



**Clean TeQ Holdings Limited
(ASX: CLQ)**

**Entitlement Offer Presentation
July 2015**



Creating sustainable solutions for oil and gas, municipal, mining, agriculture and industry.



Disclaimer and Important Information

This presentation has been prepared by Clean TeQ Holdings Limited (**CLQ, Clean TeQ or Company**) in relation to the pro-rata non-renounceable offer of new Clean TeQ Holdings Limited ordinary shares under section 708AA of the Corporations Act 2001 (Cth). The presentation has been prepared for general information purposes only. This presentation is provided on the basis that none of the Company nor its respective officers, shareholders, related bodies corporate, partners, affiliates, employees, representatives and advisers make any representation or warranty, whether as to the past or the future. The Company hereby excludes all warranties that can be excluded by law.

Certain statements in this presentation are forward looking statements. By their nature, forward looking statements involve a number of risks, uncertainties or assumptions that could cause actual results or events to differ materially from those expressed or implied by the forward looking statements. These risks, uncertainties or assumptions could adversely affect the outcome and financial effects of the plans and events described herein. Forward looking statements contained in this presentation regarding past trends or activities should not be taken as representation that such trends or activities will continue in the future. You should not place undue reliance on forward looking statements, which apply only as of the date of this presentation. The Company does not undertake any obligation to release publicly any revisions to any forward looking statement.

This presentation contains general background information about the Company and its activities current as at the date of this presentation. The information in this presentation is in summary form only and does not contain all the information necessary to fully evaluate any transaction or investment. It should be read in conjunction with the Company's other periodic and continuous disclosure announcements lodged with the ASX, which are available at www.asx.com.au and other publically available information on the Company's website at www.cleanteq.com.

The Syerston Scandium Project is at the Scoping Study phase and although reasonable care has been taken to ensure that the facts in this presentation are accurate and/or that the opinions expressed are fair and reasonable, no reliance can be placed for any purpose whatsoever on the information contained in this document or on its completeness.

Actual results and developments of projects and scandium market development may differ materially from those expressed or implied by these forward looking statements depending on a variety of factors.

This presentation is not a prospectus, disclosure document or other offering document. It does not constitute or form part of any offer, invitation or recommendation to subscribe for or purchase any securities and does not form the basis of any contract or commitment nor shall it or any part of it or the fact of its distribution form the basis of, or be relied on in connection with, any contract or commitment or investment decisions relating thereto, nor does it constitute a recommendation regarding the shares of the Company. Past performance cannot be relied upon as a guide to future performance.

All amounts including "\$" or "A\$" are in reference to Australian Dollars unless stated otherwise.

The information in this document that relates to Exploration Results, Mineral Resources or Ore Reserves is based on information compiled by Sharron Sylvester, who is a Registered Professional Geoscientist (10125) and Member (2512) of the Australian Institute of Geoscientists, and a full time employee of OreWin Pty Ltd. Sharron Sylvester has sufficient experience that is relevant to the style of mineralisation and type of deposit under consideration and to the activity which he is undertaking to qualify as a Competent Person as defined in the 2012 Edition of the 'Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves'. Sharron Sylvester, who is a consultant to the Company, consents to the inclusion in the report of the matters based on her information in the form and context in which it appears.

All persons should consider seeking appropriate professional advice in reviewing the presentation and the Company.

Table of Contents

Section	Contents	Page
Section 1	Investment Highlights	4
Section 2	Entitlement Offer Overview	5
Section 3	Entitlement Offer Timetable	7
Section 4	Company Overview	8
Section 5	Clean TeQ Metals	14
Section 6	Syerston Scandium Project	21
Section 7	Clean TeQ Water	31
Section 8	Key Risk Factors	33
Section 9	International Offer Restrictions	35

Clean TeQ | Investment Highlights

INNOVATIVE PLATFORM TECHNOLOGY

- Continuous Ion Exchange Platform Technology – intellectual property 100% owned by CLQ

SYERSTON SCANDIUM PROJECT (100% owned by CLQ)

- Potential to develop the world's first primary supply of Scandium
- Positive scoping study results for long mine life development
- High grade, large scandium resource with potential for further resource upside
- Using our proprietary technology, CLQ is targeting Scandium Oxide supply at a significantly lower cost than current supply
- Favourably located in a low political risk jurisdiction
- Key development milestones in place (MLA's and development consent)
- Critical water allocation rights already obtained

METALS RECOVERY

- Clean-iX® - innovative process for the extraction and purification of a range of valuable metals from slurries and solutions that are not amenable to conventional separation
- Piloting work has confirmed CLQ's ion-exchange extraction processes' ability to recover low concentrations of scandium from intermediate process streams

WATER TREATMENT

- Continuous Ionic Filtration & Exchange (CIF®) and Macroporous Polymer Adsorption (MPA®) resin technology provides cost effective solutions to the mining, oil and gas and municipal industries for the treatment of waste waters
- Partnership to deploy platform technology in large Chinese market through Heads of Agreement for formation of a joint venture with Shanghai Investigation, Design and Research Institute Co. Ltd (**SIDRI**), majority-owned by China Three Gorges Corporation

BOARD AND MANAGEMENT

The Clean TeQ team consist of experienced managers and specialised engineers and chemists with extensive experience in the provision of industrial technology solutions and mining operations, project development and financing

Clean TeQ | Entitlement Offer Overview

Clean TeQ Holdings Limited (ASX:CLQ) is undertaking an approximate \$6.6 million (before costs) underwritten equity capital raising through a non-renounceable 1 for 10 entitlement offer (**Entitlement Offer**) of fully paid ordinary shares in Clean TeQ (**New Shares**).

Key Details	
Entitlement Offer	<ul style="list-style-type: none"> Non-renounceable 1 for 10 entitlement offer to raise approximately \$6.6 million (before costs) through the issue of 36,876,574¹ of fully paid ordinary CLQ shares Record date of Friday, 31 July 2015 Eligible shareholders will also be offered the opportunity to apply for additional shares in excess of their entitlement
Underwriting	<ul style="list-style-type: none"> Underwritten by BW Equities Pty Ltd (Underwriter) CLQ's major shareholder, Robert Friedland, has committed to take up his full entitlement under the Entitlement Offer and has provided an additional sub-underwriting commitment for a total commitment of \$3.3 million, inclusive of his entitlement
Offer Price	<ul style="list-style-type: none"> \$0.18 (18 cents) per share 27% discount to the closing price on 22 July 2015 25% discount to 5 day VWAP 22% discount to 10 day VWAP 22% discount to 15 day VWAP
Top Up Placement	<ul style="list-style-type: none"> CLQ has reserved the right to make a placement of new shares to nominees of the Underwriter at the same Offer Price as under the Entitlement Offer Under the Top Up Placement, CLQ may issue up to 12,362,106 new shares to raise an additional up to approximately \$2.23 million

¹ The number of New Shares to be issued is subject to the rounding of fractional entitlements to New Shares

Clean TeQ | Uses of Proceeds

Funds raised from the Entitlement Offer, together with other funds the Company has access to, will be used to progress the development of CLQ's 100% owned Syerston Scandium Project in NSW including:

- Metallurgical test-work to confirm the optimal process for leaching of Scandium from ore
- Completion of the Scandium pilot plant production run currently underway
- Infill drilling program targeting high grade extensions to the Syerston resource
- Progressing discussions with Scandium end users with a view to securing binding offtake contracts
- Syerston Feasibility Study, targeted for completion in Q2 of 2016

Funds raised from the Entitlement Offer will also be directed towards funding the ongoing development of Clean TeQ's Water Business, including any equity contribution required for the formation of the Water Treatment Joint Venture with SIDRI in China, repayment of the \$1.2M Nippon Gas loan, costs of the Offer and general corporate and working capital.

As at 30 June 2015 CLQ had available cash on hand of \$3.3M

Sources	A\$ million	Estimated Uses	A\$ million
Entitlement Offer ²	6.6	Metals Business incl. Syerston Project	3.4
Sale of 59% shareholding in Air business	1.7	Water Business incl. SIDRI China JV	2.3
		Repayment of Nippon Gas Debt	1.2
		Corporate and working capital	1.0
		Offer costs	0.4
Total Sources	8.3	Total Uses	8.3

² As part of the underwriting arrangements, CLQ has reserved the right to make a placement of new shares to nominees of the Underwriter at the same Offer Price as under the Entitlement Offer, using CLQ's existing placement capacity (**Top Up Placement**). Under the Top Up Placement, CLQ may issue up to 12,362,160 new shares to raise up to an additional approximately \$2.23 million. Any proceeds raised under the Top Up Placement will be applied towards progressing the development of CLQ's Metal and Water business as well as general working capital.

Creating sustainable solutions for oil and gas, municipal, mining, agriculture and industry.



Clean TeQ | Entitlement Offer Timetable

Event	Date
Announcement of the Entitlement Offer	Monday, 27 July 2015
Shares traded on an “ex” entitlement	Wednesday, 29 July 2015
Record Date for eligibility to participate in the Entitlement Offer	Friday, 31 July 2015
Despatch of Entitlement Offer Booklet and Entitlement and Acceptance Form to eligible shareholders	Tuesday, 4 August 2015
Entitlement Offer opens	Tuesday, 4 August 2015
Entitlement Offer closes at 5pm	Wednesday, 19 August 2015
New Shares quoted on deferred settlement	Thursday, 20 August 2015
Shortfall (if any) announced to ASX	Monday, 24 August 2015
Issue of New Shares and Deferred Settlement Trading ends	Wednesday, 26 August 2015
New Shares commence trading on a normal settlement	Thursday, 27 August 2015

The above dates and times are indicative only and subject to change. All dates and times are references to Melbourne time.

