MARDIE SALT PROJECT – POSITIVE SCOPING STUDY

Cautionary Statement

The Scoping Study referred to in this announcement has been undertaken to assess the potential technical and economic viability of the Mardie Salt Project and assist BCI in determining whether to proceed with a Pre-Feasibility Study. The Scoping Study is a preliminary study based on low level technical and economic assessments. Further evaluation work and appropriate studies are required before BCI will be in a position to provide any assurance of an economic development case.

The Mardie Salt Project is proposing to produce salt from seawater. The JORC Code is not applicable to such a project and accordingly mineral resources are not reported in the Scoping Study. However, the input resource (seawater from the ocean) is abundant, has a known chemical composition and contains sufficient salt to support the range of production outcomes indicated in the Scoping Study. The estimated production rate for the Mardie Salt Project has been independently verified by CQG Consulting, an independent consulting firm with significant experience in operations that produce salt from seawater.

The Scoping Study is based on the material assumptions outlined below. These include assumptions about the availability of funding. While BCI considers all of the material assumptions to be based on reasonable grounds, there is no certainty that they will prove to be correct or that the range of outcomes indicated by the Scoping Study will be achieved.

To achieve the range of production outcomes indicated in the Scoping Study, funding in the order of A$225-255M will likely be required in the Cape Preston East Port case, or A$305-345M in the Mardie Port case. Investors should note that there is no certainty that BCI will be able to raise that amount of funding when needed. It is also possible that such funding may only be available on terms that may be dilutive to or otherwise affect the value of BCI's existing shares.

It is also possible that BCI could pursue other 'value realisation' strategies such as a sale, partial sale or joint venture of the project. If it does, this could materially reduce BCI's proportionate ownership of the project.

Given the uncertainties involved, investors should not make any investment decisions based solely on the results of the Scoping Study.

BC Iron Limited ("BCI" or the "Company") is pleased to announce the results of a positive scoping study on its 100%-owned Mardie Salt Project in the Pilbara region, Western Australia.

SCOPING STUDY SUMMARY

Key points:

- Positive Scoping Study demonstrates the potential technical and economic viability of the Mardie Salt Project;
- Mardie's physical location and natural site attributes support the potential production of 3.0 to 3.5 million tonnes per annum ("Mtpa") of high-purity industrial grade salt targeting sales to primarily the chlor-alkali industry;
- Located within trucking distance of Mardie, BCI's proposed Cape Preston East transhipment port is being configured to accommodate the export of salt and mineral concentrates, strengthening its business case as a multi-user, multi-commodity port facility;
- Potential project economics include the following over 20-years: capital cost of A$225-255M; operating cost of A$19-21/t FOB; average revenue of approximately A$45/t FOB; pre-tax NPV_{10} of A$290-380M; pre-tax IRR 25-27%; payback period of 5 years;
- Mardie is set to produce salt from seawater and could potentially operate indefinitely with an appropriate sustaining capital model;
- BCI to proceed with a Pre-Feasibility Study ("PFS") on Mardie, targeting completion by end of 2017;
- Subject to PFS results, BCI may consider partnerships for the funding and development of Mardie.

BCI's 100% owned Mardie Salt Project is a potential sodium chloride ("NaCl") salt production project located between Dampier and Onslow in the north-west of Western Australia.

The Mardie Salt Project is favourably located in Australia's major solar salt producing region and presents the key prerequisites for production of salt from solar evaporation, being: (1) access to natural channels feeding a brine source (seawater) to the project area; (2) a hot dry and/or windy climate with a predictable dry season; and (3) an area of flat land with low permeability that is suitable for the construction of evaporation ponds.

BCI has completed a positive Scoping Study on the Mardie Salt Project, which envisages development of a 3.0-3.5Mtpa operation producing high purity industrial-grade sodium chloride salt from seawater via a solar evaporation, crystallisation and raw salt purification.

The Scoping Study is based on the export of salt via BCI's proposed Cape Preston East transhipment port facility ("CPE Port"), which is located approximately 50km directly north-east and is proposed to be connected to the Mardie site by a 70km private heavy haulage road.

Key metrics from the Scoping Study are set out below, highlighting the financial robustness of the Mardie Salt Project.

Table 1: Summary of Financial Results

Item	3.0Mtpa Rate	3.5Mtpa Rate
Production Rate	3.0Mtpa	3.5Mtpa
Capital Cost	A$225M	A$255M
Operating Costs	A$21/t FOB	A$19/t FOB
Mine Life	20 years	
Product Price	US$34/t FOB	
Exchange Rate	0.75 USD per AUD	
Pre-tax NPV_{10}	A$290M	A$380M
Pre-tax IRR	25%	27%
Pre-tax Payback	5 years	5 years

The Scoping Study also examined an alternative development scenario in which a dedicated transhipment port is constructed at the Mardie site, with key metrics shown below.

Table 2: Summary of Financial Results – Alternative Case

Item	3.0Mtpa Rate	3.5Mtpa Rate
Production	3.0Mtpa	3.5Mtpa
Capital Cost	A$305M	A$345M
Operating Costs	A$19/t FOB	A$17/t FOB
Mine Life	20 years	
Product Price	US$34/t FOB	
Exchange Rate	0.75 USD per AUD	
Pre-tax NPV_{10}	A$265M	A$350M
Pre-tax IRR	21%	23%
Pre-tax Payback	6 years	6 years

While the financial results are based on a 20-year operation, the Mardie Salt Project is planning to produce salt from seawater and could potentially operate indefinitely with an appropriate sustaining capital model.

The Scoping Study was prepared by BCI in conjunction with leading industry consultants and specialists including CQG Consulting, PDC Engineering, Inceptioneer, DSB International, Roskill and Braemar ACM Shipbroking.

Based on the results of the Scoping Study, BCI has resolved to proceed with a PFS, which is anticipated to be completed by the end of 2017. Following completion of the PFS, BCI intends to consider partnership options for the funding and development of the Mardie Salt Project.

BCI Managing Director Alwyn Vorster said, *"The Mardie Scoping Study is another positive step towards realising BCI's broader strategy of developing a diversified minerals portfolio. Importantly, the development plan for Mardie envisages using BCI's proposed Cape Preston East Port, strengthening its potential to become a multi-user, multi-commodity export facility. Mardie's economics appear robust at this early stage, and BCI aims to refine cost estimates and financial assumptions over the next few months as part of the PFS. In addition to the diversification into the potash industry, the Mardie Salt Project could further support BCI's mission of 'maintaining a strong position in iron ore, creating a presence in gold and base metals, and becoming a leading Australian player in the agricultural & industrial minerals industry'."*

