

# Critical Elements Corporation: Corporate Update and Strategic Partner Discussions

written by Raj Shah | February 7, 2018

✘ February 7, 2018 ([Source](#)) – **Critical Elements Corporation** (the “Company” or “Critical Elements”) (TSX VENTURE:CRE)(OTCQX:CRECF)(FRANKFURT:F12) is pleased to provide an update to its shareholders on the most recent discussions with strategic partners and a review of 2017 accomplishments and recent lithium market developments.

## **Strategic Partner and Project Financing Discussion**

Critical Elements continues to work closely with its financial advisor, Canaccord Genuity Corp., to evaluate ongoing interest from global strategic partners that seek to accelerate the Rose Lithium-Tantalum project to production.

The process is organized, competitive and the interest is strong, in parallel we are working with banks and financial institutions to accelerate the debt financing portion of the project.

In a recent trip to Asia, the company met with several OEMs, cathode manufacturers, trading houses and cell manufacturers. More than 12 non-disclosure agreements with strategic parties are now in place and currently in the process of reviewing the data room, illustrating the competitive tension in the lithium market.

The end-users recognize our management abilities to successfully deliver lithium products, and our development strategy gives the flexibility to meet all major end-users current and future

needs.

## **Lithium Market Update**

Global demand for lithium products has recently intensified with the aggressive launch of OEM Electric Vehicle platforms and government mandates for vehicle electrification. This has been accompanied by significant equity and project financings as well as strategic investment and merger and acquisition activities in the lithium sector.

2017 has certainly been an exciting year in the lithium sector. Regulators across the globe continue to make strides to curb greenhouse emissions and pave the way for electric vehicles by establishing plans to phase-out internal combustion engines and instead rely on lithium-ion batteries as an energy alternative. Of particular note, some of the world's largest car markets, most notably China, have announced significant policy changes and target dates to stop the production and sales of traditional energy vehicles within their borders. Automakers are responding to this movement by repurposing their manufacturing platforms in preparation for significant electric vehicle sales. In fact, over the past twelve months major automakers collectively announced that they would spend over US\$100 billion on establishing electric vehicle platforms by 2030 to keep pace with forecast demand.

Key announcements by some of the world's largest auto manufacturers include:

- US\$11.0 billion investment by 2022 supporting 40 electric models  
(<https://www.reuters.com/article/us-autoshow-detroit-ford-motor/ford-plans-11-billion-investment-40-electrified-vehicles-by-2022-idUSKBN1F30YZ>)
- US\$21.5 billion investment in electric vehicles over the

next five years  
(<http://english.yonhapnews.co.kr/business/2018/01/17/0502000000AEN20180117008651320.html>)

- US\$40 billion in electric vehicle investments by 2020  
(<https://www.reuters.com/article/us-volkswagen-investment-electric/volkswagen-accelerates-push-into-electric-cars-with-40-billion-spending-plan-idUSKBN1DH1M8>)

In attempts to secure lithium supply in anticipation of significant electric vehicle demand, downstream users of lithium are increasingly partnering with and making strategic investments in developers of lithium projects.

## **2017 Developments**

Numerous important milestones were achieved in 2017 including the appointment of Dr. Steffen Haber as President of the Company. Dr. Haber was previously President and CEO of Rockwood Lithium which was acquired by Albemarle for US\$6.2B.

In March 2017, we successfully completed our spodumene pilot plant work with outstanding results compared to industry standards. Our low iron and mica deposit yielded recoveries up to 89% in Lock cycle and we consistently achieved concentrate grades of up to 6.56%  $\text{Li}_2\text{O}$ . Those results confirmed the metallurgical advantages of our deposit and the “tried and true” / low risk flowsheet for the feasibility study and future spodumene plant.  
(<https://www.cec corp.ca/en/critical-elements-successfully-completes-pilot-plant-work-produce-spodumene-concentrate-grading-6-56-li2o/>)

