

Welcome to your Clean TeQ Sunrise community newsletter



Much has happened since our first edition: we've held three Community Consultative Committee meetings, submitted three project modification applications, hosted community briefings, welcomed our autoclaves to Australian soil, purchased our camp facility, listed on the Toronto Stock Exchange, secured our mining leases, welcomed many new team members and even changed our name ... all of that and much more in just five months.

**Sam Riggall**  
Chief Executive Officer



**Another exciting milestone is that we have reached in-principle agreement with all three Councils – Lachlan, Parkes and Forbes – for our Voluntary Planning Agreement with each.**

We have committed \$400,000 each year in community enhancement contributions, which will see us spend around \$10 million over the life of mine. We will also maintain all the roads we use – which we will first upgrade – with an annual spend of \$340,035 on road maintenance. This takes our total investment in the local region to around \$17 million across the life of Clean TeQ Sunrise.

We have done a lot of work to respond to community concerns regarding Modification 4. Importantly, we've kept our promise to revisit and reduce traffic numbers through Trundle. Over 24 hours, a total of 146 vehicles associated with Clean TeQ Sunrise will pass through Trundle: 70 heavy vehicles, 70 light vehicles and six shuttle buses. For more information, please refer to: *Modification 4: We've worked to answer your questions.*

As we continue the pace in 2018, our priority is to stay in touch with the community. It's important to us that our regional community – Forbes,

Lachlan and Parkes – knows who we are and understands our plans for Clean TeQ Sunrise. Being open and honest in our communications is our continual goal. So, if you aren't getting the information you need, or you aren't clear on the facts, please let us know.

We continue to have team members working from our offices and shopfronts in Condobolin, Parkes and Trundle. Once we are into operations, we will have a Regional Operations Centre located in Parkes. This year you will see us out and about across the region. With a recent on-site drilling program and our colleagues from around the country spending more time on the ground, our presence is set to grow.

Our national team is evolving as we move closer to construction. If you are interested in future employment opportunities, please visit our website where you can register your expression of interest. The same applies if you are a business offering services that might be relevant to Clean TeQ Sunrise.

We continue to make strong progress with the Definitive Feasibility Study (DFS), having completed substantial work to date. We are currently reviewing a proposal to construct Clean TeQ Sunrise by way of a fixed price lump-sum Engineering-Procurement-Construct (EPC) contract. The team is currently considering this option, alongside the Alliance delivery model and will now deliver the DFS at the end of June 2018.

We hope you enjoy this edition of our newsletter and look forward to staying in touch. It's an exciting time for Clean TeQ and we appreciate your support and interest.

#### **A new name, a new logo and a great vision**

Clean TeQ's vision is to help reduce the world's environmental burden using our proprietary technologies and becoming a leading supplier of clean energy solutions.

And, our mission is to apply our innovative clean technologies to find better ways to solve planet earth's most pressing environmental problems. Clean TeQ Sunrise, together with Clean TeQ Water, will allow us to achieve both.

You may have heard we changed the name of the Project to Clean TeQ Sunrise. The change in name marks the end of the study phase and beginning of delivery. It also signifies the emergence of the project as a global source of cobalt sulphate, nickel sulphate and scandium.

When selecting a new name, we drew inspiration from the local 'Sunrise' property located adjacent of the project site, which Clean TeQ owns.

We are excited about our new identity and look forward to our symbol being a part of your community for years to come.

# Clean TeQ Sunrise's Community Consultative Committee

The Clean TeQ Sunrise Community Consultative Committee (CCC) is established and our inaugural meeting took place in Condobolin in October 2017.

The CCC provides a forum for discussion between the company and representatives of the local community, stakeholder groups and the local councils on issues directly relating to activities associated with Clean TeQ Sunrise. The CCC is chaired by an Independent Chairperson, Lisa Andrews, appointed by the NSW Department of Planning & Environment.