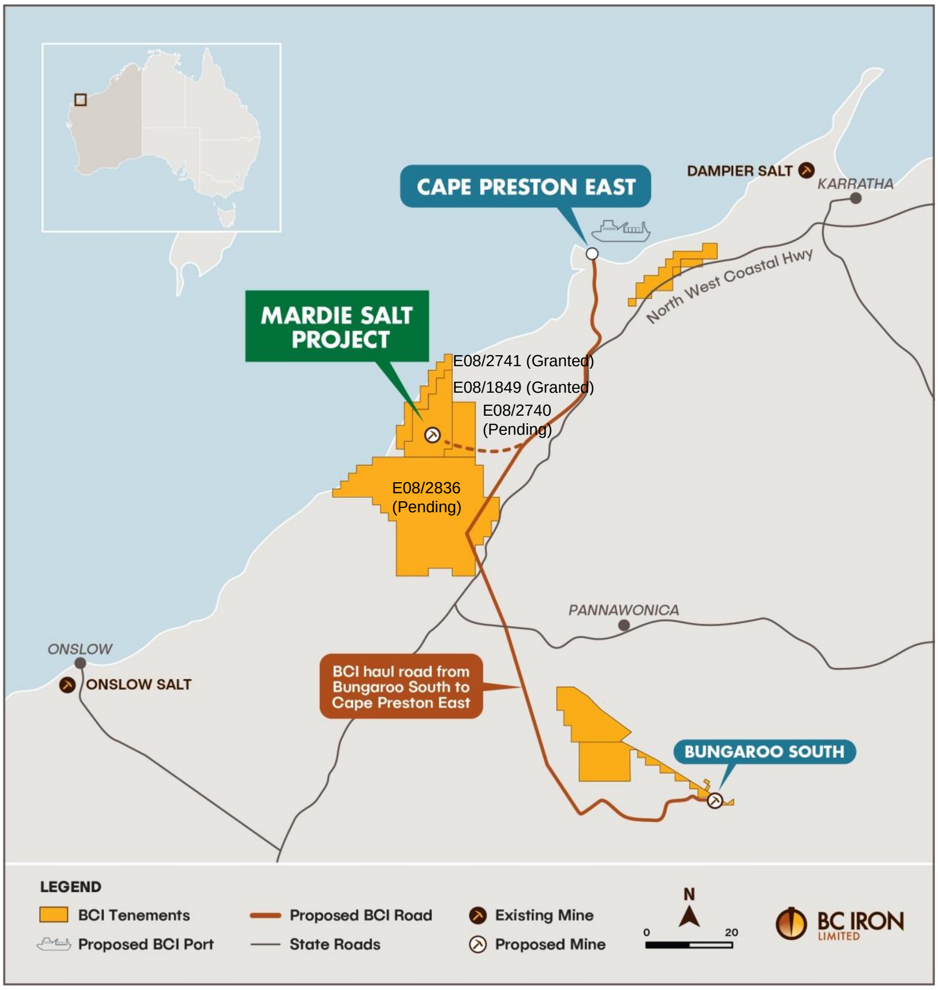
SCOPING STUDY DETAILS

Mardie Site Considerations

Location and Tenure

The Mardie Salt Project is located between Dampier and Onslow in the north-west of Western Australia, in Australia's major solar salt production and export region. Five existing salt operations with a total capacity of approximately 14Mtpa are located in the region, with Dampier Salt approximately 95km north-east and Onslow Salt approximately 90km south-west of Mardie. In addition, the world's largest salt producer, K+S, is conducting studies on a potential 3.5Mtpa operation located near Exmouth.

Figure 1: Mardie Salt Project Location



The Mardie Salt Project comprises two granted and two pending exploration licences which cover a total area of 832 square kilometres. Granted exploration licences, E08/1849 and E08/2741, cover 25 kilometres of coastline and include over 80 square kilometres of exceptionally flat mudflat terrain behind the coastal mangroves which is favourable for solar salt production ponds. Pending exploration licences, E08/2740 and E08/2836, cover the area to the south and east of the coastal tenements and are useful for access, infrastructure and construction materials.

The Scoping Study assumes the exploration licences will be converted into appropriate tenure to allow operations to occur and all required approvals, permits and licences will be secured. The basis for this assumption is the existence of multiple similar existing salt operations near the Mardie Salt Project.

BCI's proposed CPE Port, which BCI is positioning as a multi-commodity, multi-user export facility, is located approximately 50km north-east (70km by road).

Native Title

Native Title Land Access Deeds have been secured by BCI with the two native title claimant groups that have claims registered over the project area, the Kuruma Marthudunera and Yaburara & Coastal Mardudhunera groups. The deeds provide consent for BCI's exploration, mining and infrastructure activities on all BCI tenements in the respective claim areas, including the Mardie tenements. The deeds include milestone payments and ongoing production payments.

Environmental

Environmental approvals and potentially significant project risks have been mapped and further work is proposed in the PFS phase. Comprehensive environmental studies are planned including vegetation, acid sulphate soils and algal mat surveys.

The key risk of impacting tropical arid zone mangroves has been addressed in the proposed evaporation pond layout by (1) avoiding areas listed as important by the Environmental Protection Authority and (2) situating the western pond walls up to 2km inland from the coast, thereby preserving the majority of the mangroves and their habitats.

The proposed evaporation pond layout also provides east-west channels for storm surface water flow to travel to the ocean following the larger of the natural creek lines.

Marine parks and conservation areas lie offshore with the closest nature reserves being 15km from the coast within the project tenements. The proposed use of BCI's CPE Port eliminates the need to establish a new dedicated port, greatly reducing the Mardie Salt Project's marine environmental impact.

Weather and Climate

The Mardie site has a hot dry and windy climate with a predictable dry season, one of the key prerequisites to production of salt from solar evaporation.

The regional climate is classed by the Bureau of Meteorology as 'Grassland' characterised by hot weather year-round with a summer drought. The key climatic considerations for a solar evaporation project are rainfall and evaporation rates, net evaporation and seasonal fluctuations.

The Scoping Study is based on weather data from the Bureau of Meteorology recorded at the nearest meteorological station, which is located at the Mardie Station homestead on the eastern site boundary. Data has been collected at the Mardie Station homestead for over 100 years with the latest 60 years of data incorporated in the Scoping Study (1957 to 2017). Weather stations at Dampier Salt (71.2km north-east) and Learmonth (239.9km south-west) measure freshwater evaporation in a Class A pan Evaporimeter and an average of the two sites over the period 1975 to 2016 has been used in the Scoping Study. The relationship between freshwater evaporation in a Class A Pan and seawater evaporation in very large ponds over a range of densities is well understood and an estimate of this relationship has been utilised.

Table 3: Mardie Assumed Evaporation and Rainfall Data

Month	Days	Dampier Salt (mm/day)	Learmonth (mm/day)	Mardie Assumed Evaporation (mm/day)	Mardie Assumed Evaporation (mm/month)	Mardie Rainfall (mm/month)
January	31	10.9	12.4	11.7	362.7	38.3
February	28	10.1	11.2	10.7	299.6	62.1
March	31	10.1	10.1	10.1	313.1	49.4
April	30	9.1	7.9	8.5	255.0	19.8
May	31	7.1	5.6	6.4	198.4	36.6
June	30	5.9	4.1	5.0	150.0	38.2
July	31	6.2	4.3	5.3	164.3	13.2
August	31	7.2	5.7	6.5	201.5	7.3
September	30	9.0	7.9	8.5	255.0	1.4
October	31	10.8	10.2	10.5	325.5	0.9
November	30	11.8	11.4	11.6	348.0	1.5
December	31	11.8	12.4	12.1	375.1	9.0
Annual	365	9.2	8.6	8.9	3,248.2	277.7

Geology

As salt is proposed to be produced from seawater, site geology does not impact mineralisation and therefore the JORC Code is not applicable to solar salt projects. The scoping study refers to estimated annual production rates based on available area, climatic conditions and the known chemical composition of the ocean.

Geology and terrain is, however, important for understanding the suitability of the site for the construction of concentration and evaporation ponds.

As noted above, the Mardie tenements include areas of exceptionally flat mudflat terrain behind the coastal mangroves. In 2016, ConSalt completed laboratory testwork on ten surface soil samples extracted across the leases. Nine of these samples identified fine surface material with low hydraulic permeability (8 x 10^{-8} metres per second or less) and ConSalt concluded that the earth material in relevant areas is suitable for the formation of evaporation ponds with low permeability or leakage rates.

