# ASX/TSX Announcement



18 January 2019

## **Quarterly Activities Report – December 2018**

ASX/TSX: CLQ **OTCQX: CTEQF** 

#### **Corporate Information:**

Ordinary shares: 746.3M Unlisted options: 12.8M Performance rights: 5.6M Cash at bank: A\$117.4M

#### Co-Chairmen

Robert Friedland Jiang Zhaobai

## **Chief Executive Officer**

Sam Riggall

#### **Non-Executive Directors**

Li Binghan Judith Downes Eric Finlayson Ian Knight Stefanie Loader Mike Spreadborough

#### **Company Secretary** Melanie Leydin

## **Contact Details:**

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### **HIGHLIGHTS**

- Approval of Modification 4 to Clean TeQ Sunrise **Project Development Consent**
- Clean TeQ Sunrise Project engineering and design underway
- Front-end-engineering and Design (FEED) contract signed with MCC
- Project financing and offtake discussions continuing with a range of counterparties including global automobile and consumer electronics manufacturing companies
- Clean TeQ Water approaching completion and commissioning of a number of key reference projects

#### **About Clean TeQ Holdings**

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 scandium for production of the next generation of lightweight aluminum 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 PROJECT**

During the quarter, Clean TeQ Holdings Limited (Clean TeQ or the Company) made important progress toward the development of the Clean TeQ Sunrise Project (Clean **TeQ Sunrise** or **Project**) in New South Wales.

### **Determination of Modification 4 to Development Consent**

In late December 2018, Clean TeQ was pleased to be advised of the approval of all of the modifications to the Development Application for the Project (as submitted in Modification 4) by the New South Wales Independent Planning Commission (IPC).

Modification 4 allows Clean TeQ to implement a number of improvements designed to optimise and further de-risk the Clean TeQ Sunrise operationg which were detailed in the June 2018 Definitive Feasibility Study (and related Canadian National Instrument 43-101 Technical Report titled, "Sunrise Nickel Cobalt Project, New South Wales, Australia NI 43-101 Technical Report" with an effective date of June 25, 2018, filed under the Company's profile on SEDAR at www.sedar.com). The key features of Modification 4 include amendments to the processing plant design and layout, mine plan and general logistics, diversification of water supply via approval to access surface water from the Lachlan River as well as consent to produce up to 100,000 tonnes per annum of ammonium sulphate for sale as a by-product. These are important changes which will enable the Project to more effectively respond to the rapidly growing global demand for nickel and cobalt.

The approval follows a period of extensive consultation with local residents and communities across the Shires of Parkes, Lachlan and Forbes, as well as working through a formal process with the IPC. It also concludes the final outstanding modification under application, with Modification 6 having been approved in May 2018.

#### **Project Engineering and Design**

Following the appointment of Metallurgical Corporation of China Ltd (MCC) as a key project delivery partner in August 2018 and a handover of engineering activities, the primary focus of the quarter was the commencement of front end engineering and design (**FEED**). This included the signing of the formal FEED contract with MCC, which will underpin this important piece of work.

The FEED contract defines a prescribed scope of work and deliverables for the FEED phase which will be provided to Clean TeQ by MCC based on an agreed schedule of rates. A key deliverable from MCC from the current FEED phase is an update of the fixed Engineering, Procurement and Construction (EPC) contract price for the construction of the Sunrise Project process plant, which is required by the Company before it can consider a Final Investment Decision (FID).





Figure 1 - MCC and Clean TeQ signing the FEED contract for Clean TeQ Sunrise

In addition, the Company commenced work with MCC to prepare an update to the overall project delivery schedule, including the timeline for completion of the FEED phase currently underway, as well as the project construction schedule and plant commissioning. Although that work is still underway, it is expected that the target dates for FEED completion, and therefore 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.

Progress establishing MCC's engineering function with the Project's EPC framework has been excellent. Handover of all project engineering data occurred in Perth and Beijing in November and December of 2018, with FEED for all parts of the Project process plant EPC scope now underway. Work has also commenced on establishing project management and procurement systems, as well as integrating key MCC personnel into the owner's team office in Perth.

