

# Developing the Multi-Generational Mardie Salt & Potash Project

Forging Ahead To Construction

7 May 2021

ASX:BCI

[www.bciminerals.com.au](http://www.bciminerals.com.au)

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## Summary Information Only; Material Assumptions Continue to Apply

This document contains a summary of information about BCI and the Mardie Project's feasibility study that is current as at the date of this document unless otherwise stated, the information in this document is general in nature and does not contain all the information which a prospective investor may require in evaluating a possible investment in BCI or that would be required in a prospectus or a product disclosure statement prepared in accordance with the *Corporations Act 2001* (Cth) ("Corporations Act") or the securities laws of any other jurisdiction. It should be read solely in conjunction with the information provided to ASX. For further information regarding BCI's feasibility study and subsequent optimisation results, recipients should refer to BCI's ASX announcement titled "Feasibility Study Confirms World Class Opportunity" dated 1 July 2020 and "Mardie Optimisation Results: Increased Production and Improved Economics" dated 21 April 2021. BCI confirms that all material assumptions and technical parameters that underpin the production targets and forecast financial information in those announcements continue to apply (as applicable) and have not materially changed.

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## Forward-Looking Statements

This document contains forward-looking statements. These forward-looking statements are based on BCI's current expectations and beliefs concerning future events at the date of this document, and are expressed in good faith for general guide only and should not be relied upon as an indication or guarantee of future performance. BCI believes it has reasonable grounds for making the forward-looking statements. However, forward-looking statements relate to future events and expectations and as such are subject to known and unknown risks, and significant uncertainties and other factors, many of which are outside the control of BCI. Actual results may differ materially from future results expressed or implied by such forward-looking statements. None of BCI, its affiliates or their directors, officers, employees, associates, advisers, agents or contractors makes any representation or warranty (either expressed or implied) as to the accuracy or likelihood of fulfilment of any future looking statement, or any events or results expressed or implied in any forward looking statement, except to the extent required by law. You are cautioned not to place undue reliance on any forward looking statement. The forward looking statements in this document reflect views held only as at the date of this document. Other than as required by law, including the ASX Listing Rules, BCI does not undertake or assume any obligation to update or revise any forward-looking statement contained in this document.

## JORC Code – Mardie Salt and SOP Project

The Mardie Project aims to produce salt and SOP from a seawater resource, which is abundant, inexhaustible, readily accessible and has a known and consistent chemical composition. The Australian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves 2012 Edition ("JORC Code") does not apply to a project of this nature and, accordingly, JORC Ore Reserves and Mineral Resources are not reported.

## JORC Code – Iron Valley

Reference should be made to BCI announcement dated 20 October 2020 "Iron Valley Mineral Resources and Ore Reserves". BCI confirms it is not aware of any new information or data that materially affects the information included and all material assumptions and technical parameters underpinning the estimates continue to apply and have not materially changed.

## Risks

An investment in BCI is subject to investment and other known and unknown risks, some of which are beyond the control of BCI.

## Acceptance

By attending an investor presentation or briefing, or accepting, accessing or viewing this document you acknowledge and agree to the "Important Notices" as set out above.

# BCI Overview



**IRON VALLEY ROYALTIES**

**BCI MINERALS**

**MARDIE SALT & POTASH PROJECT**

~\$200M market cap<sup>1</sup>  
~\$100M cash and zero debt<sup>2</sup>

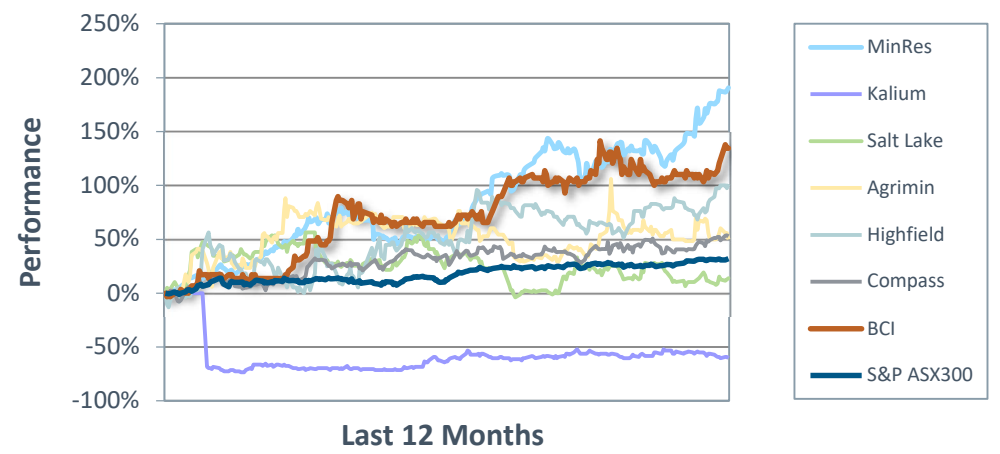
FY21 Q1-Q3 EBITDA of ~\$37M

Tier 1; Sustainable; ~\$260M/a EBITDA

**BCI SHARE PRICE**



**BCI PERFORMANCE RELATIVE TO PEERS**



<sup>1</sup>Based on 598.4M shares at \$0.34 per share closing price as at 5 May 2021 <sup>2</sup>Cash balance \$99.7M as at 30 April 2021

# Iron Valley Mine

## Strong royalty payments to BCI

- Quarterly royalty earnings from operating agreement with Mineral Resources Ltd (MIN)
- 82Mt Reserves<sup>1</sup>; Potential mine life of ~10 years
- Since first production in 2014:
  - BCI received revenue: \$400M
  - BCI received EBITDA: \$110M
  - Average 6.5Mtpa shipped
  - 55% lump ore; 59% Fe average
- Record BCI EBITDA in FY21
  - Q3: \$20.2M
  - Q1-Q3: \$37.3M
- Strong earnings potential at current prices and production; 40% rebate to MRL now ended

IRON VALLEY MINE



KEY IRON VALLEY PARAMETERS DETERMINING EBITDA TO BCI<sup>2,3</sup>

ANNUAL EBITDA (A\$M)		Iron Ore Price (CFR 62% Fe, US\$/dmt)					
		75	100	125	150	175	200
Tonnes Shipped (Mt, wet)	6.0	8	23	50	77	104	130
	6.5	8	25	54	83	112	141
	7.0	9	27	58	90	121	152
	7.5	10	29	63	96	129	163
	8.0	10	31	67	102	138	174

<sup>1</sup>Refer BCI announcement dated 20 October 2020 "Iron Valley Mineral Resources and Ore Reserves" <sup>2</sup>Based on AUD:USD of 0.75, freight rate of US\$11/dmt (average of last 12 months), 4 overall product discount of 15% relative to CFR 62% Fe price (average of last 12 months) <sup>3</sup>Dashed box shows price range and annualised tonnage range for CY21 to-date

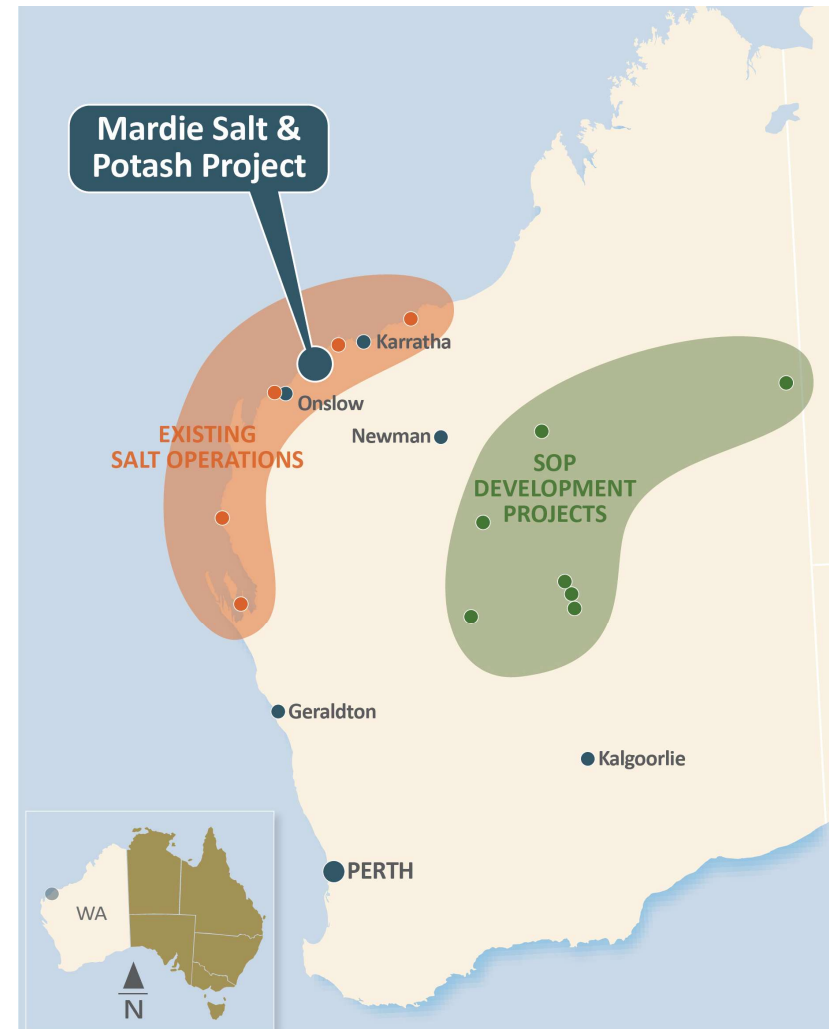
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# Australian Salt & SOP<sup>1</sup> Landscape

