

Positive feasibility study results reinforce eCobalt's leadership position in U.S. cobalt market

Over the last twelve months, amid a complex interplay of supply constraints and positive demand pressures, the price of cobalt has gone from around \$12/lb to just over \$27/lb. While we can resultantly expect a number of new projects to begin exploration efforts, there remains a single near term, primary supply of cobalt in the United States. As a company that has recently received confirmation of functional project economics from a positive feasibility study (FS), eCobalt Solutions Inc. (TSX: ECS | OTCQB: ECSIF) ("eCobalt") has become perhaps the safest junior cobalt investment that the States has to offer.

Anyone who hasn't yet heard of the imminent explosion in the electric vehicle market likely doesn't care, so I won't go too far into the details, but half of the vehicle manufacturing cost will be taken up by the battery unit, making key ingredients such as lithium and cobalt the next hot commodities. In terms of the manufacturers creating the demand, Tesla may have the Nevada gigafactory, but China has numerous megafactories that deserve far more attention than Mr Musk's hype-fuelled affairs. The fact that Chinese companies such as CATL and Lishen are already producing large quantities of lithium ion units means that their scaling will have a greater effect on the marketplace than a single factory, regardless of size.

In 2016, megafactories burned through 46,000 tonnes of cobalt, but by 2020, it'll be more like 76,000 tonnes. eCobalt's Idaho Cobalt Project (ICP) is slated to provide a weighted average

annual production of 2.4M lbs of cobalt, 3.3M lbs of copper and 3,000 oz of gold over a 12.5 year mine life with an estimated pre-production period of 24 months utilizing a 0.25% cobalt cut-off grade. The economic model uses a 34% corporate tax rate and a 7.5% discount rate, resulting in an after-tax NPV of \$135.8M and an IRR of 21.3% using an average base case price of \$26.65/lb for contained cobalt in cobalt sulphate.

The authors of the study have concluded that it contains adequate detail and information to support a positive outcome for the ICP. Standard industry practices, equipment and design methods were used, and it was further concluded that the ICP contains a viable cobalt and base metal resource that can be successfully mined by underground methods and recovered to concentrate with conventional milling processes. Using the assumptions contained in the FS, the project's economics merit promoting the ICP to the financing and execution stage.

Moving forward, management's primary goal is to evaluate all opportunities for the ICP. eCobalt is considering securing offtake agreements for cobalt sulphate heptahydrate, which eCobalt has produced from recent metallurgical testwork and shipped to potential offtakers for evaluation. Initial feedback regarding product quality has been positive and requests for additional sample material are being fulfilled, but side projects aside, the fact that cobalt will likely move into supply deficit sometime (very shortly) after 2020 means that those producers lucky enough to be near-term in 2017 should be able to catch the very sharpest edge of the battery upside.

For me, the timing of this operation is just impeccable; looming market expansion and supply constraints will most certainly send explorers running for the drills, but with eCobalt almost powering up the conveyor belts for the first time, this is a company positioned so well as to be difficult to believe. Share performance on eCobalt has been immensely strong over the past two years, but this is nothing compared

to what will likely happen over the next five. Congratulations are certainly due for the positive feasibility study results, since this represents a culmination of many years of hard work, but investment is what the ICP needs now, and I don't think it's going to struggle.

IC Potash's SOP (sulphate of potash) to be the world's cheapest to produce



IC Potash ('ICP', TSX: ICP | OTCQX: ICPTF) has filed its NI 43-101 Feasibility Study (FS) for the Ochoa Sulfate of Potash (SOP) Project in New Mexico and presented the recommendations during a press conference on March 12. The presentation left a very optimistic outlook from two perspectives: IC Potash's project outlook and the overall potash market situation, especially insofar as Sulfate of Potash (SOP or K_2O) is concerned. ICP intends to produce high quality SOP while greatly reducing production costs.

The 'name of the game' for IC Potash from now until the start of delivery (expected to start in early in 2017) will be to

secure the necessary funding to build the mine while setting up the related engineering procurement and tenders. ICP will also have to secure the final environmental permits. Sydney Himmel, ICP's President and CEO, spoke confidently and suggested that there are no obstacles in the way. He suggested that the company has been in contact with multinational banks from Europe to Asia to secure the necessary funds.

ICP has already secured (in 2012) an offtake agreement with Yara International, one of the world's largest distributors of mineral fertilizers, which greatly facilitates the financing process. Yara has access to many international markets and distributors. Under the agreement, Yara will buy 30% of all ICP products produced at its Ochoa project in New Mexico for a 15 years long period. Yara noting that it has the financial resources and expertise in international fertilizer markets to contribute towards bringing the Ochoa project into production. Essentially, the Feasibility Study predicts an economically viable mining operation and processing plant, capable of producing 714,400 tons of SOP per year over a period of at least 50 years.

