# **AGM Shareholder Presentation**

23 November 2018

(ASX:MRL)



DEVELOPING A DIVERSIFIED RESOURCES & ENERGY PLATFORM IN PAPUA NEW GUINEA

#### **Disclaimer**



This presentation has been prepared by Mayur Resources Limited ARBN 619 770 277 ("Mayur" or the "Company"). The information contained in this presentation is for information purposes only and has been prepared for use in conjunction with a verbal presentation and should be read in that context.

The information contained in this presentation is not investment or financial product advice and is not intended to be used as the basis for making an investment decision. Please note that, in providing this presentation, Mayur has not considered the objectives, financial position or needs of any particular recipient. Mayur strongly suggests that investors consult a financial advisor prior to making an investment decision. It may not be reproduced, disseminated, quoted or referred to, in whole or in part, without the express consent of Mayur.

No representation or warranty, express or implied, is made as to the fairness, accuracy, completeness or correctness of the information, opinions and conclusions contained in this presentation. To the maximum extent permitted by law, none of Mayur, its related bodies corporate, shareholders or respective directors, officers, employees, agents or advisors, nor any other person accepts any liability, including, without limitation, any liability arising out of fault or negligence for any loss arising from the use of information contained in this presentation.

This presentation includes "forward looking statements" within the meaning of securities laws of applicable jurisdictions. Forward looking statements can generally be identified by the use of the words "anticipate", "believe", "expect", "project", "forecast", "estimate", "likely", "intend", "should", "could", "may", "target", "plan" "guidance" and other similar expressions. Indications of, and guidance on, future earning or dividends and financial position and performance are also forward-looking statements. Such forward-looking statements are not guarantees of future performance and involve known and unknown risks, uncertainties and other factors, many of which are beyond the control of Mayur and its officers, employees, agents or associates, that may cause actual results to differ materially from those expressed or implied in such statement. Actual results, performance or achievements may vary materially from any projections and forward looking statements and the assumptions on which those statements are based. Readers are cautioned not to place undue reliance on forward looking statements and Mayur assumes no obligation to update such information. Specific regard (amongst other things) should be given to the risk factors outlined in this presentation.

This presentation is not, and does not constitute, an offer to sell or the solicitation, invitation or recommendation to purchase any securities and neither this presentation nor anything contained in it forms the basis of any contract or commitment.

This presentation includes financial information in relation to Mayur. Certain financial data included in this prospectus is not recognised under the Australian Accounting Standards and is classified as 'non-IFRS financial information' under ASIC Regulatory Guide 230 'Disclosing non-IFRS financial information' (RG 230). This non-IFRS information may provide information to users in measuring financial performance and condition. The non-IFRS financial measures do not have standardised meanings under the Australian Accounting Standards and therefore may not be comparable to similarly titled measures presented by other entities, nor should they be interpreted as an alternative to other financial measures determined in accordance with the Australian Accounting Standards. No reliance should therefore be placed on any financial information, including non-IFRS financial information and ratios, included in this presentation. All financial amounts contained in this presentation are expressed in Australian dollars and rounded to the nearest \$0 million unless otherwise stated. Any discrepancies between totals and sums of components in tables contained in this presentation are due to rounding.

#### **Contents**



# 1. CORPORATE SNAPSHOT

- 2. NATION BUILDING STRATEGY
- 3. PROJECT PORTFOLIO UPDATE
- 4. FORWARD PLAN

# **Corporate Snapshot**



#### **CAPITAL STRUCTURE**

Share Price (22 Nov 2018)	A\$0.70		
Shares on Issue	150m		
Market Cap	A\$105m		
Options (unlisted)	13.5m		
Cash (30 Sept 2018)	A\$9.55m		
Debt	A\$0.3m		
Enterprise Value	A\$91.8m		

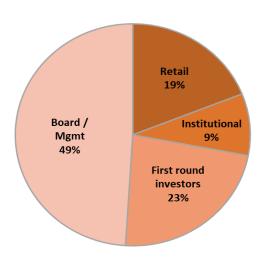
### **SHARE PRICE (Since Listing in Sept 2017 @ A\$0.40)**



#### **BOARD OF DIRECTORS**

Chairman	Rob Neale
Managing Director	Paul Mulder
<b>Executive Director</b>	Tim Crossley
Independent Director	Frank Terranova
Independent Director	Paul McTaggart

#### **SHARE REGISTER**



#### **Contents**



- 1. CORPORATE SNAPSHOT
- 2. NATION BUILDING STRATEGY
- 3. PROJECT PORTFOLIO UPDATE
- 4. FORWARD PLAN



#### **EVOLUTION OF A RESOURCES BASED ECONOMY**

A future trajectory for unlocking PNG's natural resources wealth.....

