



ASX release

4 December 2017

## Company update

### Key points

- Outstanding preliminary capital cost results from FEED phase
- Capital optimisation work continuing – completion expected in December 2017
- FEED costs fully supported by competitive bids for key operational contracts
- Final FEED economics expected to be released in January 2018
- Colluli continues to demonstrate world class attributes in cost structure, fundability and scalability
- Continued positive achievement of project milestones
- Colluli is fully permitted – project now ready to advance into full engineering and construction
- Offtake discussions are well progressed
- Equity strategy progressing
- Secondary listing on the LSE underway
- Strong cash position
- Company exceptionally well positioned for a defining year in 2018
- Board and management team changes to support the next phase of development

Danakali Limited (ASX: DNK) (**Danakali** or the **Company**) is pleased to provide the following Company update. The Company is set for a strong finish to 2017 with the completion of the front-end engineering design (**FEED**) phase imminent, offtake discussions well advanced, equity and debt strategy progressing, secondary listing on the London Stock Exchange (**LSE**) underway, and a solid cash position which will allow the company to focus on key deliverables as it progresses to full engineering and construction of the Colluli Potash Project (**Colluli**).

With the study phase progressing rapidly to full completion, the Company is amplifying its focus on firming up offtake agreements, and advancing the project debt and equity. Changes in both the Board and management team over the past twelve months have been firmly aligned with these objectives.



### **Outstanding capital cost outcomes from FEED**

Capital and operating cost estimates for the first module of the two-phase development have been received from the FEED phase. The FEED phase was led by globally recognised, multi-national engineering and construction firm, FLUOR, with input from Knight Piesold, Global Potash Solutions, Elemental Engineering and AMC Consultants.

Preliminary FEED capital numbers and comparison with the definitive feasibility study (DFS) are shown in Table 1 below.

**Table 1: DFS and FEED Colluli Module I capital estimates<sup>1</sup>**

	<b>DFS</b>	<b>FEED</b>
<b>Annual production rate (SOP)</b>	<b>425ktpa</b>	<b>472ktpa</b>
<b>Plants, ponds and mine development</b>	US\$133m	US\$126m
<b>Supporting Infrastructure</b>	US\$76m	US\$92m
<b>Owners costs, EPCM, working capital, contingency</b>	US\$127m	US\$114m
<b>Total capital expenditure (including working capital)</b>	<b>US\$337m</b>	<b>US\$332m</b>
<b>Capital intensity (including working capital)</b>	<b>US\$790/t</b>	<b>US\$705/t</b>

<sup>1</sup> Module I represents a standalone 472ktpa production facility. The DFS includes a two module development approach. Capital estimates for Module II are currently underway. Module II is a 472ktpa production facility planned for construction five years after Module I.

The FEED results have further improved the project's competitive position as a result of both reduced development capital and higher sulphate of potash (**SOP**) output. Danakali believes that the Colluli Project has a lower estimated capital cost per tonne of SOP than any other greenfields development. The FEED results also build upon the disciplined study execution and project de-risking approach adopted by Danakali and its joint venture partner, the Eritrean National Mining Corporation (**ENAMCO**) following the completion of scoping, prefeasibility and definitive feasibility study phases. The capital and operating costs have further improved from the +/- 15% level of accuracy in the DFS to +/- 10%.

Equipment and supplier lists developed in the FEED phase now provide key inputs to the procurement led debt funding process.

Capital cost estimates for the second module of the two-stage development process are currently being finalised and will form part of the final FEED economics which are planned to be released in January 2018.



### **Capital optimisation work continuing – completion expected in December 2017**

Optimisation work on the site water intake and treatment area (**WITA**) is continuing and expected to further reduce development capital costs. The expected completion is December 2017. The results will be included in the final FEED economics.