Creating sustainable solutions for oil and gas, municipal, mining, agriculture and industry.



Clean TeQ | Corporate Overview

Issued Capital

ASX code	CLQ
Shares (pre-issue)	368.8 M
Options	20.0 M
Performance Rights	1.7 M
Fully Diluted Capital (pre-issue)	390.5 M
Share Price	24.5c [@]
2015 Share Price Trading Range	6.2-29.5c
Market Capitalisation (undiluted)	90.3 M [@]

Shareholders

Total shareholders	2,535 [@]
Robert Friedland	16.9%
Board & Management	9.8%

Cash and Debt

Cash*	\$3.3 M
Short Term Debt	\$1.2 M
Long Term Debt (promissory note)	\$3.0 M

Share Price Chart (A\$/share)



* As at 30 June 2015

[@] As at 22 July 2015

Creating sustainable solutions for oil and gas, municipal, mining, agriculture and industry.



Clean TeQ | Board and Management



CHAIRMAN & CEO - Sam Riggall

Sam is a graduate in law and commerce and an MBA from Melbourne University. He was previously Executive Vice President of Business Development and Strategic Planning at Ivanhoe Mines Ltd. Prior to that Sam worked in a variety of roles in Rio Tinto for over a decade covering project generation and evaluation, business development and capital market transactions.



EXECUTIVE DIRECTOR AND CIO - Peter Voigt

Peter is a graduate in chemistry and has a MAppSc from Royal Melbourne Institute of Technology. Peter established Clean TeQ in 1990 and became a director in September 2007 and CEO in 2010. In November 2013 Peter moved to become the Chief of Innovation and Executive Director.



NON-EXECUTIVE DIRECTOR – Ian Knight

Ian is a Director of nem Corporate and his experience includes working with boards of public and private firms and State and Federal Governments . He provides extensive experience in strategy and implementing mergers, acquisitions, divestments and capital raising initiatives. Ian was also formerly a partner of KPMG and National head of Mergers and Acquisitions.



NON-EXECUTIVE DIRECTOR – Roger Harley

Roger is founder and principal of investment bank Fawkner Capital. He has over 25 years' experience as a corporate adviser, manager and investor including 11years as Director Corporate Finance and Director of Equity Capital Markets with Deutsche Bank in New York and Australia. Other Non-Executive Director positions have included Medibank Private, Industry Research and Development Board and Innovation Australia.



GENERAL MANAGER METALS – John Carr

John is a graduate in chemical engineering from Melbourne University and an MBA from Deakin University. John has previously worked as a process engineer for Rio Tinto. John has spent 8 years with Clean TeQ developing its technologies for metal extraction and water treatment.



GENERAL MANAGER WATER – Ealden Tucker

Ealden has over 20 years' senior global operations experience within a number of multi-national companies, including 8 years based in China. Prior to joining Clean TeQ, he worked for Armocon Technologies, Flowserve Valve & Controls, Tyco Flow Control, Pentair, Tyco, BHP and Tubemakers. Ealden has formal engineering qualifications from the Royal Melbourne Institute of Technology.



COMPANY SECRETARY – Melanie Leydin

Melanie is a Chartered Accountant and principal of Leydin Freyer, a chartered accounting firm specializing in accounting and company secretarial services. Melanie has over 20 years experience in the accounting profession and is company secretary for a number of junior mining, bioscience, biotechnology and IT entities listed on ASX.



CFO - Ben Stockdale

Ben is a commerce graduate from Melbourne University and has extensive financial and commercial experience including corporate and project financing, mergers and acquisitions and metals marketing and logistics. Over the past 16 years Ben has held a number of executive roles at companies including MPI Mines, Oxiana Limited, Citadel Resource Group and Unity Mining.

Creating sustainable solutions for oil and gas, municipal, mining, agriculture and industry.



Clean TeQ | Business Unit Overview

Metals

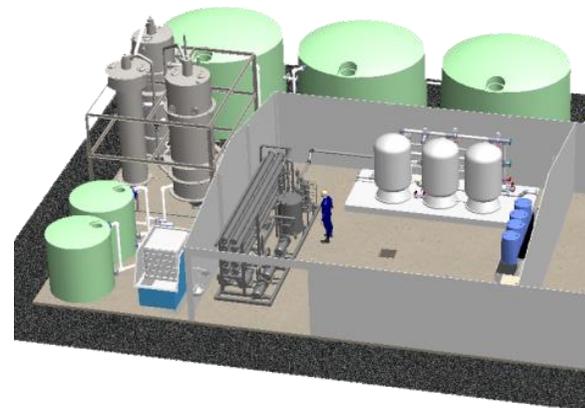
The Company's Clean-iX® Continuous Ion Exchange technology is an innovative process for the extraction and purification of a range of valuable metals from slurries and solutions that are not amenable to conventional separation.

Utilising its proprietary technology, CLQ is also progressing the development of its 100% owned Syerston Scandium Project in NSW.



Water

The Company's Continuous Ionic Filtration & Exchange (CIF®) and Macroporous Polymer Adsorption (MPA®) resin technology provides cost effective solutions to the mining, oil and gas and municipal industries for the treatment of waste waters.



Creating sustainable solutions for oil and gas, municipal, mining, agriculture and industry.



Clean TeQ | Continuous Ion Exchange Milestones

Year	Milestone
1989	CLQ founded with a focus on biological air pollution control
1989-2000	Company grows to become largest odour control company in Australia
2000	Company acquires worldwide exclusive license for continuous ion exchange technology from Russia's ARRICT
2000-2007	Development of Clean-iX continuous ion exchange technology for metal recovery and water treatment
2007	Company IPO's on ASX
2007	Clean TeQ successfully demonstrates the use continuous ion exchange for treated effluent desalination
2008	Successful development of nickel and cobalt recovery with BHP Billiton
2009	Clean TeQ develops and patents Continuous Ionic Filtration (CIF®) a new and innovative water technology
2009-2012	Further development work in recovery of uranium, gold and REE's
2012	Clean TeQ successfully demonstrates CIF® for desalination of produced water from CSG in Queensland gas fields
2012	Letter of Intent signed with ISK for scandium recovery from TiO ₂
2013	Clean TeQ successfully demonstrates the use of CIF® for reduction of sulphate in mining waters
2013	Mining entrepreneur Robert Friedland invests in Clean TeQ
2014	Heads of Agreement signed with SIDRI for China water joint venture
2014	Air division merged with Aromatrix Australia
2014	Acquisition of Syerston Scandium Project
2015	Air business divested to focus on Platform Technology – Continuous Ion Exchange

Creating sustainable solutions for oil and gas, municipal, mining, agriculture and industry.



Clean-iX[®] | Continuous Ion Exchange

Ion exchange has been used for many decades to separate and recover soluble elements including heavy metals.

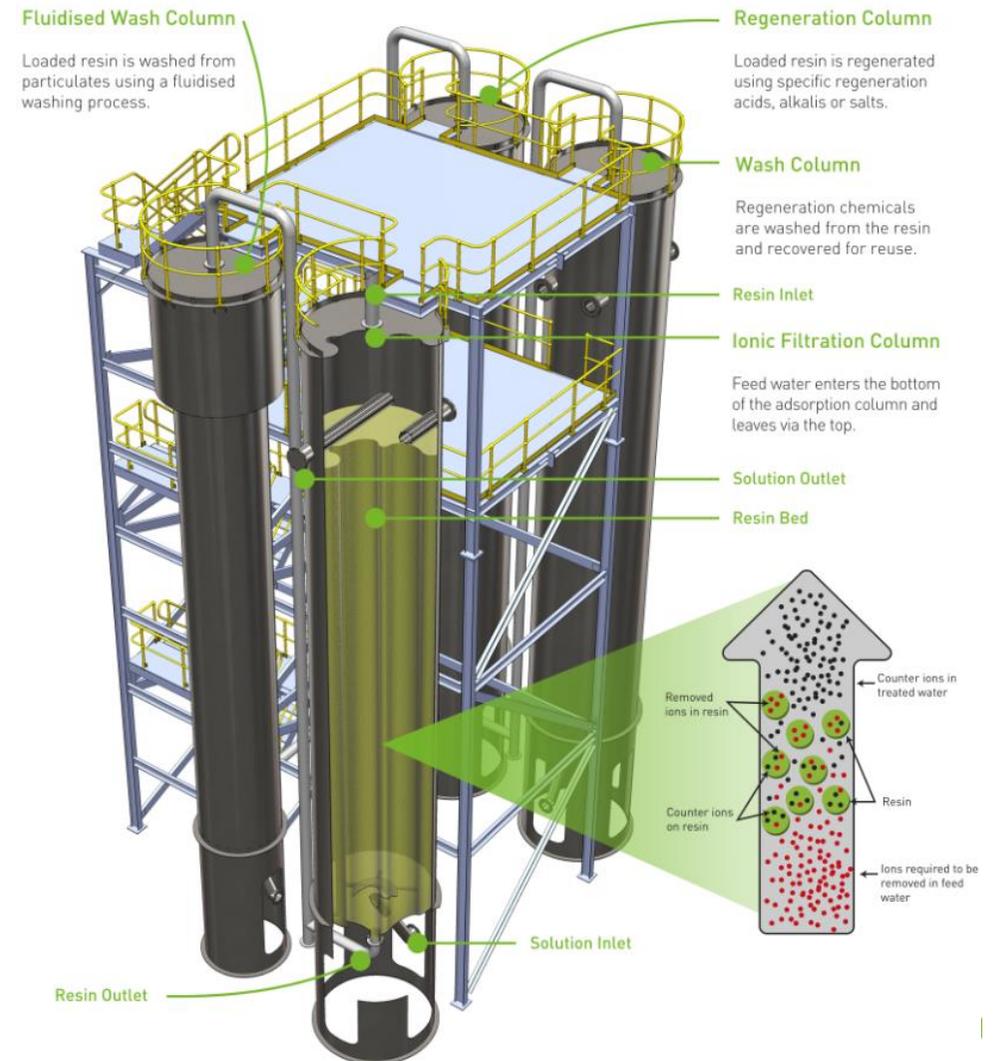
The process utilises resin (plastic) beads which are chemically engineered with a customised ionic charge.