Figure 2: Existing Mardie Salt Pans

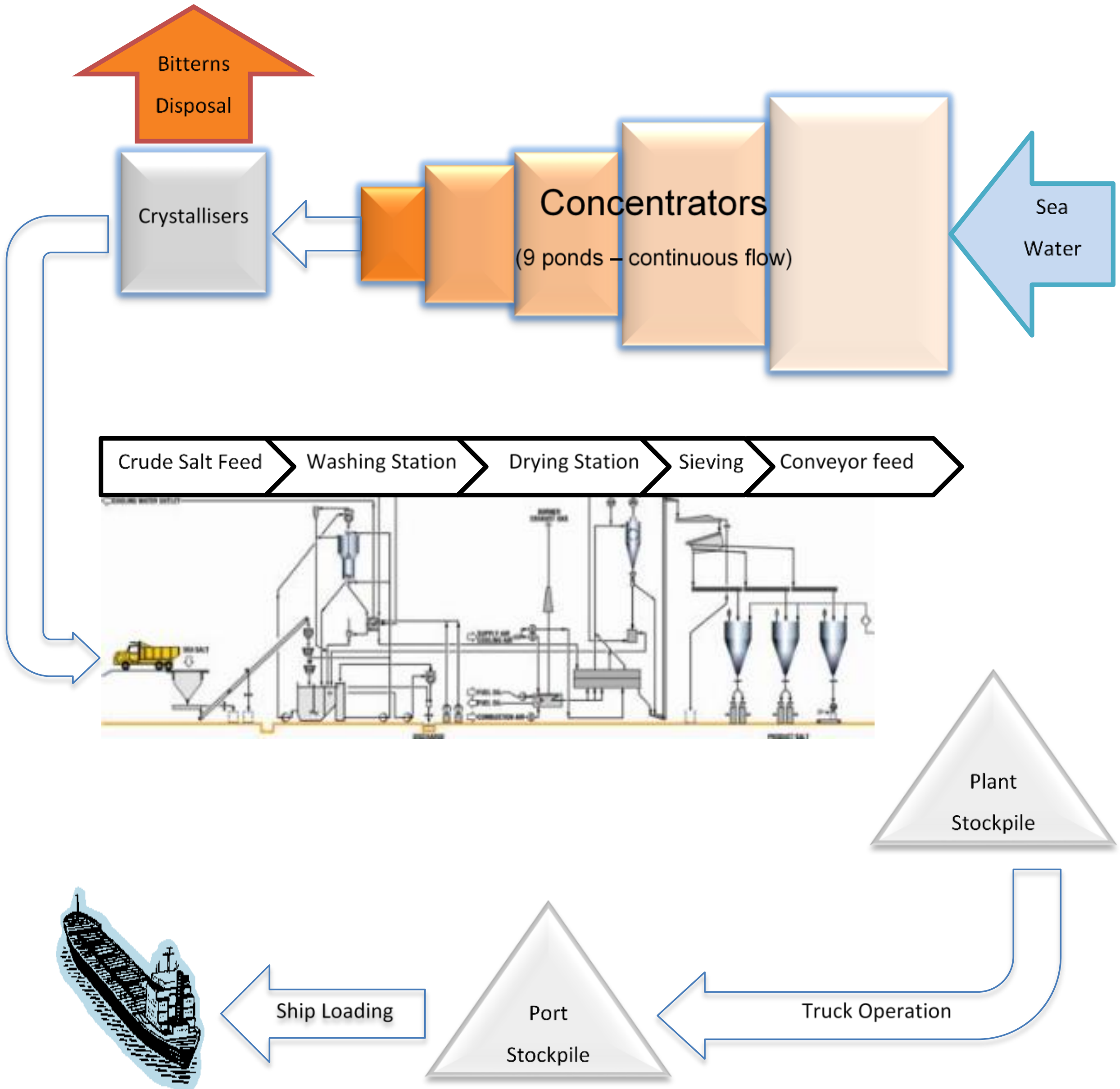
BCI has procured LiDAR topographical data with a stated accuracy of +/- 0.25m covering the Mardie site. This indicates the mudflat areas typically lie between 1.5m and 2.0m Australian Height Datum ("AHD") with minimal gradients (down to 0.02%). The evaporation pond layout has been developed using the LiDAR information and selecting a pond surface level of 3.0m AHD.

Site visual inspections have identified potential borrow material on leases suitable for pond wall construction. Further work on the identification of suitable construction materials is planned as part of the PFS.

Salt Production

The Mardie Salt Project will produce industrial grade salt suitable for the chlor-alkali market from seawater via a well proven process, which is shown in the simplified flowsheet below.

Figure 3: Proposed Simplified Flowsheet



Estimated Production Rate

The estimated production rate for the Mardie Salt Project is 3.0-3.5Mtpa.

BCI utilised a salt production modelling methodology developed by PDC Engineering and DSB International to estimate the likely production rate for the Mardie Salt Project based on:

- Prevailing ocean salinity of 35 grams per litre;
- Historic rainfall and evaporation data;
- The results of permeability testwork undertaken by ConSalt on Mardie soil samples;
- The proposed evaporation pond layout;
- Expected processing losses from the proposed purification method; and
- Typical transport losses.

The production rate allows for total processing and transport losses of between 7% and 20%. The losses will vary for a range of controllable and uncontrollable inputs including extreme weather conditions, pond losses, harvest losses, non-optimum operation scenarios, equipment and process equipment selections, accidents and contamination.

BCI engaged CQG Consulting to independently verify the estimated production rate for the Mardie Salt Project. CQG Consulting determined that BCI's estimated production rate is reasonable following its own modelling based on the information contained in the Scoping Study and benchmarking of similar Western Australian operations. In relation to benchmarking, CQG Consulting used a field ratio (ratio of concentrator pond area to crystalliser pond area) of 8.6:1 for the Mardie Salt Project, which is conservative when compared to operating Western Australian solar salt fields where pond floors are established and operating history is proven.

The information in this Scoping Study that relates to the assessment of the estimated production rate for the Mardie Salt Project is based on, and fairly represents, information and supporting documentation which has been prepared by Mr Andrew Brown who is a Member of the Australasian Institute of Mining and Metallurgy and a full time employee of CQG Consulting. Whilst the JORC Code is not applicable to the Mardie Salt Project, Mr Brown has sufficient experience that is relevant to the type of operation that is being considered and to the activity that is being undertaken to otherwise qualify as a Competent Person as defined in the JORC Code. Mr Brown consents to the inclusion in this report of the matters based on his information in the form and context in which they appear.

Seawater and Seawater Intake

The Scoping Study is based on a prevailing ocean salinity of 35 grams per litre, being a widely-supported figure and consistent with values published by Baseggio in "The Composition of Seawater and Its Concentrates" (1974).

The Scoping Study assumes seawater is sourced from an existing tidal creek located on granted exploration licence E08/2741. A fixed pump station will be installed in the mouth of the tidal creek and pump seawater approximately 800m into a settling pond. The settling pond will remove suspended solids from the seawater before it enters concentration pond 1.

Figure 4: Tidal Creek and Proposed Pump Station Location

Evaporation Ponds

Conceptual concentrator and crystalliser pond designs are based on accurate contour (LIDAR data), historical evaporation and rainfall data, the results of soil permeability testwork completed by ConSalt, and sequential pond continuous flow theory. BCI developed the pond layouts using 3D software with support from PDC Engineering and DSB International, an expert in solar pond design and sequential pond theory. The applied theory considers optimum evaporation performance and biological control of the pond system through control of the step change in density between sequential ponds.

Evaporation ponds are proposed to be constructed on the mudflats by grading clay material from the surface and importation of general fill and stone protection to form the bund walls. The area considered suitable for solar ponds is between 1m and 2m AHD with pond surfaces at a nominal 3m AHD. Small sand mounds surrounded by mudflats are expected to have underlying mud layers which will limit losses. The mounds will be left in-situ and partly submerged with the reduction of evaporation area accounted. Local clays will be used in-situ for the pond bases.

