RNS Number : 5953N
CleanTech Lithium PLC
26 September 2023

26 September 2023

CleanTech Lithium PLC ("CleanTech Lithium" or the "Company")
Scoping Study Confirms Potential Viability of Francisco Basin as
CleanTech Lithium's Second Major Project in Chile

CleanTech Lithium PLC, (AIM:CTL, Frankfurt:T2N, OTCQX:CTLHF), an exploration and development company, advancing sustainable lithium projects in Chile for the clean energy transition, announces the results of a recently completed Scoping Study for the Francisco Basin Project, which confirms the project's outstanding economics, potential for future resource expansion and strong ESG credentials.

Highlights:

- Supports the potential for Francisco Basin to become a major supplier of battery grade lithium to European and US markets based on sustainable direct lithium extraction ("DLE") technology

Scoping Study Highlights:

- Based on annual production of 20,000 tonnes of battery grade lithium carbonate for a production period of 12 years based largely on Indicated resources
- Calculates accumulated net cashflows (post-tax and royalties) of US$2.5 billion to be generated over the production period with low operating cost of US$3,641 per tonne of lithium carbonate
- Estimated capital expenditure of US$450.0m, based on DLE plant using Sunresin Materials existing DLE technology, including 20% contingency
- Attractive economics with post-tax NPV of US$1.1 billion using a discount rate of 8%, post-tax IRR of 43.5% and a payback period of 2 years and 7 months - based on a long-term lithium carbonate price of US$22,500 per tonne from 2028 *(Note: see below for sensitivity analysis including the NPV at a 10% discount rate)*
- The study assumes production commences in 2027 as the Company aims to progress project development stages with a one-year lag to the more advanced Laguna Verde project, where production is targeted for 2026
- Industry leading ESG credentials, a critical advantage for the EU market, based on utilising DLE which returns spent brine to the basin aquifers, and renewable energy for processing power by connecting with the Chilean grid and its abundant renewable energy supply
- The Company plans to undertake another resource drill programme at Francisco Basin, commencing Q4 2023, aiming to further upgrade the current resource estimate, which is 0.92 million tonnes of lithium carbonate equivalent (LCE) at a grade of 207mg/L Lithium
- This could extend the 12-year production period and would enhance projected economic returns
- A Pre-Feasibility Study ("PFS") on the project is planned to commence on the completion of the resource drill programme, which is expected to be in 2H 2024

Commenting, Aldo Boitano, Chief Executive Officer, of CleanTech Lithium PLC, said:

"The Scoping Study provides added confidence in the robust economics of our second project, Francisco Basin, based on low operating and capital costs, with a *post-tax NPV of US$1.1 billion and IRR of 43.5%, and a payback period of 2 years*

and 7 months. The study further advances the process and technical design concept for the project, with strong ESG principles incorporated at each stage.

"The next step at the project is to complete further resource drilling with the aim to expand and upgrade the current JORC resource estimate of 0.92 million tonnes LCE; an increase in the resource provides the potential to extend the production period of 12 years assumed in the study. DLE test-work on Francisco Basin brine is ongoing and important technical data will be generated when trials start at our pilot plant, which is currently being assembled at our facility in Copiapó. The Company plans to proceed to a Pre-Feasibility Study (PFS) for the project on completion of the planned resource drill programme, which is expected to be in 2H 2024.

"Francisco Basin is our second project which is being developed on a schedule one year behind our more advanced Laguna Verde project. Combining the two scoping studies means we have a total NPV of nearly $3 billion and an IRR of more than 43% for each project.

"This Scoping Study marks a major milestone for the Company and I would like to take this opportunity to thank the Scoping Study consultant, Chilean based lithium sector experts Ad-Infinitum, as well as our technical team for their hard work in completing the study. The Scoping Study outlines a plan to produce battery-grade lithium with a low environmental footprint, which positions the Company extremely well to supply the EU and US markets."

Further Information

Summary of Key Scoping Study Outcomes

A summary of the outcomes for key operational and economic analysis metrics derived from the completion of the scoping study are presented in the table below.

Key Operating Metrics	**Unit**	**Study Outcome**
Production Rate of Lithium Carbonate	Tonnes per annum	20,000
Operational Life	Years	12
Resource Utilised (Indicated & Inferred) - Total	Thousand tonnes	236.0
Resource Utilised (Indicated) - 68%	Thousand tonnes	160.5
Resource Utilised (Inferred) - 32%	Thousand tonnes	75.5
Construction Period	Years	1.5
Recovery rate - Direct Lithium Extraction	%	94.8
Recovery rate - Concentration stages & chemical plant	%	90.0
Recovery rate - Total	%	89.3
Key Financial Metrics		
Capital Cost (including 20% contingency)	US$ Million	450.0
Operating Cost	US$ / tonne Li2CO3	3,641
Lithium Price (Lithium Carbonate))	$US/tonne	Forecast Curve
Accumulated Net Cashflows Over Operational Life	US$ Billion	2.5
Payback Period	Years	2 years 7 months
IRR Post-Tax	%	43.5
NPV Post-Tax (Discount Rate = 8%)	US$ Billion	1.09
NPV Post-Tax (Discount Rate = 10%) - Sensitivity Analysis	US$ Billion	0.89

Information on Study and Contributors

The study was undertaken by Ad-Infinitum, a Chilean engineering services company/technical consultant with over 30 years of experience in the lithium sector with clients including SQM, Albemarle and Galan Lithium. Ad-Infinitum specialise in processes and operations involving the processing of brines and minerals that contain Lithium, Potassium, Sulfate, Nitrates and other elements; and provide specialist technical solutions that contribute to the development of projects in all their stages, as well as the improvement of operations. Since 2014, Ad-Infinitum has worked on lithium production processes from brine on different projects in Chile, Argentina, China, Korea and elsewhere.

The capital cost estimates for the DLE plant were contributed by Sunresin, the leader in commercial scale DLE plants. The lithium price cost curve estimate used in the study is based on estimates by Canaccord Genuity, a market leading broker with considerable experience in the lithium sector. The key study contributors are further summarised in the table below.

The Mineral Resource scheduled for extraction in the scoping study production plan is based on the Francisco Basin updated JORC resource estimate reported by the Company in August 2023. For the 12 year production plan, approximately 68% of the volume is attributed to resources classified as Indicated and 32% of the volume is attributed to resources classified as Inferred. The resource estimate was prepared by an Independent Competent Person, Christian Feddersen, in accordance with the requirements of the JORC Code.

Scope	Contributor
Study Manager	Ad Infinitum
Direct Lithium Extraction Plant	Sunresin
Metallurgical Test-Work	Ad Infinitum
Mineral Resource Estimation	Christian Feddersen
Geological Consultant	Geomin
Land Title	Juan Bedmar e Hijo Ltda
Environmental, Social and Community Impact	Minería y Medio Ambiente Ltda (MYMA)
Lithium Price Forecast	Canaccord Genuity estimates, May 2023

Scoping Study Summary

Project Description and Geology

The Francisco Basin project is located in the northern Atacama Region of Chile at an altitude of 4,150m above sea level. The project is located 200km east of the capital city of the region, Copiapó, where the mining sector is the main driver of the economy which allows access to mining services and specialised infrastructure. The port of Caldera, 270 km away by road, is a point of entry for supplies and an outlet for products with excellent loading facilities for general cargo and specialty commodities. The project is accessed by a network of paved and unpaved roads from Copiapó. Figure 1 provides a regional map, which additionally shows that Francisco Basin is approximately 100km from CleanTech Lithium´s most advanced project, Laguna Verde.



Figure 1: Regional Map of Francisco Basin Showing Distance From Key Centres and Laguna Verde Project

Francisco Basin is classified as an immature clastic salar characterised by greater moisture regimes and a sediment profile with higher porosities than mature halite salars. The Francisco Basin is an elongated basin aligned on a NW-SE axis bounded on all sides by volcanic mountain ranges. The surface of the salar is at an elevation of

approximately 4,136m. To the south-east the basin forms a gently rising plain which forms the focus area of the project. The basin fill is characterised by sedimentary deposits that can be separated into three general units:

1. An upper unit of fine to coarse sands intercalated with fine gravels, minor clay and tuff levels
2. A middle unit of clay beds intercalated with minor levels of fine sands and gypsum
3. A basal unit of moderately consolidated gravels and sands, transitioning to silt beds

The brine aquifer is contained mainly from the middle unit down to the basement, with the general basin stratigraphy interpretation presented in Figure 2 below.

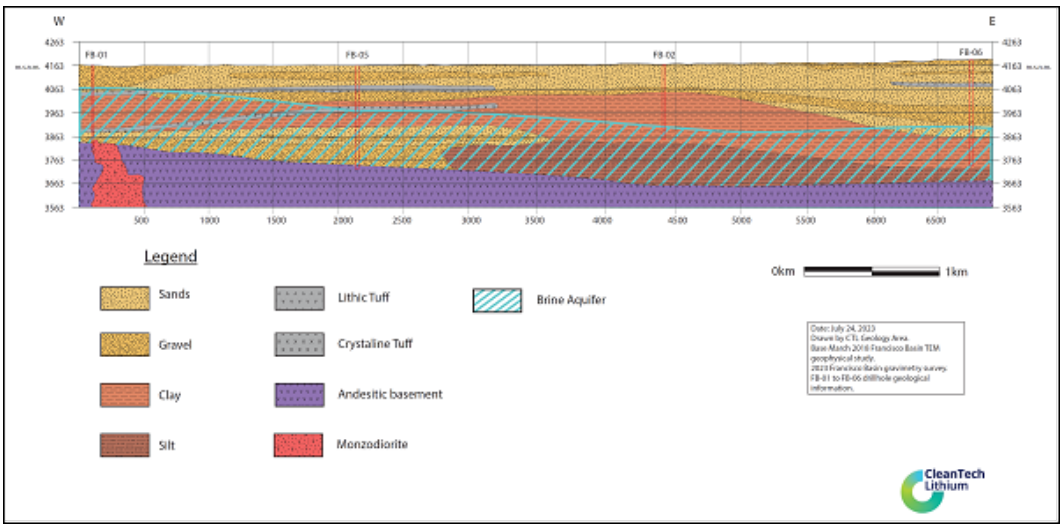


Figure 2: Francisco Basin General Stratigraphy

Mineral Property and Title

Under Chilean law, exploration and exploitation of mineral resources are granted through mining concessions. CleanTech Lithium, via its 100% owned subsidiary Laguna Negro Francisco SpA, owns a total of 47 exploitation and exploration mining concessions at the Francisco Basin Project with a total area of 127km^2. The map of the concession outline is shown in Figure 3.

Under Chilean law, the exploration and exploitation of lithium can be executed by a Special Operation Contract for Lithium (CEOL), under the terms and conditions established by the President of the Republic. On 6 September 2023, the Company submitted CEOL applications to the Chilean authorities which are now subject to a formal review process which is expected to take 3-6 months. The outline of the area of the CEOL applications is shown in Figure 3.

