

BEYONDIE SOP PROJECT

KALIUM
LAKES



**Production Imminent
Immediate Expansion to 120ktpa**

Beyondie Project Update – 23 August 2021

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DISCLAIMER & COMPLIANCE STATEMENT

Competent Persons Statements

The information in this document that relates to the Exploration Results, Mineral Resource estimate, Ore Reserve estimate and Exploration Target is based upon information compiled by Mr Adam Lloyd, a competent person who is an employee of Kalium Lakes. Mr Lloyd is a Member of the Australian Institute of Geoscientists and has sufficient experience relevant to the style of mineralisation and type of deposit under consideration and the activity which is being undertaken to qualify as a Competent Person for reporting of Exploration Results, Mineral Resources, Ore Reserves and Exploration Targets as defined in the 2012 edition of the "Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves". Certain information in this document is extracted from the ASX announcement titled "BSOPP Feasibility Study Complete – New 120ktpa Base Case" dated 18 August 2021 that relates to Exploration Results, Mineral Resource estimate, Ore Reserve estimate and Exploration Target and is based upon information compiled by Mr Adam Lloyd. Kalium Lakes confirms that it is not aware of any new information or data that materially affects the information included in the ASX announcement and, in the case of Exploration Results, Mineral Resource estimate, Ore Reserve estimate and Exploration Target, that all material assumptions and technical parameters underpinning the estimates in the relevant market announcement continue to apply and have not materially changed. Kalium Lakes confirms that the form and context in which the Competent Person's findings are presented have not materially been modified from the original market announcement. Mr Lloyd consents to the inclusion in this document of the matters based upon his information in the form and context in which it appears.

KLL BY THE NUMBERS

1st

One of the first commercial producers
in Australia/NZ

50_{yr}

Mine life

100%

Of SOP currently imported into
Australia

7 Mtpa

Global SOP Market Size - supply
constrained

5 Mt

Of Sulphate of Potash
Beyondie Ore Reserve

\$280_m

(A\$) Cost of initial Processing Plant &
Resource Development

91%

Project complete

100%

Binding offtake with K+S for 10 years ¹

3.2%

Low cost debt with NAIF and KfW
10 year term – principal repayments
commence Yr3

120_{kt}

Annual Production Target

\$484_m

(A\$) NPV on 120ktpa expansion ³

US\$617_t

Forecast 2022 average standard grade
SOP price CFR Aust ²

\$375_t

(A\$) AISC (real cashflows) – Lowest
Quartile producer

\$70_m

(A\$) Annual LOM EBITDA ³

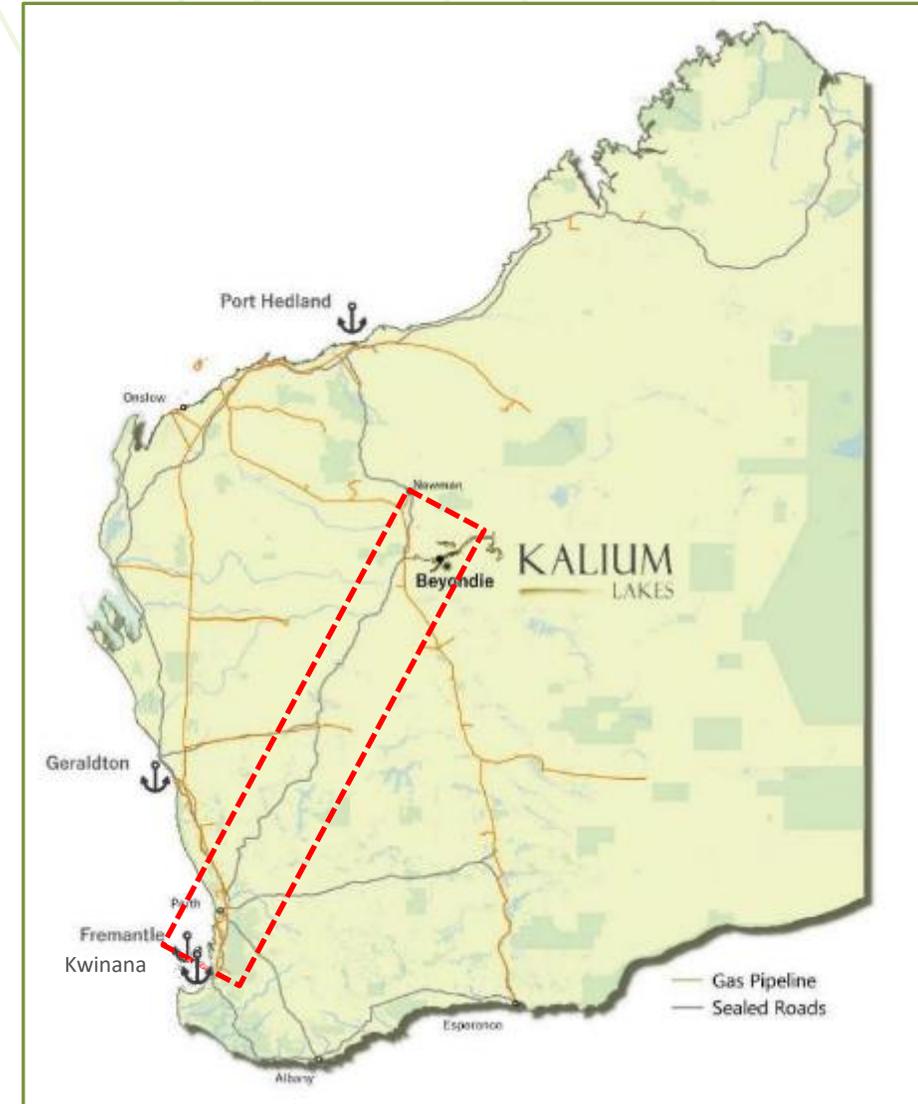
41%

LOM EBITDA Margin ³

1. K+S offtake in place for all 120ktpa production
2. Based on forecasts provided to KLL by CRU/Argus in July 2021
3. Nominal cashflows

POISED TO BECOME A LONG LIFE, LOW COST, HIGH GRADE SOP PRODUCER

- ✓ Construction near complete, within capital expenditure budget, targeting first SOP production in September 2021
- ✓ Commissioning in progress with significant inventories of potassium salts produced and on ROM stockpiles ready for production start-up
- ✓ Feasibility study completed on immediate expansion from 90ktpa to 120ktpa SOP production by Q4 2022
- ✓ Low capital intensity for incremental 30ktpa (A\$45 million - A\$1,513/t vs A\$3,113/t for initial 90ktpa) and favourable macro factors
- ✓ Low execution risk – leveraging current project team to deliver debottlenecking of all equipment upgrades
- ✓ Low marketing risk – K+S offtake in place for all 120ktpa production
- ✓ Buoyant SOP market – year-on-year price increase forecast
- ✓ Long life operation – 50 year mine life with first 30 years based on 88% reserves only, with significant additional expansion opportunity



