



SOUTH BOULDER
MINES LTD



Colluli – Building the foundations of a globally significant agrichemical production facility

Paul Donaldson – Managing Director

*March 2015
ASX:STB*

Helping grow a better future

Forward Looking Statements and Disclaimer

The information in this presentation is published to inform you about South Boulder Mines (the “Company” or “STB”) and its activities. STB has endeavoured to ensure that the information in this presentation is accurate at the time of release, and that it accurately reflects the Company’s intentions. All statements in this presentation, other than statements of historical facts, that address future production, project development, reserve or resource potential, exploration drilling, exploitation activities, corporate transactions and events or developments that the ‘Company expects to occur, are forward-looking statements. Although the Company believes the expectations expressed in such statements are based on reasonable assumptions, such statements are not guarantees of future performance and actual results or developments may differ materially from those in forward-looking statements.

Factors that could cause actual results to differ materially from those in forward-looking statements include market prices of potash and, exploitation and exploration successes, capital and operating costs, changes in project parameters as plans continue to be evaluated, continued availability of capital and financing and general economic, market or business conditions, as well as those factors disclosed in the Company’s filed documents.

There can be no assurance that the development of the Colluli Project will proceed as planned. Accordingly, readers should not place undue reliance on forward looking information. Mineral Resources have been estimated using the Australian JORC (2012) Code (‘JORC 2012’). To the extent permitted by law, the Company accepts no responsibility or liability for any losses or damages of any kind arising out of the use of any information contained in this presentation. Recipients should make their own enquiries in relation to any investment decisions.

Material resource and financial assumptions made in this presentation are consistent with assumptions detailed in the Company’s ASX announcements dated 25 February 2015 and 4 March 2015, which continue to apply and have not materially changed. The Company is not aware of any new information or data that materially affects assumptions made.

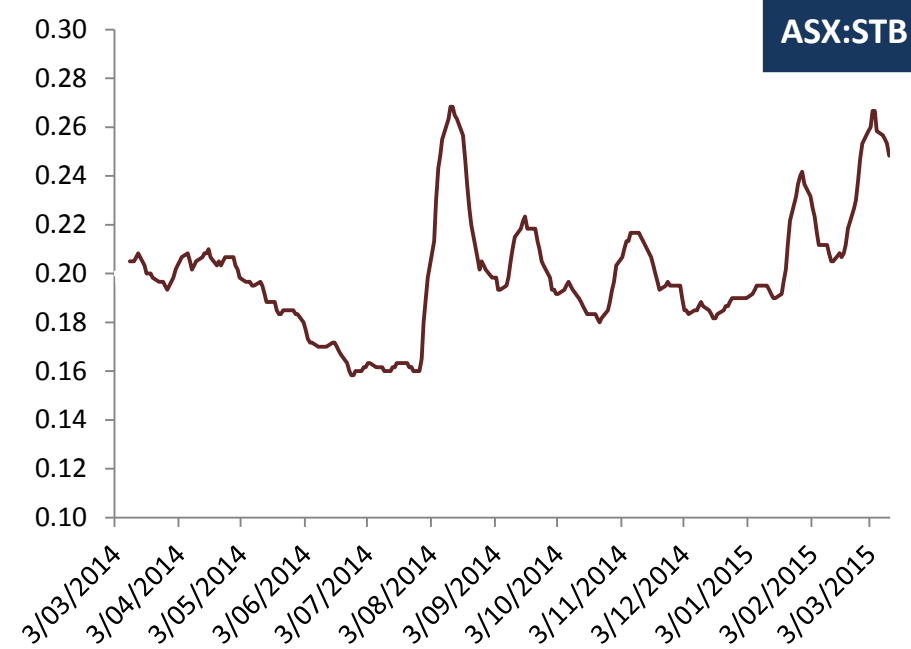


STB Corporate Overview

Capital Structure as at 12th March 2015

Ordinary shares on issue	149.43m
Options on issue	28m
Share Price ¹	\$0.25
Undiluted Market Capitalisation	\$37.4m
Debt	\$0
Cash ¹	\$8.6m
Undiluted Enterprise Value	\$28.8m

Share price performance



¹ As of 12th March 2015



STB Corporate Overview

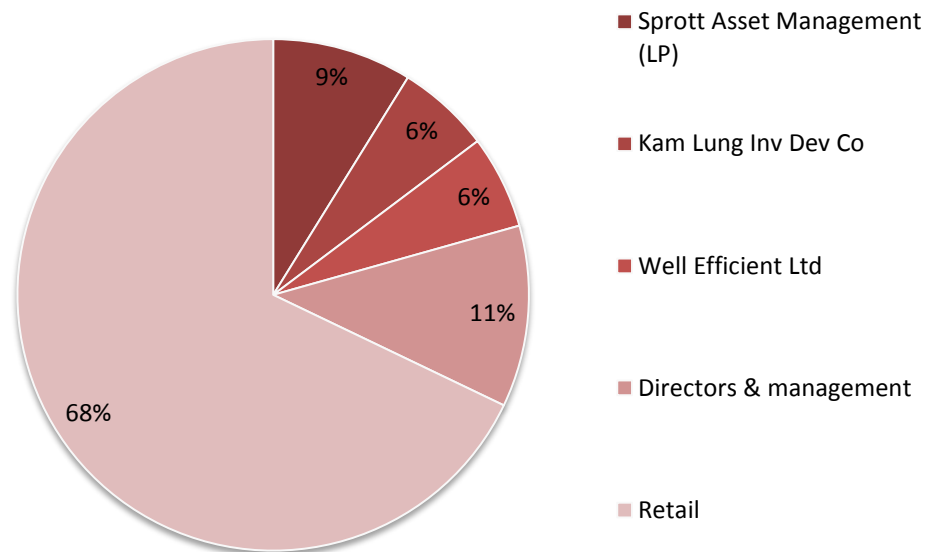
Major Shareholders

Sprott Asset Management	9%
Kam Lung Investment Development	6%
Well Efficient	6%
STB Management	11%
Top 20 shareholders	61%

Directors and Management

Seamus Cornelius	Non Executive Chairman
Paul Donaldson	Managing Director
Tony Kiernan	Non Executive Director
John Fitzgerald	Non Executive Director
Liam Cornelius	Non Executive Director
Stuart Tarrant	Head of Finance
James Durrant	Project Manager

