ECM Capital Advisors
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Electra Battery Materials Corp.

Investor Overview
April 2025

Sector: Critical Minerals and Processing Canada

ELBM – TSX.V, NASDAQ

Market Data

Closing price, C$/share	$1.44
52-Week Range, C$/share	$3.80/$1.26
Avg. 3M Dly Vlm (mm)	0.03
Shares O/S (Basic)	14.8
Shares O/S (F.D.)	17.9
Market Cap, C$M	$21.3
Enterprise Value, C$M	$108.3
Cash, C$M	$3.7
Debt, C$M	$90.7

Data as of April.22, 2025

Stock Chart

Source: Capital IQ, Prices in Canadian dollars

Disclaimer

ECM Capital Advisors has provided professional services to Electra Battery Materials Corp. for which it has been compensated.

Investment Highlights

- The ELBM investment thesis is premised on the belief that the Company's cobalt refinery is a strategic asset that will benefit from four primary drivers:
- First, the US government is in the process of on-shoring its EV supply chain and reducing its dependence on foreign nations – primarily China.
- Second, as a consequence of being a North American based supplier, under the terms of the Inflation Reduction Act (IRA), Original Equipment Manufacturers that use ELBM's cobalt sulfate in their battery cathodes can qualify their vehicles for up to a US$7,500 tax credit, which is a significant financial incentive.
- Third, ELBM believes that compared to Chinese cobalt sulfate producers, which currently supply about 94% of the worldwide market, its refinery emits approximately 51% less Green House Gas emissions.
- Fourth, with the refinery expected to begin production in mid-2026, management has started to assemble a portfolio of growth initiatives that have the potential to firmly position ELBM as a key player in the North American EV supply chain.
- Electra has entered into a 5-year agreement with LG Energy Solutions to supply up to 20,000 tonnes of cobalt sulfate. This equates to approximately 80% of the refinery's initial production capacity. In addition, ELBM has entered into clean cobalt supply agreements with both Glencore and Eurasian Resources Group S.A.R.L. which ensures the refinery has sufficient cobalt hydroxide feed to operate at capacity for at least 3 years.
- Our 12-month target price of $3.75/sh target is derived by applying a 7.0x multiple to our forecast 2028 EBITDA estimate of $33.0mm and discounting back one-year. Our valuation ascribes a nominal $15mm value to the Iron Creek cobalt-copper resource in Idaho. As our target price implies a 160% total potential return, we are initiating research coverage of ELBM with a BUY rating.

Introduction

Electra Battery Materials Corp. (ELBM-TSXV, NASDAQ) is in the process of completing construction of its fully permitted cobalt sulfate refinery located approximately 4 hours north of Toronto, Ontario. The refinery is expected to come on-line in mid-2026 and once operational, it will be the only cobalt refinery in North America to supply the domestic Electric Vehicle (EV) industry. By way of background, Electra has entered into a 5-year agreement with LG Energy Solutions (LGES) – to supply up to 20,000 tonnes of cobalt sulfate. This equates to approximately 80% of the refinery's initial production capacity. In addition, ELBM has entered into clean cobalt supply agreements with both Glencore and Eurasian Resources Group S.A.R.L. (ERG) which ensures the refinery has sufficient cobalt hydroxide feed to operate at capacity for at least 3 years.

Investment Thesis

The ELBM investment thesis is premised on the belief that the Company's cobalt refinery is a strategic asset that will benefit from four primary drivers. First, the US government is in the process of on-shoring its EV supply chain and reducing its dependence on foreign nations – primarily China. Second, as a consequence of being a North American based supplier, under the terms of the Inflation Reduction Act, Original Equipment Manufacturer's (OEM's) that use ELBM's cobalt sulfate in their battery cathodes, can qualify their vehicles for up to a US$7,500 tax credit, which is a significant financial incentive. Third, ELBM believes that compared to Chinese cobalt sulfate producers, which currently supply approximately 94% of the worldwide market, its refinery emits approximately 51% less Green House Gas (GHG) emissions. Finally, with the refinery expected to begin production in mid-2026, management has started to assemble a portfolio of growth initiatives that have the potential to firmly position ELBM as a key player in the North American EV supply chain.

US Policy is focused on onshoring its EV Supply chain

ELBM is ideally positioned to benefit from US efforts to on-shore its EV supply chain. China currently dominates all facets of EV manufacturing. In 2024, the country produced approximately 60% of all battery electric and plug-in hybrid electric vehicles sold globally. Aside from manufacturing, China also dominates multiple facets of the supply chain. For example, it accounts for 70% of EV battery production and refines +70% of battery grade lithium even though it only has about 8% of global lithium reserves. As previously mentioned, it also refines 94% of global cobalt sulfate even though the Democratic Republic of the Congo (DRC) accounts for about 77% of global cobalt mining.

In response to this dynamic, the US government has focused on de-risking its supply chain dependence. Specifically, the Biden Administration implemented a number of legislative initiatives aimed at strengthening the domestic EV sector. For example, in 2021 the US$550 billion Infrastructure Investment and Jobs Act (IIJA) was passed. The legislation contained specific provisions for battery materials processing and recycling. In August 2022 the $280 billion CHIPS and Science Act was enacted which aims to boost domestic research and manufacturing for the semiconductors used in various different sectors including EV manufacturing. Finally, in August 2022, the Inflation Reduction Act (IRA) was passed into law. The IRA provides for US$500 billion in spending and tax breaks which amongst other objectives, is designed to enhance clean energy initiatives in the United States.