CORPORATE OVERVIEW

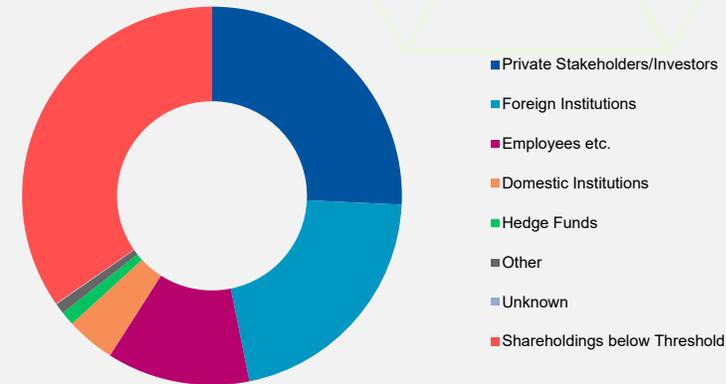
Capital structure

Ticker		KLL
Share price ¹	A\$/sh	0.185
Shares on Issue	m	839.2
Market capitalisation	A\$m	155.2
Cash and cash equivalents ²	A\$m	28.6
Debt ²	A\$m	168.7
Undrawn facilities ²	A\$m	6.4

Other securities on issue

11,750,000	Performance rights
29,896,480	nil exercise price options expiring 16 June 2023
1,182,639	options exercisable at \$0.55 each, expiring 16 June 2022
1,750,000	options exercisable at \$0.625 each, expiring 16 June 2022
5,000,000	options exercisable at \$0.3583 each, expiring on 30 June 2025

Register overview



Board of Directors

Stephen Dennis, Non-Executive Chairman

Brent Smoothy, Non-Executive Director

Mark Sawyer, Non-Executive Director

Sam Lancuba, Non-Executive Director

Key Management

Rudolph van Niekerk, CEO

Jason Shaw, CFO

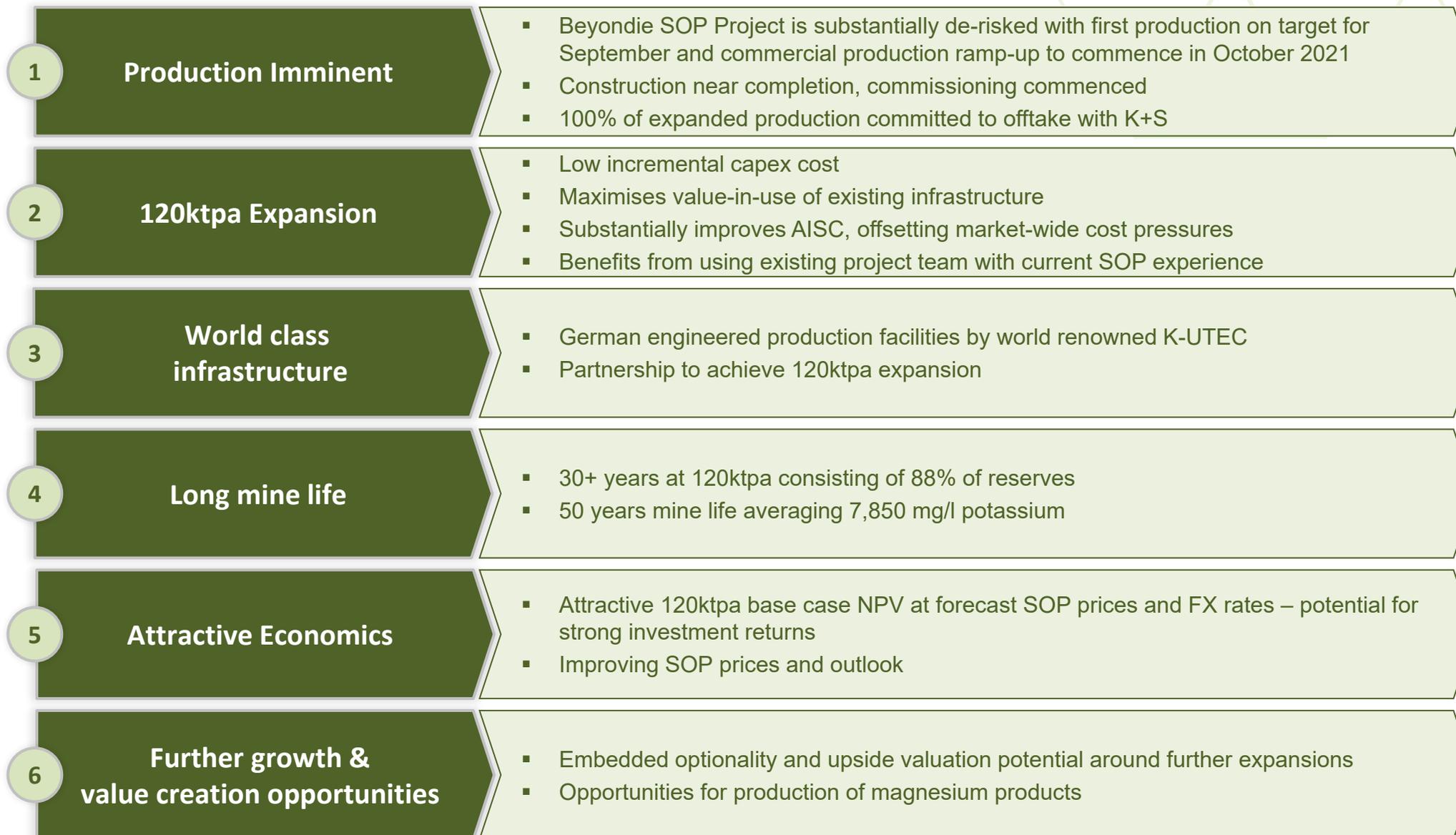
Pratik Patel, GM Operations

Ian Hind, Marketing & Logistics Manager

1. As at 20 August 2021.

2. Cash and cash equivalents as at 31 July 2021. Debt and available undrawn facilities as at 31 July 2021 based on FX rates at that date.

ATTRACTIVE INVESTMENT PROPOSITION



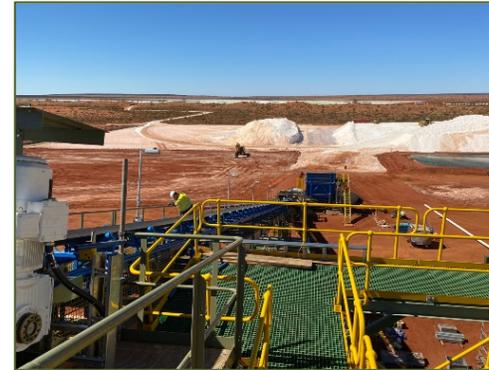
START OF OPERATIONS DE-RISKED

- ✓ **First six months of SOP production de-risked with potassium salt harvested and available for harvest**
- ✓ More than 113,000 tonnes of contained SOP pumped as at end July 2021
- ✓ More than 90,000 tonnes of potassium salt, that meets the plant feed cut-off grade, has been harvested and delivered to the ROM stockpile, equivalent to approximately 9,000 tonnes of SOP production
- ✓ Harvesting operations continue, without interruption or delay, from the abundant supply of potassium salts available within the crystalliser ponds. The potassium salts available accounts for approximately the first six months of SOP production during the ramp-up period, de-risking the start-up of operations
- ✓ The Company's pond design and operating methodology allows for a controlled transfer of brine from the lower grade sodium chloride ponds, down to the higher grade potassium crystalliser ponds, where potassium salt is precipitated to meet plant feed specifications on an ongoing basis.
- ✓ Process design proven and tested by SOP process experts, K-UTEC AG Salt Technologies, with performance guarantee in place under the Ebtac agreement