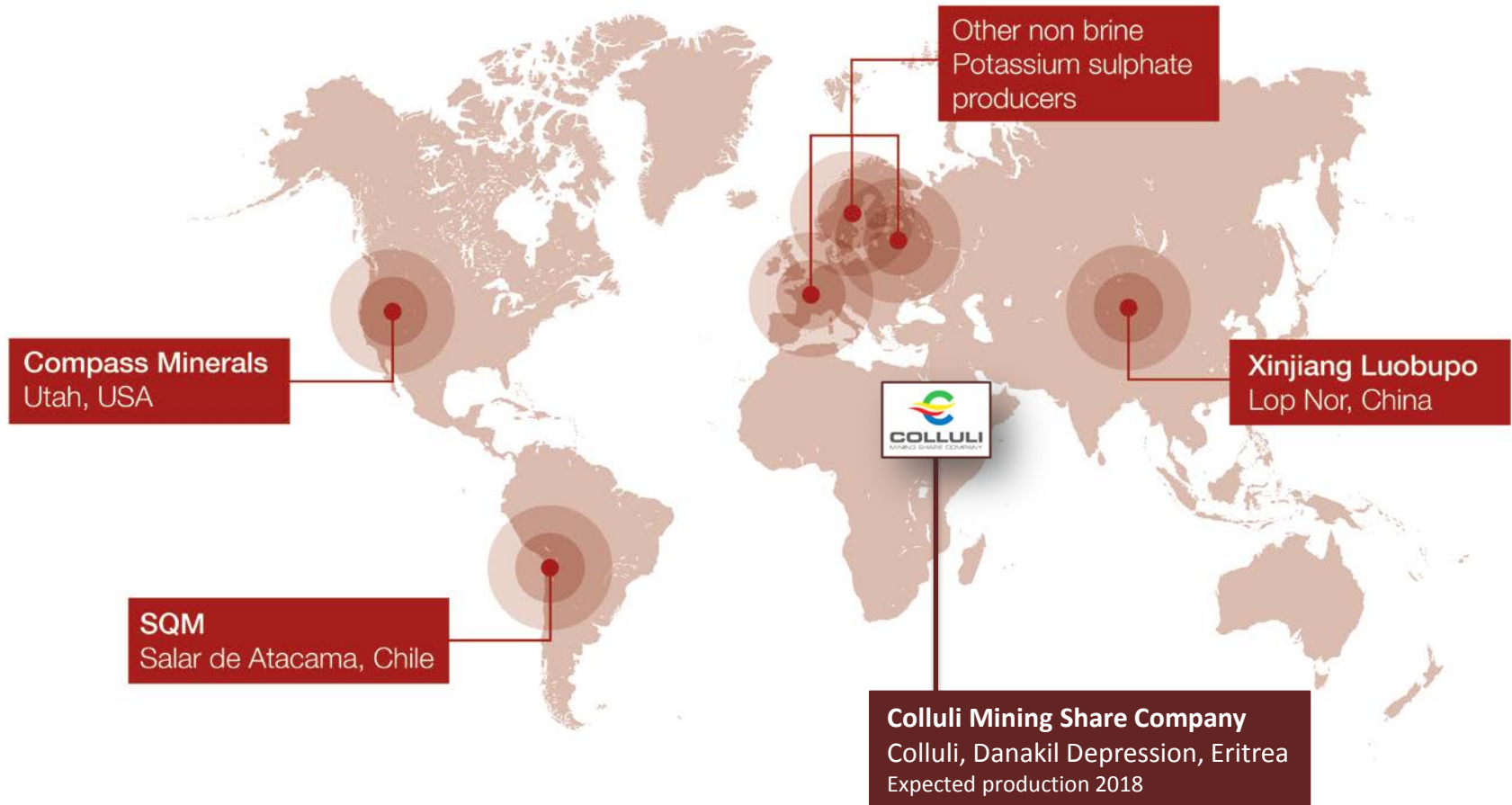
STB Registry Composition



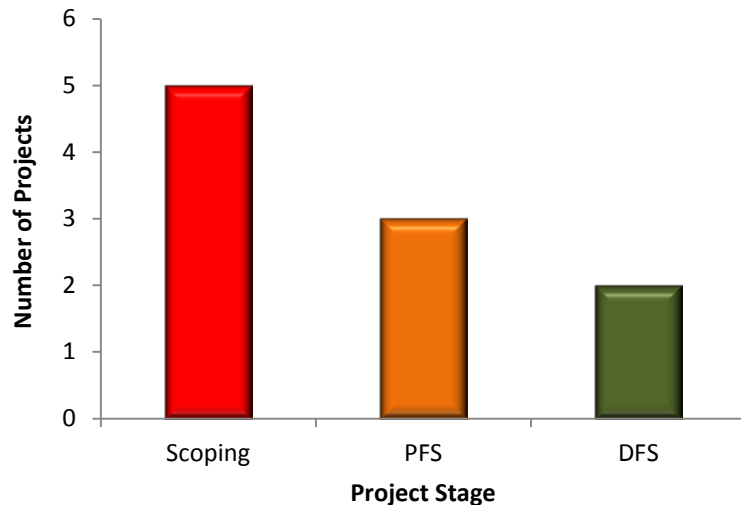
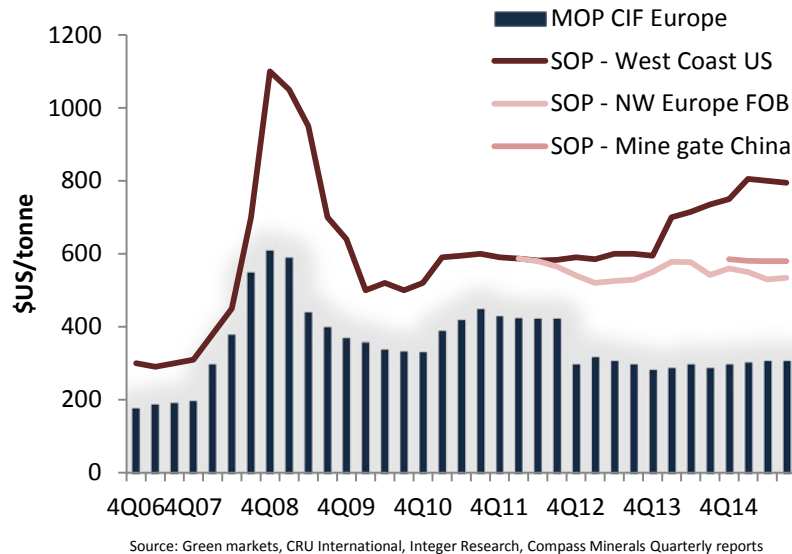
- **2941 shareholders in total**
- **82% of shares held by 137**



SOP – premium product with limited primary production centres



Supply constrained market with limited greenfield developments



SOP Prices Up

- While MOP prices have dropped since 2010, SOP prices in the US continue to climb and Europe remains stable at higher than historical premiums
- Since 2006, MOP prices have increased 72% while SOP prices have increased by **165%**

Limited advanced projects (PFS or DFS)

- Only two greenfield SOP developments with completed DFS
- Only three greenfield projects with completed PFS (including Colluli)



Colluli PFS - Project Highlights

- **Globally significant** resource
- **Highly favourable** economics
- **Stable and maturing** mining jurisdiction
- **Simple project development** focussing on single potassium sulphate (SOP) product for early project phases
- **Lowest capital intensity** of advanced SOP projects globally
- **Bottom quartile** operating costs for the production of potassium sulphate (SOP)
- **Modular development** approach underpinned by massive 1.289 billion tonne high grade resource close to surface
- **Significant project upside** with clear economies of scale and product diversification
- **Unrivalled coastal access** with only 75km to the Red Sea
- **Aligned and committed joint venture partners** in the 50:50 JV (Colluli Mining Share Company) between STB and the Eritrean National Mining Company ENAMCO



Modular growth underpinned by 1.289Bt, JORC compliant, high grade resource

Over 1 billion tonnes of potassium bearing salts – all potassium salts in the Colluli resource are suitable for the production of potash fertilisers.

Shallow mineralisation supports Colluli as open pit – a proven, safer mining method, easier to expand and better overall resource recovery than underground.

Danakil basin is an emerging potash province – over 4 billion tonnes of potassium bearing salts identified to date, and one of **only three** major deposits globally containing kainite salt (key salt for SOP production) in solid form.

