



DANAKALI



## *Colluli: Positively Unique*

Logistically Superior  
Investor Presentation: June 2015

*Paul Donaldson* Managing Director and CEO

ASX:DNK

*Helping grow a better future*

# Forward Looking Statements and Disclaimer



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The information in this presentation is published to inform you about Danakali Limited (the “Company” or “DNK”) and its activities. DNK 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 and Ore Reserves 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.

## Danakali (ASX:DNK) - formerly South Boulder Mines (ASX:STB)

- Shareholders approved name change to **Danakali** (“Danakil Potash”) on the 29<sup>th</sup> May 2015
- Company name more reflective of commodity and location

## **DNK is 50% owner of a world class potash project with a positive future. Development is inevitable.**

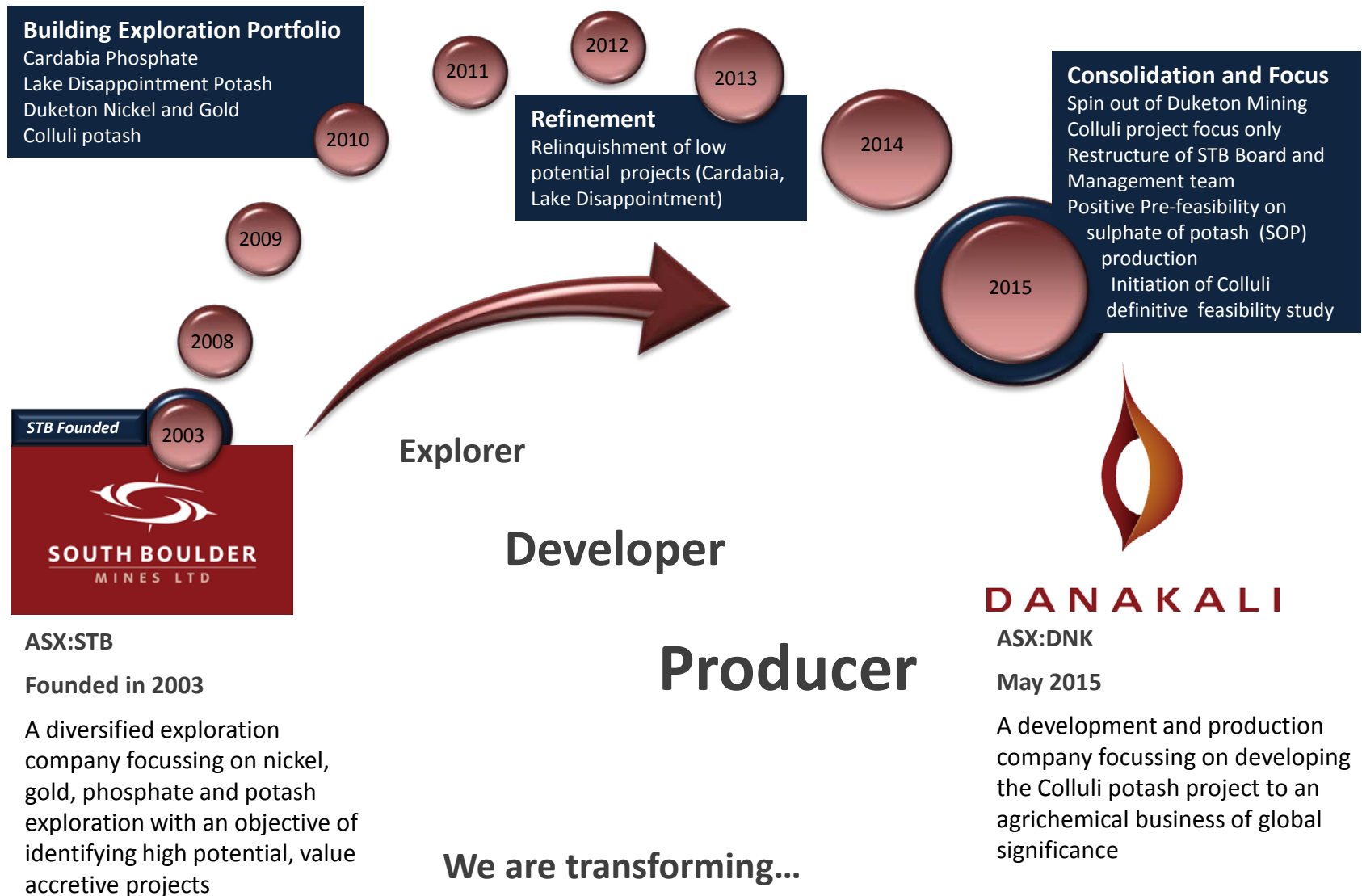
- Colluli Potash Project is 100% owned by the Colluli Mining Share Company (CMSC), which is a Joint Venture between DNK and the Eritrean National Mining Company (ENAMCO)
- DNK owns 50% of CMSC and three of the five board seats
- Prefeasibility study for the production of sulphate of potash (SOP) completed in February 2015 demonstrated the Colluli Potash Project to be economically robust with substantial upside
- Definitive feasibility studies on track for completion in September 2015



# A positive future – development and production focus



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# Market understanding of the Colluli Potash Project improving



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## Capital Structure as at 15<sup>th</sup> June 2015

Ordinary shares on issue	174M
Options on issue	27M
Share Price <sup>1</sup>	\$0.45
<b>Undiluted Market Capitalisation</b>	<b>\$78M</b>
Debt	No debt
Cash <sup>1</sup>	\$9.6m
<b>Undiluted Enterprise Value</b>	<b>\$68.4M</b>