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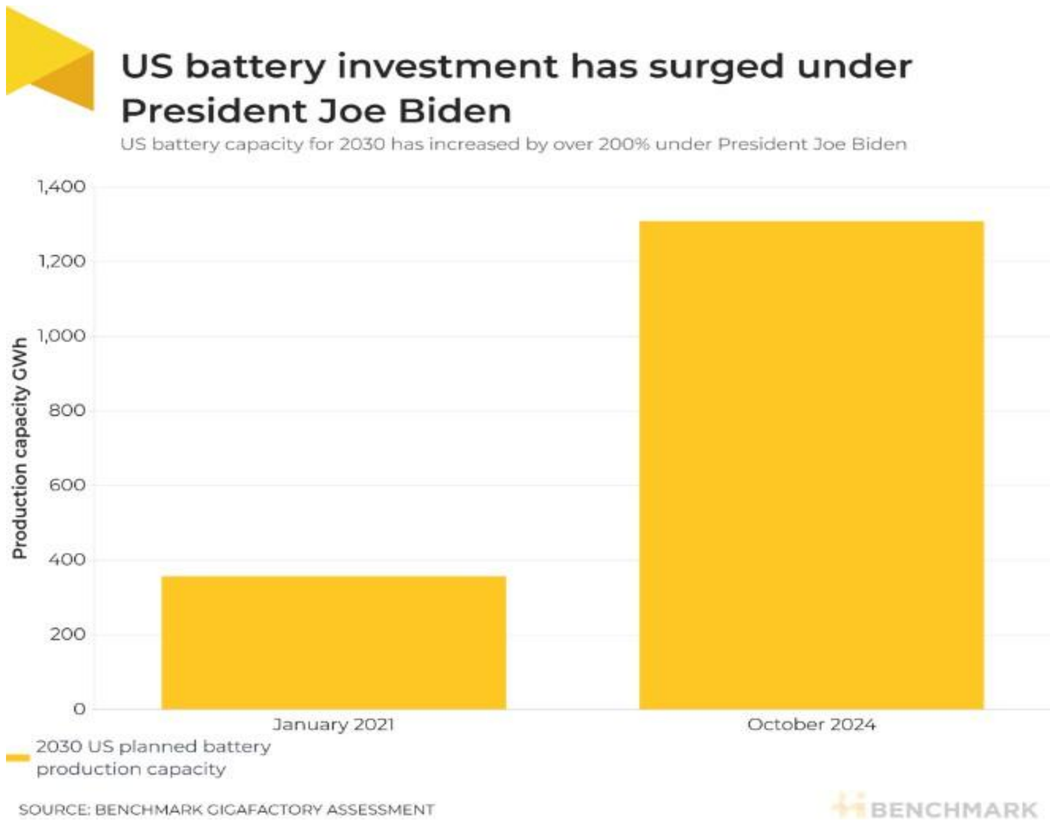
The IRA contains the Advanced Technology Vehicles Manufacturing (ATVM) Direct Loan Program, Clean Heavy Duty Vehicle Program and the Clean Vehicle Tax Credit. These initiatives are aimed at fostering a domestic presence in strategic areas of the EV supply chain. Although President Trump has signed an Executive Order freezing the disbursement of grants and loans to certain programs under the IRA and the IIJA, we would note three points. First, US$133 billion of investments in clean energy, including 35 battery factories, have either been announced, are under construction or operational in the US. This committed capital ensures there will be on-going demand for qualified battery components. Second, President Trump's trade policy continues to have a strong anti-China bias as he recently implemented duties on Chinese imports that range up to 145%. It therefore seems unlikely that the US focus around on-shoring its EV supply chain – particularly as it relates to critical minerals, will deviate. Third, a complete repeal of the IRA would require Congressional approval which seems unlikely given the number of Republican districts that are benefiting from the legislation.

Exhibit 1 – EV Battery spending under previous Administration



Source: Benchmark Minerals

The Inflation Reduction Act

The Inflation Reduction Act was passed into law in August 2022 and allows for US$500 billion in spending and tax breaks that are designed to enhance clean energy initiatives in the United States. The Biden Administration referred to the IRA as the single largest investment in climate and energy in American history.

Specifically, the legislation is focused on sustainably reducing the US' carbon footprint by 2030 as well as reviving the country's economic competitiveness, manufacturing productivity and energy independence. A key provision within the Act is the Clean Vehicle Tax Credit which provides consumers with a tax credit if they buy a new qualified plug-in or battery electric vehicle. The credit is available to individuals purchasing a vehicle for their own use (as opposed to resale), is subject to a means test and has a maximum value of US$7,500. A US$4,000 tax credit is also available for the purchase of a pre-owned EV. Beginning in 2024 buyers can transfer the tax credit to an eligible dealer in exchange for a purchase price discount at the point-of-sale. Note that despite President Trump freezing some of the funding available under the IRA, the Clean Vehicle Tax Credit remains in-place.

To qualify for the maximum tax credit a vehicle must meet the three primary criteria. First, final assembly of the vehicle must occur in North America. Second, 50% of the value of the battery components (2023) must be produced in North America. This percentage requirement increases annually reaching 100% in 2029. Third, 40% of the value of the critical materials used for the vehicle must be extracted, processed and/or recycled domestically or in a country that has a free trade agreement with the US. The 40% requirement increases annually until it reaches 80% in 2027 and includes cobalt, copper, graphite, lithium and nickel. Starting in 2025, any vehicle with critical minerals extracted processed or recycled by nations of concern, will not qualify for the subsidy. Nations of concern include China, Iran, North Korea and Russia.

These policies seem to be having an impact. Data gathered by MIT and the Rodium Group suggests that in the first two years of the IRA being enacted, U$133 billion of investments in clean energy technology and EV manufacturing were announced and that US$89 billion has already been invested. This represents a 305% increase over the two years prior to the IRA. It is estimated that a total of 271 manufacturing projects, with the potential to generate over 100,000 jobs will be created once all the announced projects become operational.