Colluli at a Glance	
Location	South Eritrea
Product	Sulphate of Potash
Resource ¹	Measured: 303Mt Indicated: 951Mt Inferred: 35Mt <u>Total: 1289Mt</u>
Potassium Bearing Salts	Sylvinite: 265Mt Carnallite: 398Mt Kainite: 626Mt
Process	Flotation/Solar Evaporation
Stage	DFS level testwork program underway

¹Refer to STB ASX announcement 25th February, 2015



PFS – Economic Snapshot

	Phase I	Phase II	Phase III and beyond
¹ Project NPV _{10%} (US\$m)	462	846	Project will grow with market over time and diversify product mix.
Project IRR (%)	22.3	24.7	
STB NPV _{10%} (US\$m)	206	397	
STB IRR (%)	22.3	25.9	
Development Capital (US\$m)	442	282 ²	
Expected Module Capacity (tpa)	425,000	+ 425,000	
Average Mine Gate Cash Costs (US\$/t SOP)	162	141	
Production Commences	Q3 2018	Q3 2023	
Expected mine life (years - based on Measured and Indicated)	520	260	
Undiscounted cumulative cash flow (US\$m)	2,645	5,134	

Phase I has been modelled as a standalone project and is an attractive investment in itself.

Phase II calculated with the second module commencing in 2023, with volumes in addition to Phase I.

¹Modelled at long term SOP price of US\$588/tonne

Note: PFS for EPM Mining modelled US\$716/tonne SOP [Source: EPM Mining N43-101 PFS report]

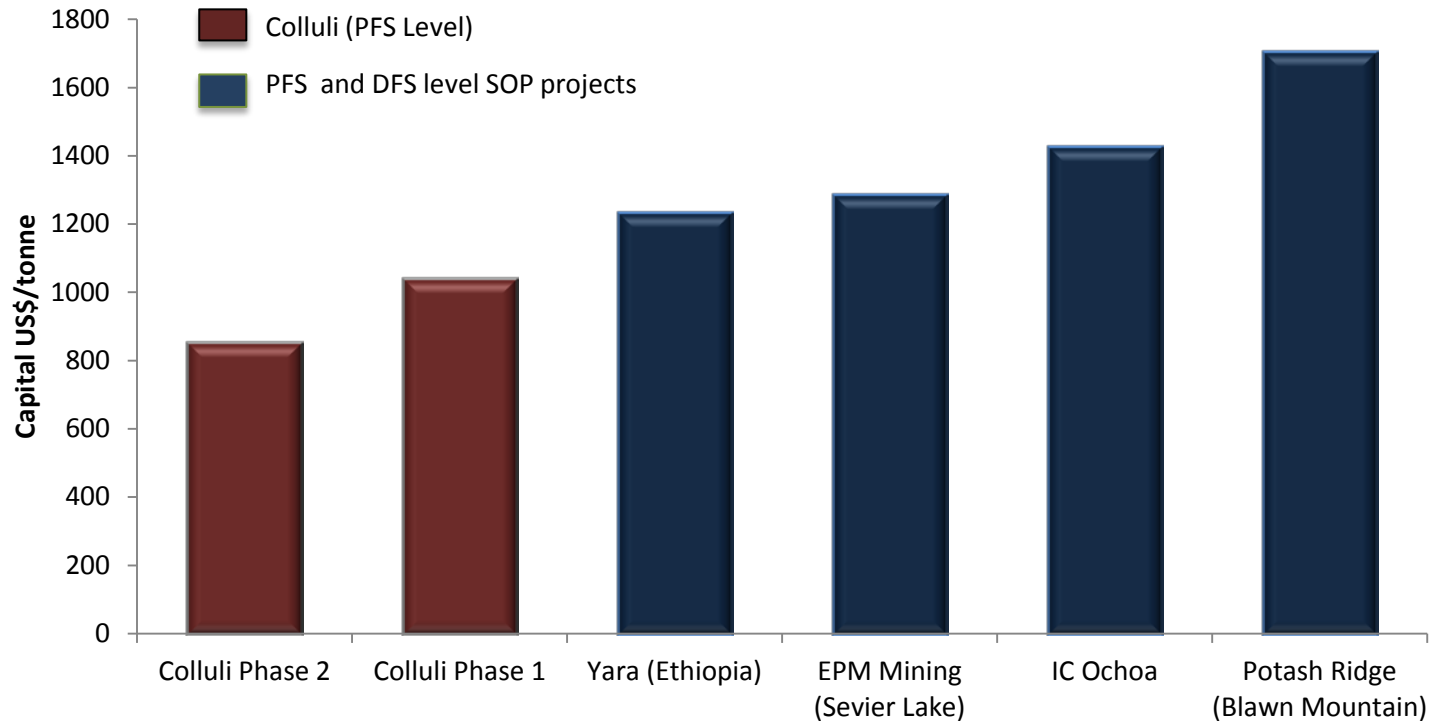
Note: DFS for IC Ochoa modelled at \$618/tonne SOP [Source: IC Ochoa N43-101 Feasibility report]

Note: Colluli Project NPV10% @ US\$700/tonne = US\$689m Phase I (28.3% IRR) and US\$1,205m (30.5% IRR) Phase II