<sup>1</sup> As of 15<sup>th</sup> June 2015

## Share price performance

ASX:DNK



# Danakali (DNK) corporate overview



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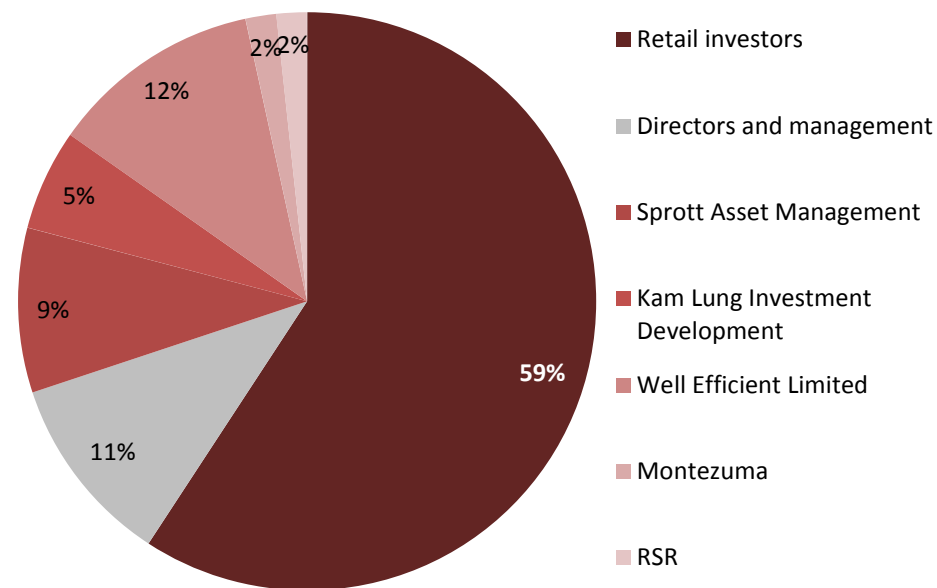
## Major Shareholders

Well Efficient	12%
Sprott Asset Management	9%
Kam Lung Investment Development	5%
DNK Management	11%
Top 20 shareholders	63%

## 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
Amy Just	Company Secretary
Stuart Tarrant	Head of Finance
Gordon Tainton	Head of Market Development
James Durrant	Colluli Project Manager
Zeray Leake	Country Manager

## DNK Shareholder Distribution





# Colluli Potash Project – a class of its own



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- ☒ Economically favourable prefeasibility study
- ☒ Large, long life, expandable resource
- ☒ **Unrivalled proximity to coast**
- ☒ Colluli resource yields high purity, premium SOP
- ☒ Commercially proven process
- ☒ Potassium salts are mined in solid form
- ☒ Lowest capital intensity and operating costs
- ☒ Unmatched potash diversification potential
- ☒ **Excellent access to the key markets of the future**
- ☒ Stable and maturing mining jurisdiction

*Focus of this presentation*

***Positively Unique***



Population growth, particularly in developing economies, is increasing the demand for food

- ***95% of global population growth is centred around Colluli;*** Africa, India and Asia
- ***62% in Africa alone;*** Colluli is uniquely positioned to meet African agricultural needs
- ***Africa and India will see the biggest gains in overall calorific consumption*** as standards of living rise, and population growth accelerates
- ***Sulphate of Potash (SOP) is highly valued in arid regions*** and is ideal for much of Africa
- ***A reduction in arable land in these areas*** is further driving demand for fertiliser to increase crop yields
- ***China is undergoing a shift from cereal and grain based crops*** as incomes rise, to more diversified diets based on fruits, vegetables, meats and dairy products
- ***Shifting dietary patterns underpin greater use of SOP*** to support yields of these high value crops





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

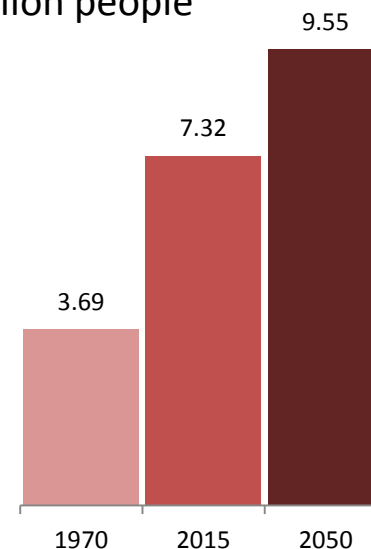
- **Essential to the world's food supply**
- **No known substitute**

## Key Drivers

- **Global population growing at 80 million people per annum**
- **Reduction in arable land**
- **Calorific demand growing and dietary mix changing**

## Global Population versus time

Billion people



Source: United Nations, Basic Materials Observer, 2014

**More People = More Food = More Fertiliser = More Potash**

# Potash comes in a variety of types



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- Potash types are differentiated by chemistry
- Availability of economic resources varies with potash type
- Potash prices are fundamentally different



Potash type	Abbreviated name	Typical sale price (US\$/t)	Key Primary Production Centres	Abundance of resources suitable for exploitation
Potassium chloride <sup>1</sup>	MOP	315	Canada, Russia, Middle East, China	Very high
Potassium magnesium sulphate <sup>2</sup>	SOP-M	400	United states	Very low
Potassium Sulphate <sup>3</sup>	SOP	720	United states, Chile, China	Very low
Potassium Nitrate <sup>4</sup>	NOP	900		Manufactured

Source: Company Announcements, Greenmarkets

1. FOB Vancouver, Standard

2. FOB Carlsbad

3. FOB Utah

4. California

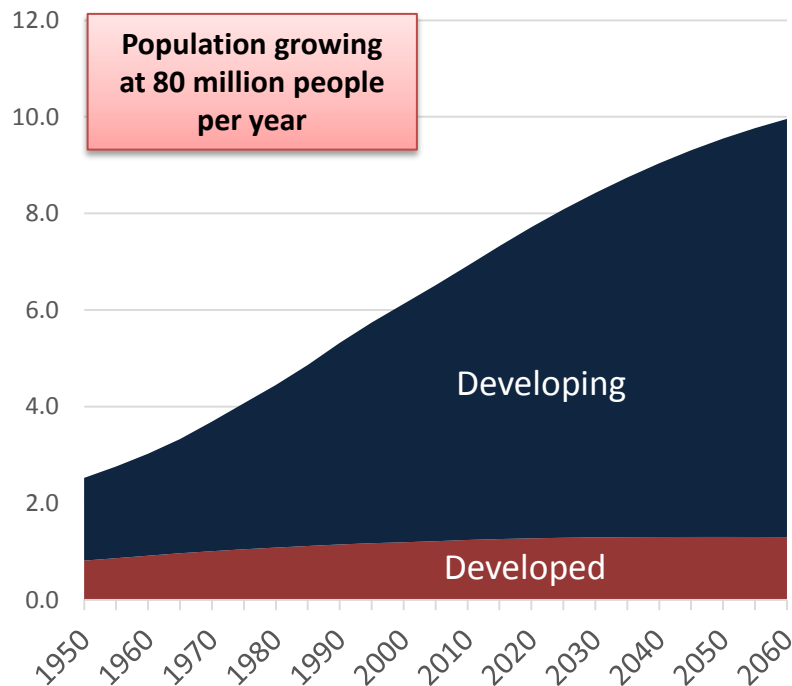
# Developing economies will be the growth engine for food and fertilisers