#### **FUTURE OPPORTUNITIES Ag Lime** Quicklime Copper Nickel Gold Coal Ilmenite Cement **Power** Iron Limestone Construction Sands **Zircon DRI/Steel** Urea Copper Nickel Gold Coal Ilmenite Iron Limestone Construction Sands **Zircon**

90 % OF ALL EXPORTS FROM PNG ARE COMMODITY BASED

# OPPORTUNITIES FOR PNG & MAYUR:

New mineral resources

Value add / vertical integration for Domestic & Export Markets

Time

**CURRENT** 

Value / Wealth



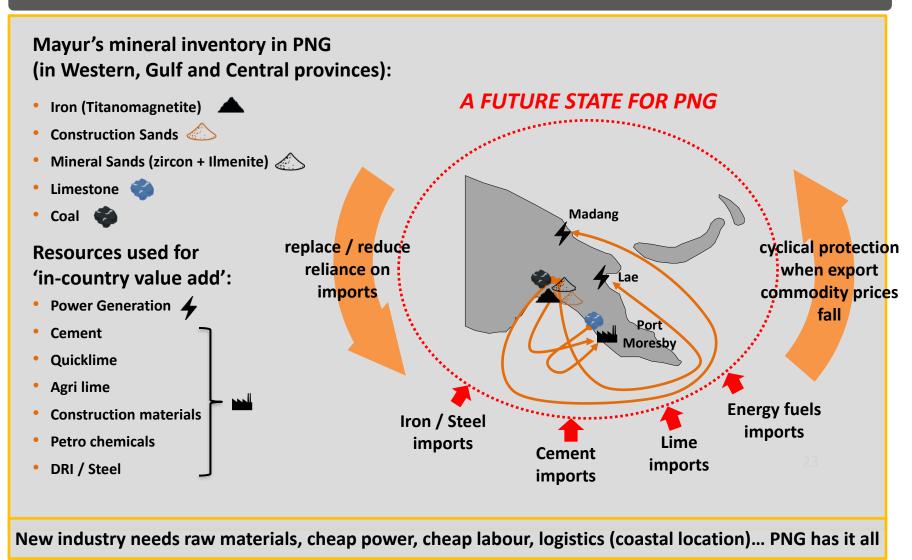
1. Diversify mineral resource extraction base

2. Increase value add to primary resource extraction

# **Import Replacement & Vertical Integration Opportunities**



#### **OPPORTUNITIES WITHIN MAYUR'S PORTFOLIO**

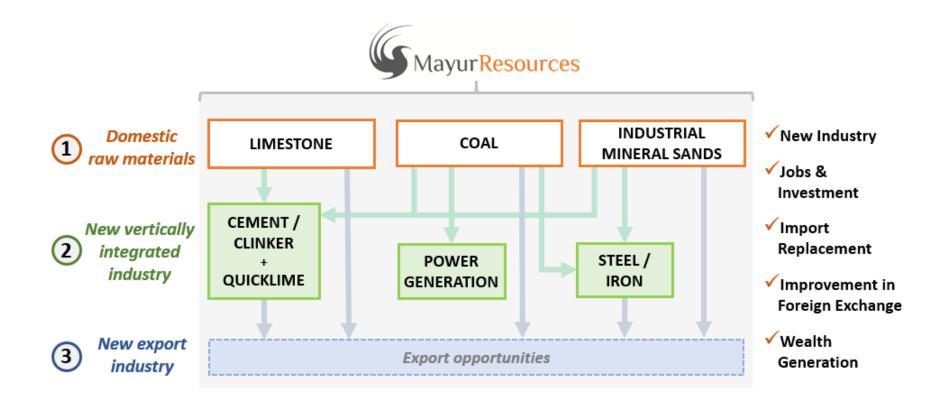


# **Staged Nation Building**



#### **DEVELOPING A STAGED NATION BUILDING PORTFOLIO PIPELINE**

Mayur is structured into commodity verticals with downstream businesses to serve both domestic and export markets



