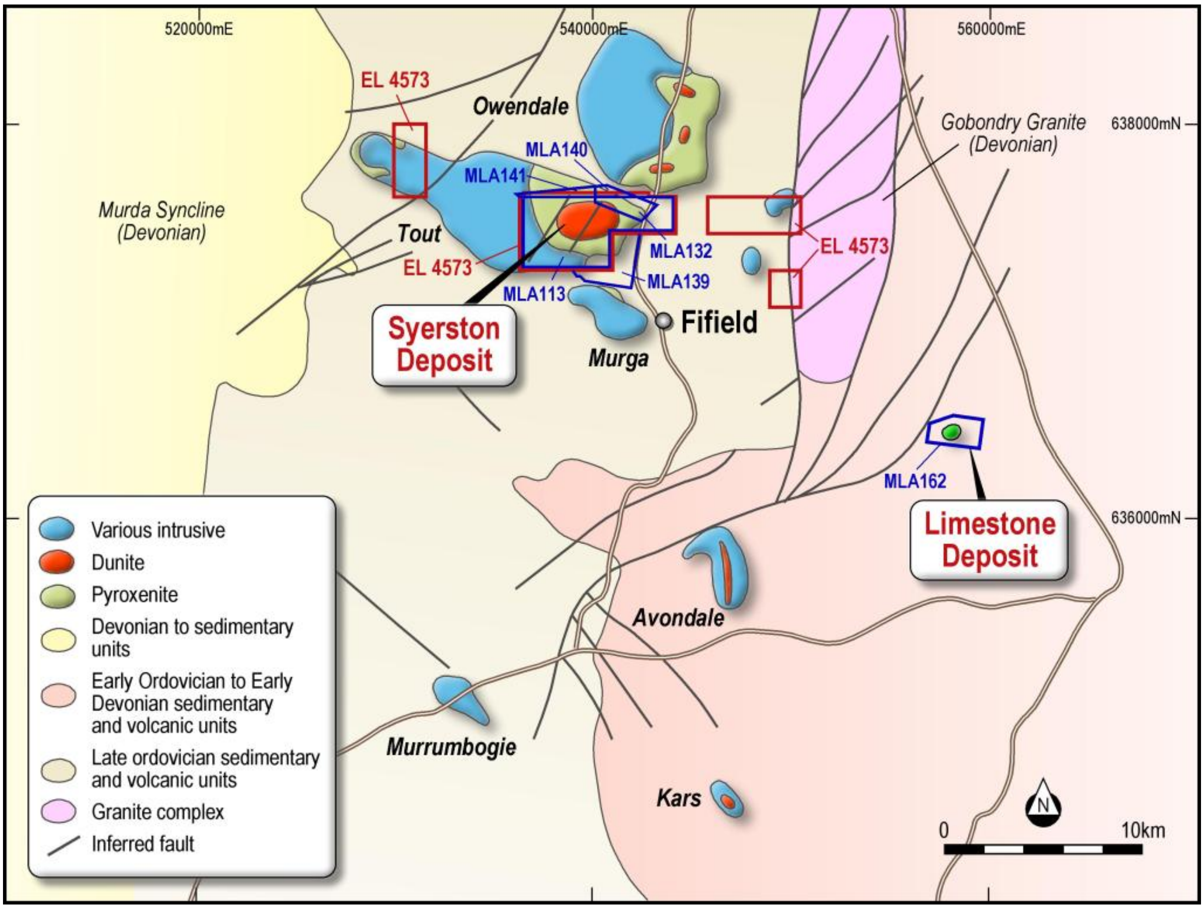
TECHNOLOGY

Geology & Resource

Geology

The Syerston project is a typical surficial deposit hosted within a Tertiary age lateritic weathered profile. Metal enhancement of the minerals of economic interest occurred during a secondary process ascribed principally to chemical weathering of the underlying metal rich ultramafic rocks. During weathering, selective leaching of more soluble elements such as magnesium and silica occurred, leaving a highly iron-enriched residue in base and precious metals. Further enrichment occurred during mechanical weathering and erosion.