### **FEED costs fully supported by contract bids for key operational contracts**

Operating cost estimates for FEED are currently being collated and will be supported by competitive bids in the key operating contract areas of mining and power generation. Inglett and Stubbs International has been appointed as the preferred power provider (*ASX announcement 31 May 2017*). Mining bids have been shortlisted to two competitive bids. Commercial negotiations to select the preferred mining contractor will commence shortly.

### **FEED economics will be complete and released by January 2018**

Capital estimates for the second module of the two-phase development are being finalised following the completion of the Module I FEED and optimisation work. Module II capital estimates are expected to be complete by mid-December. Following completion of Module II capital and operating cost estimates, a revised Ore Reserve and Competent Persons Statement will precede the final FEED economics.

### **Colluli continues to demonstrate world class attributes in cost structure, fundability and scalability**

Throughout the progressive phases of study, Colluli has continued to demonstrate world class attributes. Through the study phases development capital and overall economics have progressively improved while capital intensity remains unrivalled in contrast with advanced stage peer developments. Colluli is underpinned by a highly versatile resource which has the ability to produce potassium chloride (MOP), potassium magnesium sulphate (SOP-M), magnesium sulphate and rock salt in addition to the premium primary product, sulphate of potash (SOP). FEED economics are based solely on the sale of SOP.

### **Completion of FEED further cements Colluli as the most advanced SOP project globally**

With FEED drawing to conclusion, Colluli remains the most advanced stage greenfield SOP development in the world. The project has been costed to a +/-10% level of accuracy and is supported by firm operational contract bids. The project is fully permitted and ready to immediately advance into engineering and construction upon securing funding. Social and environmental impact assessments and associated management plans have been completed to ensure consistency with the Equator Principles. Stakeholder engagements have been completed throughout the study phases, and the project has strong support from local communities.



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The SOP market has been exceptionally price resilient throughout the commodity cycle, with a significant increase in price premium being observed over the more common potash type, potassium chloride (MOP) since 2012. Economically exploitable primary resources are geologically scarce.

#### **Offtake discussions are well progressed**

The Company continues to advance its offtake strategy and is working with a select group of potential offtake parties to secure bankable offtake agreements. The Company has been well supported by Norton Rose Fulbright in the development of the contract framework. Completion of binding agreements is targeted for Q1 2018.

#### **Equity strategy advancing**

The Danakali Board of Directors has approved applying for a secondary listing on the London Stock Exchange (LSE) which is expected to be complete by Q1 2018.

#### **Debt process progressing**

The completion of FEED is a key milestone to advance debt funding discussions with the completion of equipment and supplier lists. The Company is progressing discussions with commercial lenders, export credit agencies and development finance institutions with regard to the funding solution and is progressing 'know your client' (KYC) processes with a number of commercial lenders as the revised FEED economics draws to conclusion.

#### **Strong cash position**

The company currently has a strong cash position of approximately A\$16m with approximately A\$3.5m of in-the-money options with 30 March 2018 expiry.

#### **Board and management changes to support the next phase of development**

As the Company's focus shifts to securing binding offtake agreements, completing the LSE listing, executing the equity strategy and advancing the debt funding solution, a number of changes have commenced and will continue to be implemented over the following weeks. This is in addition to key appointments that have been made in both the management team and Board previously. After redefining the product and development path and process for the Colluli project and overseeing the scoping, prefeasibility, definitive feasibility and FEED phases, Mr. Paul Donaldson, an experienced chemical engineer and mining industry professional will transition from the role of Chief Executive Officer and Managing Director to the role of Non-Executive Director on the Danakali Board.

Mr. Danny Goeman, a highly experienced mining industry professional will transition from Head of Marketing to the role of Chief Executive Officer where he will focus on completion of the binding offtake



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agreements and overseeing the continuation of the debt and equity process as well as the LSE listing. Mr. Goeman has more than 25 years of extensive experience in management, sales and marketing strategy development and high level commercial negotiations, including more than 20 years with the Rio Tinto group of companies. He holds a Master's Degree in Business Administration and joined the Danakali team in August 2016.