² Incremental additional capital



Colluli has lowest capital intensity of advanced SOP projects

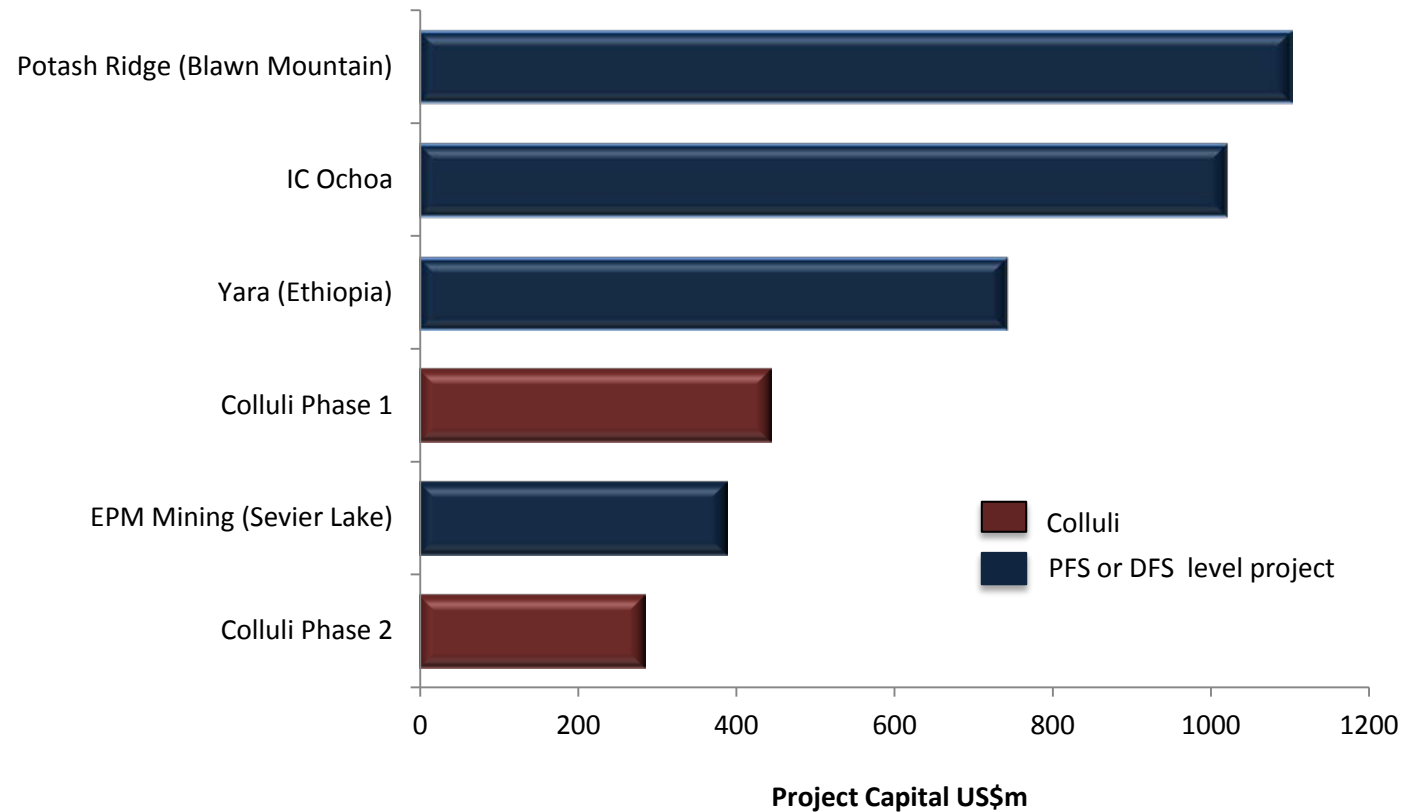


Colluli's Distinct Capital Advantages

- **Reduced solar pond size relative to brine and solution mining:** due to salts starting in solid form
- **Reduced crushing infrastructure in processing:** due to crushing capability of surface miners
- **No requirement for capital/energy intensive high temperature crystallisers:** due to favourable combination of salts for high potassium yield conversion to SOP
- **High yield conversion:** due to salt combination and salts in solid form



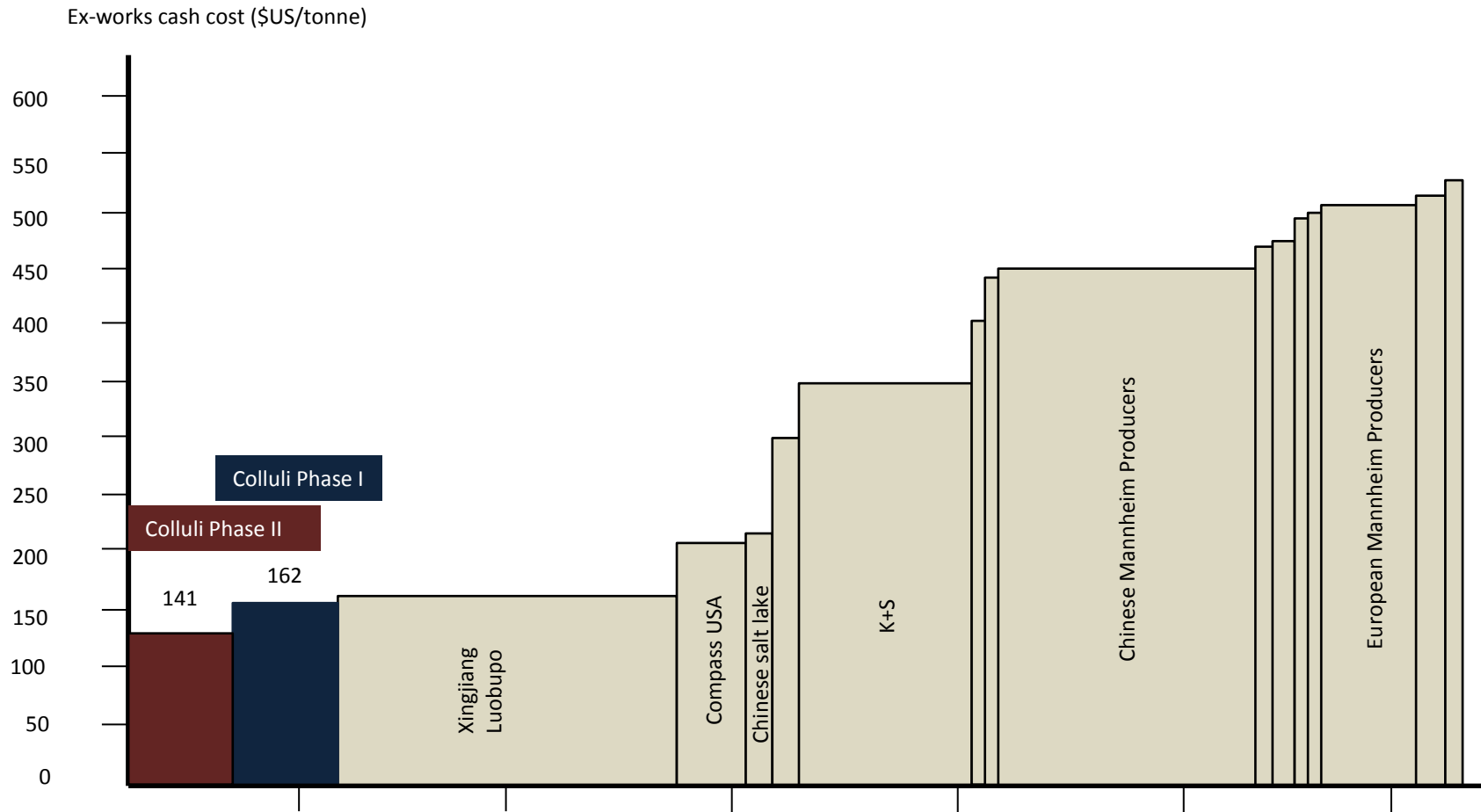
One of only 2 SOP projects in the world with entry capital < US\$450m



- Phase I capital = US\$442m (425ktpa SOP)
- Phase II capital = US\$282 (additional 425ktpa SOP)