The conceptual pond layout is shown in Figure 5. A configuration of nine concentrator ponds utilising the continuous flow methodology has been adopted for the Scoping Study. Ponds are staged in series with progressively smaller areas as the salt concentration rises. The concentrator ponds are operated continuously, with the flows between ponds increased or decreased based on density or magnesium content in each pond. The concentrator ponds concentrate the brine close to the NaCl saturation point.

Figure 5: Proposed Evaporation Pond Layout

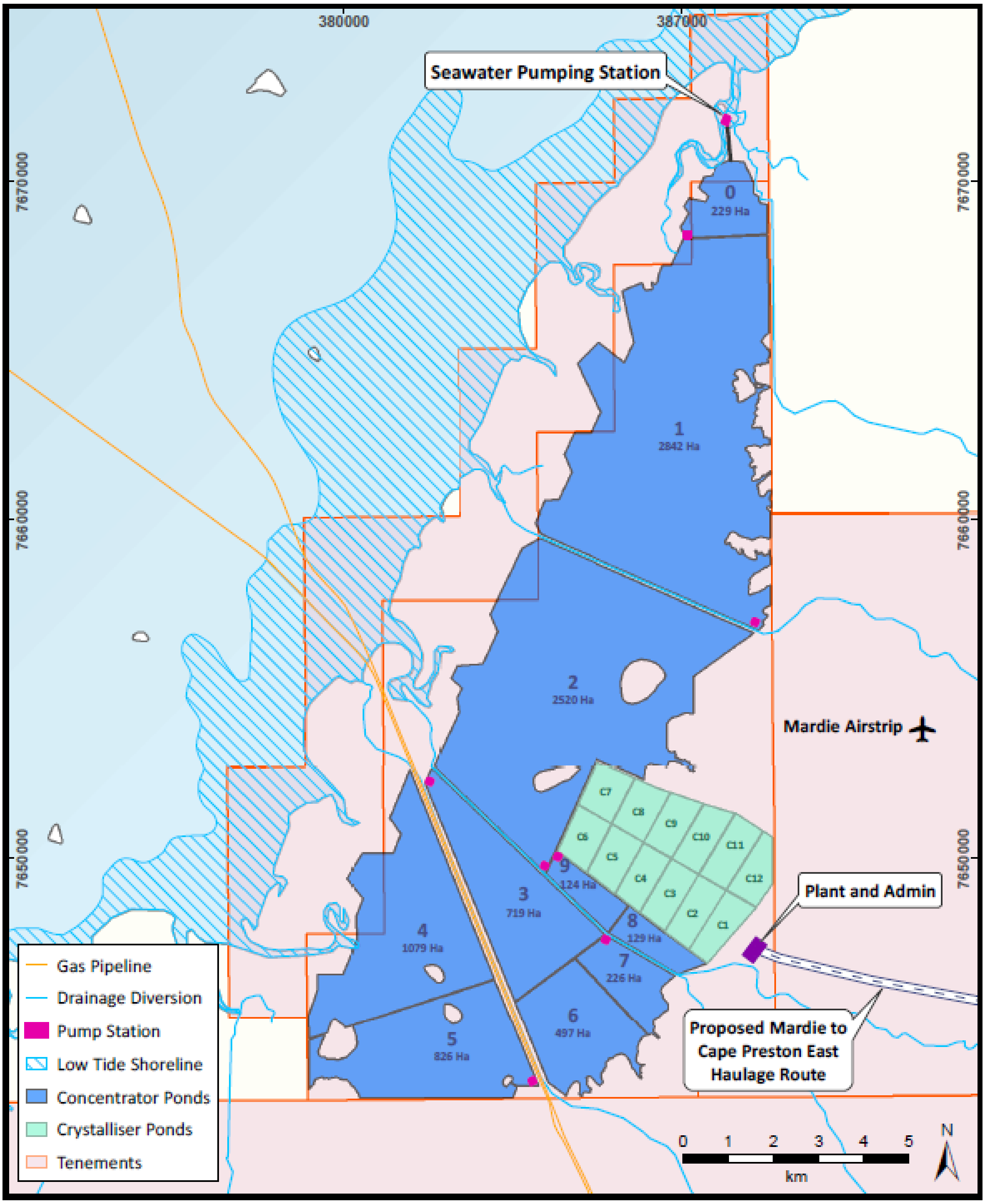


Table 4 below sets out the estimated concentrator pond sizes, average solution density and material balance. The modelling considers the evaporation rate at a specific density, derating factor for large pond areas and losses through leakage to ultimately estimate production of between 3.0Mtpa and 3.5Mtpa of saleable product.

Table 4: Concentrator Ponds Mass Balance

Pond	Starting Brine				Seepage Losses		Water Evaporation
	Density	Volume	NaCl	Pond Size	Total	NaCl	
	g/cm^3	10^6.m^3/year	10^6.t /year	(ha)	10^6.m^3/year	10^6.t /year	10^6.m^3/year
Concentrator 0/1	1.025	180.000	5.535	3071	0.860	0.038	53.943
Concentrator 2	1.036	125.197	5.497	2517	0.705	0.049	46.162
Concentrator 3	1.057	78.330	5.448	719	0.201	0.017	12.648
Concentrator 4	1.068	65.481	5.432	1078	0.302	0.035	18.543
Concentrator 5	1.095	46.636	5.397	826	0.231	0.038	13.417
Concentrator 6	1.133	32.988	5.359	497	0.139	0.029	7.392
Concentrator 7	1.172	25.456	5.330	226	0.063	0.015	3.051
Concentrator 8	1.196	22.343	5.315	129	0.036	0.009	1.634
Concentrator 9	1.211	20.673	5.306	124	0.035	0.010	1.502

Concentrated brine is transferred from the final concentrator pond into the crystallisers at a density of approximately 1.211 g/cm^3. The concentration process continues in the crystalliser ponds until NaCl crystallises and precipitates at approximately 1.228 g/cm^3. The remaining 'bitterns' solution is then removed from the crystallisers.

The Scoping Study assumes twelve crystalliser ponds with very flat floors to achieve uniform water depth. The crystalliser ponds are operated in batch mode, with each pond cycled 1 to 1.5 times per annum as follows; flood the pond with concentrated brine, maintain level, evaporate to peak concentration, drain bitterns solution via grading, trenches and pumps. The surface is then allowed to dry before the salt is mechanically harvested and trucked to the purification plant for processing. A permanent salt "floor" nominally 300mm thick will be built up by evaporation prior to commencement of harvesting and is expected to consume 12 months of salt crystallisation.

Optimisation of the evaporation pond layout will continue as future studies report on construction materials, construction methodology and costs, surface hydrology flood routing and process performance. The area and layout of the ponds has also been benchmarked against similar operations in Western Australia.

Salt Harvesting

The Scoping Study assumes a dry harvesting method using a dedicated harvester that runs along the top of the crust cutting into the floor and conveying the harvested salt into a truck running alongside the harvester. The Scoping Study assumes three mechanical harvesters and nine B-Double trucks operating day shift only.

Figure 6: Typical Salt Harvesting Method

Processing

At the purification plant, trucks bottom discharge raw salt either directly into the feed system for the process plant or the intermediate (~12 hour) stockpile. Raw salt is reclaimed from the intermediate stockpile using a front-end loader when the harvesters are offline.

The Scoping Study assumes raw salt is cleaned in a purification plant utilising the Hydrosal-XP process developed by Swiss salt consultancy and engineering company, Salt-Partners. This process is expected to reduce total processing and transport losses to 7% compared to 20% for a traditional salt washing process and deliver a higher purity product.