During the press conference Sidney Himmel commented that ICP will be "one of the world's leading companies for SOP. We intend to immediately initiate the next phase of engineering work and project financing". Some of the promising highlights from the Feasibility Study include: a three year period for construction and commissioning beginning in Q2 2014 and continuing through Q2 2017, leading to 50 years of operation. SOP production will commence in 2017 (at first 48% of annual capacity and then full capacity expected in 2018). Room-and-pillar mining and dual split super section mining methods will be used to extract ore at a rate of 3.7 million tons/year.

The average SOP recovery is estimated to be 82%. Capital costs are expected to be in the range of USD\$ 1.018 billion. The FS Importantly notes that the Ochoa project has indentified potential of 1.017 billion tons of SOP at an average grade of

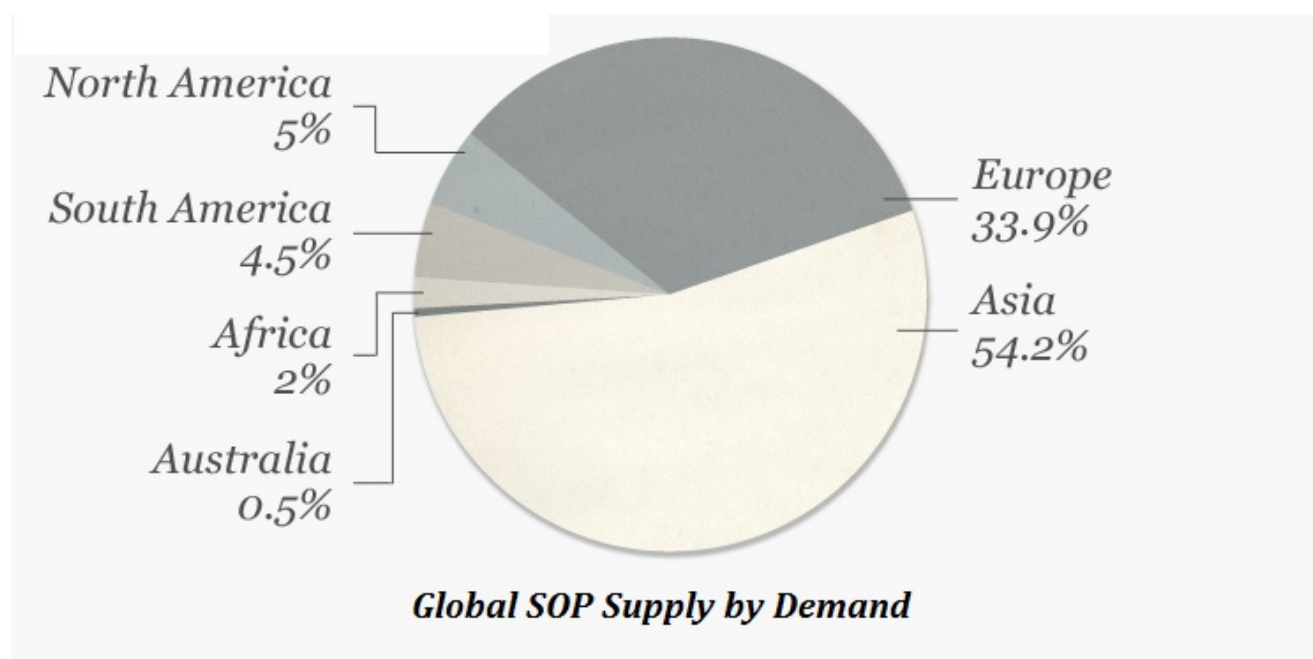
83.9% (polyhalite content). The price for SOP, which was incorporated in the financial model was USD\$ 636 per ton. This is below the current average price for granular SOP of USD\$ 680/ton for California delivery in the fourth quarter of 2013. For the fourth quarter of 2013, ICP has estimated that SOP prices may increase to well above USD 700/ton the price of soluble SOP was reported to ICP estimates at 740 USD per ton at Florida Delivery.

ICP's main target markets are California, Northern Europe and parts of North Africa, where soil salinity makes SOP especially effective. SOP does not contain chlorides and it typically fetches higher prices than the more common Muriate of potash (MOP); SOP is more easily adaptable to various soils, even those presenting high salinity levels (as in North Africa), and is suitable for a variety of crops such as fruits, tobacco, potatoes and vegetables. In contrast, the more common MOP variety of potash does not tolerate high soil salinity, which reduces its range of applications. SOP is ideal for the European and South Western Asian markets, which are low in magnesium, and where Yara enjoys considerable distribution access.