PFS shows Colluli expected in bottom quartile mine gate cash costs

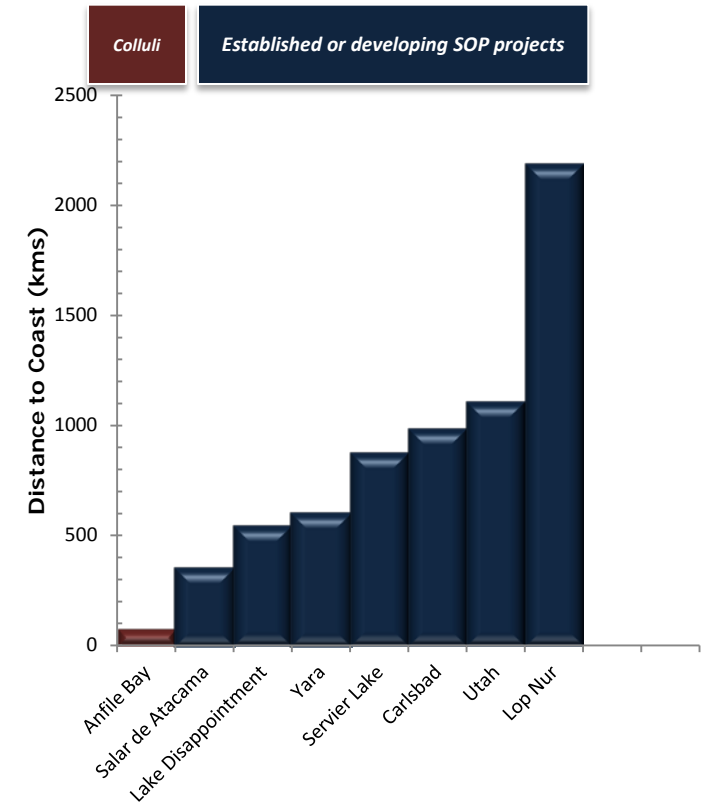
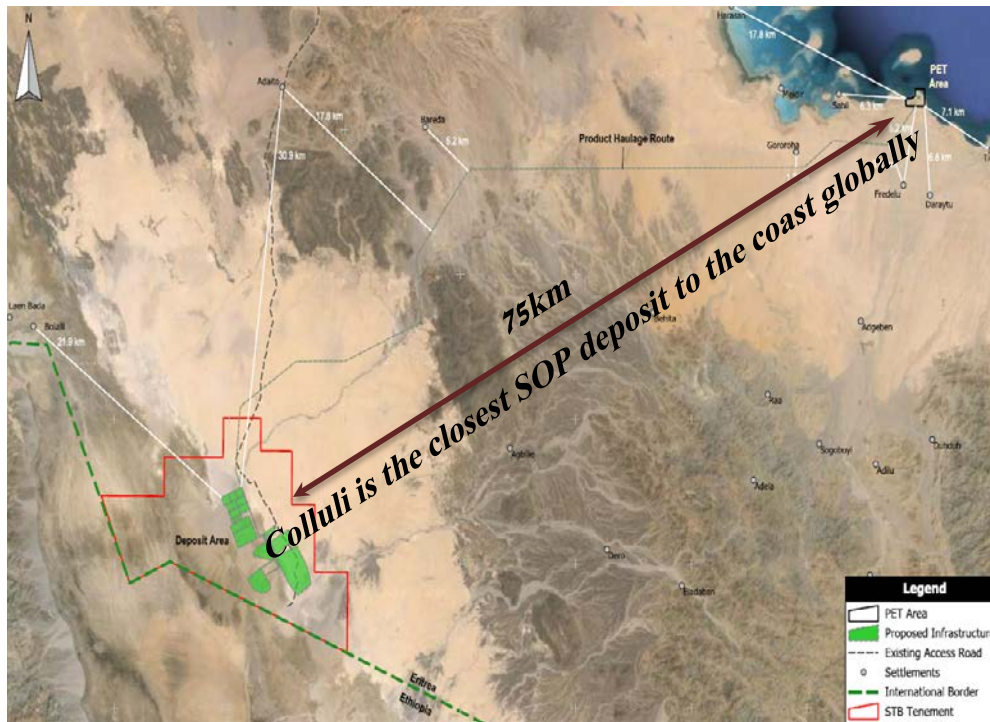


Source: CRU Research, EPM Mining presentation 2014, Company websites, Integer Research

Note: Where costs were not known, estimates were applied



Simple logistics – unrivalled proximity to coast



- Location is significantly closer to port than potassium sulphate peers
- Trucking is a low cost option to access port
- Deepwater access at Anfile Bay suitable for loading vessels up to Panamax size



Clear economies of scale and significant upside

From Phase I to Phase II:

- **46% reduction in G and A:** due to fixed senior management structure across both modules
- **14% reduction in mining costs:** fixed cost dilution and improved equipment utilisation
- **11% reduction in OPEX overall**

	Phase I	Phase II
Project Production Capacity (tpa)	425,000	850,000 (+425kt)
Breakdown of operating costs (\$US/t SOP)		
Mining costs	82.71	71.53
Processing Plant	58.34	57.89
General and Administration	20.92	11.37
Mine gate cash costs	161.97	140.79
Trucking to port	6.49	6.48
Shiploading	20.93	20.87
Total Operating Costs	189.39	168.14



Modular approach mitigates risks – safety, capital, process, market

Safety:

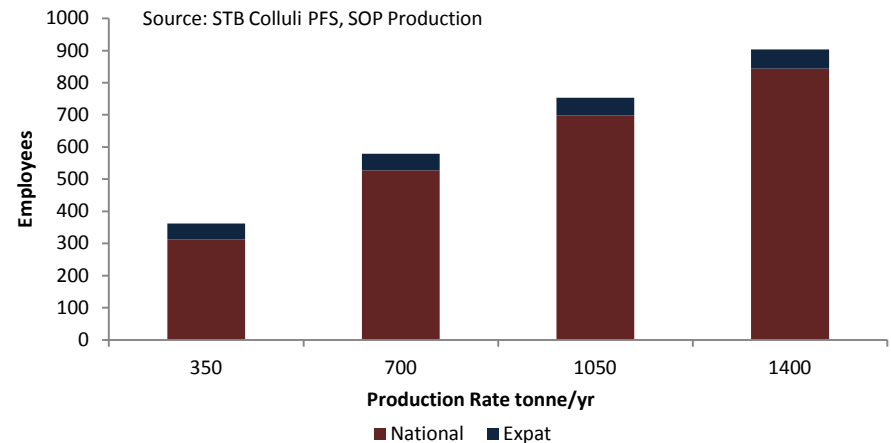
- Managing workforce size, skills and training in developing mining jurisdiction
- Avoiding competition for limited skills within developing mining industry
- Developing capability at a manageable rate
- Managing span of control

Capital/Commercial:

- Analysis of Australian mining projects shows larger % cost increases with increasing project size
- Highest level of confidence in the bracket with the largest number of projects (\$100m - \$500m)

Process:

- Greenfield developments rely on data acquisition and metallurgical test programs for process design. While this proves and de-risks the process, operational data and process understanding are core elements of process optimisation
- Module designs can be optimised with the combination of data, plant performance, improved understanding of raw material and processing behaviour