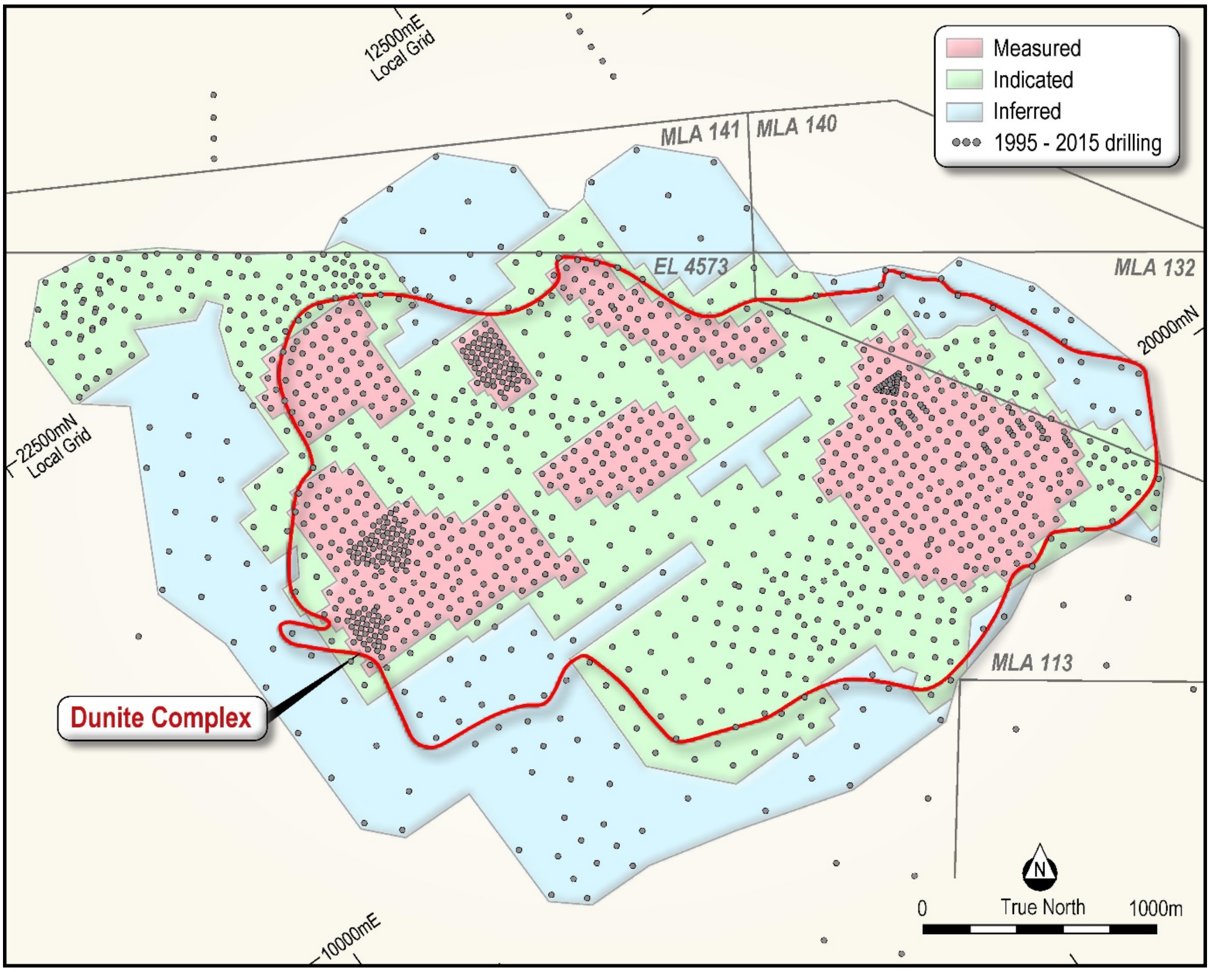


Syerston Project Regional Geology

The Tout Ultramafic Complex is one such intrusive body which underlies the laterite at the Syerston Project. The complex is concentrically zoned, ultramafic in the core grading to mafic material on the outer edge i.e. igneous rocks composed chiefly of mafic, dark minerals in the core, diminish outwards. Accelerated preferential weathering over the ultramafic core has resulted in the laterite profile reaching its maximum thickness of 35-40m over the core and thinning out laterally over surrounding less mafic rocks. Nickel and cobalt mineralisation is concentrated on mainly with in the goethite layer over the dunite core, with scandium mineralisation being more concentrated in the pyroxenite surrounding the dunite.

Nickel/Cobalt Mineral Resource Estimate

The Syerston deposit has been subjected to multiple drilling programmes by five different owners since 1988, with over 1,300 holes drilled over 16 years.



Syerston Drilling Summary and Mineral Resource Classification

McDonald Speijers Pty Ltd (**McDonald Speijers**) completed a nickel and cobalt Mineral Resource estimate for the Syerston Project (for full details see the ASX Announcement of 20 September 2016). The resource incorporates revision of the previous nickel and cobalt mineral resource, and has been prepared per the guidelines of the Australasian Code for the Reporting of Exploration Results, Mineral Resources and Ore Reserves (the JORC Code), 2012 Edition. The following table provides a summary of the Mineral Resource Estimate.

Syerston Summary Nickel/Cobalt Mineral Resource Estimate, 0.60%NiEQ Cut-off

Classification Category	Tonnage (Mt)	Ni Grade %	Co Grade %	Ni Metal Tonnes	Co Metal Tonnes
Measured	52	0.73	0.11	380,000	57,000
Indicated	49	0.58	0.10	280,000	49,000
Meas + Ind	**101**	**0.65**	**0.10**	**660,000**	**106,000**
Inferred	8	0.54	0.10	50,000	8,000
Total	**109**	**0.65**	**0.10**	**700,000**	**114,000**

Notes: Any apparent arithmetic discrepancies are due to rounding
NiEQ = nickel equivalent
Mt = million tonnes
NiEQ cut-off was calculated as NiEQ% = Ni% + (Co% X 2.95), based on assumed metal prices of US$4.00/lb Ni, US$12/lb Co, at USD:AUD exchange rate of 0.70. NiEQ was calculated on Ni and Co only, with no consideration for scandium and platinum.

Scandium Mineral Resource Estimate

While low grade scandium is associated with the large nickel/cobalt resource, the highest grades are on the periphery. OreWin Pty Ltd (**OreWin**) completed a separate Mineral Resource estimate for the Scandium Resource for Syerston (for full details see the ASX Announcement of 17 March 2016). The following table provides a summary of the Scandium Mineral Resource Estimate.

Syerston Scandium Mineral Resource Estimate

Cut-off	Classification Category	Tonnage Mt	Sc Grade ppm	Sc Tonnes	Sc_2O_3 Equiv Tonnes*
Sc >300ppm	Measured	5.8	454	2,635	4,032
	Indicated	15.9	420	6,697	10,247
	Inferred	6.4	386	2,487	3,805
	Total	**28.2**	**419**	**11,819**	**18,083**
Sc >600ppm	Measured	0.6	685	394	603
	Indicated	0.8	663	545	834
	Inferred	0.1	630	57	87
	Total	**1.5**	**670**	**996**	**1,524**

** Sc tonnage multiplied by 1.53 to convert to Sc_2O_3.*

Process Flow Sheet

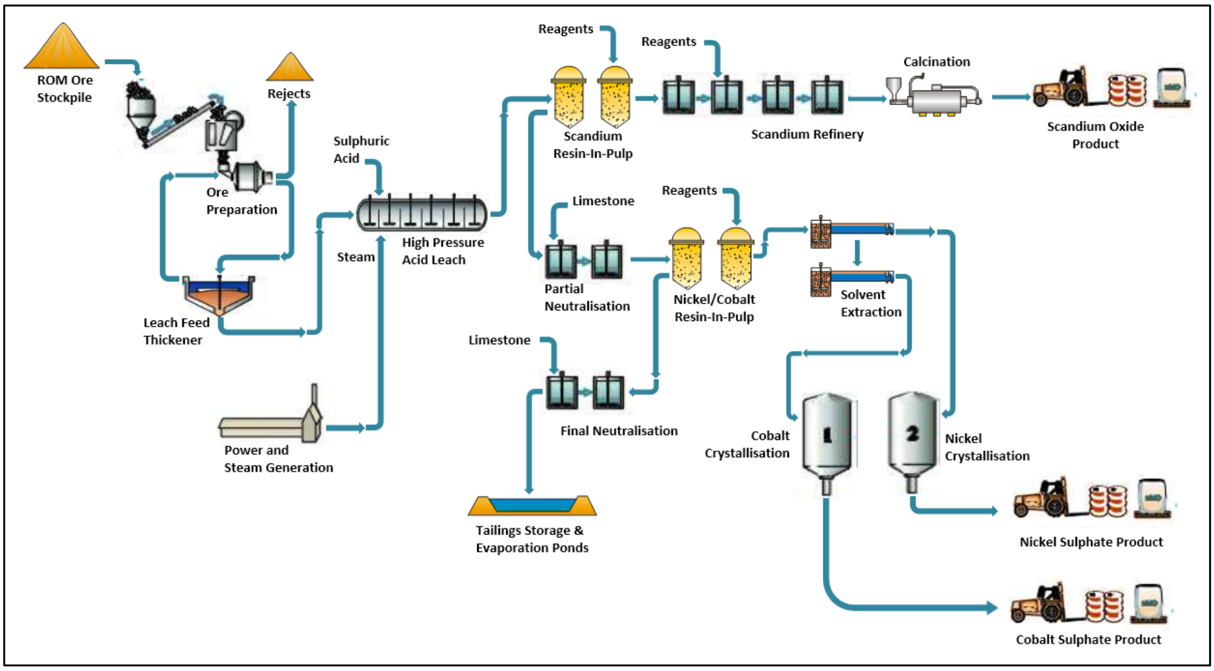
Pre-Feasibility Study

A Pre-Feasibility Study (**PFS**) was completed in October 2016 to assess a large scale project to produce nickel and cobalt sulphate and by-product scandium. The PFS was based on a flow sheet processing 2.5Mtpa of feed in Syerston's near-surface resource. The processing plant consists of a high pressure acid leach (HPAL) circuit followed by Clean TeQ's Resin-In-Pulp (cRIP) for scandium recovery, followed by partial neutralisation and cRIP for nickel and cobalt recovery.

