sunrise
energy metals

# Sunrise Newsletter 2021

**Welcome to our first newsletter under our new company name, Sunrise Energy Metals. Earlier this year, Clean TeQ shareholders approved a resolution to change the name of the company to Sunrise Energy Metals Limited. As you can see, we have new branding and we are now trading on the ASX under the stock ticker 'SRL'. Our new website can also be accessed at www.sunriseem.com**

The company name change was completed to assist in the demerger of the water treatment side of the business, which is now trading as Clean TeQ Water under the stock ticker 'CNQ'. Separating the Sunrise Battery Materials Project from Clean TeQ Water provides far greater commercial clarity as we progress our work on financing the Project.

2021 has been a challenging year for many of us. Not only has the Covid-19 pandemic continued, but the Central West region of NSW has also dealt with a mice plague and a major flooding event in the Lachlan River. Despite all this, at Sunrise we have continued to make progress on long lead time items associated with the Project, including the electricity transmission line from Parkes to site, progressing the land access negotiations for the water pipeline corridor, and we've also recently relocated our two 600 tonne autoclaves in South Australia. You can find a video of this move on our Facebook page and YouTube channel.

In mid 2021, we submitted an application to the NSW Department of Planning, Industry & Environment to modify the approved Project. This modification application followed a review of the Project Execution Plan we undertook with Fluor Australia, in which several changes were identified in preparation for Project execution. The modification is currently being assessed by the Department.

We have also been busy with on-going exploration activities in the region, including over 2900m drilled on site, where we've had encouraging intercepts of platinum group elements. We also acquired the Hylea Project from Lotus Minerals, where we intend to commence exploration work in early 2022.

The strategic rationale for the Sunrise Project continues to strengthen. At COP26 we saw a renewed global commitment to support the roll-out of electric vehicle and charging infrastructure. Decarbonisation will be mining intensive, and no better is this illustrated for nickel and cobalt, where they form the key metals in the battery cathode. We are confident that, having invested early to bring Sunrise to construction-readiness, we are in a good position to progress financing discussions. Sunrise offers a reliable, transparent source of many of the critical minerals that will be essential to building the energy supply chains of the future.

**As 2021 draws to a close, it is pleasing to report that we have kept our people safe, received no community complaints and reported no environmental issues this year. I'd like to thank all the committee members of our Community Consultative Committee for their valuable time and input to the Project during 2021. On behalf of the Sunrise Energy Metals team, I'd like to wish everyone across our communities an enjoyable and safe festive season.**

**Sam Riggall**
Chief Executive Officer

# Project Execution Plan Modification Submitted to the NSW Government

## Overview of the Approved Project

The Sunrise Project is an approved nickel, cobalt and scandium open cut mining project situated near the village of Fifield, approximately 350 kilometres west northwest of Sydney in NSW. The approved Project includes the establishment and operation of the components shown on the map below.

## Overview of the Project Execution Plan Modification

Sunrise Energy Metals has reviewed the Project design in preparation for project execution and identified several changes to the currently approved development plan in line with the Project Execution Plan, including:

- relocation of the approved rail siding and the addition of an ammonium sulphate storage and distribution shed at the siding (to supply fertilizer to agricultural operations by road and rail),
- an amended site footprint for the current processing facilities,
- an increase in size of the construction accommodation camp, necessitated by an increase in the peak construction workforce from approximately 1,000 to 1,900 personnel and an increased construction phase duration, and
- changes to road transport activities.