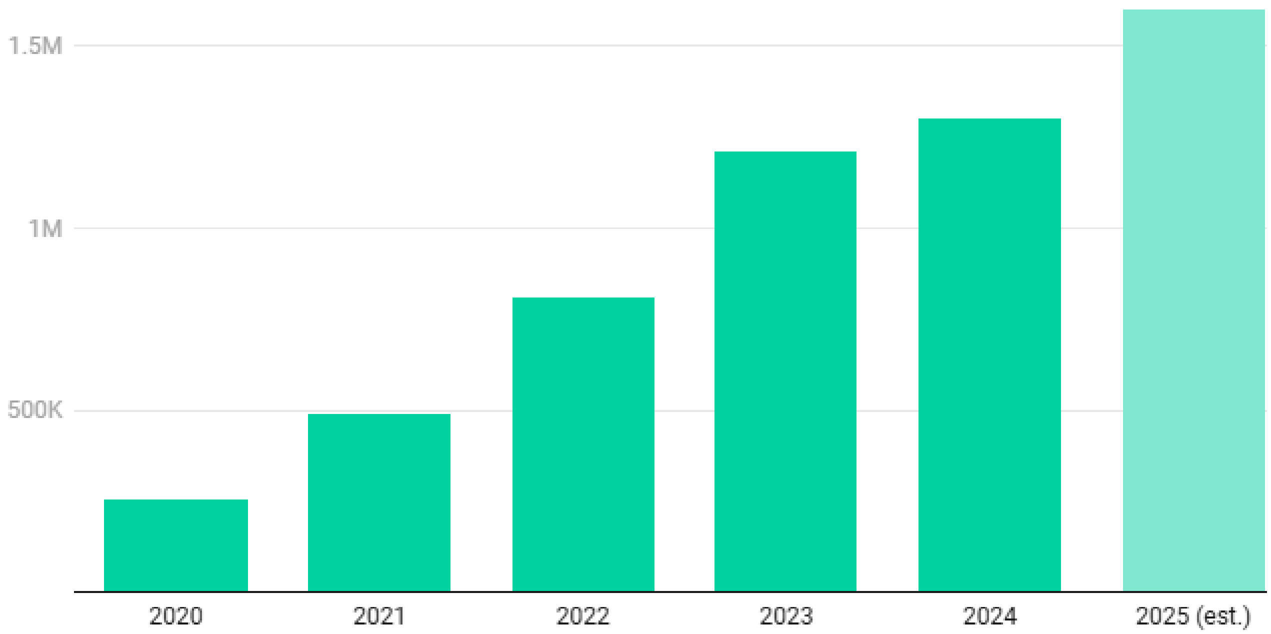
In the United States there are currently 35 battery factories either planned, under construction or in operation. This is a significant increase from 2019 when two plants were operational and another two were under construction. As previously mentioned, ELBM has agreed to supply LG Energy Solutions with up to 80% of its cobalt sulfate production. LGES is the second largest EV battery manufacturer globally and is rapidly expanding its US presence. In addition to investing US$3 billion in a battery plant in Holland, Michigan, to supply Toyota, it is also building a new US$5.5b battery plant in Arizona (2026 start date). The Company has partnered with Hyundai on a US$6.3 billion battery campus in Georgia, invested in a US$4.4 billion battery plant with Honda also in Georgia and partnered on three Ultium battery plants with GM in

Ohio, Tennessee and Michigan. ELBM management believes its cobalt sulfate – enough to power one million vehicles – could be used in any of these facilities. It is also possible that in the near-term, the cobalt sulfate produced by ELBM could be processed by LGES off-shore and then returned to the US for inclusion in a battery pack.

The US EV Market Overview

For 2024, US EV sales (BEV and PHEV) totaled 1.3 million units – which represents 7.3% YoY growth according to data published by Cox Automotive (Exhibit 2). Based on these estimates, EV sales would account for approximately 8% of the total US light vehicle market. By contrast, Chinese EV sales totaled approximately 11.2mm units and accounted for approximately 48% of new vehicle sales, while European Union EV sales totaled approximately 2.2mm units, which equates to an approximate 21% market share.

Exhibit 2 – US EV Sales 2020-2025



Source: Cox Automotive

Although various factors help explain why the US EV market share lags that of both China and Europe, two issues are particularly noteworthy. First, US consumers appear concerned over the lack of a nationwide charging infrastructure. This, in turn, raises concerns over the viability of purchasing an EV and plays on fears of being stranded with a dead battery and no access to a charging station. There are currently about 65,000 charging stations in the US. The Biden Administration committed US$7.5 billion to building an additional 500,000 charging stations nationwide by 2030. In addition, Tesla – which owns the most advanced charging network in the US, has agreed to provide other OEM's with access to 7,500 of its charging stations by the end of 2024.

