ASX Announcement 28 October 2021

Bankable Feasibility Study Update Target Production Capacity Increase

- Successful integration of Peak's recently appointed technical and project delivery team into the BFS Update¹ process
- In light of rapid growth in rare earth demand, the team has identified an opportunity to further optimise the integrated Ngualla – Teesside Project through materially expanding production capacity
- Change in scope of the BFS Update to reflect a nameplate annual mill throughput of 800tkpa which would deliver:
 - a ~28% increase over original BFS² throughput of 624ktpa and a ~13% increase over the August 2017 Optimisation Update³ throughput of 711ktpa; and
 - an increase in annual NdPr Oxide production to 3,000 3,500tpa
- This expansion in production capacity is expected to support a material increase in the value for the integrated Ngualla – Teesside Project, particularly in the context of higher NdPr Oxide prices
- Delivering the higher production capacity requires an extension of the BFS Update to June 2022 and additional study costs of ~A\$2.3 million
- Final Investment Decision is targetted before the end of Calendar Year 2022

Peak Resources Limited (ASX: **PEK**) ("**Peak**" or the "**Company**") is pleased to announce (1.) that its recently appointed technical team has been successfully integrated into the Bankable Feasibility Study ("BFS") Update process; and (2.) the identification of an opportunity to further optimise the value of its integrated Ngualla-Teesside Project by pursuing an increase in concentrator capacity.

The scope of the BFS Update has been amended to allow for an increase in the Ngualla flotation plant average Life-of-Mine ("LOM") capacity to 800ktpa. This reflects an approximate 28% increase in capacity over the average LOM capacity of 624ktpa in the BFS published in April 2017 ("April 2017 BFS") and an approximate 13% increase in the average LOM capacity of 711ktpa that was reflected in an internal optimisation study completed in August 2017 ("August 2017 Optimisation").

This higher mine-concentrator throughput would increase the average LOM NdPr Oxide production to between 3,000 - 3,500tpa, compared to 2,420tpa reflected in the April 2017 BFS and 2,810tpa in the August 2017 Optimisation.

¹ The Bankable Feasibility Study Update is reported in the Company's ASX announcement dated 25 August 2021

² The Bankable Feasibility Study is reported in the Company's ASX announcements dated 12 April 2017, 28 August 2017 and 12 October 2017

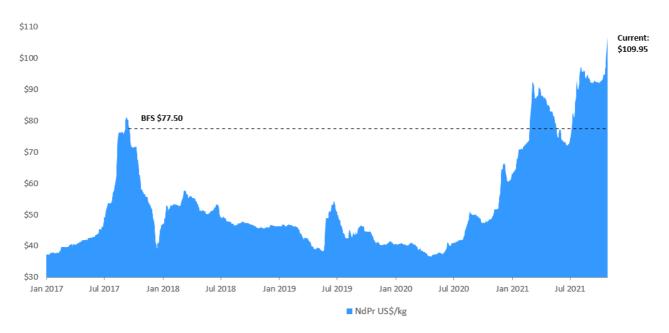
³ The Optimisation is reported in the Company ASX Announcement dated 28 August 2017



ASX Announcement 28 October 2021

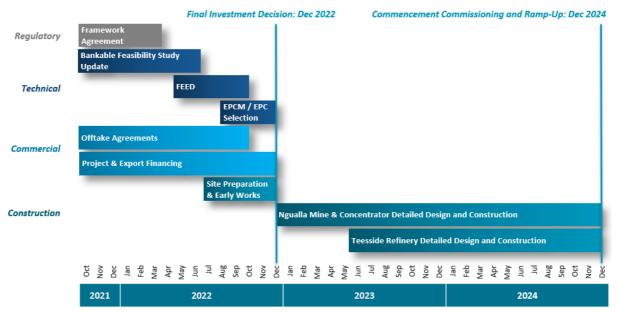
As part of the BFS Update, testwork will be undertaken prior to the Final Investment Decision to support detailed design. The program of work will be focused on optimising NdPr recoveries and minimizing overall operating costs in the mining and the two processing plants, as well as further decreasing the start-up risks.

An expansion in capacity is expected to support a material increase in the value of the integrated Ngualla-Teesside Project particularly given the strong appreciation in NdPr Oxide prices since the April 2017 BFS and August 2017 Optimisation were completed.



It is expected that the cost of the BFS Update will increase from A\$1.7 million to A\$4 million and its completion date will move from the end of February 2022 to June 2022.

An updated indicative timeline with key milestones is set out below. Under the revised timeline a Final Investment Decision is targeted before the end of December 2022.





ASX Announcement 28 October 2021

This announcement is authorised for release by the Company's Board of Directors.

Bardin Davis

Media inquiries:

Michael Vaughan

Fivemark Partners

+61 422 602 720

Bankable Feasibility Study

This announcement references the Bankable Feasibility Study ("BFS"), Optimisation Study, BFS Update and outputs.

The BFS is reported in the Company's ASX announcements dated 12 April 2017, 28 August 2017 and 12 October 2017. The Optimisation Study is reported in the Company's ASX announcements dated 28 August 2017. The BFS Update is reported in the Company's ASX announcements dated 25 August 2021.

The ASX announcements are available to view on the Company's website and the ASX Announcements platform.

The BFS Update will report any new information or data that materially affects the information included in the aforementioned announcements.

The Framework Agreement to be negotiated with the Government of the United Republic of Tanzania may also require an update to the BFS.

Forward Looking Statements

This announcement contains forward-looking information which is based on the assumptions, estimates, analysis and opinions of management and engaged consultants made in light of experience and perception of trends, current conditions and expected developments, as well as other factors believed to be relevant and reasonable in the circumstances at the date that such statements are made, but which may prove to be incorrect.

Assumptions have been made by the Company regarding, among other things: the commodity prices, the timely receipt of required approvals, the accuracy of capital and operating cost estimates, the completion of studies on its exploration and development activities, the ability of the Company to operate in a safe, efficient and effective manner and the ability of the Company to obtain financing as and when required and on reasonable terms. Readers are cautioned that the foregoing list is not exhaustive of all factors and assumptions which may have been used by the Company.

Although management believes that the assumptions made and the expectations represented by such information are reasonable, there can be no assurance that the forward-looking information will prove to be accurate.

Forward-looking information involves known and unknown risks, uncertainties, and other factors which may cause the actual results, performance or achievements of the Company to be materially different from any anticipated future results, performance or achievements expressed or implied by such forward-looking information. Readers should not place undue reliance on forward-looking information. Neither the Company nor its directors undertake any obligation to update or revise any forward-looking statements, whether as a result of new information, future events or otherwise.