDA valuation of $0.45 is relatively close to our un-risked DCF valuation. Whilst there is a lot of forecast risk, it does support out DCF valuation.

Figure 30: EV/EBITDA valuation (ramped earnings)

Our EV/EBITDA valuation at steady state cross checks our DCF valuation

EV/EBITDA Multiple Valuation	Value
FY29F EBITDA ($m)	200
Compass EBITDA Multiple (x)	7.7
Time value discount for FY29	0.57
BCI multiple for ramped EBITDA	**4.4**
Mardie Value	878
Iron Valley discounted earnings	45
NPV of royalties, risk discounted 75%	19
Net debt at FY29F	(271)
Dividends paid up to FY29F	237
Equity Value ($m)	908
No. Shares diluted (m)	2,023
Valuation per Share ($)	**0.45**

Source: PAC Partners

INVESTMENT VIEW

To date, the value of the Mardie salt project does not appear to have been factored into the value of BCI. BCI's last reported cash balance (June 2020) was $41.5m. With a market cap of $78m, it has an EV of just $36m. Our un-risked NPV of BCI is $1005m, highlighting very significant upside potential.

In our opinion, securing the environmental approvals in the predicted time frame appears likely, further de-risking the project. Perhaps there is the element of a known capital raise and still some doubt on whether project proceeds due to its size and not yet fully approved.

If the market gets a sense that Mardie is able to be built and funded, BCI could have material short term share price appreciation. We feel this could be the case

Relative to pure play SOP companies, BCI looks materially undervalued. By our estimates it is trading at 28.1x NPV/EV, versus peers shown in Figure 25 trading between 2.2x - 8.5x (i.e. between 3–12x more expensive). Mardie appears to have considerable advantages over the SOP companies in terms of the size of its project and location. The short-term opportunity is that the NPV/EV equation at BCI moves in line with SOP peers, which could lead to rapid share price appreciation.

A recent comparison of what can occur at BCI's stage of progress is American Pacific Borates (ABR), which released its DFS on the 17th December 2020. The current share price of ABR is now double what it was when the DFS was released. ABR's Fort Cady project is set to produce Borate and SOP as the secondary product.

We recommend buying BCI now, with future catalysts such as environmental approvals and NAIF involvement likely to occur in the near term

As Mardie moves towards FID over the next 9 months, BCI should be materially re-rated. We see a short-term share price upside as the value of the Mardie project gets recognised, making BCI one of the stand out investment prospects of a soft commodity exposed company.

BCI should also appeal to value investors, who generally invest in undervalued companies with a good long-term outlook. Either way, BCI looks to have investment appeal to investors looking for a quick return due to upcoming catalysts and those wanting long term value.

MANAGEMENT AND BOARD

The board is made up of the Managing Director (Alwyn Vorster) and three non-executive directors, including the Chairman.

Brian O'Donnell (the Chairman) is also associated with Wroxby (the largest shareholder with 29.2%). Wroxby is associated with the Stokes family. Brian has 34 years-experience in the finance industry.

We rate the management team

The Managing Director has previous held MD roles at Iron Ore Holding and at API (the company managing the West Pilbara Iron Ore project for Baosteel and its JV partners). Potentially MIN or Baosteel could be a port partner at Mardie.

In terms of management, the company has a strong track record in securing approvals and on-selling projects to larger companies in return for a fee and/or royalty stream.