## Mardie: ideal location to produce high-purity salt and SOP

- Pilbara has an ideal climate to produce high purity salt
  - High temperature, high wind, low rainfall, low humidity
  - Proven region for production of high quality consistent salt
- Five large WA **Solar Salt Operations** (12-13Mtpa)
  - Controlled by Rio Tinto and Mitsui
  - Operating for up to 50 years
  - No new large Australian salt project in 20 years
- No current **SOP** production in Australia
  - Other development projects all based on inland lake brines and >800km road transport to third party ports
- **Mardie Salt & Potash Project**
  - Only Australian project with commercial salt and SOP from seawater

WESTERN AUSTRALIA – SALT AND SOP PROJECTS

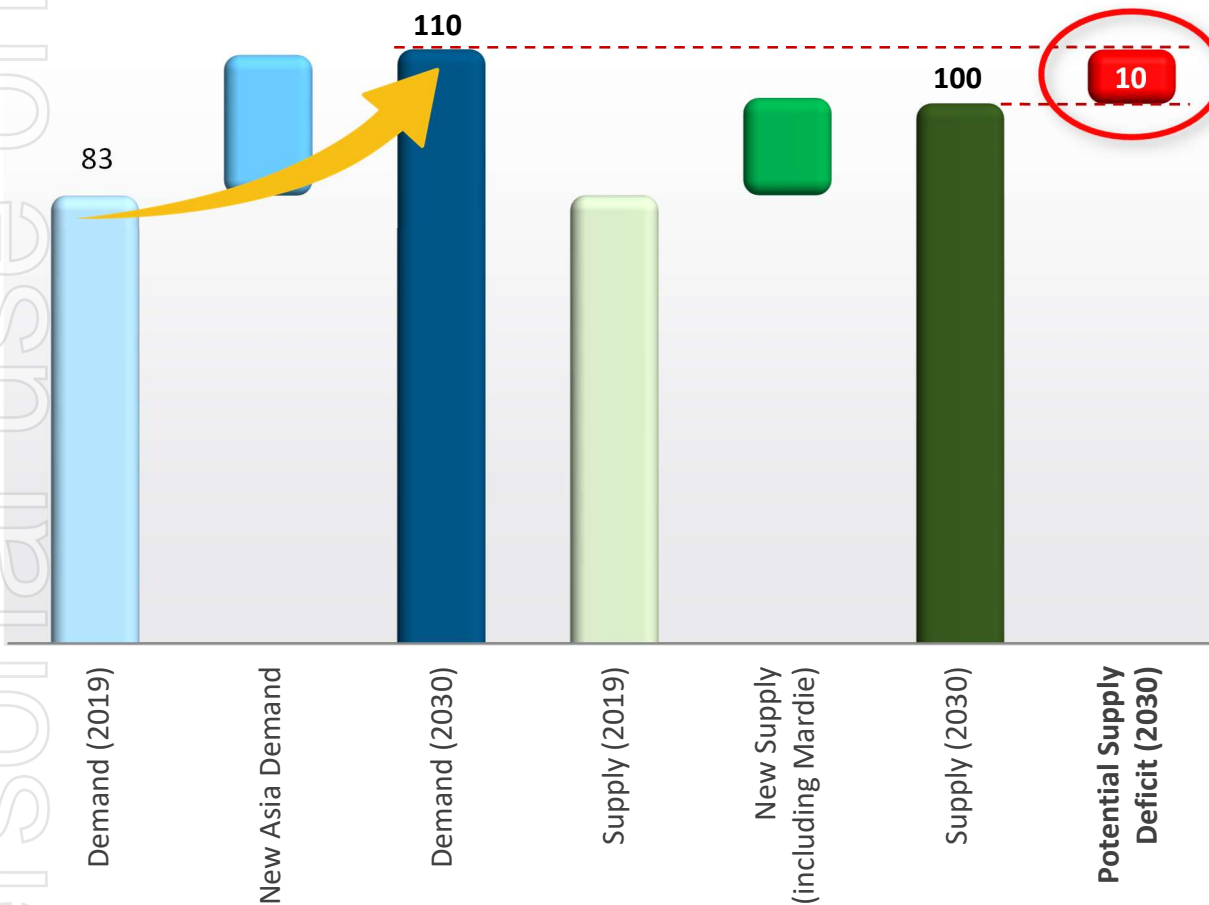


<sup>1</sup>Sulphate of Potash or  $K_2SO_4$

# Positive Salt Market Outlook

## Strong demand growth in Asia and insufficient new supply

CONTESTABLE ASIAN MARKET<sup>1</sup> DEMAND/SUPPLY; 2019-2030 (MT)



- Large established market
- >10,000 direct and indirect uses across many market segments
- Strong correlation ( $r=0.97$ ) between salt demand and Asian GDP
- 30% demand growth over next decade in contestable Asian market<sup>1,2</sup>
- Insufficient new salt projects resulting in potential ~10Mtpa supply deficit<sup>3</sup> (after including Mardie production)

<sup>1</sup>Contestable Asian market is where the Mardie project is expected to compete on delivered cost and quality, including coastal China, Japan, Korea, Taiwan and South East Asia

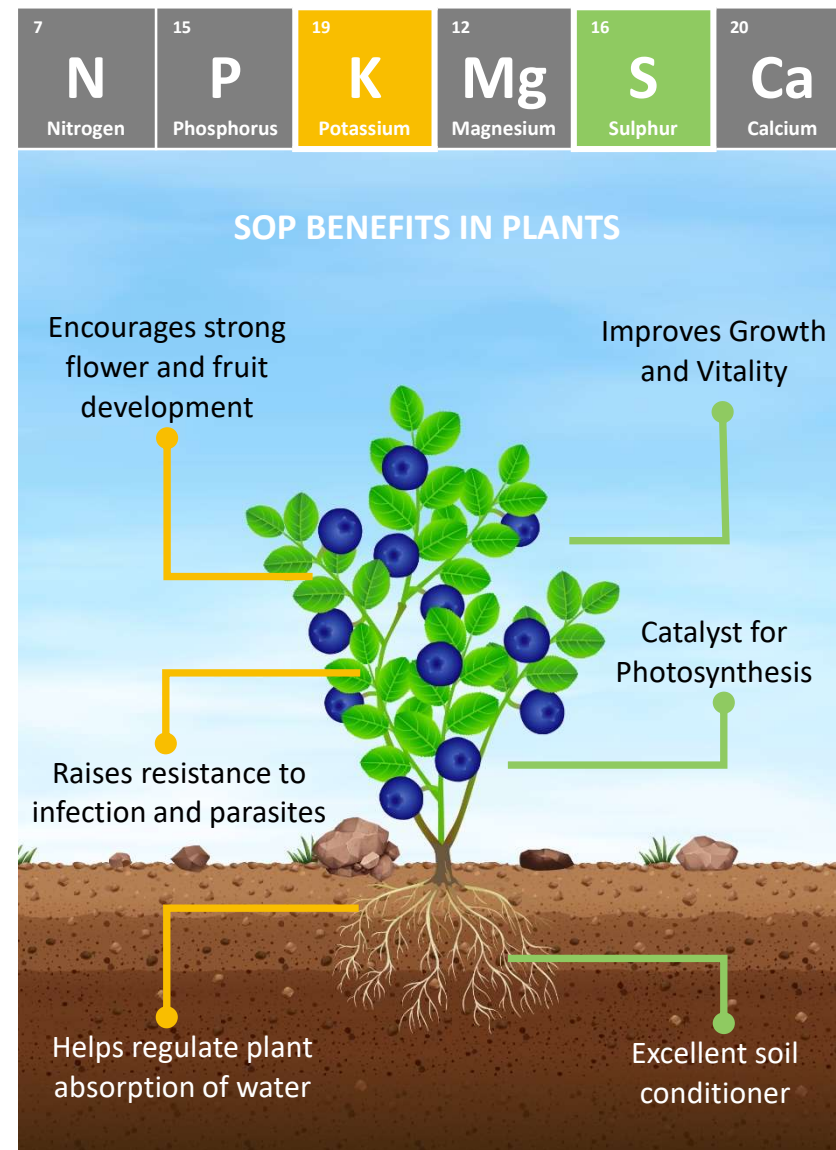
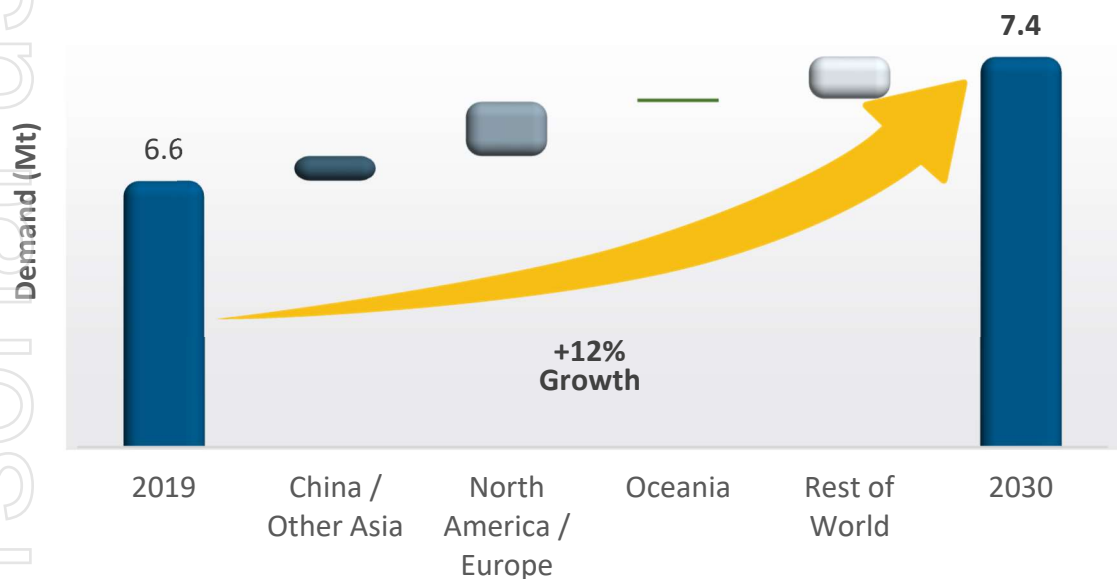
<sup>2</sup>Roskill (December 2020) <sup>3</sup>Roskill (December 2020) and BCI analysis

