RNS Number : 0456N
CleanTech Lithium PLC
21 November 2024

21 November 2024

CleanTech Lithium PLC ("CleanTech Lithium" or the "Company")
Major Milestone Achieved: Pilot-Scale Lithium Carbonate Production

CleanTech Lithium PLC (AIM: CTL), an exploration and development companyadvancing sustainable lithium projects in Chile, is pleased to announce the downstream conversion process is successfully producing pilot scale samples of lithium carbonate. CTL is a leader in Chile in producing lithium carbonate using Direct Lithium Extraction ("DLE") at the pilot scale, marking a major milestone for the Company. The samples will be sent to a laboratory to confirm the grade and impurity profile, which is expected to be battery-grade and prepared for strategic partner qualification.

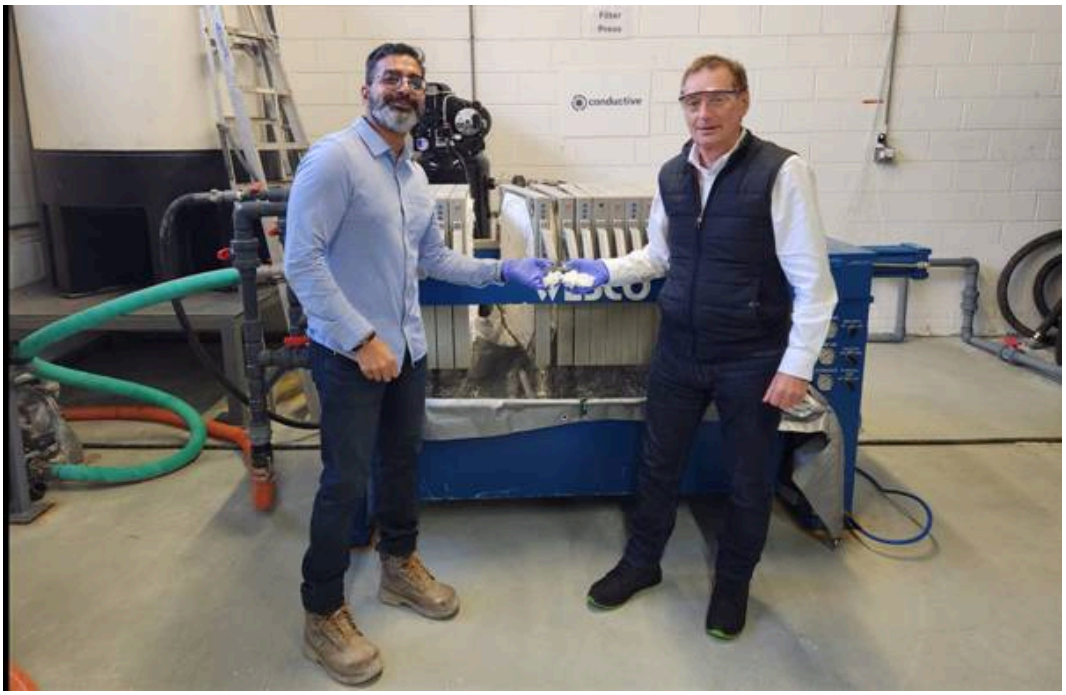


Image 1: CTL Director Gordon Stein and CEO of Conductive Energy Haafiz Hasham
with first Lithium Carbonate produced from Conversion Process

The Company shipped four tanks with a total of 88m^3 of concentrated eluate from its DLE pilot plant in Copiapó, Chile, to the facilities of Conductive Energy in Chicago, USA, for conversion into lithium carbonate. The first tank with 20m^3 of eluate is currently being processed and produced the first 50kg of lithium carbonate on November 19th. The full tank will be processed over the next week and is expected to produce approximately 150kg of battery grade lithium carbonate.

To mark the commencement of production a site visit to the conversion facility was held showcasing the innovative process. The conversion process utilises forward osmosis at the concentration stage rather than the

conventional evaporator helping to reduce water consumption and energy use before solution purification and then carbonation into the final product.

Conversations with potential strategic partners interested in testing the product have begun. After laboratory analysis, the Company will be aiming to send samples of battery-grade lithium carbonate to such partners initially in the several kilograms to tens of kilograms, to start the product qualification process.