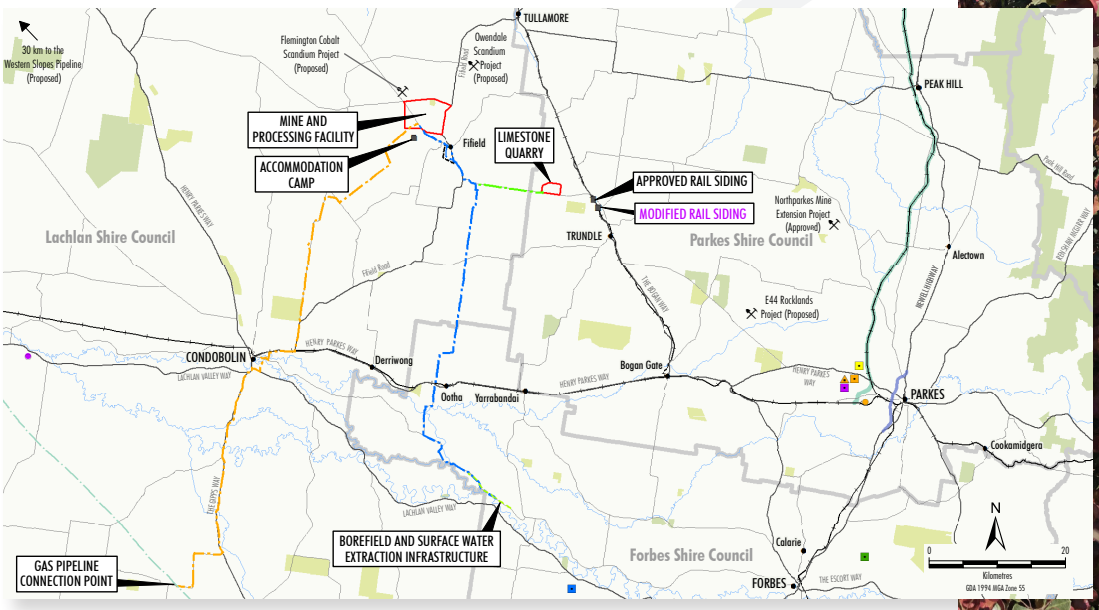
Approval for these changes is being sought via an application to modify the Sunrise Project Development Consent (DA 374 11 00) under section 4.55(2) of the NSW Environmental Planning and Assessment Act 1979.

## Environmental Assessment

Sunrise Energy Metals has prepared and submitted a Modification Report that includes a detailed description of the Modification. The Modification Report also includes a range of technical studies, prepared by third-party consultants, to assess the potential environmental impacts of the Modification on air quality, noise, biodiversity, Aboriginal Cultural Heritage, water resources, social impacts and road transport.

The Modification Report can be accessed via the Department of Planning, Industry and Environment website (**planningportal.nsw.gov.au/major-projects**).
A determination on the Modification is expected soon.

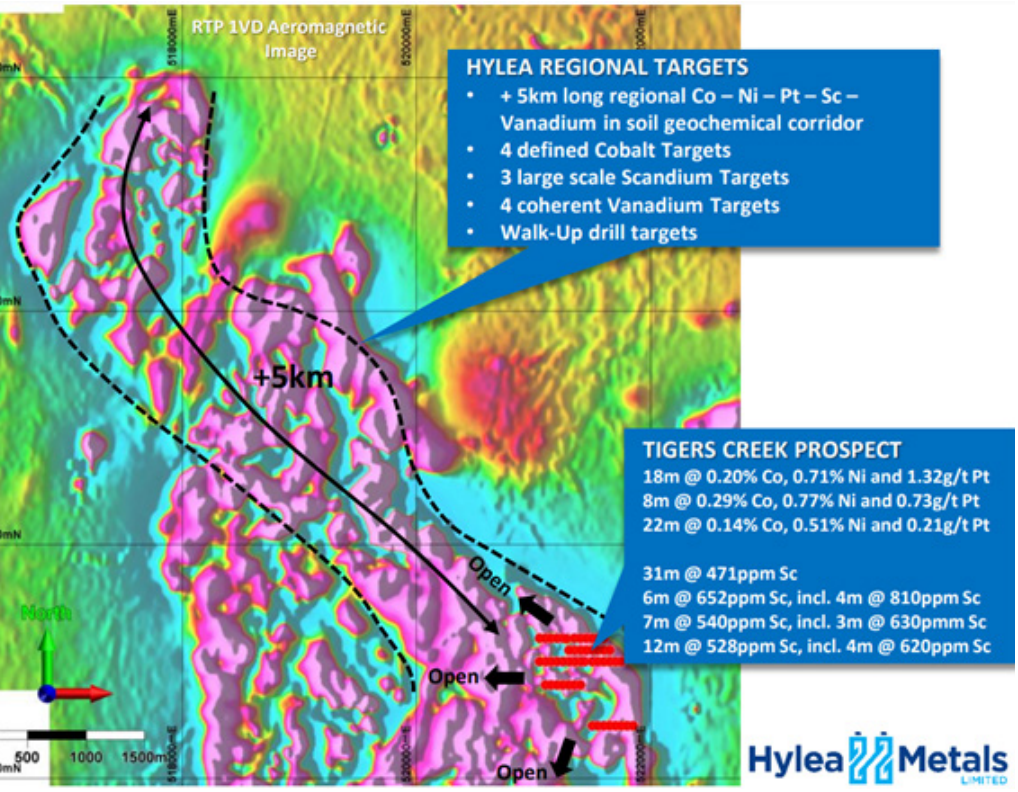
If you would like further information on the Modification, please don't hesitate to contact Sunrise Energy Metals at community@sunriseem.com.