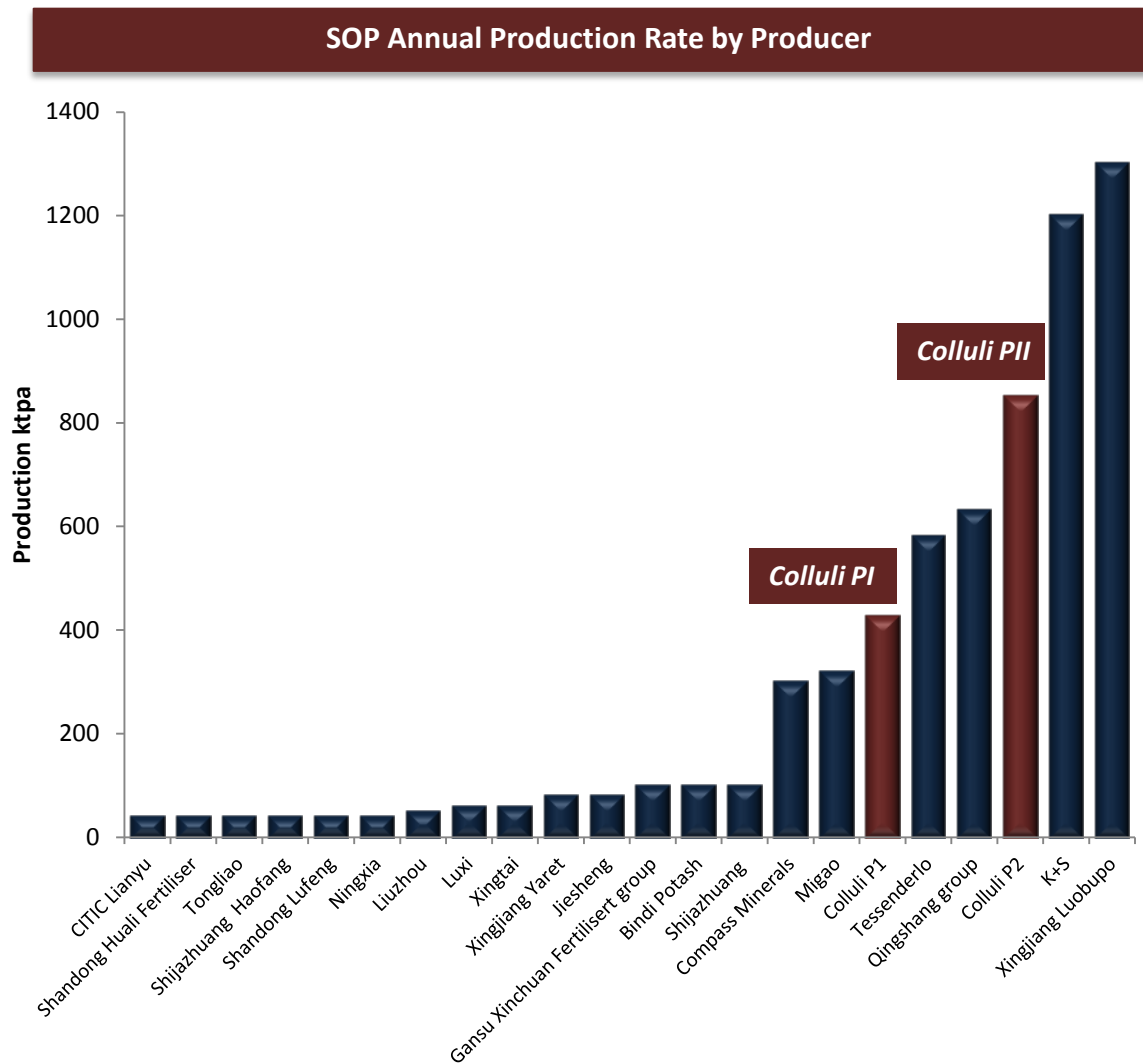


Value of Mining Projects Completed (\$m)	20 – 100	101 - 500	501 - 1000	+1000
Projects	43	54	17	27
Average cost change	2.4%	-3.8%	4.0%	14.6%

Source: Deloitte Access Economics, March 2014



Phase II will make Colluli the third largest SOP producer globally



Global SOP Market
approx. 6 million tonnes.

Only two producers above 1Mtpa.

Colluli Phase I: Places Colluli in top 10 producers globally and allows non disruptive market entry.

Colluli Phase II: Will place Colluli in the top 3 producers globally.

First module = non disruptive market entry point



Eritrea – maturing mining industry, stable jurisdiction

1. Stable jurisdiction

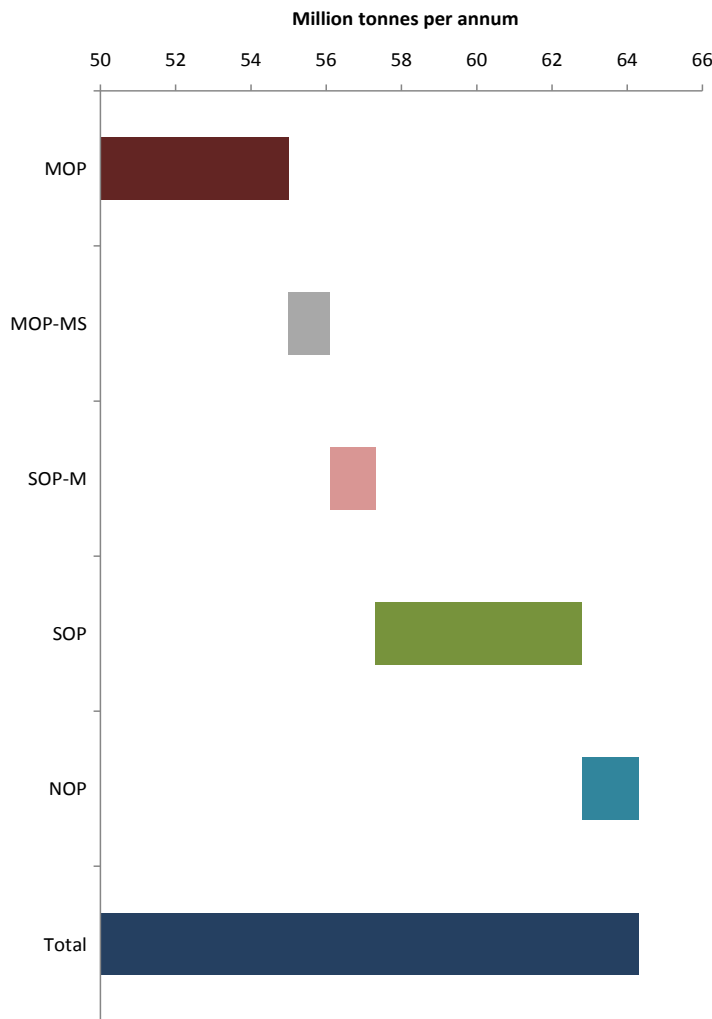
- 24 years of independence
- Stable government

2. Maturing Mining Industry

- ✓ Bisha mine (Nevsun:ENAMCO) in production since 2010
 - Third capacity expansion underway
- ✓ Zara mine (previous owner Chalice Gold) currently commissioning
- ✓ Asmara project (Sunridge Gold:ENAMCO) completed DFS
- ✓ Colluli project (South Boulder Mines:ENAMCO) completed PFS



Colluli's salt suite allows longer term product diversification



Source: UN FAO, CRU, BMO Capital Markets

Potential product from Colluli	Potash Type	Nutrients	Uses
✓	Potassium Chloride (MOP)	Potassium	Staples – wheat, corn, chloride tolerant crops
✓	Potassium chloride-magnesium sulphate (MOP-MS)	Potassium, magnesium, sulphur	Sugar beet, maize, oilseed rape
✓	Sulphate of Potash Magnesia	Potassium, sulphur and magnesium	Specialty fertiliser, high value crops, limited production centres
✓	Sulphate of Potash	Potassium and sulphur	Chloride intolerant and specialty crops such as fruits, vegetables, nuts, beans and coffee
	Potassium Nitrate	Potassium and nitrogen	Chloride sensitive crops that require additional nitrogen
Total potash market approx. 64 million tonnes			