The CCC met again in late November, where members were provided with a project update, presentation relating to the Modification 4 application and the development of a Clean TeQ Sunrise Frequently Asked Questions (FAQs) document. A copy of the FAQs, along

with membership details and minutes of CCC meetings can be found at [www.cleanteq.com/sunrise-project](http://www.cleanteq.com/sunrise-project)

The first CCC meeting for 2018 was held in February at the new SRA Pavilion in Condobolin, an impressive facility near the Lachlan River. CCC members were provided with an update on Clean TeQ Sunrise and Modification 4 (MOD4), as well as presentations on air quality and emissions. Members were also provided with reports on the Trundle pedestrian access review and supplementary noise assessment studies undertaken late last year.

## Autoclaves on Australian soil

Two autoclaves that are destined for Clean TeQ Sunrise arrived in Port Pirie, South Australia late last year.

Each vessel weighs approximately 600 tonnes and measures 30 metres long and 6 metres in diameter.

The autoclaves are pressure vessels manufactured with steel shells and explosively bonded titanium lining. They are a critical component of the high-pressure acid leach (PAL) circuit for Clean TeQ Sunrise.

The unused autoclaves were purchased from Vale International S.A. and arrived onboard the BBC Emerald from New Caledonia in November 2017. They were successfully unloaded at Port

Pirie, where they will be stored before being transported next year by road to Clean TeQ Sunrise.

Having this key part of our processing facility on Australian shores is a big milestone and speaks volumes to the progress we are making towards achieving our targets. The US\$6.5M acquisition (mid 2017) of these critical long-lead time items at this early stage of project development significantly reduces the risk of delays to the project delivery schedule.

A crew of heavy transport experts are now working on the logistics of transporting the autoclaves to the Clean TeQ Sunrise project site. Due to the sheer size of the autoclaves.... we think you'll see them coming!

## Community Investment Program

Clean TeQ recognises the importance positive community relations plays in a successful operation and is therefore committed to supporting the communities in which we operate.

We are excited to have reached in-principle agreement with all three Councils - Lachlan, Parkes and Forbes - with respect to our Voluntary Planning Agreement. This will see us invest around \$17 million in the region across the life of Clean TeQ Sunrise.

We are currently designing our community investment program, which we will launch following final investment decision by Clean TeQ's Board. When we do, one of the program's key objectives will be to support the community to develop sustainable projects that build capacity, meet community aspirations and enhance wellbeing. This approach is very much aligned with the Company's Core Values and Sustainability Statement.

In the meantime, you will see us doing our best to support initiatives such as the Trundle Showgirl Competition and other local programs that are important to our community.



# Modification 4: We've worked to answer your questions

In 2017, we identified opportunities to improve the overall efficiency of the full production phase of Clean TeQ Sunrise, which Modification 4 (MOD4) included.

It is not uncommon for a Project of this size to request modifications to the original development consent conditions. In our case, much has changed in global markets and demand, resource use, extraction processes and technology since the original development consent was granted in 2001.

We submitted MOD4 to the NSW Department of Planning & Environment in November 2017. The application, Environmental Assessment and related reports were placed on public exhibition in early December. We have reviewed submissions received during the public exhibition period and provided a response to the Department of Planning & Environment.

One of the concerns raised by the public regarding MOD4 was the number of vehicles that will travel through Trundle. We have responded promptly to these concerns, plus questions about emissions, by way of the following actions:

1. We arranged for an independent transport consultant - GTA - to undertake a pedestrian access review in Trundle while MOD4 was still on public exhibition.

This Review included a review of the pedestrian environment along Forbes Street (The Bogan Way) through Trundle in respect to existing traffic conditions and forecast traffic conditions incorporating predicted Clean TeQ Sunrise traffic. GTA consulted various business owners on Forbes Street, school principals, a NSW Police Officer, representatives of the Trundle and District Progress Association and members of the public.

The review concluded that *"Considering the forecast modified Project traffic in the context of the review of the existing pedestrian and vehicular environment in Forbes Street, it is considered unlikely that a significant deterioration in the safety of that environment would result with the modified Project. As for the existing conditions, no major issues are anticipated which would require immediate upgrading to meet current standards. Some aspects of the pedestrian and vehicular environment could however be improved."*



**Top:** John Hanrahan (Clean TeQ Approvals Lead), Paul Schiller, Justine Fisher (Clean TeQ GM Government, External Relations and Community), Karen Worthington (Clean TeQ Community Relations Officer) and Sue Fleming.