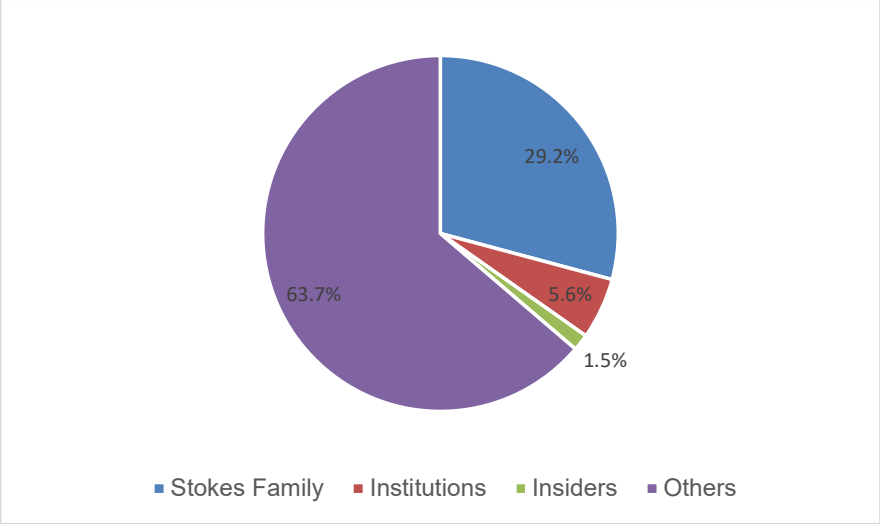
Whilst BCI has good liquidity for its size, in order to fund Mardie, it has a liquidity event coming up. We expect liquidity would be very positive post that occurring

LIQUIDITY AND REGISTER

BCI has fair liquidity for its size, with $1.25m per month or ~$60k per day traded.

The register is dominated by Wroxby with 29.2%. Our understanding is that Wroxby is supportive of BCI and they are likely to back BCI in relation to its Mardie project.

Figure 31: Composition of the BCI register



Source: CapIQ

The majority of BCI's register is made up of retail and high net worth investors. The likely raise provides an opportunity to add institutional investors to the register.

OPTIONS

BCI has two classes of options on issue, totalling 11m shares.

BCI has 5m management performance rights on issue with MD Alywn Vorster. These vest upon the meeting the following conditions:

- 2.5m shares vest (at no cost) if the share price has averaged $0.35 or greater from Dec'18 to Nov'20. We assume these rights will lapse; and
- 2.5m shares vest (at no cost) if the share price has averaged $0.50 or greater from Dec'20 to Nov'22. These rights are currently out of the money and we do not include them.

BCI has 6m shares available under its share rights plan and represents a component of its short term incentives plan (STI). Shares are granted by the board upon achievement of operational milestones (not clearly defined) relating to:

- OH&S;
- Continued employment; and
- Mardie operational milestones.

We assume the 6m of share rights are exercied in our valuation.

Financial Model

BCI Minerals Share Price ($) 0.195 Mkt Cap: ($m) 78 Speculative Buy

PROFIT & LOSS ($m)	FY18A	FY19A	FY20F	FY21F	FY22F
Operating Revenue	**33.0**	**54.2**	**84.2**	**72.3**	**59.5**
EBITDA	(14.4)	(2.6)	(8.9)	(3.4)	1.3
Depreciation	(0.1)	(0.1)	(0.1)	(0.1)	(0.3)
Amortisation	0.0	0.0	0.0	0.0	0.0
EBIT	**(17.3)**	**(5.2)**	**(9.0)**	**(3.5)**	**1.0**
Net Interest	0.4	0.6	0.5	1.7	0.2
Income tax expense	0.0	1.5	0.0	0.0	0.0
UNPAT pre abnormal	**(16.9)**	**(3.1)**	**(8.5)**	**(1.8)**	**1.2**
Abnormal Items	0.0	16.0	2.0	0.0	0.0
Reported NPAT	**(16.9)**	**12.9**	**(6.5)**	**(1.8)**	**1.2**
Normalised NPATA	**(14.0)**	**5.1**	**14.2**	**5.6**	**(1.4)**

BALANCE SHEET ($m)	FY18A	FY19A	FY20F	FY21F	FY22F
Cash	13.1	33.7	27.4	303.4	129.5
PP&E	42.2	0.2	0.2	24.6	203.5
Debtors & Inventory	7.2	22.3	31.3	25.9	18.6
Intangibles	23.5	23.5	23.5	23.5	23.5
Other assets	20.1	50.7	41.9	41.8	39.2
Total Assets	**106.0**	**130.4**	**124.3**	**419.2**	**414.4**
Borrowings	0.0	0.0	0.0	0.0	0.0
Trade Creditors	9.4	18.1	18.5	14.5	10.7
Other Liabilities	6.1	8.7	11.0	5.6	5.9
Total Liabilities	**15.4**	**26.8**	**29.6**	**20.1**	**16.6**
Shareholder Equity	**90.6**	**103.6**	**94.8**	**399.1**	**397.7**