# SOP – High Quality Potassium Fertiliser

## Solid growth market driven by demand for high quality fruits and vegetables

Sulphate of Potash or SOP ( $K_2SO_4$ ) is a premium fertiliser and source of potassium for high-value crops and chloride intolerant crops

**12% GLOBAL DEMAND GROWTH OVER NEXT DECADE<sup>1</sup>**

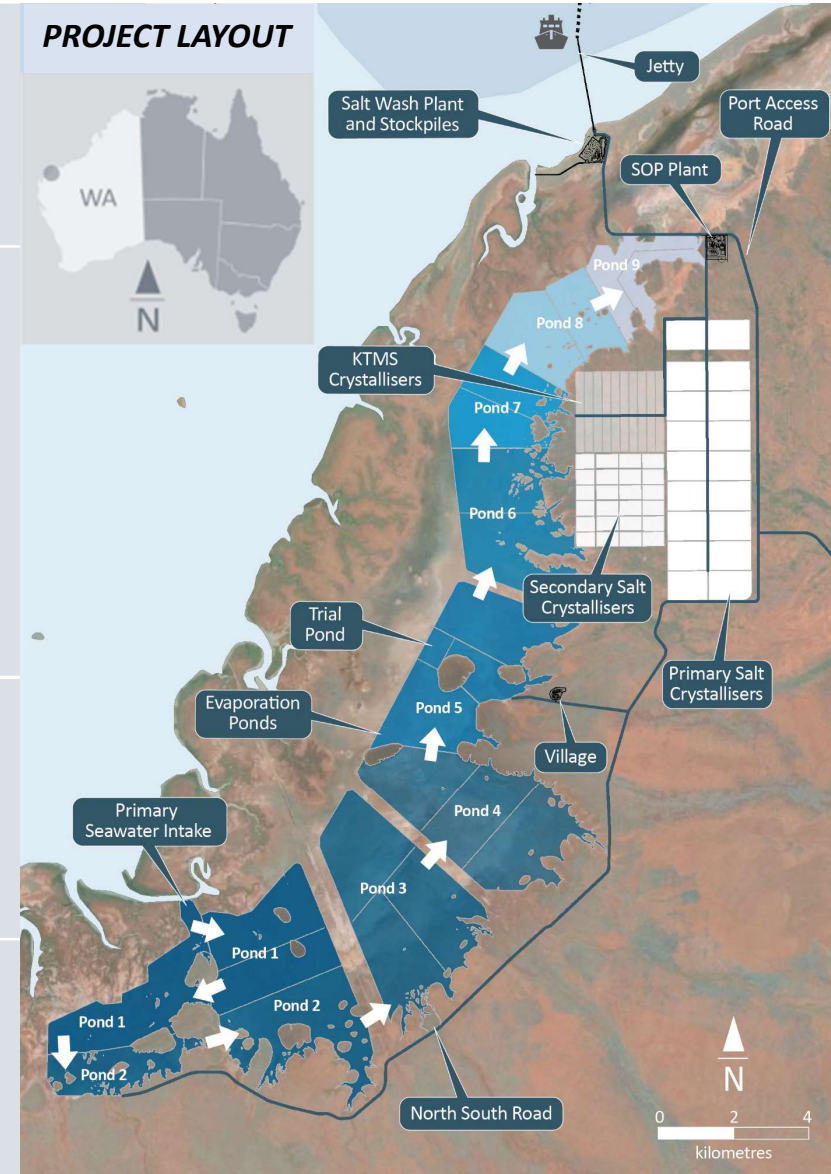


<sup>1</sup>Argus (November 2020)

# Optimised Feasibility Study Design

## Bigger project with better economics

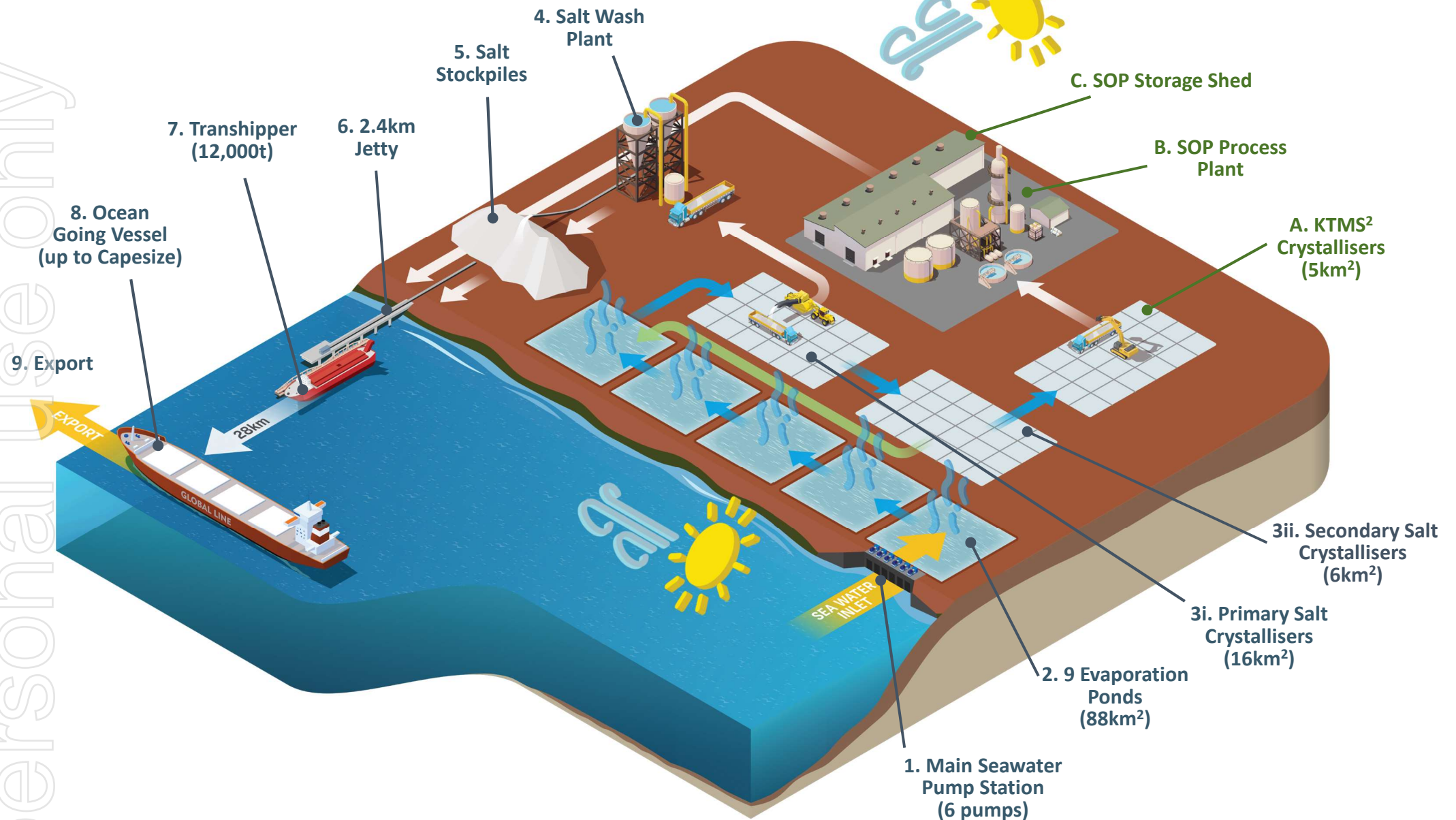
<p><b>SITE CONDITIONS</b></p>	<ul style="list-style-type: none"> <li>&gt;100km<sup>2</sup> clay soils – ideal to retain water</li> <li>High net evaporation rates (~10mm/day)</li> </ul>
<p><b>PRODUCTION</b></p>	<ul style="list-style-type: none"> <li>9 evaporation ponds</li> <li>42 salt and 20 SOP crystallisers</li> <li>Salt wash plant - 5.35Mtpa &gt;99.5% NaCl</li> <li>SOP process plant - 140ktpa &gt;52% K<sub>2</sub>O (granular)</li> </ul>
<p><b>PORT</b></p>	<ul style="list-style-type: none"> <li>2.4km steel trestle jetty with conveyor</li> <li>4.4km dredged channel</li> </ul>
<p><b>SHIPPING</b></p>	<ul style="list-style-type: none"> <li>12,000t self-propelled transhipment vessel</li> <li>Vessels up to 160kt anchored 28km offshore</li> </ul>