The nickel/cobalt-rich sulphate solution is processed through a small solvent extraction separation and purification step prior to crystallisation to produce separate hydrated nickel sulphate ($NiSO_4.6H_2O$) and hydrated cobalt sulphate ($CoSO_4.7H_2O$) products.

The scandium-rich solution is processed through a series of selective precipitation stages and a final calcination to produce high-purity scandium oxide (Sc_2O_3).

The slurry is neutralised by the addition of limestone and sent to a tailings storage facility. The Project mining licence applications incorporate an area close to the Syerston deposit which contains a substantial limestone deposit, this is proposed to be developed as part of the Project. The relatively dry climate of the region means that it is amenable to residue disposal to conventional tailings storage facilities and evaporation ponds.



PFS Flowsheet

The PFS assessed the economics of a mine with a designed throughput capacity of 2.5Mtpa of ore feed from Syerston's near-surface resource, over an initial 20-year mine life.

The following table provides a summary of the key parameters used in the evaluation of the Project. All dollar figures quoted herein are A$ unless otherwise indicated and are exclusive of GST:

Syerston Project Summary Table – Base Case

Parameter		Assumption / Output
Processing Plant Throughput		**2.5Mtpa** [1]
Initial Life of Mine		**20 years**
Autoclave Feed Grade [2] (Year 3-20 average)	*Nickel*	**0.80%**
	Cobalt	**0.14%**
Production (Years 3-20 average)	*Nickel sulphate*	**85,135tpa**
	Cobalt sulphate	**15,343tpa**
Production (Years 3-20 average)	*Contained nickel*	**18,730tpa**
	Contained cobalt	**3,222tpa**
Recovery (Years 3-20 average)	*Nickel*	**93.5%**
	Cobalt	**92.7%**
Nickel price assumption [3]		**US$7.50/lb**
Cobalt price assumption [3]		**US$12.00/lb**
Exchange Rate		**A$/US$ 0.75**
Total Capital Cost [4]		**US$680M (A$912M)**
C1 Cash Cost (Year 3-20 average) [5]	*before Co credits*	**US$2.95/lb Ni**
	after Co credits	**US$0.90/lb Ni**
Net Present Value (NPV_8) – post tax[6]		**US$891M**
Internal Rate of Return (IRR) – post tax		**25%**

1 Designed processing throughput rate following a 24-month commissioning and ramp up period.
2 Includes pit selection, dilution and mining factors applied
3 Based on bank/broker long-term consensus market pricing for metal content only. Does not account for or include sulphate product premiums that are typically paid in the market to produce battery-grade nickel and cobalt sulphate.
4 Includes a US$62M (A$83M) contingency on capital costs
5 C1 cash cost excludes potential by-product revenue from scandium oxide sales and royalties
6 Post tax, 8% discount, 100% equity, real terms

The economic factors determined as part of the PFS were used by Inmett Projects to estimate Proved and Probable Ore Reserves for the Project (for full details see the ASX announcement of 5 October 2016). The table below details the Syerston Nickel and Cobalt Proved and Probable Ore Reserves.

Syerston Nickel and Cobalt Ore Reserves

Classification Category	Tonnage, kt	Ni Grade, %	Co Grade, %
Proved	54,930	0.71	0.10
Probable	41,263	0.58	0.10
Total	**96,193**	**0.65**	**0.10**

** Ore Reserve is reported as Autoclave Feed tonnes.*

The large-scale nickel/cobalt resource assessed through the PFS also hosts significant quantities of scandium oxide. Given the scandium market is still developing, the PFS Base

Case assumed no scandium revenue. However, scandium oxide sales provide a significant increase in the project economics and therefore scandium recovery will be integrated into the larger flow sheet for the Bankable Feasibility Study.

A Bankable Feasibility Study for the project is currently underway and expected to be completed in Q4, 2017.

Project Infrastructure

One of Syerston's competitive advantages is its proximity to existing infrastructure. The Project is near the Moomba-Sydney natural gas pipeline, a rail line within 20 kilometres of Syerston and bitumen roads providing good access to the site. The major centres have excellent infrastructure including transport, airport and rail facilities, all of which are available for project requirements. The Project and associated infrastructure are located within the Lachlan and Parkes Shires and the borefield providing water for the Project are in the Forbes Shire.

[Insert figure of project infrastructure plan diagram]

Water Borefields

Water investigations undertaken by Clean TeQ, as well as the previous owners, determined that insufficient water was available in the project area to meet the historical requirement. The closest viable source of water was the borefield near the Lachlan River, approximately 65km south of the project area. A 3.2GL p.a. water licence is currently held by the company and a borefield has been established for the project. The water licence provides most of Syerston's water requirements for the 2.5Mtpa operation.

A water pipeline will be constructed for the project, providing water from the borefields in the south to the mine site, as well as the limestone quarry.

Syerston's Western Borefield

The Project's Borefield Environmental Management Plan can be downloaded HERE.

Resin-In-Pulp for Nickel, Cobalt & Scandium

Between 2004 and 2008, the application of Clean TeQ's technology for metal recovery from lateritic ores was developed in collaboration with BHP Billiton through an A$8 million investment. Clean TeQ's continuous resin-in-pulp (cRIP) and elution processes were proven to extract and concentrate nickel and cobalt directly from acidic lateritic pulps at a much lower cost than conventional routes. Uniquely, this allows the purification and production of battery grade nickel and cobalt sulphates direct at the mine site, with no further refining required.

As a part of the current Feasibility Study for the project, Clean TeQ is focusing on securing commitments for nickel and cobalt offtake. To enable this, Clean TeQ has operated a large-scale continuous pilot plant to process Syerston material to produce nickel and cobalt sulphate samples for potential customers. Additionally, this piloting work will provide process input data for the Feasibility Study.

Development for Clean-iX® for scandium has been carried out over 6 years, with an initial focus on recovery from titanium dioxide waste streams, where the majority of scandium is sourced today. This work culminated in operation of a large-scale scandium recovery pilot plant to a major Japanese titanium dioxide producer in 2015. Subsequently, a large-scale pilot plant campaign was carried out in 2015 on Syerston ore to produce scandium oxide samples for potential customers.

Clean TeQ's cRIP Pilot Plant in Perth, Australia

Environment & Permitting

An Environmental Impact Statement (EIS) was prepared in late 2000 by Black Range Minerals as a requirement to apply for Development Consent for the Project. Potential environmental impacts, impact assessments, mitigation measures and environmental management, rehabilitation and monitoring strategies are documented in the EIS. The Project was granted Development Consent in May 2001, with a modified Development Consent granted in 2006.