Processing requires brine input, fresh water input and a series of small ponds to supply and receive the flows. Plant operation is assumed to be 24 hours per day.

Following processing, purified wet salt is conveyed to a stacking system and accumulated in stockpiles with a total capacity of around 1.0-1.5Mt. The salt stockpiles drain over several months bringing the product moisture and chemical content into specification for shipment.

Transport and Shipping

The Scoping Study is based on exporting of salt from BCI's proposed CPE Port, located approximately 70km to the north-east of the proposed site product stockpile by a proposed private haul road. Dry purified salt product is assumed to be loaded onto road trains and transported to the CPE Port.

Iron ore infrastructure at the CPE Port is proposed to contain shore stockyards, a 1.4km loadout jetty, loadout conveyor and shiploader. Iron ore would be transhipped to large Capesize vessels anchored in deep water approximately 17km from the shiploader. The Scoping Study assumes this infrastructure is in place and that the Mardie Salt Project only incurs incremental capital costs. The Scoping Study assumes a dedicated salt shore stockyard, loadout conveyor and shiploader would be constructed to minimise contamination of salt products. Salt transhipment vessels would operate in shallower water than the iron ore transhipment vessels, allowing the salt shiploader to be positioned approximately at

1km or 70% of the length of the loadout jetty, resulting in separation between the products and transhipment vessels. Salt would be transhipped to Panamax or small Capesize vessels in the CPE Port's designated shallow loading area approximately 7km from the shiploader.

Site Infrastructure

A significant amount of existing infrastructure is located close to the Mardie Salt Project, including:

- Northwest Coastal Highway;
- Gas pipelines crossing from off-shore production facilities to onshore compression stations;
- Mardie Station – Outcamp – 5km;
- Mardie Station – Homestead – 10km;
- Mardie Station airfield, an unsealed landing strip suitable for turbo-prop planes;
- Fortescue Roadhouse – service station and Fortescue River Village camp – 25km;
- Small boat launching ramp at Fortescue river mouth – 35km along the coastline north east;
- Mobile phone coverage;
- Karratha – approximately 90km north-east (120km by road);
- Onslow – approximately 100km south-west (210km by road).

In addition, BCI's proposed private haul road is planned to pass within 7km of the purification plant site and is instrumental in reducing the haulage cost to the CPE Port.

The estimated project power maximum demand (excluding port) is 6MW, with approximately half centralised in the purification plant, village and central services. Field pump stations form the remainder and are distributed over a wide area. Power options have been considered including centralised and distributed generation using natural gas, diesel and/or supplementary solar systems. The PFS will consider the mix of generation, scheduling and commercial delivery of an integrated power generation system.

Market

Supply and Demand

Salt (or NaCl) has many thousands of commercial uses with over 75% consumed in four main markets; chlor-alkali production, synthetic soda ash production, road de-icing and food industries.

Roskill, a leading minerals research group who BCI utilised for market information and analysis, estimates that world consumption of salt in 2015 was approximately 330Mt. Annual consumption grew at approximately 2% per annum from 275Mt in 2006 to 330Mt in 2015.

Salt is produced in more than 100 countries and can be produced by three main methods: (1) solar evaporation of seawater or inland brine; (2) mining of rock salt; or (3) solution mining of brines. Solar salt represents approximately 40% of global production and is traded from raw harvested crystals to some of the purest products available, 99.9% NaCl. Rock salt represents approximately 25% and solution mining of brines represents approximately 35%. The Mardie Salt Project is intending to produce NaCl with a purity of 99.5% to 99.7% from solar evaporation of seawater.

Roskill estimates that world salt production totalled 295Mt in 2015, complemented with an additional 35Mt of unreported Chinese production. Recorded world trade (exports plus imports) totalled 135.7Mt with exports being 67.3Mt and imports being 68.5Mt.

Australia produced 13.5Mt of salt in 2015, with the majority produced in the north-west of Western Australia and exported for use in industrial purposes in China, Japan and the rest of Asia. Australian traded salt competes primarily with supply from India and Mexico. Australia is the largest exporter to Asia followed by India. Recent information has indicated that India is increasing exports at reduced prices, supressing the global price.

Looking forward, Roskill is forecasting annual consumption to rise to nearly 400Mt in 2025 at an average rate of approximately 2% per annum. Roskill expects growth in demand will continue to be led by Asia, where annual consumption is expected to rise from 153Mt to 199Mt over the period, representing an annual growth rate of 2.6% per annum. Over 80% of 46Mt in growth is expected to be from the chlor-alkali sector.

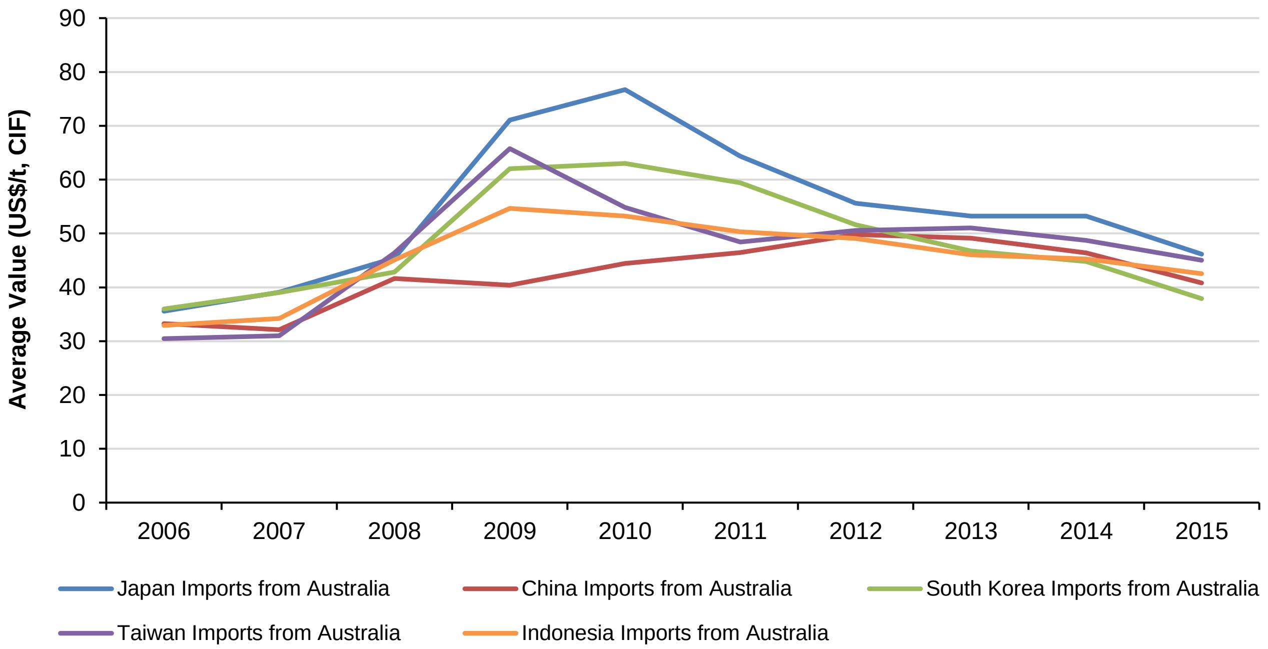
Roskill is reporting that over 20Mtpa of additional salt production capacity is in various stages of development in countries including Australia, Canada, Mexico and Spain. BCI believes there is a strong opportunity for additional projects to competitively supply into the forecast growth in global and Asian salt consumption.

<u>Pricing</u>

There is no readily available spot or benchmark price for salt, with prices typically based on individual contracts. Salt prices vary considerably from less than US$10/t to nearly US$200/t depending on the method of extraction, process, purity, application and location.

