29 February 2024

CleanTech Lithium PLC ("CleanTech Lithium" or the "Company")
Laguna Verde Project PFS Update

CleanTech Lithium PLC (AIM:CTL, OTCQX:CTLHF, Frankfurt:T2N), an exploration and development company advancing lithium projects in Chile, announces that it now expects to publish the Pre-Feasibility Study (the "PFS") for the Laguna Verde Project in Q3 2024. In order to produce a more robust PFS, which will further support strategic partner discussions, the Board has decided to include data from the Company's DLE pilot plant as well as from the current drilling and field programme at Laguna Verde.

Highlights:

- The Company aims to complete a PFS that will define the best configuration of the Laguna Verde Project to take forward into a Definitive Feasibility Study (DFS).
- The current drilling programme at Laguna Verde is designed to produce the first JORC compliant reserve estimate for the project, which is an essential component to the PFS in accordance with recognised standards
- The drilling programme will also produce a hydrogeological model to design the extraction and reinjection wells to maximise the recovery of the lithium resource.
- Data from the optimisation of process parameters for the Company´s DLE pilot plant will provide important input for the PFS.
- Incorporating the results of the current field programme and pilot plant process data will produce a highly robust PFS in the Board's view, therefore the PFS is now targeted for completion in Q3 2024.
- The PFS is being led by Worley, an international engineering services company, from its Santiago office which has considerable experience of undertaking feasibility studies for and executing lithium projects in Chile.
- The Company has engaged various consultants to deliver more detailed studies addressing port access, water supply, power access and lithium market studies, which also form part of the PFS.
- Completion of the PFS, along with process and product verification, are key steps in 2024 to engage with high quality strategic investors for offtake and project funding.

Aldo Boitano, Chief Executive Officer, of CleanTech Lithium PLC, commented: *"The Pre-Feasibility Study (PFS) for the Laguna Verde project will be a significant milestone on our path to lithium production. It is the Company's aim to produce the highest quality PFS to ensure the strongest possible platform for discussions with strategic partners. The addition of data from the Company's DLE pilot plant will help achieve that aim."*

Further Information

Following the completion of a positive scoping study on the Laguna Verde project in Q1 2023, the Company engaged Worley to lead a PFS, a systematic assessment of all critical elements of the project and the various options for the project configuration. Worley is an international engineering services company with extensive experience in resource project feasibility studies, and its Chile office has a high level of lithium sector expertise. Other consultants which specialise in key aspects of the study such as port access, water supply, power access and lithium market studies are supporting Worley.

A resource evaluation programme at the project is ongoing, which aims to produce a JORC compliant reserve estimate scheduled for early Q3 2024. The existing resource of 1.8 million tonnes of lithium carbonate equivalent (LCE) in the Measured, Indicated and Inferred categories is based on six wells completed in 2022 and 2023. A further five wells are planned to be completed in the first half of 2024, as shown in figure 1. The drilling programme, which will include completion of pumping and reinjection tests, is being managed by Montgomery and Associates, a leading hydrogeology consultant with extensive experience working on lithium brine aquifers in Chile and Argentina.

The increased drilling density and the completion of pump tests on wells LV05 and LV06, along with a reinjection test, is expected to provide sufficient data to produce an estimate of reserves. The drilling programme will also enable a robust hydrogeological model to be completed, which will be used to design the extraction and reinjection wellfields to maximise recovery of the lithium resource. The importance of having control of the basin cannot be underestimated, as this allows the Company to manage the aquifer without interference from third parties. The reserve estimate and wellfield design is required to plan the life of mine production output in the PFS.