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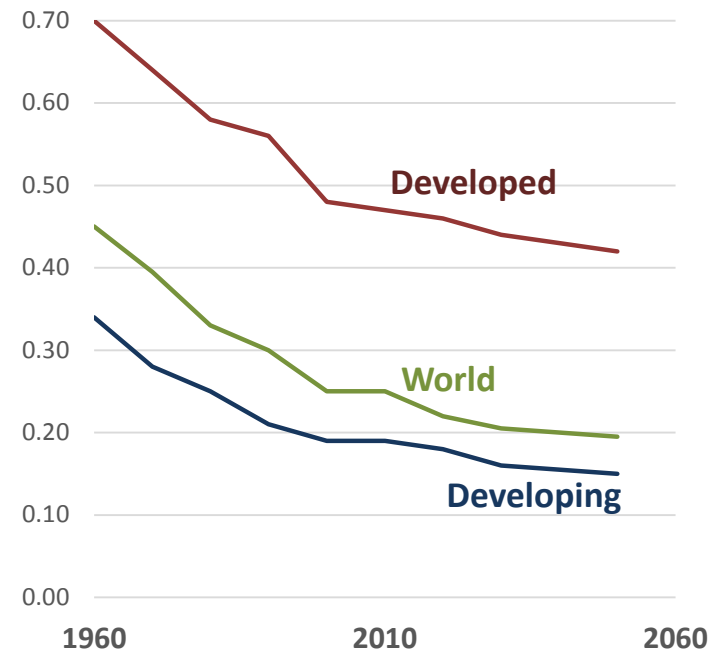
## Global Population

Billion people



**98% of population growth will be driven by less developed regions; 62% in Africa alone**

## Arable land/capita ha/ person



**Crop yields for arable land in less developed economies will have to increase**

Source: United Nations, FAO

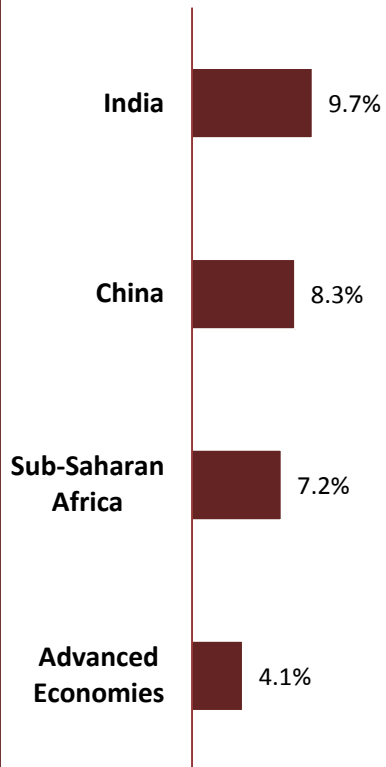
# GDP growth drives calorie intake (amount of food) and diet composition



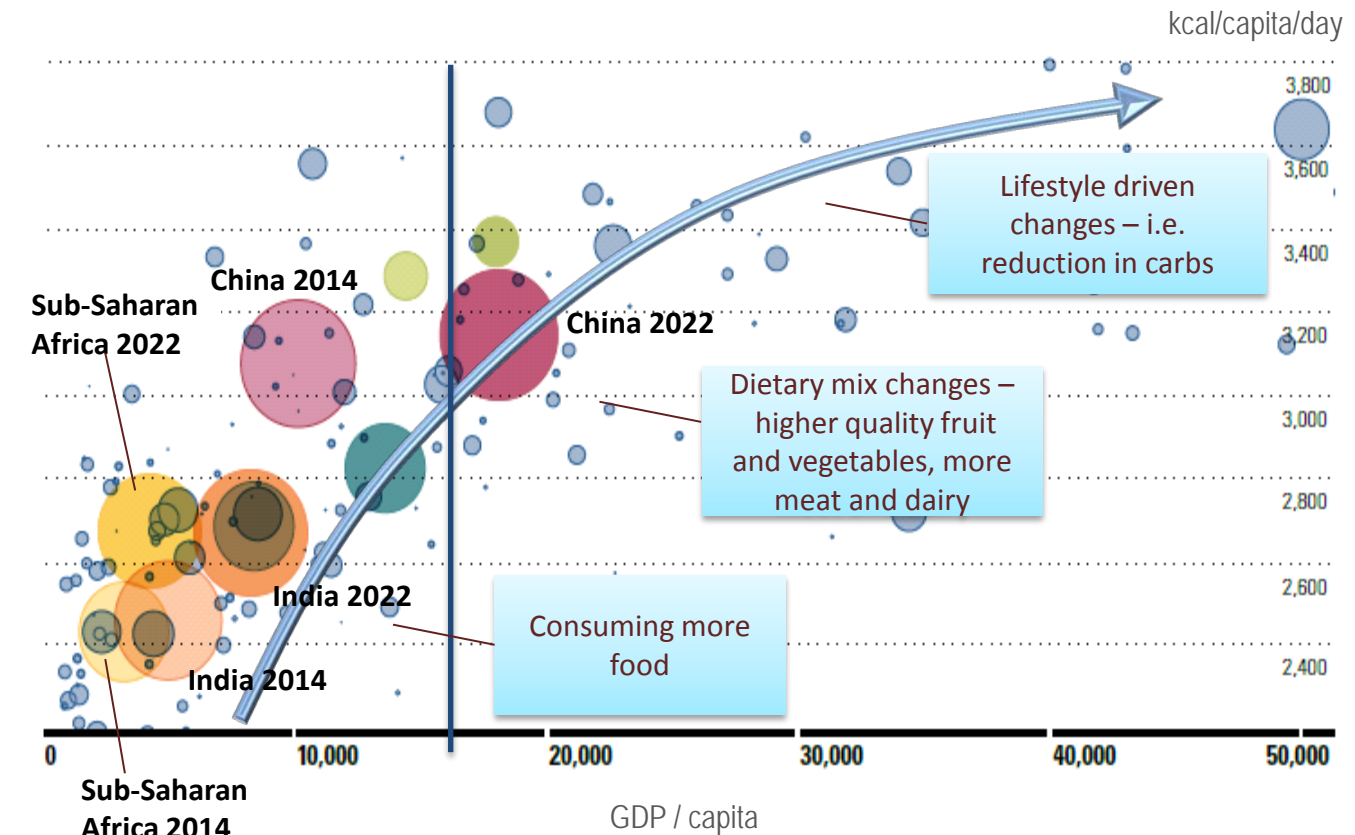
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## GDP growth rates

