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CleanTech Lithium PLC
07 July 2025

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CleanTech Lithium PLC ("CleanTech Lithium" or the "Company")

Process Test-work Progress Update

CleanTech Lithium PLC (AIM:CTL),an innovative sustainable lithium developer in Chile, is collaborating with DuPont Water Solutions, a business unit of DuPont, to test lithium processing technology. DuPont has developed a new nanofiltration (NF) membrane technology which aims to remove impurities and maximise lithium recovery. NF is applied in CleanTech Lithium's direct lithium extraction (DLE) downstream process. Trials have recently been completed with highly encouraging results.

Test-work Highlights:

- Test-work on lithium processing technology, a new nanofiltration (NF) membrane technology, for high lithium recovery developed by Dupont Water Solutions
- The test-work focused on processing two different concentrations of eluate produced from CleanTech Lithium´s DLE pilot plant in Chile, and measured the key metrics of impurity removal and lithium recovery
- The first trial was based on eluate representative of the average produced from the Company´s DLE pilot plant, while the second trial applied to eluate that had been concentrated approximately 4 times higher by forward osmosis
- The primary impurities targeted by NF are Calcium and Magnesium which showed very high rejection rates while lithium recovery rates were 94% and 92%:

	Trial 1 - Concentrated Eluate			**Trial 2 - Concentrated Eluate**		
Parameter (mg/L)	**Pre-NF**	**Post NF**	**Rejection**	**Pre-NF**	**Post NF**	**Rejection**
Lithium	2,120	1,990	6%	8,760	8,080	8%
Calcium	284	42	85%	1,200	180	85%
Magnesium	225	9	96%	950	32	97%

- The results were in line or exceeded the expected design parameters provided by Dupont Water Solutions with performance minimally impacted by feed concentration
- The membranes were designed to run at a higher pressure than that trialled which would likely increase the lithium recovery rates and reduce reprocess volumes to recover the rejected lithium
- The effectiveness of the NF membrane at high eluate concentrations is positive for application of the technology at much lower feed volumes, reducing Capex and Opex costs

Commenting, Ignacio Mehech, Chief Executive Officer, of Cleantech Lithium PLC, said:

"These highly encouraging results mark an important step in our collaboration with DuPont Water Solutions. Calcium and magnesium are among the most difficult impurities to remove in the lithium extraction process, and DuPont's nanofiltration technology has demonstrated excellent rejection rates while maintaining high lithium recovery. This supports our approach to

sustainable lithium production and signals the potential for reduced capital and operating costs as we progress towards commercialisation."

Competent Persons Statement

The following professional acts as qualified person, as defined in the AIM Note for Mining, Oil and Gas Companies (June 2009) and JORC Code (2012):

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 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. Mr Bravo consents to the inclusion in the press release of the matters based on his information in the form and context in which it appears.

Further Information

CleanTech Lithium PLC

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Notes

CleanTech Lithium (AIM:CTL, Frankfurt:T2N) is an exploration and development company advancing lithium projects in Chile for the clean energy transition. CleanTech Lithium has two key lithium projects in Chile, Laguna Verde and Viento Andino, and exploration stage project in Arenas Blancas (Salar de Atacama), located in the lithium triangle, a leading centre for battery grade lithium production.

CleanTech Lithium is committed to utilising Direct Lithium Extraction ("DLE") with reinjection of spent brine resulting in no aquifer depletion. Direct Lithium Extraction is a transformative technology which removes lithium

from brine with higher recoveries, short development lead times and no extensive evaporation pond construction.

For more information, please visit: www.ctlithium.com

****ENDS****

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