

Quarterly Activities Report – March 2019

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MELBOURNE, April 29, 2019 - HIGHLIGHTS

Renovations underway at the Parkes office.

Clean TeQ community engagement activities

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Clean TeQ plant installation at Fosterville Gold Mine, Victoria

Clean TeQ CIF® plant constructed and awaiting commissioning in Oman

Clean TeQ Continuous Resin-In-Column Ion Exchange plant in DRC

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The Monash/NematiQ/Clean TeQ team with the graphene oxide printer at the NematiQ facility in Notting Hill, Victoria

Dr Sam Martin and Dr Sebastian Hernandez holding a graphene oxide membrane produced on an industrial-scale printer at the NematiQ facility in Notting Hill, Victoria

- Construction and commissioning of three commercial-scale ion-exchange metal recovery and water purification plants nearing completion in DRC, Australia and Oman
- Clean TeQ Sunrise front end engineering and design progressing steadily with approximately 20% complete
- Market conditions remain favourable for EV battery materials – nickel was the best performing base metal on the LME in Q1 2019
- Mr Shawn Wang appointed as non-executive director

About Clean TeQ Holdings Limited

Our vision is to empower the clean revolution by providing specialty materials and clean solutions to a range of industries using our proprietary Clean-iX® continuous ion exchange technology.

Clean TeQ Sunrise

The Clean TeQ Sunrise Project is an advanced nickel, cobalt and scandium project in New South Wales which, when combined with our proprietary continuous ion-exchange processing technology, provides Clean TeQ with the opportunity to become a leading global supplier of nickel and cobalt sulphate to the lithium-ion battery industry. The Project also positions Clean TeQ to provide significant quantities of low cost scandium for production of the next generation of lightweight aluminium alloys for key transportation markets.

Clean TeQ Water

Clean TeQ's water division delivers cost effective water treatment solutions to the power, mining, oil and gas and municipal industries using our proprietary technologies, including Continuous Ionic Filtration & Exchange (CIF®) and DeSALx®. These technologies are designed to cope with the most demanding waters to provide best in class performance in water recovery and operability.

CLEAN TEQ SUNRISE NICKEL COBALT SCANDIUM PROJECT

During the quarter, [Clean TeQ Holdings Ltd.](#) (Clean TeQ or the Company) continued to advance the development of the Clean TeQ Sunrise Project (Clean TeQ Sunrise or Project) in New South Wales.

MARKET UPDATE

Investor appetite for exposure to battery materials remains strong, in spite of the sharp decline in the cobalt price over the past six months. Specific feedback from investor meetings in North America over Q1 2019 has been very positive, as has the increased interest from the global auto OEM sector to secure long-term supply arrangements. These meetings have confirmed that, within the global market for battery cathode material supply, Clean TeQ Sunrise stands out as the most advanced development project, capable of bringing significant new nickel and cobalt supply to the electric vehicle (EV) market:

- Definitive Feasibility Study complete, demonstrating robust economics and long (+40 years) mine life
- Fully permitted with all key approvals in place including Development Consent and Environmental Impact Statement
- Mining Leases granted
- Critical water supply obtained via +3.2 GLpa ground water allocation
- Excellent regional infrastructure in place including existing road, rail and power infrastructure in close proximity
- Initial binding offtake contract secured with Beijing Easpring for tonnages representing approximately 20% of forecast production in years 1-5, with strong demand for the balance from a number of counterparties
- Metallurgical Corporation of China Ltd (MCC) (constructor/operator/co-owner of the Ramu nickel/cobalt laterite project in PNG) appointed as key project delivery partner with front end engineering (FEED) and design underway
- Strong technical team engaged in Perth engineering hub and locally in Parkes and the Central West of NSW

While spot cobalt prices have fallen over the past six months as a result of supply growth from the DRC, Clean TeQ remains strongly of the view that, even with the trend to cobalt thrifting in battery cathodes, the cobalt market will experience long-term structural deficits, with an increasing proportion of global supply originating from the DRC.

In the nickel market, the supply challenge is significantly greater. Overall, nickel supply growth in recent years has been dominated by the expansion of nickel pig iron (NPI) production for stainless steel, and NPI's share of supply is expected to keep growing. Meanwhile, supply of 'battery-appropriate' Class I nickel feedstock has been limited by a decade of low nickel prices and lack of new ore discoveries (traditional sulphide resources). Class I nickel production represents less than half of current global market supply and approximately half of that is already committed to end uses other than batteries.