# Mardie Production Process<sup>1</sup>

99% Sun and Wind Energy



<sup>1</sup>Refer blue coloured labels for salt process and green for SOP process. SOP is exported in 10,000t parcels via the jetty, transhipper and onto ocean going vessels for export to customers <sup>2</sup>Kainite Type Mixed Salt

# \$60M Enabling Works Underway

Establish key infrastructure<sup>1</sup> to accelerate Mardie development



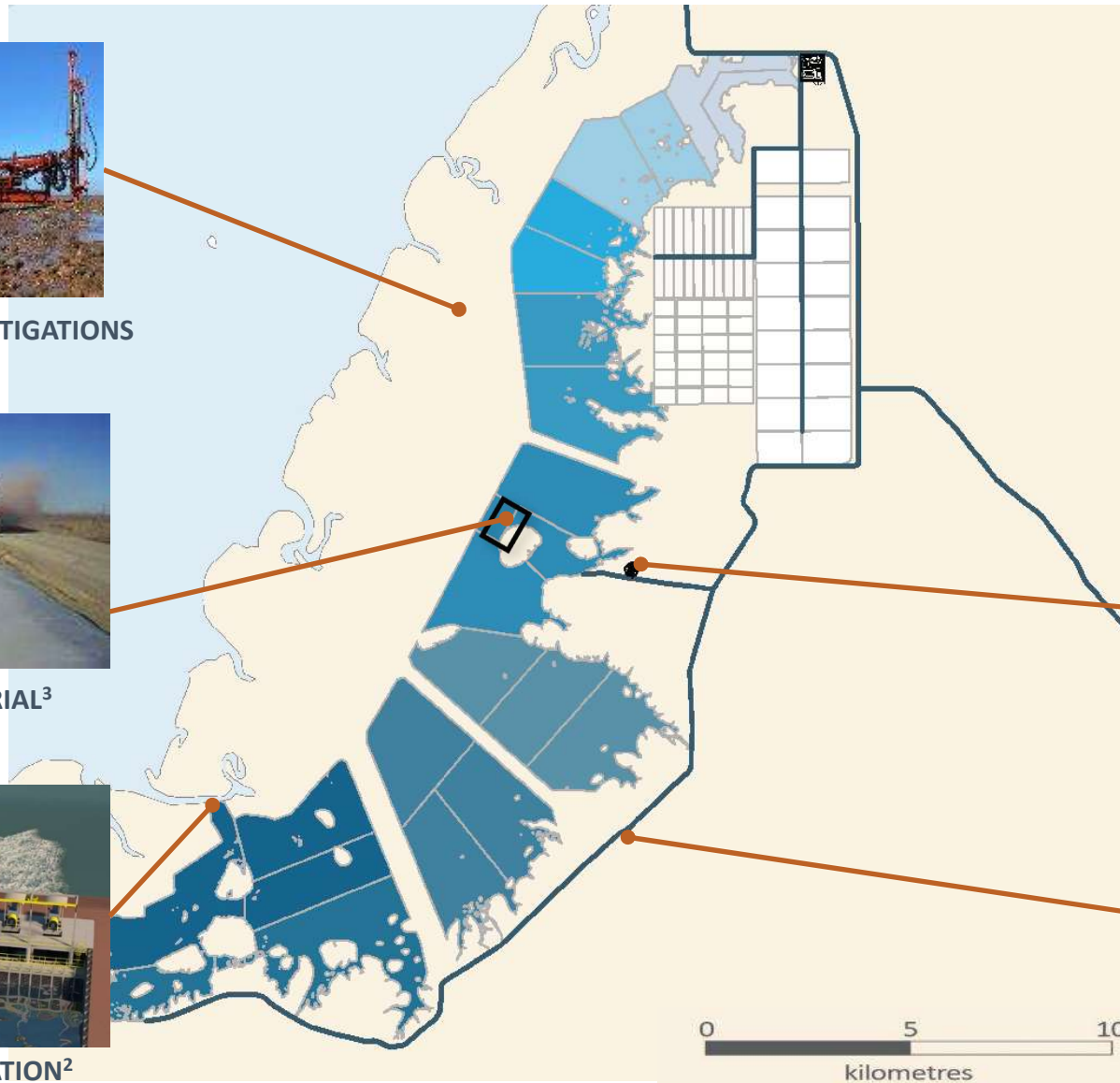
GEOTECHNICAL INVESTIGATIONS



EMBANKMENT TRIAL<sup>3</sup>



MAIN PUMP STATION<sup>2</sup>



SALT PILOT PLANT (PERTH)



VILLAGE<sup>2</sup>



NORTH-SOUTH ROAD<sup>3</sup>

<sup>1</sup>All enabling works subject to special permitting <sup>2</sup>Artist impression <sup>3</sup>Illustrative

# Positive Stakeholder & Approval Progress

## Native title agreements in place; Approvals and tenure on track

### GOVERNMENT



- Major Project Status - one of 20 in Australia
- Largest NAIF loan in WA approved - \$450M

### ENVIRONMENT



- Public Environmental Review (PER) process completed
- Target EPA referral in Q2 2021 & Ministerial approval in Q3 2021
- Renewable energy and carbon neutral strategy being finalised

### COMMUNITIES

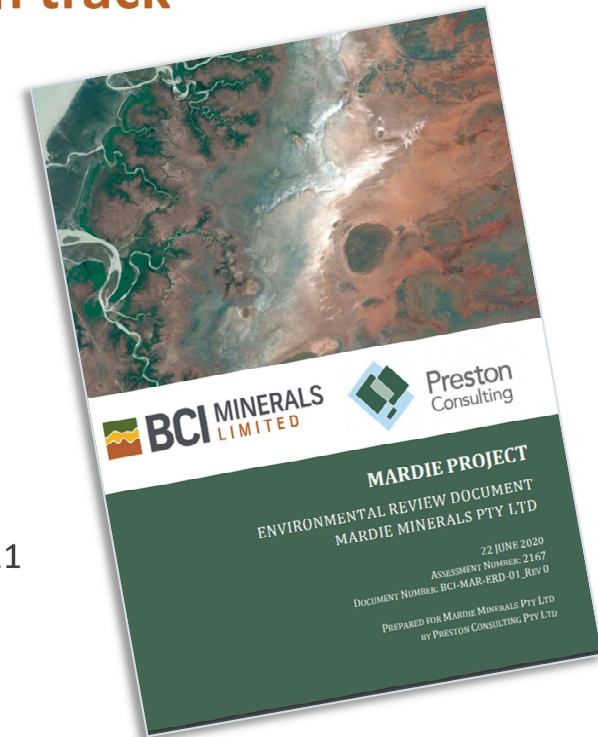


- Strong relationship with Traditional Owner groups
- Key Native Title agreements in place
- Karratha office established with focus on local engagement