MAXIMISING VALUE-IN-USE OF WORLD CLASS SOP

- ✓ Designed and manufactured by K-UTEC and Ebner (Ebtec), world renowned and experienced German engineering
- ✓ Construction near completion and commissioning well advanced within capital expenditure budget and on schedule
- ✓ First SOP targeted for September '21 with commercial production to commence in October '21 and nameplate achieved by March '22
- ✓ Operations team in place and salt harvesting operations ongoing, with 90kt KTMS feed (equivalent of 9,000 tons of SOP) delivered to ROM stockpile as at 31 July 2021
- ✓ **Expansion to 120ktpa to be achieved through optimisation, debottlenecking and small equipment upgrades**
- ✓ **120ktpa production rate by Q4'2022**



GAS AND POWER INFRASTRUCTURE COMPLETE



Gas Supply Infrastructure Commissioned

- ✓ Goldfields gas pipeline tie-in commissioned
- ✓ APA metering facility commissioned
- ✓ Kalium Lakes owned gas inlet facility commissioned
- ✓ Kalium Lakes owned 78km gas pipeline commissioned
- ✓ Kalium Lakes owned gas delivery station commissioned
- ✓ Kalium Lakes owned power station commissioned & performance tested

No upgrade to gas supply infrastructure required and only a small upgrade to the power station to produce 120ktpa of SOP



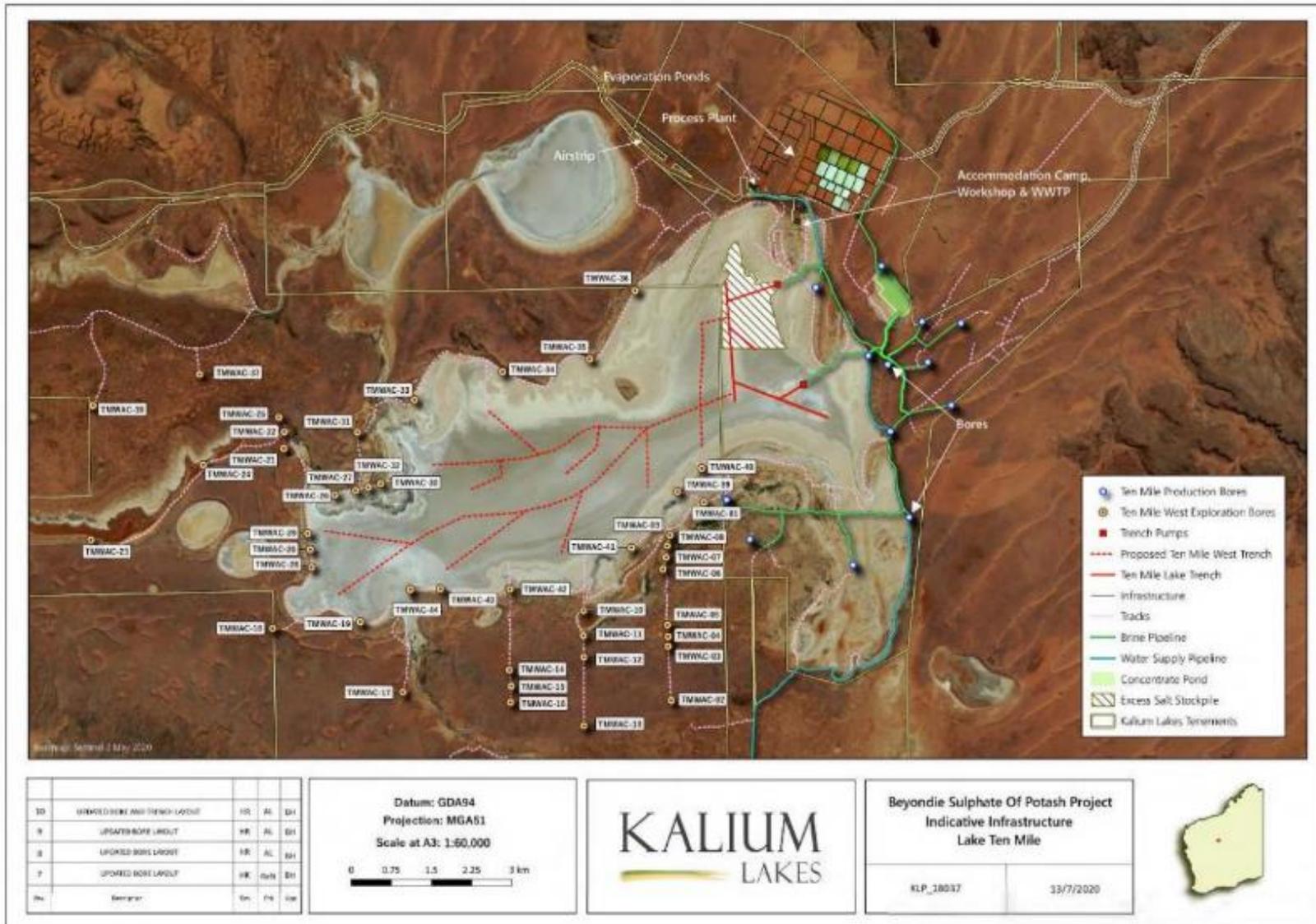
Power Station Commissioned

BRINE PRODUCTION BORES & TRENCHES



- ✓ 10 additional production bores at Ten Mile and 15 additional production bores at Sunshine required for SOP production at 120ktpa
- ✓ Brine extraction and transfer infrastructure installation complete, with only minor upgrades required to support 120ktpa production rates
- ✓ Pre-concentrator ponds complete and operational, with no upgrade required to support 120ktpa production rate
- ✓ Future design allowance (contingency / further expansion) for 5 additional production bores and 24km of trenches at Ten Mile West

10 MILE WEST ADDS SIGNIFICANT UPSIDE



- ✓ **Mineral Resource of 5.95Mt at 17,490 mg/L SOP**
- ✓ High-grade SOP Resource with easy extension of trenches and bore network directly adjacent to the current Ten Mile operations
- ✓ Consistently low Na:K ratio averaging around 7.4
- ✓ Included in expanded Land Access Agreement signed April 2021 with Marputu Aboriginal Corporation RNTBC, representing the Gingirana People
- ✓ Approvals strategy confirmed and work commenced for inclusion in mine plan
- ✓ Included in 120ktpa mine plan from 2024 onwards to allow for completion of additional approvals requirements