As cathode chemistries become increasingly nickel rich, there is an absence of development-ready projects

able to produce Class 1 nickel to respond to increasing EV demand. Even with higher nickel prices, the lead-time to development of new nickel capacity is often substantially longer than for most other commodities.

Nickel was the best performing LME base metal over the quarter, increasing 22% from US\$4.81/lb (US\$10,605/t) to US\$5.85/lb (US\$12,897/t) with a significant reduction in LME nickel inventories, down to 5-year lows.

Electric vehicle demand growth continues to surprise on the upside. In 2018 over 2 million pure electric vehicles were produced globally, with just over half that number manufactured in China. That represents a 67% YOY growth rate (with China expanding at 80% YOY)¹. Importantly, progressive reductions in Chinese EV subsidies has seen minimal impact on China's EV sales growth. In almost all major global economies, government policy is mandating the progressive transition to electric vehicles, prompting unprecedented investment in the battery and automotive supply chains. At a forecast rate of growth for cell manufacturing capacity of circa 100GWh pa, the equivalent of two to three Sunrise projects will need to be brought online in each year over the next decade to supply the nickel and cobalt units needed just for EV demand.

Market commentators and expert forecasters maintain strongly bullish outlooks for nickel as a result of the emerging electric vehicle industry. For example²:

Ken Hoffman, leader of the McKinsey EV battery materials research group, concurred that Ramu has been a "phenomenal success" that battery companies hope can be replicated. "But if it cannot...this industry is going to be in serious trouble," he said.

"From the EV standpoint, there is a lot of concern...but you don't see that sense of urgency from many senior mine managers" who want the nickel price to be over \$20,000 a tonne before committing to any big investment, he said.

Nickel prices on the London Metal Exchange are currently trading at just over \$13,000 a tonne.

"When you talk to the battery companies and the auto companies, they are petrified about supply because they don't see it coming on line," Hoffman said.

As Sunrise represents one of the only near-term options to supply large incremental volumes of nickel and cobalt into the rapidly growing battery market we continue to see strong ongoing interest in the project from the auto, battery and materials sectors for both offtake and investment.

PROJECT WORKS

FEED work continues to proceed with Clean TeQ's key project delivery partner, MCC. As part of the collaboration plan with MCC, integration of MCC's and Clean TeQ's engineering teams has now been completed, with personnel from both organisations now co-located in the Perth project office and Beijing respectively. Overall, FEED progress is running slightly behind plan at approximately 20% complete but is still scheduled to be finished in Q3 2019.

A key output to be provided by MCC through the FEED phase is an update and finalisation of the fixed-price EPC price and contract for the construction of the Sunrise processing plant.

In addition, the Company continues to work with MCC to prepare an update to the overall project delivery schedule, including project construction, plant commissioning and first production. Although a revised project execution schedule has not yet been determined, it is expected that the target dates for FID and first production will be subject to some delay as a result of the revised schedule. The Company will provide an update to the market as soon as the new project schedule has been determined.

Clean TeQ is also planning to engage a Tier 1 global engineering and project management contractor to

support the owner's team through the FEED phase and into the project delivery phase, including overseeing the construction of associated non-MCC/EPC infrastructure and facilities. Tendering for the preferred contractor is well underway.

Key early works completed during the quarter included the surveying of the water pipeline route. The water pipeline will be constructed within the road reserve from the Clean TeQ Sunrise borefield, located near Bedgerabong, to the project site which is adjacent to Fifield. Engineering of the water pipeline is also underway. Completion of engineering will allow the detailed pipeline route to be finalised and necessary access approvals gained from local government authorities. Other early works underway included renovations to the Parkes office ahead of the April move-in date and Sunrise site preparation (security fencing, vegetation management and telecommunications).

Given the anticipated delay to the overall project delivery schedule, the Company has elected to defer some of the higher cost components of the early works packages including ordering and laying of the planned water pipeline and the transportation and installation of the construction camp. Rather than completing all planned early works in advance of the required timeframe, the higher cost packages will be deferred to align with the new overall project delivery schedule, once it is determined.

Figure 1 – Renovations underway at the Parkes office.

<http://www.globenewswire.com/NewsRoom/AttachmentNg/18d0e42e-ebb6-435d-8133-7e0fc19b01b4>

Deferring these early works is a financially prudent approach that will allow Clean TeQ to maintain a significantly higher cash buffer while financing discussions remain ongoing. Early works activities which are currently underway including planning, engineering and progressing permitting and land access arrangements will continue through to completion.