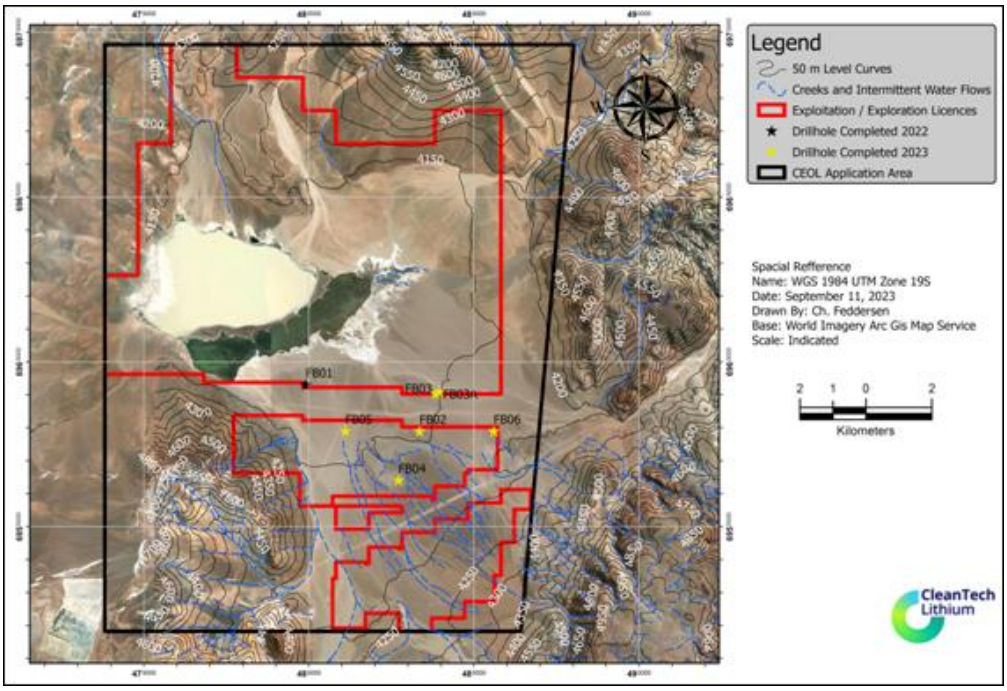


Figure 3: Tenement map of Francisco Basin Project Mining Concessions

Mineral Resource Estimate

An updated JORC compliant resource estimate for the Francisco Basin project of 919,346 tonnes of LCE was published on 24 August 2023. This estimate was based on resource drill programmes undertaken in the first halves of 2022 and 2023. In addition to a single resource well completed in 2022 (designated FB01), a further five wells (FB02 - FB06) were completed during the 2023 programme, with recorded drilling depths and coordinates as per Table 1 below.

HoleID	Coordinates		A.S.L	Depth
	East	North	Metres	Metres
FB01	479,904	6,959,310	4,151	335
FB02	485,664	6,958,302	4,168	351
FB03	483,949	6,959,090	4,167	320
FB03A	483,835	6,959,040	4,167	162
FB04	482,715	6,956,410	4,180	415
FB05	481,099	6,957,900	4,163	452.2
FB06	485,600	6,957,900	4,185	461.8
			Total	2,497

Table 1: Francisco Basin Resource Drilling Details

The resource estimate is classified in the categories of Indicated and Inferred. Of the total resource 443,215 tonnes are classified in the Indicated category and 476,130 is classified in the Inferred category, as shown in Table 2 below. For the 12-year production plan outlined in the scoping study, 68% of the volume is assumed from Indicated resources and 32% from Inferred, which roughly corresponds to the final four years of the production profile.

Total Indicated Resources		
Total Volume	m^3	3,376,080,000
Specific Yield	%	11.2%
Brine Volume	m^3	377,547,013
Average Li Grade	mg/l	220.5
Li Mass	tonne	83,264
Indicated Resource (Lithium Carbonate Equivalent)	**tonne**	**443,215**

Total Inferred Resources		
Total Volume	m^3	3,313,680,000

Specific Yield	%	13.8%
Brine Volume	m^3	458,182,522
Average Li Grade	mg/l	195.2
Li Mass	tonne	89,448
Inferred Resource (Lithium Carbonate Equivalent)	**tonne**	**476,130**

Total Indicated + Inferred Resources		
Total Brine Volume	m^3	835,729,536
Average Li Grade	mg/l	206.6
Li Mass	tonne	172,712
Indicated + Inferred Resource (Lithium Carbonate Equivalent)	**tonne**	**919,346**

Table 2: Francisco Basin JORC Resource Estimate

Mining Method

Lithium enriched brine occurring within the porous sub-surface sediments is to be extracted utilising a well field. A total of twenty-three extractions wells have been considered in the study, with the area of the well field shown in red in Figure 3. The extracted brine will be transferred to a tank to be mixed prior to being fed into the first stage of plant processing, which is the DLE adsorption columns. The spent brine from the adsorption process, which is the brine with lithium removed, will be reinjected into the salar basin through deep wells, in areas where the mineral resource will not be affected by dilution. The area considered in the Scoping Study for reinjection wells is shown in Figure 4. Further hydrogeological work is required to develop the extraction and reinjection model for the production phase of the project.

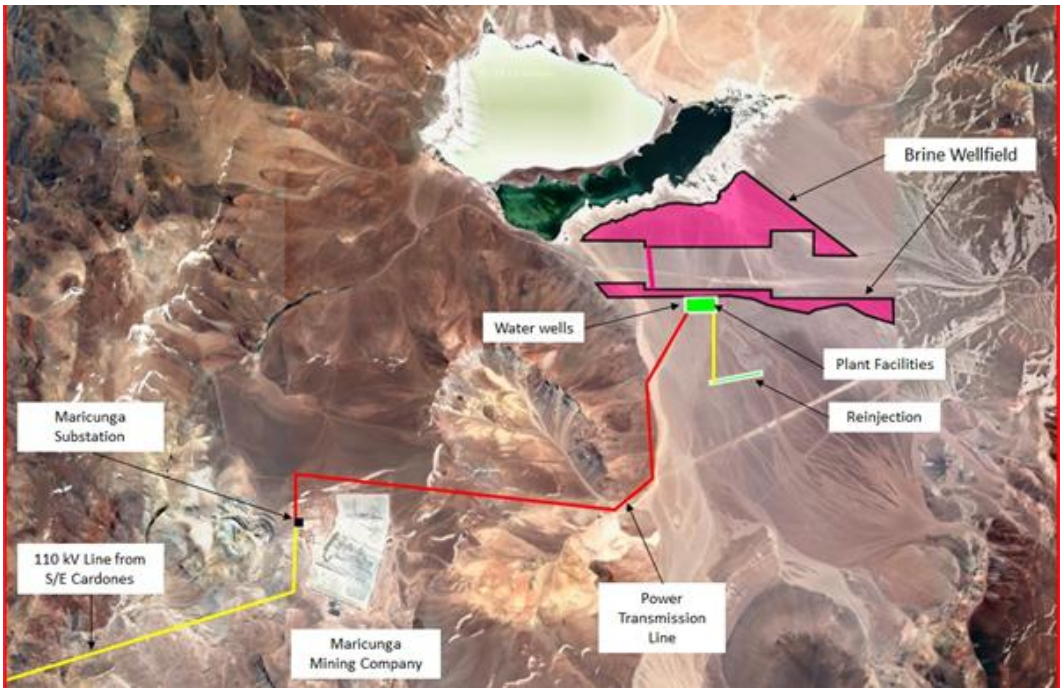


Figure 4: Scoping Study Wellfield Infrastructure Layout Plan

Power Supply

Francisco Basin project will use renewable energy for power supply through contracting a supplier of renewable energy via a Power Purchase Agreement (PPA). The study notes that as of December 2022, 62% of the installed capacity in Chile is renewable energy, such as hydropower, solar-thermal, geothermal, wind, and photovoltaic solar, making such a PPA feasible. A feature of the project is the proximity to the Maricunga Substation, 10km south-west of the project area as shown in Figure 4, which is supplied via a 110 KV transmission line. This is expected to significantly facilitate the cost of providing energy supply to the project.

Process Method

Brine processing test design work has progressed emphasising the minimisation of environmental impact, waste disposal and water consumption to ensure high ESG standards for the project. The process considers the use of DLE to selectively extract lithium-ions from the brine before standard concentration, impurity removal and finally carbonation stages. DLE is primarily a cleaning stage and subsequent concentration stages are used to increase the lithium concentration to about 1% Li. The process design, based on test work completed and simulation, can be described broadly in six stages to produce lithium carbonate as listed below, and shown in Figure 5 which provides an overview diagram of the process stages. As process work is further advanced the option of producing lithium hydroxide, either via conversion of lithium carbonate or an alternative process route will be further evaluated.

1. Direct Lithium Extraction (DLE)
2. Concentration of the solution
3. Purification of the solution
4. Carbonation and Production of Li2CO3
5. Treatment of the Mother Liquor
6. Water Recovery

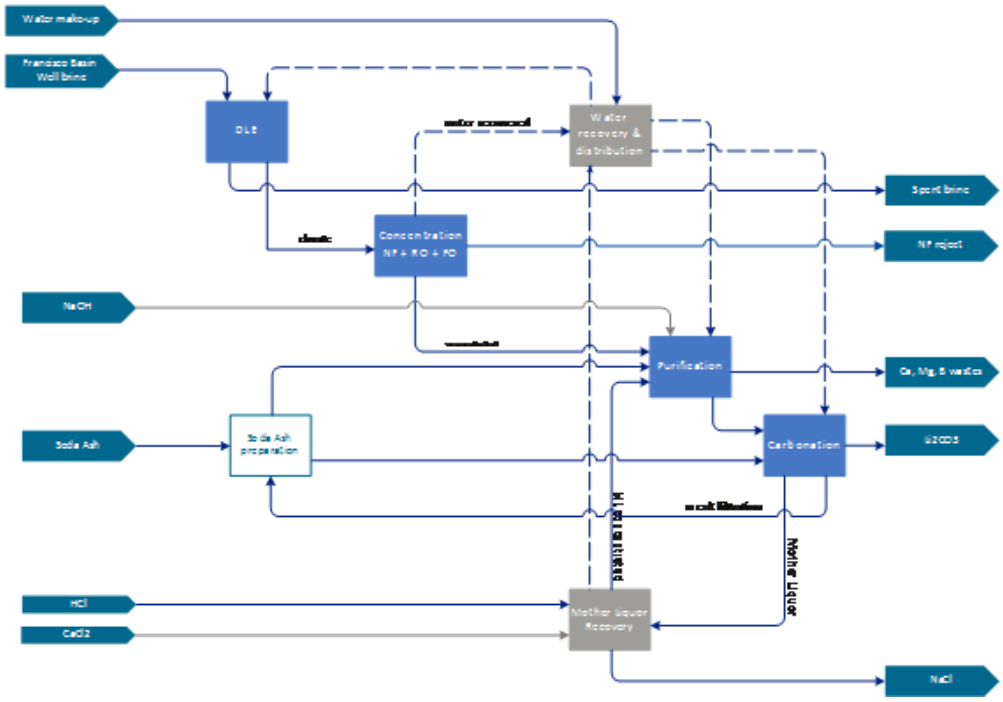


Figure 5: Process Stages

Process Recovery

Lithium recovery is the key factor to determine the efficiency and effectiveness of the process. The overall recovery rate used in the study of 89.3% is based on the DLE stage achieving a 94.8% recovery. Treatment of the mother liquor after carbonation to precipitate NaCl and then recirculation of the concentrated solution to the first purification stage allows for the maximisation of process water recovery and overall lithium recovery. Based on the modelling, the stages with the lowest recovery are the direct extraction and lithium carbonation processes. These process stages will be optimised in the piloting stage. The modelled lithium recovery according to the process stage is shown in Table 3 below.

	Flow (ton/hr)	Li %	LCE recovered (tonne/hr)	LCE recovered (tonne/yr)	Li Recovery
From wells	2,549	0.021	2.81	22,186	100.0%
DLE	509.5	0.098	2.67	21,036	94.8%
Membranes NF/RO	124.9	0.393	2.62	20,617	98.0%
Concentration FO	40.6	1.21	2.62	20,617	100.0%

Purification	40.6	1.21	2.62	20,617	100.0%
Carbonation	2.5	18.80	2.54	20,000	90.0%
Mother Liquor recovery	5.4	1.18	0.34	2,682	12.0%
Overall Recovery					89.3%

Table 3: Overall Process Recovery

Summary Mass Balance

The streams that represent the incoming and outgoing material flows in the system are quantified in the summary mass balance below.

