

Infinity GreenTech Launches Next Generation Processing Tech

HIGHLIGHTS

- Infinity GreenTech incorporated to focus on the commercialisation of low carbon footprint lithium hard rock processing technologies.
- Lodgement of provisional patent applications for a sustainable and novel lithium hydrometallurgical conversion process.
- The readily available reagents used in the process are low cost, non-toxic, and recyclable.
- Significant environmental benefits and product optionality for end users.
- Simple and rapid conversion process reduces CAPEX requirements and minimises energy and reagent consumption.
- Phase 1 test work complete progression to Phase 2 locked cycle test work.
- Progressing pilot plant design and layout engineering and source of long lead items.

Infinity Lithium Corporation Limited ('Infinity', or 'the Company') is pleased to announce the incorporation of Infinity GreenTech Pty Ltd ('Infinity GreenTech') and the lodgement of provisional patent applications for a sustainable and novel lithium hydrometallurgical conversion processes.

Infinity GreenTech anticipates the lodgement of corresponding international PCT applications within twelve months of filing the provisional patent applications.

Infinity GreenTech will initially focus on the further development and commercialisation of these sustainable and low carbon footprint lithium hard rock processing technologies that provides for a radical departure from traditional process routes. Infinity GreenTech will seek to minimise environmental impact of all process development through direct alignment to green energies and recirculation of key inputs.

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Project highlights

2nd Largest JORC hard rock lithium deposit in the EU

Strategically located in Spain, Europe to be the 2nd largest market for battery grade lithium after China

1st lithium project to secure EIT InnoEnergy Funding

Uniquely **fully integrated project** with mine and adjacent conversion plant

Low carbon footprint and sustainable operation

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The results of a comprehensive review of potential alternative extractive technologies for San José Lithium Project ('San José', or 'the Project') identified candidate alternative technologies with significant technical, financial and environmental potential benefits warranting further investigation and demonstration through appropriate laboratory test work. This work confirmed the technical feasibility and likely cost and other benefits of these candidate technologies.

Infinity Technical Advisory Committee ('TAC') Chairman Jon Starink and TAC expert Dr David Maree have overseen the successful completion of phase 1 test work and process flowsheet development.

Mr Starink noted "the encouraging first stages of test work have been successful and the opportunity to implement this novel process promises significant technical and environmental benefits. With the potential for a real reduction in capital intensity and operating costs, there may be opportunities to unlock lithium deposits that were previously unviable or not of sufficient scale for integrated downstream projects."

Infinity CEO and Managing Director Ryan Parkin said, "the results of the progression of these technical validations could provide an alternative and major opportunity for Infinity to provide an option to significantly improve the economic and environmental profile of San José', whilst enabling Infinity to apply its new generation GreenTech technology for the conversion of multiple sources of lithium bearing materials to produce a sustainable and cost-effective battery grade end product."

The simplified and sustainable lithium conversion process will endeavour to utilise renewable energies in the conversion of lithium raw materials to lithium chemicals. Comparatively short processing residence times results in minimised energy inputs, whilst the readily available, non-toxic reagents are low cost and recyclable.

The processing route has significant environmental benefits including less waste, significantly reduced emissions and a minimised CO_2 footprint. The rapid production of both battery grade lithium carbonate and lithium hydroxide end products is achieved with a significant reduction in process complexity, thus a reduction in capital intensity.

Early bench scale test work results confirmed recoverability of lithium in solution from Run-Of-Mine ('ROM') feedstock between 60% to 70% lithium from open-circuit direct processing of ROM without optimisation. Significantly higher recovery of lithium may reasonably be anticipated once process conditions are optimised. Whilst beneficiation test work has been completed, the initial results for the novel technologies based on ROM feedstock highlights an opportunity to forgo the beneficiation stage for some lithium chemical conversion projects including San José

Infinity GreenTech is also assessing opportunities to recover potentially valuable potassium and sodium-containing by-products in the next stages of test work. Locked-cycle test work ('LCT') is expected to commence in late November 2021.



Infinity Greentech has commenced the preparation of budgets and schedules for the construction of appropriate laboratory and pilot plant facilities for the further development of these progressive technologies. There are multiple options being evaluated for the development of these facilities with the progression of pilot plant design and layout engineering and the design and sourcing of long lead items prioritised.

The announcement was authorised by the Board. For further inquiries please contact:

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About Infinity Lithium

Infinity Lithium is an Australian listed minerals company who is seeking to develop its 75% owned San José Lithium Project in Spain. The proposed fully integrated industrial Project is focused on the production of battery grade lithium chemicals from a mica feedstock that represents the EU's 2nd largest JORC compliant hard rock lithium deposit.

The Company is contesting the cancellation of Investigation Permit Valdeflorez ('PIV') and has lodged a contentious-administrative appeal. The Company strongly disputes the basis of the decision of the cancellation of PIV and retains all legal rights against the Junta of Extremadura. Infinity retains subsequent rights of applications over and including the PIV area through other applications. These are summarised in the ASX announcement 19 July 2021.

The Project would provide an essential component in the EU's development of a vertically integrated lithium-ion battery supply chain. The availability of critical raw materials and the production of battery grade lithium hydroxide in the EU is essential to ensure the long-term production of lithium-ion batteries for electric mobility and the transition of the EU's automotive industry towards electric vehicles.