The NSW Environment Protection Authority issues environment protection licences (EPL) to the owners or operators of various industrial premises. In January 2019 Clean TeQ Sunrise received an EPL - a significant milestone - which covers the construction phase of Clean TeQ Sunrise.

COMMUNITY AND GOVERNMENT

Clean TeQ engages proactively with our local communities in the Sunrise project area. Clean TeQ is committed to maintaining ongoing dialogue and transparency with all stakeholders and enjoys the strong support of local communities, as well as regional and state governments.

A range of forums have been established to enable positive community engagement including a formal Community Consultative Committee (CCC) and a more informal, travelling "Coffee Cart". Local schools are invited to partner with the coffee cart program, with proceeds used for education initiatives such as the purchase of student iPads. Clean TeQ is also supporting student Breakfast Clubs at a number of schools in the region.

Figure 2a – Clean TeQ community engagement activities

<http://www.globenewswire.com/NewsRoom/AttachmentNg/22a18c2b-16d0-44e2-92f5-6fbf94384d48>

Figure 2b – Clean TeQ community engagement activities

<http://www.globenewswire.com/NewsRoom/AttachmentNg/52c1e79b-0533-40e6-8218-51dedf1a40bb>

Following the execution of the Voluntary Planning Agreement in December 2018 with the Shire Councils of Lachlan, Parkes and Forbes, the first payments totalling \$400,000 were made in January to the Councils.

On 7 February 2019 the NSW Minister for Resources, Energy, Utilities and the Arts launched "The NSW Minerals Strategy", designed to unlock NSW's underground mineral wealth. The strategy includes initiatives to streamline approvals to unlock NSW's large resource base of strategic metals including nickel, cobalt and scandium.

The Minister noted, "From nickel to scandium, cobalt to zinc, magnesium, titanium and more we are blessed with huge untapped resources – we want to take advantage of those deposits. This strategy positions NSW as an essential supplier to meet growing global demand for metals used in the advanced technologies of today and tomorrow. This strategy clearly signals that NSW is very much open for business when it comes to socially and environmentally responsible metal exploration and extraction."

PROJECT FINANCING

Clean TeQ is actively engaging with a number of project financiers and potential offtake/joint venture partners in order to secure an equity financing package for the project. The drive for end-users to secure high-quality, long-term supply of nickel and cobalt sulphates remains strong. Automotive OEMs continue to make headlines with announcements of new investments in EV production, and governments remain supportive with policies supportive of emissions reduction and EV adoption.

Discussions on debt financing with the mandated lead arranger (MLA) banks are also advancing. The MLAs have provided indicative best efforts undertakings to provide a total of up to US\$500 million of the total financing facilities. Although the size of the actual total debt funding package is yet to be determined, the Company is targeting a significantly larger total debt funding package being syndicated out to the wider bank market – at least 50% of the total funding requirement for the project. In particular, we have seen strong additional interest from Chinese debt providers since the announcement of MCC as the key project delivery partner for the project.

CLEAN TEQ WATER

Clean TeQ Water is focused on completing key projects in Australia, Oman, DRC and China, with excellent progress over the past quarter.

At the Fosterville Gold Mine in Victoria, Clean TeQ was engaged to design, supply and commission a 2 million litre-per-day Clean TeQ DeSALx® mine water treatment plant. The plant is designed to deliver a sustainable water management solution by treating mine process water for reuse in the mine operations. With construction now complete, Clean TeQ Water personnel are currently on site to finalize installation and prepare for plant commissioning over the coming months.

Figure 3 - Clean TeQ plant installation at Fosterville Gold Mine, Victoria

<http://www.globenewswire.com/NewsRoom/AttachmentNg/4421a440-cd44-47a7-9d6b-fa2d8ed07d12>

In Oman, engineering, delivery and construction of the Clean TeQ waste water treatment plant delivered in partnership with Multotec Process Equipment Ptd Ltd (Multotec) has been completed. The final commissioning phase will commence later this year when the customer begins delivering waste water to the CIF® plant for treatment.