	Stream	Mass (tonne/yr)
Inlet	Well brine	20,092,840
	Na_2CO_3 Purification	423
	NaOH Purification	580
	IX Boron Reagents	0
	IX Ca-Mg Reagent	14
	Na2CO3 Carbonation	34,177
	HCl mother liquor recovery	3,840
	$CaCl_2$ mother liquor recovery	829
	Water use (recycled & re-injected)	880,146
	Total Inlet	**21,012,850**
Outlet	Spent brine	20,051,869
	NF reject	781,744
	Purification ($Mg(OH)_{2)}$ solid waste	1,243
	Wash water	96,041
	IX-Boron, Ca-Mg wastes	50
	Li2CO3 Production	20,000
	H2O moisture	8,565
	Mother liquor recovery. Solid waste (NaCl)	53,336
	Total Outlet	**21,012,850**

Table 4: Summary Mass Balance for 20,000 tpa LCE production rate

Wash water refers to water used for washing in the process with elements such as Boron, Calcium and Magnesium, that cannot be recycled. As these are extracted from the brine this wash water will be combined in the reinjection brine. The largest waste product stream is NaCl from mother liquor recovery. This will also be combined with spent brine and reinjected without changing the original brine chemistry.

Reagent Requirements

Table 5 shows the volume of reagents required to produce lithium carbonate based on the modelled process with the annual consumption rates based on elemental consumption and adjusted for real volumes of commercial product.

Pure Reagent	Total tonne	Commercial Reagent	Commercial name	Purity	Adjusted total tonne
Na_2CO_3	34,600	Na_2CO_3	Soda ash	99.2%	34,879
NaOH	580	NaOH	Caustic soda (granular)	99.0%	586
HCl	3,840	HCl al 32%	Muriatic acid	32.0%	12,000
$CaCl_2$	560	$CaCl_2*2H_2O$ (99%)	Calcium chloride di-hydrate	74.0%	757

Table 5: Annual consumption of Reagents

Basin Water Balance

The process to produce the planned 20,000 tpa of battery grade lithium requires water for desorption (or elution) in the DLE process, preparation of reagents, washing and other process steps. The total volume required is 880,200m^3 or 28 l/s. This is planned to be provided by a fresh water extraction well located in a peripheral area of the basin, where numerous fresh water extraction wells have previously been drilled. This volume of process water, labelled ´Water make-up´ in Figure 6, is part of the reinjection volume and does not therefore represent water loss.

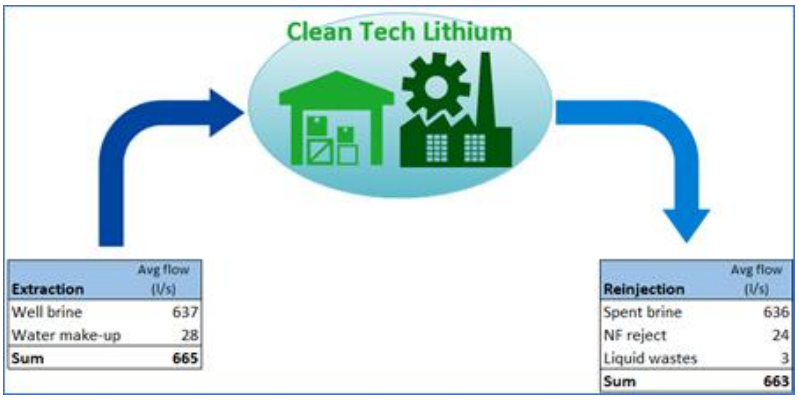


Figure 6: Basin Water Balance

The observed difference in the extraction and reinjection flows corresponds to the water loss in the process, for which a break down is summarised in Table 6. This is based on a loss factor from Nano filtration reject and liquid waste which are not suitable for reinjection, along with moisture loss in the final product and in the NaCl waste stream produced by recovery of mother liquor. This represents a water loss of 31,926 m^3/year, which corresponds to 1.6m^3 of water loss per tonne of final product.

As a comparison, water loss from evaporation pond based operations in Chile is estimated to exceed 100m^3 per tonne of final product, representing the water lost to the atmosphere in the process of evaporation. In a DLE based operation this water loss is vastly reduced, avoiding the environmental impact of basin aquifer depletion.

Stream	Loss factor	Water loss (m^3/year)
NF reject	2%	11,666
Liquid wastes	10%	9,179
Product moisture	100%	8,565
NaCl moisture	100%	2,515
Total water loss		**31,926**

Table 6: Water loss breakdown

Process Work Next Stage - Pilot Plant and Lithium Hydroxide Evaluation

For the development of more advanced engineering studies, the study recommends the operation of a pilot plant to validate and adjust, if necessary, the process design. The Company has commenced assembly of a pilot plant with the capacity to produce 1 tonne per month of battery-grade lithium carbonate. The pilot plant has a feed brine inlet of 4.5m^3 per hour which will be processed by the DLE unit to produce a lithium eluate. For the concentration of the eluate, Nano Filtration, Reverse Osmosis and Forward Osmosis is being considered, with the aim of obtaining a lithium chloride solution with a concentration of 1.2% lithium, before the final removal of contaminants and carbonation stages. The Company has a 1,000m^2 facility near Copiapó where the pilot plant DLE unit is currently being assembled for commissioning and commencement of operation before the end of 2023.





Fig. 7: Pilot plant DLE columns installed Copiapó (Aug 2023) Fig. 8: Rotary valve final tests Belgium (Aug 2023)

Based on long-term industry trends, lithium hydroxide is expected to experience higher demand growth than lithium carbonate. Lithium hydroxide can be conventionally obtained by converting the lithium carbonate produced in the first stage of the process with lime. This will be tested in test-work and potentially at the pilot plant scale. Several other processes to produce lithium hydroxide from brines are in development that will also be considered.

Capital Expenditure

Capital expenditure (CAPEX) estimates are based on an annual production of 20,000 tonnes of lithium carbonate. The cost of the equipment has been obtained by Ad-Infinitum from a combination of data from similar projects and information from supplier quotes. A summary of the CAPEX by major areas is provided in Table 7. This estimate was made based on figures for the fourth quarter of 2022 with a 10% inflation adjustment applied for some lines. The estimated accuracy is within a range of -15%/+30%. Maintenance CAPEX is estimated at a total of US$ 21.5 million over the 12-year evaluation period.

Area	Description	US$ 000
1000	Well Field	64,032
3000	Lithium Carbonate Plant	238,939
3100-3300	*DLE and Reverse Osmosis (incl. Resin)*	*199,018*
3300-3800	*Chemical Plant*	*35,070*
3900	*Packaging, Storage and Handling*	*4,851*
4000	Services	23,800
	Total Direct Cost	**326,771**
	Indirect Cost	48,198
	Contingencies (20%)	74,994
Total CAPEX		**449,964**

Table 7: Capital Expenditure Summary Breakdown

The **Well Field** CAPEX item includes brine extraction wells, spent brine reinjection wells, and water extraction wells as shown in Table 8 below. Twenty-three brine extraction wells have been assumed at an average depth of 350 metres with each well estimated at an average flow rate of 30 L/s. Sixteen spent brine reinjection wells were assumed with spent brine discharged in two reinjection fields, requiring two main pumps. Two wells have been assumed for process water supply, with their respective pumps and pipes transporting the water to the lithium carbonate plant area.

Area	Description	US$ 000
1100	Brine extraction wells	51,768
1200	Brine reinjection well	10,027
1300	Water wells	2,238
Total Wells		**64,032**

Table 8: Well Field Capital Expenditure Breakdown

The **Plant** CAPEX estimate is made up of the DLE plant, based on a quotation received from Sunresin, and a Reverse Osmosis and Chemical plant, based on data from suppliers and developers of the required equipment calculated using Ad-Infinitum's database. Table 9 shows a further breakdown of the DLE and Reverse Osmosis estimates.

Area	Description	US$ 000
3100	DLE	115,673
3200	Reverse Osmosis	83,345
Total		**199,018**

Table 9: Plant Capital Expenditure Breakdown

The **Services** CAPEX estimate of US$23.8 million includes all the satellite activities that are essential for the operation of the wells and the lithium carbonate plant: electricity supply, boilers, preparation of reagents, water treatment, and fire-fighting system, among others.

The **Indirect Costs** estimate of US$48.2 million includes all other expenses incurred during the construction period. The Construction and Operation Camp, and Polyclinic, are the major expense, followed by the Vendor´s technical assistance.

Finally, a 20% **Contingency** was applied to all CAPEX items by Ad-Infinitum in accordance with industry practice.

Operating Expenditure

Estimates are based on the design of the production process, considering yields and estimated recoveries, and the estimated consumption and prices for the main reagents used. The estimates of expenses, prices and labour are based on Ad-Infinitum's database for the costs of similar operations in Chile. Operating expenses are summarised in Table 10.

Operating Expenditure	US$/tonne LCE	Annual Total US$ mn
Reagents	1,065	21,298
Water	196	3,927
Energy	1,135	22,707
Manpower	293	5,855
Transport	201	4,012
Catering & Camp Services	148	2,954
Maintenance	369	7,388
Total Direct Costs	**3,406**	**68,134**
SGA	234	4,685
Total OPEX	**3,641**	**72,826**

Table 10: Operating Expenditure Summary Breakdown

Energy and Reagents are the two largest items representing 32% and 30% of total operating costs. The unit cost for energy is US$0.1437/kWh consistent with the pricing of similar supply contracts in the Chilean market. The Reagent cost is dominated by Soda Ash used in the Carbonation process, which comprises 67% of the total cost for reagents.

Manpower costs include an estimated total operational manpower of 163 people with an additional 59 people providing G&A services - totalling 222 personnel supporting the operation of the project.

Transportation assumes land transportation of the product packed in 1-tonne capacity bulk bags by ramp truck from the plant in Francisco Basin, via Copiapó, to the port at Caldera from where it is shipped in containers to its destination in the EU and/or the USA.

Cash flow and Economic analysis

The economic analysis carried out in the study included the following basic assumptions:

CAPEX	Schedule	2025 - US$315.0 million 2026 - US$112.5 million 2027 - US$22.5 million Total - US$450.0 million
Production	Schedule Grade	Annual production of 20,000 tonnes per annum Production ramp-up projected at 40% in Year 1 with full capacity being achieved in Year 2. 65% of initial production will be battery grade, reaching 100% in Year 2
Lithium Carbonate Sales Prices	Annual Prices	2027 - US$40,000 per tonne 2028 - US$22,500 per tonne Long-term - US$22,500 per tonne
Opex	Cost per tonne	US$3,641
Financing	Project Funding	Analysis assumes entire project funded by the Company from its own capital
Taxes & Royalties	Corporate Tax Royalties (CEOL) Withholding Tax	First Category Tax as currently defined in the Chilean tax regime for mining industries - 27% on net profits (after royalties) Specific payments to the Chile State - Based on the Companies CEOL applications made in early 2022: § Specific quarterly payment - 3% of revenues § R&D expenses - 1.5% of revenues § Community Development Fund - 1.5% of revenues § Annual Operating Margin Payment - a progressive table which increases from 7% to a maximum rate of 16% when the operating margin reaches 85%. This is the same table as included on page 47 of the Company's Admission Document for its IPO on the London Stock Exchange in March 2022 and which has been included in the CEOL application recently announced for Francisco Basin. With foreign companies or investors, the additional tax that companies must pay when distributing their profits and dividends overseas is 35%, in which case, the First Category Tax operates as a credit. In the study, the tax rate of 27% is used as the applicable rate on a project economics basis. Study also assumes CleanTech Lithium will establish tax arrangements in Chile and elsewhere to manage the additional 8% net withholding tax which may be payable in the event that dividends are distributed outside Chile.

