

CleanTech Lithium PLC ("CleanTech Lithium", "CTL" or the "Company") Operations and Corporate Update

Extensive activity across all three lithium projects in Chile, to deliver on ambition to supply green lithium to the EV market.

CleanTech Lithium PLC (AIM:CTL, Frankfurt:T2N, OTC:CTLHF), an exploration and development company advancing the next generation of sustainable lithium projects in Chile, announces an operations and corporate update as the Company continues to progress its projects towards production of battery grade 'green' lithium, through Direction Lithium Extraction ("DLE").

- Three simultaneous drilling and development programmes across Laguna Verde, Francisco Basin and Llamara
 - Laguna Verde Resource drilling programme comprising three wells is completed, sampling programme advanced with laboratory results expected in the coming weeks. Maiden pump test underway for hydrogeological modelling. Upgraded resource estimate expected during Q2 2023. Pre-Feasibility Study ("PFS") progressing, led by international engineering company Worley, now expected to be completed before the end of 2023
 - **Francisco Basin** Resource drilling programme comprising three wells is advanced, upgraded resource estimate now expected end of Q2 2023 with Scoping Study following directly after
 - Llamara drilling contractor engaged to undertake one exploration hole to a depth of 500m, grading of access road currently underway after recent rainfall event, programme due to commence in April 2023 – results expected during Q2 2023
- DLE it is currently understood that the Chilean Government is set to prioritise DLE projects for the development of future lithium projects in Chile
 - Lab scale DLE demo unit is currently being commissioned at Copiapó, Chile with the assistance of the DLE processing partner, Sunresin
 - Pilot plant DLE unit, a component of a full pilot plant to produce 1 tonne per month of battery grade lithium carbonate, which was ordered from Sunresin's facilities in Belgium in December 2022, is expected to arrive on site in June 2023 with installation and commissioning expected by mid Q3 2023
- Bolstered Community Relations team, productive consultations with local communities and opening a local community office in Copiapó Q2 2023
- Formation of an ESG Committee, reporting to the Board, to ensure the Company is being held accountable across all ESG factors.

Aldo Boitano, Chief Executive Officer, of CleanTech Lithium PLC, said: "As CleanTech Lithium's momentum continues, moving from the exploration to development stage, we have seen a record level

of technical and operational activity over the past few months with six wells being planned, drilled, completed, or tested simultaneously.

"Our high altitude (4,250+ meters above sea level) drilling campaigns and extensive hydrogeology work at both Laguna Verde and Francisco Basin are well advanced and progress has also been made at our third prospective site, Llamara, where we will commence drilling in the coming weeks. We will announce the results of the campaigns once we have carried out the comprehensive review process, including JORC upgrades at both Laguna Verde and Francisco Basin projects. The Scoping Study at Francisco Basin is progressing well and will follow soon after the JORC upgrade. In addition, work continues with other critical activities including preparations for the DLE pilot plant, the ongoing Environmental Impact Assessment ("EIA") work and the Hydrogeological Studies at our two flagship assets.

"As indicated by recent comments made by Ministers and President Boric, we fully support the Government's prioritisation of DLE for all new lithium projects in Chile due to the potential environmental and social benefits. This confirms the Company is in a favourable position to deliver on its ambition to become a green supplier of lithium to the EV market.

"To further strengthen our proposition, we are planning to establish an ESG Committee, reporting to the Board, to monitor and drive all ESG factors and we are soon to be opening our local Copiapó office to continue our engagement with local communities and key stakeholders. This, together with the recent growth in our operational team in Chile, means we can continue making headway across all three CleanTech Lithium projects.

"Noting our new Board appointments, announced this week, which further strengthen the team, our Company has come a long way in the past year, and we will endeavour to keep our shareholders updated as we progress our work programmes."