Average prices for salt can be determined by published import and export data. The chart below illustrates the average import values of Australian salt into other countries between 2006 and 2015 in US$/t on a cost, insurance, freight ("CIF") basis, as reported by Roskill. As can be seen from the chart, import values trended up from US$30-36/t in 2006 to US$45-77/t in 2010 before trending down to US$38-46/t in 2015. The average import value for the 10-year period between 2006 and 2015 across all importing countries is US$47.5/t.

Figure 7: Average Import Values of Australian Salt



Source: Roskill

Import values of Australian salt into other countries reflects solar salt produced in the north-west of Western Australia, which accounts for the vast majority of Australian salt exports. Roskill reports that the typical purity of Australian exported salt is 99.5% NaCl on a dry basis.

Marketing Strategy

The Mardie Salt Project is proposing to utilise modern purification technology to produce a high purity product for consumption in Asian and middle eastern industrial plants, which is forecast to be a near term growth market.

A new Australian producer providing a high purity product into the Asian market will:

- Have a competitive shipping advantage over key Mexican and Indian operations, which are key suppliers to the Asian chlor-alkali and synthetic soda ash markets; and
- Have a competitive product and be well placed to displace lower purity products from older plants.

The Mardie Salt Project is proposing to produce and market two high purity products:

- Mardie Ultra Purity: NaCl > 99.7%; end users will include industrial uses; and
- Mardie High Purity: NaCl > 99.5%; end users will include industrial plant with purification plants and waste disposal systems.

It is anticipated that 20% of sales will be Mardie Ultra Purity at a sales price of US$50/t FOB and 80% of sales will be Mardie High Purity at a sales price of US$30/t FOB. This equates to a weighted average sales price for the Mardie Salt Project of US$34/t FOB, which has been utilised in the Scoping Study.

This price assumption is consistent with the 10-year average import value of Australian salt after deducting freight costs, which range between US$5-15/t for bulk carriers from the Pilbara region of Western Australia to Asia and the Middle East.

Financial Evaluation

Capital Cost Estimate

Capital costs for the Mardie Salt Project have been estimated to an accuracy of +/- 35%. Capital costs are estimated at A$225-255M as shown in Table 5 below.

Table 5: Capital Cost Estimate (+/- 35%)

Item	3.0Mtpa Rate (A$M)	3.5Mtpa Rate (A$M)
Evaporation Ponds	50	55
Process Plant	17	20
Supporting Infrastructure	11	13
Accommodation Village	7	9
Port & Site Access Infrastructure	60	65
Temporary Construction Facilities	7	9
Project Management	14	17
Owners Cost	29	33
Contingency	29	33
Total Capital Cost	**225**	**255**

The estimates include capital expenditure for evaporation, processing, supporting infrastructure, haulage, local transhipping facilities, utilities and services. Capital costs have been estimated based on budget proposals from relevant contractors and vendors, factored estimates or otherwise based on the industry knowledge of engineering consultants.

The key differences between the low and high production rate cases include an increase in solar pond pumps, process plant and supporting infrastructure, with an associated increase in contingency.

Operating Cost Estimate

Operating costs have been estimated on a free-on-board ("FOB") basis to an accuracy of +/- 35% for production rates of 3.0Mtpa and 3.5Mtpa. Operating costs include all activities required to extract and concentrate seawater and crystallise, process and export salt via the CPE Port. Operating costs are defined as the operating expenditure required to pump the seawater into the evaporator ponds, transfer brine between ponds and crystallisers, harvest the raw salt, process the raw salt into a high purity product, waste bitterns return to ocean, product transport to port, transhipper loading, transhipment, ship loading and management.

Table 6: Operating Cost Estimate (+/- 35%)

Item	3.0Mtpa Rate		3.5Mtpa Rate	
	A$/t	A$ p.a.	A$/t	A$ p.a.
Evaporation & Crystallisation	4.7	14,100,000	4.2	14,700,000
Processing	0.8	2,400,000	0.8	2,800,000
Road Transport	3.6	10,800,000	3.3	11,550,000
Port and Transhipment	4.3	12,900,000	3.9	13,650,000
Other	2.8	8,400,000	2.4	8,400,000
Contingency	1.6	4,800,000	1.5	5,250,000
Total Direct Operating Costs	**17.8**	**53,400,000**	**16.1**	**56,350,000**
Sustaining Capital Costs	1.1	3,300,000	1.1	3,850,000
Royalties	1.0	3,000,000	1.0	3,500,000
Marketing	0.9	2,700,000	0.9	3,150,000
Total Operating Costs	**20.8**	**62,400,000**	**19.1**	**66,850,000**

The following assumptions have been made associated with operating costs and the operating philosophy:

- BCI would owner operate the plant and equipment to run the ponds, crystallisers, process plant, product haulage to the port and port stockyard;
- Accommodation village will be owner operated;
- Existing road infrastructure between Bungaroo South and CPE Port is assumed to be in place for iron ore. The Mardie Salt Project incurs access charges for shared sections of the road and contributes to road maintenance;
- Existing infrastructure at CPE Port is assumed to be in place for iron ore. The Mardie Salt Project incurs access charges in relation to shared facilities;
- Transhipment is on a contract basis and includes transhipper hire, transhipper operations, loading the ships and draft survey;
- FIFO flights for all personnel will be managed by BCI;
- Flights have been based on commercial services between Perth and Karratha;
- Diesel fuel will be purchased in bulk and distributed by BCI;

- Allowances for maintenance down time have been considered by operating unit;
- The estimate base date is Q1, 2017. Escalation of the estimate past the base date has been excluded;
- All costs are in Australian dollars. An exchange rate of A$1.00 = US$0.75 has been used during operations where necessary;
- GST has been excluded;
- Contingency has been applied to the Ex-Works and FOB estimates;
- All tonnages are on a dry basis unless otherwise indicated;
- Exploration activities have been excluded as this is not relevant in the context of the input resource (seawater from the ocean).

Project Financial Assessment

BCI has undertaken a financial assessment of the Mardie Salt Project, with a summary of the key financial metrics set out below.

Based on the production rate range of 3.0-3.5Mtpa, the Mardie Salt Project has a pre-tax NPV_{10} of A$290-380M and a pre-tax IRR of 25-27%, with payback achieved in 5 years.

Table 7: Summary of Financial Results

Item	3.0Mtpa Rate	3.5Mtpa Rate
Production Rate	3.0Mtpa	3.5Mtpa
Capital Cost	A$225M	A$255M
Operating Costs	A$21/t FOB	A$19/t FOB
Mine Life	20 years	
Product Price	US$34/t FOB	
Exchange Rate	0.75 USD per AUD	
Pre-tax NPV_{10}	A$290M	A$380M
Pre-tax IRR	25%	27%
Pre-tax Payback	5 years	5 years

The financial assessment in the Scoping Study has not adopted a specific funding structure for the Mardie Salt Project and hence all NPVs are reported at the project level utilising a weighted average cost of capital for the project of 10%.

Sensitivity of the pre-tax NPV to changes in key assumptions is set out in the figures below. The Mardie Salt Project is most sensitive to changes in discount rate, exchange rate and salt price assumptions, followed by changes in operating costs and then capital costs.