CASHFLOW ($m)	FY18A	FY19A	FY20F	FY21F	FY22F
Operating EBITDA	**(14.4)**	**(2.6)**	**(8.9)**	**(3.4)**	**1.3**
Interest & Tax Paid	0.4	2.1	0.5	1.7	0.2
Working Cap.	2.0	(5.7)	(4.3)	(4.1)	3.9
Operating CF	**(12.0)**	**(6.2)**	**(12.7)**	**(5.8)**	**5.4**
Maintenance Capex	(0.1)	(0.2)	(0.2)	(0.2)	(0.2)
Expansion Capex	(10.0)	27.0	6.5	(26.8)	(179.1)
Free Cashflow (FCF)	**(22.0)**	**20.6**	**(6.4)**	**(32.8)**	**(173.9)**
Ord & Pref Dividends	0.0	0.0	0.0	0.0	0.0
Net Other	(1.3)	0.0	0.0	308.8	0.0
Net Cashflow	**(23.3)**	**20.6**	**(6.4)**	**276.0**	**(173.9)**

DIVISIONAL P&L ($m)	FY18A	FY19A	FY20F	FY21F	FY22F
Iron Valley	33.0	54.2	84.2	72.3	59.5
Mardie	0.0	0.0	0.0	0.0	0.0
Other	0.5	0.5	0.5	1.7	0.4
Total Revenue	**33.4**	**54.7**	**84.6**	**74.0**	**59.9**

DIRECTORS	%		%
Brian O'Donnell	0.2%	Jenny Bloom	0.0%
Alwyn Vorster	1.3%	Michael Blakiston	0.0%
		Total	**1.5%**

KEY RATIOS	FY18A	FY19A	FY20F	FY21F	FY22F
EBITDA Margin (%)	-43.7%	-4.8%	-10.6%	-4.7%	2.2%
EBIT Margin (%)	-52.6%	-9.6%	-10.7%	-4.8%	1.6%
NPAT Margin (%)	-51.3%	23.8%	-7.8%	-2.5%	2.0%
ROE (%) y/e	-18.7%	-3.0%	-11.4%	-1.1%	-0.4%
ROA (%) y/e	-18.6%	-5.4%	-11.6%	-5.2%	-0.6%
ROIC (%) Av.	-21.8%	-6.5%	-14.5%	-6.8%	-0.9%
NTA per share ($)	0.17	0.20	0.18	0.94	0.94
Eff Tax Rate (%)	0.0%	32.9%	0.0%	0.0%	0.0%
EBIT Interest Cover (x)	NM	NM	nm	nm	nm
Gearing ND/ND+E (%)	(17%)	(48%)	(41%)	(317%)	(48%)
OPCF / EBITDA (%)	83%	237%	143%	171%	416%

VALUATION METRICS	FY18A	FY19A	FY20F	FY21F	FY22F
Dil. Normalised EPS (c)	-3.6	1.3	3.5	0.5	-0.1
Dil. Reported EPS (c)	-4.3	3.2	-2.2	-0.4	-0.1
Dil. Normalised PE (x)	**-5.5**	**15.3**	**5.6**	**42.3**	**-282.9**
Dil. Reported PE (x)	**-4.5**	**6.1**	**-8.9**	**-54.0**	**-282.9**
Enterprise Value ($m)	65	44	50	-226	-52
EV / EBITDA (x)	**-4.5**	**-17.0**	**-5.7**	**66.3**	**-39.9**
EV / EBITA (x)	**-3.7**	**-8.4**	**-5.6**	**65.1**	**-54.3**
EV / EBIT (x)	**-3.7**	**-8.4**	**-5.6**	**65.1**	**-54.3**
Price / NTA (x)	1.2	1.0	1.1	0.2	0.2
DPS (c)	0.0	0.0	0.0	0.0	0.0
Dividend Yield (%)	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**
Franking (%)	0%	0%	0%	0%	0%
Payout Ratio (%)	0%	0%	0%	0%	0%
Free Cash / Share (cps)	-5.6	5.1	(1.6)	(2.7)	-8.6
Price / FCF PS (x)	-3.5	3.8	(12.4)	-7.2	-2.3
Net Debt / EBITDA (x)	0.9	13.0	3.1	89.1	(100.0)