Figure 4 – Clean TeQ CIF® plant constructed and awaiting commissioning in Oman

<http://www.globenewswire.com/NewsRoom/AttachmentNg/5e9fc223-7c5e-49e7-8563-ac59762a6afb>

In the DRC, Clean TeQ has been engaged to design and construct a Continuous Resin-In-Column (cLX) Ion Exchange plant to treat up to 20 million litres-per-day of a raffinate stream, removing contaminant metals and improving the quality and environmental rank of the raffinate, prior to further processing. All construction was completed during the quarter with hot commissioning commencing. Initial tests showed that the cLX plant was performing well, exceeding design expectations. However, an accidental uncontrolled release by the mine owner/operator of very high-pressure water from the main plant into the cLX system resulted in some damage being caused to the Clean TeQ plant, taking it offline. The damage is currently being repaired with some additional modifications being installed upstream of the cLX plant to prevent a similar event occurring again. Expectations are for a restart of the plant over the coming weeks.

Figure 5 – Clean TeQ Continuous Resin-In-Column Ion Exchange plant in DRC

<http://www.globenewswire.com/NewsRoom/AttachmentNg/4cedcef8-c5b1-45de-abdb-765993b5cc27>

The successful delivery and commissioning of these three plants demonstrates the efficacy of Clean TeQ's suite of proprietary ion exchange technologies and their versatility for metal extraction and waste water treatment. As commercial scale plants, the facilities provide a valuable platform from which to rapidly grow Clean TeQ Water.

The waste water treatment plant being delivered via a joint venture between Clean TeQ and Jinzhong Hoyo Municipal Urban Investment & Construction Co., Ltd, remains in the detailed design and permitting phase.

During the quarter, Clean TeQ was advised that it was the preferred technical solution for the design and construction of a recycled water re-use plant at the Cleveland Bay Purification Plant in Townsville. Commercial negotiations between the parties are ongoing. Final award of a contract will be subject to a range of conditions including agreement on commercial terms and financing.

Figure 6 – Clean TeQ Continuous Resin-In-Column Ion Exchange plant in DRC
<http://www.globenewswire.com/NewsRoom/AttachmentNg/cc481f1b-169a-4aea-9b72-f003034e1109>

TECHNOLOGY DEVELOPMENT

Clean TeQ's technology development team continues to advance its work in the development of graphene oxide nanofiltration membranes and adsorbents, as well as ongoing development of the CIF® technology for water treatment applications.

NEMATIQ JOINT VENTURE

In late-2018, Clean TeQ and Ionic Industries established a joint venture company NematiQ Pty Ltd (NematiQ) to pursue in partnership the development of graphene oxide (GeO) membranes for water treatment applications. All documentation for the various commercial agreements and technology licences have now been finalised, and NematiQ's work program has commenced.

Over the past two years, Clean TeQ and Ionic have successfully developed a process to manufacture high purity graphene oxide (GeO) that can be applied to a membrane support to create a highly efficient graphene nanofiltration membrane (GeO-Membrane). Significantly, the GeO-Membrane manufacturing process has been demonstrated on commercial scale industrial equipment.

Figure 7 – The Monash/NematiQ/Clean TeQ team with the graphene oxide printer at the NematiQ facility in Notting Hill, Victoria
<http://www.globenewswire.com/NewsRoom/AttachmentNg/a80a1b09-c6d5-4e27-af9b-cb7ed125f1e6>

NematiQ has established a factory and office premises in Notting Hill, adjacent to the existing Clean TeQ head office and laboratory. From this facility, NematiQ is focused on optimising its proprietary process for refining graphite oxide raw material into graphene oxide, which is used to form the filtration layer of the GeO-Membrane. A plant for the manufacture of high purity graphene oxide has been designed and installed at NematiQ's premises, with graphene oxide produced by the facility to be used for larger scale manufacture of graphene oxide membranes.

The ultimate goals of the NematiQ work programs are to:

1. Confirm the technical process and cost effectiveness of ion exchange for refining of the raw material graphite oxide into high purity GeO. This process has been successfully completed;
2. Demonstrate the GeO layering process at commercial scale using a specialised process developed and patented by Monash University and licensed to NematiQ. Activities currently underway; and,
3. Refine the printing process to demonstrate the ability to produce GeO membranes at commercial scale with the appropriate physical properties, flow rates and filtering capability.

In water purification applications, graphene oxide membranes have the potential to offer distinct operational

advantages over the current polymer nanofiltration membranes, providing a significant commercial opportunity should the technology prove successful.