#### **Contents**



- 1. CORPORATE SNAPSHOT
- 2. NATION BUILDING STRATEGY
- 3. PROJECT PORTFOLIO STATUS
- 4. FORWARD PLAN

# A diversified resources and energy platform

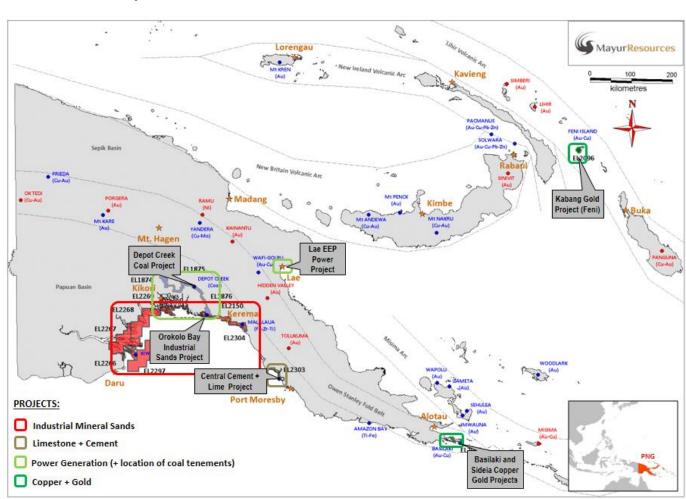


#### Developing a diversified and unique resources and energy platform in PNG

#### A unique portfolio of projects under development.

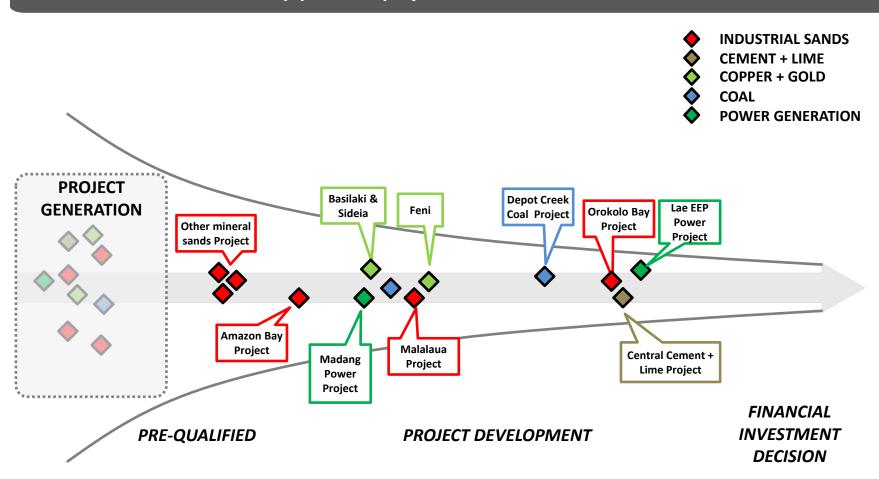
#### Key asset groups:

- Industrial Mineral Sands;
- Lime & Cement:
- Power Generation;
- Coal; and
- Copper/Gold
- Fully focused on PNG





#### A pipeline of projects across business divisions



### Mayur Resources Project Development Pipeline



# **INDUSTRIAL MINERAL SANDS**

<b>Business Division</b>	Planned (IPO and 2018 Raise)	Actual Progress to date
INDUSTRIAL MINERAL SANDS  Focus: Orokolo Bay Project	<ul> <li>Deliver trial production pilot plant (TPP) at Orokolo Bay project within 14 months of IPO</li> <li>Complete DFS at Orokolo Bay project</li> </ul>	<ul> <li>✓ 250 hole drill programme for bulk sample pit at Orokolo Bay</li> <li>✓ Design of bulk sample plant at Orokolo Bay</li> <li>✓ DFS in-fill drilling programmes at Orokolo Bay</li> <li>✓ Resource development MOU signed with Gulf Provincial Govt</li> <li>✓ Regional exploration programmes</li> <li>✓ Port Botany (Sydney) site being investigated as dual sand and cement import facility</li> <li>✓ Signed Letters of Intent for product offtake for the Orokolo Bay project</li> <li>✓ Lodged ELA for Amazon Bay – Vanadium potential</li> </ul>