In April 2016 Clean TeQ applied for a modification of the Development Consent to include scandium oxide as a product and to operate an initial smaller scale scandium operation while preserving the approval for a larger nickel/cobalt operation which may be considered in the future. The modification is expected to be approved by the end of Q4, 2016.

The modification application included draft Voluntary Planning Agreements (VPA) which have been agreed with each of the local Shires outlining contributions that Clean TeQ will make to local road upgrades, road maintenance and contributions to a range of community based activities.

The Project's EIS can be downloaded HERE.

The Project's Development Consent can be downloaded HERE.

Scandium for Lightweight Alloys

Scandium is a metallic element with atomic number 21. While it is a transition metal, it sometimes is classified as a rare-earth element. While scandium is not particularly rare in the earth's crust (31st most abundant), it is very rare to find in concentrations over 100ppm.

While the potential applications of scandium are broad, Clean TeQ has focussed on two key areas: aluminium scandium alloys for light-weighting the global transport industry and the use of scandium in solid oxide fuel cells.

The lack of any reliable supply of scandium has been the limiting factor in development of this market. However, this has the potential to change rapidly as scandium from primary mine production is brought on stream and expanded.

Aluminium-Scandium Alloys

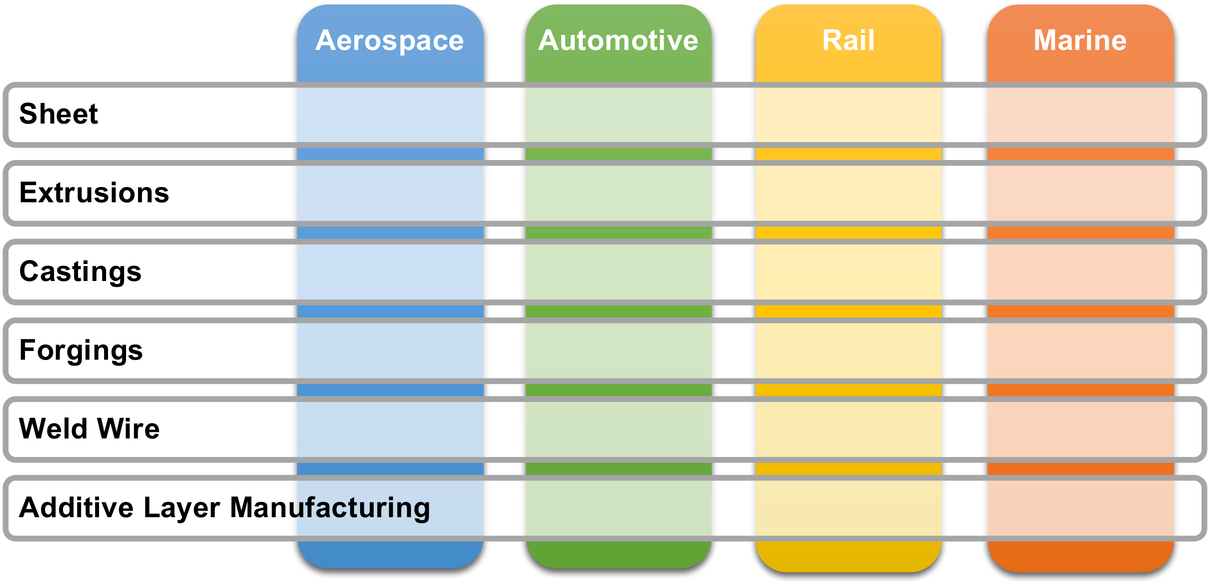
While the solid oxide fuel cell industry has been the dominant consumer of scandium in recent years, scandium's greatest value lies in the functional properties it imparts as an alloy in aluminium. Aluminium-scandium (AlSc) alloys represent one of the largest untapped opportunities for delivering lightweighting solutions to the global transport sector.

Growing transport sector interest in AlSc alloys arises from:

- Legislation setting tougher fuel efficiency targets and CO_2 limits globally;
- Aluminium's comparative benefits as a strategic lightweighting material; and
- Scandium's potent strengthening effect in a broad range of aluminium alloys.

Major aluminium players and leading-edge transport sector companies are aware of the lightweighting opportunities that AlSc alloys offer. In fact, many of the original Al-Sc alloys were first developed in the 1960s, specifically for aerospace use. Adoption has been held back, however, by availability and affordability. As one of the highest-grade sources of naturally occurring scandium in the world, Syerston can transform value in use considerations across the entire global aluminium value chain.

Scandium provides significant benefits to a broad range of aluminium alloys in a diverse set of metal offerings. However, a range of physical and economic parameters need to be considered in optimising each application and the associated manufacturing process.



The scandium marketing matrix for global transportation

Syerston will make quality scandium raw materials reliably available in commercially useful quantities and at much lower prices. To further improve the value proposition of AlSc alloys, Clean TeQ is collaborating with partners to optimise the scandium content. Compositions that deliver the full suite of benefits with minimal scandium added will accelerate the deployment of AlSc alloys.

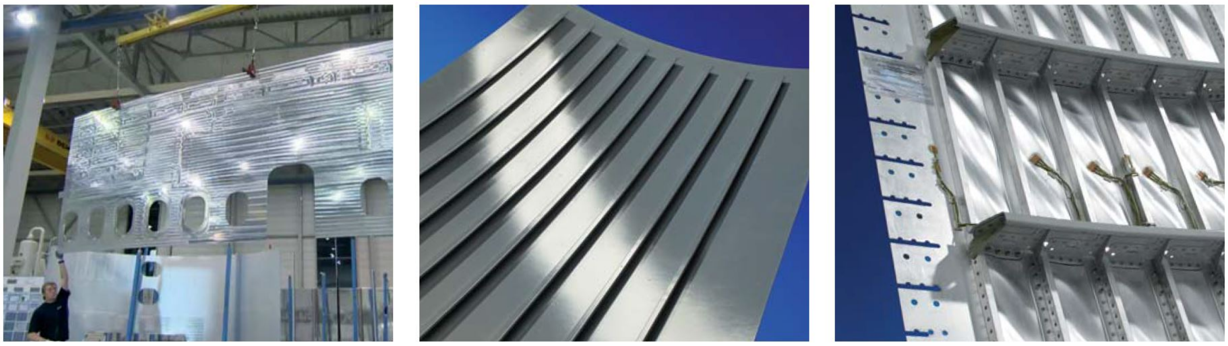
Aerospace

While AlSc alloys have been used in the aerospace industry for decades, their high price and the lack of a secure scalable supply of scandium have limited their use to high performance parts on military aircraft. However, over the last two decades a significant amount of development work has been undertaken on the use of AlSc alloys for commercial aircraft components. The high strength and weldability of AlSc alloys means that future aircraft can significantly benefit from their broader application, through fuel savings by reduced weight and manufacturing costs.

High Strength Sheet for Fuselage Skins

Airbus and Aleris have co-developed a high strength AlMgSc alloy[1] (AA5028) for use in fuselage skin on aircraft[2]. 5028 offers weight reduction opportunities relative to incumbent alloys both directly and through superior weldability. AlMgSc formability properties also enable drop-in solutions and streamlining of the aircraft production line. This allows for a reduction in the "buy-to-fly" ratio, as less material is required in the finished component and manufacturing processes can be used to minimise material waste.

