

# **Neo Lithium Files Technical Report with Positive PEA Results on its 3Q Project Showing a Capital Cost reduction of US\$98.5M**

13.12.2017 | [Marketwired](#)

TORONTO, ON--(Marketwired - December 13, 2017) -

- CAPEX reduction from US\$588.7 million to US\$490.2 million through the relocation of evaporation ponds
- Updated US\$1.2 billion after-tax NPV at 8% discount rate
- Updated IRR of 27.9%
- Updated payback period of 1 year and 8 months
- Average production rate of 35,000 tonnes of lithium carbonate per year
- Results based on simple and proven solar evaporation technology
- Expected mine life of 20 years with a 3 year ramp up period starting 2021
- Fully loaded operating cost of US\$2,791 per tonne of Lithium Carbonate

[Neo Lithium Corp.](#) ("Neo Lithium" or the "Company") (TSX VENTURE: NLC) (OTCQX: NTHF) announces the filing of a technical report (the "Technical Report") in connection with the release of the results of its preliminary economic assessment ("PEA") for the production of lithium carbonate from its wholly owned Tres Quebradas lithium brine project ("3Q Project") in Catamarca Province, Argentina, titled Preliminary Economic Assessment (PEA) 3Q Project NI 43-101 Technical Report.

The Technical Report was prepared by GHD Chile SA ("GHD"), a leading independent engineering services firm with extensive experience in the design and construction requirements for some of the largest and lowest cost lithium brine processing facilities in Chile and Argentina. The estimation was prepared to a Class 4 level and completed to an accuracy range of  $\pm 30\%$ .

Subsequent to the October 30, 2017 news release announcing the PEA (the "News Release"), GHD was able to further optimize the layout of the 3Q Project with the consequent positive impact on the 3Q Project's economics. There were no changes in the assumptions for the processing costs, lithium market and price, process studies and engineering, the lithium resource or the environmental or permitting considerations of the project.

"After we published the initial numbers of the PEA we continued working with GHD to understand the main variables and we identified pond location as a major cost factor" stated Waldo Perez, President and CEO of [Neo Lithium Corp.](#) "We were pleased to discover with GHD that a modification in the pond layout provided significant savings in the total CAPEX."

#### Updated Preliminary Economic Assessment Highlights

Below is a table reconciling the changes to the PEA from those disclosed in the News Release, as required by NI 43-101. The lower capital costs have a larger impact on the IRR and payback period while an important albeit smaller impact on the NPV of the project.

Description	News Release October 30, 2017	Current
After-Tax Net Present Value ("NPV") @ 8% Discount Rate	US\$1,128 million	US\$1,200 million
After-Tax Internal Rate of Return ("IRR")	24.4%	27.9%
Capital Expenditures	US\$588.7 million	US\$490.2 million
Cash Operating Costs (per tonne of lithium carbonate)	US\$2.791	unchanged
Average Annual Production (lithium carbonate)	35,000	unchanged
Mine Life	20 years	unchanged
Payback Period (from commencement of production)	2 years	1 year, 8 months

Note: The economic analysis is based upon measured, indicated, and inferred mineral resources only. Mineral resources that are not mineral reserves do not have demonstrated economic viability. The PEA is preliminary in nature and includes inferred mineral resources that are considered too geologically speculative to have the economic considerations applied to them that would enable them to be categorized as mineral reserves. There is no certainty that the 3Q Project envisioned by the PEA will be realized. The economic analysis of the PEA is based, among others, on the following main assumptions: a) 100% equity financing; b) construction commencing in 2019; c) production ramp up of three years from 2021 to 2023; and d) all capital

costs, operating costs and revenues in the economic model are calculated on a constant U.S. dollar basis.