Table 11: Key Assumptions in Economic Analysis of Francisco Basin project

Cashflows Analysis

The Scoping Study confirms, based on the assumptions, very strong cashflows from operations from an early stage as shown in Table 12 below.

Year		2025	2026	2027	2028	2029	2030	2035	2037	2038
Production	*Ton Li2CO3*	-	-	**16,000**	**20,000**	**20,000**	**20,000**	**20,000**	**20,000**	**20,000**
On Spec Production	*Ton Li2CO3*	-	-	10,400	20,000	20,000	20,000	20,000	20,000	20,000
Off Spec Production	*Ton Li2CO3*	-	-	5,600	-	-	-	-	-	-
Revenues	*MUS$*	-	-	**606,400**	**450,000**	**450,000**	**450,000**	**450,000**	**450,000**	**450,000**
Operational Costs	*MUS$*	-	-	-58,261	-72,826	-72,826	-72,826	-72,826	-72,826	-72,826
Insurance cost	*MUS$*	-	-	-5,918	-4,909	-4,909	-4,909	-4,909	-4,909	-4,909
Non budgeted Costs/Mine closure	*MUS$*	-	-	-1,165	-1,457	-1,457	-1,457	-1,457	-1,457	-3,257
Total Costs	*MU$*	-	-	**-65,344**	**-79,191**	**-79,191**	**-79,191**	**-79,191**	**-79,191**	**-80,991**
Gross Margin	*MU$*	-	-	**541,056**	**370,809**	**370,809**	**370,809**	**370,809**	**370,809**	**369,009**
Gross Margin	*%*	*0.0%*	*0.0%*	*89.2%*	*82.4%*	*82.4%*	*82.4%*	*82.4%*	*82.4%*	*82.0%*
Deprec + Amort	*MU$*	-	-	43,254	43,254	44,604	44,604	44,896	2,150	2,150
Operating Margin	*MUS$*	-	-	**497,802**	**327,555**	**326,205**	**326,205**	**325,912**	**368,659**	**366,859**
		0.0%	*0.0%*	*82.1%*	*72.8%*	*72.5%*	*72.5%*	*72.4%*	*81.9%*	*81.5%*
(-) IVA	*MUS$*	-	-	-	-	-	-	-	-	-
(-) Quarter Specific PaymentPago especific	*MUS$*	-	-	-18,192	-13,500	-13,500	-13,500	-13,500	-13,500	-13,500
(-) Annual Specific Payment	*MUS$*	-	-	-64,645	-35,315	-35,157	-35,157	-35,122	-47,012	-46,765
R+D Payment	*MUS$*	-	-	-18,192	-13,500	-13,500	-13,500	-13,500	-13,500	-13,500
Remuneration	*MUS$*	-	-	**505,371**	**387,685**	**387,843**	**387,843**	**387,878**	**375,988**	**376,235**
Profit before Taxes	*MUS$*	-	-	**396,773**	**265,240**	**264,048**	**264,048**	**263,790**	**294,647**	**293,094**
Accumulated Profit before Taxes	*MUS$*	-	-	396,773	662,013	926,061	1,190,109	2,510,282	3,068,719	3,361,814
Income Taxes - 27%	*MUS$*	-	-	-107,129	-71,615	-71,293	-71,293	-71,223	-79,555	-79,135
Profit after Taxes	*MUS$*	-	-	**289,644**	**193,625**	**192,755**	**192,755**	**192,567**	**215,092**	**213,959**
Accumulated Profit after Taxes	*MUS$*	-	-	289,644	483,269	676,024	868,780	1,832,506	2,240,165	2,454,124
		0.0%	*#¡DIV/0!*	*47.8%*	*43.0%*	*42.8%*	*42.8%*	*42.8%*	*47.8%*	*0.0%*

Year		2025	2026	2027	2028	2029	2030	2035	2037	2038
Cash Flow										
Profit after Taxes	*MUS$*	-	-	289,644	193,625	192,755	192,755	192,567	215,092	213,959
Depreciation and Amortization	*MUS$*	-	-	43,254	43,254	44,604	44,604	44,896	2,150	2,150
CAPEX	*MUS$*	-314,975	-112,491	-22,498	-	-	-	-	-	-
Ramp Up expenses	*MUS$*	-3,280	-4,685	-	-	-	-	-	-	-
Working Capital	*MUS$*	-	-	-22,839	7,124	-	-	-	-	-
Residual Value	*MUS$*	-	-	-	-	-	-	-	-	47,151
Total Cash Flow	*MUS$*	**-318,255**	**-117,176**	**287,561**	**244,003**	**237,359**	**237,359**	**237,463**	**217,242**	**263,260**
Accumulated Cash Flow	*MUS$*	-318,255	-435,431	-147,870	96,133	333,492	570,851	1,744,177	2,190,864	2,454,124

Table 12: Cashflow Forecast Summary

Economic Evaluation Results:

Base Case: Based on the post-tax cashflows shown in Table 12 above, the following economic evaluation results were obtained:

Post-tax NPV_8	US$ 1.087 billion
Post-tax NPV_{10}	US$0.895 billion
IRR	43.5%
Payback period	2 years and 7 months

Table 13: Economic Evaluation Results after taxes

Sensitivity Analysis

A sensitivity analysis was undertaken for the three parameters with the greatest impact on the calculation of the Present Value of the project and the Internal Rate of Return. This analysis was carried out for variations of -25% and 25% regarding the Base Case, with the results being shown in Table 14 below. These sensitivities show the robust economics of the project, even in downside scenarios.

		NPV After taxes, US$ million			NPV, Var %		
Variable		**75%**	**100%**	**125%**	**75%**	**100%**	**125%**
CAPEX	*MM$*	1,155	**1,087**	1,018	106%	**100%**	94%
OPEX	*M$/tonne*	1,144	**1,087**	1,028	105%	**100%**	95%
Price	*M$/tonne*	684	**1,087**	1,485	63%	**100%**	137%

		IRR After taxes, %			IRR, Var %		
Variable		**75%**	**100%**	**125%**	**75%**	**100%**	**125%**
CAPEX	*MM$*	54.8%	**43.5%**	36.1%	126%	**100%**	83%
OPEX	*M$/tonne*	45.0%	**43.5%**	42.0%	103%	**100%**	97%
Price	*M$/tonne*	32.4%	**43.5%**	53.4%	75%	**100%**	123%

Table 14: NPV and IRR sensitivities over Capex, Opex and Sales Price

It is observed for both analyses that the "Price" variable is the one that has the greatest impact on the calculation of the Present Value of the project flows, as well as on the calculation of the Internal Rate of Return, followed by Capex in the case of IRR.

Project Funding

It is recognised in the Scoping Study that to achieve the range of outcomes indicated, it is estimated that pre-production funding of approximately US$400-450 million before working capital will likely be required. The Report states that given the very high worldwide demand for lithium for electric car batteries, with significant demand growth forecast for the next 10 years, it is anticipated by the Company that the finance will be sourced through a combination of the following:

- Equity and debt instruments from strategic partners or offtake partners and their associated banks
- Through access to funds that are available from the USA, European Union and other countries to support the expansion of green lithium supply
- From ESG specialist funds and/or infrastructure funds, targeted at sustainable lithium production practices which pass ESG criteria/hurdles
- From new or existing equity investors and debt providers from the UK, USA, Australia and elsewhere, and/or
- From various other sources, linked to the above.

CleanTech Lithium plc has formed the view that there is a reasonable basis to believe that requisite funding for development of the Francisco Basin Project would be available when required, having considered factors including the following:

- The quality of the Francisco Basin Project, in terms of the grade of the deposit and relatively low level of projected pre-production capital expenditure. The release of the Scoping Study will provide a potential platform for CleanTech Lithium to commence discussions with potential strategic or offtake partners and financiers, although the Company may wait until a pre-feasibility study has been completed on this Project before entering into substantive discussions.
- Global debt and equity finance availability for lithium extraction projects like the Francisco Basin Project is expected to remain robust, particularly given the long-term price forecasts for lithium.
- The project is in Chile, which holds the largest reserves of lithium in the world (source: United States Geological Survey, McKinsey & Company article, 25 May 2022) and is a well-respected international mining jurisdiction.
- The Company has no existing debt.

Environmental and Social Licence Considerations

The project does not fall within a designated environmental protection area, with fauna being scarce due to the high aridity and extreme climate at the altitude of 4,150m. The study confirms that the Company is currently developing an environmental baseline study, as well as compiling information for the environmental impact assessment (EIS) which will be necessary for the production phase of the project. The Company is supported by MYMA (Minería y Medio Ambiente Ltda), which specialises in environmental studies and permitting.

For the purpose of assessing possible impacts CleanTech Lithium plans to develop close relationships with project stakeholders. The Company has recently opened an office in Copiapó and is developing an Early Engagement Plan (PACA) that aims to keep an open communication channel with relevant community bodies and organisations and allows for a continuous assessment of the social impact of the project.

Conclusions and Recommendations

Francisco Basin is classified as an immature clastic salt lake basin. The total resource for the Project is estimated at 919,346 tonnes of LCE, with 443,215 tonnes being in the Indicated resource category and 476,130 tonnes being in

the Inferred resource category. The average lithium value is 207 mg/l Lithium.

Public studies of the lithium market indicate strong demand and sustained high prices during the evaluation period. The demand for electric vehicles continues to increase, and progressively more countries are declaring bans on the sale of combustion vehicles in the coming years, ensuring the elevated levels of demand for lithium.

Chile is one of the few countries in the world where there are lithium deposits in continental brines, so the interest and supply requirements for this material should be of national interest.

The offer of a project with low environmental impact is in line with current regulations, so meeting the standards of environmental regulations should be a focus. At this point, it is necessary to have more information on the reinjection system and the development of a hydrogeological model that confirms the low impact on groundwater and its null impact on lake surfaces.

The operating cost, according to what is indicated in the scoping study (-15%/+35% accuracy), of US$ 3,641 per tonne, is a competitive cost for the projected prices, even in comparison with the costs of projects from continental brines and with traditional processes (solar evaporation).

The capital cost of the project is estimated (-15%/+ 30%) at US$ 450 million, considering 20% contingencies.

The economic analysis of the project, after taxes, gives a Net Present Value of US$ 1.1 billion, using a discount rate of 8%, and giving an internal rate of return of 43.5%. The term to recover the investment (payback period) is 2 years and 7 months.

The sensitivity analysis of the economic evaluation model shows that the factor that most impacts the Present Value of the project, for the same variations, is the Price factor. And with respect to IRR, both the Price and Capex are the most influential parameters.

It is recommended that a further resource drilling programme is undertaken at the project with the aim of further expanding and upgrading the current resource estimate. A plan for the location of the next stage of drillholes comprising a total of four wells is shown in Figure 9 below. This is based on three additional resource wells drilled with diamond drilling, labelled FB07 - FB09, with FB07 planned for the same site as well FB02 which was not successfully completed during the 1H 2023 drilling programme. An additional wide diameter reverse flooded well, labelled IFFB01, is recommended specifically designed for reinjection tests.