EVAPORATION PONDS PRODUCING SALTS

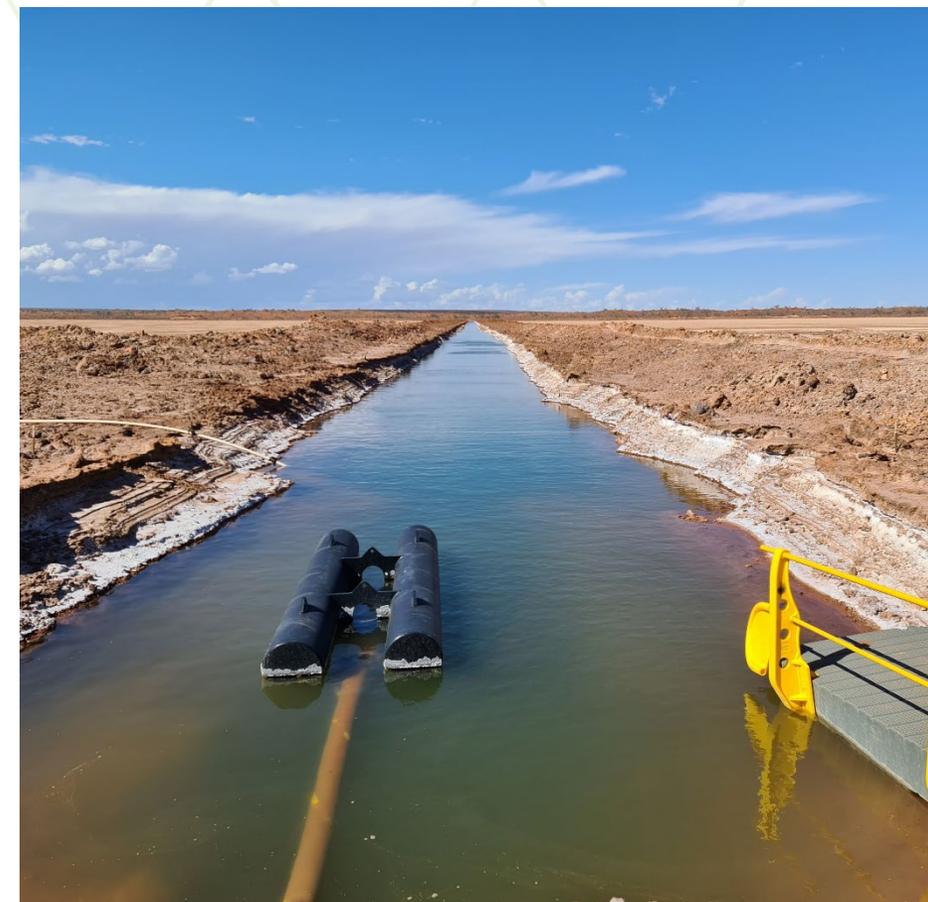
- ✓ Lined ponds producing Potassium and NaCl salts
- ✓ 113,000 tonnes of SOP in brine pumped into ponds*
- ✓ Earthworks and lining of all 90ktpa ponds complete
- ✓ Harvesting activities underway in preparation for commissioning and commencement of production
- ✓ **One additional train of primary and recycle ponds each required for the 120ktpa production rate**



Crystalliser Ponds

ATTRACTIVE EXPANSION ECONOMICS – 120KTPA

Description	120ktpa Feasibility Study Assumptions and Results ¹
Production Target	120ktpa by Q4 2022
Life of Mine (LOM)	50 years (from 2019) ²
Capital Cost for the expansion from 90ktpa to 120ktpa	A\$45.3m ³
LOM Operating Cost FOB (real) ⁴ (All-in Sustaining Cost)	A\$375/t FOB (US270/t FOB @ AUD:USD 0.72)
LOM Average Net SOP Price (real) ⁵	US\$585/t
AUD:USD foreign exchange rate	0.75 to June 2025, 0.72 thereafter
LOM Royalties (nominal) ⁶	A\$1,053m
LOM EBITDA (nominal)	A\$3,465m
LOM Average EBITDA p.a. (nominal)	A\$70.7m
LOM EBITDA Margin (nominal)	41%
Project unlevered pre-tax NPV (8%, nominal) ⁷ (Valuation date: 30 June 2021)	A\$484m



¹ Except for the incremental capital cost presented in the table which relates to the cost of expansion from 90ktpa to 120ktpa, all figures in the table are for the project in relation to the 120ktpa production target.

² Refer to Cautionary Statement in ASX announcement titled "BSOPP Feasibility Study Complete – New 120ktpa Base Case" dated 18 August 2021 the 120ktpa mine plan comprises Ore Reserves (77%) and Measured and Indicated Mineral Resources (13%), it is partly based on Inferred Mineral Resources (10%). No Exploration Target brine has been included in the assumed life of mine or economic evaluation of the project. Refer to the disclaimer and compliance statement in page 2 of this announcement.

³ Capital cost estimate is based on actual data from current project and updated where required to Q2 2021 prices. The majority of the deliverables constituting the basis for the capital cost estimate at an AACE Class 3 level. The capital cost includes a contingency of A\$4.2m.

⁴ Life of Mine Operating Cost FOB includes all mining, processing, site administration, product haulage to port, port costs, head office corporate costs, sustaining costs, but excludes royalties and taxes.

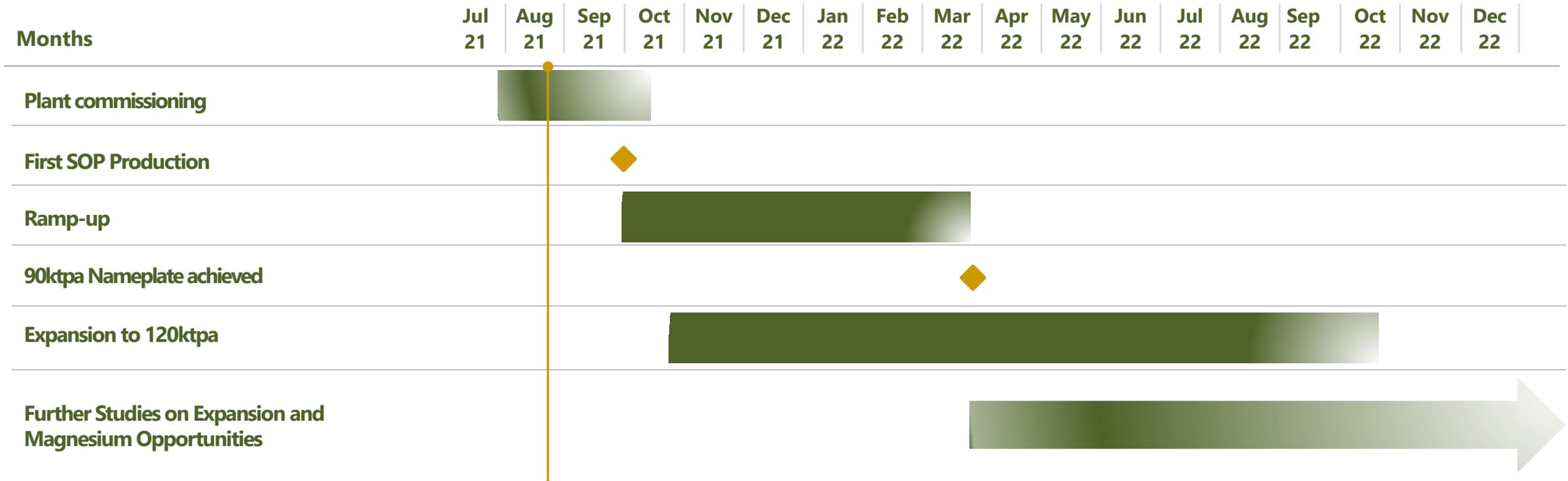
⁵ SOP market studies by CRU and Argus have been used as the basis for the commodity price. Long term SOP price forecasts were obtained in July 2021 for the period to 2040 which the Company has adopted in its forecasts. The Company has assumed that SOP prices remain stable for the period after 2040 for the remainder of the life of mine. The average net SOP price is calculated as the average CFR price less agent fee and CPT costs but before marketing fees.

⁶ WA Royalty Rate = Downside case 5% of "royalty value" however the position is still under discussion and negotiation with the WA Government; Native Title Royalty Rate = 0.75% of Mine Gate; Founders' Royalty = 1.9% of gross revenue.

⁷ NPV based on nominal cashflows assuming a 2.4% inflation factor used; WACC calculation = 8% discount rate.