The ionic charge of the resin, when introduced into the solution, results in adsorption of the targeted elements onto the beads.

The resin beads are then removed from solution and the targeted elements are washed off the beads (desorbed) and either recovered or disposed of.

Typically, ion exchange has been undertaken as a batch process in vats, which makes treating large volumes of solution expensive.

Clean-iX[®] Continuous Ion Exchange has been developed as a means to employ ion exchange in a cost effective manner for recovery of metals from solution and for the treatment of industrial waste water.



Clean-iX[®] | Continuous Ion Exchange

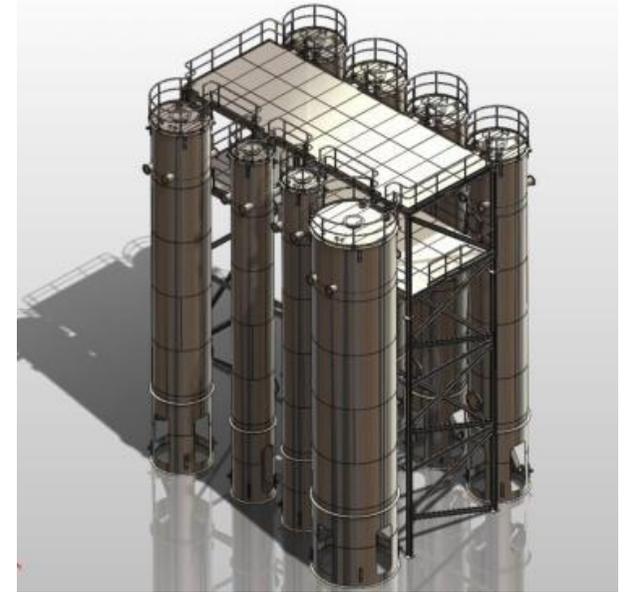
Continuous Ion Exchange involves the continuous counter-current flow of chemically charged resin beads through solutions and slurries in specially designed columns.

Targeted elements are adsorbed onto the beads, which are then pumped into separate columns where they are washed off the beads by desorption. The resin beads are then recycled back to the beginning of the process.

Originally developed by the All Russian Research Institute of Chemical Technology (**ARRICT**) over 40 years ago, Clean TeQ has further developed the Continuous Ion Exchange technology to provide the most cost effective, and environmentally friendly, metal recovery and waste water treatment processes available.

Metals: Clean TeQ's **Clean-iX[®]** Continuous Ion Exchange technology is an innovative process for the extraction and purification of a range of valuable metals from slurries and solutions.

Water: Our Continuous Ionic Filtration & Exchange (**CIF[®]**) and Macroporous Polymer Adsorption (**MPA[®]**) resin technologies provide cost effective solutions to the mining, oil and gas and municipal industries for the treatment of waste waters. CIF[®] and MPA[®] have been specifically designed to cope with the most demanding industrial waste water streams.



Resin-in-Column (cLX)



Resin-in-Pulp (cRIP) or Resin-in-Leach (cRIL)

Creating sustainable solutions for oil and gas, municipal, mining, agriculture and industry.



Clean TeQ Metals | Clean iX[®]

Clean-iX[®] combines the processes of:

- Leaching
- Extraction
- Elution/Desorption

Key Advantages:

- Higher metal recovery
- High selectivity for target metals, reducing system size and reagents
- Multiple metal products produced from one process

Benefits compared to conventional:

- Simplification of process flow sheet reducing capital costs
- High efficiency extraction and reagent utilisation, reducing operating costs

Metals Recovered with Clean-iX[®]:

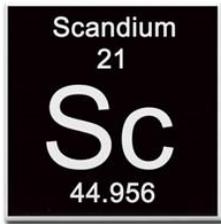
The periodic table shows the following elements highlighted in various colors, representing metals recovered with Clean-iX:

- Blue:** Sc, Ti, V, Cr, Mn, Fe, Co, Ni, Cu, Zn, Ga, Ge, As, Se, Br, Kr, Y, Zr, Nb, Mo, Tc, Ru, Rh, Pd, Ag, Cd, In, Sn, Sb, Te, I, Xe, Lu, Hf, Ta, W, Re, Os, Ir, Pt, Au, Hg, Tl, Pb, Bi, Po, At, Rn, La, Ce, Pr, Nd, Pm, Sm, Eu, Gd, Tb, Dy, Ho, Er, Tm, Yb, Ac, Th, Pa, U, Np, Pu, Am, Cm, Bk, Cf, Es, Fm, Md, No.
- Green:** Sc, Ti, V, Cr, Mn, Fe, Co, Ni, Cu, Zn, Ga, Ge, As, Se, Br, Kr, Y, Zr, Nb, Mo, Tc, Ru, Rh, Pd, Ag, Cd, In, Sn, Sb, Te, I, Xe, Lu, Hf, Ta, W, Re, Os, Ir, Pt, Au, Hg, Tl, Pb, Bi, Po, At, Rn, La, Ce, Pr, Nd, Pm, Sm, Eu, Gd, Tb, Dy, Ho, Er, Tm, Yb, Ac, Th, Pa, U, Np, Pu, Am, Cm, Bk, Cf, Es, Fm, Md, No.
- Orange:** Sc, Ti, V, Cr, Mn, Fe, Co, Ni, Cu, Zn, Ga, Ge, As, Se, Br, Kr, Y, Zr, Nb, Mo, Tc, Ru, Rh, Pd, Ag, Cd, In, Sn, Sb, Te, I, Xe, Lu, Hf, Ta, W, Re, Os, Ir, Pt, Au, Hg, Tl, Pb, Bi, Po, At, Rn, La, Ce, Pr, Nd, Pm, Sm, Eu, Gd, Tb, Dy, Ho, Er, Tm, Yb, Ac, Th, Pa, U, Np, Pu, Am, Cm, Bk, Cf, Es, Fm, Md, No.
- Red:** Sc, Ti, V, Cr, Mn, Fe, Co, Ni, Cu, Zn, Ga, Ge, As, Se, Br, Kr, Y, Zr, Nb, Mo, Tc, Ru, Rh, Pd, Ag, Cd, In, Sn, Sb, Te, I, Xe, Lu, Hf, Ta, W, Re, Os, Ir, Pt, Au, Hg, Tl, Pb, Bi, Po, At, Rn, La, Ce, Pr, Nd, Pm, Sm, Eu, Gd, Tb, Dy, Ho, Er, Tm, Yb, Ac, Th, Pa, U, Np, Pu, Am, Cm, Bk, Cf, Es, Fm, Md, No.
- Yellow:** Sc, Ti, V, Cr, Mn, Fe, Co, Ni, Cu, Zn, Ga, Ge, As, Se, Br, Kr, Y, Zr, Nb, Mo, Tc, Ru, Rh, Pd, Ag, Cd, In, Sn, Sb, Te, I, Xe, Lu, Hf, Ta, W, Re, Os, Ir, Pt, Au, Hg, Tl, Pb, Bi, Po, At, Rn, La, Ce, Pr, Nd, Pm, Sm, Eu, Gd, Tb, Dy, Ho, Er, Tm, Yb, Ac, Th, Pa, U, Np, Pu, Am, Cm, Bk, Cf, Es, Fm, Md, No.

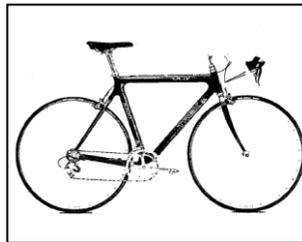
Target Metals:

Base Metals	Rare Earth Elements
Platinum Group Metals	Radioactive Elements
Precious Metals	

Scandium | The Next Strategic Metal



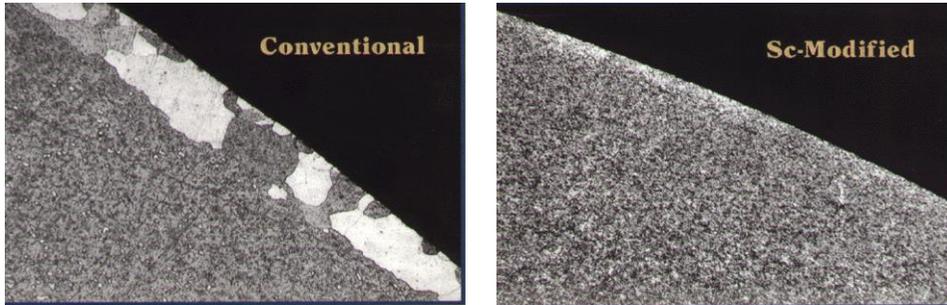
A periodic table of elements with Scandium (Sc) highlighted in red. The table includes the Lanthanide and Actinide series at the bottom.