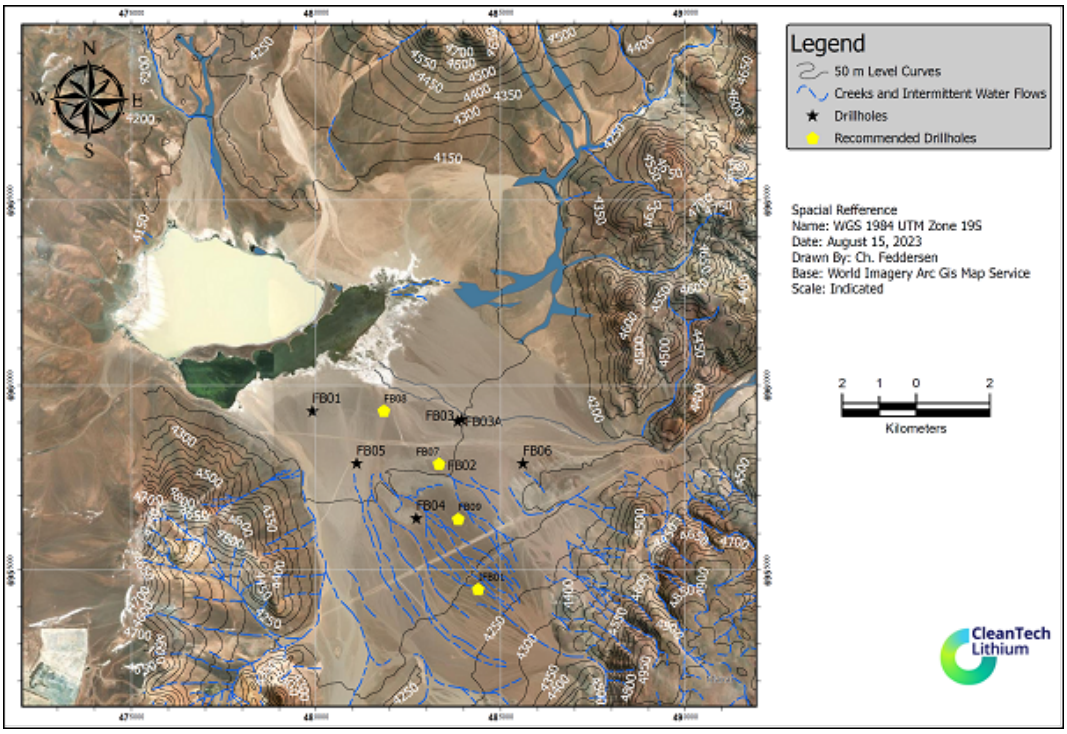


Fig 9: Francisco Basin Recommended Drillhole Locations

Based on the results of the initial explorations and the future exploration program, it is concluded that the Francisco Basin Project justifies continuing its development to determine if the lithium resource can be turned into a reserve, in terms of economic and technical aspects, and confirm the feasibility of its production on a pilot scale.

For further information contact:

CleanTech Lithium PLC
Aldo Boitano/Gordon Stein

Jersey office: +44 (0) 1534 668 321
Chile office: +562-32239222
Or via Celicourt

Celicourt Communications
Felicity Winkles/Philip Dennis/Ali AlQahtani

+44 (0) 20 7770 6424
cleantech@celicourt.uk

Dr. Reuter Investor Relations
Dr. Eva Reuter

+49 69 1532 5857

Porter Novelli - Chile
Ernesto Escobar

+569 95348744
Ernesto@publicoporternovelli.cl

Harbor Access - North America
Jonathan Paterson/Lisa Micali

+1 475 477 9401

Beaumont Cornish Limited
(Nominated Adviser)
Roland Cornish/Asia Szusciak

+44 (0) 207 628 3396

Fox-Davies Capital Limited +44 20 3884 8450
(Joint Broker)
Daniel Fox-Davies daniel@fox-davies.com

Canaccord Genuity Limited +44 (0) 207 523 4680
(Joint Broker)
James Asensio
Gordon Hamilton

Competent Persons

The following professionals act as qualified persons, as defined in the AIM Note for Mining, Oil and Gas Companies (June 2009):

- Christian Gert Feddersen Welkner: Geologist and Master of Science, major in geology (University of Chile). With more than 20 years of experience, Mr Feddersen is a qualified person independent of the company and a member of the Chile Mining Resources and Reserves Competence Qualifying Commission, a "Recognised Professional Organisation" (OPR). He is registered with No. 132 in the public registry of Competent Persons in Mineral Resources and Reserves, under the Law of Competent Persons and its Regulations in force in Chile. Mr Feddersen, who has reviewed and approved the geological information included in the announcement, has sufficient experience relevant to the style of mineralisation and type of deposit under consideration and the activity being undertaken and qualifies as a competent person, as defined in the JORC Code.
- Marcelo Bravo: Chemical Engineer (Universidad Católica del Norte), has a Master's Degree in Engineering Sciences major in Mineral Processing, Universidad de Antofagasta. He currently works as a Senior Process Consulting Engineer at the Ad-Infinitum company. Mr Bravo has relevant experience in researching and developing potassium, lithium carbonate, and solar evapo-concentration design processes in Chile, Argentina, and Bolivia. Mr Bravo, who has reviewed and approved the information contained in the chapters relevant to his expertise contained in this announcement, is registered with No. 412 in the public registry of Competent Persons in Mining Resources and Reserves per the Law of Persons Competent and its Regulations in force in Chile. Mr Bravo has sufficient experience relevant to the metallurgical tests and the type of subsequent processing of the extracted brines under consideration and to the activity being carried out to qualify as a competent person, as defined in the JORC Code.

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.

Cautionary Statement

The Scoping Study referred to in this AIM release has been undertaken for the purpose of initial evaluation of a potential development of the Francisco Basin Project located approximately 110 km, in a straight line, at east of Copiapó city, south of the Maricunga salt flat, Copiapó Municipality, Copiapó Province, Atacama III Region, Chile ("Francisco Basin Project"). It is a preliminary technical and economic study of the potential viability of the Francisco Basin Project. The Scoping Study outcomes, production target and forecast financial information referred to in the release are based on low level technical and economic assessments that are insufficient to support estimation of Ore Reserves.

The Scoping Study is presented in US dollars to an accuracy level of +/- 35%. While each of the modifying factors was considered and applied, there is no certainty of eventual conversion to Ore Reserves or that the production

target itself will be realised. Further exploration and evaluation and appropriate studies are required before CleanTech Lithium will be able to estimate any Ore Reserves or to provide any assurance of any economic development case. Given the uncertainties involved, investors should not make any investment decisions based solely on the results of the Scoping Study. Of the Mineral Resources scheduled for extraction in the Scoping Study production plan, approximately 68% are classified as Indicated and 32% as Inferred during the 12+-year evaluation period.

The Company has concluded that it has reasonable grounds for disclosing a production target which includes an amount of Inferred Mineral Resources. There is a low level of geological confidence associated with Inferred Mineral Resources and there is no certainty that further exploration work will result in the determination of Indicated Mineral Resources or that the production target itself will be realised. Inferred Mineral Resources support production over the last 4 years of operation. The viability of the development scenario envisaged in the Scoping Study does not depend on the inclusion of Inferred Mineral Resources. Removing the Inferred Resources from the mine plan still provides a positive NPV and attractive IRR but reduces the production life to 8 years.

The Mineral Resources underpinning the production target in the Scoping Study have been prepared by a competent person in accordance with the requirements of the JORC Code (2012). For full details on the Mineral Resource estimate, please refer to the AIM announcement by CleanTech Lithium plc of 24 August 2023 for the Francisco Basin project.

Other than as presented in this announcement, CleanTech Lithium plc confirms that it is not aware of any new information or data that materially affects the information included in previous announcements and that all material assumptions and technical parameters underpinning the estimate continue to apply and have not been changed. This Scoping Study is based on the material assumptions outlined in this announcement. These include assumptions about the availability of funding. While CleanTech Lithium plc considers that all the material assumptions are based on reasonable grounds, there is no certainty that they will prove to be correct or that the range of outcomes indicated by the Scoping Study will be achieved.

To achieve the range of outcomes indicated in the Scoping Study, funding in the order of between US$400-450 million will likely be required. Investors should note that that there is no certainty that CleanTech Lithium plc will be able to raise that amount of funding when needed. It is also possible that such funding may only be available on terms that may be dilutive to or otherwise affect the value of CleanTech Lithium plc's existing shares. It is also possible that CleanTech Lithium plc could pursue other value realisation strategies such as an agreement with a strategic partner for future funding and offtake, a sale or partial sale of its interest in the Francisco Basin Project or other potentially dilutive options. If it does, this could materially reduce CleanTech Lithium plc's proportionate ownership of the project.

This announcement contains forward-looking statements. CleanTech Lithium plc has concluded that it has a reasonable basis for providing these forward-looking statements and believes it has a reasonable basis to expect it will be able to fund development of the Francisco Basin Project. However, several factors could cause actual results or expectations to differ materially from the results expressed or implied in the forward-looking statements. Given the uncertainties involved, investors should not make any investment decisions based solely of the results of this study.

Important Information for this Announcement

The Scoping Study has been prepared and reported in accordance with the requirements of the JORC Code (2012). The primary purpose of the Scoping Study is to establish whether or not to proceed to a Pre-Feasibility Study ("PFS") and has been prepared to an accuracy level of +/- 35%, the Scoping Study results should not be

considered a profit forecast or production forecast. As defined by the JORC Code, a "Scoping Study is an order of magnitude technical and economic study of the potential viability of Mineral Resources. It includes appropriate assessments of realistic assumed Modifying Factors together with any other relevant operational factors that are necessary to demonstrate at the time of reporting that progress to a Pre-Feasibility Study can be justified."

The Modifying Factors included in the JORC Code have been assessed as part of the Scoping Study, including mining (brine extraction), processing, metallurgical, infrastructure, economic, marketing, legal, environmental, social and government factors. The Company has received advice from appropriate experts when assessing each Modifying Factor.

Following an assessment of the results of the Scoping Study, the Company has formed the view that a PFS is justified for the Francisco Basin project, which it will commence following completion of the recommended drilling programme. The PFS will provide the Company with a more comprehensive assessment of a range of options for the technical and economic viability of the Francisco Basin project.

The Company has concluded it has a reasonable basis for providing any of the forward-looking statements included in this announcement and believes that it has a reasonable basis to expect that the Company will be able to fund its stated objective of completing a PFS for the Francisco Basin project. All material assumptions on which the forecast financial information is based are set out in this announcement.

Some of the statements appearing in this announcement may be in the nature of "forward-looking statements" which include all statements other than statements of historical fact, including, without limitation, those regarding the Company's financial position, business strategy, plans and objectives of management for future operations, or any statements preceded by, followed by or that include the words "targets", "believes", "expects", "aims", "intends", "will", "may", "anticipates", "would", "could" or similar expressions or negatives thereof. Such forward-looking statements involve known and unknown risks, uncertainties and other important factors beyond the Company's control that could cause the actual results, performance or achievements of the Group to be materially different from future results, performance or achievements expressed or implied by such forward-looking statements. Such forward-looking statements are based on numerous assumptions regarding the Company's present and future business strategies and the environment in which the Company will operate in the future. These forward-looking statements speak only as at the date of this document. The Company expressly disclaims any obligation or undertaking to disseminate any updates or revisions to any forward-looking statements contained herein to reflect any change in the Company's expectations with regard thereto or any change in events, conditions or circumstances on which any such statements are based unless required to do so by applicable law or the AIM Rules.