¹Source: Greenmarkets, Feb. 2015, Compass Minerals quarterly report

² CFR Europe

³ West Coast US

⁴ NW Europe FOB

⁵ Eastern Canada

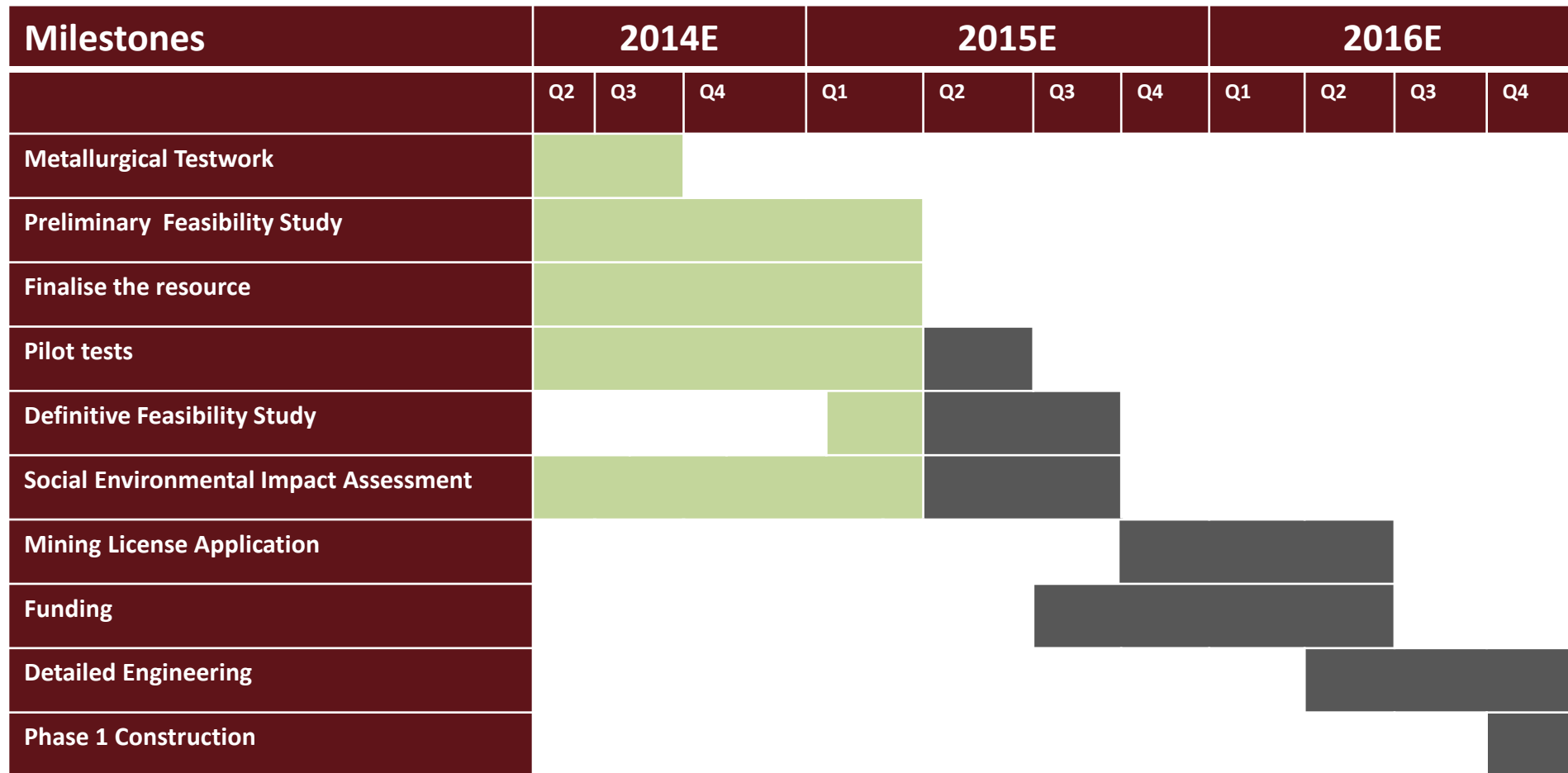


Social and Environmental baselines well progressed

- Community engagement well advanced
- Two tranches of environmental baseline assessments submitted to the Ministry of Environment
- Feedback received from first submission
- Oceanography base studies well progressed
- Final tranche due to be submitted in Q2 2015
- Colluli exploration camp managed by closest community as needed



DFS Underway



Summary

- **Colluli is set to become an agrichemical production facility of global significance**
- **Simple project development** focussing on single potassium sulphate (SOP) product for Phase I and Phase II modules. Each module expected to produce 425ktpa
- **Lowest capital intensity** of advanced SOP projects
- **Bottom quartile operating costs** for the production of potassium sulphate (SOP)
- **Modular development approach** underpinned by massive 1.289 billion tonne high grade resource close to surface
- **Significant project upside** with clear economies of scale and product diversification
- **Social and environmental baseline** work well advanced



Why STB?

- STB owns 50% of a world class resource that supports decades of growth
- Joint Venture with Eritrean National Mining Company - aligned and committed business partners
- Only one of three SOP projects at PFS level globally
- Highly experienced and capable board and management team focussed on project delivery
- Modular approach de-risks project
- Simple, proven mineral processing units
- Unrivalled access to coast with simple logistics
- Highly favourable geographic location relative to key growth markets
- Positive social impact for local communities
- No communities within tenements
- Substantial upside to develop a multi commodity agrichemical business





SOUTH BOULDER
MINES LTD



Appendices

Potash and Demand Drivers

Potash is a generic term used to describe a variety of potassium bearing minerals and manufactured chemicals used primarily as fertiliser



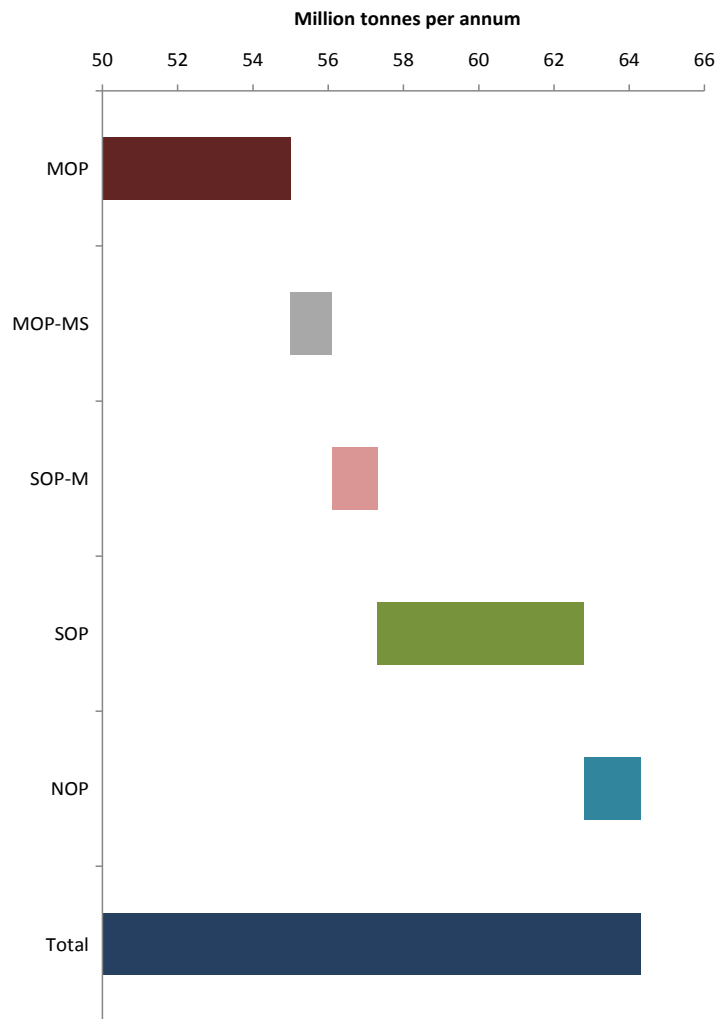
The key driver of growth

Increasing global population : +80 million people per annum globally

more people = more food = more fertiliser = more potash



Potash comes in a number of types – differentiated by chemistry



Source: UN FAO, CRU, BMO Capital Markets

Potash Type	US\$/tonne ¹	Nutrients	Uses
Potassium Chloride (MOP)	310 ²	Potassium	Staples – wheat, corn, chloride tolerant crops
Potassium chloride-magnesium sulphate (MOP-MS)	140-150	Potassium, magnesium, sulphur	Sugar beet, maize, oilseed rape
Sulphate of Potash Magnesia	450	Potassium, sulphur and magnesium	Specialty fertiliser, high value crops, limited production centres
Sulphate of Potash	730 ³ 534 ⁴ 940 ⁵	Potassium and sulphur	Chloride intolerant and specialty crops such as fruits, vegetables, nuts, beans and coffee
Potassium Nitrate	970	Potassium and nitrogen	Chloride sensitive crops that require additional nitrogen
Total potash market approx. 64 million tonnes			

¹Source: Greenmarkets, Feb. 2015, Compass Minerals quarterly report

² CFR Europe

³ West Coast US

⁴ NW Europe FOB

⁵ Eastern Canada



Our vision is to bring the Colluli project into production using the principles of risk management, resource utilisation and modularity, using the starting module as a growth platform to develop the resource to its full potential.