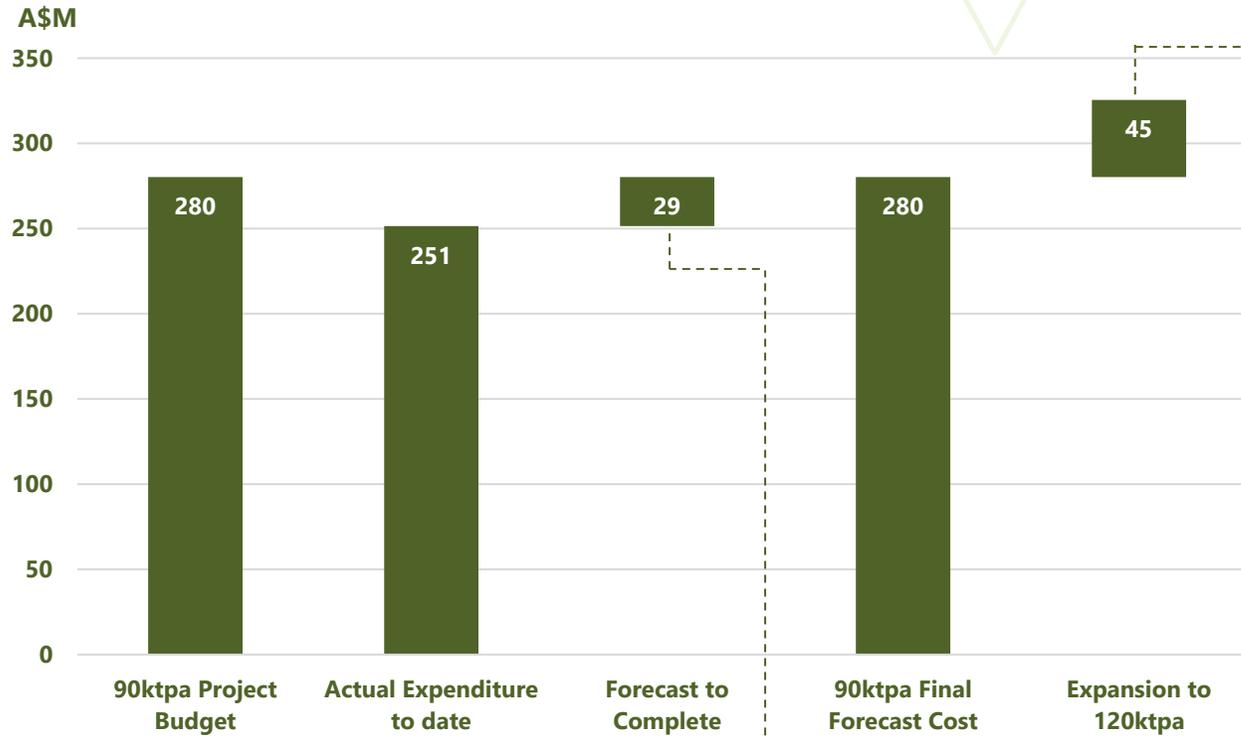
EXPECTED TIMETABLE

- ✓ Delivered on every milestone since June 2020
- ✓ First production on target for September 2021



CAPITAL EXPENDITURE SUMMARY

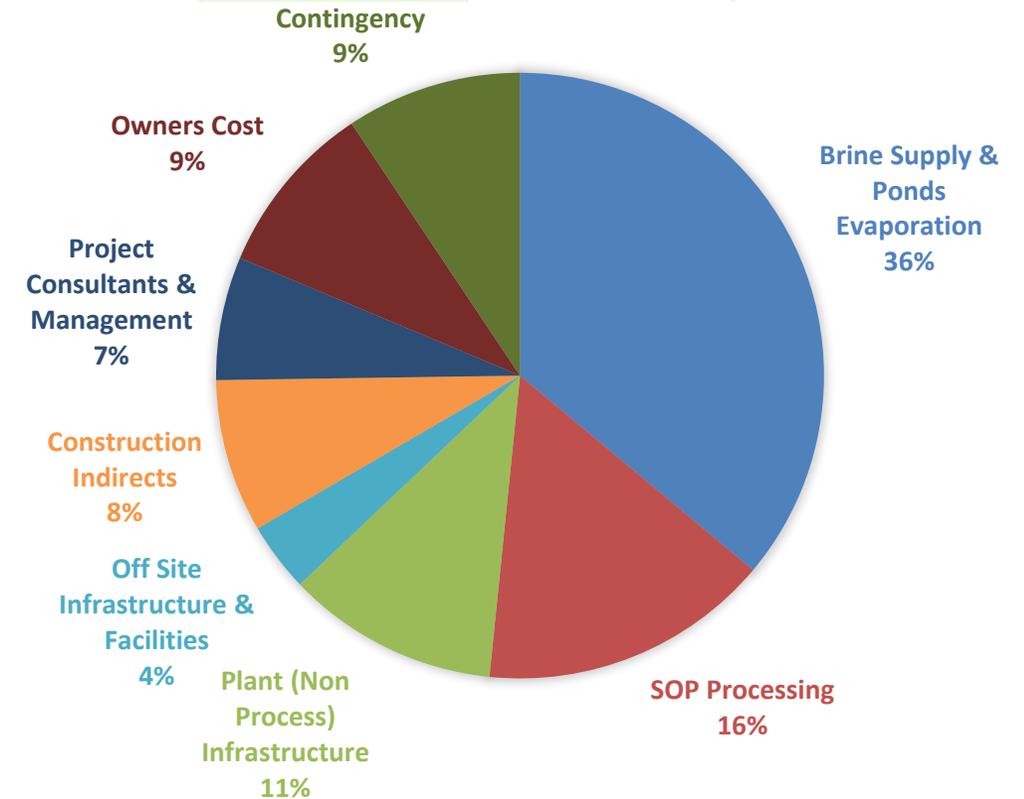
Project Capital Expenditure Overview



Forecast to Complete includes:

- A\$27M committed expenditure
- 100% of forecast expenditure to complete is fully funded from available cash and debt facilities

30ktpa Incremental Expansion Capital Expenditure



LONG TERM SUPPORTIVE FINANCIERS

- Ongoing support of Senior Lenders, NAIF and KfW
- Attractive long term, low cost funding
 - ✓ Long Tenor 10-15 year loan life
 - ✓ Low Cost ~3.2% average interest rate
- Discussions ongoing with Senior Lenders to facilitate expansion to 120ktpa with restructuring of facilities and a new A\$20 m liquidity facility to supersede and replace the Westpac working capital facility, subject to:
 - negotiation and execution of formal documentation and Ministerial non-veto of the NAIF component; and
 - consent by KfW board as well as Euler Hermes and the German ministerial bodies

Lender	Borrower	Drawn Principal & Interest as at 31 July '21 (A\$M)	Undrawn & Available as at 31 July '21 (A\$M)
 	Kalium Lakes Potash – Tranche A ¹	47.1	3.6
	Kalium Lakes Potash – Tranche B ²	49.0	1.4
	Kalium Lakes Potash – Tranche C	25.3	0.7
	Kalium Lakes Infrastructure	47.3	0.7
	Totals	168.7	6.4

¹ Tranche A facility denominated in EUR. Converts to USD denominated loan on draw-down date. Upon conversion from EUR to USD on draw-down, loan is denominated in USD and interest accrues in USD.