The timing of the transition coincides with the final stage of the pre-construction studies. The industry and project knowledge, skills and relationships developed by Mr. Donaldson throughout the study phases will be retained within both Danakali and the Colluli Mining Share Company as the project progresses. Mr. Donaldson will assume Chairmanship of a newly established technical review sub-committee within Danakali and join the nomination and remuneration committee.

The transition will take place prior to the end of the calendar year with further details to follow.

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### About Danakali Ltd

Danakali is an ASX listed company and 50% owner of the Colluli Potash Project in Eritrea, East Africa. Danakali is currently developing the Colluli Potash Project with its joint venture partner Eritrean National Mining Corporation (ENAMCO). Danakali and ENAMCO each have a 50% ownership interest in the joint venture company, the Colluli Mining Share Company (CMSC).

The project is located in the Danakil Depression region of Eritrea, and is ~75km from the Red Sea coast, making it one of the most accessible potash deposits globally. Mineralisation within the Colluli resource commences at just 16m, making it the world's shallowest potash deposit. The resource is amenable to open pit mining, which allows higher overall resource recovery to be achieved, is generally safer than underground mining and is highly advantageous for modular growth.

The company has completed a definitive feasibility study for the production of potassium sulphate, otherwise known as SOP. SOP is a chloride free, specialty fertiliser which carries a substantial price premium relative to the more common potash type; potassium chloride. Economic resources for production of SOP are geologically scarce. The unique composition of the Colluli resource favours low energy input, high potassium yield conversion to SOP using commercially proven technology. One of the key advantages of the resource is that the salts are present in solid form (in contrast with production of SOP from brines) with which reduces infrastructure costs and substantially reduces the time required to achieve full production capacity.

The resource is favourably positioned to supply the world's fastest growing markets.

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.

### Competent Persons Statement (Rock Salt Resource)

Colluli has a JORC 2012 compliant Measured, Indicated and Inferred Mineral Resource estimate of 347Mt @97% NaCl. The resource contains 28Mt @ 97% NaCl of Measured Resources, 180Mt @ 97% NaCl of Indicated Resources and 139Mt @ 97% NaCl of Inferred Resources.

The information relating to the Colluli Rock Salt Mineral Resource estimate was compiled by Mr. John Tyrrell. Mr. Tyrrell is a member of the Australasian Institute of Mining and Metallurgy (AusIMM) and a full-time employee of AMC. Mr. Tyrrell has more than 25 years' experience in the field of Mineral Resource estimation. He has sufficient experience relevant to the style of mineralisation and type of the deposit under consideration, and in resource model development, to qualify as a Competent Person as defined in the JORC Code.

Mr Tyrrell consents to the inclusion of the information relating to the rock salt Mineral Resource in the form and context in which it appears.

### Competent Persons Statement (Sulphate of Potash Resource)

Colluli has a JORC 2012 compliant Measured, Indicated and Inferred Mineral Resource estimate of 1,289Mt @11% K<sub>2</sub>O. The resource contains 303Mt @ 11% K<sub>2</sub>O of Measured Resources, 951Mt @ 11% K<sub>2</sub>O of Indicated Resources and 35Mt @ 10% K<sub>2</sub>O of Inferred Resources.

The information relating to the 2015 Colluli Mineral Resource estimate was compiled by Mr. John Tyrrell, under the supervision of Mr. Stephen Halabura M. Sc. P. Geo. Fellow of Engineers Canada (Hon), Fellow of Geoscientists Canada, and as a geologist with over 25 years' experience in the potash mining industry. Mr. Tyrrell is a member of the Australian Institute of Mining and Metallurgy and a full-time employee of AMC. Mr. Tyrrell has more than 25 years' experience in the field of Mineral Resource estimation.