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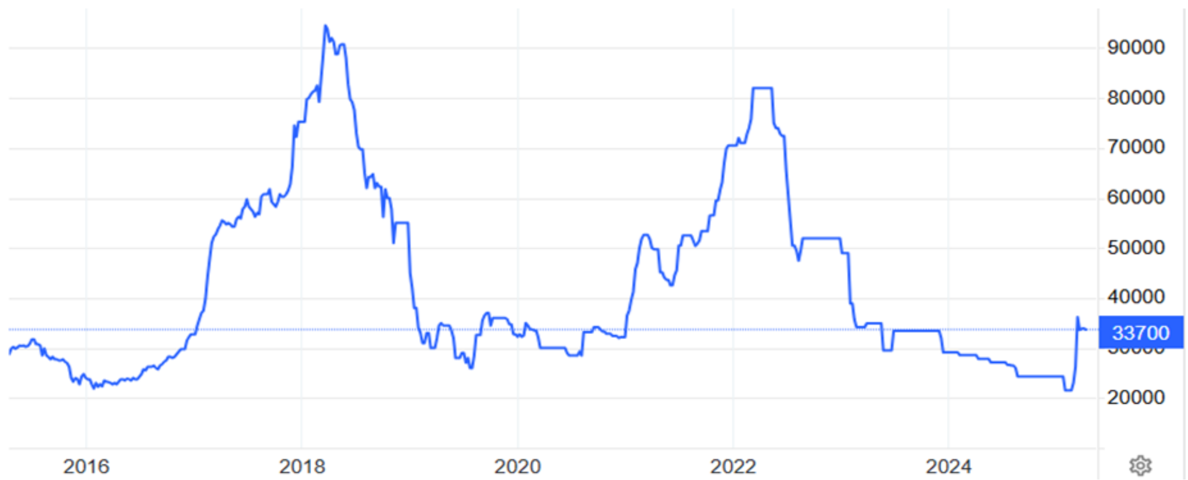
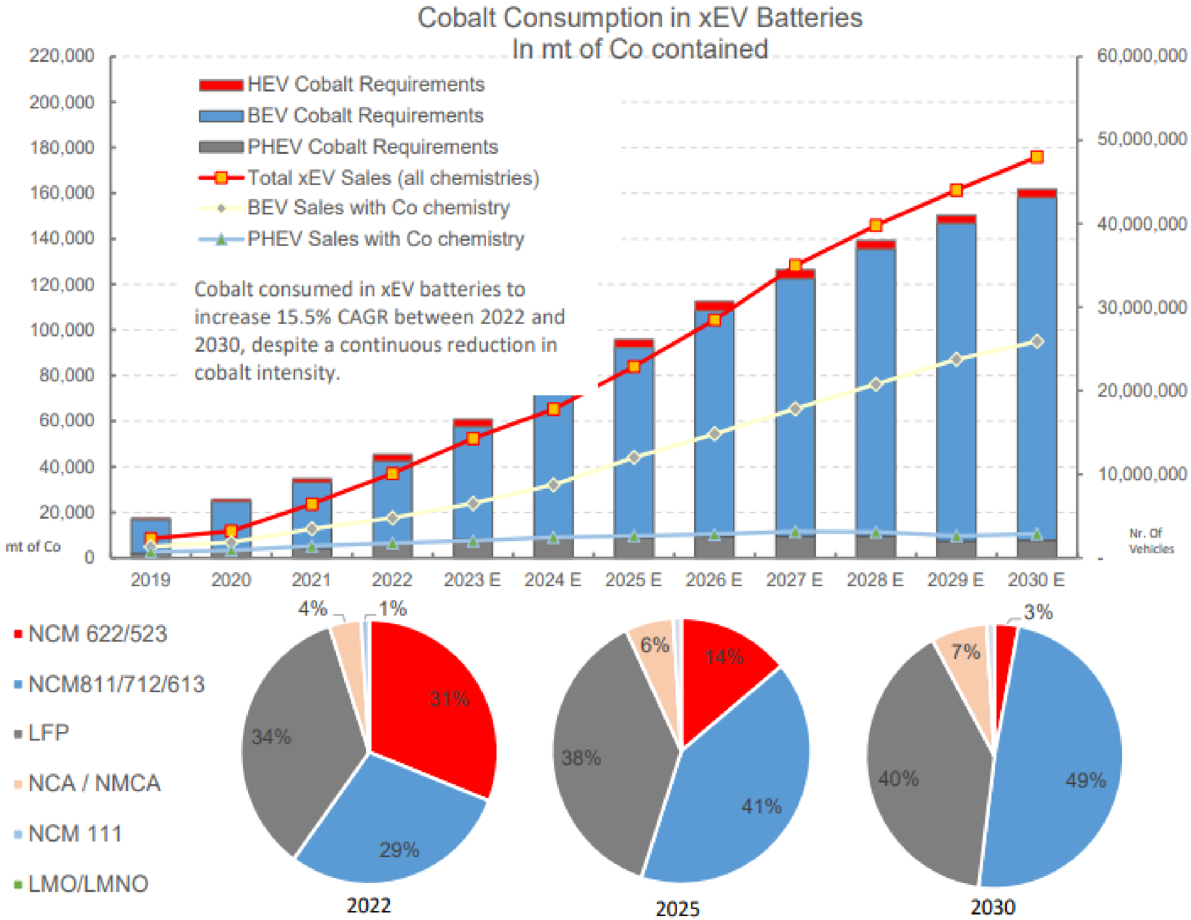
Second, OEM's have acknowledged the need to make the cost of an EV equivalent to that of an Internal Combustion Engine (ICE) vehicle. As 30% - 40% of an EV's total cost relates to the battery pack, this challenge has become an issue for the battery manufacturers. They, in turn, have responded by altering the battery chemistry with the objective of substituting lower priced compounds in-place of more expensive ones. A consequence of this approach has been the introduction of the Lithium Iron Phosphate battery (LFP) battery, which eliminates higher priced cobalt and nickel from the cathode. There are two points to note here. First, as illustrated in Exhibit 3, the price of cobalt has decreased quite significantly as output in the DRC, which accounts for approximately 77% of the global production, has significantly increased. The spot price of cobalt has gone from a peak of approximately US$43/lb in March 2018 to approximately US$15/lb currently. Second, while LFP batteries do have a lower cost chemistry compared to nickel based chemistries, the trade-off is lower energy density. All else being equal LFP batteries have less range per kilogram of capacity than either NMC or NCA batteries. Perhaps not surprisingly it is estimated that in 2025 Nickel Manganese Cobalt (NMC) and Nickel Cobalt Aluminum (NCA) batteries will have a combined 61% market share (Exhibit 4).

Exhibit 3 – Cobalt Price Chart



Source: Trading Economics Commodities

Exhibit 4 – Battery Market Share by Chemistry



Source: Jervois Global Limited

ELBM process is more environmentally sustainable

In July 2020, environmental consultant Minviro was retained to undertake a life cycle analysis of the environmental impact of producing one tonne of cobalt sulfate at the ELBM refinery versus one tonne of cobalt sulfate at the Huayou cobalt refinery in Tongxiang, China, which is one of the largest in the country. Based on the work undertaken by Minviro, the ELBM refinery was found to have a lower environmental impact with respect to its global warming impact, eutrophication potential, smog potential and freshwater consumption. The acidification potential of the two refineries was found to be equal, while the ELBM refinery was found to have a higher ozone depletion impact. This was attributed to ELBM using sodium hydroxide in its solvent extraction process. The study went on to state that the superior environmental performance of the ELBM refinery was to some degree likely reflective of its energy source being renewable electricity versus the Chinese grid which is mainly coal powered (Exhibit 5).

Exhibit 5 – Environmental Advantage of ELBM Refinery

Impact per Kilogram of Cobalt Sulfate Produced				
Category	Measure	First Cobalt	Chinese Refiner	Impact Reduction
Global Warming Potential	kg CO_2 eq.	1.58	3.25	51%
Eutrophication Potential	kg N eq.	0.0068	0.0097	30%
Smog Potential	kg particulate matter	$1.4E^{-7}$	$1.8E^{-7}$	22%
Acidification Potential	kg SO_2 eq.	0.022	0.022	0%
Ozone Depletion Potential	kg CFC-11 eq.	$1.2E^{-6}$	$1.1\ E^{-6}$	-9%
Freshwater Consumption	kg water	3.38	12.5	73%