² Tranche B facility is denominated in USD and has been converted to AUD at exchange rate of 0.735 AUD:USD

SIGNIFICANT MACROECONOMIC CHANGES

- ✓ A number of macroeconomic and other changes have impacted forecast operating costs as reflected in 120ktpa feasibility study
- ✓ Kalium Lakes is in ongoing discussions with its Senior Lenders around working capital and debt repayment profiles, to allow for robust long term project economics and appropriate short term cash flow requirements during commencement and ramp-up of production
- ✓ The accelerated expansion to 120ktpa offsets some of the cost pressures and benefits from the increase in SOP prices (right time, right place) and, combined with the proposed changes in the debt repayment profiles and new liquidity facility, delivers a more robust operation within the current economic climate

Description	Change
AUD/USD	Australian dollar is significantly stronger compared to previous assumptions, reducing USD revenue forecasts
SOP inland freight and distribution	Kalium Lakes has received notification from Toll that it is not able to provide the proposed backloading services, due to unavailability of adjacent forward hauling services ¹
Shipping	Shipping costs are substantially higher, largely due to the impact of Covid-19
Opex inflation	Other opex increases due to inflationary pressures, largely driven by Covid-19 impacts in Australia and WA
Mineral Royalty	The Company is also aware that the WA Government is reviewing the mineral royalty that will be applicable to SOP producers. ²

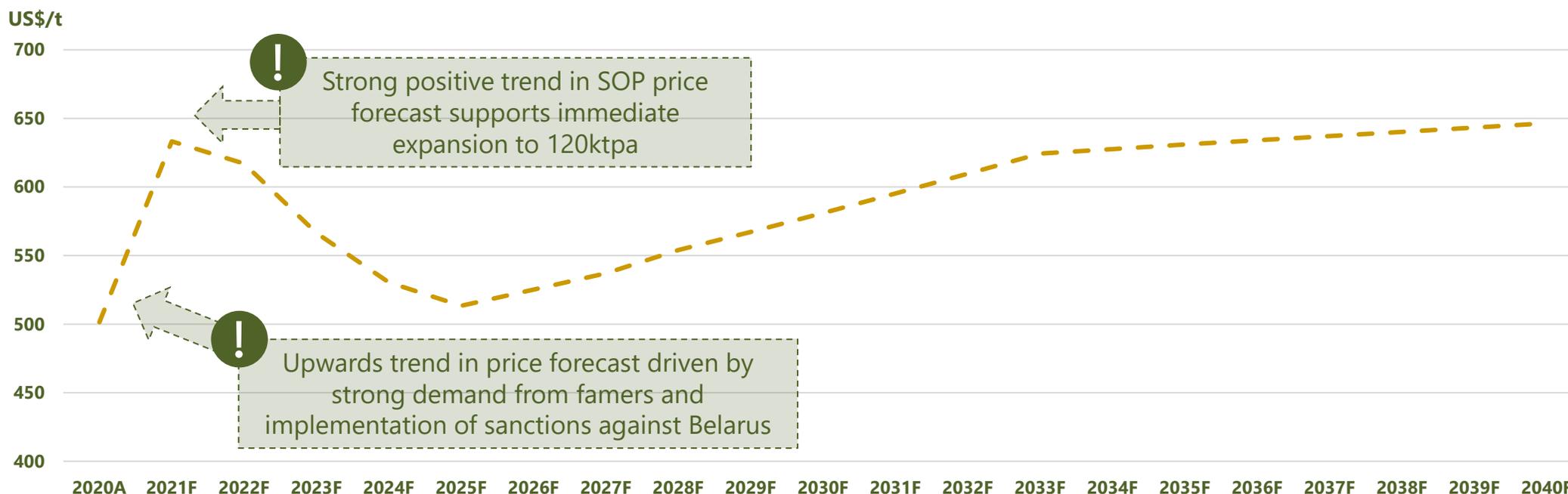
1. While commercial discussions between Toll and Kalium Lakes on this matter remain ongoing in respect of which the Company has reserved its rights, it is also examining several alternative viable backloading arrangements and Perth depot services to ensure there will be no interruption to the SOP supply chain when SOP production commences.

2. The Company received written advice from the Department of Mines and Energy in 2015 as to the level of mineral royalty that would be applied to SOP. This advice was relied upon by the Company for the purposes of completing the project Bankable Feasibility Study which provided the basis for securing finance for the project from current lenders. If the WA Government impose a different basis for royalty payments the Company will need to determine the impact of any changes on its operating costs and will advise shareholders in respect to this by way of further ASX announcements.

ATTRACTIVE SOP PRICE OUTLOOK

- Strong SOP price outlook driven by:
 - ✓ Strong demand from farmers – crop prices up 40% YTD and on multi year high
 - ✓ Coordinated global sanctions against Belarus - ~ 20% of global potash supply affected

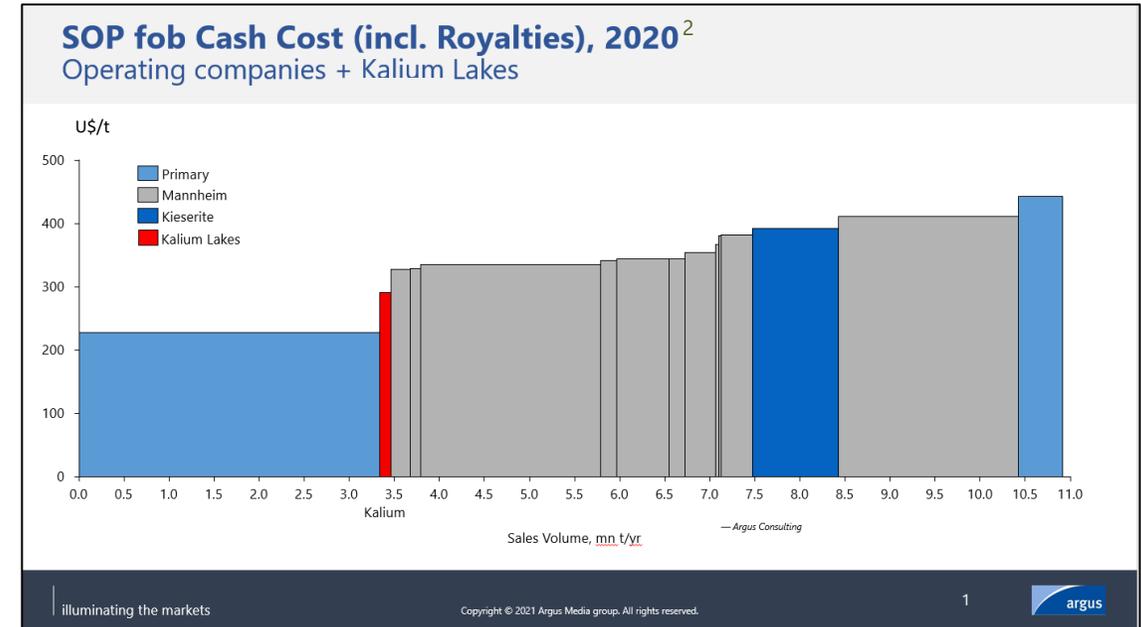
CFR Australia SOP Price Forecast (Standard Grade, Real ¹)



1. SOP price forecasts are KLL's forecast prices for standard grade SOP on a CFR Australia basis in real terms. SOP pricing forecasts are calculated as the mid-point of price forecasts derived from data prepared by CRU and Argus. Comparative to standard grade product prices, granular and soluble grade SOP products are expected to achieve a price premium.