### TENURE



- Land access: pastoralist - complete; gas pipeline owners - negotiations underway
- Port leases with Pilbara Ports Authority (PPA) – discussions underway

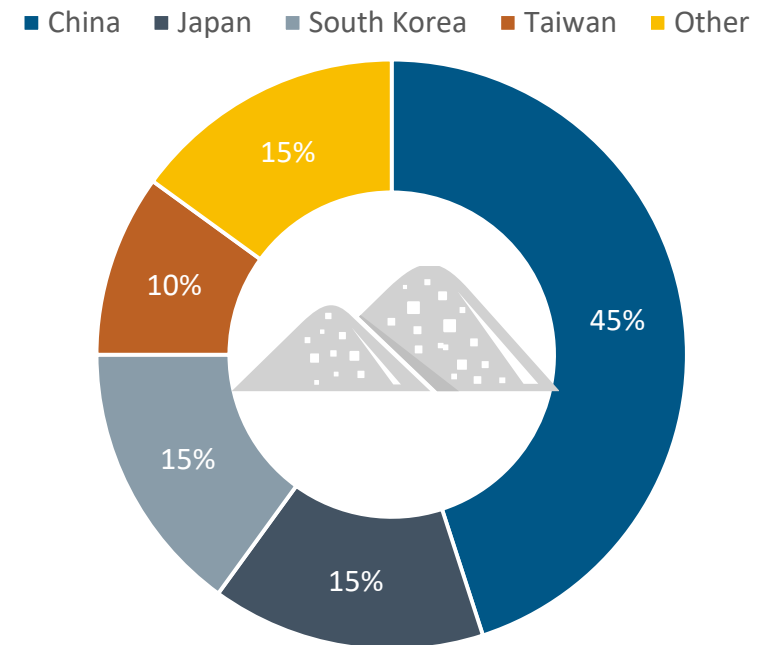


# Salt MOUs Show Strong Customer Support

## MOUs to be converted to offtake contracts over next 18-months

- Asian salt market is deep and diversified
- Typical buyers include: chloralkali, soda ash, water treatment, chemical, paper / pulp, dye and food companies
- Typically 1-2 year tonnage contracts with individual 1-2 year price settlements
- Ongoing engagement with >20 high quality Asian end-users and traders to develop future offtake support
- 15 non-binding MOUs signed across target markets covering >100% of first 3 years' salt production
- Mardie salt samples tested by key customers delivered on-spec results; Larger pilot scale samples to follow in 2021

TARGET MARKETS SALT (5.35MTPA)



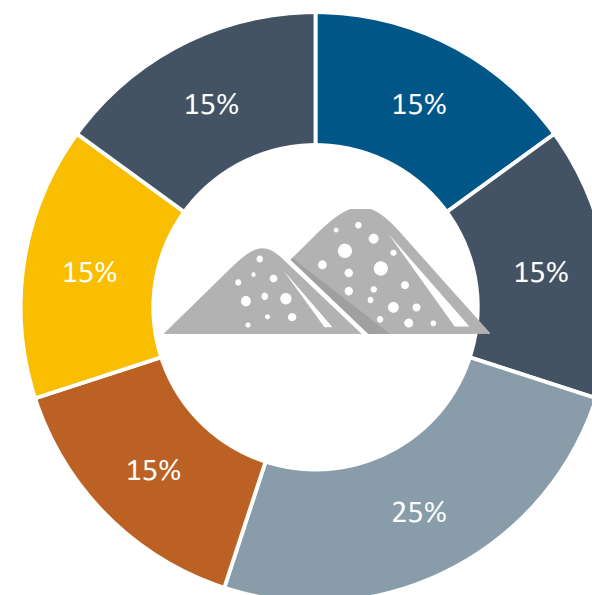
# SOP MOUs Show Strong Customer Support

## MOUs to be converted to offtake contracts over next 18-months

- Global SOP market is fragmented and specialised
- Typical buyers include: fertiliser distributors, compound and bulk fertiliser companies
- Typically 2-5 year tonnage contracts with 1-2 year pricing – published reference pricing as guide
- BCI engagement with >10 high quality end-users and traders to develop future offtake support
- 2 SOP non-binding MOUs signed covering 80% of first 3 years' SOP production
- Mardie SOP samples tested by laboratories delivered on-spec results; Larger pilot scale samples to follow in 2021

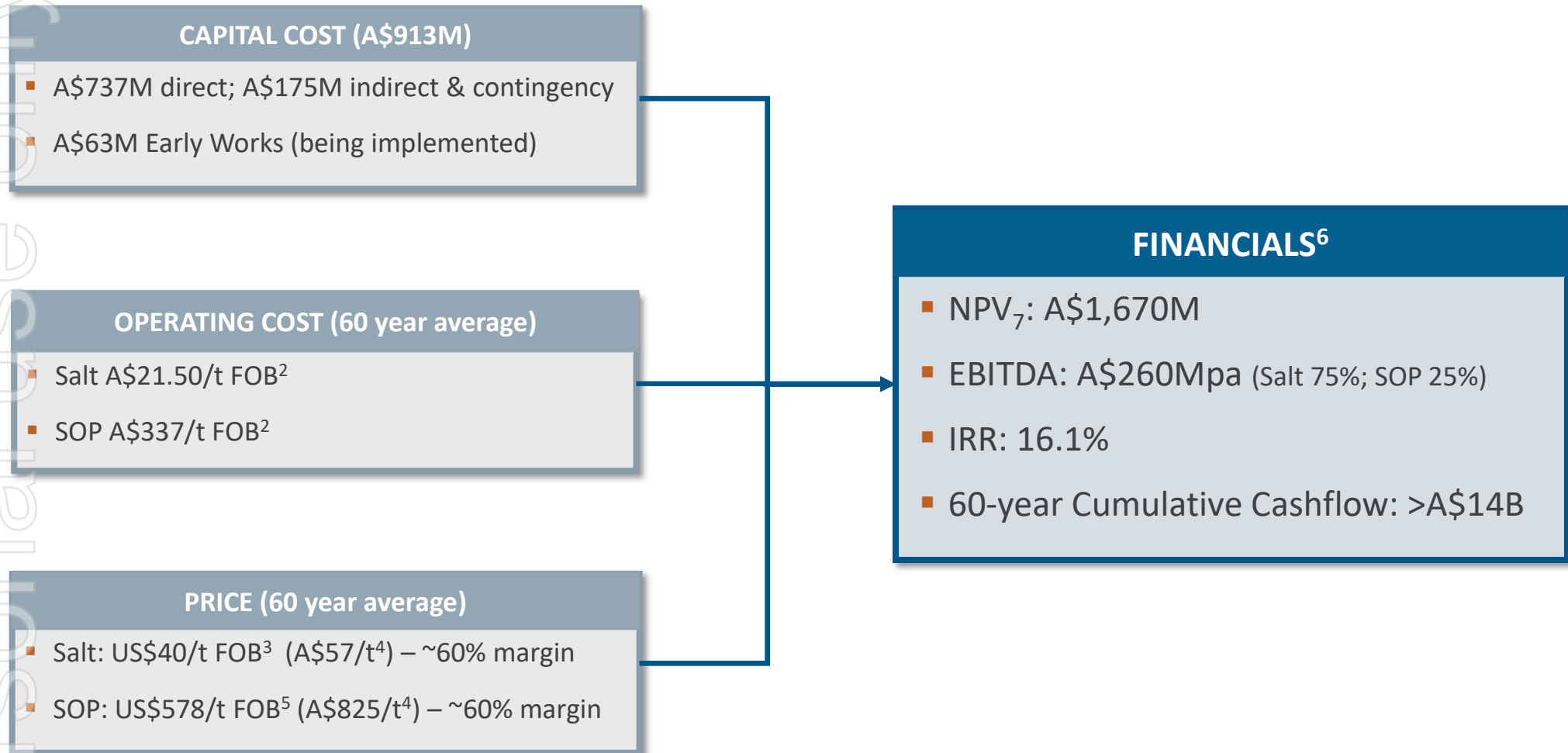
TARGET MARKETS SOP (140KTPA)