% CAGR 2014 - 2020



## Calorific intake per capita vs GDP per capita, 2011

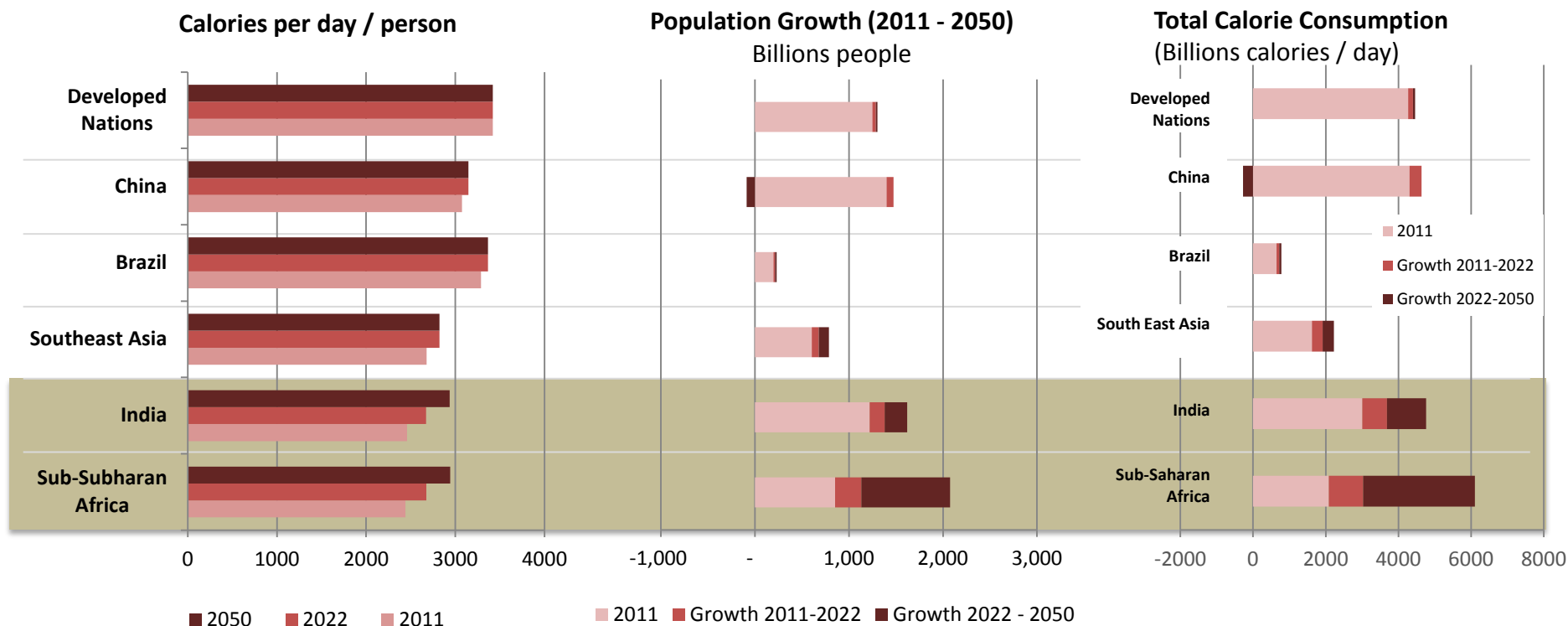


Note: Bubble size denotes population

# Africa and India dominate food consumption growth



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## Significant implications for global food markets

- Sub-Saharan Africa's calorie growth to 2050 equates to total calories consumed in 2011 by **all Developed Nations combined**
- India's growth to 2050 exceeds the total calorific intake of **South East Asia in 2011**

# 95% of global population growth in close proximity to Colluli

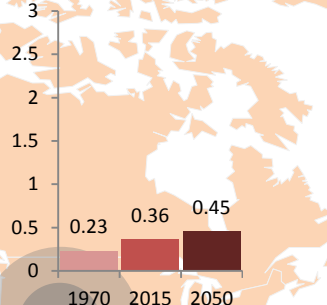


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## Global Population (1970, 2015, 2050)

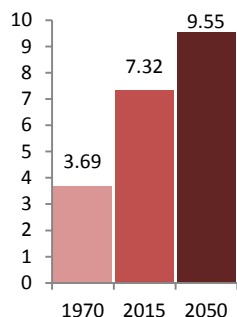
Billions

### North America



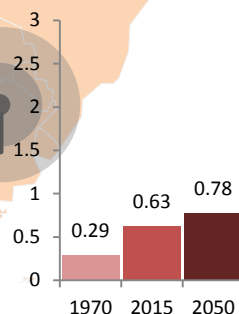
Compass Minerals  
Utah, USA

### Global

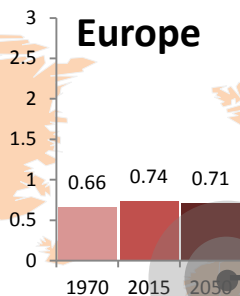


### South America

SQM  
Salar de Atacama, Chile

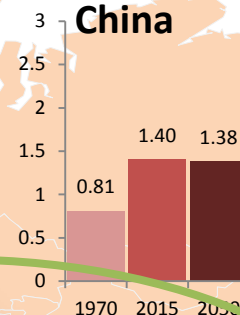


### Europe

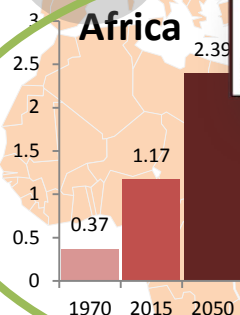


Other non brine  
Potassium  
sulphate  
producers

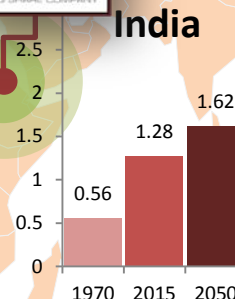
### China



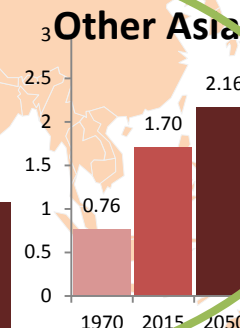
### Africa



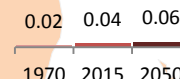
### India



### Other Asia



### Oceania



*Colluli is centred around major  
population growth regions*

Source: United Nations, Basic Materials Observer, 2014

# SOP critical to support food growth and mix changes



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SOP improves yields, quantity, taste and enhances shelf life