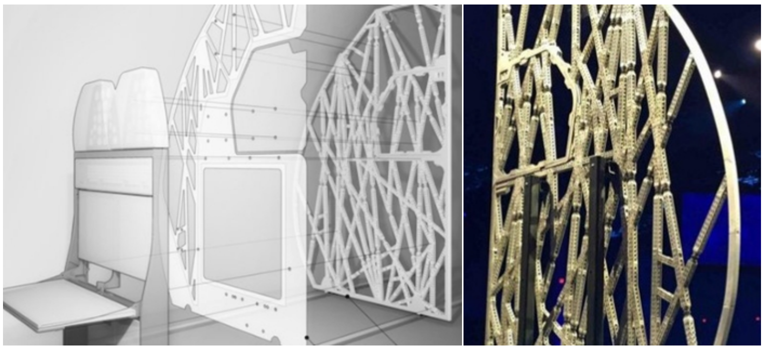
[1] Airbus and Aleris co-development of 5028 AlMgSc alloy: http://www.france-metallurgie.com/31923/
[2] Aleris: www.aleris.com; for more info on creep forming please see: https://youtu.be/SP2s2dXMYd4



Aleris creep formed AlMgSc fuselage skin component

Additive Manufacturing (3D Printing)

Airbus Group Innovations (AGI) is Airbus' global network of research and technology centres for future aerospace challenges. AGI is responsible for development, qualification and commercialisation of Scalmalloy®, a patented 3D printing AlSc powder and direct manufacturing concept used in the production of high strength components for Airbus' fleet of aircraft. Compared to all other aluminium alloys currently used in selective laser melting (a typical 3D printing process), Scalmalloy® offers outstanding mechanical strength values in combination with corrosion resistance, allowing the material's use without protective coatings.



3D Printed Scalmalloy®RP partition and Aleris creep formed AlMgSc part[3]

High Strength Extrusions

In January 2016, Clean TeQ entered a collaboration with Universal Alloy Corporation[4] (UAC) and Deakin University for the development of higher strength and improved surface finish extruded parts for aerospace. The work was supported by a government grant and was completed in September. The 9-month program investigated model alloys series to determine the effect of scandium addition on strength and impact on extrudability. Results have been very encouraging and have paved the way for additional work at Deakin University to optimise the scandium addition and processing parameters, as well as larger-scale trials at UAC.

Welding Wire

Aluminium alloys that are both very strong and very weldable offer the prospect of substantial weight savings in future aircraft, for example by reducing or eliminating the need

[3] http://www.airbusgroup.com/int/en/story-overview/Pioneering-bionic-3D-printing.html
[4] For more information on UAC's production facilities and extruded products, see: https://youtu.be/_xeBkx1gUgo

for rivets. While small additions of scandium can dramatically improve the weldability of a range of aluminium alloys, an alternative approach is to introduce scandium units into weldments via a filler wire. High strength, high fatigue resistance welds can be achieved without modification to the base alloys, resulting in stronger finished components with no change to the current production process. Ease and reliability (quality) of the welding process are additional benefits.

Automotive

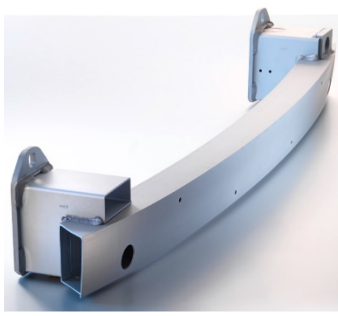
The automotive industry is under considerable pressure to produce lighter vehicles with improved recyclability. For conventional cars, lighter materials of construction are often the only way to meet fuel efficiency and emission reduction targets. Additionally, electric vehicles need to find ways to offset the very substantial weight of the battery systems. Recyclability of material is also of key importance to the automotive industry as, unlike aerospace, this plays a much larger role in the total lifecycle cost of a vehicle. The combination of these factors has led to the automotive sector substantially increasing it use of aluminium, with 50% growth forecasted by 2020[5].

The need for stronger, more weldable and more formable aluminium is driving considerable automotive sector interest in scandium-containing alloys. Additionally, scandium is typically added as a trace material and can be used in normal alloy production processes, segregation of materials will be minimised. Clean TeQ is leveraging our experience of scandium in aerospace to fast track development of applications in automotive. Below are some examples of collaborations with key partners in the automotive industry to validate the benefits of aluminium-scandium alloys.

High Strength Extrusions for Body Frame & Crash Management Systems

Of upmost importance in the design of any vehicle is its ability to protect passengers against collisions on all sides. The internal skeleton of the car is made up of the main body frame with the crash management system (CMS) on the front and back of vehicle for crash protection.

The key feature of the CMS (e.g. bumpers, etc) is its ability to absorb energy without failure. The main body needs to have high strength to maintain structural integrity. Both strength and "ductility" (ability to absorb energy) are the key focus for materials used. Traditionally, these sections have been made from heavier steel components. Substitution with high strength aluminium offers significant weight reduction without compromising safety or ductility.

[5] Please see the Arconic website: http://www.arconic.com/global/en/what-we-do/automotive.asp

Body structure[11] and crash management systems[6] produced from aluminium

High Strength Sheet for Panels

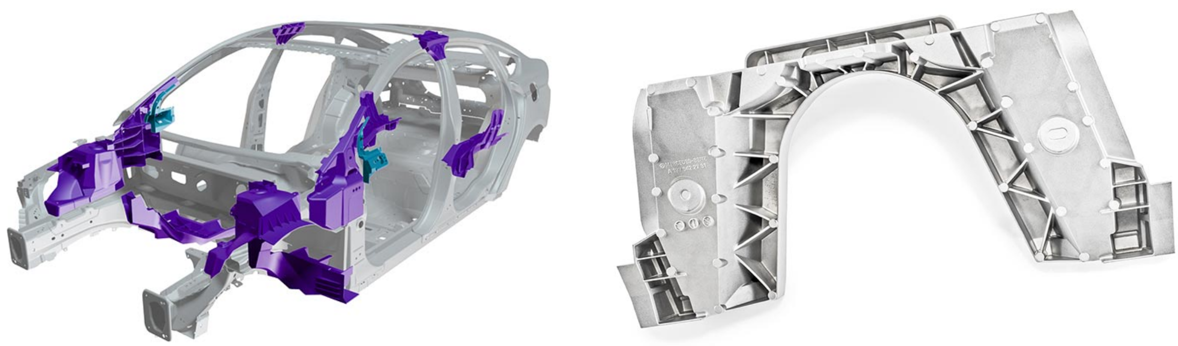
Aluminium has already been adopted in panels for some models by major car companies such as Ford, Jaguar Land Rover and Audi. Aluminium provides significant weight saving over traditional steel panels and much lower cost and higher recycle rates than carbon fibre alternatives, used in some high-end vehicles.