We have shared the findings with our CCC and the Trundle and District Progress Association, as well as Parkes Shire Council. The report includes suggestions to improve the overall safety of pedestrians in Trundle. Depending on the preferences and input of the Trundle community, we are willing to progress any or all these recommendations. If you'd like to see a copy of this report, visit [www.cleanteq.com](http://www.cleanteq.com). Hardcopies are available for viewing at the Trundle Newsagency, Trundle Food Store, Staging Post Trundle and Trundle True Value Hardware.

2. We reviewed our requirement for traffic movements - as we promised we would - and have reduced these numbers. Over a 24-hour period, 146 vehicles associated with Clean TeQ Sunrise will pass through Trundle: 70 light vehicles, 70 heavy vehicles and six buses. MOD4 originally proposed a maximum of 346 vehicle movements through Trundle each day. This is a reduction of 200 vehicles.

We stand by this commitment and will honour it. Our Response to Submissions does not cite this as a "material change" because it is not classified as such in the context of the Modification. Regardless, we will be held to this commitment as per our Terms of Consent which state Clean TeQ "must comply with any reasonable requirements of the Secretary arising from the Department's assessment of any plans, strategies, programs, reviews, audits, reports or correspondence that we submitted in accordance with this consent".

3. We engaged Renzo Tonin & Associates to prepare a Supplementary Road Noise Assessment to clarify potential road noise impacts in Trundle associated with the Modification. This assessment was included in our response to submissions and can be viewed on the Department of Planning & Environment's website.

4. In response to concerns regarding potential air quality impacts of Clean TeQ Sunrise (including the Modification), we engaged air quality specialist (Ramboll Environ) who prepared the Air Quality Assessment for the Modification to provide a briefing to the CCC at our February meeting.

We wanted to further explain the assessment approach adopted in the Air Quality Assessment for the Modification and proposed mitigation measures, impact assessment criteria, modelling methodology and results. In non-technical terms - we talked about the standards set by the EPA, explained how our emissions profile is predicted to be well below this and answered questions from our neighbours about their amenity. Our Chief Technical Development Officer, Stephen Grocott, also attended this CCC meeting. Stephen recently joined our team from Rio Tinto and brings with him over 35 years' experience in processing.

5. We held community drop-in sessions in Trundle and Fifield on Monday and Tuesday, 26 and 27 February. These sessions were well received in both locations and it was helpful to have the opportunity to talk with members of the community, many of whom lodged submissions regarding MOD4. Thank you to everyone who took time out of your day to come and chat with us. We plan to hold a second round of community drop-in sessions towards the end of March.

We have tried hard to respond quickly to community suggestions and concerns. While we recognise this may not answer everyone's questions or meet all needs, it's important to know that our submission to the Department of Planning and Environment seeks to address each question raised.

# Beds secured and leases granted

Constructing a sophisticated mine and processing facility will require the help and involvement of hundreds of people.

To assist with accommodating our future construction crew, we have purchased a 300-person camp facility that will support the Clean TeQ Sunrise construction phase. We bought the facility from Fleetwood Corporation, which includes 306 rooms, an administration area, first aid centre, mess and recreational facilities and can expand in capacity as required. Eventually, Clean TeQ Sunrise will house up to 1,300 beds over the construction phase.

With our mining leases now granted by the NSW Department of Planning and Environment, we have secure tenure over our primary mining area.



## Secondary Stock Exchange listing for Clean TeQ

Clean TeQ's application for a secondary listing on the Toronto Stock Exchange (TSX) was approved late last year, after a lot of work.

TSX trading commenced on Friday 15 December 2017 and our CEO, Sam Riggall, marked the

occasion by ringing the opening bell at the TSX on the 1 March, in Toronto. Clean TeQ shares trade on the TSX using the stock ticker 'CLQ'.