Beaumont Cornish Limited, which is authorised and regulated in the United Kingdom by the Financial Conduct Authority, is acting as nominated adviser to the Company in relation to the matters referred herein. Beaumont Cornish Limited is acting exclusively for the Company and for no one else in relation to the matters described in this announcement and is not advising any other person and accordingly will not be responsible to anyone other than the Company for providing the protections afforded to clients of Beaumont Cornish Limited, or for providing advice in relation to the contents of this announcement or any matter referred to in it.

Notes

About CleanTech Lithium

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 the leading supplier of 'green' lithium to the EV and battery manufacturing market.

CleanTech Lithium has three 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 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 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

****ENDS****

List of Abbreviations used in Scoping Study

%	percentage	m/d	metres per day
°C	temperature in degrees Celsius	mg	milligram
3D	three dimensional	Mg	magnesium
m.a.s.l.	meters above sea level	mg/L	milligrams per litre
ALS	ALS Life Sciences Chile	mL	millilitre
B	boron	mm	millimetre
BV	bed volume	mm/year	millimetres per year
Ca	calcium	US$MN	million dollars
$CaCl_2$	calcium chloride	MVR	mechanical vapor recompression
$CaCO_3$	calcium carbonate	MW	megawatt
$Ca(OH)_2$	calcium hydroxide	MWh	megawatt hour
CAPEX	Capital Cost Estimates	Na	sodium
CCHEN	Chilean National Nuclear Commission	Na_2CO_3	sodium carbonate (soda ash)
CEOL	Special Operation Contracts for Lithium	NaCl	halite
Cl	chlorine	NaOH	sodium hydroxide
CODELCO	National Copper Corporation	NF	nanofiltration
CONAMA	National Environment Committee	NFB	nanofiltration for Boron
CORFO	Development Corporation	No.	number
CP	competent person	NI	National Instrument
CPR	competent person report	NPV	Net Present Value
CTL	CleanTech Lithium	OPEX	Operating Cost Estimates
CYMA	engineering and management company	Pe	effective porosity
cm	centimetre	pH	The measure of acidity or alkalinity
cm^3	cubic centimetres	PPA	power purchase agreement
DGA	General Water Directorate	Pt	total porosity
DIA	Environmental Impact Statement	QA/QC	quality assurance/quality control
DLE	direct lithium extraction	QP	Qualified Person
DTM	digital surface model	RBRC	relative brine release capacity
EIA	Environmental Impact Study	RCA	Environmental Qualification Resolutions
ENAMI	National Mining Company	RO	reverse osmosis
GPS	global positioning system	RQD	rock quality designator
Has	hectares	R+D	research and development
H_3BO_3	boric acid	SEA	Environmental Assessment Service
HCl	hydrochloric acid	SEIA	Environmental Impact Assessment System
ICP-OES	inductively coupled plasma - optical emission spectrometry	SERNAGEOMIN	National Geology and Mining Service
IRD	French Institute de Recherche pour le Development	S-L	solid-liquid
IRR	Internal Rate of Return	SO_4	sulfate

IVA	value added tax
IX	ion exchange
JORC	Joint Ore Reserves Committee
JV	joint venture
K	potassium
km	kilometre
km^2	square kilometre
KV	kilovolt
L/s	litres per second
LCE	lithium carbonate equivalent
Li	lithium
$LiOH*H_2O$	lithium hydroxide
Li_2CO_3	lithium carbonate
LV	Laguna Verde
m	metre
m^3	cubic metres

SRK	SRK Consulting
SS	Scoping Study
Sr	Specific retention
SX	solvent extraction
Sy	specific yield/drainable porosity
TEM	transient electromagnetic
t	tonnes
tonne/hr	tonnes per hour
t/y	tonnes per year
TDS	total dissolved solids
US$	United States dollar
WBS	work breakdown structure
WML	Wealth Minerals Ltd.
y	year
ZOIT	Zone of Tourist Interest

JORC Code, 2012 Edition - Table 1 report

Francisco Basin

Section 1 Sampling Techniques and Data

(Criteria in this section apply to all succeeding sections.)

Criteria	JORC Code explanation	Commentary
Sampling techniques	· *Nature and quality of sampling (eg cut channels, random chips, or specific specialised industry standard measurement tools appropriate to the minerals under investigation, such as down hole gamma sondes, or handheld XRF instruments, etc). These examples should not be taken as limiting the broad meaning of sampling.* · *Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.* · *Aspects of the determination of mineralisation that are Material to the Public Report.* · *In cases where 'industry standard' work has been done this would be relatively simple (eg 'reverse circulation drilling was used to obtain 1 m samples from which 3 kg was pulverised to produce a 30 g charge for fire assay'). In other cases more explanation may be required, such as where there is coarse gold that has inherent sampling problems. Unusual commodities or mineralisation types (eg submarine nodules) may warrant disclosure of detailed information.*	· After the wells PVC casing and silica gravel installation, a development process took place. The well development includes an injection of a hypochlorite solution to break the drilling additives, enough solution actuation waiting time and then, purging of minimum three well volumes operation to clean the cased well from drilling mud and injected fresh water. · The developing process was made using a small rig, a high-pressure compressor and 2-inch threaded PVC that can be coupled to reach any depth. The purging/cleaning operation is made from top to bottom, injecting air with a hose inside the 2-inch PVC and "suctioning" the water, emulating a Reverse Circulation (Air-Lift) system. · Once the well is verified, clan assuring that the purged water is brine coming from the aquifer, the PVC Casing Suction (Air-Lift) samples were taken on FB01 well from bottom to top, while the 2-inch PVC is extracted from the well. A 20-liter bucket is filled with brine and the brine sample is obtained from the bucket once the remaining fine sediments that could appear in the sample decant. · One-liter Samples every 3 m were taken and, every 6 m sent to laboratory to preserve a second sample set for auditory purposes. · Conductivity-based TDS and T°C were measured in every sample with a Hanna Multiparameter. All materials and sampling bottles were first flushed with brine water before receiving the

Criteria	JORC Code explanation	Commentary
		final sample. · After the PVC Casing Suction sampling, a stabilization period of minimum 5 days took place before proceed with the PVC Casing Bailer sampling to let the well match the aquifer hydro-chemical stratigraphy. · PVC Casing Disposable Bailer sampling process was made by JCP Ltda., specialists in water sampling on drillholes FB01, FB02, FB03, FB05 and FB06. Samples were taken from the interest depths with a double valve discardable bailer. The bailer is lowered and raised with an electric cable winch, to maintain a constant velocity and avoid bailer valves opening after taking the sample from the desire support. · PVC Casing Disposable Bailer samples were obtained every 6 m support to avoid disturbing the entire column during the sampling process. Conductivity-based TDS and Temperature °C were measured for every sample with a Hanna multiparameter. · PVC Casing Pressurized Bailer samples were obtained in FB04. A pressurized bailer brand Solinst proportioned by Geomin SpA were used This bailer permit to obtain sealed water samples down to 1,000 m with a pressure system that open the and seal the sampler in the interest support. · Pressurized Bailer samples were obtained every 6 m support to avoid disturbing the entire column during the sampling process. Conductivity-based TDS (Multi-TDS) and Temperature °C were measured for every sample.

Criteria	JORC Code explanation	Commentary
Drilling techniques	· *Drill type (eg core, reverse circulation, open-hole hammer, rotary air blast, auger, Bangka, sonic, etc) and details (eg core diameter, triple or standard tube, depth of diamond tails, face-sampling bit or other type, whether core is oriented and if so, by what method, etc).*	· Reverse flooded drilling system with 20 to 14 inch diameter was used in well FB01, FB02, FB03 (FB03A) and FB04. · FB01 was cased and habilitated from 0 m to its final depth 335 m with 8-inch PVC. · FB02 was cased and habilitated from 0 m to its final depth 351 m with 4-inch PVC. · FB03 was cased and habilitated from 0 to 314 m with 4-inch PVC. · FB04 was cased and habilitated from 0 m to 414m · Diamond Drilling system with HQ3 diameters were used in FB05 and FB06 · FB05 was cased and habilitated 2 inch PVC from 0 m to 455 m · FB06 was cased and habilitated 2 inch PVC from 0 m to 450 m
Drill sample recovery	· *Method of recording and assessing core and chip sample recoveries and results assessed.* · *Measures taken to maximise sample recovery and ensure representative nature of the samples.* · *Whether a relationship exists between sample recovery and grade and whether sample bias may have occurred due to preferential loss/gain of fine/coarse material.*	· On Reverse Flooded Drilling system, cuttings and 10 kg sample bags were recovered for geological logging and tests purposes. Direct supervision and continue geological logging were applied to assure recovery · On Diamond Drilling system, diamond core recovery were assured by direct supervision and continuous geotechnical logging

Criteria	JORC Code explanation	Commentary
Logging	· *Whether core and chip samples have been geologically and geotechnically logged to a level of detail to support appropriate Mineral Resource estimation, mining studies and metallurgical studies.* · *Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc) photography.* · *The total length and percentage of the relevant intersections logged.*	· Continue geological logging took place during drilling · For all 2022 brine samples conductivity-based TDS and Temperature °C parameters were measured during the sampling · From 2023, for all brine samples conductivity-based TDS, pH and Temperature °C parameters were measured during the sampling
Sub-sampling techniques and sample preparation	· *If core, whether cut or sawn and whether quarter, half or all core taken.* · *If non-core, whether riffled, tube sampled, rotary split, etc and whether sampled wet or dry.* · *For all sample types, the nature, quality and appropriateness of the sample preparation technique.* · *Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples.* · *Measures taken to ensure that the sampling is representative of the in situ material collected, including for instance results for field duplicate/second-half sampling.* · *Whether sample sizes are appropriate to the grain size of the material being sampled.*	· On year 2022, during the brine samples batch preparation process, Standard (internal standard composed by known stable brine), Duplicates and Blank samples (distilled water) were randomly included in the batch in the rate of one every twenty original samples. · From year 2023, during the brine samples batch preparation process, Standard (internal standard composed by known stable brine), Duplicates and Blank samples (distilled water) were randomly included in the batch in the rate of one every ten original samples. · After check samples insertion, all samples were re-numbered before submitted to laboratory. The author personally supervised the laboratory batch preparation process.
Quality of assay data and laboratory tests	· *The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total.* · *For geophysical tools, spectrometers, handheld XRF instruments, etc, the parameters used in determining the analysis including instrument make and model, reading times, calibrations factors applied and their derivation, etc.* · *Nature of quality control procedures adopted (eg standards, blanks, duplicates, external laboratory checks) and whether acceptable levels of*	· Brine samples obtained on 2022 were assayed on ALS Life Science Chile laboratory, by Li, K, B, Mg, Ca, Cu and Na by ICP-OES, method described on QWI-IO-ICP-OES- 01 Edisión A, Modification 0 EPA 3005A; EPA 200.2. · From year 2023 all brine samples were assayed also on ALS Life Science Chile laboratory by ICP-OES, method described on QWI-IO-ICP-OES- 01 Edisión A, Modification 0 EPA 3005A; EPA 200.2, but now reporting the full element swift · Total Density use the method described on THOMPSON Y, TROEH DE. Los suelos y su fertilidad.2002. Editorial Reverté S.A. Cuarta Edición. Págs.75-85.