Apart from ICP's strong position, the potash market itself is in better shape now than it was last year. At the end of 2013, J. P. Morgan issued a report suggesting that the oversupply in the potash market is less pronounced than it appears when considering potash deliveries in relation to operational capacity, which the analysts calculated at 72 %. J. P. Morgan also pointed out that the sales volume was probably less than predicted 2013 as a result of high price volatility after the largest potash producer in the world Uralkali abandoned the BPC joint venture with Belarus. In 2014, JP Morgan has estimated utilization of 89%.

The higher that percentage, the better it is for the potash market; indeed, the potash industry is in a phase of demand recovery while 2014 is being characterized by a favorable

price momentum. As for the Belarus-Russia potash dispute, Belarus wants to resume the formula of high price over volume – that formula that existed before the BPC breakup and also favored by CANPOTEX. J. P. Morgan believes that this change in strategy by Uralkali would trigger an increase in value at PotashCorp, Mosaic and Agrium among other majors. It so happens that SOP costs anywhere from 30% – 60% more than Muriate of Potash (MOP the kind of sulfate produced by PotashCorp or Uralkali). ICP is also the only new SOP potash being developed in the world now and is marked by the lowest capital and operational costs (OPEX) as well. The projected OPEX rate per ton of production at Ochoa will be about is USD\$ 150/ton, which is about 65% -70% less than the industry average of USD\$ 500-550/ton. ICP's SOP will be the world's cheapest to produce.



A world-class SOP play with extraordinary promise, IC Potash nearing completion of Feasibility Study



Sulphate of Potash (SOP) is the preferred potash fertilizer for chloride-sensitive, high-value crops where quality counts.

One of the most advanced-stage sulphate of potash (SOP) project developers in the world, IC Potash Corp. (TSX: ICP | OTCQX: ICPTF) announced on October 10th that it expects to complete and finalize its much-awaited Feasibility Study for its 100,000-plus-acre, flagship Ochoa SOP Project in southeastern New Mexico by December. ICP's objective is to become a global industry leader in the production and distribution of high-quality, low-cost specialty fertilizers.

"IC Potash is focused on the mining of polyhalite, a potash mineral, and its processing into sulphate of potash, the world's premium-priced potash, used in the agriculture of

fruits and vegetables and in salt-sensitive soils,” said Sidney Himmel, President and CEO of IC Potash. “The completion of the Feasibility Study will mark the most significant milestone achieved by ICP.”

Without question, Himmel and Co. have made significant progress on all key activities that advance the Ochoa SOP project; however, the Feasibility Study (which will contain final economic and technical data, along with definitive cost assessments) will enable to IC Potash to “*continue negotiations*” with various domestic and international institutions and strategic industry partners to fund the Ochoa SOP project. Yara International – the world’s largest distributor of all fertilizer products, based in Norway – made a \$40 million investment in ICP in 2012 (Yara also has a seat on ICP’s Board of Directors and an off-take agreement in place).

Since late last year, ICP’s staff of technical professionals along with its team of more than 100 distinguished industry consultants has been working tirelessly on the completion of the Ochoa Project Feasibility Study. Yesterday’s announcement also provided an operational update on pilot plant optimization tests, jurisdictional determination on water, water supply, and the draft environmental impact statement on the Ochoa Project.

In September, ICP successfully completed pilot plant testing, which demonstrated the robust nature of Ochoa’s flow sheet and the ability to successfully and economically convert raw polyhalite to SOP on a commercial scale (something that has never been done before). According to ICP, “The results were very positive, being consistent with the effective and efficient processing of Polyhalite ore into various grades of SOP, and will be incorporated into the Study with respect to final equipment selection and sizing and the computation of projected capital costs and operating costs.” Pilot testing

included the crushing, grinding, washing and dewatering of mined ore; calcination, which is the controlled heating to remove entrapped water thereby increasing ore solubility; leaching of calcined ore and crystallization of SOP.”



Sidney S. Himmel, President and CEO of IC Potash Corp.

Earlier this summer, the US Army Corps of Engineers determined that the Ochoa Project area is composed entirely of uplands and upland drainage; therefore it does not require federal permits. As a result, the Corps issued ICP a Jurisdictional Determination confirming that its planned mining and processing operations will not require the Corps' authorization to proceed with mine and processing plant construction, nor will it be subject to ongoing monitoring once in commercial operations.