Source: First Cobalt

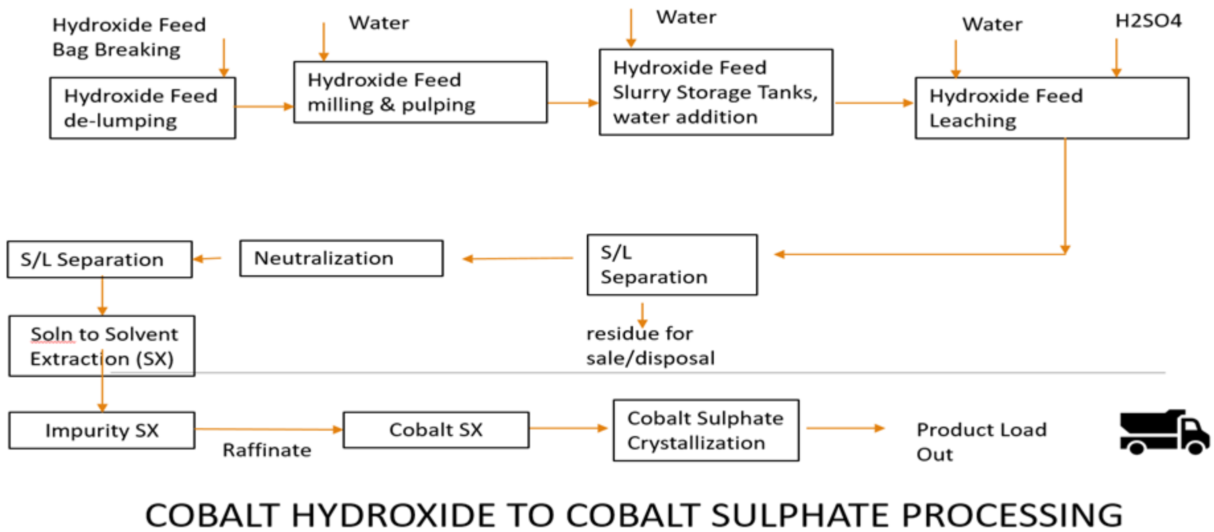
Finally, ELBM management believes its transportation emissions are at least 40% lower than that of its Chinese competitors. As previously stated, the majority of the world's cobalt is mined in the DRC. A Chinese refinery, after shipping cobalt hydroxide to China from the DRC, would then have to ship its finished product to a US customer. However, while ELBM's cobalt hydroxide also originates from the DRC, it would be relatively easy to ship cobalt sulfate from the refinery in northern Ontario, to customers located across North America.

The Refinery

The ELBM hydrometallurgical refinery is located approximately 600 kilometers north of the US-Canada border, near the town of North Cobalt, Ontario and the city of Temiskaming Shores. The refinery was originally built in 1995 to process ore from a nearby silver and cobalt mine and was acquired by ELBM in 2017 via a merger with Cobalt One and CobalTech Mining. The refinery is situated on a 600-acre site and is fully permitted. This includes the permits to take water, air and noise environmental compliance and industrial sewage compliance. Fresh water is sourced from nearby Lake Timiskaming and power is provided by Hydro One via a connection to the local grid. A well establish network of paved roads provides access to the site while an existing rail line comes within 2 kilometers of the refinery. The refinery itself consists of three separate buildings: the main refinery building and crystalizer tower, a new solvent extraction (SX) plant and a standalone shipping facility.

From a processing perspective, cobalt hydroxide containing anywhere from 30% - 50% cobalt will be received at the refinery in one tonne bags. The material is removed from the bags and fed via conveyor to a storage bin. It is then mixed with recycled water and converted to a slurry. The slurry moves to a leach tank where it is mixed with sulphuric acid at 80℃ – 90℃ such that the contained metals are dissolved. Testing has shown that the majority of the contained cobalt along with some impurities (i.e. copper and iron) are extracted at this stage. The slurry next goes through a filter press where solid/liquid separation occurs before entering the SX plant. The SX plant essentially scrubs the feed liquid to separate out the remaining impurities which could include nickel, zinc and manganese. The impurities are sent to the effluent plant for treatment, while the cobalt rich solution is sent to crystallization where it is converted to a powder for shipping. The primary reagents used in this process are sulphuric acid, caustic soda, and lime. The cobalt sulfate will be shipped to either a cathode manufacturing facility or a precursor cathode active materials facility depending on the type of battery being produced.

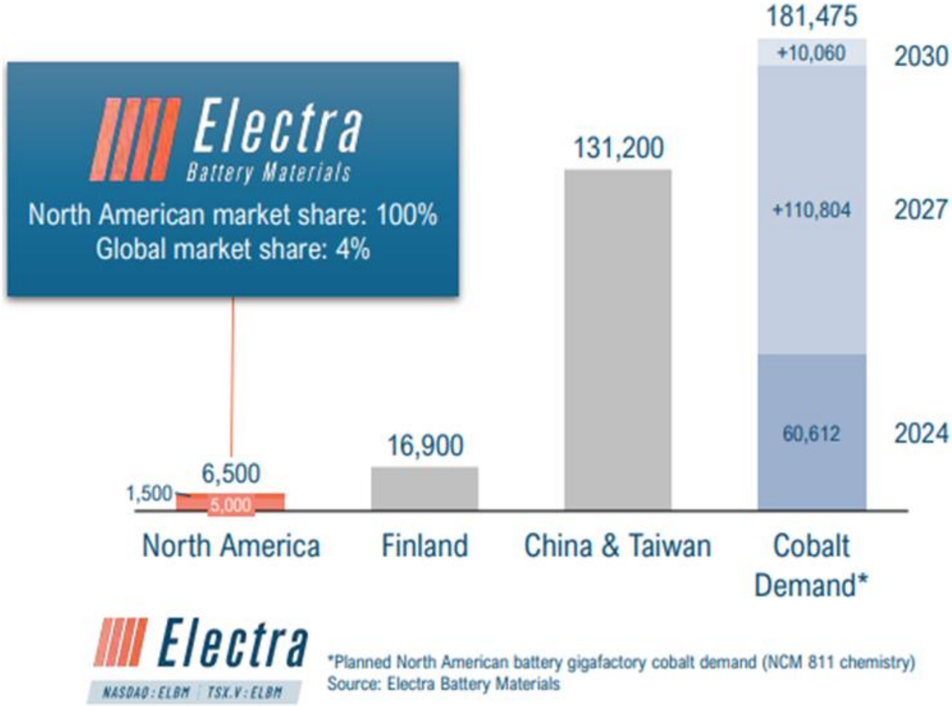
Exhibit 6 – Refinery Flowsheet



Source: Electra Battery Materials

The refinery will initially have the capacity to process 5,000 tonnes of cobalt in cobalt hydroxide. Subsequent to receiving a permit amendment, which is expected to take 9-12 months, processing capacity will increase to 6,500 tonnes of cobalt in cobalt hydroxide annually. The new equipment for the refinery has been sized to accommodate 6,500 tonnes of annual production, so minimal incremental cap-x will be needed to reach the expanded capacity. As previously mentioned, the vast majority of cobalt sulfate for the EV market is produced in China. The only other non-Asian refiner of cobalt sulfate is Jervois Global Ltd. (JRV-TSXV) which operates a refinery in Finland and recently entered into Chapter 11 bankruptcy proceedings. As illustrated in Exhibit 7, when operating at capacity, ELBM's refinery is expected to have an approximate 27% market share of the ex-China cobalt sulfate market.