Figure 8 – Dr Sam Martin and Dr Sebastian Hernandez holding a graphene oxide membrane produced on an industrial-scale printer at the NematiQ facility in Notting Hill, Victoria
<http://www.globenewswire.com/NewsRoom/AttachmentNg/6e6fb01a-f469-463e-acad-ca9440ad366e>

The benefits of graphene oxide nanofiltration membranes when compared to conventional nanofiltration membranes include higher flux (flow rates) and lower propensity to fouling. These benefits have the potential to deliver lower operating costs, longer membrane life and lower maintenance costs.

CORPORATE

In early-March, Clean TeQ announced the appointment of Shawn Wang to the Board as a Non-Executive Director, replacing Li Binghan who has resigned. Mr Wang is the Head of Business Development and Investment at Pengxin International Mining Co. Ltd (Pengxin Mining), one of Clean TeQ's largest shareholders.

At the end of the quarter, the Company's cash balance was A\$100 million.

For more information about Clean TeQ contact:

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FORWARD-LOOKING STATEMENTS

Certain statements in this Quarterly Activities Report constitute "forward-looking statements" or "forward looking information" within the meaning of applicable securities laws. Such statements involve known and unknown risks, uncertainties and other factors, which may cause actual results, performance or achievements of the Company, the Clean TeQ Sunrise Project, or industry results, to be materially different from any future results, performance or achievements expressed or implied by such forward-looking statements or information. Such statements can be identified by the use of words such as "may", "would", "could", "will", "intend", "expect", "believe", "plan", "anticipate", "estimate", "scheduled", "forecast", "predict" and other similar terminology, or state that certain actions, events or results "may", "could", "would", "might" or "will" be taken, occur or be achieved. These statements reflect the Company's current expectations regarding future events, performance and results, and speak only as of the date of this Quarterly Activities Report. Statements in this Quarterly Activities Report that constitute forward-looking statements or information include but are not limited to, statements regarding: the completion of the FEED phase and project financing; the timing and commencement of construction at the Project; the making of a final investment decision in 2019; finalisation of product offtake agreements; and anticipated construction and/or completion of the various Clean TeQ Water projects.

Readers are cautioned that actual results may vary from those presented.

All such forward-looking information and statements are based on certain assumptions and analyses made by Clean TeQ's management in light of their experience and perception of historical trends, current conditions and expected future developments, as well as other factors management believe are appropriate in the circumstances. These statements, however, are subject to a variety of risks and uncertainties and other factors that could cause actual events or results to differ materially from those projected in the forward looking information or statements including, but not limited to, unexpected changes in laws, rules or regulations, or their enforcement by applicable authorities; the failure of parties to contracts to perform as agreed; changes in commodity prices; unexpected failure or inadequacy of infrastructure, or delays in the development of infrastructure, and the failure of exploration programs or other studies to deliver anticipated results or results that would justify and support continued studies, development or operations.

Other important factors that could cause actual results to differ from these forward-looking statements also

include those described under the heading "Risk Factors" in the Company's most recently filed Annual Information Form available under its profile on SEDAR at www.sedar.com.

Readers are cautioned not to place undue reliance on forward-looking information or statements.

Although the forward-looking statements contained in this Quarterly Activities Report are based upon what management of the Company believes are reasonable assumptions, the Company cannot assure investors that actual results will be consistent with these forward-looking statements. These forward-looking statements are made as of the date of this Quarterly Activities Report and are expressly qualified in their entirety by this cautionary statement. Subject to applicable securities laws, the Company does not assume any obligation to update or revise the forward-looking statements contained herein to reflect events or circumstances occurring after the date of this Quarterly Activities Report.

ASX/TSX: CLQ
OTCQX: CTEQF

Corporate Information:

Ordinary shares: 746.3M
Unlisted options: 12.8M
Performance rights: 8.3M
Cash at bank: A\$100M

Co-Chairmen
Robert Friedland
Jiang Zhaobai

Chief Executive Officer
Sam Riggall

Non-Executive Directors
Judith Downes
Eric Finlayson
Ian Knight
Stefanie Loader
Mike Spreadborough
Shawn Wang

Company Secretary
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¹ *Global Energy Storage & Electric Vehicles Alliance* Bernstein L.P. 11 February 2019

² Reuters 11 April 2019

A PDF accompanying this announcement is available at
<http://ml.globenewswire.com/Resource/Download/6a8acde6-821f-4e93-85cc-6f128b8becf2>

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