Experienced board and management



Seamus Cornelius, Non Executive Chairman

Mr Cornelius has 21 years of corporate experience in both legal and commercial negotiations. He has been based in Shanghai and Beijing since 1993, where he has been living and working as a corporate lawyer. From 2000 to 2011 Mr Cornelius was an international partner with one of Australia's leading law firms, specialising in cross border investments in the energy and resource sectors.



Paul Donaldson, CEO and Managing Director

Mr Donaldson was appointed to the role of Chief Executive Officer in February 2013. He joins South Boulder Mines from a series of senior management roles with BHP Billiton. Mr Donaldson has experience in large scale open cut mine management, supply chain logistics, mineral processing, business improvement and marketing.



Tony, Kiernan, Non Executive Director

Mr Kiernan was previously a commercial lawyer and is currently Chairman of the Australian iron ore producer BC Iron Ltd (ASX:BCI) and a non-executive director of several listed mining companies including Chalice Gold Mines Ltd (ASX: CHN), which has been operating in Eritrea since 2009.



Liam Cornelius, Non Executive Director

Mr Cornelius graduated from Curtin University of Technology with a BAppSc in Geology. He has been involved in the exploration industry within Australia and Africa for 18 years. As a founding member of South Boulder Mines, Mr Cornelius has played a key role in outlining areas of interest for the company.



John Fitzgerald, Non Executive Director

Mr Fitzgerald joined the board in February 2015, and has previously held positions at NM Rothschild and Sons, Investec Bank Australia, Commonwealth Bank and HSBC Precious Metals. He is the Managing Director of Optimum Capital Pty Ltd, a corporate debt and advisory business focussed on the mining sector. Mr. Fitzgerald is also a Non-Executive Director of Northern Star Resources Limited and Chairman of Mungana Goldmines Limited. Mr Fitzgerald is a Chartered Accountant, a Fellow of FINSIA and a member of the Australian Institute of Company Directors.



James Durrant, Project Manager

Mr. Durrant joined South Boulder Mines after a series of operational roles within BHP Billiton. With tertiary qualifications in both mechanical and mining engineering, Mr. Durrant brings project management, organisational design and operational management of large scale open cut mines skills to the organisation.



Zeray Leake, Country Manager

Mr Leake is a Geologist with over 12 years experience in the development and exploration of potash, gold, base metals and industrial minerals. Mr Leake previously worked for the Geological Survey of Eritrea.



Two phase SOP development creates a platform for growth

	Phase I	Phase II
Capacity (tpa)	425,000	425,000
Breakdown of development capital (\$USm)		
Process plant and ponds	165	179 ¹
Mine development and infrastructure	71	7
Water supply, product road and port	49	14
Support infrastructure	10	3
EPCM	37	18
Indirects	27	27
Owners costs	35	3
Contingency	48	31
Capital	US\$442m	US\$282m²

¹Includes plant modifications to process lower carnallite material

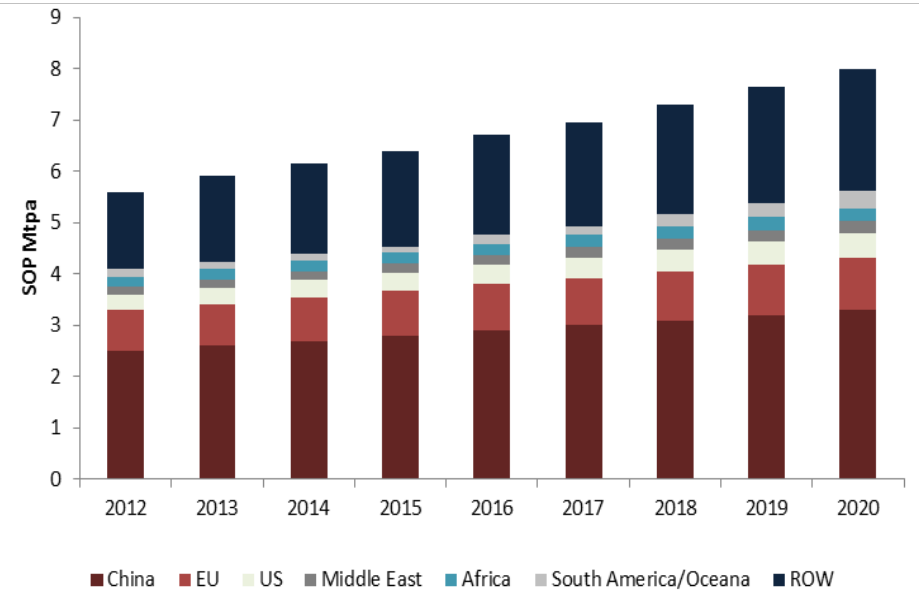
²Clear economies of scale in mine development, pit dewatering, port and product road



SOP - solid growth fundamentals and limited new projects

Fertiliser growth underpinned by:

- Growing population : +80 million people per year
- Reduction in arable land : Increased crop yield per acre required
- Changing dietary preferences: Developing economies changing to higher protein diets and increased fruit and vegetable intake



Limited greenfield projects

- Potassium sulphate is geologically scarce
- Only one greenfield project at DFS completion stage
- High energy inputs
- DFS Projects = 2
- PFS Projects = 3

4% CAGR and approx. 2 million tonnes of SOP growth projected over next decade

Source: Parthenon Analysis, EPM Mining



Potential project upside

Markets for these products are well established.

Potential Markets for Various Resource Mineralisation

Mineral Present at Colluli	Colluli Potential ¹	Global Market Context
rock salt (NaCl) halite (NaCl)	+ 650Mt	300Mtpa global salt market
bischofite (MgCl ₂)	+200Mt	6 – 7Mtpa global market
anhydrite	Avg 4% (~40Mt)	187Mtpa Gypsum market
kieserite (MgSO ₄)	40Mt	Established fertiliser segment

¹ Non JORC compliant . Exploration targets based on Colluli resource drilling to date



Eritrea Mining Law

1. **Accelerated depreciation** – straight line method over 4 years of all capital and pre-production costs
2. **Generous reinvestment deduction**
 - (5% of gross income)
3. **10 year carrying forward of losses**
4. **0.5% import duty on mining inputs**
5. **Simple “one stop” licensing system**



Bisha Mine



Zara Mine





SOUTH BOULDER
MINES LTD



Thank you