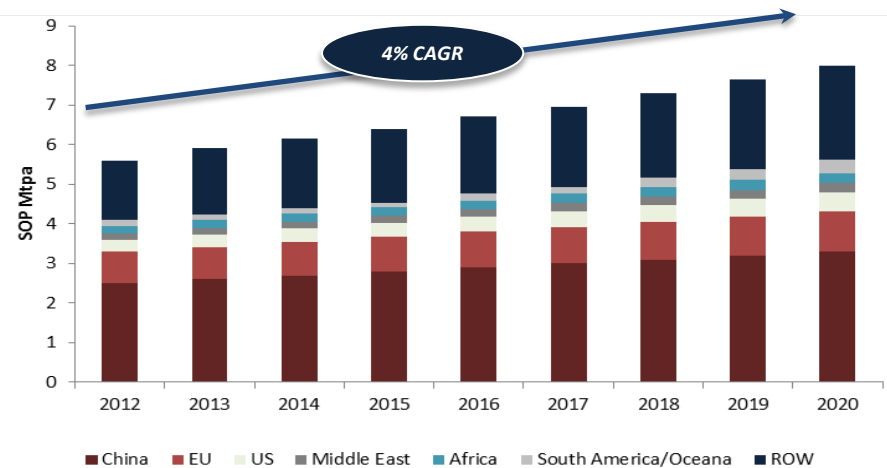
Especially valued for chloride sensitive crops, where it increases yields

- Fruits
- Vegetables
- Nuts
- Tea
- Coffee
- Beans

SOP highly valued in arid regions with low rainfall, and salinity affected soils



## SOP Demand growing strongly



Source: Parthenon Analysis, EPM Mining

**2 million tonnes of SOP growth projected over next decade, 25% increase in market size**

- Strong growth in China, driven by changing dietary mix to include more fruits and vegetables that have higher chloride sensitivity
- SOP more suited to arid conditions in many developing economies, that are driving population and food consumption growth



# Limited global supply options

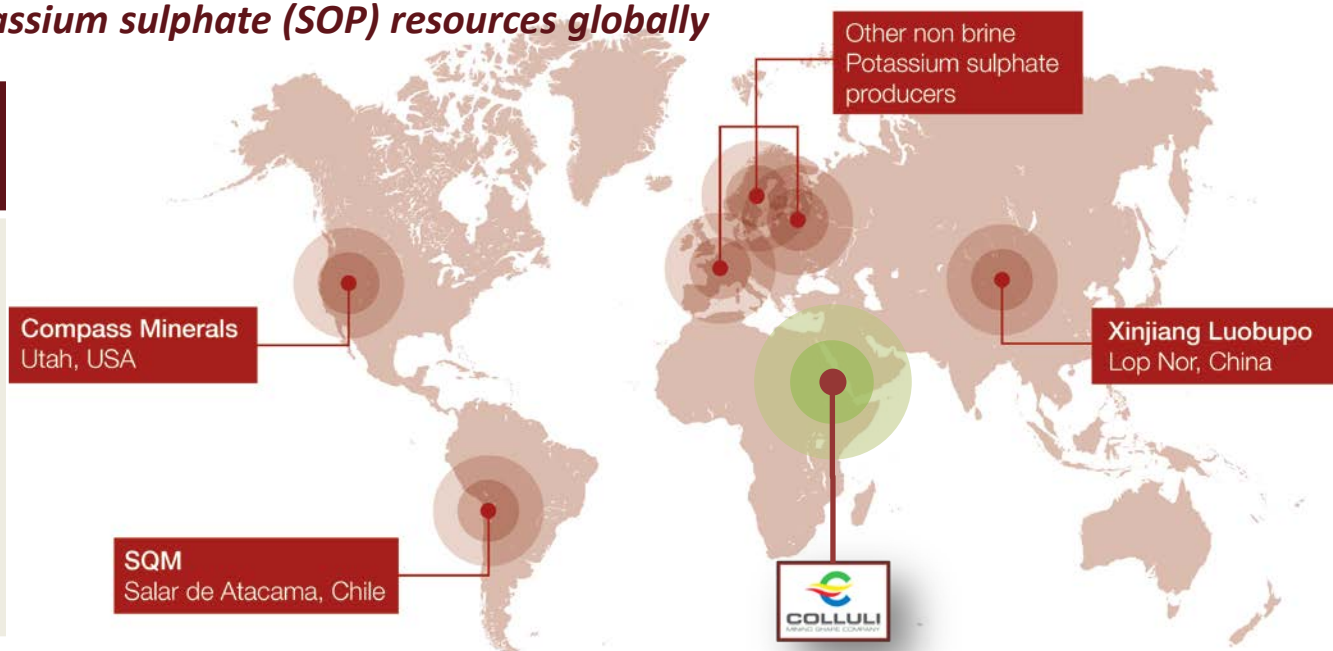


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## Limited low cost potassium sulphate (SOP) resources globally

### Limited greenfield projects and high energy requirements

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



Project	Location	Phase	Capacity	Capex est. (\$US)	Capital Intensity	Process
1	New Mexico	DFS Complete	700kt/yr	\$1.2b	\$1714/t	Calcine (500°C), leach, crystallise
2	Utah	PFS Complete	300kt/yr	\$378m	\$1260/t	Solar evaporation, slurry (90°C)crystallise
3	Utah	PFS Complete	770kt/yr	\$1.1b	\$1429/t	Calcine (550°C), leach, crystallise
4	Eritrea	DFS Underway	425kt/yr	\$442m	\$1087	Mixed salts and solar evaporation (ambient)

Source: 1. IC Ochoa N43-101 Definitive feasibility study  
 2. EPM Sevier Lake, Preliminary feasibility study  
 3. Potash Ridge preliminary feasibility study  
 4. Danakali (formerly South Boulder Mines) prefeasibility study

# Colluli is logistically superior relative to its peers.....



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Colluli is **the closest SOP deposit to a coastline globally**

It will be **the closest supplier to the major growth markets** and, coupled with low extraction costs,