Clean TeQ is delighted to be listed on the TSX and believes it represents a significant milestone for the business as we develop Clean TeQ Sunrise. The additional listing will deliver improved accessibility for a broad range of retail and institutional investors in Canada and the United States.



## Clean TeQ Water enters landmark agreement

Did you know Clean TeQ has a water division? Here's an example of the innovative work the Water team is doing.

Clean TeQ Water has recently entered into a landmark agreement with Fosterville Gold Mine, located in Bendigo Victoria, to design, supply and commission a two million litre-per-day Clean TeQ DeSALx® mine water treatment plant. This contract was awarded after extensive due diligence and test work by Fosterville to validate the efficacy of Clean TeQ's DeSALx® system for the treatment of mining process waters.

Sustainable water management is becoming critically important in the mining industry as environmental regulations are tightened globally and water scarcity increases. To create a more sustainable water management strategy, Fosterville approached Clean TeQ to provide a system that will treat the mine water to match the quality of the region's underlying aquifer. The Fosterville water treatment plant is an important reference project for Clean TeQ's DeSALx® technology, which is expected to add significant momentum to the growing pipeline of Clean TeQ Water projects. Learn more about Clean TeQ Water by visiting [www.cleanteqwater.com](http://www.cleanteqwater.com)



## Appointment of Mandated Lead Arrangers

In late 2017, we announced we'd appointed four leading mining project finance institutions – Industrial and Commercial Bank of China (ICBC), Société Generale, National Australia Bank and Natixis – as Mandated Lead Arrangers (MLAs).

The MLAs will arrange a debt financing facility for the development of Clean TeQ Sunrise, targeting debt funding of 50 to 60 per cent of the total development cost of the project, including

working capital and other credit facilities. The banks will make best efforts to provide a total of US\$500 million of the total credit facilities required for the development of the project.

All financing will be contingent upon the completion of a successful due diligence process, credit approval and agreement of terms and conditions.

# The new generation of aluminium alloys

We are excited about our recent agreement with Chinalco Materials Application Research Institute (CMARI) and Chongqing University for the development and adoption of scandium alloys in the global transport industry.

We have together committed to a two-year development program. Over this time, we will investigate the functional and commercial benefits of scandium in a range of aluminium alloys currently used in China's automotive and aerospace industries.

The program will bring together research and production engineers from CMARI, Chongqing University and Clean TeQ to develop and commercialise scandium containing alloys for customers. The work will be carried out in CMARI's Research & Development laboratories in Beijing and Chongqing University's School of Materials Science and Engineering (SMSE). Clean TeQ's Alloy Development Manager, Dr. Timothy Langan, will assist in the development of test programs.

Chinalco is investing heavily in developing the next generation of advanced alloys to be adopted in China's growing automotive and aerospace sectors. Chongqing University is in the top one per cent of universities in China with a strong focus on research and development.

Scandium allows us to create a new generation of aluminium alloys with unrivalled functionality –

alloys that are stronger, lighter, corrosion-resistant and weldable. As the largest resource in the world of this rare metal, Clean TeQ Sunrise will become an important source of global supply for decades to come.



## Meet our growing team

The Clean TeQ Sunrise team is spread across NSW, Melbourne and Perth. We have recently appointed three new members to our Executive Team.

Stephen Grocott has joined the Clean TeQ team in the role of Chief Technical Development Officer.

Stephen joined us from Rio Tinto where he held the position of Chief Advisor – Processing. He brings 35 years' experience in minerals processing, process development and industrial chemistry across a range of commodities. Our Water business is also excited about his appointment given he knows a great deal about water and emissions treatment.

As we start to get ready for operations, we have appointed Tim Kindred as Operations Director. This is an important leadership role as the project progresses through development and into operations.

Tim has over 30 years' experience in the mining industry, having held senior positions in project management, construction, commissioning and ramp-up of development projects, with a strong background in operations and in pressure-acid-leach (PAL) nickel projects.