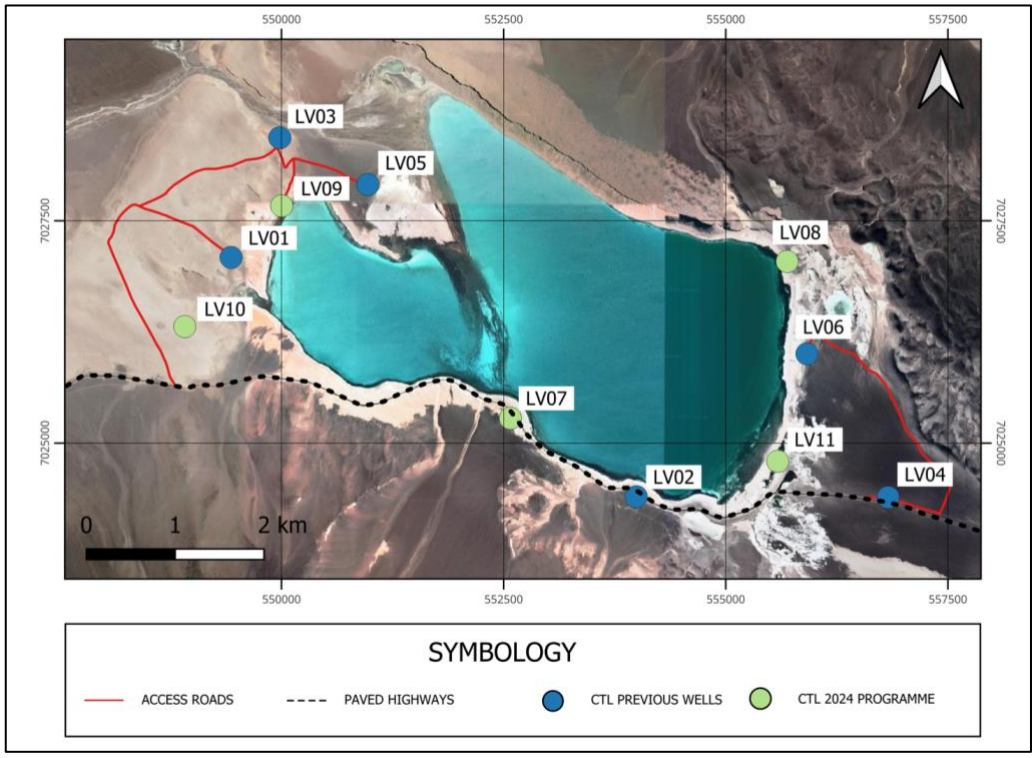

Figure 1: Drill Plan Map Showing Previous and Planned Well Locations at Laguna Verde

An important aspect of the PFS is to utilise data that will be generated from the Company´s DLE pilot plant in 1H 2024. The pilot plant, with a capacity of 1 tonne/month LCE in eluate, is of sufficient scale to allow data from the process optimisation to be used within the design for a full scale production plant. Operating the pilot plant and producing a high quality lithium chloride eluate over a sufficiently high number of cycles should verify the DLE process. The eluate from the DLE pilot plant will then be converted to battery grade lithium carbonate at an existing third party facility in North America. This programme will provide product samples for potential strategic and offtake partners for testing and to start their product qualification process.

The battery market is rapidly evolving with different battery types requiring different lithium products. The PFS will also evaluate the expected growth rates for these different lithium products and determine which products are to be produced by the Laguna Verde project.

Based on the additional studies and work programmes that are being undertaken to support the PFS, completion is now targeted for Q3 2024**.** Completion of the PFS, along with process and product verification, are the key steps the Company aims to complete in 2024 which will provide the strongest basis for engaging high-quality strategic investors for product offtake and project funding agreements.

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Notes

CleanTech Lithium (AIM:CTL, Frankfurt:T2N, OTCQX:CTLHF) is an exploration and development company advancing sustainable lithium projects in Chile for the clean energy transition. Committed to net-zero, CleanTech Lithium's mission is to produce material quantities of battery grade using sustainable Direct Lithium Extraction technology, powered by renewable energy, the Company plan to be a leading supplier of 'green' lithium to the EV and battery manufacturing market.

CleanTech Lithium has four lithium projects - Laguna Verde, Francisco Basin, Llamara and Salar de Atacama - located in the lithium triangle, the world's centre for battery grade lithium production. The two major projects: Laguna Verde and Francisco Basin are situated within basins controlled by the Company, which affords significant potential development and operational advantages. All four projects have direct access to existing infrastructure and renewable power.

CleanTech Lithium is committed to using renewable power for processing and reducing the environmental impact of its lithium production by utilising Direct Lithium Extraction. Direct Lithium Extraction is a transformative technology which removes lithium from brine, with higher recoveries and purities. The method offers short development lead times, low upfront capex, with no extensive site construction and no evaporation pond development so there is no water depletion from the aquifer. www.ctlithium.com

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