- Scandium (**Sc**) commonly marketed as Scandium Oxide (**Sc₂O₃**).
- Sc is abundant in Earth's crust but rare to find concentrated occurrences for economic extraction.
- Scandium's value as an alloy of aluminium has been well understood for decades.
- Scandium can play a key role in the development of high performance materials in the aerospace, transport, energy and consumer sectors.
- Scandium also plays a key role in the distributed power generation market through solid oxide fuel cells.

Al-Sc Alloys | Next Generation Materials

Grain Refinement:



(Source: scandium.org)

Applications of aluminum and alloys to airplanes:



(Source: Kaiser Aluminum)

Aluminium-Scandium (Al-Sc) alloy physical characteristics:

- **Grain refinement:** smaller evenly shaped grains for increased strength
- **Superplasticity:** Al-Sc alloys can be subjected to higher stresses to form more complex shapes
- **Precipitation hardening:** Al-Sc alloys are significantly harder
- Higher **corrosion resistance** and thermal **conductivity**
- Increased **weldability** with no loss in strength

Potential functional benefits of Al-Sc alloys to transport:

- Reduction in overall weight through lighter materials and removal of rivets
- Additional weight reduction through Al-Sc components made with Additive Layer Manufacturing (ALM)
- Reduction/elimination of chromium and other harmful corrosion inhibiting chemicals (aerospace)
- Reduction in overall manufacturing cost
- Reduction in fuel and maintenance costs

Scandium Alloys | Aerospace and Automotive

Commercial Aerospace

New Airplanes to be delivered by 2032:



Average Aluminium content per aircraft:

- Boeing: 51 tonnes
- Airbus: 43 tonnes
- Average: 47 tonnes**

(Source: USGS)

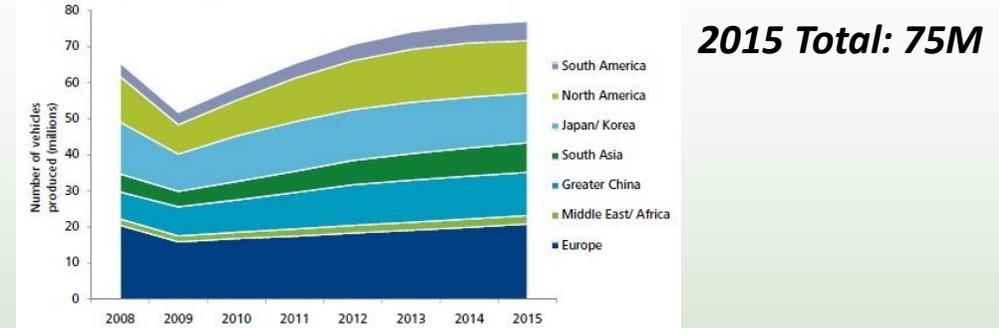
Total Al Consumption: 1,658,160 tonnes by 2032

Assuming 0.4% Sc in all aircraft aluminium and 25% uptake in the market:

Sc market potential: 1,660 tonnes by 2032
 or **98 tonnes per annum of scandium**
 or **150 tonnes per annum of scandium oxide**

Commercial Automotive

New Light Vehicles 2010-2015 (millions of units):



(Source: CSM Worldwide)

Average Aluminium content per light vehicle:

World Average: 0.159 tonnes

(Source: Ducker Worldwide & The Aluminium Association)

Total Al Consumption: ~12,000,000 tonnes p.a.

Assuming 0.2% Sc in all light vehicle aluminium and 10% uptake in the market:

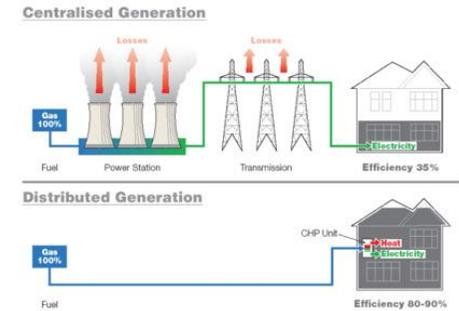
Sc market potential:
2,400 tonnes per annum of scandium
 or **3,650 tonnes per annum of scandium oxide**

Solid Oxide Fuel Cells | Energy Production

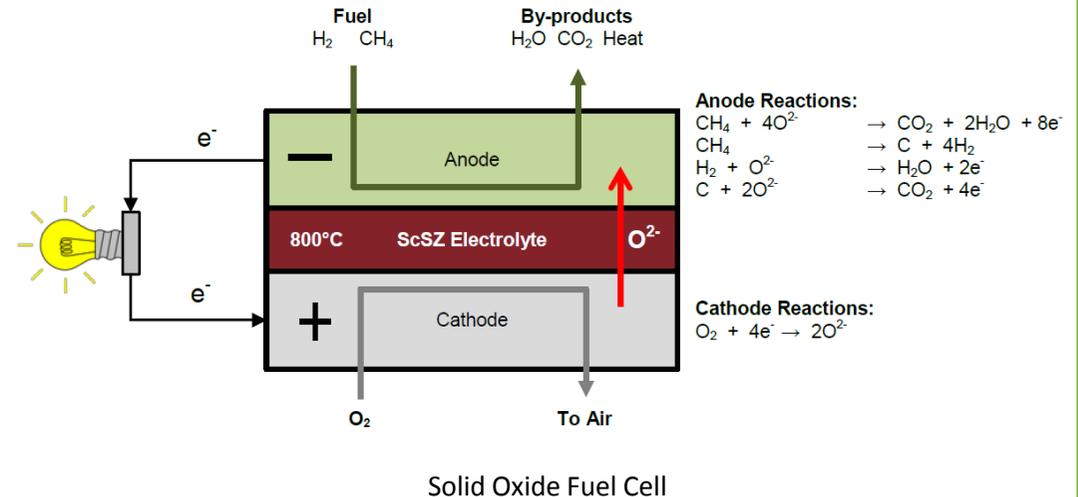
- Solid Oxide Fuel Cells (**SOFC's**) convert gas into electricity, heat and water.
- SOFC's use hard ceramic materials as the electrolyte – normally yttrium-stabilised zirconium.
- Sc-stabilised zirconium electrolyte allows for operation at much lower temperatures and extends operating life:
 - Lower production and operating cost
 - Higher efficiencies
 - Reduced downtime from cell replacement and servicing
- Large potential as a source for low cost “green” energy of the future.
- Decentralised energy production combined with off-grid power storage solutions.
- Bloom Energy (leading Sc-based SOFC provider) has 140MW of installed capacity and growing.



Bloom Energy Fuel Cells



(Source: SOFC Power)



Scandium Alloys | Additive Layer Manufacturing

3D printed part (EADS-Airbus):



3D printed heat exchange plate:



- Al-Sc alloys are already used for Additive Layer Manufacturing (3D printing) of component parts utilising computer aided design.
- Complex geometries and unique shapes formed to minimising waste and reduce cost of production.
- Al-Sc alloys highly applicable to this emerging industry due to its:
 - High mechanical strength
 - Fast cooling rate
 - High level of geometric freedom

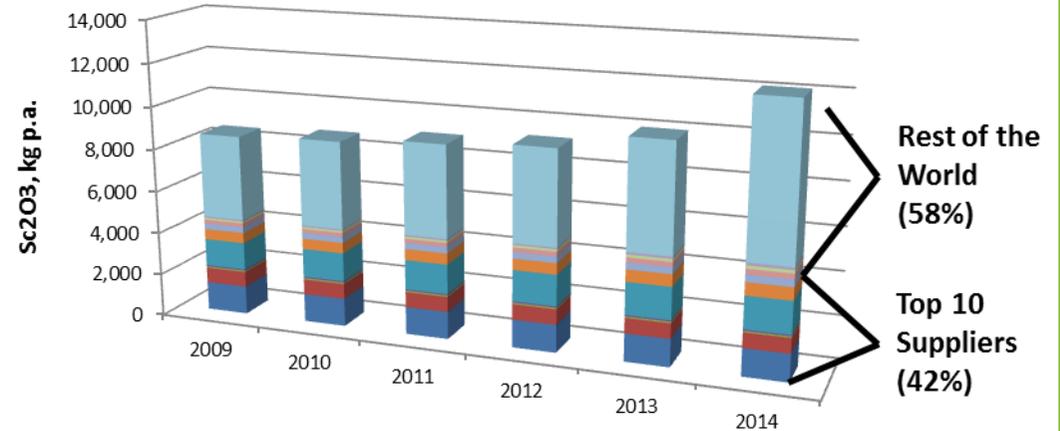
Other emerging industries include:

- High voltage tension wire - due to Sc-Al alloys having high strength and high electrical conductivity.
- Sporting equipment - Baseball bats, golf clubs, lacrosse sticks, bicycle frames due to high strength to weight properties.
- High intensity lamps - Scandium-based lamps provide light which most resembles sunlight.

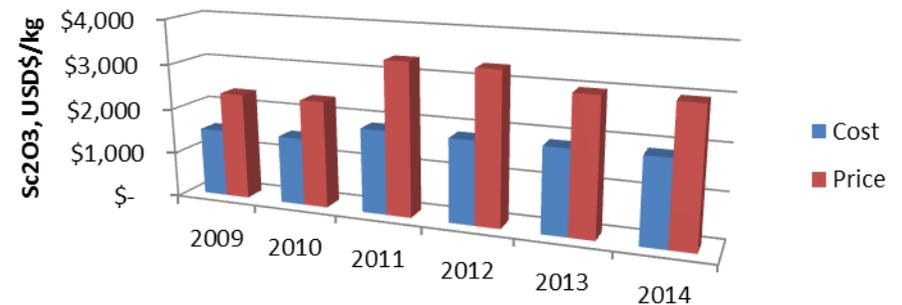
Scandium | Supply Chain Challenges

- Sourced as a by-product or from stockpiles - no current sources of primary mine supply.
- Due to limited supply and high production costs, total global consumption ranges from 10-12tpa.
- Supply is heavily fragmented, as by-product streams generally only contain low concentrations of scandium (~10-30ppm Sc).
- 2014 estimated averages per kg Sc_2O_3 :
 - Price: USD\$2,000-3,000/kg
 - Production cost: USD\$1,600-1,800/kg
- The majority of the world's Sc_2O_3 is produced in China, Russia or the FSU, which presents inherent sourcing risks.
- Availability of reliable supply has been a major inhibitor to the increased usage of Scandium.