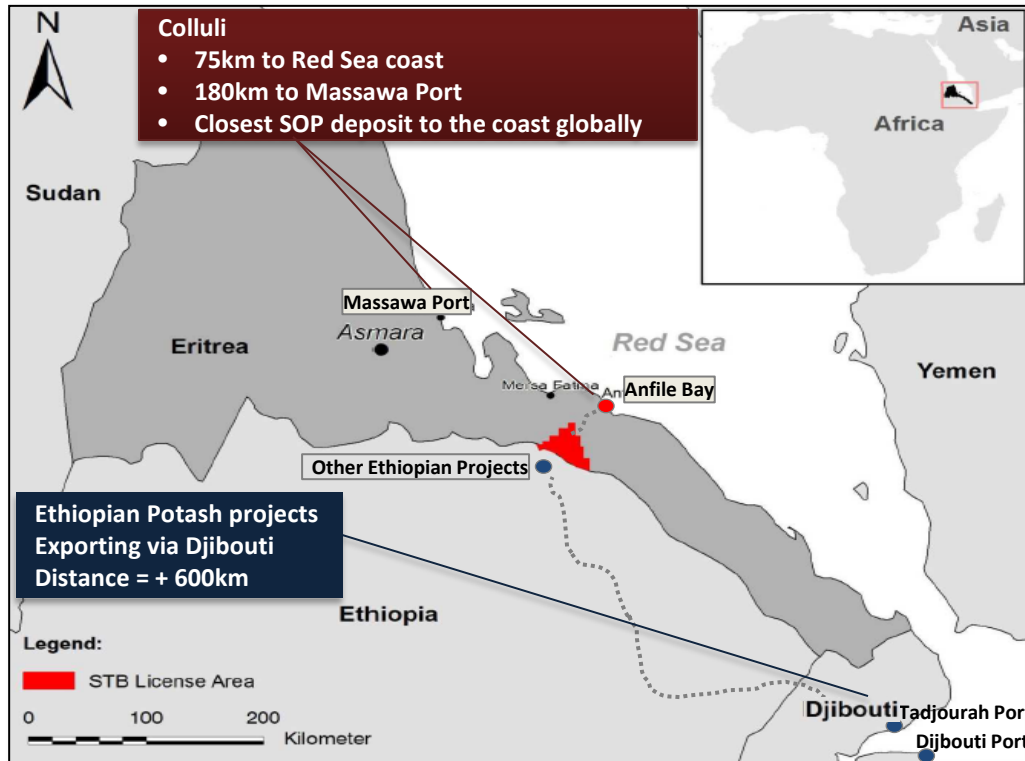
is expected to be **the lowest delivered cost SOP supplier to the growth markets**

and **substantially cheaper than many of the incumbent players**

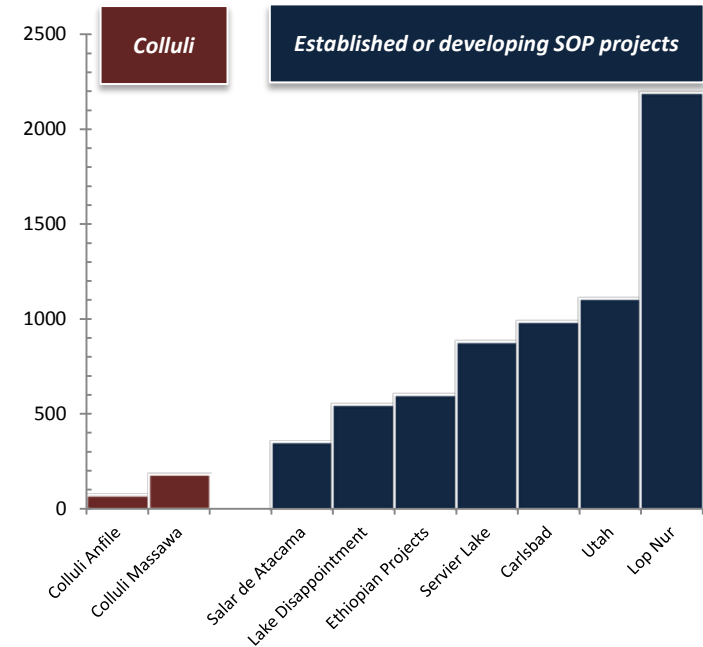
# Unrivalled proximity to coast



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Distance to coast for selected SOP projects  
Km<sup>1,2</sup>



- Colluli is significantly closer to shipping point than potassium sulphate peers globally
- Only 75km to the Red Sea Coast (Anfile Bay); 1300km of access to Red Sea coast from Eritrea
- Only 180km to the Port of Massawa (The key import/export facility in Eritrea)
- Trucking is a simple, low cost option to access port

1. Company announcements: Allana Potash, Circum  
2. Danakali Analysis

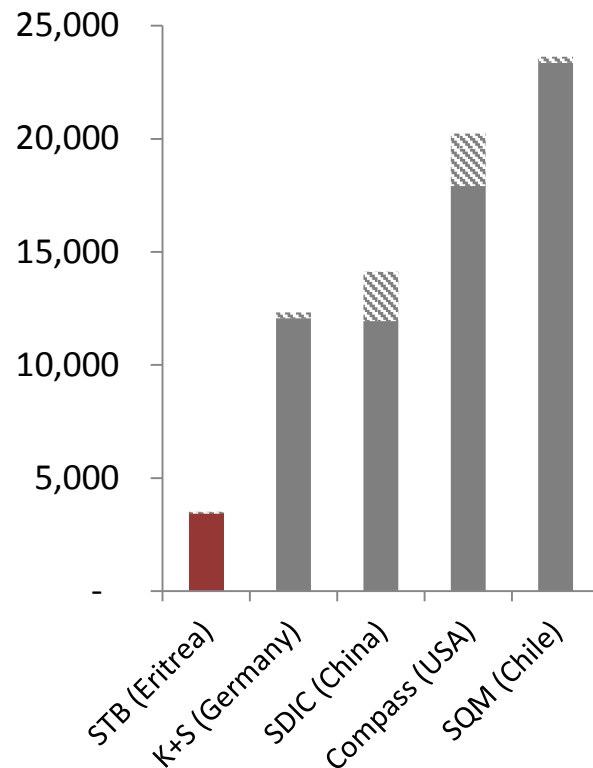
# Logistically favourable relative to key markets



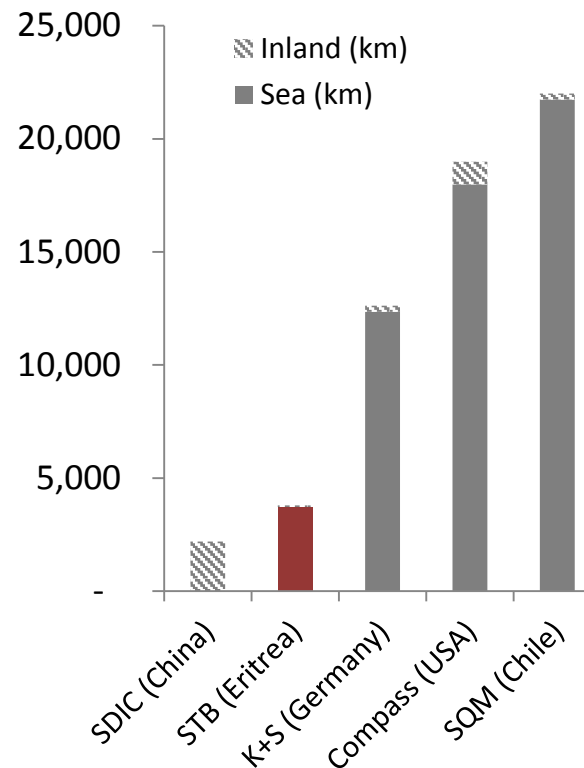
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## To: Port Reitz (Kenya)