Exhibit 7 – Cobalt Sulfate Market Share Forecast



Source: Electra Battery Materials

The refinery is expected to operate on a tolling basis and charge a processing fee per pound of contained cobalt in cobalt hydroxide. It is anticipated that LGES will purchase the cobalt hydroxide and arrange for delivery to the refinery gate. The only commodity exposure ELBM will have is when the cobalt recovery exceeds target levels, in which case the cobalt recovered in excess of this threshold will accrue to Electra at no incremental cost.

The refinery's design and flow sheet have undergone significant testing. Hatch Consulting was responsible for the process design, SGS Canada conducted the pilot plant testing and Metso-Outotec designed and tested the SX plant. Management believes an incremental US$65mm of capital spending is needed to complete the refinery. This excludes a US$20mm term sheet received in September 2024 from a strategic player in the battery materials sector, in exchange for marketing rights over future production.

The strategic significance of the refinery was also highlighted in August 2024, when ELBM received a US$20mm grant from the US Department of Defense, that was provided under Title III of the Defense Production Act. In order to qualify for funding under Title III, three criteria must be met:

- The material or technology must be essential to the national defence;
- United States industry cannot reasonably be expected to provide the capability for the needed industrial resource, material, or critical technology item in a timely manner; and
- Purchases or purchase commitments, are the most cost effective, expedient, and practical alternative method for meeting the need.

All long lead time items have either been ordered or are at site awaiting installation. The remaining equipment needed to complete the refinery includes pipes, valves and electrical equipment – the majority of which can be sourced within North America. Since inception, a total of US$190mm has been spent on the refinery, including US$70mm by ELBM. Management believes the replacement value to be approximately US$250mm.

Growth Initiatives

With the refinery operations expected to begin in mid-2026, ELBM management has started to focus on additional growth initiatives designed to position the Company firmly within the North American EV supply chain. Specifically, we would note the following initiatives:

Black Mass Recycling. In late 2022, ELBM conducted a black mass trial at the refinery to test its ability to recover high value metals such as lithium, nickel, cobalt, manganese and graphite from shredded lithium-ion batteries. The success of this initiative led to a desktop scoping study in 2023, which evaluated the economics behind a standalone black mass processing plant within the refinery complex. In early 2024, the Company announced that it had continued to optimize the recovery process such that the nickel-cobalt mixed hydroxide precipitate had achieved paymetal concentration of nearly 50% nickel and cobalt, which is well above industry standards.

In September 2024, Electra announced the Aki Battery Recycling joint venture – which is a partnership with Three Fires Group – a First Nations owned investment group. The joint venture will focus on gathering and shredding scrap from cell plants and battery manufacturers. ELBM will then use its hydromet process to recover recycled battery metals. This will require the construction of a second processing facility at the existing refinery site. It is worth noting that the Stellantis/LGES and VW/PowerCo battery plants are situated on the traditional lands of Three Fires' First Nations shareholders.

Becancour cobalt sulfate plant. Located on the south shore of the St. Lawrence River, Becancour, Quebec is emerging as one of the centres of battery manufacturing in Canada. General Motors, POSCO, Ford, BASF and others have announced plans to locate battery and precursor manufacturing facilities in the area. ELBM is contemplating building a second cobalt sulfate processing facility - which would take advantage of the potential customers located in the immediate vicinity as well as an abundant supply of hydro electricity. A potential site has been identified and discussions with prospective customers as well the provincial and regional authorities remain on-going.

North American nickel sulfate refinery. There are currently no nickel sulfate refineries in North America even though nickel is the most abundant mineral in NMC and NCA cathodes. In conjunction with Glencore and Talon Metals Corp., ELBM has undertaken a government sponsored nickel sulfate scoping study that evaluated the potential to produce battery grade nickel sulfate with and without an integrated PCAM facility. Given the funding opportunities currently available, this facility could be located in the southern United States. However, having said this, the nickel sulfate opportunity is still in the very early stages of its evolution.

Capital Structure

At December 31, 2024, ELBM had a cash balance of $3.7mm and $90.7mm of debt. The debt essentially consists of three tranches. The first tranche is a $7.8mm zero interest loan from the Ontario government which is to be repaid once the refinery construction has been completed. The second tranche is a $68mm convertible debenture, with an 8.99% coupon, a US$9.92/share conversion price and a maturity date of February 2028. On November 27, 2024, Electra announced that interest owing to August 15, 2024, would be paid in-kind, rather than in cash. This added an additional $9,157 to the principal amount outstanding. The third tranche is a US$4mm convertible note with a 3-year term, a 12.0% coupon, and a US$0.62445 conversion price. Note that US$1mm of common shares at a price of US$0.543 per share were also issued as part of this transaction.

As mentioned earlier, on September 20, 2024 ELBM received a non-binding proposal for a US$20mm prepayment facility from a strategic player in the battery materials sector. If completed, this transaction will result in an immediate US$10mm investment and a subsequent US$10mm investment which would be made during the refinery's commissioning phase. In return, ELBM would grant marketing rights to a portion of the refinery's production.

Subsequent to year-end Electra received a $20mm non-binding LOI from the Canadian government, the proceeds of which would be used to finance completion of the refinery. The Company is currently in discussions with the Ontario government regarding a similar financial commitment. Finally, on April 14, 2025, Electra completed a US$3.5mm equity financing at a price of US$1.12/unit. The unit consisted of one common share and one common share warrant, exercisable at a price of US$1.40 at any time for a period of 18 months.

Management Profiles

Trent Mell – President, CEO and Director. Trent is the founder and CEO of Electra Battery Materials. He has 25 years of business experience including capital markets, project development and mineral processing and has worked for companies such as Barrick Gold, Sherritt International and North American Palladium. He has an EMBA from the Schulich School of Business and a LL.M from Osgoode Hall and a LL.B from McGill University.

Marty Rendall – Chief Financial Officer. Marty is a seasoned finance executive with over 17 years of experience in the mining sector. He was previously the Chief Financial Officer for Victoria Gold where he oversaw the transition of the Company from an early stage explorer to a leading gold producer. Marty holds the Chartered Financial Analyst designation and has proven expertise in strategic planning, financial reporting and team development.