Aluminium panels for Ford's F-150 manufactured by Novelis[7]

Scandium can be used to promote wider adoption of aluminium in these applications. Scandium's potent strengthening effect allows thinner panels to be used, reducing weight. Where superior corrosion resistance is essential as well as increased strength, an adapted AlMgSc alloy may prove to be the optimal solution. Scandium also improves formability, which means panels can incorporate more complex features – a highly desirable benefit for car companies looking for differentiated aesthetics.

Castings

Casting is an important way to produce components with complex geometries, ranging from body nodes to wheels. One of the benefits of casting is the ability to reduce the number of parts required to assemble a complete vehicle, to achieve critical technical and commercial objectives.



Aluminium cast parts for automotive[8]

[6] Please see the Constellium website: http://www.constellium.com/aluminium-products/automotive-structures
[7] http://novelis.com/markets-we-serve/automotive/
[8] http://www.magna.com/capabilities/body-chassis-systems/innovation-technology/aluminum-casting

Castable silicon-containing alloys are typically used to produce these components to the required specification. The automotive sector has great interest in designing new casting alloys that preserve or improve formability while increasing strength.

Solid Oxide Fuel Cells (SOFCs)

Fuel cells were invented over a century ago and have been used in practically every NASA mission since the 1960s. However, they have not gained widespread adoption until now because of their higher cost relative to other sources of baseload power. Solid Oxide Fuel Cells (**SOFCs**) hold the greatest potential of any fuel cell technology. With low cost ceramic materials and extremely high electrical efficiencies, SOFCs can deliver attractive economics.

SOFCs convert a fuel source (typically natural gas) and oxygen into electricity, water, carbon dioxide and heat. SOFC's use a hard ceramic material as a solid electrolyte between an anode and cathode, which, when subjected to high temperatures, catalyses the conversion of natural gas to energy. In the absence of scandium, the high temperatures quickly degrade the ceramic electrolyte, adding to the capital and maintenance costs of the units. The use of scandium in the solid electrolyte allows the system to operate at much lower temperatures than conventional SOFC's, lowering the costs and allowing the potential for wide spread adoption for distributed power generation.

Nickel & Cobalt for Lithium Ion Batteries

Cobalt and nickel are critical raw materials in the production of cathodes for the lithium-ion battery (**LiB**) market. These metals are used in the production of precursor materials, which are converted to cathode active material for use in the batteries.

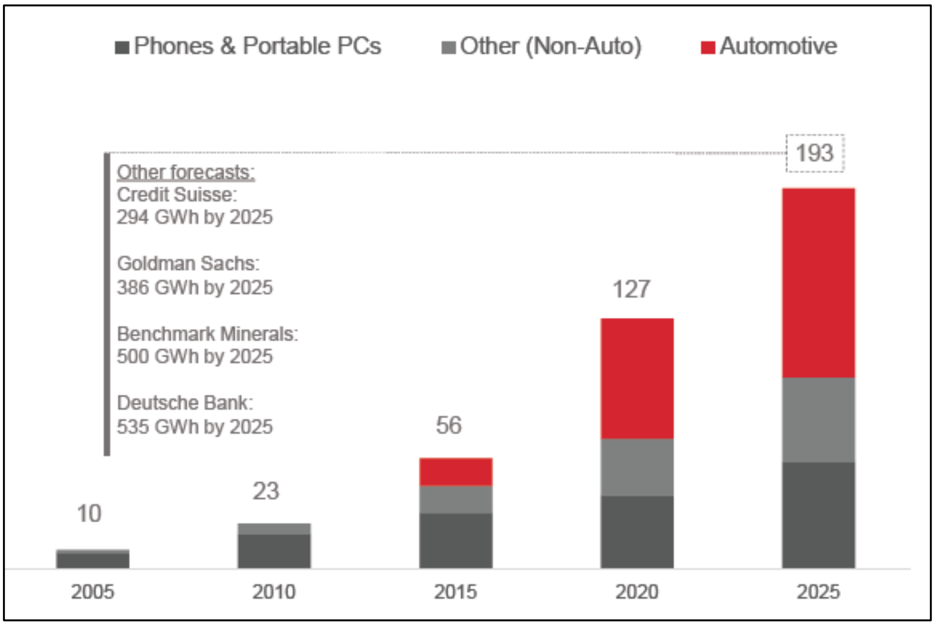
The battery industry requires nickel and cobalt to be supplied in specific chemical form for production of precursor material. In the case of both cobalt and nickel, this is generally in the form of hydrated metal sulphates ($CoSO_4.7H_2O$ and $NiSO_4.6H_2O$).

The demand for lithium-ion cells is anticipated to grow strongly over the next decade as production of electric vehicles increases and batteries become an important component in utility-scale energy storage systems.

Syerston's high cobalt grades, combined with Clean TeQ's proprietary Clean-iX® technology to produce the specific cobalt and nickel sulphates required by lithium-ion cell manufacturers, positions the Company to benefit from strong forecast growth in demand for LiB's.

The global LiB market has grown at a 20% compound annual growth rate (CAGR) over the last 10 years[9], mainly due to the steady growth in portable electronic devices (laptops, smartphones, etc) and, more recently, the emergence of automotive applications. Forecasts for LiB demand growth vary, but even the most conservative estimates are predicting LiB demand to experience rapid growth over the next 10 years.

Historic and Forecast Global LiB Sales ('GWh) [5]

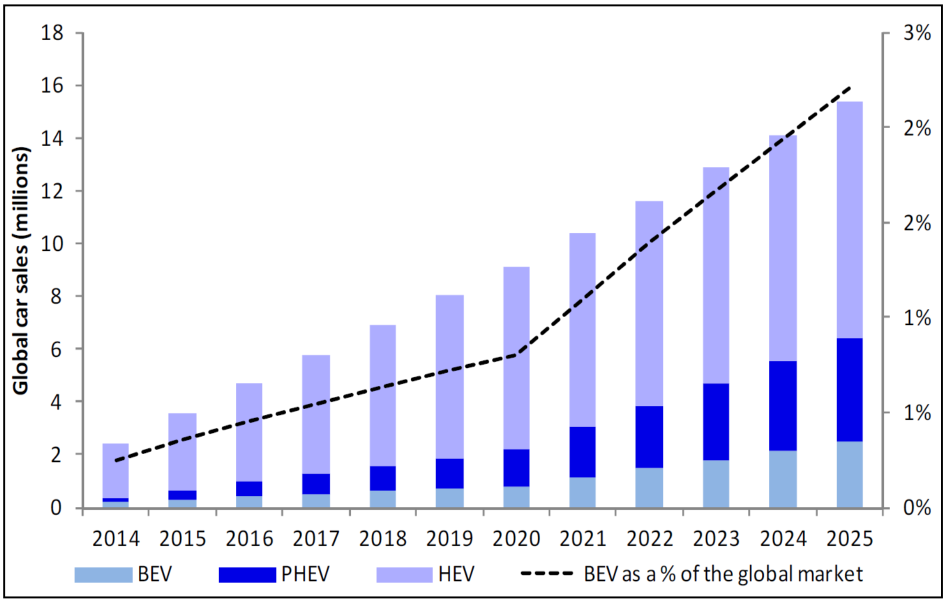


Much of the current acceleration in demand for LiB's is resulting from their use in electric vehicles. From approximately 0.5 million plug-in hybrid electric vehicles (**PHEV**) and battery electric vehicles (**BEV**) sold in 2015, demand is forecast to grow to 2 million units by 2020 and 6 million units by 2025. As battery costs fall, BEV drivetrains with higher capacity

[9] *Source: Avicenne Energy Analysis 2014 et al as indicated. Avicenne estimates include China Auto Upside case.*

batteries are expected to replace PHEV's and hybrid electric vehicles (**HEV**), further adding to demand for key raw materials.