Criteria	JORC Code explanation	Commentary
	accuracy (ie lack of bias) and precision have been established.	· Chlorine detemination described on QWI-IO-Cl-01 Emisión B mod. 1 Método basado en Standard Methods for the Examination of Water and Wastewater, 23st Edition 2017. Método 4500-Cl-B QWI-IO-Cl-01 Emisión B, mod. 1. SM 4500-Cl- B, 22nd Edition 2012. · Total Disolved Solids (TDS) with method describe on INN/SMA SM 2540 C Ed 22, 2012 · Sulfate according method described on INN/SMA SM 4500 SO4-D Ed 22, 2012 · Duplicates were obtained randomly during the brine sampling. Also, Blanks (distilled water) and Standards were randomly inserted during the laboratory batch preparation. · The standards were prepared on the installations of Universidad Católica del Norte using a known stable brine according procedure prepared by Ad Infinitum. Standard nominal grade was calculated in a round robin process that include 04 laboratories. ALS life Sciences Chile laboratory was validated during the round robin process. · Check samples composed by standards, duplicates and blanks were inserted in a rate of one each twenty original samples during year 2022. · From year 2023, check samples composed by standards, duplicates and blanks were inserted in a rate of one each ten original samples · For the 2023 QA/QC process, a new set of standards were internally prepared on the Copiapó warehouse installations, using 200 liters of brine obtained from Laguna Verde CleanTech project. Standard nominal Lithium grade was calculated in a round robin process that include 04 laboratories (Ch. Feddersen Standards preparation, statistical analysis, nominal valuation & laboratories analysis, February 2023) · For the TEM Geophysical survey a Applied Electromagnetic Research FAST-TEM 48 equipment was used, composed by a transmitter and receiver unit, a PC and the circuit cables (buckle), with batteries as power

Criteria	JORC Code explanation	Commentary
		source. A coincident transmission / reception loop of 220x220 m2 was used for the 98 surveyed stations, reaching a survey depth of 400 m. · The equipment used for the Gravimetry geophysical survey was a Scintrex portable digital model CG-5 Autograv, type "microgravity meter", with a 0.001 mGal resolution with tidal, temperature, pressure and leveling automatic correction system · The topographic data measured during the gravimetry survey were acquired with a double frequency differential positioning equipment, brand CHC NAV, model I-80 GNSS, that consists in two synchronized equipments, one fix at a known topographic station and the other, mobile thru the surveyed gravimetry stations
Verification of sampling and assaying	· *The verification of significant intersections by either independent or alternative company personnel.* · *The use of twinned holes.* · *Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.* · *Discuss any adjustment to assay data.*	· The assay data was verified by the author against the assay certificate. · Geophysics were used as delivered by Terra Pacific and Geodatos · Geological logs were managed by geology contractor GEOMIN and checked by the competent person · Brine samples batches were prepared personally by the author or by JCP Ltda. And Geomin SpA, with the supervision of the author. All data are in EXCEL files
Location of data points	· *Accuracy and quality of surveys used to locate drill holes (collar and down-hole surveys), trenches, mine workings and other locations used in Mineral Resource estimation.* · *Specification of the grid system used.* · *Quality and adequacy of topographic control.*	· Drillhole collars were captured with non-differential hand held GPS. Position was verified by topographic features Total station topographic capture of the drillhole collars is pending · The TEM geophysical survey coordinates were captured with non-differential hand held GPS. · Gravimetry stations were captured with a double frequency differential positioning equipment, brand CHC NAV, model I-80 GNSS, that consists in two synchronized equipments, one fix at a known topographic station and the other, mobile thru the surveyed gravimetry stations · The coordinate system is UTM, Datum WGS84 Zone 19J

Criteria	JORC Code explanation	Commentary
Data spacing and distribution	· *Data spacing for reporting of Exploration Results.* · *Whether the data spacing and distribution is sufficient to establish the degree of geological and grade continuity appropriate for the Mineral Resource and Ore Reserve estimation procedure(s) and classifications applied.* · *Whether sample compositing has been applied.*	· PVC Casing Suction brine samples were taken every 3 m and, sent to laboratory every 6 m · PVC Casing Disposable Bailer brine samples were taken every 6 m · PVC Casing Pressurized Bailer brine samples were taken every 6 m · For TEM geophysical survey a 750 m stations distance, in lines every 750 m were used. · For the Gravimetry survey a 200 m to 300 m stations distance were used · The author believes that the data spacing and distribution is sufficient to establish the degree of geological and grade continuity appropriate for the Resource Estimation
Orientation of data in relation to geological structure	· *Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type.* · *If the relationship between the drilling orientation and the orientation of key mineralised structures is considered to have introduced a sampling bias, this should be assessed and reported if material.*	
Sample security	· *The measures taken to ensure sample security.*	· All brine samples were marked and immediately transported them to Copiapó city warehouse · The brine water samples were transported without any perturbation directly to a warehouse in Copiapó city, were laboratory samples batch was prepared and stored in sealed plastic coolers, then sent via currier to ALS laboratory Santiago. All the process was made under the Competent Person direct supervision. · ALS personnel report that the samples were received without any problem or disturbance
Audits or reviews	· *The results of any audits or reviews of sampling techniques and data.*	· The assay data was verified by the Competent Person against the assay certificate. · No audits were undertaken

Section 2 Reporting of Exploration Results

(Criteria listed in the preceding section also apply to this section.)

Criteria	JORC Code explanation	Commentary
Mineral tenement and land tenure status	· *Type, reference name/number, location and ownership including agreements or material issues with third parties such as joint ventures, partnerships, overriding royalties, native title interests, historical sites, wilderness or national park and environmental settings.* · *The security of the tenure held at the time of reporting along with any known impediments to obtaining a licence to operate in the area.*	· CleanTech Lithium holds in Francisco Basin 12,762 hectares of Mining Concessions, separated in 1,474 hectares Exploitation Concessions, 10,088 hectares of Exploitation Applications and 1,200 hectares of Exploration Applications. · The Competent Person relies in the Mining Expert Surveyor Mr, Juan Bedmar. · All concession acquisition costs and taxes have been fully paid and that there are no claims or liens against them · There are no known impediments to obtain the licence to operate in the area
Exploration done by other parties	· *Acknowledgment and appraisal of exploration by other parties.*	· No Lithium Exploration works has been done by third parties in the past
Geology	· *Deposit type, geological setting and style of mineralisation.*	· Francisco Basin are classified as the "Salar Marginal Facies" of a hyper saline lagoon that approaches to an immature clastic salar classification (Negro Francisco lagoon), with the lagoon corresponding to the "salar nucleus"
Drill hole Information	· *A summary of all information material to the understanding of the exploration results including a tabulation of the following information for all Material drill holes:* o *easting and northing of the drill hole collar* o *elevation or RL (Reduced Level - elevation above sea level in metres) of the drill hole collar* o *dip and azimuth of the hole* o *down hole length and interception depth* o *hole length.* · *If the exclusion of this information is justified on the basis that the information is not Material and this exclusion does not detract from the understanding of the report, the Competent Person should clearly explain why this is the case.*	· The following drillhole coordinates are in WGS84 zone 19 J Datum · FB01 E479,904 N6,959,310 ELEV 4,151 m a.s.l. · FB02 E483,350 N6,957,900 ELEV 4,164 m a.s.l. · FB03 E483,949 N6,959,090 ELEV 4,161 m a.s.l. · FB03A E483,835 N6,959,040 ELEV 4,160 m a.s.l. · FB04 E482,715 N6,956,410 ELEV 4,177 m a.s.l. · FB05 E482,000 N6,957,900 ELEV 4,159 m a.s.l. · FB06 E485,600 N6,957,900 ELEV 4,181 m a.s.l.

Criteria	JORC Code explanation	Commentary
Data aggregation methods	· *In reporting Exploration Results, weighting averaging techniques, maximum and/or minimum grade truncations (eg cutting of high grades) and cut-off grades are usually Material and should be stated.* · *Where aggregate intercepts incorporate short lengths of high grade results and longer lengths of low grade results, the procedure used for such aggregation should be stated and some typical examples of such aggregations should be shown in detail.* · *The assumptions used for any reporting of metal equivalent values should be clearly stated.*	· No low-grade cut-off or high-grade capping has been implemented due to the consistent nature of the brine assay data · No data aggregate of any kind has been implemented
Relationship between mineralisation widths and intercept lengths	· *These relationships are particularly important in the reporting of Exploration Results.* · *If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported.* · *If it is not known and only the down hole lengths are reported, there should be a clear statement to this effect (eg 'down hole length, true width not known').*	· The relationship between aquifer widths and intercept lengths are direct
Diagrams	· *Appropriate maps and sections (with scales) and tabulations of intercepts should be included for any significant discovery being reported These should include, but not be limited to a plan view of drill hole collar locations and appropriate sectional views.*	· Addressed in the report
Balanced reporting	· *Where comprehensive reporting of all Exploration Results is not practicable, representative reporting of both low and high grades and/or widths should be practiced to avoid misleading reporting of Exploration Results.*	· All results have been included.

Criteria	JORC Code explanation	Commentary
Other substantive exploration data	· *Other exploration data, if meaningful and material, should be reported including (but not limited to): geological observations; geophysical survey results; geochemical survey results; bulk samples - size and method of treatment; metallurgical test results; bulk density, groundwater, geotechnical and rock characteristics; potential deleterious or contaminating substances.*	· Pump Test on FB01 well just finished · A 50 hp submergible electric pump, piping with flowmeters were used for the pump tests. The tests consist in 6-hour variable pump test to verify the aquifer capabilities and a constant 12-hour pump test · In FB01 the pump was installed at 159 m
Further work	· *The nature and scale of planned further work (eg tests for lateral extensions or depth extensions or large-scale step-out drilling).* · *Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive.*	· Drilling to be undertaken upgrade Inferred Resources to Measured + Indicated and Indicated Resouces to Measured Resources and to improve drainable porosity estimation. Include a drillhole designed for reinjection tests · Hydraulic testing be undertaken, for instance pumping tests from wells to determine, aquifer properties, expected production rates, upgrade Resources to Reserves and infrastructure design. · Aquifer recharge dynamics be studied to determine the water balance and subsequent production water balance. For instance, simultaneous data recording of rainfall and subsurface brine level fluctuations to understand the relationship between rainfall and aquifer recharge, and hence the brine recharge of the aquifer. SGA Hydrogeologist consultants are actually working on basins steady still model

Section 3 Estimation and Reporting of Mineral Resources

(Criteria listed in section 1, and where relevant in section 2, also apply to this section.)