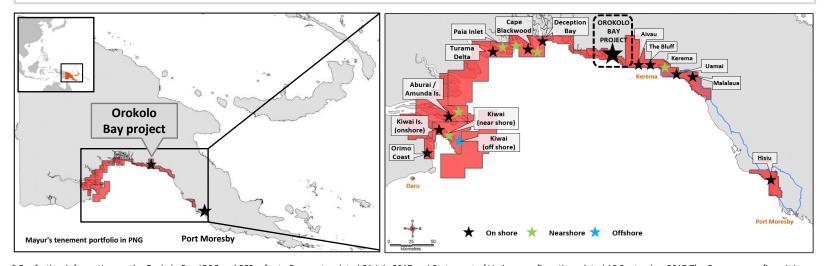
# **Orokolo Bay Project – Industrial Mineral Sands**



#### A mineralised province with potential to become a significant industrial mineral precinct globally

#### FLAGSHIP PROJECT - OROKOLO BAY PROJECT\*:

- JORC Resource:
  - 86 Mt of industrial sand
  - 173Mt @ 9.2% Fe (block model prioritised on +10% magnetite upgrades to 6.6Mt VTM at 57% Fe and 0.48% V2O5)
  - 107,000t of Zircon;
- Pre Feasibility Study completed with USD\$106m NPV post tax @ 10% DCF. DFS now commenced
- Mining on shore 12 year LOM, mineralisation at surface with low extraction cost
- Low CAPEX US\$22m
- Multi products:
  - Construction Sands
  - Magnetite for and steel making (57% Fe) and for Dense Media Separation (DMS)
  - Valuable Heavy Mineral Concentrate (VHMC) inc. zircon and ilmenite



<sup>\*</sup> For further information on the Orokolo Bay JORC and PFS refer to Prospectus dated 21 July 2017 and Statement of Various confirmations dated 19 September 2017. The Company confirms it is not aware of any new information or data that materiality effects the previously disclosed information and that all material assumptions and technical parameters underpinning the estimates in that information continue to apply and have not materially changed



# **LIME AND CEMENT**

Business Division	Planned (IPO and 2018 Raise)	Actual Progress to date
LIMESTONE & CEMENT  FOCUS: Central Cement & Lime Project	<ul> <li>Deliver JORC (IPO)</li> <li>Secure JV partner (IPO)</li> <li>Deliver DFS at Port Moresby project (2018 Raise)</li> </ul>	<ul> <li>✓ Maiden JORC Resource (382 Mt)*</li> <li>✓ Gas Supply MOA with Kumul Petroleum</li> <li>✓ DFS underway (including EPC tendering)</li> <li>✓ Issued EPC tender documents for the integrated quarry, clinker/cement and lime plant as part of the ongoing Definitive Feasibility Study (DFS)</li> <li>✓ Secured environmental permit for project</li> <li>✓ Port Botany (Sydney) site being investigated as dual sand and cement import facility</li> </ul>

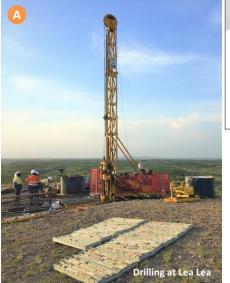
<sup>\*</sup> Port Moresby Limestone Project JORC Resource as disclosed in the ASX Announcement dated 12 January 2018. The Company confirms it is not aware of any new information or data that materiality effects the previously disclosed information and that all material assumptions and technical parameters underpinning the estimates in that information continue to apply and have not materially changed

# **Central Cement and Lime project - PNG**



#### Port Moresby Limestone Project – ~25km north of Port Moresby

- High grade limestone deposits 25km from Port Moresby, and 7km from the Exxon PNG LNG Refinery
- 382 Mt Maiden JORC Resource across 2 deposits (Kido and Lea Lea), including 205 Mt Measured
- MOU signed for gas supply from PNG LNG
- DFS underway for development of a quicklime and clinker/ cement business in PNG
- Import replacement and export market penetration opportunities identified