KALIUM WELL PLACED TO BENEFIT FROM HIGHER PRICES

- ✓ Beyondie SOP production about to commence (right time and place) and within lowest quartile operating costs
- ✓ First mover advantage being one of the first SOP producers in Australia
- ✓ Offtake Agreement with German fertiliser producer K+S and distributor for 10 years at 120ktpa¹
- ✓ Pricing is linked to the sale price realised by K+S
- ✓ K+S currently supplies more than 60% of the Australian (~75ktpa) and 40% of the New Zealand (~18ktpa) SOP markets
- ✓ Expansion to 120ktpa benefits from retaining existing project resources and experience, providing a low risk profile to the expansion works



1. Refer to Kalium Lakes Concludes Historic Binding Offtake agreement with global potash Producer K+S ASX Announcement dated 26 March 2019 https://www.kaliumlakes.com.au/site/wp-content/uploads/austocks/kll/2019_03_26_KLL_1553549280.pdf and ASX Announcement titled "BSOPP Feasibility Study Complete – New 120ktpa Base Case" dated 18 August 2021

2. While this chart reflects SOP FOB cash costs for operating companies in 2020, the red bar represents KLL's forecast AISC (plus royalties) as per the ASX announcement titled "BSOPP Feasibility Study Complete – New 120ktpa Base Case" dated 18 August 2021

STRONG ESG CREDENTIALS

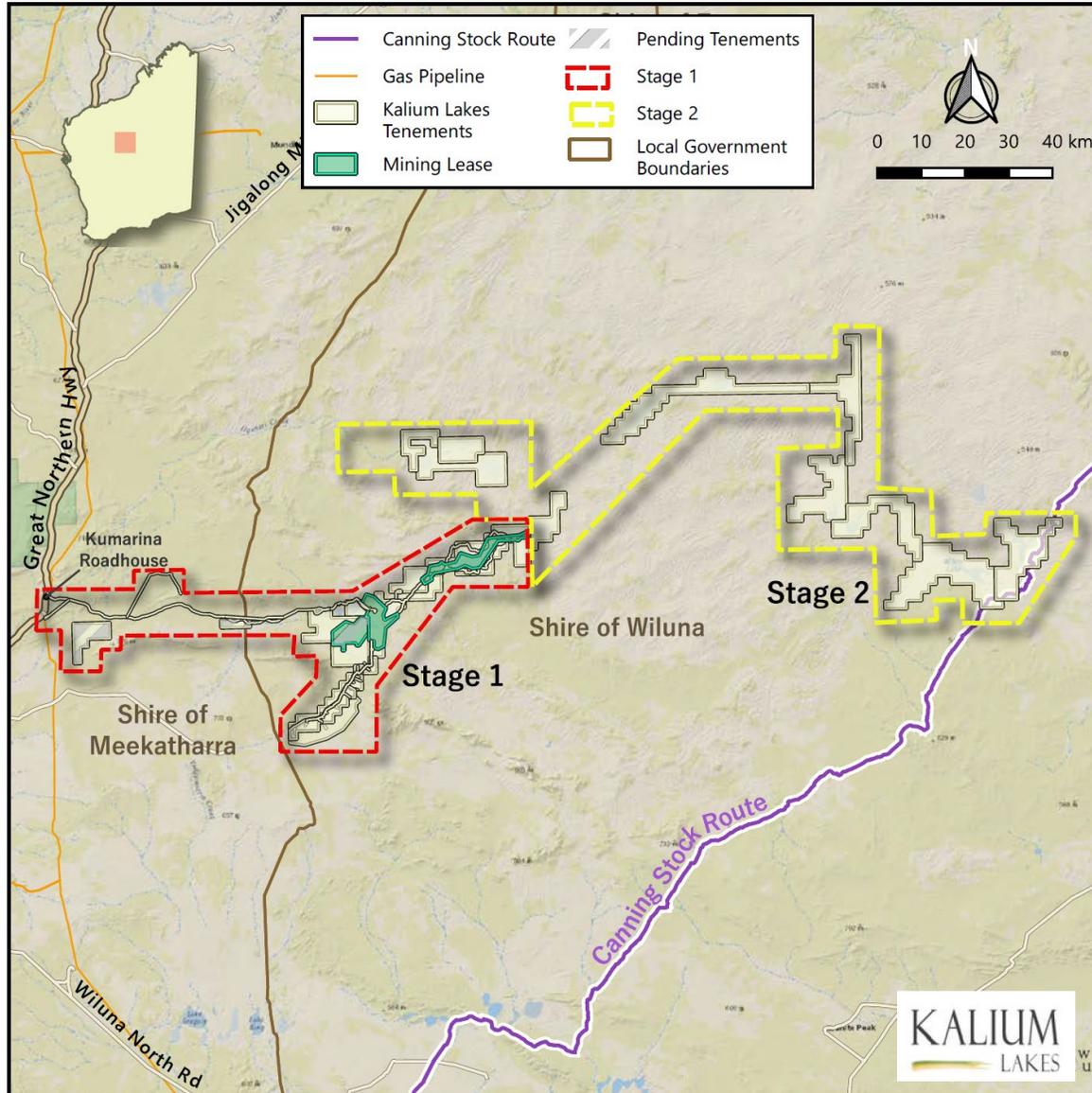
- High quality fertilizer, responsibly sourced for the agricultural sector, enabling farmers to provide nutrition for the world.
- Low consumption footprint
 - ✓ High nutrient content minimises relative transport emission
 - ✓ Lower-production emissions relative to other SOP mines (0.26 kgCO₂e/kg SOP)
- Increased usage drives improved crop yields and reduces deforestation
- Active engagement with traditional owners
 - ✓ Marputu Aboriginal Corporation RNTBC, representing the Gingirana People, resulting in expanded Land Access Agreement signed April 2021.

GHG emission factors for fertilizers, seeds and pesticides ¹

Agricultural Input	GHG Emissions (kg CO ₂ eq/kg)
Nitrogen fertilizer (as N)	6.69
Phosphate fertilizer (as P)	0.71
Potash fertilizer (as K)	0.46
Pesticides (as active ingredient)	5.41
Seed material	0.87

¹ Source: Woods, Jeremy & Brown, Gareth & Estrin, Alexander. (2005). Bioethanol greenhouse gas calculator.

SIGNIFICANT FURTHER GROWTH POTENTIAL



INCREASED PRODUCTION

- A review of resources and reserves, combined with the updated resources / reserves currently being completed to maximise SOP production and economics.
- Further increased SOP production scenario will not only maximise resource potential and returns for stakeholders, but also provide other benefits including:
 - ✓ Establish Kalium lakes as one of the largest SOP producer in Australia, competitive in the global market
 - ✓ Further reduce operating costs due to economies of scale

OPTIMISE AND DEVELOP OPPORTUNITIES

IMMEDIATE EXPANSION TO 120KTPA

PRODUCTION AND RAMP-UP

- Production Imminent
- Commissioning well advanced
- Handover from projects to operations team in progress
- First production Sep '21
- Commercial production of standard SOP from Oct '21
- Granular SOP production from Jan'22
- 90ktpa nameplate from Mar '22
- Organic certification of SOP products

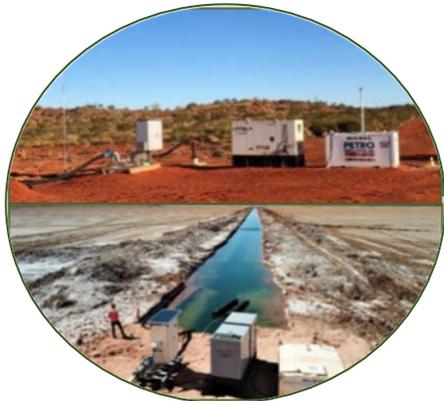
- Immediate expansion to grow operations to 120ktpa
- Expansion works target commencement in Q4'21
- Target operating run rates at 120ktpa from Q4'22
- Develop and implement systems for other ongoing process improvement, including cost improvement initiatives