Criteria	JORC Code explanation	Commentary
Database integrity	· *Measures taken to ensure that data has not been corrupted by, for example, transcription or keying errors, between its initial collection and its use for Mineral Resource estimation purposes.* · *Data validation procedures used.*	· Cross-check of laboratory assay reports and Database · QA/QC as described in Sampling Section

Criteria	JORC Code explanation	Commentary
Site visits	· *Comment on any site visits undertaken by the Competent Person and the outcome of those visits.*	· Continue supervision of March to May 2022 drilling campaign.
	· *If no site visits have been undertaken indicate why this is the case.*	· Continue supervision on October 2022 to July 2023 drilling campaign
Geological interpretation	· *Confidence in (or conversely, the uncertainty of) the geological interpretation of the mineral deposit.*	· For the geological interpretation was made based in the TEM study and drillholes
	· *Nature of the data used and of any assumptions made.*	· Low resistivities are associated with sediments saturated in brines, but also with very fine sediments or clays
	· *The effect, if any, of alternative interpretations on Mineral Resource estimation.*	· Drillholes confirm the geological interpretations
	· *The use of geology in guiding and controlling Mineral Resource estimation.*	
	· *The factors affecting continuity both of grade and geology.*	
Dimensions	· *The extent and variability of the Mineral Resource expressed as length (along strike or otherwise), plan width, and depth below surface to the upper and lower limits of the Mineral Resource.*	· The Brine Resource is a sub horizontal lens with an approximately area of 9 km x 5 km and 320 m wide
Estimation and modelling techniques	· *The nature and appropriateness of the estimation technique(s) applied and key assumptions, including treatment of extreme grade values, domaining, interpolation parameters and maximum distance of extrapolation from data points. If a computer assisted estimation method was chosen include a description of computer software and parameters used.*	· The brine ore model was built from the TEM geophysical surveys performed by Terra Pacific (Terra Pacific, 2018), and Golder-Kinross TEM survey profiles that are on public domain. 25 every 50 m plans were built, considering a north east limit at 2,500 m from FB01 drillhole (Indicated radius), that collide with the shore of the salt portion of the Del Negro Francisco lagoon. · The built model was clipped from below with the basement surface constructed using the gravimetry survey performed by Geodatos (Geodatos, April 2023), and the basement intercepts in FB01 and FB05 drillholes and, from above by the brine aquifer ceiling surface, constructed with the first brine aquifer intercepts on FB01 (99 m), FB02 (260 m), FB04 (300 m), FB05 (195 m) and FB06 (285 m) drillholes and, the interpreted brine intercept from TEM geophysics on drillhole FB03 (305 m), to form the final 3D model. This final model corresponds to the Francisco Basin Brine Ore Volume · One block model was constructed on Francisco Basin with the following properties: · Block size: 200 m x 200 m x 6 m.
	· *The availability of check estimates, previous estimates and/or mine production records and whether the Mineral Resource estimate takes appropriate account of such data.*	
	· *The assumptions made regarding recovery of by-products.*	
	· *Estimation of deleterious elements or other non-grade variables of economic significance (eg sulphur for acid mine drainage characterisation).*	

Criteria	JORC Code explanation	Commentary
	Whether assumptions about interpolation, the block size in relation to the average sample spacing and the search employed. · *Any assumptions behind modelling of selective mining units.* · *Any assumptions about correlation between variables.* · *Description of how the geological interpretation was used to control the resource estimates.* · *Discussion of basis for using or not using grade cutting or capping.* · *The process of validation, the checking process used, the comparison of model data to drill hole data, and use of reconciliation data if available.*	· Block Model Origin: 484,800 East, 6,952,400 North, Level 4,080 m a.s.l. · N° Columns: 40 · N° Rows: 60 · N° Levels: 90 · Rotation: 50° Clockwise · The individual block variables are: · Rock Type: 0=No Ore, 1= Brine Ore · Density · Percent · Economic · Material: 1=Upper Zone Sand-Gravel, 2=Inner Zone Clay, 3=Lower Bed Consolidated Sand-Gravel Transitioning to Silt and 4 = 1,000 m around FB05 · Li (Lithium) · Mg (Magnesium) · K (Potash) · B (Boron) · SO4 · Ca (Calcium) · Category: 1=Measured, 2=Indicated and 3=Inferred · Porosity · Elevation · The traditional Inverse to the Square Distance method to estimate the block variables was used. To accomplish this, the samples from the Sub-Surface Assay Resource Database were manually assigned to their correspondent block levels on both block models. Once assigned, the block variable values were calculated by levels with the correspondent assigned samples and their horizontal distances from the individual block to estimate. All calculations were performed in EXCEL files. · The calculated block variables are: · Lithium (Li) · Magnesium (Mg) · Potash (K) · Boron (B) · Sulfate (SO4) · Calcium (Ca)

Criteria	JORC Code explanation	Commentary
		· To assign drainable porosity for resources calculation, the Francisco Basin Brine Ore Volume was divided in the following units: · Upper unit of Fine to coarse sands intercalated with fine polymictic gravels and minor clay and tuff levels (block variable Material=1). A drainable porosity of 22% was assigned to this unit according literature, as a small amount of the resources lie inside this unit. · Middle unit of clays beds with variable plasticity intercalated with minor levels of fine sands and gypsum (block variable Material=2). This unit presents RBRC values in FB05 samples between 0.2% and 5.1% depending on the plasticity level and sand content. The suction level at 160 m of the pump test performed in FB01 were located in the upper part of this clay unit, giving transmittivity (k) values between 0.88 m/d and 1.23 m/d. These k values are related with much higher drainable porosity values. On the FB01 detailed cutting geological logging, this unit appear with more fine sand beds intercalations, more sand content and lower plasticity levels. In FB02 this unit also appear with more sand content and lower plasticity levels. Considering all, a drainable porosity of 8% were assigned to this unit. · Basal unit of moderately consolidated gravels and sands, transitioning to silt beds (block variable Material=3) This unit presents RBRC values in FB05 samples between 0.7% and 10.8%. In FB01 this unit is composed mainly by sands with scarce gravels that are related with higher drainable porosity. To FB03 drillhole, this unit transition to a very soft silt bed with minor plasticity level. This stratigraphical unit was the one that "swallow" the drilling tools, provoking the rods brakeage and tools loose in that well and should have high drainable porosity (silt could reach 20% according literature). Also, starts to appear in the bottom of FB02 drillhole, before the drilling rods brakeage and tools loose, just like in FB03 drillhole.Considering all, a drainable porosity of 15% were assigned to this unit. For the blocks Material variable assignation between values 1 to 3, two surfaces were built with the unit's contacts on Francisco Basin drillholes, corresponding to the ceiling and bottom of the Middle Unit of Clay Bed. Then, these surfaces were intercepted with the blocks that lie inside the Francisco Basin Brine Ore Volume to assign their correspondent Material variable value.

Criteria	JORC Code explanation	Commentary
		· Volume inside a 1,000 m radius around drillhole FB05 (block variable Material=4) Blocks inside 1,000 m radius around FB05 were assigned with block variable Material=4. For the blocks were variable Material=4, FB05 RBRC samples were manually assigned to their correspondent block level. Once assigned, the block porosity values were copied by levels with the correspondent RBRC sample value. All calculations were performed in EXCEL file. The following is the file used for the porosity assignation around FB05 drillhole. 2023-08-03_PorosityEstimationFB05ReducedV1.xlsx
Moisture	· *Whether the tonnages are estimated on a dry basis or with natural moisture, and the method of determination of the moisture content.*	· Not applicable for brine resources
Cut-off parameters	· *The basis of the adopted cut-off grade(s) or quality parameters applied.*	· No cut-off parameters were used
Mining factors or assumptions	· *Assumptions made regarding possible mining methods, minimum mining dimensions and internal (or, if applicable, external) mining dilution. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider potential mining methods, but the assumptions made regarding mining methods and parameters when estimating Mineral Resources may not always be rigorous. Where this is the case, this should be reported with an explanation of the basis of the mining assumptions made.*	· Mining will be undertaken by pumping brine from production wells and re-injection · Pump Test on FB01 well just finished · Pump Test on FB01 was made with a 50 hp submergible electric pump, piping with flowmeters were used for the pump tests. The tests consist in 6-hour variable pump test to verify the aquifer capabilities and a constant 12-hour pump test · In FB01 the pump was installed at 159 m

Criteria	JORC Code explanation	Commentary
Metallurgical factors or assumptions	· *The basis for assumptions or predictions regarding metallurgical amenability. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider potential metallurgical methods, but the assumptions regarding metallurgical treatment processes and parameters made when reporting Mineral Resources may not always be rigorous. Where this is the case, this should be reported with an explanation of the basis of the metallurgical assumptions made.*	· The lithium carbonate production process considers six stages to minimize the water and energy requirements: 1. Direct Lithium Extraction (DLE) 2. Concentration of the solution 3. Purification of the solution 4. Carbonation and Production of Li2CO3 5. Treatment of the Mother Liquor 6. Water Recovery Lithium is selectively extracted in the DLE stage, and the brine is reinjected. In the concentration stage, water is removed from the solution to concentrate 1.2%Li, and 90% of the water is recovered. The conventional purification and carbonation stages have been optimized to maximize production and reduce contaminants, ensuring the battery-grade product is obtained. In the mother liquor treatment stage, the solution is recovered and concentrated, which provides 6 to 7 recovery points of Lithium, and process water is recovered. The overall recovery of lithium is 89,3%. · The recovery of process water makes it possible to minimize the water requirement of the process, and it has been estimated that water losses will be 1.6 m3/tonne of product.
Environmental factors or assumptions	· *Assumptions made regarding possible waste and process residue disposal options. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider the potential environmental impacts of the mining and processing operation. While at this stage the determination of potential environmental impacts, particularly for a greenfields project, may not always be well advanced, the status of early consideration of these potential environmental impacts should be reported. Where these aspects have not been considered this should be reported with an explanation of the environmental assumptions made.*	· The main environmental impacts expected is the Production Plant / Camp and the surface disturbance associated with production wells and brine mixing ponds. These impacts are not expected to prevent project

Criteria	JORC Code explanation	Commentary
Bulk density	· *Whether assumed or determined. If assumed, the basis for the assumptions. If determined, the method used, whether wet or dry, the frequency of the measurements, the nature, size and representativeness of the samples.* · *The bulk density for bulk material must have been measured by methods that adequately account for void spaces (vugs, porosity, etc), moisture and differences between rock and alteration zones within the deposit.* · *Discuss assumptions for bulk density estimates used in the evaluation process of the different materials.*	· Bulk density is not relevant to brine resource estimation.

Classification	· *The basis for the classification of the Mineral Resources into varying confidence categories.*
	· *Whether appropriate account has been taken of all relevant factors (ie relative confidence in tonnage/grade estimations, reliability of input data, confidence in continuity of geology and metal values, quality, quantity and distribution of the data).*
	· *Whether the result appropriately reflects the Competent Person's view of the deposit.*
		· The considered criteria were based on the recommended sampling grid distances of the complementary guide to CH 20235 code to report resources and reserves in brine deposits (Comision Calificadora en Competencias en Recursos y Reservas Mineras, July 2021).
		· The resources categorization is dependent of the brine samples availability, their quality in terms of confidence and the drainable porosity assignation confidence level.
		· Considering the above, the resources categorization conditions for the Francisco Basin block are:
		  · Blocks estimated at 2,500 m around FB01 and FB05 samples were considered as INDICATED
		  · The rest of the blocks that don't match the above condition were considered as INFERRED
		· The result reflects the view of the Competent Person

Audits or reviews	· *The results of any audits or reviews of Mineral Resource estimates.*	· No audit or reviews were undertaken.

Criteria	JORC Code explanation	Commentary
Discussion of relative accuracy/ confidence	· *Where appropriate a statement of the relative accuracy and confidence level in the Mineral Resource estimate using an approach or procedure deemed appropriate by the Competent Person. For example, the application of statistical or geostatistical procedures to quantify the relative accuracy of the resource within stated confidence limits, or, if such an approach is not deemed appropriate, a qualitative discussion of the factors that could affect the relative accuracy and confidence of the estimate.* · *The statement should specify whether it relates to global or local estimates, and, if local, state the relevant tonnages, which should be relevant to technical and economic evaluation. Documentation should include assumptions made and the procedures used.* · *These statements of relative accuracy and confidence of the estimate should be compared with production data, where available.*	· The estimated tonnage represents the in-situ brine with no recovery factor applied. It will not be possible to extract all of the contained brine by pumping from production wells. The amount which can be extracted depends on many factors including the permeability of the sediments, the drainable porosity, and the recharge dynamics of the aquifers. · No production data are available for comparison

This information is provided by RNS, the news service of the London Stock Exchange. RNS is approved by the Financial Conduct Authority to act as a Primary Information Provider in the United Kingdom. Terms and conditions relating to the use and distribution of this information may apply. For further information, please contact rns@lseg.com or visit www.rns.com.

RNS may use your IP address to confirm compliance with the terms and conditions, to analyse how you engage with the information contained in this communication, and to share such analysis on an anonymised basis with others as part of our commercial services. For further information about how RNS and the London Stock Exchange use the personal data you provide us, please see our Privacy Policy.

END

DRLKZGZLLKZGFZM