Figure 5: Forecast Global x-EV Sales (2014 – 2025) [10]



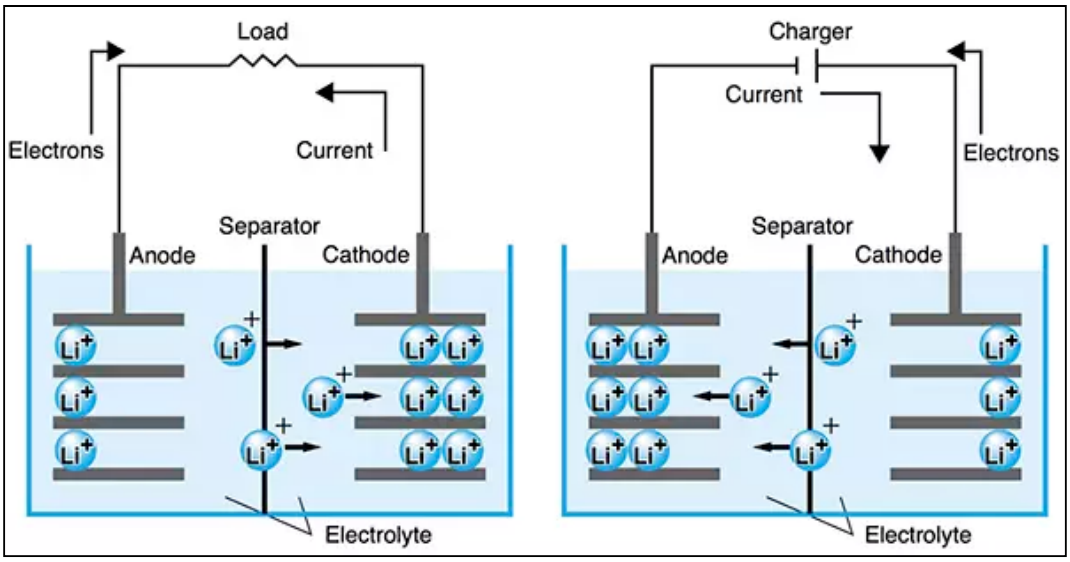
Lithium-Ion Battery Chemistries

Lithium ion cells contain a positive and a negative electrode. The positive electrode (cathode) is made of various formulations or 'chemistries' of oxidized metals. The negative electrode is generally made of carbonaceous material (natural and synthetic graphite). When the battery is charged, ions of lithium move through an electrolyte from the cathode to the anode and attach to the carbon. During discharge, the lithium ions move back from the carbon anode to the cathode (See Figure 6).

The different battery types or 'chemistries' are defined by the compositions of their metalliferous cathodes. There are five main battery chemistries which comprise the majority of the LiB market. Of those, lithium-cobalt-oxide (**LCO**) is the dominant battery in portable electronic devices. The nickel-cobalt-manganese (**NCM**) and nickel-cobalt-aluminium (**NCA**) chemistries are increasingly becoming the industry standard for electric vehicle applications, due to their high energy density.

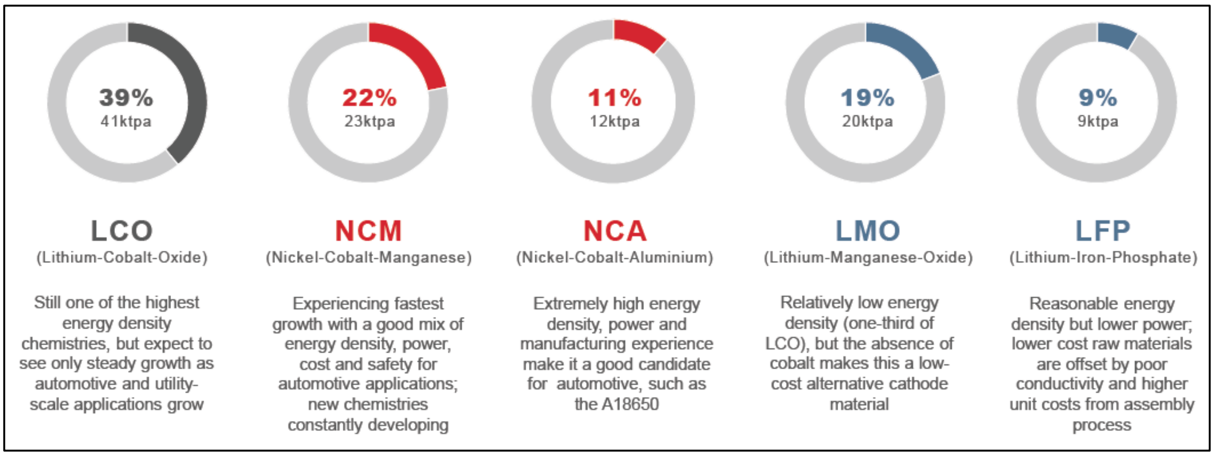
[10] *Source: Deutsche Bank research 2016*

***Rechargeable LiB Cell*[11]**



In recent years, China's automotive industry has favoured adoption of lithium-iron-phosphate (**LFP**) and lithium-magnesium oxide (**LMO**) battery chemistries. However, there is a clear global trend to the adoption of NCM and NCA chemistry due to their higher energy densities, increased life cycle and the auto industry's preference for passenger vehicles with longer range. Significant growth in the LiB sector is expected to come from NCM and NCA chemistries, both of which can contain relatively high nickel and cobalt content.

***LiB Chemistry Market Share*[12]**



LiB cathode production requires high purity precursor materials to ensure high performance and extended battery life. NCA and NCM battery chemistries require high purity nickel sulphate ($NiSO_4.6H_2O$) and cobalt sulphate ($CoSO_4.7H_2O$) to produce precursor materials. LCO battery chemistry requires cobalt oxide.