Highlights:

- CTL has produced pilot scale lithium carbonate from Laguna Verde brine following successful commencement of the downstream conversion process
- CTL is a leader in Chile producing lithium carbonate at the pilot scale using sustainable DLE which, with spent brine reinjection, prevents aquifer depletion and through innovative downstream processing, minimises water and energy consumption
- Lithium carbonate product will be sent to a laboratory in North America to be verified as battery-grade (>99.5%)
- A site visit to Conductive Energy's conversion facility took place on Tuesday 19th November to mark the commencement of production from what is the largest pilot plant in operation in North-East USA.
- Conversations with strategic partners have started and samples will be available for product qualification

Steve Kesler, Executive Chairman and Interim Chief Executive Officer, CleanTech Lithium PLC, said:
"CleanTech Lithium has reached an important milestone by commencing pilot scale lithium carbonate production using a sustainable and innovative DLE based process. As a leader in the DLE sector in Chile with a focus on efficiency and sustainability, this accomplishment marks a significant step forward. Years of hard work have led to this important milestone, and it sets the stage for future development with a commitment to supporting the transition to electric vehicles and clean energy. Thank you to the partners involved and we look forward to enter the next phase of development."

Haafiz Hasham, Chief Executive Officer, Conductive Energy, said:
"The successful conversion to lithium carbonate in partnership with CleanTech Lithium and Forward Water Technologies represents a significant milestone for all the companies involved. This achievement highlights our commitment to developing innovative, efficient, and sustainable processes that meet the growing global demand for lithium, a critical component in green energy solutions. We are excited to continue advancing Direct Lithium Extraction, which we believe represents the future of battery-grade lithium production."



Image 2: Site visit at Conductive Energy's facilities was held on 19th November to see the conversion process to lithium carbonate



Image 3: Filter press used in the conversion process to separate precipitated Li_2CO_3 from solution. White powder is lithium carbonate



Image 4: Two tanks of concentrated eluate arrive on site in Chicago, USA



Image 5: Industrial Forward Osmosis unit

ENDS

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.

For further information contact:

CleanTech Lithium PLC

Steve Kesler/Gordon Stein/Nick Baxter	Jersey office: +44 (0) 1534 668 321
	Chile office: +562-32239222
	Or via Celicourt
Celicourt Communications	+44 (0) 20 7770 6424
Felicity Winkles/Philip Dennis/Ali AlQahtani	cleantech@celicourt.uk
Beaumont Cornish Limited (Nominated Adviser)	+44 (0) 20 7628 3396
Roland Cornish/Asia Szusciak	
Fox-Davies Capital Limited (Joint Broker)	+44 (0) 20 3884 8450
Daniel Fox-Davies	daniel@fox-davies.com
Canaccord Genuity (Joint Broker)	+44 (0) 20 7523 4680
James Asensio	

Beaumont Cornish Limited ("Beaumont Cornish") is the Company's Nominated Adviser and is authorised and regulated by the FCA. Beaumont Cornish's responsibilities as the Company's Nominated Adviser, including a responsibility to advise and guide the Company on its responsibilities under the AIM Rules for Companies and AIM Rules for Nominated Advisers, are owed solely to the London Stock Exchange. Beaumont Cornish is not acting for and will not be responsible to any other persons for providing protections afforded to customers of Beaumont Cornish nor for advising them in relation to the proposed arrangements described in this announcement or any matter referred to in it.

Notes

CleanTech Lithium (AIM:CTL, Frankfurt:T2N, OTCQX:CTLHF) is an exploration and development company advancing lithium projects in Chile for the clean energy transition. Committed to net-zero, CleanTech Lithium's mission is to become a new supplier of battery grade lithium using Direct Lithium Extraction technology powered by renewable energy.

CleanTech Lithium has two key lithium projects in Chile, Laguna Verde and Viento Andino, and exploration stage projects in Llamara and Arenas Blancas (Salar de Atacama), located in the lithium triangle, a leading centre for battery grade lithium production. The two most advanced projects: Laguna Verde and Viento Andino are situated within basins controlled by the Company, which affords significant potential development and operational advantages. All four projects have good access to existing infrastructure.

CleanTech Lithium is committed to utilising Direct Lithium Extraction 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. www.ctlithium.com

****ENDS****

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

UPDPPGQGGUPCPGU