Operations Update

Laguna Verde

Drilling Programme & Post Drilling Analysis:

At the Laguna Verde Project resource drill holes LV01 – LV03 were completed in 2022 and formed the basis for the existing JORC compliant resource estimate at the project of 1.51 million tonnes of lithium carbonate equivalent ("LCE") at a grade of 206mg/L Lithium, of which 0.8 million tonnes are in the Measured + Indicated category. In the current season infill resource drill holes LV04 – LV06, as shown on Figure 1 below, have been completed with the aim of upgrading the existing resource estimate. The wells have been completed with drill depths in line with that modelled in the existing resource estimate.



Rig mobilising on site at Laguna Verde in January 2023

The wells were drilled with a 'pre-well' drill rig which uses a wide diameter 20-inch drill for the upper approximately 50m. A 14-inch steel casing was inserted to stabilise the upper well before a 10-inch diameter reverse circulation drill was used to drill to depth. The wells were then cased to depth with 8-inch PVC casing included slotted casing over the aquifer zone. LV05 and LV06 well sites are important locations with respect to the Laguna Verde resource model, aligning with the deepest sections of the model and being most representative of the sub-surface resource directly beneath the footprint of the Laguna.



Well	Depth
2022	
LV01	463m
LV02	290m
LV03	431m
2023	
LV04	320m
LV05	434m
LV06	405m

Position on 29 March 2023

Figure 1: Laguna Verde Resource Drilling Map

After completion of the drill hole, well installation and development, both suction and bailer samples are collected. A large number of samples have been collected from completed wells and submitted to an accredited laboratory. Bailer sampling was recently completed at LV06 and is ongoing at LV05. Laboratory results will be reported to the market on the completion of the sampling programme.

A pump test programme is currently underway at LV06 where an accumulative volume of 6,138m³ of brine was obtained, this is the first pump test conducted at the project and will provide important

data for the hydrogeological model such as potential flow rates for planned production bores, as shown in the photographs below. A pump test is also planned at LV05. Bulk samples of 1,000L of brine are being collected from LV05 and LV06 to be used in DLE process trial work at both the Company's installed demo unit in Copiapó, and for shipment to Sunresin's facilities in China. A much larger bulk sample of 30,000L will be collected from LV05 and transported to the Company's Copiapó facility in preparation for processing in the larger scale pilot plant, targeting to produce one tonne per month of LCE, for which the DLE plant is scheduled to be delivered from Sunresin's Belgian subsidiary in June 2023 with installation and commissioning expected to take place by mid Q3 2023.



Pump test trial underway at Laguna Verde

Pre-Feasibility Study, EIA and Hydrogeological Studies:

The international engineering company, Worley, has been engaged to lead the PFS and this will incorporate inputs from various work programme activities, all of which have already commenced in some form, including:

- The JORC resource upgrade data arising from the current drilling campaign
- The EIA which commenced in April 2022 and is progressing well, with the baseline studies well advanced, this will include incorporating more detailed engineering design work in 2H 2023
- The Hydrogeological Studies which are currently being undertaken on the sub-surface aquifers through specialist support providers, and
- The results of process test work for which bulk samples are being collected to be used at the DLE demo unit and at Sunresin's facilities in China, with the larger pilot plant due for commissioning in Q3 2023.

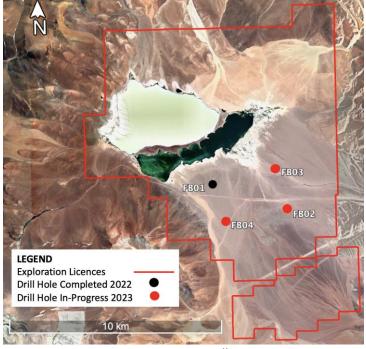
These key studies and process work will all be integrated in the PFS which is expected to be completed in late 2023. The Company is aiming to produce a high quality PFS that will form the basis for engagement with strategic partners.

Francisco Basin

Drilling Programme and Sampling:

At the Francisco Basin Project resource drill hole FB01 was completed in 2022 and formed the basis for the existing JORC Inferred resource estimate of 0.52 million tonnes of LCE at a grade of 305mg/L Lithium. In the current season resource drill holes FB02 – FB04, as shown in Figure 2, are currently in

progress with the aim of expanding and upgrading the existing resource estimate. Drilling at Francisco Basin started in late December 2022, later than Laguna Verde after unusually heavy snowfall over the last Chilean winter period required roadworks to the mining haul road that connects to Francisco Basin, as opposed to the paved international highway that connects to Laguna Verde. Drilling has reached depths below 125m for each well and the aim is to complete all three wells in the current drilling season.