Most recently, Tim has been the Director of Plant Operations at the Ambatovy Nickel/Cobalt



**From left:** Stephen Grocott (Chief Technical Development Officer), Ben Stockdale (Chief Financial Officer), Sam Riggall (Chief Executive Officer), Tim Kindred (Operations Director), Justine Fisher (GM Government, External Relations and Community), Willem Vriesendorp (GM Clean TeQ Water), Richard Glass (Investor Relations Manager), Peter Voigt (Chief Technical Officer) and Rae Wyatt (GM Human Resources).

Project in Madagascar. He has held various roles within Vale's nickel business, including Project Director of the Long Harbour Processing Plant Project and the Voisey's Bay Mine Expansion Project.

In addition to the recent appointments of Stephen and Tim, we also have Stewart Hamilton coming on board as General Manager, Operations Readiness.

Stewart joins us from Acacia Mining where he

has held the role of General Manager of the Buzwagi Gold Project in Tanzania. Prior to this, most of his career was spent in Rio Tinto's New Zealand aluminum smelting business where he gained significant operations and business process improvement experience.

Stewart brings outstanding knowledge of complex process plants and will be an invaluable addition to the team as the Project progresses toward development.

# Employment and business opportunities

Clean TeQ is thrilled that interest is being shown for future employment and business opportunities in relation to Clean TeQ Sunrise; and our team is working hard to manage the information and enquiries being received. We have developed an online self-registration

form for both employment and procurement, so anyone interested can register; while we build an understanding of the available skills, capabilities and services. To register your interest, please visit the Careers and Contact page at [www.cleanteq.com](http://www.cleanteq.com)

As we are still stepping through the approvals process and putting the finishing touches on our Definitive Feasibility Study, most employment opportunities are still some way off. But, we will stay in touch and let you know of our progress.



**Top Left:** Rae Wyatt (GM Human Resources), Belinda Woods (Senior HR Advisor), Melodie Young (Recruitment Advisor), Sonja Mouton (HR/Project Administrator), Helen Allison (Office Manager) and Cheng Tan (Senior HR Advisor/Business Analyst).



**Top Right:** Members of our HR team recently visited the project site and toured the Condobolin, Parkes and Forbes area. During their visit the team meet with Lachlan, Parkes and Forbes Shire Councils. In photo: Rae Wyatt (GM Human Resources), Tekohi Rivera (Lachlan Shire Council Director Infrastructure Services), Justine Fisher (GM Government, External Relations and Community) and Robert Hunt (Lachlan Shire Council General Manager).



## Partnering with community

James Fisher – NSW Manager for Clean TeQ Sunrise – participated in the STEM X Regional Academy late last year.

The two-day workshop was hosted by the Condobolin High School, with close to 50 teachers from 20 schools in attendance. Run in partnership with CSIRO, the Australian Science Teachers Association and Questacon, the Academy provides a professional learning experience designed around teacher development and classroom practice. James lent a hand by joining the workshop in a mentoring and advisory role.

### Fact Sheets

As part of our commitment to keep local communities informed about the progress, timelines and activities of the Clean TeQ Sunrise project, we will publish regular community newsletters and develop a range of Fact sheets.

Fact sheets are continually being developed to provide accurate information to our communities and are available for viewing at [www.cleanteq.com/sunrise-project/sunrise-newsletter-fact-sheets](http://www.cleanteq.com/sunrise-project/sunrise-newsletter-fact-sheets)

### Community Contact Line

Clean TeQ has established a Community Contact (complaints) line for once construction gets underway. The line is operated 24/7 and can be reached by calling 1800 952 277 (toll free).

If you have a complaint, an operator will take your details and a summary of what the call relates to. These details will be provided to the Clean TeQ Community Relations team, who will aim to provide a response within a 24-hour period.

### More Information and staying in touch

Visit the Clean TeQ website and register to receive our community newsletter and other updates.

**Website** – [www.cleanteq.com](http://www.cleanteq.com)

**Email** – [community@cleanteq.com](mailto:community@cleanteq.com)

**Like and follow Clean TeQ on Facebook** – [www.facebook.com/PoweringInnovation](http://www.facebook.com/PoweringInnovation)