- Further studies for SOP production expansion opportunities
- Explore opportunities for development of magnesium products from available brine
- Ongoing implementation of cost improvement initiatives

Additional Information



SOP PRODUCTION PROCESS



**Bores and Trenches
Brine Pumping**



Brine Solar Evaporation



Salt Harvesting



Agriculture Production



Premium SOP Fertiliser



Purification Processing

“ ... using the sun to economically extract SOP for the world’s growing population...” ”

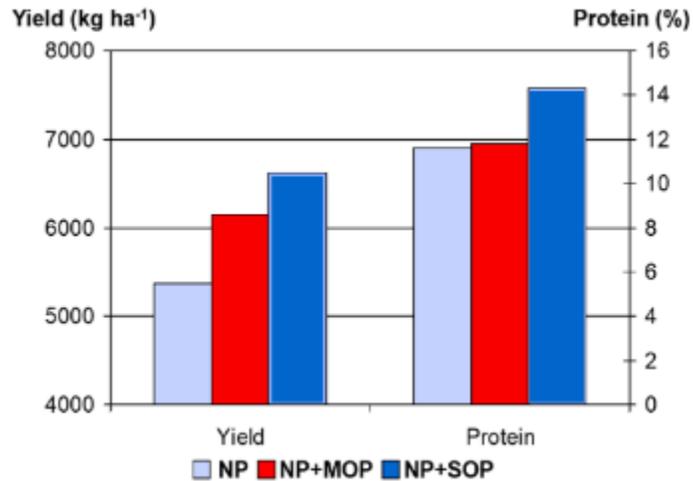
Key Highlights

- ✓ SOP demand is forecast to grow from 6.4 Mtpa currently to 7.8Mtpa by 2035¹
- ✓ SOP used in crop markets is to grow just over 100ktpa in 2021 with China and Europe being the biggest consumers of SOP in direct agricultural application, accounting for 74% of total SOP crop uses in 2021, and demand in the coming years to be driven mostly by Latin America, Western Europe and Africa¹
- ✓ Mannheim SOP producers accounts for about 50% of all SOP production, with China accounting for ~67% of the global Mannheim capacity from a multitude of producers and NW Europe for ~28% of the global Mannheim capacity from Yara, Kemira and Tessenderlo
- ✓ Capacity has been lost from smaller Chinese Mannheim producers with high operational costs who became unprofitable as MOP prices climbed since 2018. Environmental concerns also lead to Mannheim closures for producers without HCL disposal on site and with new primary production coming to market, a further decline in Mannheim SOP production is forecast over the coming years
- ✓ SOP prices have also started to trend upwards, exceeding expectations during the last quarter, but not at the same rate as MOP prices, significantly reducing the price premium between SOP and MOP.
- ✓ SOP price increases are anticipated to follow similar trends as MOP as rising feedstock costs for Mannheim producers mean that buyers expect to see higher prices for their next round of buying, while delivery times are also longer than normal and container availability remains an issue

1. Argus

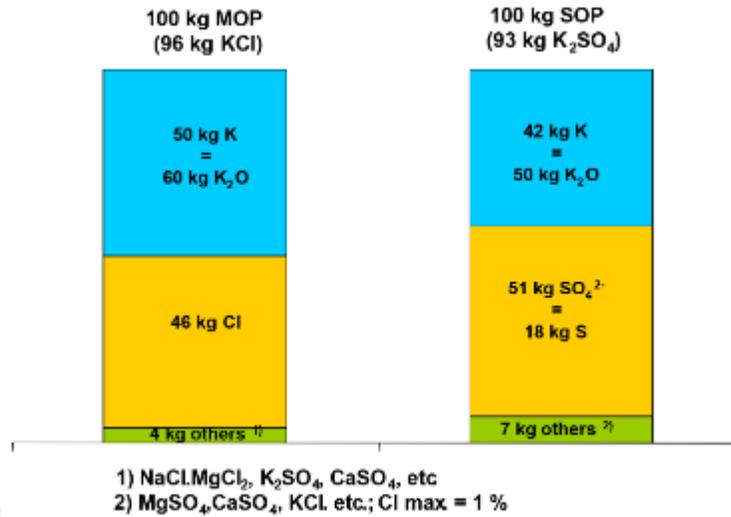
SOP BENEFITS IN AGRICULTURE

SOP vs MOP on Irrigated Wheat



Soil: Silty clay, pH: 7.9, CaCO₃: 49%, K_{exch.} = 240 mg kg⁻¹, K rate: 50 kg K₂O ha⁻¹

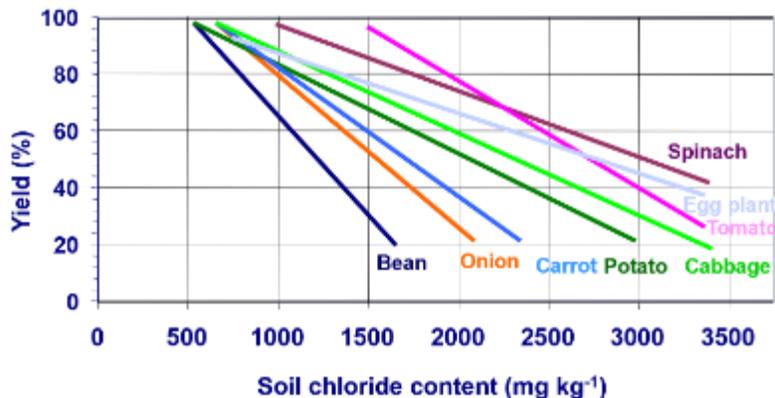
Composition of MOP & SOP



1) NaCl, MgCl₂, K₂SO₄, CaSO₄, etc
2) MgSO₄, CaSO₄, KCl, etc.; Cl max = 1 %

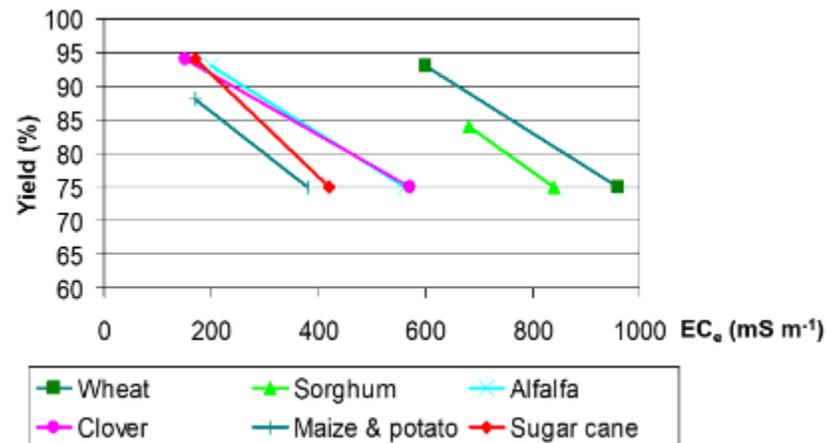
- Potassium and sulphur are among the macronutrients essential for the growth of plants, animals and humans
- Intensive cultivation has led to a depletion of these macronutrients in many soils around the world
- SOP combines these two nutrients in a highly concentrated dual nutrient fertilizer, with 50% K₂O and 18% S
- SOP is the Potash form with the lowest salt index compared to MOP
- Higher nutritional value due to higher concentration of starch, sugar, protein, oil, vitamins and others

Chloride Effect on Yield of Vegetables



Source: Maas, 1986

Yield Depression Caused by Salinity



Source: K+S Agronomic Reasons for the use of SOP, Excerpts from a workshop on SOP



THANK YOU

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