Figure 8: Pre-tax NPV Sensitivity – 3.0Mtpa Rate

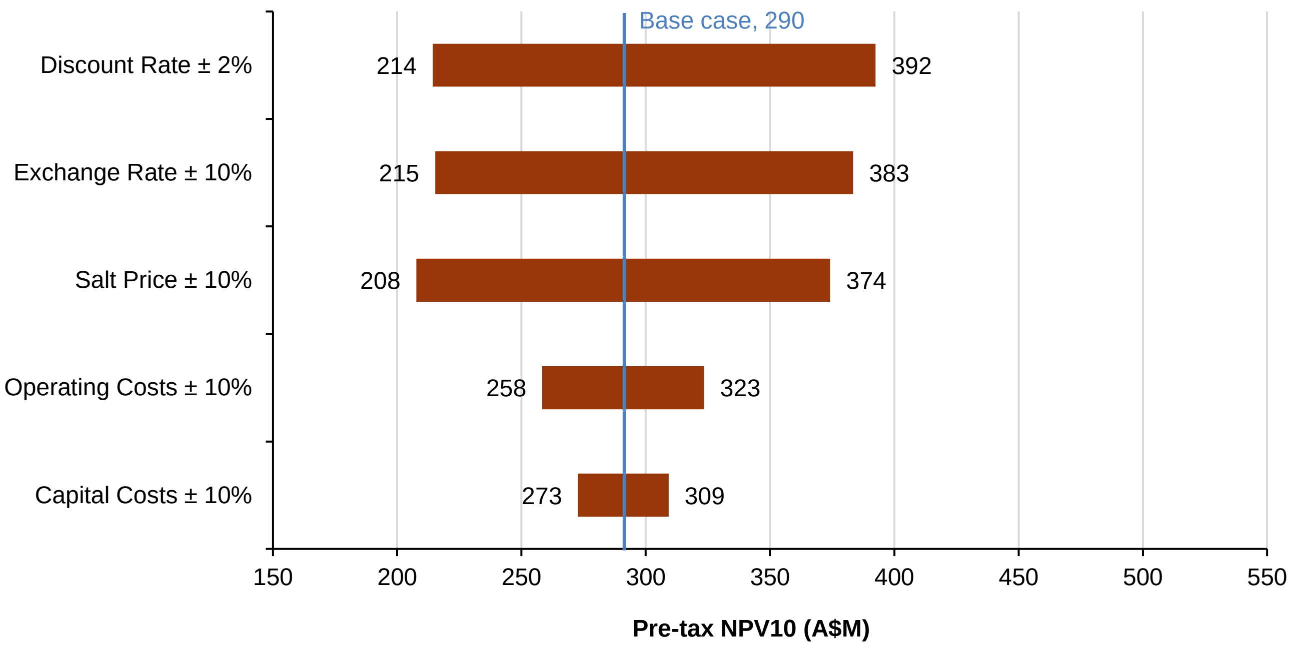
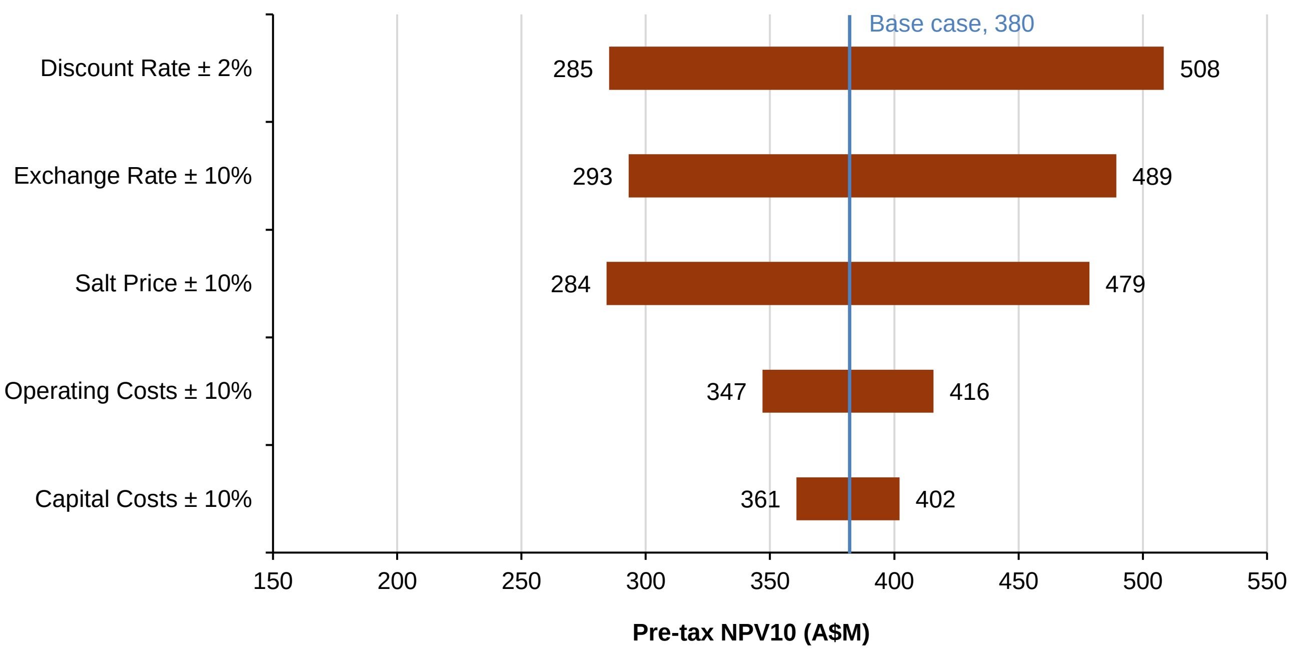


Figure 9: Pre-tax NPV Sensitivity – 3.5Mtpa Rate



Alternative Case – Standalone Mardie Port Option

As an alternative case, the Scoping Study also assessed the potential for a dedicated small transhipment port at the Mardie site and associated onshore facilities. The transhipment facility would comprise a 2.4km jetty, 3.1km loadout conveyor and shiploader (basis for the alternative case); or alternatively, a dredged channel and shiploader close to shore. Both of these alternative port solutions have a higher capital cost and higher marine environmental impact and therefore would only be considered if the CPE Port was not available.

Capital costs for the alternative case have been estimated at A$305-345M as shown in Table 8 below. Key differences between the CPE Port base case and the alternative case are the additional port capital expenditure for construction of a standalone transhipping facility at the Mardie site, offset by reduced site access infrastructure due to elimination of the haul road to connect the Mardie Salt Project to BCI's proposed haul road to CPE. Associated changes in contingency have also been made.

Table 8: Capital Cost Estimate for the Alternative Case (+/- 35%)

Item	3.0Mtpa Rate (A$M)	3.5Mtpa Rate (A$M)
Evaporation Ponds	50	55
Process Plant	17	20
Supporting Infrastructure	11	13
Accommodation Village	7	9
Port & Site Access Infrastructure	125	135
Temporary Construction Facilities	10	15
Project Management	14	17
Owners Cost	31	35
Contingency	40	45
Total Capital Cost	**305**	**345**

Estimated FOB operating costs for the alternative case are shown below in Table 9. The key difference between the CPE Port base case and the alternative case is the reduced cost for transporting salt to the nearer standalone port and elimination of access charges for utilisation of shared road and port infrastructure assumed to be in place for iron ore operations.

Table 9: Operating Cost Estimate for the Alternative Case (+/- 35%)

Item	3.0Mtpa Rate		3.5Mtpa Rate	
	A$/t	A$ p.a.	A$/t	A$ p.a.
Evaporation & Crystallisation	4.7	14,100,000	4.2	14,700,000
Processing	0.8	2,400,000	0.8	2,800,000
Road Transport	2.0	6,000,000	1.8	6,300,000
Port and Transhipment	3.7	11,100,000	3.4	11,900,000
Other	2.8	8,400,000	2.4	8,400,000
Contingency	1.4	4,200,000	1.3	4,500,000
Total Direct Operating Costs	**15.4**	**46,200,000**	**13.9**	**48,650,000**
Sustaining Capital Costs	1.5	4,500,000	1.5	5,250,000
Royalties	1.0	3,000,000	1.0	3,500,000
Marketing	0.9	2,700,000	0.9	3,150,000
Total Operating Costs	**18.8**	**56,400,000**	**17.3**	**60,550,000**

The financial assessment for the alternative case has estimated a pre-tax NPV_{10} of A$265-350M and a pre-tax IRR of 21-23%, with payback achieved in 6 years.