■ China ■ Japan ■ Oceania ■ USA ■ SE Asia ■ Other Asia



# Optimised Feasibility – Bigger and Better<sup>1</sup>

## Strong financial metrics providing annuity-style cash flow



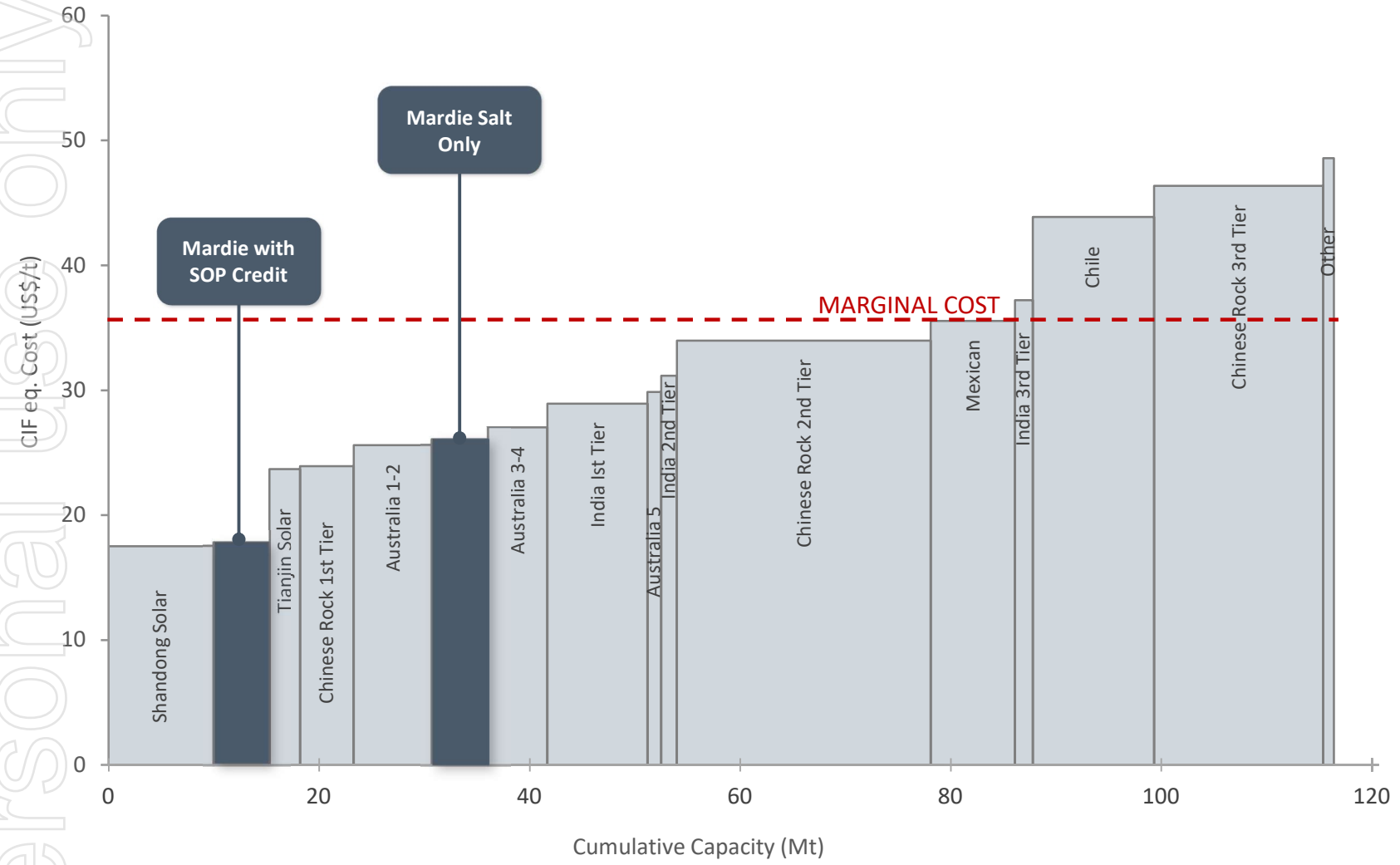
<sup>1</sup>With upside based on an inexhaustible seawater resource <sup>2</sup>All-in sustaining opex <sup>3</sup>Roskill (December 2020) price forecast less Braemar (June 2020) freight forecast <sup>4</sup>FX: 0.70

<sup>5</sup>Argus (November 2020) price forecast <sup>6</sup>Pre-tax, ungeared, real

# Salt Cost Curve – Contestable Market

## Mardie will be a low-cost supplier of salt into contestable<sup>1</sup> Asian market

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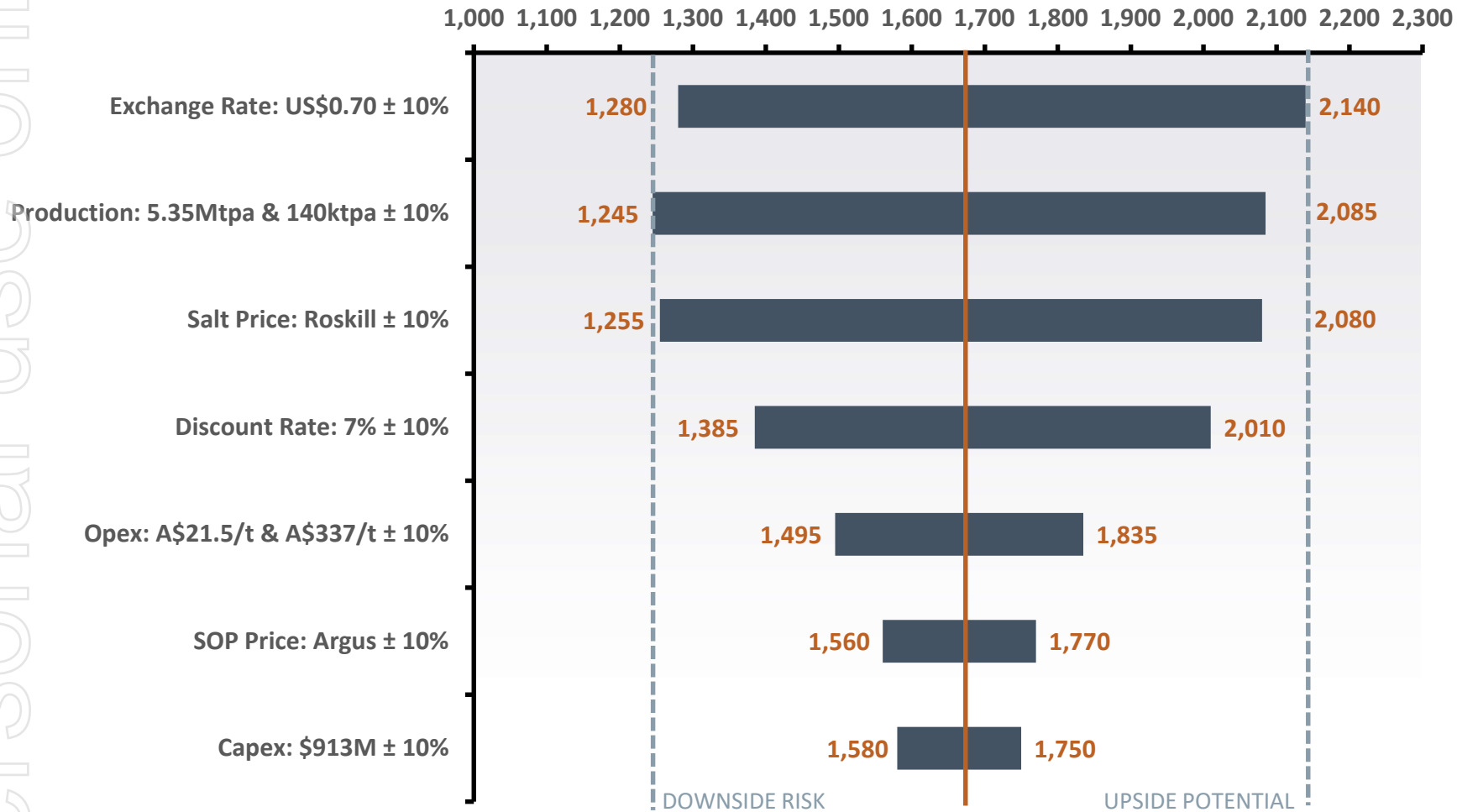
- Mardie will be cost competitive with all Australian salt operations<sup>2</sup>
- When SOP margin treated as a by-product credit, Mardie becomes one of the lowest cost salt producers
- Mexican solar salt and Chinese rock salt the marginal cost suppliers to most Asian markets (~US\$35/t)

<sup>1</sup>Cost curve limited to contestable market where the Mardie project is expected to compete on delivered cost and quality, including coastal China, Japan, Korea, Taiwan and South East Asia <sup>2</sup>Roskill (December 2020), BCI analysis