### Updated Capital Costs

The total capital costs of the 3Q Project are now estimated to be US\$490.2 million, previously being estimated to be US\$588.7 million, as noted in the News Release of October 30<sup>th</sup>. The majority of the savings of US\$98.5 million, or 16% of the original total capital costs estimate, was obtained through relocating all evaporation ponds into the salar (previously half the ponds were in the salar and half in the alluvial cone). There were additional costs in regards to infrastructure and others, indirect costs and a larger contingency that are now included in the current capital costs estimate that GHD considered prudent. Building the ponds in the salar is less expensive because it requires less earth movement and there are extra savings in the construction of roads and power generation and distribution.

Description	News Release October 30, 2017 (US\$ Million)	Current (US\$ Million)
<b>Direct Costs</b>		
Evaporation Ponds and Wells	\$323.0	\$178.4
Plant Facilities and Equipment	\$67.3	\$62.8
Infrastructure and Others	\$59.7	\$80.2
Direct Costs Subtotal	\$450.1	\$321.4
Indirect Costs	\$70.8	\$88.5
Contingency	\$67.8	\$80.3
Total Initial Capital Costs	\$588.7	\$490.2

### Operating Costs

The table below sets out the operating cost estimate, which remains unchanged from what was disclosed in the News Release.

Description	US\$000/yr	US\$/tonne Li2CO3 (lithium carbonate)
<b>Direct Costs</b>		
Chemical Reactives and Reagents	\$53,934	\$1,541
Salt Removal and Transport	\$23,620	\$675
Energy	\$10,820	\$309
Manpower	\$4,713	\$135
Catering and Camp Services	\$1,659	\$47
Maintenance	\$1,570	\$45
Direct Costs Subtotal	\$96,317	\$2,752
<b>Indirect Costs</b>		
General and Administration	\$1,359	\$39
Indirect Costs Subtotal	\$1,359	\$39
Production Total Costs	\$97,677	\$2,791

### Lithium Markets and Price

Neo Lithium has reviewed a number of publicly available lithium price forecasts and there are some variations between each source. For the purposes of the PEA, Neo Lithium used the average pricing assumptions as per below, which remains unchanged from what was disclosed in the News Release:

Year	US\$/tonne				
	2021	2022	2023	2024	2025 and Long term

Lithium Carbonate 10,869 11,026 11,273 11,601 11,834

Average lithium carbonate pricing estimate over the life of mine is approximately \$11,760 per tonne.

#### Base Case Sensitivity Analysis

Discount Rate	News Release - October 30, 2017 (US\$ Million)			Current (US\$ Million)			
	NPV After Tax	IRR After Tax	NPV Pre-Tax	IRR Pre Tax	NPV After Tax	IRR After Tax	
6%	\$1,474		\$2,303		\$1,545	\$2,400	
8%	\$1,128	24.4%	\$1,792	29.4%	\$1,200	\$1,889	33.7%
10%	\$859		\$1,398		\$933	\$1,495	

#### Process Studies and Engineering

The process begins with the extraction of brine through production wells. From the wells, the brine is pumped into large solar evaporation ponds. The evaporation process in the solar ponds starts with a pre-concentration stage where more than 90% of the sodium chloride from the brine is expected to crystallize out. This pre-concentration stage has an evaporation period of approximately 160 to 180 days, during which the volume of brine is reduced by approximately 95%.

In order to promote the production of lithium carbonate at the lowest possible cost, the solar evaporation process will be designed so that the lithium concentration in the brine reaches values in the range of 2.5%. The pre-concentrated brine is then subjected to chemical treatment with sodium sulfate in order to remove most of the calcium present. The precipitation of gypsum and then post-concentration will bring the lithium concentration in the brine to approximately 6%.

From there, the 6% brine is to be transported to a processing plant to be built in the town of Fiambala, Catamarca (approximately 160 km from the 3Q Project).

The processing plant for producing lithium carbonate includes the final purification of the concentrated lithium brine feeding the lithium carbonate precipitation stage. For this purpose, the conventional process used by lithium carbonate plants in operation has been taken as a reference, which includes the following:

Elimination of the boron content by solvent extraction. First stage where boron-free brine is mixed with mother liquor from the lithium carbonation stage to dilute lithium to 1% and remove Ca (Calcium) and some Mg (Magnesium). Second stage treatment of the boron-free brine with a mixture of slaked lime and soda ash, to remove low residual levels of magnesium. The purified brine, containing 1% lithium dissolved as lithium chloride, is transferred to three reactors in series, where lithium carbonate is precipitated by the addition of sodium carbonate solution (at 28 wt.%). The slurry containing the precipitated product is separated from the mother liquor by filtration and is washed with soft water. Finally, the product is dried, classified and packed.