Early works are progressing with the engineering portion of the water pipeline underway. Completion of engineering will allow the detailed pipeline route to be finalised and necessary approvals gained from local government authorities.

A range of activities are also underway in building the operational readiness capability of the Project team including the commencement of Paul De Ponte in the role of General Manager Operational Readiness. Paul is a chemical engineer with postgraduate qualifications in process control and optimisation, as well as an MBA in finance and



operational research. Paul spent several years in oil & gas/chemicals and ten years in iron ore with Rio Tinto, including a blend of operational and technical management roles, as well as project start-up/operational readiness roles.

## **Voluntary Planning Agreement signed with local councils**

During the Quarter, Clean TeQ signed a Voluntary Planning Agreement (VPA) with the Shire Councils of Lachlan, Forbes and Parkes (collectively, the Councils). The VPA represents an important financial commitment to our host communities which ensures the benefits of the Project will be shared among all our stakeholders.

Under the VPA, Clean TeQ will fund local initiatives totalling over A\$18 million<sup>[1]</sup> over the first 21 years of the Project, following a formal decision to proceed with the The commitment includes approximately A\$10 million in community enhancement contributions, with further annual payments to the Councils to support community and infrastructure enhancements at the discretion of the Councils. In addition, contributions of approximately A\$340,000 will be made each year to fund maintenance of the road network that Clean TeQ plans to use for the Project, and an additional investment to upgrade various other roads and intersections.

## Financing and offtake

During the guarter, Clean TeQ continued to engage with a range of investors and offtake partners regarding potential project financing and offtake agreements. The Company continues to see strong interest in the Project from participants at all levels of the global electric vehicle supply chain. The Company remains confident of delivering a project financing solution prior to a FID in 2019.

## **CLEAN TEQ WATER**

Clean TeQ Water continued its focus on delivering key projects in Australia, Oman, the DRC and China.

### Australia – Fosterville Gold Mine waste water treatment project

At the Fosterville Gold Mine in Victoria, Clean TeQ has been engaged to design, supply and commission a 2 million litre-per-day Clean TeQ DeSALx® mine water treatment plant. During the quarter, construction was completed on schedule, with commissioning expected during the first quarter of 2019.

<sup>[1]</sup> Estimated value inclusive of inflation indexation at an assumed Australian CPI rate of 2.5% p.a.



### Oman – Waste water treatment project

With construction and the first stage cold commissioning completed earlier in 2018, Clean TeQ has been waiting for the supply of waste water from the client's mineral processing plant to complete the final commissioning phase. This is expected to occur in early 2019, with formal handover to occur shortly afterward.

### **Democratic Republic of Congo – Metals processing plant**

During the quarter, Clean TeQ completed construction of key equipment at the metals processing plant it is delivering Multotec Processing Equipment. Final electrical works are expected to be completed during early 2019, with commissioning to follow shortly thereafter.

### China – Joint Venture with Hoyo for municipal waste water treatment

The waste water treatment plant being delivered via a joint venture between Clean TeQ and Jinzhong Hoyo Municipal Urban Investment & Construction Co., Ltd (Hoyo), remains in the detailed design phase with construction expected to commence during the second quarter of 2019.

## **TECHNOLOGY DEVELOPMENT**

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

#### **Graphene Oxide Membranes**

During the guarter, the joint venture company between Clean TeQ and Ionic Industries Pty Ltd (lonic) was formally established to pursue the development of graphene oxide membranes for water treatment applications. The 75/25 Clean TeQ/Ionic joint venture company, NematiQ Pty Ltd (NematiQ) will be based in and operate from premises adjacent to Clean TeQ's existing facility in Notting Hill, Victoria.

The forward work program for NematiQ is focused on refining the commercial production and technical specifications of the graphene oxide raw material, which is the filtration layer of the GO-membrane. A demonstration plant for the manufacture of high purity graphene oxide will be 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. Membranes produced during this time will be used for certification and insitu demonstration purposes.