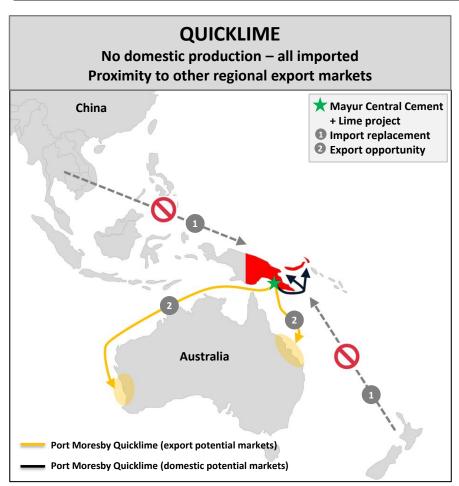


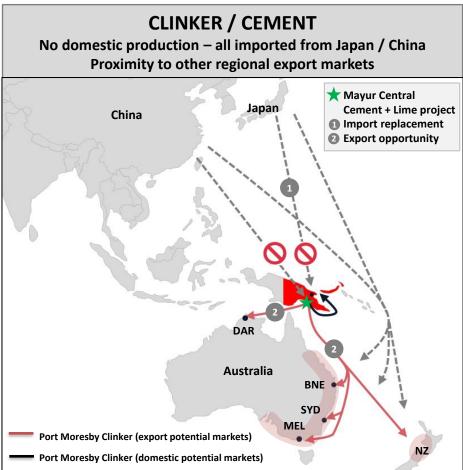
## **Central Cement and Lime project - PNG**



#### **Products and markets**

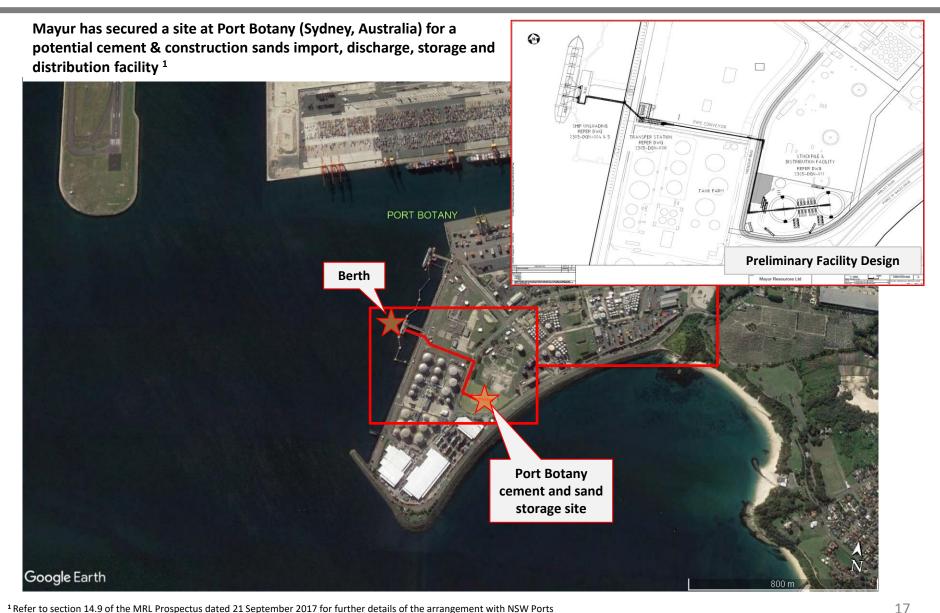
#### Quicklime and Cement / Clinker - Domestic Import replacement and regional market penetration opportunities





# Cement - Sydney import terminal development site, Port Botany Wayur Resources





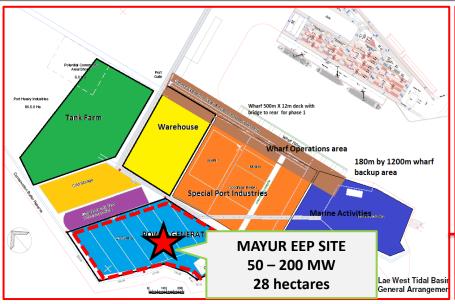


# **POWER GENERATION**

Business Division	Planned (IPO and 2018 Raise)	Actual Progress to date
POWER GENERATION FOCUS: Lae EEP Power Project	<ul> <li>Secure Power Purchase         Agreement (PPA) for the         Lae Power Project</li> <li>Progress MOU with Era         Resources for Madang EEP         (Era have embarked on a         sales process for their         Yandera Project and until         this completes this remains         as is)</li> </ul>	<ul> <li>✓ Continued dialogue with key stakeholders for the Enviro Energy Park (EEP) power station project at Lae</li> <li>✓ Completed detailed air modelling studies demonstrating the proposed technology for Lae EEP will drastically improve current air quality in Lae in terms of Nitrogen Oxide, Sulphur Dioxide and Particulate Matter emissions</li> <li>✓ Signed a MOA with Morobe Provincial Government to support the development of the Lae Enviro Energy Park (EEP)</li> <li>✓ Continued intensive stakeholder management and engagement for the Lae EEP Power Purchase Agreement (PPA)</li> </ul>