GROWTH PROFILE (YoY)	FY18A	FY19A	FY20F	FY21F	FY22F
Sales ($m)	-49%	64%	55%	-14%	-18%
EBITDA ($m)	-248%	-82%	243%	-62%	-138%
EBIT ($m)	-367%	-70%	72%	-61%	-127%
Adj. NPAT ($m)	-299%	-137%	177%	-60%	-125%
Adj. EPS (c)	-248%	-136%	-176%	87%	-115%
DPS (c)	0%	0%	0%	0%	0%

DCF VALUATION			
PV of Cashflows FY20-29	(550)	Risk Free Rate	5.0%
PV of Term Year Cashflow	1,502	Equity Risk Premium	5.0%
Other	0	Equity Beta (x)	1.10
Net Cash at 1H20A	34	Cost of Equity	10.5%
PV of Equity	1,005	WACC	7.0%
PV of Equity per share	**$ 0.50**	Terminal Growth	2.5%

SUBSTANTIAL HOLDERS	%		%
Wroxby Pty Ltd	29.2%	Sandon Capital	5.5%

Appendix: Royalty Agreements and Potential Annuity Income Streams

BCI has essentially five avenues for recurring earning streams (free carried) outside of Mardie and Iron Valley. Two are significant in size. Whilst the timing of when they commence is uncertain, both are likely to eventuate, in our opinion.

BUCKLAND PROJECT

We believe BCI is likely to start receiving a royalty from Buckland sooner than we forecast

BCI sold its Buckland project to MIN for $20m in 2H20 ($6m upfront and $14m of deferred payments subject to milestones not quantified, we assume first production), plus a 1% royalty stream based on the A$ FOB price. The Buckland project has a mineral resource of 283mt and a mineral reserve of 134mt.

MIN has signalled that it will provide more details in its FY20 results presentation around its proposed West Pilbara iron ore project, which is likely to incorporate the Buckland project.

The Buckland royalty, if received, has the potential to deliver ~$108m of EBIT (without capex) to BCI, assuming only the Reserve (134mt) is mined and sold, see Figure 32.

KOODAIDERI SOUTH

Koodaideri is a big project, but it is hard to know when they mine the ore they acquired from BCI, it could be a long time off

Iron ore tenements were sold to RIO for $32m, plus a 2% FOB revenue royalty in 2011. The tenements contained 106mt of JORC compliant Resource at an average grade of 58.6% at the time of the sale.

RIO is currently spending $2.6bn constructing its Koodaideri processing hub, with a guided production rate of 43mtpa and first production expected in late 2021. RIO have significant other tenements at Koodaideri, and it remains unclear as to when the tenements in question come into production. We assume only ~50% of the resource is mined or 50mt.

With first production at Koodaideri ~18 months away, it is possible that sometime within the next decade, BCI could receive ~$80m in royalty payments (free carried), see Figure 32.

With a royalty rate double and a resource that is ~50% of the size of Buckland, the Koodaideri South royalty is very similar to the Buckland one, with the iron ore price at the time of production the determinant of how big the royalty is.

BUCKLAND AND KOODAIDERI SOUTH ROYALTY ESTIMATES

No value has been ascribed to potential iron ore royalties in the share price. Each of the two main royalty options could generate ~$100m of EBITDA to BCI – they are material

We run a DCF valuation on both these royalties, as we believe both deposits are likely to be mined, the timing is very uncertain though. We run the following assumptions in our DCF:

- The assumed iron ore price is US$70/t, with an FX of $0.70 and a grade discount of 20%, resulting in an A$80/t FOB price assumption; and
- We assume MIN places a Nextgen plant at Buckland, with a production rate of 15mtpa.