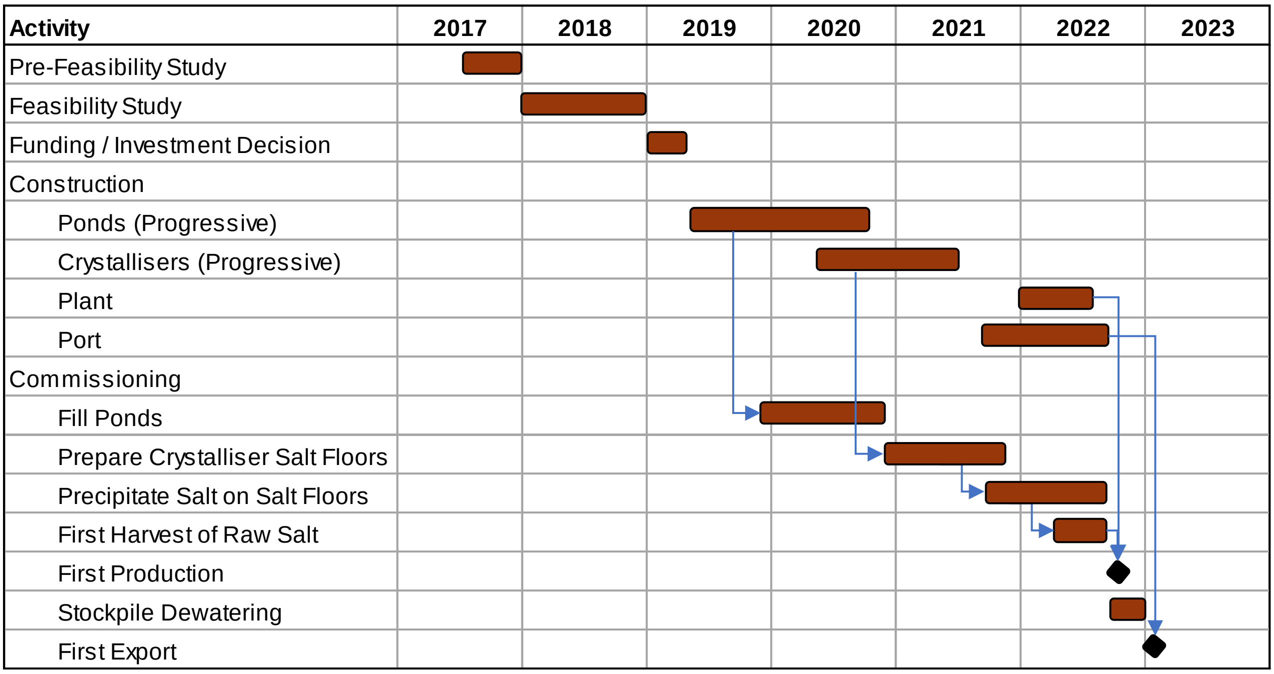
Table 10: Summary of Financial Results – Alternative Case

Item	3.0Mtpa Rate	3.5Mtpa Rate
Production	3.0Mtpa	3.5Mtpa
Capital Cost	A$305M	A$345M
Operating Costs	A$19/t FOB	A$17/t FOB
Mine Life	20 years	
Product Price	US$34/t FOB	
Exchange Rate	0.75 USD per AUD	
Pre-tax NPV_{10}	A$265M	A$350M
Pre-tax IRR	21%	23%
Pre-tax Payback	6 years	6 years

Implementation and Financing

The proposed implementation timeline for the Mardie Salt Project is shown in Figure 10. The Scoping Study assumes that BCI completes a PFS on the Mardie Salt Project by the end of 2017 and then undertakes a feasibility study ("FS") in 2018. A period of 3 months is allowed to secure financing and make a positive investment decision, allowing construction to commence in the second quarter of 2019. The Scoping Study timeline assumes that construction, pre-production evaporation and pre-production salt crystallisation activities will be completed in approximately 3 years, resulting in first harvest of raw salt in mid-2022 and first export of salt in early-2023. For the CPE Port case, this timeline requires that iron ore infrastructure is in place by the end of 2021. Given the level of evaporation and crystallisation that occurs prior to first export, the Scoping Study assumes that the first sales year achieves exports at the full 3.0Mtpa or 3.5Mtpa rate (as applicable). Production and sales are assumed to continue on a flat line basis thereafter.

Figure 10: Implementation Schedule



As at 31 March 2017, BCI had cash on hand of approximately A$32.9M, which is sufficient to fund the PFS and the FS.

To achieve the range of production outcomes indicated in the Scoping Study, development funding in the order of A$225-255M will likely be required in the CPE Port case, or A$305-345M in the Mardie Port case. Subject to the outcomes of further studies and discussions with potential financiers, BCI plans to fund the Mardie Salt Project through a combination of securing project partners, build-own-operate-transfer or similar type contracts, debt financing and equity financing from existing and new shareholders. BCI's current intention is to commence discussions with potential project partners upon completion of the PFS.

The BCI Board believes there is a reasonable basis to assume that the required development funding will be secured by BCI for reasons including: (a) the positive financial results of the Mardie Salt Project Scoping Study; (b) the track record of the Company and its Board and management team; (c) and the support of its shareholder base as evidenced by the A$25.5M entitlement offer that successfully completed in November 2016 with 74% take-up by existing shareholders. Investors should note that there is no certainty that BCI will be able to raise that amount of funding when needed. It is also possible that such funding may only be available on terms that may be dilutive to or otherwise affect the value of BCI's existing shares.

- ENDS -

FOR FURTHER INFORMATION:

ALWYN VORSTER

MANAGING DIRECTOR

BC IRON LIMITED

TELEPHONE: +61 8 6311 3400

ABOUT BCI

BCI is an ASX-listed resources company that is managing a portfolio of iron ore and other mineral interests.

Iron ore is the Company's core focus, with the key assets of Iron Valley and Buckland providing a complimentary mix of existing earnings and growth potential.

Iron Valley is an iron ore mine located in the Central Pilbara, which is operated by Mineral Resources Limited (ASX: MIN) and is generating low risk royalty earnings for the Company.

Buckland is a strategic iron ore development project located in the West Pilbara region, comprising a proposed mine at Bungaroo South and a proposed infrastructure solution incorporating a haul road and transhipment port at Cape Preston East.

The Company's iron ore portfolio also includes potential royalties over the Nullagine, Koodaideri South, Extension and Breakaway tenements.

BCI is establishing an agricultural and industrial minerals business, which currently includes a joint venture over the Carnegie Potash Project with Kalium Lakes Limited (ASX: KLL) and the 100%-owned Mardie Salt Project.

BCI is also seeking to build a strong gold and/or base metals business, primarily targeting project level interests in Australian assets with near-term earnings potential.

KEY STATISTICS

Shares on issue:	392.5 million	
Cash and cash equivalents:	$32.9 million	as at 31 March 2017
Board:	Brian O'Donnell	Non-Executive Chairman
	Alwyn Vorster	Managing Director
	Michael Blakiston	Non-Executive Director
	Jenny Bloom	Non-Executive Director
	Martin Bryant	Non-Executive Director
	Andy Haslam	Non-Executive Director
Major shareholders:	Wroxby Pty Ltd	27.9%

Website: www.bciron.com.au