# Vegetation Screens Growing Well

Our regular readers may remember approximately 9,500 seedlings were planted in 2019 on both the Mining Lease and at other Project areas.
A mix of local native trees and shrubs were used, and due to the drought at the time the plants required regular watering by a local contractor until established. Further native seedlings were planted in 2020, and after good seasonal rains many of these trees and shrubs are now flowering. These plants will provide vegetation screens around the perimeter of the sites.

# Sunrise Energy Metals Acquires the Hylea Project




In April 2021, Sunrise Energy Metals announced the company had reached agreement with Lotus Resources Limited to acquire the Hylea Project located approximately 50 km north of the Sunrise Project. Its geology is similar to the Sunrise Project, where the weathered surface expression hosts nickel, cobalt and scandium mineralisation.

Completion of the acquisition was achieved in August when Sunrise Energy Metals acquired a 100% interest in Exploration Licences EL8520, EL8641 and EL8801 for $2.5 million following receipt of Ministerial Approval for the transfer of the Hylea Project Exploration Licences.

Sunrise Energy Metals CEO, Sam Riggall, stated "Acquisition of the Hylea Project is consistent with our strategy to expand our footprint in the highly prospective Lachlan Fold Belt by adding to our already sizeable inventory of nickel and cobalt. We believe that demand for these metals in coming years will be enormous. With enough nickel and cobalt in our current Sunrise resource to support approximately 1.5TWh of cathode capacity, our objective is to continue adding to this resource base in a region that provides safe, sustainable, low-cost supply."

Sunrise Energy Metals plans to commence exploration work on the Hylea Project in early 2022.

# Platinum Exploration

Sunrise Energy Metals commenced a drilling campaign in late 2020 to target a platinum anomaly (the Phoenix Platinum Zone) located at the Sunrise Project. The first hole (SDD022) of an initial three-hole campaign identified a significant high-grade intersection of 0.6m at 129g/t platinum at 255.9m downhole. The intersection also included significant grades of other platinum-group elements (PGE's) palladium, rhodium, iridium, osmium and ruthenium. These metals have similar physical chemical properties and are usually found together in nature.

More recently, Sunrise Energy Metals completed phase two of the drilling campaign at the Phoenix Platinum Zone. A further three holes, totalling 1054m, were drilled, targeting intersections of high-grade mineralisation within the chromite-bearing structure. Several significant chromite veins were intersected in two of the three holes, suggesting chromite mineralisation may continue beyond the high-grade intercept in hole SDD022. Chromite veins are considered to be the principal host of the PGE's in the Tout Intrusive Complex which is an ultramafic intrusion.

The phase two platinum drilling program was completed in September 2021, with the company currently awaiting assay results.

