

MoU: Infinity & Thyssenkrupp BU Mining to Assess Green Hydrogen at San José

HIGHLIGHTS

- MoU with global leading engineering and industrial group thyssenkrupp Industrial Solutions AG BU Mining.
- San José in global leading first project to assess the potential to use green hydrogen to power the lithium chemical conversion process.
- Potential application to San José Lithium Project and the advancement of Infinity GreenTech technologies.

Infinity Lithium Corporation Limited ('Infinity', or 'the Company') and wholly owned subsidiary Infinity GreenTech Pty Ltd ('Infinity GreenTech') are pleased to announce a collaboration with thyssenkrupp Industrial Solutions AG Business Unit Mining ('tk BU Mining') to assess the potential to use green hydrogen to power the lithium chemical conversion process.

The Memorandum of Understanding ('MoU') highlights the intention of both parties to apply technological advancements for green hydrogen energy applications for pyrometallurgical equipment relevant to lithium chemical conversion processes. The advancements have the potential to be integrated into both the San José Lithium Project ('San José', or 'the Project') and the Infinity GreenTech novel lithium hydrometallurgical conversion processes (see ASX announcement 18 November 2021).

Infinity CEO and Managing Director Ryan Parkin noted *"the ability to be at the forefront of this global leading application of green hydrogen has wide ranging implications for the Company and the industry. Infinity and thyssenkrupp BU Mining are bringing world leading technologies to San José in alignment to Extremadura's ambitions to produce green hydrogen from their vast renewable energy projects, and progress sustainable industrialisation in the region."*

This global first application to an integrated lithium project will see pilot scale activities using the new tk BU Mining Hydrogen Burner installation in Germany to assess San José feedstock and the use of green hydrogen to power a rotary kiln.

thyssenkrupp BU Mining CEO Jan Lüder said *"Global demand for raw materials is rising all the time, whilst there is consciousness about the finite nature of resources and the need to protect the environment. As one of the world's leading engineering and equipment supply companies for the mining industry, we are aware of our customers' needs to reduce the carbon footprint of their operations."*

ASX Release
6 December 2021
ASX: INF
FRA: 3PM

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

Corporate Directory

Ryan Parkin
Managing Director & CEO

Adrian Byass
Non-Executive Chairman

Remy Welschinger
Executive Director

Jon Starink
Executive Director

Contact

Level 3, 22 Railway Road
Subiaco WA 6008

T: +61 (8) 6146 5325
E: admin@infinitylithium.com
W: www.infinitylithium.com
W: www.sanjosevaldeflorez.es



Therefore, thyssenkrupp Mining technologies has been developing projects to improve our equipment and services in order to help our customers achieve their goal of sustainable and environmentally responsible mining. From digitalization and optimization solutions, mining operations integration studies and, of course, low-CO₂ pyroprocessing solutions.

Among other developments, our pilot hydrogen/natural gas combustion facility allows us to evaluate with our customers the potential of using Green H₂ in the mining industry as an alternative to fossil fuels with special attention to the final product quality. Our collaboration with Infinity Lithium is a great step in this direction and we are proud to support the development of a crucial project for Extremadura, Spain and Europe.”

The parties will examine further strategic opportunities in addition to the collaboration under the MoU relating to San José and the application to Infinity GreenTech’s technological developments.

Green Hydrogen Potential for San José

The Project has the potential to utilise green hydrogen as the energy source to power the rotary kiln that will be required under the sulphate roast stage of the process flowsheet. tk BU Mining will assess varying compositions of natural gas and green hydrogen for use at San José.

The Company can assess the potential use of natural gas from the Project’s adjacent pipeline infrastructure and the impact of blended gas and hydrogen which is already in use in pipelines globally. The Company and tk BU Mining will also assess the potential use of hydrogen from alternative sources which can include a localised source of green hydrogen or the development of specific infrastructure on site.

Infinity GreenTech

Provisional patent applications have been lodged for the novel lithium hydrometallurgical conversion processes, and the collaboration with tk BU Mining will be incorporated for the assessment of the pyrometallurgical applications under these novel technologies. The provisionally protected patent has the potential for application to lithium bearing materials and more widely for other battery material refining processes.

thyssenkrupp BU Mining Hydrogen Burner Pilot plant

tk BU Mining Technologies is one of the few full-line suppliers globally, reliably provides tailored, cost-efficient and responsible solutions for mining, processing and handling raw materials and is committed to a sustainable mining industry through continuous improvement of products to reduce project’s carbon footprint. The pyroprocessing product portfolio includes a wide installed base including rotary kilns, Multiple Hearth Furnaces (‘MHF’) and Gas Suspension Calciners that focus on the CO₂ emission profile.

In this context, tk’s new Hydrogen burner installation will facilitate test works to assess the potential of hydrogen as substitution fuel in rotary kilns, MHF and other pyroprocessing technologies.

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

Ryan Parkin
CEO, Managing Director
T: +61 (8) 6146 5325
E: rparkin@infinitylithium.com

Lucas Robinson
Investor Relations Manager
T: +61 (0)408 228 889
E: lrobinson@infinitylithium.com

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.