Well	Current Depth
2022	
FB01	335m
2023	
FB02	129m
FB03	179m
FB04	159m

Position on 29 March 2023

Figure 2: Francisco Basin Resource Drilling Map

On completion of the programme, samples will be collected. A bulk sample of 1,000L of brine has been collected from FB01 to be used in DLE process trial work at both the Company's installed pilot unit in Copiapó, and for shipment to Sunresin's facilities in China. A pump test will be undertaken on FB01 once the pump test programme at Laguna Verde has been completed. These programmes will provide valuable data for hydrogeological modelling and feasibility studies being undertaken on the project in 2023. The JORC resource upgrade is now expected to follow the completion of the drilling campaign in late Q2 2023.



Drilling rig on site at Francisco Basin in February 2023

Scoping Study:

Work on the Francisco Basin Scoping Study commenced at the end of 2022 and is now well advanced. Given the delays to the drilling campaign, largely due to weather issues, the final Measured & Indicated resource inputs to the Scoping Study will need to await the completion of the JORC resource upgrade, referred to above. It is now expected that the Scoping Study will be finalised soon after the JORC upgrade.

Llamara Project

Upcoming Drilling Programme:

At the Llamara Project, which is a green-field lithium project, the primary exploration target is to test the lithium enrichment of a subsurface brine aquifer interpreted from a historical geophysics survey. A secondary target is to collect sediment samples to test if the near surface sediments are characterised by evaporite minerals with potentially economic grades of lithium. A drilling contractor has been engaged to undertake one exploration drill hole to a target depth of up to 500m using diamond drilling. The programme was intended to start by the end of the current quarter, however a recent rainfall event, known as a 'Bolivian winter' rainfall in the region, has required the grading of an 8km access track to the drill site which is currently underway. Drilling is now expected to commence in April 2023 with the results to be announced some 2-3 months later.

The access track and drill site LM01 is shown in the Figure 3. The location is based on the historical TEM survey station 39, which had a resistivity signal of 0.5 Ohm as shown in Figure 4, which is interpreted to correlate to brine.

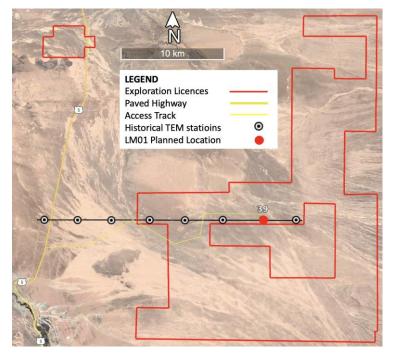


Figure 3: Access track and drill site LM01

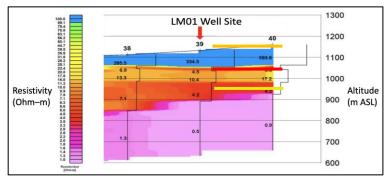


Figure 4: TEM Resistivity Cross-Section Showing LM01 Location

DLE Pilot Plant

A lab-scale DLE demo unit that was delivered to Copiapó in December 2022 is being set up with the assistance of Sunresin. This will produce small quantities of post DLE eluate that will be used for process testing.

CTL has ordered the DLE unit for a pilot plant that plans to produce 1 tonne per month of battery grade lithium carbonate. This unit, being manufactured at Sunresin's facilities in Belgium, is expected to be delivered on site in June 2023 and then installed and commissioned by mid Q3 2023. As mentioned above, the pilot plant will provide process verification data that will be an important input into the PFS and also produce sufficient quantities of battery grade lithium carbonate and hydroxide for product testing by potential customers, such as battery manufacturers, auto-makers and international traders. CTL has a dedicated facility in Copiapó that is suitable for both the demo unit and the planned pilot plant.