Chromite veining in cut diamond core from the Phoenix Phase 2 drill program.

# Relocation of Autoclaves

Sunrise Energy Metals owns two autoclaves – they are the "heart" of the Sunrise processing plant. The autoclaves are made of steel shells and an explosively bonded titanium lining and designed to withstand the high pressure operating conditions required for the effective leaching of nickel, cobalt and scandium from the Sunrise ore.

For the past four years, these vessels have been stored at the port in Port Pirie, South Australia. Last month, the autoclaves were relocated to an alternate storage location as significant port maintenance works are scheduled to be undertaken at Port Pirie.

A number of preparatory works were required to be undertaken prior to the move, including relocation of overhead powerlines, protection of rail crossings and roundabouts with steel plates and removal of fences to allow the autoclaves to exit the port.

Each autoclave weighs approximately 600 tonnes, is 8 metres wide, 37 metres long and 9 metres high on a trailer. Heavy haulage specialists Mammoet were engaged by Sunrise Energy Metals to perform the three kilometre move to the new storage location. Given the size of the autoclaves, the move was undertaken at night to minimise disruption to local traffic using self-propelled modular trailers where the trailer is driven by an operator via a remote control walking behind the load. The move was completed on time and as planned with no safety incidents.

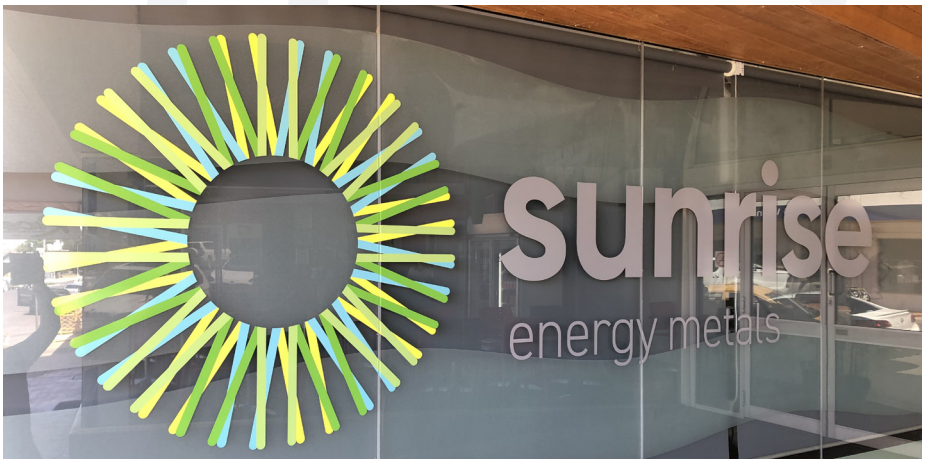
Autoclave being relocated in Port Pirie, South Australia.

# Sharing our Parkes Office Space

The Sunrise Energy Metals office space in Clarinda Street, Parkes has recently been sub-let to Fulton Hogan until mid 2022. Fulton Hogan were the successful tenderer for the contract to design and construct the Parkes Special Activation Precinct. The project includes upgrades to local roads, water and sewer infrastructure, electricity, gas, telecommunications, bridges and 7km of new roads. Construction commenced in September and Stage 1 of the planned precinct is scheduled for completion by 2023. Once complete, the new infrastructure will open about 1500 hectares for development.

The approximately 40 strong Fulton Hogan team and team members from Regional Growth NSW Development Corporation will share the Parkes office space with our Sunrise Energy Metals regional team.

The Fulton Hogan team has fully mobilised to Parkes.




New company logo on Parkes shopfront.

# New Look Shopfronts

Locals in Condobolin and Parkes may have noticed the new graphics on our shopfronts in both towns. Following the company name change earlier this year from Clean TeQ to Sunrise Energy Metals, the new Sunrise Energy Metals graphics were installed by local Condobolin business Progress Printing.

## Contact us:

Email: community@sunriseem.com
Complaints line: 1800 952 277