# Lae Enviro Energy Park (EEP) Project





- CITY OF LAE

  Massive in city
  Diesel / HFO
  emissions to be
  largely eliminated
- Detailed PPA submitted to PPL with Coal Delinked from Energy market
- ✓ Site with PNG Ports Western Tidal Basin
- Environmental approval from CEPA with new emissions limits set for PNG
- ✓ UNITECH Sustainability Energy Institute JV executed
- ✓ International and Local EPC Construction Bids received
- ✓ MOA signed with Morobe Provincial Government
- ✓ Sets new low ICCC reference price for Ramu Grid

#### LAE EEP - 3D PERSPECTIVE



3D image of EEP power plant



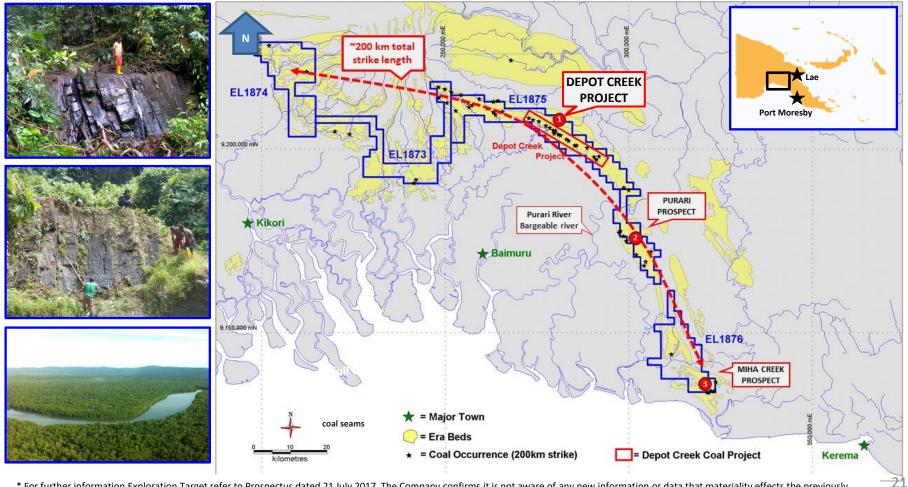
# COAL

Business Division	Planned (IPO and 2018 Raise)	Actual Progress to date
COAL  FOCUS: Depot Creek Coal project	<ul> <li>Increase coal resources at Depot Creek project (IPO)</li> <li>Undertake expanded Depot Creek drilling and additional drilling across other prospects (2018 Raise)</li> </ul>	<ul> <li>✓ Secured Environmental Permit for coal bulk sample at Depot Creek (EL1875) – the first in PNG</li> <li>✓ Completed successful coal mapping programme</li> <li>✓ Completed further field mapping and surface coal outcrop sampling across the coal exploration portfolio in Gulf Province. Numerous coal intersections up to 8 metres in thickness encountered at surface</li> <li>✓ Signed non binding Letter of Intent for coal offtake</li> </ul>



#### Tenure covering >200km strike – only 0.6% drilled so far (Depot Creek)

PNG's coal region in Gulf Province, Mayur's licences and proximity to rivers and coast for access to the seaborne markets (domestic and export) +210Mt regional Exploration Target\*



<sup>\*</sup> For further information Exploration Target refer to Prospectus dated 21 July 2017. The Company confirms it is not aware of any new information or data that materiality effects the previously disclosed information and that all material assumptions and technical parameters underpinning the estimates in that information continue to apply and have not materially changed