Corporate Update

Community Relations:

The Company employed a Community Relations Manager, with ample experience both in developing community relations strategies and implementing them in major mining companies. Based in Copiapó, the role was filled in early Q4 2022 and has been instrumental in developing constructive relationships with the local communities across the Atacama region. The Company has commenced early engagement that encourages open dialogue, transparency and recognises community knowledge to ensure the longevity of the Company's success and social licence to operate. The Company has hosted a number of visits from indigenous communities – most of which live in settlements approximately 100km away from the Company's sites - to the Francisco Basin project site and the small scale DLE demo unit which is located in Copiapó.



Local community representatives participate in a guided visit to the small scale DLE demo unit and at Francisco Basin with CleanTech Lithium's Safety Specialist in March 2023

Furthermore, the Company is now a part of CORPROA, the regional chamber of industry, which acts as a platform for local suppliers and engagement activities such as public and private partnerships with the regional government. The Company is in dialogue with the University of Atacama to promote potential local employability and training opportunities.

Expansion of Operational and Support Team in Chile:

As the Company has increased its activities in Chile over the course of 2022 and into 2023, it has looked to ensure that it has the staffing resources required to deliver its forward work programmes in an effective manner and, ultimately, achieve sustainable lithium production using the DLE process in late 2025.

At the beginning of 2022, the Company had just three full-time members of staff working in Chile, very much a fledgling company from an operational point of view. As of today, there will be approximately 20 staff in the Company's Chile organisation, reporting to the CEO, with the addition of approximately 80 contractors working at both drilling sites (two rotational crews).

Opening of Office in Copiapó:

As the Company continues to grow its operations teams, a greater presence in Copiapó is needed, especially from an operational, regulatory and community relations point of view. Copiapó, which has a population of approximately 158,000 people, is the main city in the Atacama region and is located approximately 200km and 260km from the Laguna Verde and Francisco Basin projects respectively. The Company plans to open a new office in the coming weeks which will become the Company's main operational base and will also be a hub where local people - and other interested parties and NGOs - will be able to visit to communicate with Company personnel on the Company's forward plans.

The new office will be in the centre of Copiapó, close to the offices of the regional regulatory authorities and the Presidential Delegate for the Atacama region.

ESG Committee:

The Company is setting up an ESG Committee which will ensure the business is being held accountable across various ESG factors. The Committee will consist of Director level positions, chaired by Jonathan Morley-Kirk who will be joined by the newly appointed Non-executive Director Maha Daoudi and CEO, Aldo Boitano, as other directors on the Committee. The purpose of the Committee is to ensure the Company has an ESG-led approach to business decision making, factoring in the risks and opportunities that will be presented to the Board for consideration and shaping the long-term strategy to produce battery grade green lithium by using DLE, powered by clean energy and managed by an experienced team. On occasion, the Committee will look to invite external non-voting personnel with certain expertise to strengthen and inform the meetings.

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The information communicated within this announcement is deemed to constitute inside information as stipulated under the Market Abuse Regulations (EU) No 596/2014 which is part of UK law by virtue of the European Union (Withdrawal) Act 2018. Upon publication of this announcement, this inside information is now considered to be in the public domain. The person who arranged for the release of this announcement on behalf of the Company was Gordon Stein, Director and CFO.

Notes

CleanTech Lithium (AIM:CTL, Frankfurt:T2N, OTC:CTLHF) is an exploration and development company, advancing the next generation of sustainable lithium projects in Chile. Proudly sustainable, committed to net-zero, our mission is to produce material quantities of battery grade, carbon-neutral lithium using sustainable Direct Lithium Extraction technology, powered by clean energy, we plan to be the greenest lithium supplier to the EV market.

CleanTech Lithium has three prospective lithium projects – Laguna Verde, Francisco Basin and Llamara – located in the lithium triangle, the world's centre for battery grade lithium production. The Laguna Verde and Francisco Basin projects are situated within basins entirely controlled by the Company, which affords significant potential development and operational advantages. Llamara is the Company's latest greenfield project, which offers material potential upside at a low initial cost. All three projects have direct access to excellent 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 or harm to the local environment.

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