Historical Global Scandium Oxide Production



Historical Global Scandium Oxide Price & Cost



(Source: QY Research Scandium Oxide Research Centre)

Syerston | Scandium Project

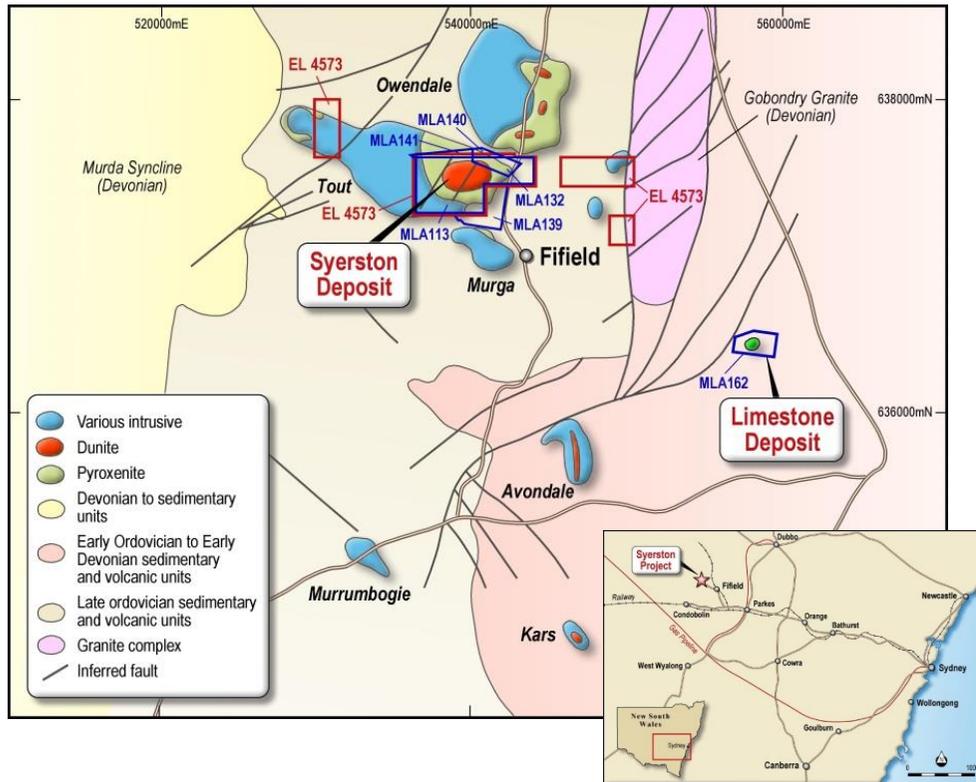
There are a number of things which need to occur for the Scandium market to grow significantly:

- 1) **Reliable supply over decades** – current sources of supply are highly fragmented and large volumes are not available.
- 2) **Lower Sc_2O_3 pricing** - low grades/concentrations of existing sources of supply combined with conventional technologies (HPAL & SX) result in higher costs of production.
- 3) **Customer commitment to offtake** - Customers and suppliers must work in partnership to develop new resources and markets for scandium.

Clean TeQ aims to facilitate this growth through the development of the Syerston Scandium Project:

- Potential to develop the world's first primary supply of Scandium
- Positive scoping study results for long mine life development
- High grade, large scandium resource with potential for further resource upside
- Using our proprietary technology, CLQ is targeting Scandium Oxide supply at a significantly lower cost than current supply
- Favourably located in a low political risk jurisdiction
- Key development milestones in place (MLA's and development consent)
- Critical water allocation rights already obtained
- Experienced development team

Syerston | Project Location & History



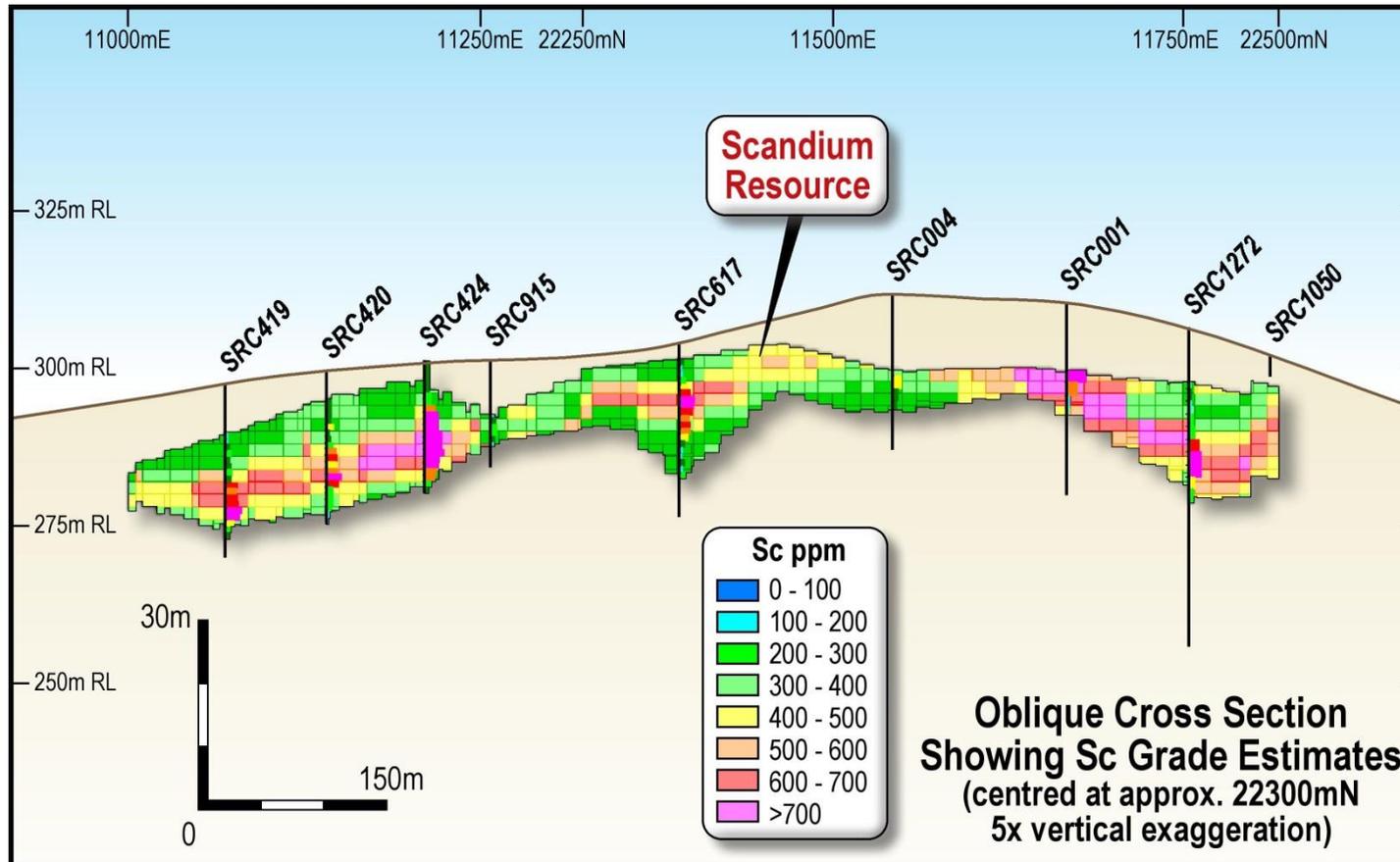
The Syerston Project consists of:

- An Exploration License (EL 4573);
- Mining Lease Applications (MLA 113, 132, 139, 140, 141 & 162 [limestone deposit]);
- Freehold land over portion of project area;
- Established bore field south of Project; and
- Project development consent in place.

Extensive drilling and development to date:

- 2000: Black Range Minerals completed a feasibility study for Ni/Co, including 725 RC drill holes and 9 bulk met samples.
- 2004: Ivanhoe Mines completed another feasibility study for Ni/Co after acquiring the project from Black Range, including an additional 117 RC drill holes.
- 2014: Additional 14 drill holes drilled in prospective scandium zone.

Syerston | Project Geology



- Shallow resource amenable to low cost open cut mining.
- High grade zones for selective mining in early years of operation.
- Potential resource upgrade through assaying shallow depths.