Mr. Halabura is a member of the Association of Professional Engineers and Geoscientists of Saskatchewan, a Recognised Professional Organisation (RPO) under the JORC Code and has sufficient experience relevant to the style of mineralisation and type of deposit under consideration and to the activity which he is undertaking to qualify as a Competent Person as defined in the 2012 Edition of the Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves (the JORC Code). Mr. Tyrrell & Mr. Halabura consent to the inclusion of information relating to the 2015 Resource Statement in the form and context in which it appears.

### Competent Persons Statement (Sulphate of Potash Reserve)

The November 2015 Colluli Ore Reserve is reported according to the JORC Code and estimated at 1,113Mt @10% K<sub>2</sub>O Equiv. The Ore Reserve is classed as 286Mt @ 11% K<sub>2</sub>O Equiv Proved and 827Mt @ 10% K<sub>2</sub>O Equiv Probable. The Competent Person for the estimate is Mr Mark Chesher, a mining engineer with more than 30 years' experience in the mining industry. Mr. Chesher is a Fellow of the AusIMM, a Chartered Professional, a full-time employee of AMC Consultants Pty Ltd, and has sufficient open pit mining activity experience relevant to the style of mineralisation and type of deposit under consideration to qualify as a Competent Person as defined in the JORC Code. Mr Chesher consents to the inclusion of information relating to the Ore Reserve in the form and context in which it appears.

In reporting the Mineral Resources and Ore Reserves referred to in this public release, AMC Consultants Pty Ltd acted as an independent party, has no interest in the outcome of the Colluli Project and has no business relationship with Danakali Ltd other than undertaking those individual technical consulting assignments as engaged, and being paid according to standard per diem rates with reimbursement for out-of-pocket expenses. Therefore, AMC Consultants Pty Ltd and the Competent Persons believe that there is no conflict of interest in undertaking the assignments which are the subject of the statements.



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### Quality Control and Quality Assurance

Danakali Exploration programs follow standard operating and quality assurance procedures to ensure that all sampling techniques and sample results meet international reporting standards. Drill holes are located using GPS coordinates using WGS84 Datum, all mineralisation intervals are downhole and are true width intervals.

The samples are derived from HQ diamond drill core, which in the case of carnallite ores, are sealed in heat sealed plastic tubing immediately as it is drilled to preserve the sample. Significant sample intervals are dry quarter cut using a diamond saw and then resealed and double bagged for transport to the laboratory.

Halite blanks and duplicate samples are submitted with each hole. Chemical analyses were conducted by Kali-Umwelttechnik GmbH Sondershausen, Germany utilising flame emission spectrometry, atomic absorption spectroscopy and ion chromatography. Kali-Umwelttechnik (KUTEC) Sondershausen1 have extensive experience in analysis of salt rock and brine samples and is certified according to DIN EN ISO/IEC 17025 by the Deutsche AkkreditierungssystemPrüfwesen GmbH (DAR). The laboratory follows standard procedures for the analysis of potash salt rocks chemical analysis ( $K^+$ ,  $Na^+$ ,  $Mg^{2+}$ ,  $Ca^{2+}$ ,  $Cl^-$ ,  $SO_4^{2-}$ ,  $H_2O$ ) and X-ray diffraction (XRD) analysis of the same samples as for chemical analysis to determine a qualitative mineral composition, which combined with the chemical analysis gives a quantitative mineral composition.

### Forward Looking Statements and Disclaimer

The information in this document is published to inform you about Danakali Limited (the "Company" or "DNK") and its activities. DNK has endeavoured to ensure that the information enclosed is accurate at the time of release, and that it accurately reflects the Company's intentions. All statements in this document, 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 reported according to the JORC Code, 2012 Edition. 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 document. Recipients should make their own enquiries in relation to any investment decisions. Mineral Resource, Ore Reserve and financial assumptions made in this presentation are consistent with assumptions detailed in the Company's ASX announcements dated 25 February 2015, 4 March 2015, 19 May 2015, 23 September 2015, 30 November 2015, 15 August 2016 and 1 February 2017 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.