# Robust Financial Sensitivities

## Robust project even with >10% downside risk

BASE CASE NPV<sub>7</sub>, \$1,670M<sup>1</sup>

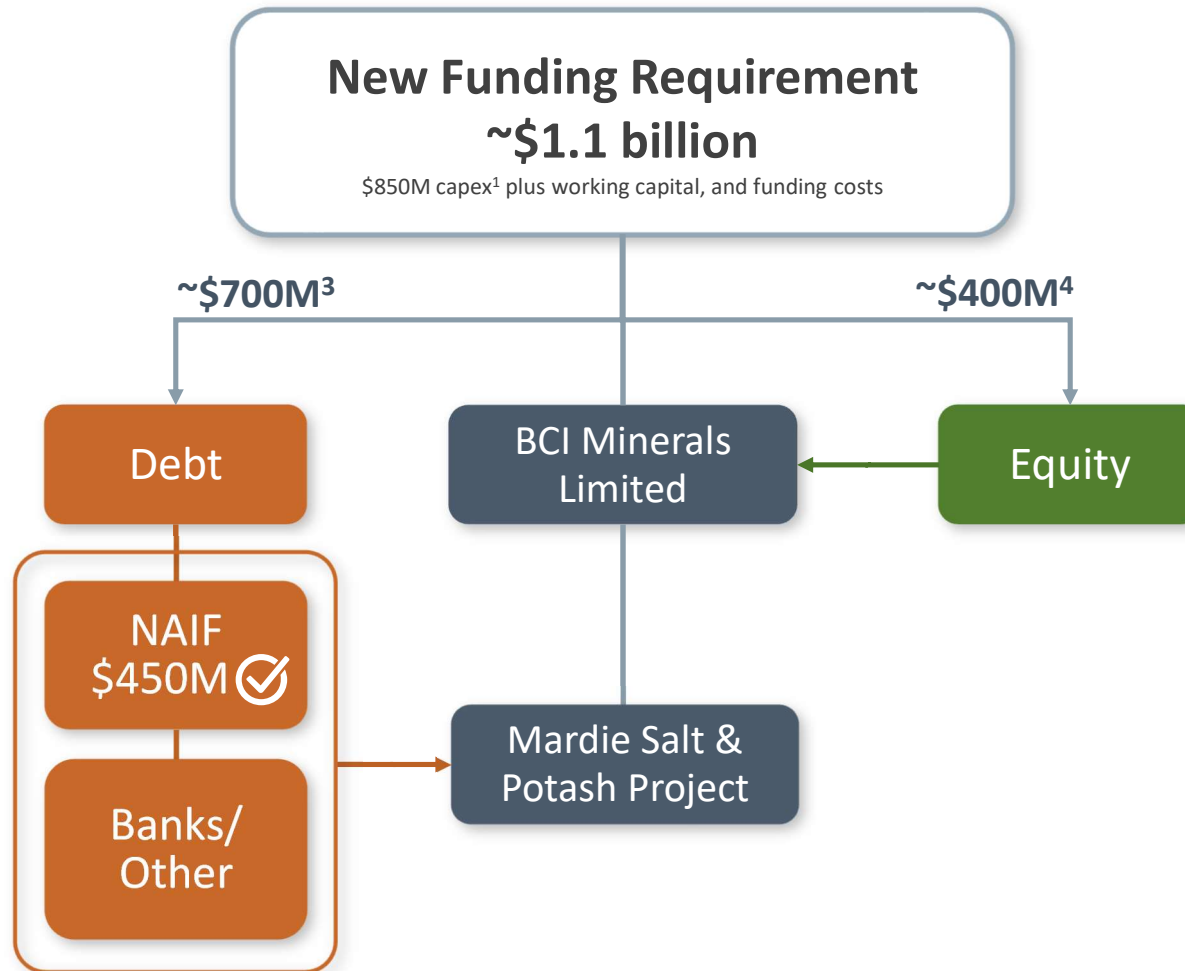


<sup>1</sup>Pre-tax NPV<sub>7</sub> (real, ungeared, project cash flows)



# Funding Strategy Advanced

## NAIF loan approved; positive engagement with banks



- **NAIF<sup>2</sup>:** Positive Investment Decision for \$450M loan over 15 years

- **Banks/Other:** Positive progress with Australian and international banks, and other lenders

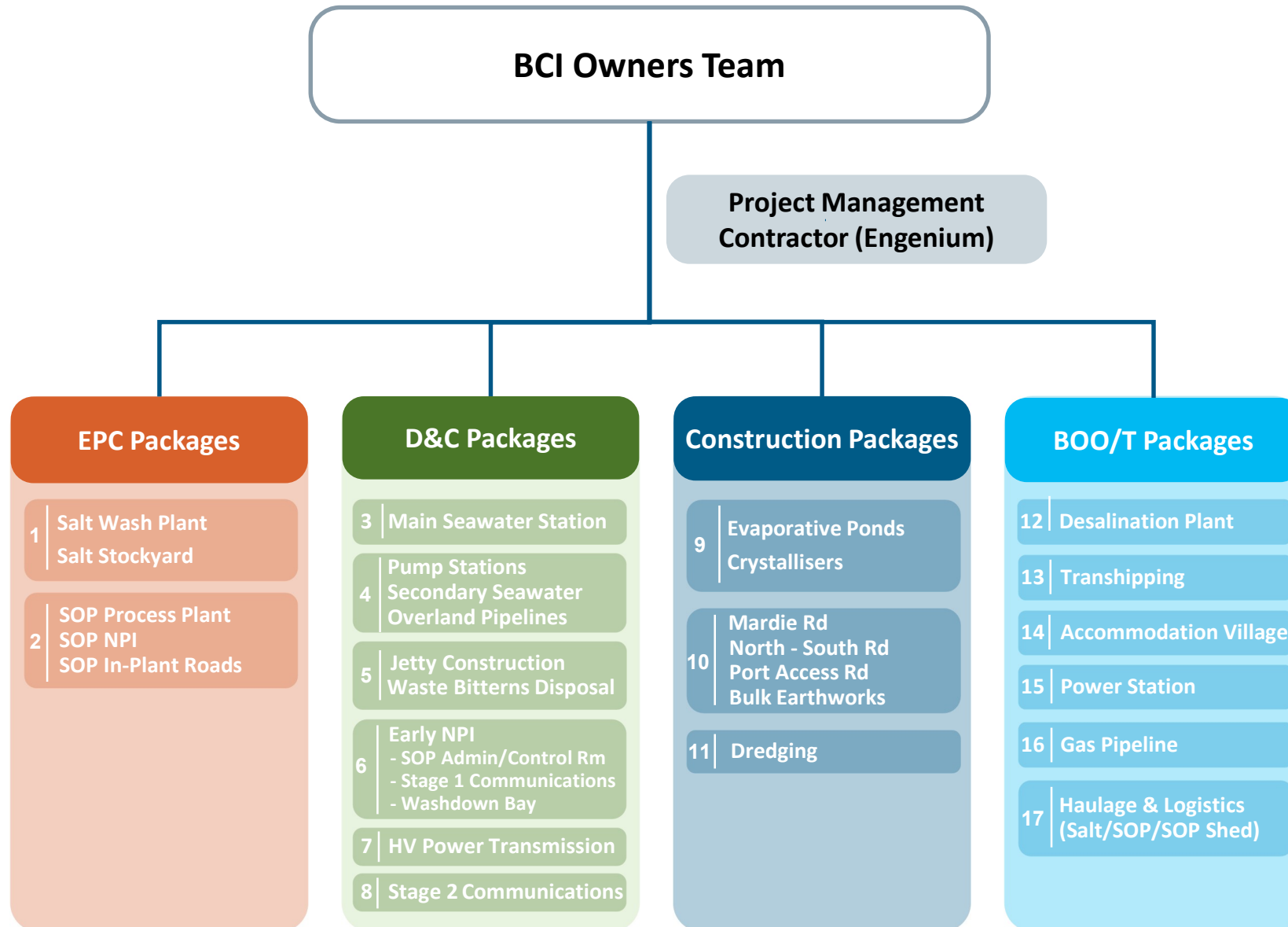
- Equity to be sourced from existing cash, new Iron Valley earnings and new capital
- Corporate level investment preferred; merits of project level investment will be considered
- 100% underwriting from existing shareholders in late 2020 Entitlement Offer

<sup>1</sup>Excluding \$63M early works capex funded from BCI cash and earnings <sup>2</sup>Northern Australia Infrastructure Facility <sup>3</sup>Excluding bank guarantees and cost overrun facilities

<sup>4</sup>Excluding BCI cash and earnings applied to fund all early enabling construction capex