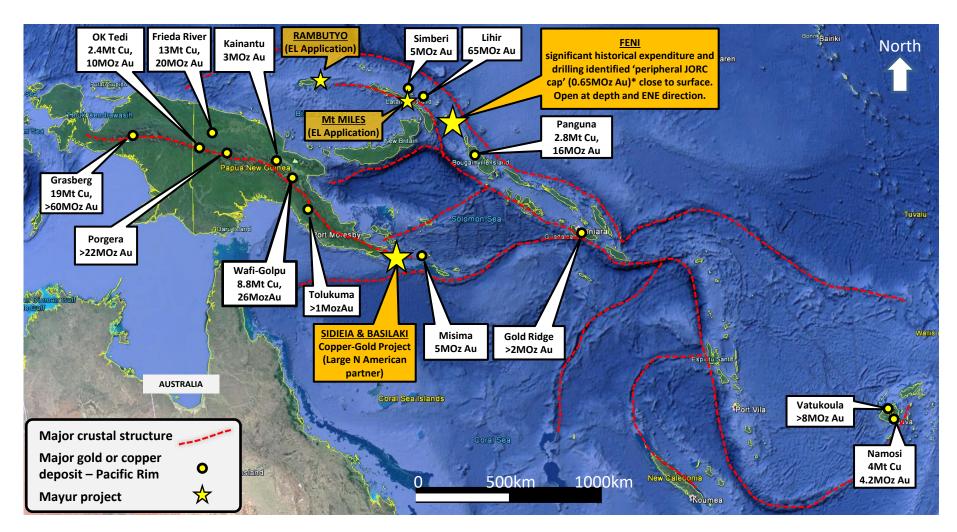
# **COPPER & GOLD**

<b>Business Division</b>	Planned (IPO and 2018 Raise)	Actual Progress to date
COPPER & GOLD  FOCUS: Feni Project	<ul> <li>Secure JV partner for Feni project (IPO)</li> <li>Fund own drilling programme at Feni project Feni project (2018 Raise)</li> </ul>	<ul> <li>✓ Extended letter agreement with north American developer for Basilaki project</li> <li>✓ Diamond drill program completed at Basilaki project</li> <li>✓ Pre mobilisation for Feni project Drilling programme</li> <li>✓ Awarded contract for airborne magnetic survey across Sideia Island project in Milne Bay province</li> <li>✓ Lodged new 2 new ELAs (Rambutyo and Mt Miles)</li> </ul>

# **Copper & Gold in PNG**



### Regional setting in the Pacific Ring of Fire



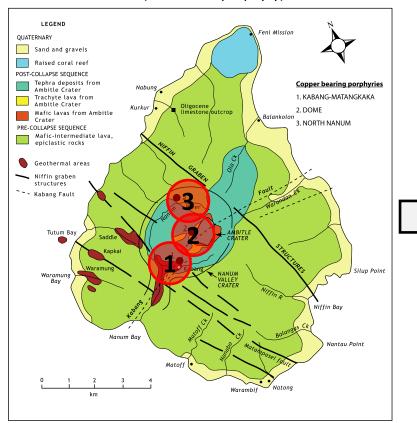
## **Copper & Gold in PNG**



### Feni Island project – drilling porphyry copper potential

#### 3 large mineralising systems:-

- Kabang (Feldspar porphyry)
- Dome (Monzonite porphyry)
- 3. North Nanum (Monzonite porphyry)



Company believes thus far only the periphery 'halo' style mineralisation has been drilled at Feni - 6 hole programme has been proposed to locate the feeder system Hole KAD001 - 81.85m @ 0.76g/t Au and 0.36% Cu (from 15.5m depth)\* Advanced Argillic Alteration 'Peripheral 650.000Oz Kabang Gold Resource JORC Cap' Chloritic Alteration VOLCANIC ow Sulphidation Vein **EDIFICE High Sulphidation Massive** Sulphide Lode Sericitic Alteration Potassic Alteration Propylitic Alteration Porphyry Cu-Au Mineralisation SUB-VOLCANO BASEMENT Porphyry Stock

'FEEDER AT DEPTH'

Model modified by Mayur - based on Sillitoe 1995

100m

200 - 600m



- 1. CORPORATE SNAPSHOT
- 2. NATION BUILDING STRATEGY
- 3. PROJECT PORTFOLIO UPDATE
- 4. FORWARD PLAN



#### **Project Pipeline Matrix – Target Operational Size & Delivery**

	Project	Current State 'Phase'	Project Particulars	Next Milestone	FID	Operations / cashflow
A	POWER GENERATION – LAE PROJECT	DFS complete	Subject to execution of PPA, delivery of a 52.5MW power station in Lae to generate ~413,910 MWH/year, with future scalability to 200MW	Lae PPA signed	2019	2021
В	LIME / CEMENT - PORT MORESBY	DFS underway	Aiming to be a producer of 250,000 tonnes of Quicklime and 1.5Mt Cement within the next 3-4 years for domestic and regional end users	Award EPC, DFS completion + offtake	2018/19	2021/22
С	MINERAL SANDS – OROKOLO BAY	DFS underway	Delivery of a simple, low cost mining operation with capex of USD22m and ~USD60m in annual revenue once in full production*	DFS completion + bulk sample	2019	2020
D	COPPER GOLD	Early exploration	Resource delineation and expansion via completion of exploration programmes at Basilaki and Feni	Magnetic survey (Sideia) + new drilling (Feni)	NA	NA