Figure 32: Potential royalty stream DCF valuation

	Units	FY27F	FY28F	FY29F	FY30F	FY31F	FY32F	FY33F	FY34F	FY35F	Total
Tonnes Sold											
Koodaideri	mt				8.3	8.3	8.3	8.3	8.3	8.3	**50.0**
Buckland	mt	15.0	15.0	15.0	15.0	15.0	15.0	15.0	15.0	15.0	**135**
Total Tonnes	**mt**	**15.0**	**15.0**	**15.0**	**23.3**	**23.3**	**23.3**	**23.3**	**23.3**	**23.3**	**185.0**
Price (Benchmark)	US$/t FOB	70	70	70	70	70	70	70	70	70	
FX	A$: US$	0.70	0.70	0.70	0.70	0.70	0.70	0.70	0.70	0.70	
Grade Discount	%	20%	20%	20%	20%	20%	20%	20%	20%	20%	
Iron ore price	A$/t	80	80	80	80	80	80	80	80	80	
Revenue to seller											
Koodaideri	$m	0	0	0	666	666	666	666	666	666	
Buckland	$m	1,200	1,200	1,200	1,200	1,200	1,200	1,200	1,200	1,200	
Royalty Rate											
Koodaideri	%	2%	2%	2%	2%	2%	2%	2%	2%	2%	
Buckland	%	1%	1%	1%	1%	1%	1%	1%	1%	1%	
EBIT to BCI											
Koodaideri	$m	0.0	0.0	0.0	13.3	13.3	13.3	13.3	13.3	13.3	**80.0**
Buckland	$m	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	**108.0**
Deferred Payments	$m	14.0									**14.0**
Total EBIT	**$m**	**26**	**12**	**12**	**25**	**25**	**25**	**25**	**25**	**25**	**202**
Time to mid-point of year		6.4	7.4	8.4	9.4	10.4	11.4	12.4	13.4	14.4	
Discount Factor		0.54	0.49	0.45	0.41	0.37	0.34	0.31	0.28	0.25	
PV of Cashflows		**14.1**	**5.9**	**5.4**	**10.3**	**9.4**	**8.5**	**7.7**	**7.0**	**6.4**	**74.8**
Risk Discount											75%
Included in BCI valuation											**18.7**

Source: PAC Partners estimates

In total, we estimate that the two royalty streams could generate ~$200m of EBIT. We highlight that production rates and start dates are estimates only and they could be materially off the mark. It is likely that Buckland is developed before Koodaideri South.

Figure 32 calculates an un-risked valuation of $75m. Pushing start dates out or production rates would lower the DCF, hence we risk weight it 75% (only include 25%) of the value in our valuation. This results in a valuation of $19m to BCI, which we incorporate into our overall DCF valuation of BCI. Buckland is located ~200km from the Mardie project and could well be the iron ore project that shares the port, implying a possible earlier start than FY30.

NULLAGINE

In October 2016, BCI sold its 75% interest in the Nullagine JV to Fortescue (FMG). The royalty agreement is complicated. For each tonne shipped, FMG will pay:

- 1.0 – 2.0% FOB revenue royalty for iron ore >55% Fe or $0.50-$1.50/t for <55% Fe for the first 15mt;
- A 50% royalty reduction applies for tonnes mined above 15mt and a 75% discount for all tonnes mined above 25mt; and
- FMG will only pay 33% of the royalty to BCI until an amount equating to $7.5m has been withheld.

FMG has not restarted Nullagine nor has it signalled any intent to do so. We believe the chances of BCI receiving a royalty from Nullagine is very low.

