



PURE
ALUMINA

Annual General Meeting

Disclaimer

Forward-looking Statements

This announcement contains forward-looking statements which are identified by words such as 'anticipates', 'forecasts', 'may', 'will', 'could', 'believes', 'estimates', 'targets', 'expects', 'plan' or 'intends' and other similar words that involve risks and uncertainties. Indications of, and guidelines or outlook on, future earnings, distributions or financial position or performance and targets, estimates and assumptions in respect of production, prices, operating costs, results, capital expenditures, reserves and resources are also forward-looking statements. These statements are based on an assessment of present economic and operating conditions, and on a number of assumptions and estimates regarding future events and actions that, while considered reasonable as at the date of this announcement and are expected to take place, are inherently subject to significant technical, business, economic, competitive, political and social uncertainties and contingencies. Such forward-looking statements are not guarantees of future performance and involve known and unknown risks, uncertainties, assumptions and other important factors, many of which are beyond the control of the Company, the directors and management. We cannot and do not give any assurance that the results, performance or achievements expressed or implied by the forward-looking statements contained in this announcement will actually occur and readers are cautioned not to place undue reliance on these forward-looking statements. These forward-looking statements are subject to various risk factors that could cause actual events or results to differ materially from the events or results estimated, expressed or anticipated in these statements.

PFS Assumptions and Risks

Refer to announcement titled, "PFS Results," dated 14 June 2018. HEG confirms that all material assumptions underpinning the pre-feasibility study continue to apply and have not materially changed. Risk includes, Resource, Technology, Market, Permitting and Financing Risk. HEGL currently does not have sufficient funds to construct and commission the Yendon HPA project. Due to the strong economic results from the PFS, HEGL believes there are reasonable grounds to expect that sufficient funding will be available to finance the A\$271M capital development cost of the project. A number of funding sources may be available to HEGL, including but not limited to: access to debt finance facilities; access to equity funding from capital markets; and funding from other sources such as potential off-take agreements, equipment suppliers and / or government business development financing. Securing funding is not normally contemplated at the PFS stage of a project. HEGL's funding requirements depend on numerous factors, including the completion of a Definitive Feasibility Study.



OUR GOAL

Build shareholder wealth by
developing the compelling
Yendon HPA project to
capitalise on growing HPA
demand



The HPA market is growing rapidly and needs new supply to satisfy the rising demand

OUR STRATEGY

- To begin commercial production of Yendon high purity alumina as quickly as practicable
- Capitalise on Yendon's low costs and high quality to secure a significant share of the rapidly growing demand for high purity alumina from the lithium battery separator and LED markets
- Utilise Yendon's substantial competitive advantages – particularly its robust margins - to generate strong financial returns for shareholders

FY 2018 - A Year of Transformation

Aug 17 - Pure Alumina asset acquisition completed

Sep 17 – Yendon kaolin deposit drilled

Oct 17 – Sizing test work produces Yendon kaolin concentrate

Jan 18 – High purity alumina produced from Yendon kaolin

Feb 18 – Substantial high grade kaolin resource defined at Yendon

Mar 18 – Metallurgical test work to define kaolin to HPA process

April 18 – Marketing team for Yendon HPA appointed

May 18 – Strategic review of the gold assets commences

Jun 18 – Outstanding prefeasibility results announced

Pre-Feasibility Outcomes

Yendon HPA Pre-Feasibility Study generates outstanding technical and financial outcomes

Annual HPA Production	8,000 tpa +99.99% Al₂O₃
Capital Cost*	\$271 million (incl contingencies of \$53m)
Capital Cost per t of HPA	\$33,875 based on 8,000 tpa HPA
Forecast Sale Price	\$25,200 /tonne
Average EBITDA	\$133m per annum
Payback Period	4.1 years
Project NPV @ 10%	\$692m
IRR	34%

* All financial amounts are in US Dollars

FY 2019 Update

Definitive Feasibility Study
Commercial Demonstration Plant
HPA Marketing
Gold Assets Sale

Definitive Feasibility Study

Definitive Feasibility Study is underway

- A key focus is to reduce the capital and already low operating costs further
- The hydrochloric acid regeneration plant is largest capital item and a material operating cost to produce HPA
- The most conservative assumptions were used for the acid plant in the PFS as test work was out of scope. This resulted in high capex and opex.
- Test work to optimize the acid regeneration process as part of the DFS is currently underway with acid plant suppliers and specialists
- Material reductions in acid plant capex and opex are potentially available

Commercial Demonstration Plant

As part of the DFS, Hill End is assessing building a commercial scale demonstration plant producing a commercial volume of HPA up to 1,000 tpa. This option could deliver key benefits including:

- HPA process optimisation and proof of scalability up to 8,000tpa of HPA;
- Considerably lower capex than the 8,000 tpa Yendon HPA project PFS;
- Path to production would be significantly ahead of the Yendon PFS timeframe;
- Revenue from HPA sales, satisfying the HPA customer supplier accreditation processes and market acceptance of our product, which would translate into offtake contracts when the full scale HPA operation is commissioned.

Hill End has commenced a preliminary economic assessment to determine the capital and operating costs to ensure it is financially feasible.

HPA Marketing

Recent customer visits to Asia and the USA verified that projected rapid growth for HPA is real and imminent.

- Lithium battery manufacturers are planning and building significant expansions in their current capacity.
- The majority of new separator capacity will be HPA coated
- HPA growth from the separator market alone will require multiple Yendon 8,000 tpa HPA projects to satisfy it
- Sapphire demand for HPA is also growing strongly especially LED lights. New high tech uses are creating demand for even higher purity HPA

Gold Asset Sale

The sale process of HEG's gold assets is approaching the finish line

- More than 30 parties have looked at the gold assets
- A select group are currently undertaking detailed due diligence
- Firm and final offers are now being received
- A final decision is expected shortly

Summary

High purity alumina represents an outstanding opportunity for shareholders

- Yendon is an exceptional project
- Low-cost, high-quality, strong margins, ideal timing
- DFS advancing rapidly
- Metallurgical tests generating very favourable results
- Highly favourable feedback from potential customers
- Commercial-sized demonstration plant offers opportunity to generate early cashflow
- Strong newsflow throughout FY19
- A final decision on the sale of the gold assets is expected shortly



PURE
ALUMINA