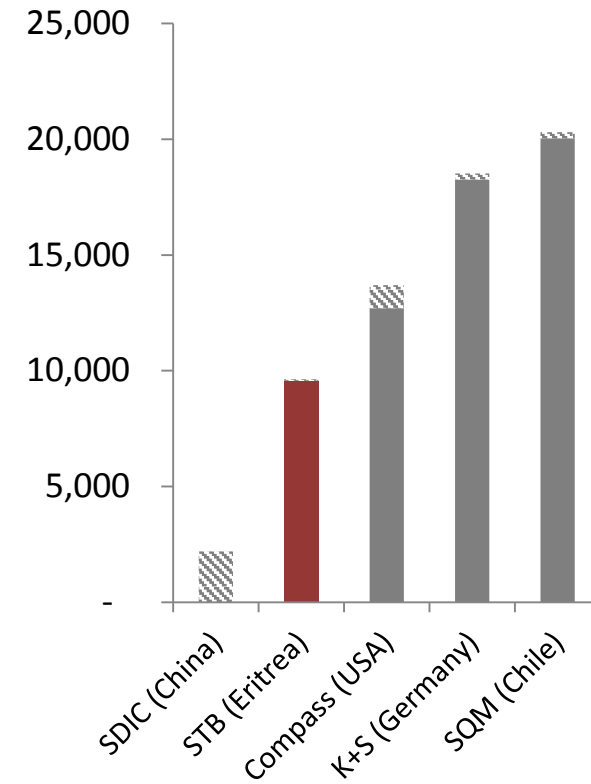
Distance (km)



## To: Mangalore (India)



## To: Zhanjiang (China)



*Major population growth centres*

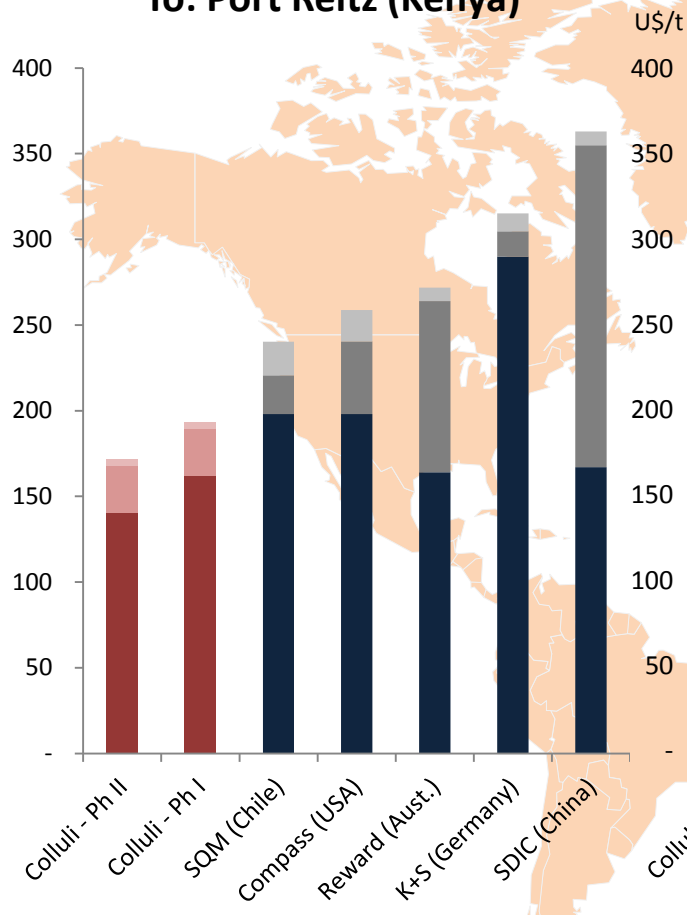
Source: Sea distances.org, Company websites, STB analysis

# Unparalleled delivered cost advantage



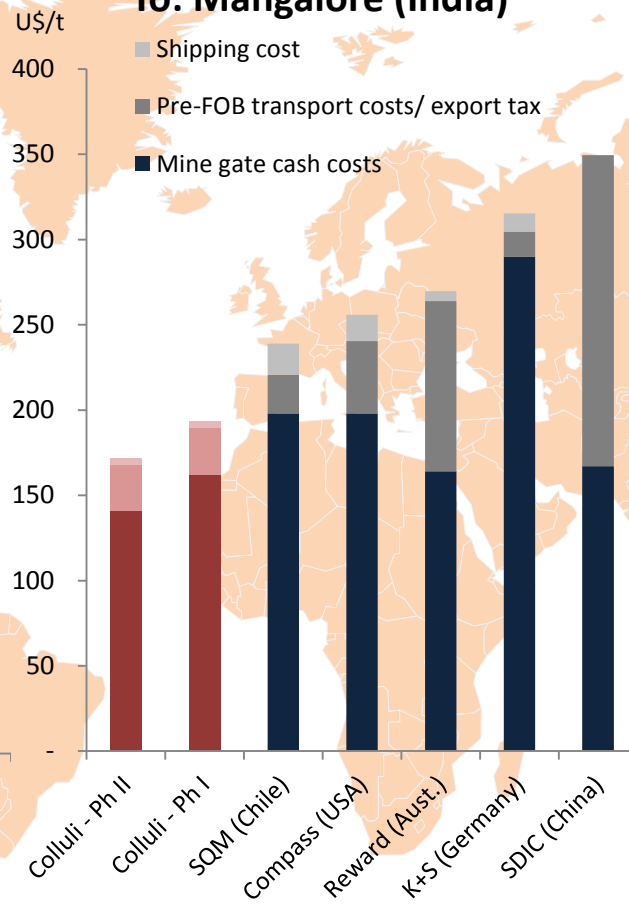
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## To: Port Reitz (Kenya)