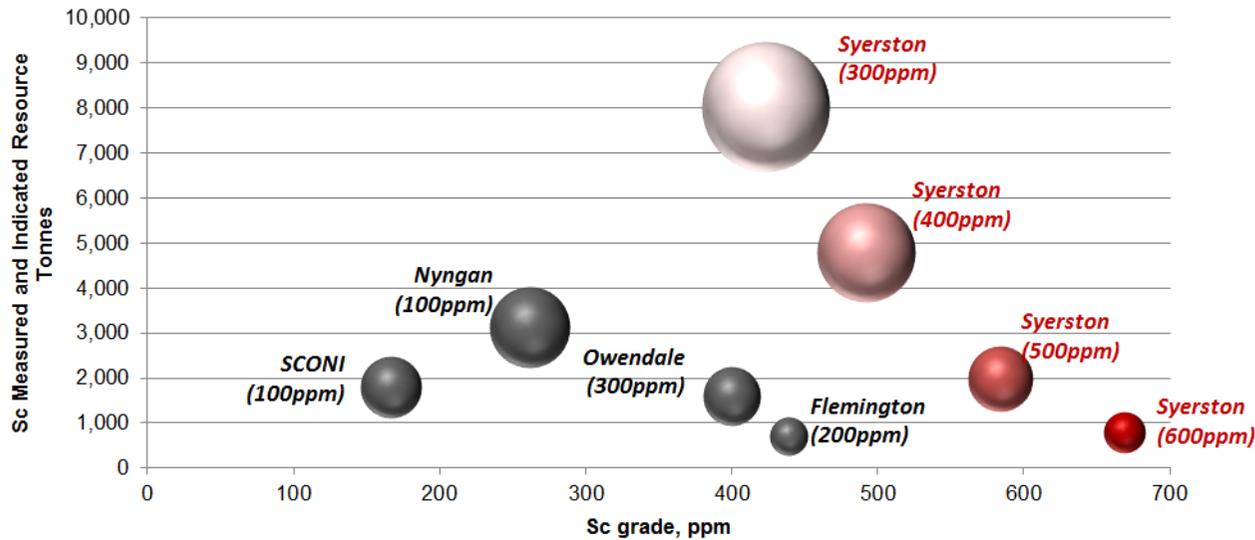
Syerston | Scandium Mineral Resource

Syerston Scandium Mineral Resource Estimate (2012 JORC)

Cut-off	Classification Category	Tonnage, Mt	Sc Grade, ppm	Sc Tonnes	Sc ₂ O ₃ Equiv Tonnes*
Sc >300ppm	Measured	1.1	411	465	712
	Indicated	17.9	424	7,570	11,583
	Inferred	6.4	386	2,480	3,795
	Total	25.4	414	10,516	16,089
Sc >600ppm	Measured	0.1	686	62	95
	Indicated	1.1	667	701	1,073
	Inferred	0.1	630	55	84
	Total	1.2	666	818	1,252

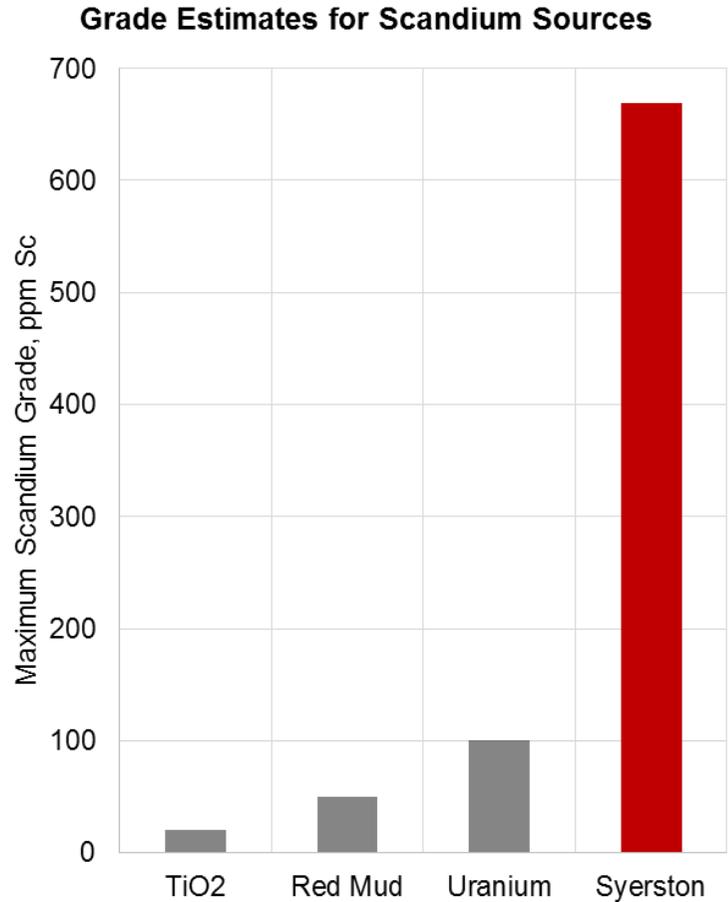
* Sc tonnage multiplied by 1.53 to convert to Sc₂O₃.

Syerston | Scandium Mineral Resource



Australian Scandium Mine Measured & Indicated Resource (Scandium cut-off grade)

- Other scandium sources range from 10-100ppm Sc.
- Scandium production from these sources are limited by:
 - Throughput of material
 - Relative operating costs to recover low-grade material
- The Syerston project has grades 6-30 times conventional scandium sources.



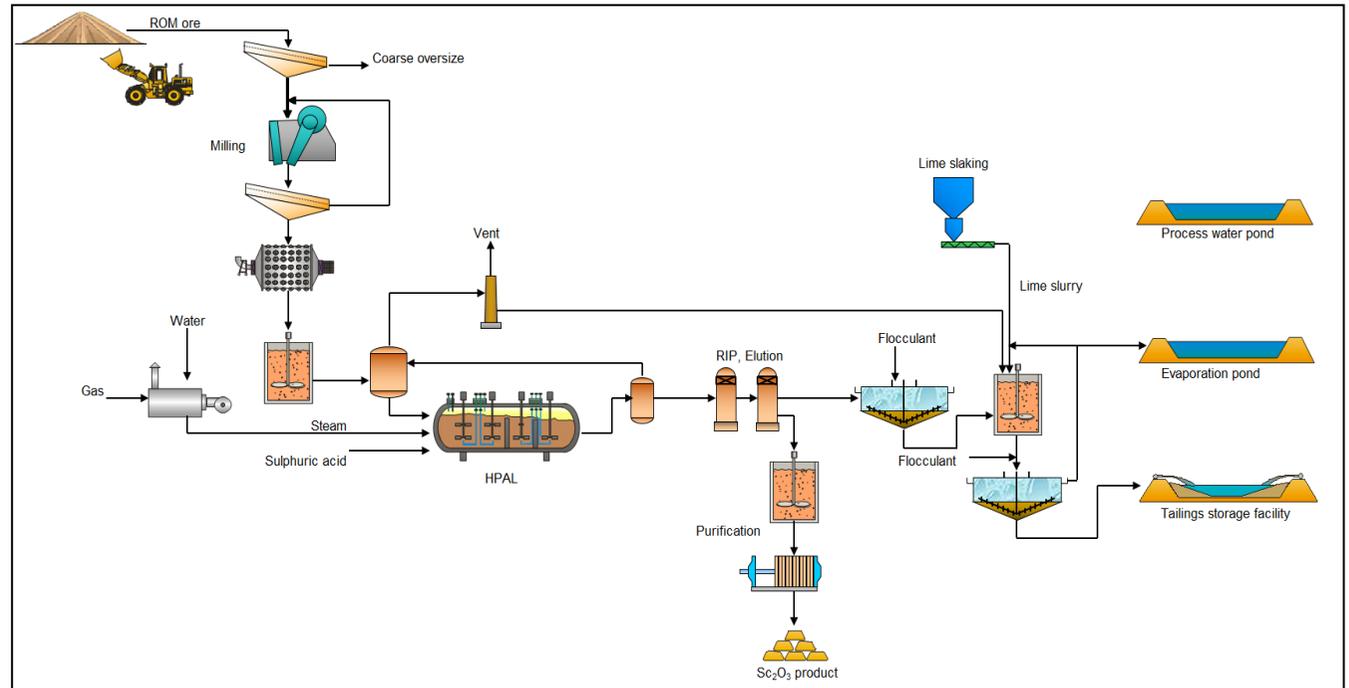
Creating sustainable solutions for oil and gas, municipal, mining, agriculture and industry.



Syerston | Scoping Study Flowsheet

Scoping Study Report May 2015:

- Mineral Resource Model and Mine Pit Model completed by OreWin Pty Ltd
- Metallurgical testwork completed internally and at ALS Metallurgy in Perth on Syerston samples
- Capital and operating cost estimate by CPC Project Design Pty Ltd
- Water source evaluation completed by Golder Associates Pty Ltd
- Financial Modelling completed internally



- Based on current resource model and mine pit modelling
- Small-scale campaign mining of shallow resource for 64,000tpa plant feed
- High Pressure Acid Leach (HPAL) followed by Resin-In-Pulp (RIP)
- 42.5tpa of 99.9% purity Sc₂O₃ (life of mine average production)
- 20 year initial life of mine assumed

Syerston | Scoping Study

Parameter	Assumption / Output
Resource Base used for Mine	Measured & Indicated Resource
Processing Plant Throughput	64,000tpa (1.28Mt over 20 years)
Processing Plant Average Feed Grade (Year 1-20)	510g/t Sc ¹
Sc ₂ O ₃ Average Production (Years 1-20)	42.5tpa Sc ₂ O ₃
Processing Plant Recovery	85%
Life of Mine	20 years
Long Term Sc ₂ O ₃ Price Assumption (99.9% purity)	USD\$1,500/kg Sc ₂ O ₃
Exchange Rate	0.78USD:1AUD
Total Capital Cost	AUD\$78.4M ²
Average Sc ₂ O ₃ Unit Operating Cost (Year 1-20)	AUD\$571/kg Sc ₂ O ₃ USD\$446/kg Sc ₂ O ₃
Average Annual Revenue	AUD\$81.8M
Net Present Value (NPV) – post tax	AUD\$279.1M³
Internal Rate of Return (IRR) – post tax	53%³

- Robust project economics for long term scandium production.
- Conservative Sc₂O₃ price assumption targeting wide scale adoption of scandium in key markets (aluminium alloys and fuel cells).