Michael Insulan – Vice President, Commercial. Michael is responsible for marketing the Company's cobalt sulfate production to EV manufacturers and battery cell makers. He has close to 20 years of experience in the oil and gas and bulk commodities sector and previously worked for Royal Dutch Shell, CRU and Eurasian Resources Group. Michael holds a PhD in Economics, focused on extractive industries.

Mark Trevisiol – Vice President, Project Development. Mark is a professional engineer with over 30 years of experience in mineral processing, mining and capital projects. He has a track record of increasing plant efficiency and margins, particularly in treating third party feeds. He previously spent 20 years with Falconbridge Ltd. and Xstrata Nickel, where he was General Manager of Business Development and Strategy and General Manager of the Sudbury Smelter Business Unit. Mark holds an Engineering degree from the University of Waterloo.

George Puvvada – Vice President, Metallurgy and Technology. Dr. Puvvada has over 25 years of industrial metallurgical experience and has worked for some of the world's largest mining companies including Vale, Xstrata and Barrick Gold. At Electra, he is part of the team responsible for completing and commissioning the refinery expansion and qualifying the cobalt sulfate for inclusion in Western automakers electric vehicle batteries. George holds a PhD in Extractive Metallurgy from the University of New South Wales in Australia.

Forecast and Valuation

Our ELBM financial forecast is outlined in Exhibits 10-12. We have assumed that the refinery operates on a tolling basis and charges a US$5.00/lb of cobalt in cobalt hydroxide processing fee and that LGES delivers cobalt hydroxide to the refinery gate and ships cobalt sulfate to its various different cathode, precursor or battery plants. As outlined, reagents are expected to be the largest operating cost items – namely sulphuric acid and caustic soda. We are assuming the refinery comes on-line in mid-2026, with processing volumes ramping from 2,200 tonnes of cobalt in cobalt hydroxide to 6,500 tonnes of cobalt in cobalt hydroxide in 2028. On this basis ELBM's consolidated EBITDA is forecast to increase from ($5.5mm) in 2025 to $33.0mm in 2028. We are assuming a US:CAD exchange rate of $1.40.

We estimate that an additional $120mm is needed to complete and commission the refinery. Approximately $100mm of this relates to cap-x spending, while the balance is a combination of working capital requirements, first fills and corporate costs. As previously mentioned, Electra has secured a US$20mm grant from the US DoD, a $20mm commitment from the Canadian government and a US$20mm commitment from a strategic partner (assumed to be split equally debt and equity). We have also assumed the Ontario government commits $19mm to the Project , while an additional $25mm of equity is raised from investors. We are assuming all the remaining equity is issued at $2.00/share and that on a pro forma basis Electra will have 37.4mm common shares outstanding.

In addition to the refinery economics, the ELBM valuation needs to reflect its low risk business model as well as its market positioning. The refinery is expected to operate on a tolling basis, which means it has no commodity exposure and that its working capital requirements will be minimal as we anticipate that LGES will purchase the cobalt hydroxide and arrange for delivery to the refinery. To be clear, in the event the refinery recoveries exceed target, the incremental cobalt sulfate produced will accrue to ELBM at no incremental cost. However, we have not allowed for the capture of this upside. Moreover, as the only fully permitted cobalt refinery in North America, ELBM could have a potentially dominant market position once it commences operations. This should be further reinforced by the growth initiatives that management has put in-place. Our one-year target price of $3.75/share is derived by applying a 7.0x multiple to FY28 forecast EBITDA of $33.0mm discounted back one-year. While this is a premium multiple, we feel it is justified given the above stated rationale. Note that we ascribe a nominal $15mm value to the Iron Creek cobalt-copper resource in Idaho. As our target price represents a 160% potential rate of return, we are initiating research coverage with a BUY rating.

Risks:

Financing risk: We have assumed that the final $44mm required to complete construction of the refinery will be received via a $19mm grant from the Ontario government and $25mm from equity investors. While we believe this to be a reasonable assumption, failure to receive these funds could potentially impact our financial forecast and valuation.

Execution risk: Although the refinery's process flow sheet has been extensively tested, the refinery has yet to produce cobalt sulfate on a commercial basis. As such, it is possible that the ramp up in commercial operations could take longer to achieve compared to what we have assumed.

Political risk: The Trump Administration took office in early 2025 and promised changes to some of the policies that were implemented by the Biden Administration including the Inflation Reduction Act. At this juncture, it appears as though the focus on on-shoring US supply chains will remain, if not increase. While these changes could result in some near-term volatility for ELBM, we do not anticipate the Company's long term potential to be negatively impacted.

Exhibit 8 – Comparable Valuations

Company	Currency	Market Cap. (mm)	Enterprise Value (mm)	2024 EV/EBITDA	2025 EV/EBITDA	2026 EV/EBITDA	2027EV/EBITDA
Dowa Holdings	JPY	262,433.80	318,572.80	5.7	5.3	5.6	5.4
AMG Critical Materials	EUR	467.30	959.00	6.8	6.2	5.3	4.5
Aurubis	EUR	3,243.90	3,269.90	4.8	5.7	4.8	4.1
Source: Capital IQ/S&P Global				5.8	5.7	5.2	4.6

Exhibit 9 – ELBM Target Price

Refinery run-rate EBITDA (2028)	33,000
Assumed multiple	7.0
Enterprise Value	230,997
Less: Net Debt	98,364
	132,633
Iron Creek	15,000
Implied Equity Value	147,633
NAVPS (Basic)	$3.94
NAVPS (F.D.)	$3.79
1-year target price	$3.75

Source: ECM Estimates

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Exhibit 10 – Income Statement

Electra Battery Materials Corp.
Pro forma Income Statement
For year ended December 31,
C$000's