#### Lithium Resource Summary

	Lithium Grade Cut-Off of 520 mg/L				Lithium Grade Cut-Off of 400 mg/L			
	Measured Brine Volume (m <sup>3</sup> )	Indicated	M&I	Inferred	Measured Brine Volume (m <sup>3</sup> )	Indicated	M&I	Inferred
	1.247E+07	1.751E+08	1.875E+08	3.532E+08	1.247E+07	3.930E+08	4.055E+08	7.418E+08
	Average Concentration (mg/L)				Average Concentration (mg/L)			
Lithium	792	710	716	713	792	560	567	567

	Tonnage				Tonnage			
Lithium	9,876	124,309	134,185	251,662	9,876	220,135	230,011	420,418
Lithium Carbonate	52,569	661,673	714,242	1,339,546	52,569	1,171,735	1,224,305	2,237,803

Additional information with respect to the 3Q Project and the estimated mineral resources thereon can be found in the Company's technical report entitled "Mineral Resource Estimate Technical Report on the Tres Quebradas Lithium Project, Catamarca Province, Argentina". The report is effectively dated as of May 23, 2017. A summary of the resource estimate is highlighted in the table above at two cut off grades: 400 mg/L Li and 520 Mg/L Li. The 20-year mine life is estimated using only measured and indicated resources at the higher cut-off grade of 520 mg/Li and inferred resources are not included for this purpose.

#### Environmental and Permitting Considerations

The Company is fully permitted for the current work program to feasibility and up to construction. The current focus is on baseline studies and Neo Lithium has completed the analysis for flora, fauna, limnology and microbiology for the summer, fall and winter. Social and archeology studies have also been completed. Soil, air, landscape and paleontology studies are expected to be completed before the end of the year. These environmental studies are required to support the full environmental impact assessment report that is required, along with an economic study, to obtain a mine construction permit. As mentioned in our previously issued news release dated September 6, 2017, this environmental impact assessment report is expected to be completed and delivered to the mining authorities in the first half of 2018 and is expected to be the final permit required before mine construction. An easement agreement has been granted for mine construction and road access to the site.

#### Qualified Person

Randy Pitts, Mining Engineer, Qualified Professional Member (QP) of Mining Metallurgical Society of America (MMSA) is an independent qualified person and has reviewed and approved the disclosure regarding the 3Q Project in this press release. In accordance with National Instrument 43-101, the Company has filed the completed technical report with respect to the release of the results of the PEA under the Company's profile on the SEDAR website ([www.sedar.com](http://www.sedar.com)) and on the Company's website ([www.neolithium.ca](http://www.neolithium.ca)).

#### About Neo Lithium Corp.

[Neo Lithium Corp.](#) is an established lithium brine exploration company focused on its wholly-owned, high quality 3Q Project located in Latin America's Lithium Triangle in the Province of Catamarca, Argentina. The Company is quickly advancing the 3Q Project given the rapidly growing lithium battery market that is driven largely by the growth of the electric vehicle market, and other consumer electronic products as the world moves towards cleaner and more efficient sources of energy.

Neo Lithium is well capitalized to continue the rapid development of its 3Q Project, a unique high-grade and low impurity lithium brine lake and salar complex, which encompasses approximately 35,000 hectares.

The technical team that discovered this unique salar complex is one of the most experienced in the industry, having discovered and led the technical work, including resource definition and full feasibility study that established the Cauchari lithium salar as the third largest lithium brine resource in the world.

Additional information regarding [Neo Lithium Corp.](#) is available on SEDAR at [www.sedar.com](http://www.sedar.com) under the Company's profile and at its website at [www.neolithium.ca](http://www.neolithium.ca), including various pictures of ongoing work at the 3Q Project.