## **CORPORATE**

At the end of the quarter, the Company's cash balance was A\$117.4 million.

#### For more information about Clean TeQ contact:

Richard Glass, Investor Relations (Australia) +61 3 9797 6781 +1 647 808 2141 Evan Young, Investor Relations (North America)

#### 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 forwardlooking 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 anticipated execution of a FEED contract between the Company and MCC; the expected timing and completion of project engineering and design work on the Project; the anticipated ability for the Company to implement a number of improvements designed to optimise and further de-risk the operation of Clean TeQ Sunrise Development Plan, as modified; the proposed timing and commencement of construction at the Project; the ability for the Company to make a final investment decision as and when anticipated; the Company's expectations to be able to deliver financing solutions for the Project prior to an FID; the proposed design and construction of a demonstration plant for the manufacture of high purity graphene oxide at NematiQ's premises; the anticipated production of graphene oxide to be used for larger scale manufacture of graphene oxide membranes; 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 forwardlooking 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.

+Rule 4.7B

## **Appendix 4C**

## Quarterly report for entities subject to Listing Rule 4.7B

Introduced 31/03/00 Amended 30/09/01, 24/10/05, 17/12/10, 01/09/16

## Name of entity

CLEAN TEQ HOLDINGS LIMITED	
ABN Quarter ended ("current quarter")	
34 127 457 916	December 2018

Con	solidated statement of cash flows	Current quarter \$A'000	Year to date (6 months) \$A'000
1.	Cash flows from operating activities		
1.1	Receipts from customers	1,835	3,343
1.2	Payments for		
	(a) research and development	(140)	(280)
	(b) product manufacturing and operating costs	(999)	(2,653)
	(c) advertising and marketing	(325)	(551)
	(d) leased assets	(488)	(608)
	(e) staff costs	(511)	(3,700)
	(f) administration and corporate costs	(1,781)	(6,955)
1.3	Dividends received (see note 3)	-	-
1.4	Interest received	768	1,631
1.5	Interest and other costs of finance paid	-	-
1.6	Income taxes paid	-	-
1.7	Government grants and tax incentives	-	-
1.8	Other (provide details if material)	-	-
1.9	Net cash from / (used in) operating activities	(1,641)	(9,773)

2.	Cash flows from investing activities		
2.1	Payments to acquire:		
	(a) property, plant and equipment	(1,967)	(3,021)
	(b) businesses (see item 10)	-	-
	(c) investments	376	-

<sup>+</sup> See chapter 19 for defined terms

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Con	solidated statement of cash flows	Current quarter \$A'000	Year to date (6 months) \$A'000
	(d) intellectual property	-	(250)
	(e) other non-current assets	(13,907)	(22,520)
2.2	Proceeds from disposal of:		
	(a) property, plant and equipment	6	6
	(b) businesses (see item 10)	-	-
	(c) investments	-	-
	(d) intellectual property	-	-
	(e) other non-current assets	-	-
2.3	Cash flows from loans to other entities	-	-
2.4	Dividends received (see note 3)	-	-
2.5	Other (provide details if material)	-	-
2.6	Net cash from / (used in) investing activities	(15,493)	(25,785)

3.	Cash flows from financing activities		
3.1	Proceeds from issues of shares	-	-
3.2	Proceeds from issue of convertible notes	-	-
3.3	Proceeds from exercise of share options	203	344
w3.4	Transaction costs related to issues of shares, convertible notes or options	-	-
3.5	Proceeds from borrowings	-	-
3.6	Repayment of borrowings	-	-
3.7	Transaction costs related to loans and borrowings	-	-
3.8	Dividends paid	-	-
3.9	Other (provide details if material)	-	-
3.10	Net cash from / (used in) financing activities	203	344

4.	Net increase / (decrease) in cash and cash equivalents for the period		
4.1	Cash and cash equivalents at beginning of quarter/year to date	134,354	152,637
4.2	Net cash from / (used in) operating activities (item 1.9 above)	(1,641)	(9,773)
4.3	Net cash from / (used in) investing activities (item 2.6 above)	(15,493)	(25,785)
4.4	Net cash from / (used in) financing activities (item 3.10 above)	203	344