In May 2017, we announced the results of our lithium carbonate pilot plant which again proved the unique quality of our ore yielding 88.4% recovery rates with a 99.9% purity and overall recoveries from ore to lithium carbonate of 81.4%. These results

compare favourably to overall recovery benchmarks for the market of 60% to 70% from spodumene to lithium carbonate. (<https://www.cec corp.ca/en/critical-elements-successfully-completes-pilot-plant-work-lithium-carbonate-conversion/>)

In June 2017, the former CFO at Rockwood Lithium and colleague of Dr. Steffen Haber, Dr. Marcus Brune, joined the Company as a director. The appointment of Dr. Brune also increased the lithium market know-how of our team. We also hired Mr. Lloyd Mayappo to join our team as Cree Relation Coordinator to increase our local activities and facilitate communication in the Eastmain community. (<https://www.cec corp.ca/en/critical-elements-appoints-ex-rockwood-lithium-cfo-board-directors/>) (<https://www.cec corp.ca/en/lloyd-mayappo-joins-critical-elements-cree-relation-coordinator/>)

In July 2017, we submitted our Environmental Impact Study to the Environmental & Social Impact Review Committee (COMEX) and to the Canadian Environmental Assessment Agency (CEAA). This was an important step to maintain our development timeline. (<https://www.cec corp.ca/en/critical-elements-submits-environmental-impact-study-rose-lithium-tantalum-project/>)

In August 2017, our joint-venture partner Lepidico Ltd. (“Lepidico”) announced positive drilling results from the Lemare Project and that supports future potential beyond our current development plans. Our exploration team continued to demonstrate the geological potential of our strategic land position in James Bay. (<https://www.cec corp.ca/en/wide-spodumene-intercepts-at-lemare-lithium-project/>)

### **Lemare Project Drilling Highlights:**

- 33.7 m @ 0.94% Li<sub>2</sub>O (LE-17-29)

- 18.0 m @ 2.00% Li2O (LE-17-30)
- 28.5 m @ 2.15% Li2O (LE-16-13)
- 24.0 m @ 1.87% Li2O (LE-16-14)
- 21.0 m @ 1.75% Li2O (LE-16-03)

In September 2017, we welcomed the results of our Definitive Feasibility Study (DFS) on the Rose Lithium-Tantalum project. The results returned Pre-tax IRR of 48.2% and an NPV<sub>8</sub> of \$1.25B. (<https://www.ceccorp.ca/en/critical-elements-announces-positive-feasibility-study-pre-tax-npv-8-1-257-b-pre-tax-irr-48-2-rose-lithium-project/>)

### **Feasibility Study Highlights (press release of September 6<sup>th</sup> 2017)**

- Average annual production of 186,327 tonnes of chemical grade lithium concentrate
- Average annual production of 50,205 tonnes of technical grade lithium concentrate
- Average annual production of 429 tonnes of tantalum concentrate
- Expected life of mine of 17 years
- Average operating costs of \$66.56 per tonne milled, \$458 (US\$344) per tonne of concentrate (all concentrate production combined)
- Estimated initial capital cost \$341.2 million before working capital
- 100% equity basis for project
- Average gross margin 63.6%
- After-tax NPV of \$726 million (at 8% discount rate), after-tax IRR of 34.9% and price assumption of US\$1,500 per tonne technical grade lithium concentrate, US\$750 per tonne chemical grade lithium concentrate, US\$130 per kg tantalum pentoxide
- Anticipated construction time to start of production of 21

months

## **Financial Advisor Appointment**

In December 2017, we appointed Canaccord Genuity as financial advisors to evaluate and coordinate the currently in progress project financing and off-take negotiations. The Critical Elements team and our advisors are currently in a competitive process of negotiation with multiple parties for the project financing, including off-take agreements. (<https://www.cec corp.ca/en/update-strategic-partner-retention-financial-advisor-operational-update/>)

Jean-Sébastien Lavallée (OGQ # 773), geologist, shareholder, Chairman and CEO of the Corporation, and “Qualified Person” under Regulation 43-101, revised and approved the technical content of this press release.

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