Last month, the New Mexico Office of the State Engineer confirmed that the ICP had met the requirements of state statutes and may apportion water from the Capitan Reef aquifer for mining and industrial use by the Ochoa Project. The water will be treated by reverse osmosis to reduce dissolved solids (to the extent required for process water to be used in the leaching and crystallization processes) required to produce SOP.

In August, the US Department of the Interior, Bureau of Land Management published the draft environmental-impact statement available for public scrutiny, and three subsequent public hearings were held in New Mexico, to give interested stakeholders the opportunity to comment and make their opinions on the Ochoa Project known. The comment period closed on September 23rd. With tremendous support from both the state and federal levels, IC Potash expects the permitting process to proceed as planned, culminating in clearing the final EIS in the first quarter of 2014.

“We firmly believe that the investment of time and resources devoted to developing our long-life asset will provide a strong foundation for future growth and deliver long-term value for our shareholders for decades to come,” explains Himmel. “However, we still have more hard work ahead of us. While the ICP continues to enjoy sufficient liquidity to complete the Feasibility Study – and several months of operations thereafter – we recognize that the financial market environment for project funding could remain challenging for junior mining companies for the next 12 to 18 months. Nonetheless, we stand ready to meet these challenges with the same commitment, skill and dedication that has served to differentiate IC Potash as a world class company with extraordinary future promise.”

Ty Facts about potash:

- Potash is an essential, non-substitutable commodity in agriculture – needed more now than ever – it’s a multi-billion-dollar global industry.
- The world’s population is 7.2 billion. The global populace continues to grow at a rate of 82-million-plus people per year. Imagine almost two-and-a-half times the entire population of Canada unloaded onto to the planet each and every year. That’s a lot of mouths to feed every day.

- *Sulphate of Potash (SOP)*: the second major form of potash, with a chemical formula of K_2SO_4 . It is particularly effective in the cultivation of fruits, vegetables, potatoes, tobacco and tree nuts. SOP has a total global market size of approximately 5.5 million short tons. SOP provides the potassium needed to nourish and strengthen plants, ward off disease, improve transportability and add flavor. SOP improves crop yield and provides sustainable food supplies for the rapidly expanding global population, growing middle-class, and shrinking agricultural land.
- *Muriate of Potash (MOP)*: the most common form of potash, also known as standard potash. It is particularly effective when used in the commercial cultivation of the carbohydrate crops including wheat, oats, and barley. MOP is composed of potassium and chloride in the forms of charged atoms, and therefore in the form of a salt which is soluble in water. MOP has a total global market size of approximately 60 million short tons.
- *The difference between the SOP and MOP potash*: SOP is superior to MOP because it does not contain chloride, which has a toxic impact on many food plants, especially fruits and vegetables. When MOP is used, soils fall victim to increasing levels of chloride salt which hurt plant yields. Chloride-free fertilizer enhances plant health, so the demand for SOP has increased. An abundance of research has concluded that the demand for specialty fertilizers, particularly SOP, has averaged a substantial annual growth over the last five years. In addition, SOP has a lower salinity index than MOP. The higher salinity of MOP can cause plants to have difficulty absorbing water and nutrients from the soil thereby diminishing the quality and yield of the crop. SOP has a salinity index of 46, the lowest of the potassium fertilizers, while MOP has a salinity index of 116. For these reasons, producers of high value crops

use SOP over MOP.

Why IC Potash makes sense:



The IC Potash Corp. Ochoa SOP Project is located in southeastern New Mexico.

- There world's population is exploding. People have to eat and will demand better and higher quality fruits and vegetable (and coffee, oilseeds, tree nuts, tobacco, etc.).
- A key component in the ability to develop a cost-effective and lucrative mining operation is the quality of the deposit (asset). ICP's Ochoa deposit high-grade polyhalite deposit is accessible, has sub-horizontal and conformable bedding, and consistent mineral and chemical compositions throughout.
- The IC Potash Ochoa Project is a long-life asset in a very friendly and safe mining jurisdiction (tremendous US federal and New Mexico state support).

- SOP potash from the Ochoa Project will be premium quality and highly sought worldwide, and priced at a premium to MOP (standard potash).
- The SOP potash market is underserved, with no other viable emerging sources.
- SOP potash sells at a price substantially higher than that of traditional potash (MOP).
- ICP will produce and distribute SOP potash (and other sulphate of potash mineral fertilizers) in the bottom quartile of the world cost curve – and will leverage this advantage to enter into existing and emerging markets.