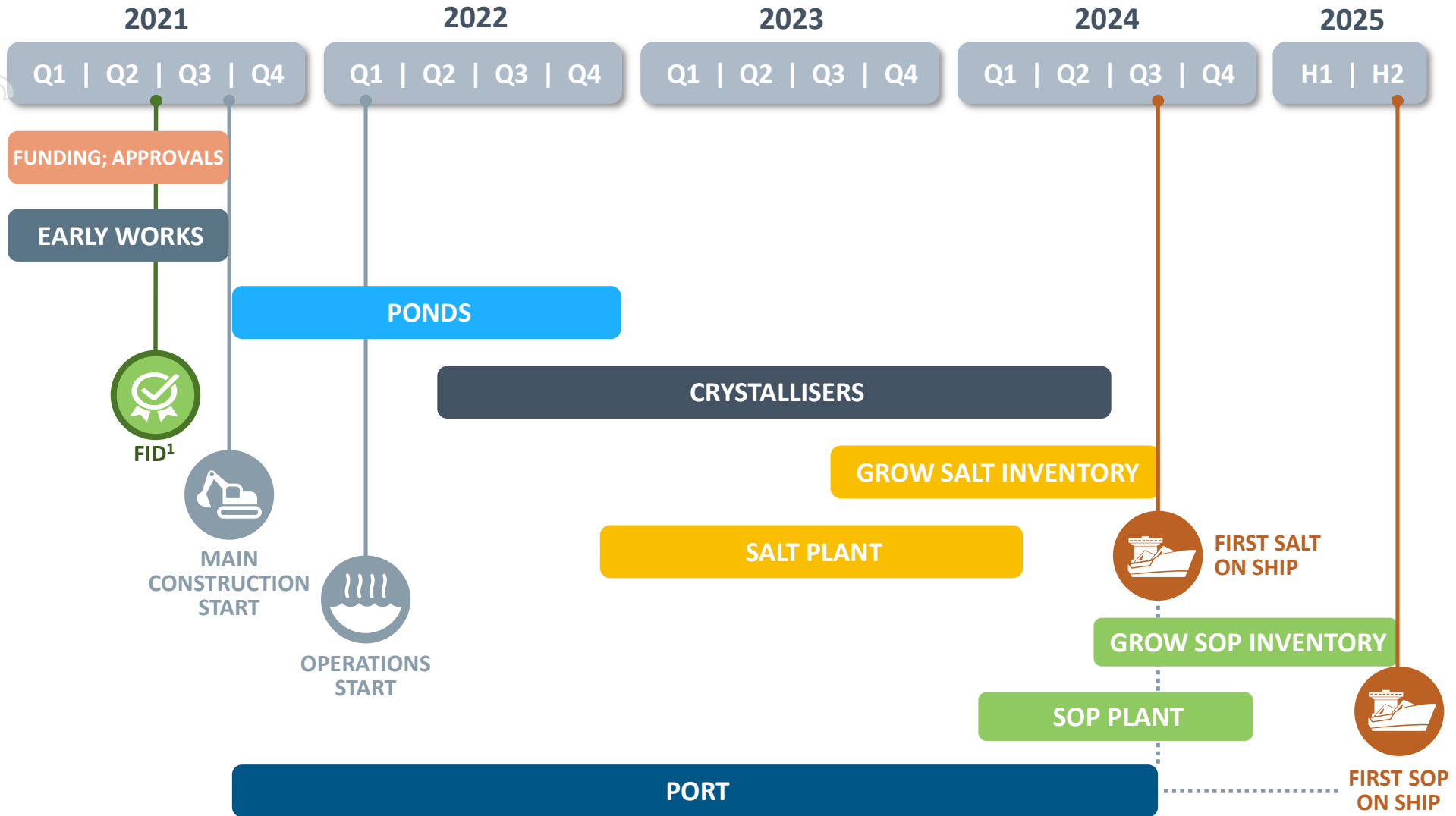
# Delivery Model

Maximise fixed price contracts to reduce cost overrun risk



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# Project Schedule



<sup>1</sup>Final Investment Decision

# Mardie – A Tier 1 Project

Large scale, low cost and long operating life



## 1. LARGE SCALE

- Largest salt project in Australia
- 3<sup>rd</sup> largest globally<sup>1</sup>
- Expansion potential



## 2. SUSTAINABLE

- 99% of energy from wind and sun<sup>2</sup>
- Seawater is an inexhaustible resource
- Secondary processing of waste brines to produce SOP
- 100-year life potential<sup>3</sup>



## 3. QUALITY PRODUCTS

- High purity salt (>99.5% NaCl)
- Premium granular SOP fertiliser (>52% K<sub>2</sub>O)



## 4. LOW COST

- Lowest quartile salt operating cost (incl. SOP credits)
- Ability to ship large vessels provides cost advantage



## 5. STRONG CASHFLOWS

- Long term annuity of ~\$260Mpa EBITDA
- ~\$24Bn cashflow<sup>4</sup> over 100 years<sup>3</sup>

# Why Invest in BCI?

## Strong Iron Valley earnings and significant Mardie upside potential

### CURRENT VALUATION

- Low enterprise value of ~\$100M
- Record Iron Valley royalties
- \$99.7M cash; no debt



### MARDIE POTENTIAL

- Salt & SOP growth markets
- Tier 1 – sustainable, large scale, low cost & long life
- ~\$260M/a EBITDA for 100 years<sup>1</sup>

<sup>1</sup>Subject to Mining and Port Leases being extended

# BCI Board of Directors

## Brian O'Donnell

### NON-EXECUTIVE CHAIRMAN



- Banking and investment background
- Director, Finance and Investments - Australian Capital Equity (ACE)
- Numerous current and previous board positions on ASX-listed and private companies

## Alwyn Vorster

### MANAGING DIRECTOR



- Geology, Mining and MBA degrees
- Kumba; Rio Tinto; Iron Ore Holdings
- Geology; Mining; Marketing, Business Development and various CEO roles

## Jennifer Bloom

### NON-EXECUTIVE DIRECTOR



- Governance, approvals and business background
- Senior positions in both the private and public sector
- Chair BCI Rem & Nom Cmte

## Garret Dixon

### NON-EXECUTIVE DIRECTOR



- Civil engineering background
- Senior contracting roles (HWE; Mitchell Corp; Watpac - NED)
- Executive Vice Pres - Alcoa Corp
- Chair of BCI Project Review Cmte

## Michael Blakiston

### NON-EXECUTIVE DIRECTOR



- Legal and mining business background
- Partner in Gilbert + Tobin's Energy + Resources group
- Chair BCI Audit & Risk Cmte and Chair BCI Equity Cmte

## Richard Court

### NON-EXECUTIVE DIRECTOR



- Commercial & Political background
- Former Ambassador to Japan; Premier and Treasurer of Western Australia
- Former Chair of GRD Minproc, Chair of Iron Ore Holdings, Chair of National Hire

# BCI Executive Team / Key Personnel

**Alwyn Vorster**  
**MANAGING DIRECTOR**



- Geology, Mining and MBA degrees
- Kumba; Rio Tinto; Iron Ore Holdings
- Geology; Mining; Marketing; Feasibilities; Corporate Development

**Sam Bennett**  
**PROJECT DIRECTOR**



- Civil engineering degree
- Fortescue; Roy Hill; WSP
- Construction

**Stephanie Majteles**  
**GENERAL COUNSEL**



- Law degree
- Freehills; Rio Tinto
- Tenure; Approvals; Corporate

**Simon Hodge**  
**CHIEF FINANCIAL OFFICER**



- Finance degree
- JP Morgan; Poynton; Quickflick
- Corporate finance; Investment banking

**Jim Cooper**  
**GENERAL MANAGER OPERATIONS**



- Management Diplomas
- GM Dampier Salt (Rio Tinto); GM Hope Downs (Rio Tinto); GM Boddington (Newmont)
- Operations; Salt Marketing; Health & Safety

**Angela Glover**  
**HEAD OF CORPORATE AFFAIRS**



- Metallurgy degree
- BBI Group, Atlas, Alcan Gove
- Heritage; approvals, License to Operate; Government relations
- Based in Karratha

**Colyn Louw**  
**HEAD OF PEOPLE AND SAFETY**



- Commerce and MBA degrees
- BHP; Roy Hill; Gold Fields
- People, health & safety through studies, construction and operations

## **MARDIE SENIOR DEVELOPMENT TEAM:**

### **Mark Forward (GM Landside)**

- Previously Rio Tinto - Project Manager Processing and Inf.

### **Rob Ernst Jr. (GM Marine)**

- Previously BBI Group – Manager of Port and Marine

## **MARDIE MARKETING TEAM:**

### **Matthew Gurr**

- Previously Rio Tinto - Korea Manager

### **Takashi Kawada (Singapore)**

- Previously Dampier Salt - GM Marketing

### **Kevin Yu (Beijing)**

- Previously Cliffs - China Country Manager

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