KUMINA

MIN is expected to give an update on its West Pilbara iron ore expansion plans at the FY20 result. Kumina is likely to be part of that project

Whilst not a royalty per say, BCI is entitled to a $4m payment 12 months after first production. The tenement is owned by MIN. In our modelling for MIN, we forecast first tonnes sold from Kumina in FY22, hence we include the $4m payment (as one-off profit) in FY23 for BCI.

NORTH MARILLANA

These tenements were sold to Maiden Iron Pty Ltd (now Australian Aboriginal Mining Corporation) in September 2013 for $2.5m upfront and $5.3m upon meeting development milestones, with a 2.5% revenue royalty (based on the A$ FOB price).

As the name suggests, these tenements are located near Brockmans Marillana deposit which is currently in a 50/50 JV with MIN and under consideration for development. This appears the most logical route to market for this tenement. More information on the development of Marillana is expected to be announced by MIN at its FY20 result.

The Resource is 15.6mt at 54.0% Fe. Due to uncertainty of development, low grade and likely lead time to production even if Marillana was developed by MIN, we do not factor any value from this potential royalty stream into our valuation.

PORT OPERATIONS IN THE WEST PILBARA REGION

Having an operating port in the Pilbara is a very valuable and strategic asset. We expect interest will be received from a third party

Once salt operations commence, BCI will own a bulk material handling port, running at 4.5mtpa from its own operations, via trans-shipping. It remains a possibility that iron ore (there are numerous stranded deposits in the vicinity) could be also shipped over this berth, assuming it could be expanded a capacity of 20mtpa. BCI could earn a recovery on its capex spend to build the jetty, or a reduction in capex as the cost of the port construction is shared.

No details of any arrangements have been announced; hence we do not factor this potential income stream or capex reduction into our forecasts.

CARNEGIE SOP PROJECT

BCI has another asset that could potentially be sold, or developed much further down the track. We ascribe no value to it in our valuation. The asset is a 30% holding of the Carnegie Potash project, in JV with Kallium Lakes (KLL). This project is recorded on the books at a $1.7m valuation. BCI can go to 50% ownership if they fund the PFS and DFS study phases. Additional tenements are being secured. With a Resource size of 0.39mt, further exploration is required. The Carnegie project is still very early stage and we do not expect much news flow until Mardie is well advanced.

CONTACT INFORMATION

CORPORATE FINANCE		RESEARCH		DEALING	
BROOKE PICKEN *Chief Operating Officer* bpicken@pacpartners.com.au	03 9114 7402	**CRAIG STRANGER** *Managing Director* cstranger@pacpartners.com.au	03 9114 7405	**JAMES WILSON** *Executive Director, Institutional Sales,– Sydney* jwilson@pacpartners.com.au	02 9134 9111
SEAN KENNEDY *Corporate Finance* skennedy@pacpartners.com.au	03 9114 7403	**PAUL JENSZ** *Executive Director, Research* pjensz@pacpartners.com.au	03 9114 7444	**PHIL CAWOOD** *Institutional Sales – Sydney* pcawood@pacpartners.com.au	02 9134 9122
ANTHONY STANI *Corporate Finance* astani@pacpartners.com.au	03 9114 7401	**HEATH ANDREWS** *Senior Analyst* handrews@pacpartners.com.au	03 9114 7415	**MARK PASHLEY** *Head of Sale Trading – Sydney* mpashley@pacpartners.com.au	02 9134 9177
CHARLES REED *Corporate Finance* creed@pacpartners.com.au	03 9114 7406	**MARK YARWOOD** *Senior Analyst* myarwood@pacpartners.com.au	02 9134 9188	**SEBASTIAN JURD** *Senior Advisor – Sydney* sjurd@pacpartners.com.au	02 9134 9155
DAVINA GUNN *Corporate Finance* dgunn@pacpartners.com.au	03 9114 7408	**PHIL CARTER** *Analyst* pcarter@pacpartners.com.au	0400 252 465	**RYAN GALE** *Advisor – Melbourne* rgale@pacpartners.com.au	03 9114 7404
JAMES EMONSON *Corporate Finance* jemonson@pacpartners.com.au	03 9114 7407	**ALEX SMITH** *Analyst* asmith@pacpartners.com.au	03 9114 7408	**TOM FAIRCHILD** *Corporate Sales – Melbourne* tfairchild@pacpartners.com.au	03 9114 7409
ANDREW SHEARER *Technical Consultant* ashearer@pacpartners.com.au	04 1172 0516	**TOM WAITE** *Junior Analyst* twaite@pacpartners.com.au	03 9114 7400	**IAN LEETE** *Corporate Sales – Sydney* ileete@pacpartners.com.au	02 9134 9144
				DANIEL GADALLA *Operator – Melbourne* dgadalla@pacpartners.com.au	03 9114 7400