1. Includes pit selection, dilution and mining factors applied
2. 20% contingency on direct capital costs
3. Post Tax, 8% discount rate, 100% equity, real terms

All \$ are in Australian Dollars (AUD) unless otherwise stated.

Syerston | Scoping Study

Capital Cost Estimate

Plant Area	COST (AUD\$M)
Beneficiation & Leach Feed	\$2.2
High Pressure Acid Leach (HPAL)	\$25.8
Resin-In-Pulp (RIP)	\$3.0
Purification	\$1.1
Neutralisation & Tailings	\$2.8
Reagents	\$4.0
Services	\$9.5
Total Directs	\$48.4
Indirects, including EPCM	\$17.9
Owners Costs	\$2.4
Capital Cost, excluding Contingency	\$68.7
Contingency (20% of Directs)	\$9.7
Total Capital Cost Estimate (AUD\$M)	\$78.4

Operating Cost Estimate

Cost Centre	AUDM\$ p.a.	AUD\$ per kg Sc ₂ O ₃	USD\$ per kg Sc ₂ O ₃ ¹
Variable Costs			
Mining	\$1.1	\$25	\$20
Reagents	\$8.6	\$204	\$159
Utilities	\$1.3	\$31	\$24
Consumables	\$0.3	\$8	\$6
Power	\$0.8	\$18	\$14
Subtotal	\$12.1	\$272	\$212
Fixed Costs			
Labour	\$6.1	\$144	\$112
Power	\$0.2	\$6	\$5
Maintenance	\$2.7	\$64	\$50
General & Admin	\$3.1	\$72	\$56
Subtotal	\$12.1	\$286	\$223
Total Avg Operating Cost²	\$24.2	\$571	\$446

1. Exchange rate of 0.78USD:1AUD applied

2. Average over 20 year life of mine

Creating sustainable solutions for oil and gas, municipal, mining, agriculture and industry.



Syerston | Fast Track Development Path

Sufficient resource definition for Feasibility Study (Measured & Indicated) - Includes high grade zones for first years of operation.

Development Consent in place, with Mining Lease Applications (MLA) currently over project area.

- Includes all environmental approvals etc.
- Significant reduction in permitting/approvals time and cost.
- Most likely only development consent modification required for scandium mine.

Established borefield with allocation for mine requirement and expansion.

As water is scarce in the region, this provides a significant advantage over other projects, as there is no large scale water sources available in the area.



Syerston | Indicative Development Timeline

Year	2014	2015				2016				2017			
Stage	Q 4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
Initial Resource Statement	✓												
Metallurgical Bench Scale Testwork	✓	✓											
Scoping Study		✓	✓										
Feasibility Study Piloting				█									
Feasibility Study					█		█						
Offtake Agreement Negotiations				█									
Project Funding						█		█					
Design & Construction									█		█		
Commissioning													█

Key Activities proposed for the next 12 months:

- Flow sheet optimisation to form basis of Feasibility Study
- Negotiations of offtake agreements
- Drill program targeting high grade scandium resource extensions
- Pilot program to produce Sc₂O₃ samples for potential customers
- Completion of Feasibility Study

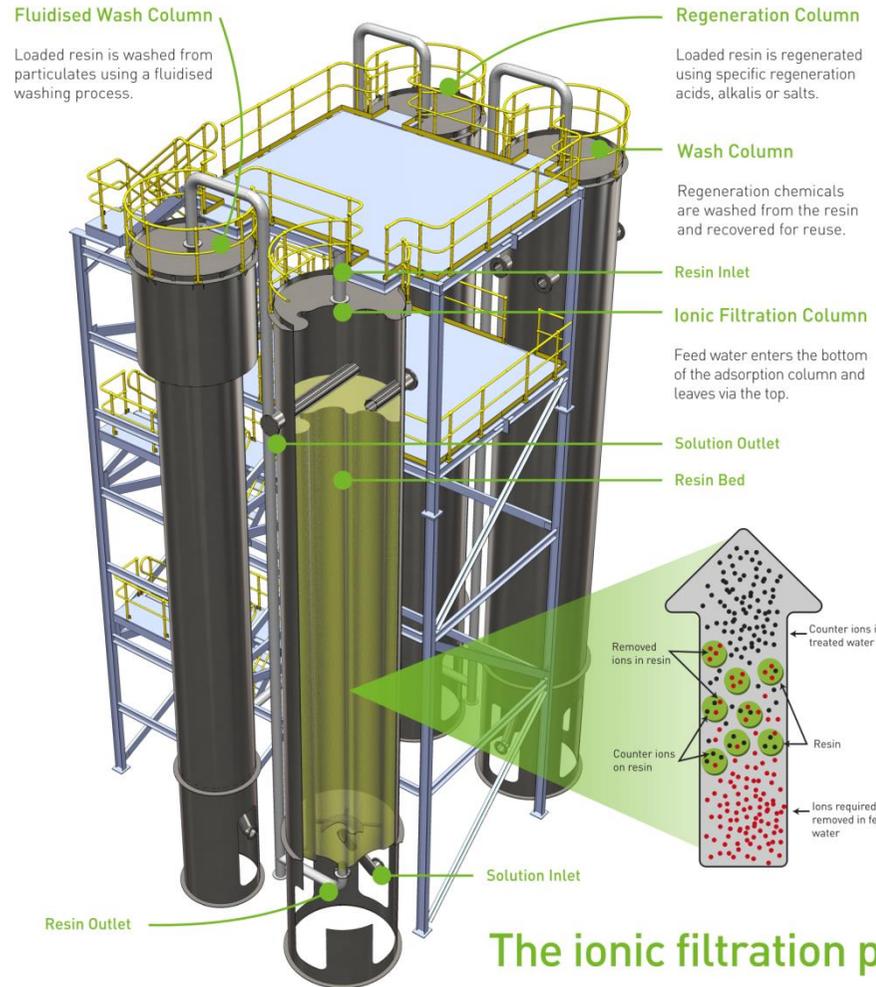
Clean TeQ Water | Technology

Features:

- Moving Ionic (CIF®) or Non-ionic (MPA®) resin bed
- Resin and water flow adjustable
- Fully automatic operation
- Uses low cost easily available chemicals
- Tolerates suspended solids without fouling
- Resin continuously cleaned and regenerated
- Modular construction

Advantages:

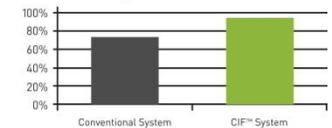
- Low capital investment
- Low operating costs
- Low power use
- High water recovery
- Produces “fit for purpose” water
- Simple operation and low maintenance
- Potential value in by-products