*Neither TSX Venture Exchange nor its Regulation Services Provider (as that term is defined in the policies of the TSX Venture Exchange) accepts responsibility for the adequacy or accuracy of this release. The TSX Venture Exchange Inc. has in no way approved nor disapproved the contents of this press release.*

*Cautionary Note Regarding Forward Looking Statements -- This news release contains forward-looking information regarding Neo Lithium, its business and the 3Q Project within the meaning of that term under Canadian securities laws. Such forward-looking information includes statements with respect to the economic results of the PEA and the Company's ability to achieve such results (including lower capital costs associated with pond construction as a result of optimization), the Company's continued advancement of the 3Q Project, the Company's ability to be a low-cost lithium carbonate producer, the growth rate of the lithium and technology metals industries and the demand for the Company's products, the ability to finance the 3Q Project, future lithium prices, and the permitting status of the Company to construction. Generally, forward-looking statements can be identified by the use of words such as "plans", "expects" or "is expected", "scheduled", "estimates" "intends", "anticipates", "believes", or variations of such words and phrases, or statements that certain actions, events or results "can", "may", "could", "would", "should", "might" or "will", occur or be achieved, or the negative connotations thereof. These forward-looking statements are subject to numerous risks and uncertainties, certain of which are beyond the control of the Company, which could cause the actual results, performance or achievements of the Company to be materially different from the future results, performance or achievements expressed or implied by such statements. These risks include, without limitation, risks related to failure to obtain adequate financing on a timely basis and on acceptable terms, political and regulatory risks associated with mining and exploration activities, including environmental regulation, risks and uncertainties relating to the interpretation of drill and sample results and relating to resource estimations, risks related to the uncertainty of cost and time estimation and the potential for unexpected delays, costs and expenses, risks related to lithium and potash price fluctuations, the market for lithium products, and other risks and uncertainties related to the Company's prospects, properties and business detailed elsewhere in the Company's disclosure record. Although the Company believes its expectations are based upon reasonable assumptions and has attempted to identify important factors that could cause actual actions, events or results to differ materially from those described in forward-looking statements, there may be other factors that cause actions, events or results not to be as anticipated, estimated or intended and undue reliance should not be placed on forward-looking statements.*

## Contact

For further information, please contact:

[Neo Lithium Corp.](#)

*Carlos Vicens*

*cvicens@neolithium.ca*

---

Dieser Artikel stammt von [Rohstoff-Welt.de](#)

Die URL für diesen Artikel lautet:

<https://www.rohstoff-welt.de/news/285285--Neo-Lithium-Files-Technical-Report-with-Positive-PEA-Results-on-its-3Q-Project-Showing-a-Capital-Cost-reduction>

Für den Inhalt des Beitrages ist allein der Autor verantwortlich bzw. die aufgeführte Quelle. Bild- oder Filmrechte liegen beim Autor/Quelle bzw. bei der vom ihm benannten Quelle. Bei Übersetzungen können Fehler nicht ausgeschlossen werden. Der vertretene Standpunkt eines Autors spiegelt generell nicht die Meinung des Webseiten-Betreibers wieder. Mittels der Veröffentlichung will dieser lediglich ein pluralistisches Meinungsbild darstellen. Direkte oder indirekte Aussagen in einem Beitrag stellen keinerlei Aufforderung zum Kauf-/Verkauf von Wertpapieren dar. Wir wehren uns gegen jede Form von Hass, Diskriminierung und Verletzung der Menschenwürde. Beachten Sie bitte auch unsere [AGB/Disclaimer!](#)

---

Die Reproduktion, Modifikation oder Verwendung der Inhalte ganz oder teilweise ohne schriftliche Genehmigung ist untersagt!  
Alle Angaben ohne Gewähr! Copyright © by Rohstoff-Welt.de -1999-2026. Es gelten unsere [AGB](#) und [Datenschutzrichtlinien](#).