SYDNEY
Kyle House, 27 – 31 Macquarie Place, Sydney
+61 2 9233 9600

MELBOURNE (Head Office)
Level 10, 330 Collins Street, Melbourne
+61 3 8633 9831

Hong Kong
Upper Ground Floor, 148 Queens Road Central
+0011 852 041169 7866

RECOMMENDATION CRITERIA

Investment View
PAC Partners Investment View is based on an absolute 1-year total return equal to capital appreciation plus yield.

A Speculative recommendation is when a company has limited experience from which to derive a fundamental investment view.

Buy	Hold	Sell
>20%	20% – 5%	<5%

Risk Rating
PAC Partners has a four tier Risk Rating System consisting of: Very High, High, Medium and Low. The Risk Rating is a subjective rating based on: Management Track Record, Forecasting Risk, Industry Risk and Financial Risk including cash flow analysis.

Disclosure of Economic Interests
The views expressed in this research report accurately reflect the personal views of Heath Andrews about the subject issuer and its securities. No part of the analyst's compensation was, is or will be directly or indirectly related to any recommendation or view expressed in this report.

The author or PAC Partners do not Hold an economic interest in the securities covered in this report or other securities issued by the subject issuer which may influence this report:

Disclaimer
PAC Partners Securities Pty Ltd. ("**PAC Partners**", "**PAC**" or "**PPS"**) is a Corporate Authorised Representative of PAC Asset Management Pty Ltd holder of an Australian Financial Services Licence (AFSL No. 335 374).

The information contained in this report is provided by PAC Partners to Wholesale Investors only. **Retail investor and third party recipients should not rely, directly or indirectly, on this report.** Users of this research report should not act on any content or recommendation without first seeking professional advice. Whilst the report has been prepared with all reasonable care from sources which we believe are reliable, no responsibility or liability is accepted by PAC Partners, for any errors or omissions or misstatements however caused. Any opinions, forecasts or recommendations reflect our judgement and assumptions at the date of publication or broadcast and may change without notice. This report is not and should not be construed as an offer to sell or the solicitation of an offer to purchase or subscribe for any investment. This publication contains general securities advice. In preparing our Content it is not possible to take into consideration the investment objectives, financial situation or particular needs of any individual user. Access of this report does not create a client relationship between PAC Partners and the user. Before making an investment decision on the basis of this advice, you need to consider, with or without the assistance of a securities adviser, whether the advice in this publication is appropriate in light of your particular investment needs, objectives and financial situation. PAC and its associates within the meaning of the Corporations Act may hold securities in the companies referred to in this publication. PAC believes that the advice and information herein is accurate and reliable, but no warranties of accuracy, reliability or completeness are given (except insofar as liability under any statute cannot be excluded). No responsibility for any errors or omissions or any negligence is accepted by PAC or any of its directors, employees or agents. Any content is not for public circulation or reproduction, whether in whole or in part and is not to be disclosed to any person other than the intended user, without the prior written consent of PAC Partners.

Disclosure of Corporate Involvement

PAC Partners does not own securities of the Company described in this report. PAC Partners associates do not own securities of the Company described in this report. PAC Partners does and seeks to do business with companies covered in the research. PAC may receive commissions

from dealing in securities associated with the Company. As a result, investors should be aware that PAC Partners may have a conflict of interest that could affect the objectivity of this report.

For more information about PAC Partners please visit www.pacpartners.com.au