	2023 A	2024 A	2025 E	2026 E	2027 E	2028 E
Processing Volume (tonnes)	0	0	0	2,200	5,500	6,500
Revenue	0	0	0	33,951	84,878	100,310
Operating expenses						
Refinery processing costs	0	0	0	39,977	56,601	62,311
Corporate S,G&A	2,395	2,902	3,500	4,000	4,500	5,000
Depreciation and Amortization	56	65	90	2,389	3,675	3,675
Other expenses	9,711	9,288	2,000	0	0	0
Share based payments	1,821	1,739	0	0	0	0
	13,983	13,994	5,590	46,366	64,776	70,986
EBITDA	-13,927	-13,929	-5,500	-10,026	23,777	33,000
EBIT	-13,983	-13,994	-5,590	-12,415	20,102	29,325
Other expenses						
Interest expense	0	0	2,007	1,260	9,153	9,718
Unrealized (loss) gain on marketable securities	-253	41	0	0	0	0
(Loss) Gain on financial derivative	6,683	-4,493	0	0	0	0
Changes in fair value of US warrants	1,243	7	0	0	0	0
Other non-operating income (Loss)	-6,472	-11,008	0	0	0	0
Impairment	-51,884	0	0	0	0	0
Income taxes	0	0	0	0	0	0
Net Income (loss)	-64,666	-29,447	-7,597	-13,675	10,950	19,606
Foreign currency translation gain	-2,082	6,196	0	0	0	0
Net income and other comprehensive income (loss)	-66,748	-23,251	-7,597	-13,675	10,950	19,606
EPS (Basic)	$5.96	$2.07	$0.28	$0.37	$0.29	$0.52
EPS (F.D.)	$5.96	$2.07	$0.25	$0.34	$0.27	$0.48
WA shares O/S (Basic)	10,857,737	14,256,263	26,959,539	37,434,197	37,434,197	37,434,197
WA shares O/S (F.D.)	10,857,737	14,256,263	30,084,539	40,559,197	40,559,197	40,559,197

Source: ECM Estimates

Exhibit 11 – Cash Flow Statement

Electra Battery Materials Corp.
Pro Forma Statement of Cash Flows
For year ended December 31,
C$000's

	2023 A	2024 A	2025 E	2026 E	2027 E	2028 E
Operating activities						
Net Income (loss)	-64,666	-29,447	-7,597	-13,675	10,950	19,606
Adjustment for items not affecting cash:						
Share based payments	1,226	1,768	0	0	0	0
Unrealized loss marketable securities	253	-41	0	0	0	0
Realized loss marketable securities	-90	-306	0	0	0	0
Depreciation and Amortization	56	65	90	2,389	3,675	3,675
Interest expense convertible debentures	4,805	6731	0	0	0	0
Changes in fair value of convertible debentures	5,076	0	0	0	0	0
Loss of extinguishment of notes	18,727	0	0	0	0	0
Other	20,949	9,900	0	0	0	0
	-13,664	-11,330	-7,507	-11,286	14,625	23,281
Changes in working capital	-9,382	-5,682	-3,500	-5,716	-4,074	-1,543
Cash used in operating activites	-23,046	-17,012	-11,007	-17,002	10,550	21,738
Investing activities						
Transfer to restricted cash	-1,158	888	0	0	0	0
Proceeds from sale of marketable securities	816	930	0	0	0	0
Additions to property, plant and equipment	-13,705	-555	-90,000	-12,000	-2,000	-2,000
Cash used in investing activities	-14,047	1,263	-90,000	-12,000	-2,000	-2,000
Financing activities						
Proceeds from issuance of common shares	19,960	1,221	43,900	0	0	0
Proceeds from loans	250	5,222	14,000	-806	-1,613	-1,613
Proceeds from government grants	0	0	65,000	0	0	0
Payment of lease liability	-43	-42	-50	-50	-50	0
Proceeds from 2028 Notes	68,049	0	0	0	0	0
Proceeds from convertible notes	0	5,498	0	0	0	94,100
Repayment of notes	-48,036	0	0	0	-7,200	-94,100
Transaction cost on 2028 notes	-2,384	0	0	0	0	0
Exercise of convertible notes	397	0	0	0	0	0
Interest settement on notes	-1,656	0	0	0	0	0
	36,537	11,899	122,850	-856	-8,863	-1,613
Cash provided by financing activities						
Change in cash during the year	-556	-3,850	21,843	-29,858	-313	18,125
Effect of exchange rate	164	7	0	0	0	0
Cash, beginning of year	7,952	7,560	3,717	25,560	-4,298	-4,611
Cash, end of year	7,560	3,717	25,560	-4,298	-4,611	13,514

Source: ECM Estimates

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Exhibit 12 – Balance Sheet

Electra Battery Materials Corp.
Pro Forma Balance Sheet
For year ended December 31,
C$000's

	2023 A	2024 A	2025 E	2026 E	2027 E	2028 E
Assets						
Current Assets						
Cash and equivalents	7,560	3,717	25,560	-4,298	-4,611	13,514
Restricted cash	888	0	0	0	0	0
Marketable securities	595	12	100	100	100	100
Prepaid expenses and deposits	468	672	4,500	13,000	11,400	11,000
Receivables	1,081	1,310	5,000	8,500	11,000	11,000
	10,592	5,711	35,160	17,302	17,889	35,614
Non-Current Assets						
Exploration and evaluation assets	85,634	93,200	93,200	93,200	93,200	93,200
Property, plant and equipment	51,258	51,189	145,099	158,467	161,292	162,617
Long-term restricted cash	1,208	1,347	1,347	1,347	1,347	1,347
	138,100	145,736	239,646	253,014	255,839	257,164
Total Assets	148,692	151,447	274,806	270,316	273,729	292,779
Liabilities and shareholders equity						
Current liabilities						
Accounts payable	8,828	3,579	3,516	5,614	5,394	6,250
Accrued interest	5,730	2,799	2,799	1,200	1,500	1,700
Convertible notes payable	40,101	63,963	71,739	81,231	75,227	75,227
Lease liabilities	0	50	10	10	10	10
Warrants	1,421	1,582	1,582	1,582	1,582	1,582
US Warrants	7	0	50	50	50	50
	56,087	71,973	79,696	89,687	83,763	84,819
Non-Current Liabilities						
Loans payable	4,299	7,824	21,824	21,018	19,405	17,792
Government grants	849	3,124	3,124	3,124	3,124	3,124
Royalty	858	1,283	1,283	1,283	1,283	1,283
Lease liability	175	83	133	133	133	133
Asset retirement obligations	3,126	2,842	3125	3125	3125	3125
Total Liabilities	65,394	87,129	109,185	118,370	110,833	110,276
Shareholders' Equity						
Common shares	304,721	307,723	351,623	351,623	351,623	351,623
Reserve	25,579	26,848	26,848	26,848	26,848	26,848
Accumulated other comprehensive income	-1,557	4,639	69,639	69,639	69,639	69,639
Deficit	-245,445	-274,892	-282,489	-296,164	-285,214	-265,608
Total Shareholders Equity	83,298	64,318	165,621	151,946	162,896	182,502
Total Liabilities and Shareholders' Equity	148,692	151,447	274,806	270,316	273,729	292,779

Source: ECM Estimates