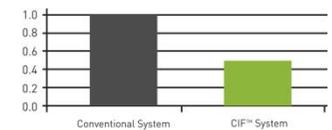
The ionic filtration process

CIF features and benefits

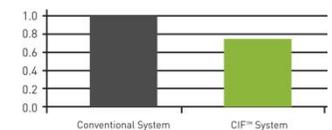
Recovery



Capex



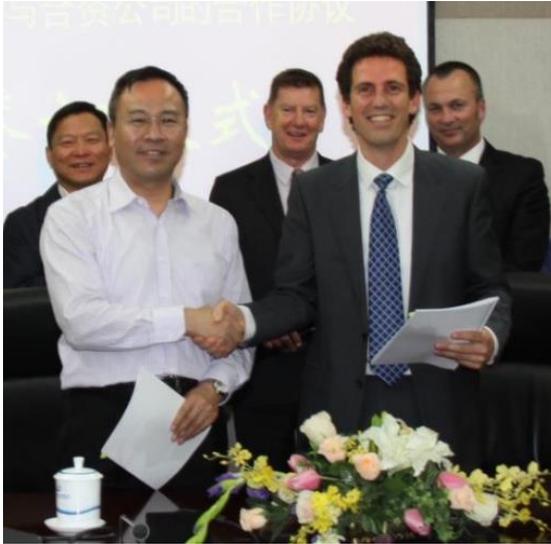
Opex



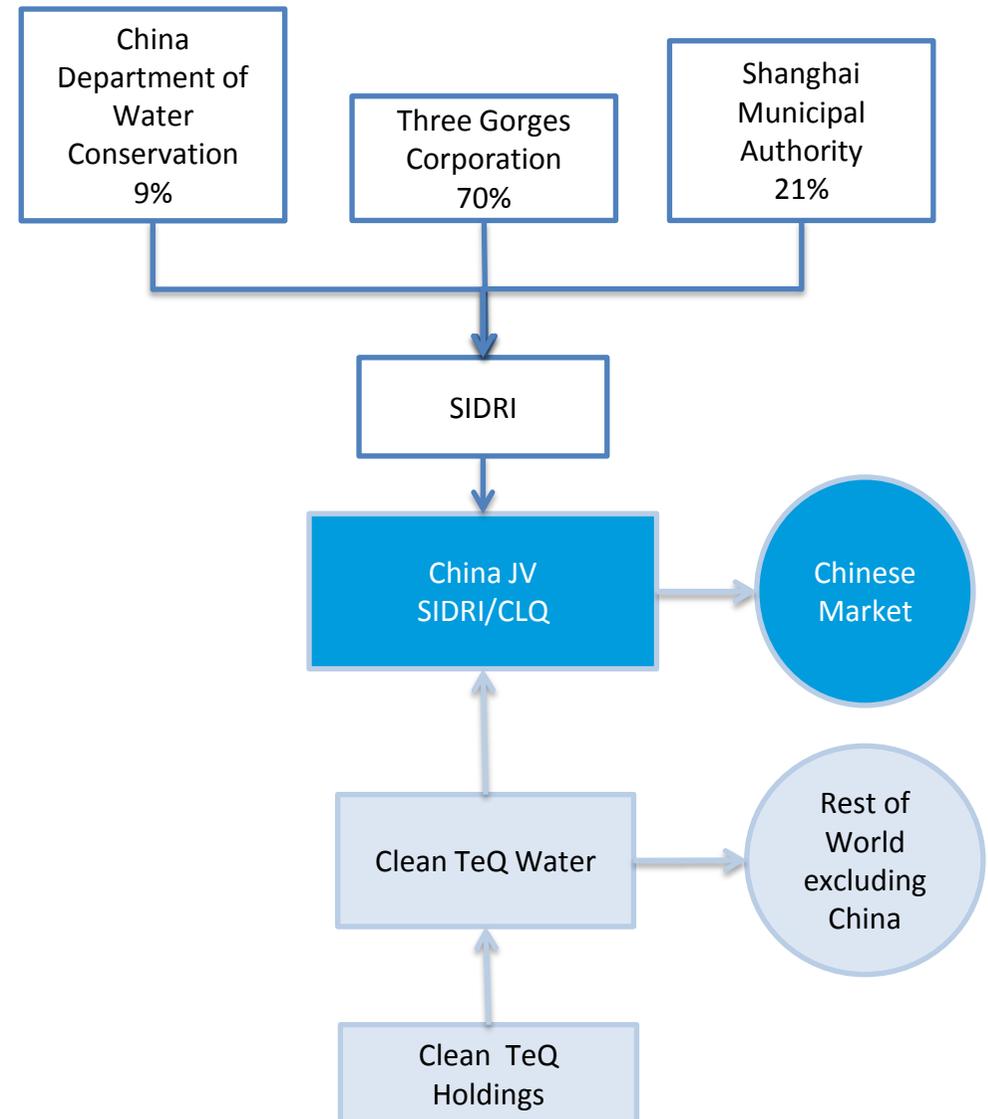
Process benefits:

- Low capital cost
- Low power cost
- High water recovery (up to 99%)
- Simple to operate
- Low maintenance
- Potential to produce valuable by-products

Clean TeQ Water | Strategic Partnerships



- Clean TeQ and Shanghai Investigation Design Research Institute (**SIDRI**) signed a Heads of Agreement to form a joint venture for the provision of industrial water treatment services in China utilising CLQ's Continuous Ion Exchange technology.
- Qualification test work has been completed and negotiations are underway in respect of the final structure of the Chinese Joint Venture Company.
- Clean TeQ is also pursuing a number of other business partnerships and opportunities aimed at commercialising the water purification technology.



Creating sustainable solutions for oil and gas, municipal, mining, agriculture and industry.



Clean TeQ | Key Risk Factors

Potential investors should be aware that there are risks associated with investing in CLQ. Some risks are beyond the control of CLQ and its Directors and Management and may have a material impact on CLQ's future operating and financial performance, and/or financial position of CLQ, its prospects and/or the value of the shares.

Some of the key risks associated with an investment in CLQ are set out below. The following list is not intended to be an exhaustive list of the risk factors to which CLQ is exposed.

Key Risk	Details
Technology Risk	CLQ's continuous ion exchange technology is at an early stage of commercialisation. While a number of bench-top and pilot scale test programs have been undertaken which successfully demonstrated the technical and economic viability of the technology, there is no guarantee that the bench-top and pilot scale test program results will be replicated on a full scale commercial basis. If the initial commercial scale plants, including the Syerston scandium recovery plant, do not operate as anticipated, CLQ's prospects, value, project and financial condition may be materially adversely affected.
Scandium Market Risk	CLQ is proposing to develop the Syerston Scandium Project with an annual level of production of Sc3O2 which exceeds historic annual average levels of global demand. CLQ is engaging with a number of parties who have expressed an interest in entering into offtake contracts with CLQ for the supply of significant quantities of Sc3O2, however, there is no guarantee that offtake contracts will be secured in the near future, or at all, which will support the volume, or price, of Sc2O3 required to support the development of the Syerston Scandium Project.
Funding	CLQ's Syerston Scandium Project is at pre-development stage and will require additional evaluation and feasibility study work prior to a development decision. Should CLQ proceed to develop the project it is likely that significant capital expenditure will be incurred. This process will require substantial additional funding and there is no guarantee that such funding, whether debt, equity or otherwise, will be obtained or available on favourable terms, or at all. The remainder of CLQ's business is at an early stage of commercialisation and may require additional funding in order to generate positive cash flow and there is no guarantee that such funding, whether debt, equity or otherwise, will be obtained or available on favourable terms, or at all.
Reliance on key personnel	The responsibility of overseeing the day-to-day operations and the strategic management of the Company depends substantially on its senior management and its key personnel. No assurance can be given that there will be no detrimental impact on the Company if one or more of these employees cease their employment.

Clean TeQ | Key Risk Factors cont'd

Key Risk	Details
Development Risks	CLQ's Syerston Scandium Project is at pre-development stage. If CLQ decides to proceed to production, the process of developing and constructing the project will be subject to many uncertainties, including the timing and cost of construction, the receipt of required government permits and the availability of financing the project. There is a risk that unexpected challenges or delays will arise, or that technical results and cost outcomes will differ from the estimates on which CLQ's current estimates are based, increasing the costs of development, production and/or resulting in lower sales.
Uncertainty in the Estimation of Mineral Resources	CLQ is at the preliminary stage of determining the economic and technical viability of the project, having completed only a scoping study on the Syerston Scandium Project to date. There is a risk that the more detailed studies may disprove assumptions or conclusions reached in the conceptual studies, may reveal additional challenges or complexities and may indicate the cost estimates are incorrect. In addition, CLQ must proceed through a number of steps before making a final investment decision with respect to the project, conducting feasibility studies, converting Resources to Reserves, obtaining government approvals and permits and obtaining adequate financing. There is a risk that the project may not proceed, may be delayed or may cost more than expected.
Licenses and Permits	CLQ requires certain licenses, permits and approvals to develop the Syerston Scandium Project, including conversion of current mining licence applications into mining licences and potential modifications to existing development consents. Failure to obtain, or delays in obtaining such licenses, permits and approvals may adversely affect CLQ's ability to proceed with the Syerston Scandium Project.
Mineral Title Risks	There are a number of conditions and regulatory requirements that CLQ must satisfy with respect to its tenements to maintain its interests in those tenements in good standing. There is a risk that CLQ may not be able to satisfy these conditions and requirements, in which case the Company's mineral title rights may be terminated in respect of those tenements.
General Economic Risks	CLQ's ability to obtain funding for its activities, financial performance and ability to execute its business strategy will be impacted by a variety of general global economic, political, social, stock markets and business conditions. Deterioration in any of these conditions could have an adverse impact on CLQ's financial position and/or financial performance.

International Offer Restrictions

This document does not constitute an offer of new ordinary shares (**New Shares**) of the Company in any jurisdiction in which it would be unlawful. New Shares may not be offered or sold in any country outside Australia except to the extent permitted below.

New Zealand

The New Shares are not being offered to the public within New Zealand other than to existing shareholders of CLQ with registered addresses in New Zealand to whom the offer of these securities is being made in reliance on the transitional provisions of the Financial Markets Conduct Act 2013 (New Zealand) and the Securities Act (Overseas Companies) Exemption Notice 2013 (New Zealand).

This document has been prepared in compliance with Australian law and has not been registered, filed with or approved by any New Zealand regulatory authority. This document is not a product disclosure statement under New Zealand law and is not required to, and may not, contain all the information that a product disclosure statement under New Zealand law is required to contain.

Singapore

This document and any other materials relating to the New Shares have not been, and will not be, lodged or registered as a prospectus in Singapore with the Monetary Authority of Singapore. Accordingly, this document and any other document or materials in connection with the offer or sale, or invitation for subscription or purchase, of New Shares may not be issued, circulated or distributed, nor may these securities be offered or sold, or be made the subject of an invitation for subscription or purchase, whether directly or indirectly, to persons in Singapore except pursuant to and in accordance with exemptions in Subdivision (4) Division 1, Part XIII of the Securities and Futures Act, Chapter 289 of Singapore (**SFA**), or as otherwise pursuant to, and in accordance with the conditions of any other applicable provisions of the SFA. This document has been given to you on the basis that you are an existing holder of the Company's shares. In the event that you are not such a shareholder, please return this document immediately. You may not forward or circulate this document to any other person in Singapore. Any offer is not made to you with a view to the New Shares being subsequently offered for sale to any other party. There are on-sale restrictions in Singapore that may be applicable to investors who acquire New Shares. As such, investors are advised to acquaint themselves with the SFA provisions relating to resale restrictions in Singapore and comply accordingly.

Contact Information



Ferntree Business Park
2 Acacia Place
Notting Hill, Victoria, 3168
Australia

Tel : +61 3 9797 6700
Email: info@cleanteq.com
Web: cleanteq.com

For more information about Clean TeQ
please contact:

Ben Stockdale, CFO
or
Melanie Leydin, Company Secretary

Creating sustainable solutions for oil and gas, municipal, mining, agriculture and industry.