<sup>\*</sup>Orokolo Bay revenue and capital expenditure assumptions are as disclosed in the Prospectus dated 21 July 2017 and the Statement of Various Confirmations dated 19 September 2017. The Company confirms that it is not aware of any new information or data that materially affects this statement and that all material assumptions and technical parameters underpinning the estimates as previously disclosed continue to apply and have not materially changed.

### **PNG Government support**



- Mayur's strategy is aligned with the PNG government's 'Nation Building Agenda'
- Mayur's business activities have strong support across all levels of Government including the Prime Minister Mr Peter O'Neill.
- Mayur has strong support from both the **Gulf Provincial Governor** (Hon Chris Havieta) and the **Central Province Governor** (Hon Robert Agarobe) where the lime and cement raw materials and facilities are to be located



Mayur Managing Director (Paul Mulder) and Gulf Provincial Governor (Hon Chris Havieta) signing MOA, 7 December 2017



From right, Paul Mulder (Mayur MD), Prime Minister of PNG – Hon Peter O'Neill, Tim Crossley (Mayur Executive Director), PNG Bank Governor – Mr Bokani) at the PNG/UK investment Forum - April 2018



Mayur's Head of Business Affairs (Darren Lockyer), MD (Paul Mulder) and Central Province Governor (Hon Robert Agarobe) addressing the community at the Limestone Project

#### **COMPETENT PERSONS STATEMENT**

Statements contained in this presentation relating to Mineral Resource estimates for the Central Cement and Lime Project are based on, and fairly represents, information and supporting documentation prepared by Mr. Rod Huntley, who is a member of the Australian Institute of Geoscientists). Mr. Huntley has sufficient and relevant experience (including PNG) that specifically relate to the style of mineralisation. Mr Huntley qualifies as a Competent Person as defined in the Australian Code for Reporting of Identified Mineral Resources and Ore Reserves (JORC) Code 2012. Mr Huntley is an employee of Groundworks Pty Ltd contracted as a consultant to Mayur Resources and consents to the use of the matters based on his information in the form and context in which it appears. As a competent person Mr Huntley takes responsibility for the form and context in which this initial Mineral Resource Estimate prepared for the Central Cement and Lime Project appears.

Statements contained in this presentation relating to Mineral Resource estimates for the Orokolo Bay Industrial Sands Project and the Feni Gold project are based on, and fairly represents, information and supporting documentation prepared by Mr. Simon Tear, who is a member of the Australian Institute of Geoscientists. Mr. Tear has sufficient and relevant experience that specifically relate to the style of mineralisation. Mr Tear qualifies as a Competent Person as defined in the Australian Code for Reporting of Identified Mineral Resources and Ore Reserves (JORC) Code 2012. Mr Tear is an employee of H&S Consultants Pty Ltd contracted as a consultant to Mayur Resources and consents to the use of the matters based on his information in the form and context in which it appears. As a competent person Mr Tear takes responsibility for the form and context in which the Mineral Resource Estimate prepared for the Orokolo Bay Project and Feni Gold appears.

Statements contained in this presentation relating to Mineral Resource estimates for the Depot Creek Coal Project are based on, and fairly represents, information and supporting documentation prepared by Mr. Neill Biggs, who is a member of the Australian Institute of Geoscientists. Mr. Biggs has sufficient and relevant experience that specifically relate to the style of mineralisation. Mr Biggs qualifies as a Competent Person as defined in the Australian Code for Reporting of Identified Mineral Resources and Ore Reserves (JORC) Code 2012. Mr Biggs is an employee of Resolve Geo Pty Ltd contracted as a consultant to Mayur Resources and consents to the use of the matters based on his information in the form and context in which it appears. As a competent person Mr Biggs takes responsibility for the form and context in which the Mineral Resource Estimate prepared for the Depot Creek Coal Project appears.



**THANK YOU**