<sup>+</sup> See chapter 19 for defined terms 1 September 2016

Con	solidated statement of cash flows	Current quarter \$A'000	Year to date (6 months) \$A'000
4.5	Effect of movement in exchange rates on cash held	-	-
4.6	Cash and cash equivalents at end of quarter	117,423	117,423

5.	Reconciliation of cash and cash equivalents at the end of the quarter (as shown in the consolidated statement of cash flows) to the related items in the accounts	Current quarter \$A'000	Previous quarter \$A'000
5.1	Bank balances	117,423	134,354
5.2	Call deposits	-	-
5.3	Bank overdrafts	-	-
5.4	Other (provide details)	-	-
5.5	Cash and cash equivalents at end of quarter (should equal item 4.6 above)	117,423	134,354

6.	Payments to directors of the entity and their associates	Current quarter \$A'000
6.1	Aggregate amount of payments to these parties included in item 1.2	205
6.2	Aggregate amount of cash flow from loans to these parties included in item 2.3	-
6.3	Include below any explanation necessary to understand the transaction items 6.1 and 6.2	ns included in

7.	Payments to related entities of the entity and their associates	Current quarter \$A'000
7.1	Aggregate amount of payments to these parties included in item 1.2	-
7.2	Aggregate amount of cash flow from loans to these parties included in item 2.3	-
7.3	Include below any explanation necessary to understand the transaction items 7.1 and 7.2	ns included in

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<sup>+</sup> See chapter 19 for defined terms 1 September 2016

8.	Financing facilities available Add notes as necessary for an understanding of the position	Total facility amount at quarter end \$A'000	Amount drawn at quarter end \$A'000
8.1	Loan facilities	-	-
8.2	Credit standby arrangements	-	-
8.3	Other (please specify)	-	-

8.4 Include below a description of each facility above, including the lender, interest rate and whether it is secured or unsecured. If any additional facilities have been entered into or are proposed to be entered into after quarter end, include details of those facilities as well.

9.	Estimated cash outflows for next quarter	\$A'000
9.1	Research and development	(362)
9.2	Product manufacturing and operating costs	(250)
9.3	Advertising and marketing	(95)
9.4	Leased assets	(150)
9.5	Staff costs	(2,009)
9.6	Administration and corporate costs	(1,240)
9.7	Sunrise Project Costs	(23,166)
9.9	Total estimated cash outflows	(27,272)

10.	Acquisitions and disposals of business entities (items 2.1(b) and 2.2(b) above)	Acquisitions	Disposals
10.1	Name of entity	N/A	N/A
10.2	Place of incorporation or registration	N/A	N/A
10.3	Consideration for acquisition or disposal	N/A	N/A
10.4	Total net assets	N/A	N/A
10.5	Nature of business	N/A	N/A

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<sup>+</sup> See chapter 19 for defined terms

#### **Compliance statement**

- 1 This statement has been prepared in accordance with accounting standards and policies which comply with Listing Rule 19.11A.
- 2 This statement gives a true and fair view of the matters disclosed.

Sign here: Date: 18 January 2019

Company secretary

Print name: Melanie Leydin

#### **Notes**

- The quarterly report provides a basis for informing the market how the entity's activities have been financed for the past quarter and the effect on its cash position. An entity that wishes to disclose additional information is encouraged to do so, in a note or notes included in or attached to this report.
- If this quarterly report has been prepared in accordance with Australian Accounting Standards, the definitions in, and provisions of, AASB 107: Statement of Cash Flows apply to this report. If this quarterly report has been prepared in accordance with other accounting standards agreed by ASX pursuant to Listing Rule 19.11A, the corresponding equivalent standard applies to this report.
- 3. Dividends received may be classified either as cash flows from operating activities or cash flows from investing activities, depending on the accounting policy of the entity.

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<sup>+</sup> See chapter 19 for defined terms