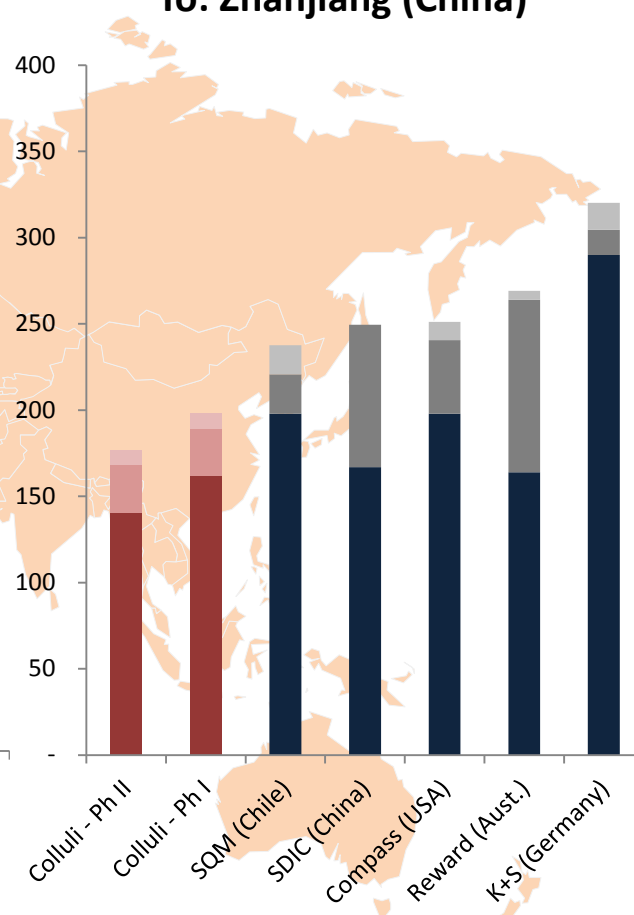
**\$69 – 191/t**  
cost advantage delivered to Kenya

## To: Mangalore (India)



**\$67 – \$177/t**  
cost advantage delivered to India

## To: Zhanjiang (China)



**\$61 – \$143/t**  
cost advantage delivered to China <sup>1</sup>

Sources: Sea distances.org, company websites/ presentations, CRU, DNK analysis. Reward Minerals costs based on May 2015 Roadshow and AGM presentation. 1) Major SOP consuming regions in southern China, 2) Freight cost estimates assume Panamax vessels, common port costs at destination locations, oil prices at \$US56/barrel. Pre-FOB inland rail / trucking estimates based on industry referenced figures. All figures excluding royalties. Chinese exports incur \$US100/t export tax.

# Eritrea – growing economy, maturing mining industry and stable jurisdiction



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## Fast growing economy

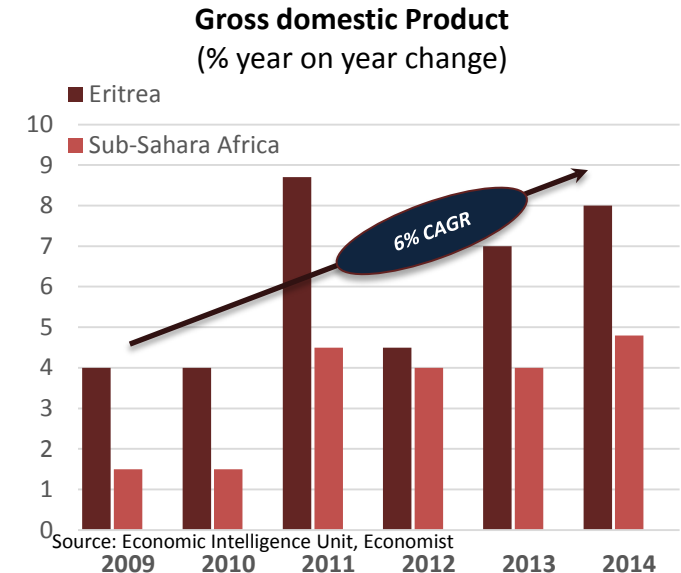
- Eritrea was ranked 11<sup>th</sup> fastest growing economy globally in 2014, at 8% p.a.
- Growth driven by strong mineral exports, agricultural output and infrastructure development

## Maturing Mining Industry

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

## Stable jurisdiction

- 24 years of independence
- Stable government



# ***Colluli: Positively Unique – logistically superior***



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- **Colluli is centred around the major regions driving food consumption growth over the next 50 years**
  - Africa, India and Asia account for 95% of population and food consumption growth
  - SOP will play an important role delivering yields, as arable land in these regions declines
  - SOP is highly suitable for the arid African climate
  - China's changing food mix will continue to drive SOP demand
- **Colluli is expected to be the lowest delivered cost producer into the key growth markets – a sustainable competitive advantage derived from being:**
  - ✓ The closest potassium sulphate deposit to a coastline globally (75km)
  - ✓ The closest supplier to the major growth markets
  - ✓ The lowest cash cost producer
- **Eritrea is a safe and stable jurisdiction, developing rapidly with significant international mining investment**





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# Thank you

*Colluli: Positively Unique*

# The Colluli Potash Project – an unparalleled opportunity



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**SOP – commodity of the future**



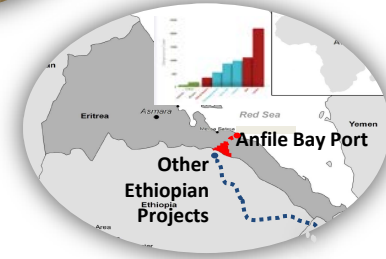
**Large resource**



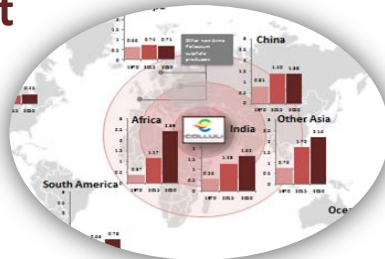
**Unmatched proximity to coast**



**Strong support from government**



**Positively Unique**



**Close proximity to key growth markets**



**Lowest capital intensity and lowest operating costs**



**Highest purity product**

# Experienced board and management



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## **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 Danakali 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 the Company, 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 Danakali 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.





## *Our Vision*

*To bring the Colluli project into production adopting 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.*

# Development timeline



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Milestones	2014			2015E				2016E				2017E			
	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
Metallurgical testwork															
Preliminary feasibility Study															
Finalise resource															
Optimisation and pilot tests															
Definitive feasibility study															
Social Environmental Impact Assessment															
Mining License Application															
Funding															
Detailed Engineering															
Phase I Construction															

# Eritrea – advancing



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