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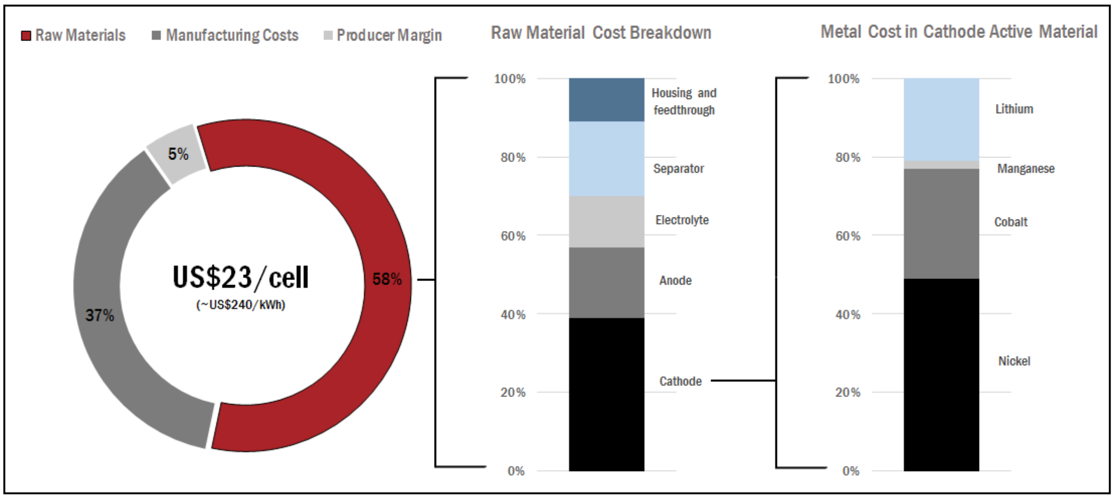
[11] *Source: Stephen Evanczuk, DigiKey Electronics*
[12] *Source: Avicenne Energy Analysis 2014*

Cathode is Critical to Battery Cost and Performance

The cathode is fundamentally important to both the performance and cost-competitiveness of a lithium-ion cell. Raw materials can represent 50%–70% of the cost of manufacturing a lithium-ion cell, depending on the chemistry adopted. As such, nickel and cobalt can represent as much as 80% of the metal cost in the cathode, or approximately 20% of the total cell cost.

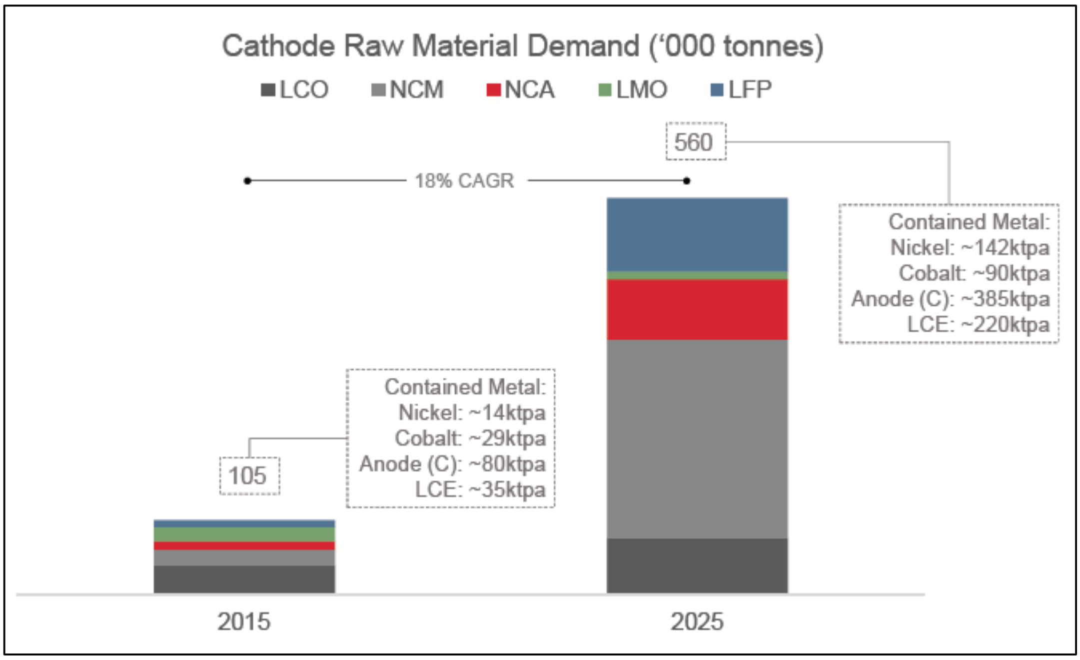
Estimated NCM Cell Cost Breakdown[13]



The predicted growth in the LiB market means that a considerable amount of high grade nickel sulphate and cobalt sulphate will be required over the next ten years. As such, reliable and cost-competitive nickel and cobalt supply has an important role to play in the future of LiB's.

[13] *Source: Roland Berger (2012) and internal analysis. Assumes a 96Wh PHEV cell (26Ah, 3.7W) using NCM622 cathode chemistry. Cathode cost includes non-metallic materials (carbon black, binder, foil). Internal assumptions concerning split of costs assumes average long-term prices of Ni US$7.00/lb; Co US$12.00/lb; Mn US$1.00/lb; Li US$6.50/kg (as LCE).*

LiB Cathode Raw Material Demand[14]



While there is a large and established market for nickel which is driven by the global steel sector, almost all the world's cobalt is produced as a by-product from nickel and copper mines. For this reason, cobalt stands apart as one of the few metals consumed at industrial-scale that has almost no source of primary supply. Global refined production in 2015 was in the order of 90,000 tonnes[15] of contained cobalt, a large portion of which was exported to, and processed in, China. To meet the demands of the growing LiB market, there will need to be a significant increase in global supply of cobalt. At a time when nickel and copper prices are at or near long-term historic lows, this presents real challenges for cobalt supply, as seen in recent or pending mine and refinery closures in Africa (Katanga Mining) and Australia (QNI).

In addition to the risk through by-product dependence, global cobalt supply is heavily concentrated in the Democratic Republic of Congo (DRC). In 2015 production sources in the DRC represented 65% of global mined cobalt supply. A large portion of this production was from artisanal mining operations involving child labour.[16] While cobalt is not listed as a 'conflict mineral', the LiB industry is under increasing pressure to demonstrate an auditable cobalt supply chain to ensure that responsible procurement practices are adopted.

A recent report by Amnesty International and Afrewatch, "*This is what we die for: Human rights abuses in the Democratic Republic of the Congo power the global trade in cobalt"*, highlighted the child labour practices adopted in many of the artisanal mines and urged the global electronics and automotive industries to provide better auditing of their supply chains. See:

http://www.amnesty.org.au/images/uploads/about/Amnesty_report_2016_Human_rights_abuses_in_DRC_power_global_cobalt_trade.pdf

[14] Source: Avicenne Energy Analysis 2014. 2025 case based on internal company estimates, utilising an EV adoption rate based on the average from five banks and industry consultant forecasts: HEV 5.7m, PHEV 2.7m, BEV 3.6m. EV applications forecast at 215 GWh. Non-EV applications forecast at 135GWh. Assumes an average battery size of 50kWh/BEV.

[15] *Source: Darton Commodities, "Global Cobalt Review, 2015–2016"*

[16] *Source: Darton Commodities, "Global Cobalt Review, 2015-2016"*

Syerston’s high cobalt grades, combined with Clean TeQ’s proprietary ion exchange technology to produce the specific cobalt and nickel sulphates required by lithium-ion cell manufacturers, positions the Company to benefit from strong forecast growth in demand for LiB’s.