

# ASX ANNOUNCEMENT

28 JANUARY 2022

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## QUARTERLY ACTIVITIES REPORT PERIOD ENDING 31 DECEMBER 2021

### HIGHLIGHTS

#### San José Lithium Project

- Fundamental realignment of the Project through the delivery of an Integrated Underground Scoping Study which delivered:
  - Outstanding financial outcomes aligned to positive environmental impacts and societal benefits.
  - Compliments ongoing technical studies and results of the Pre-Feasibility Study.
- Progression and submission of writ regarding the status of Investigation Permit Valdeflórez in the Contentious-Administrative Court in Cáceres.
- Positive Court Decision for San José on rehabilitation and restoration in the Contentious-Administrative Court in Cáceres.

#### Commercial

- Infinity and Thyssenkrupp BU Mining enter MoU to assess Green Hydrogen at San José.
- Infinity Greentech applied for provisional patents on next generation processing technology.

#### Corporate

- Available cash as at 31 December 2021 of A\$18.71 million.

#### CORPORATE DIRECTORY

RYAN PARKIN Managing Director & CEO  
ADRIAN BYASS Non-Executive Chairman  
REMY WELSCHINGER Executive Director  
JON STARINK Executive Director

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## Integrated Underground Scoping Study - San José Lithium Project

In October 2021 Infinity Lithium Corporation Limited ('Infinity', or 'the Company') delivered a Scoping Study ('Scoping Study', or 'the Study') for an Integrated Underground Mine and Lithium Hydroxide production facility at the San José Lithium Project ('San José', or 'the Project'). The outstanding financial outcomes from the Study are aligned to positive environmental impacts and societal benefits with increased levels of employment from prior technical studies.

The Highlights of the Scoping Study are presented below. For full details of the Scoping Study please refer to the ASX announcement and presentation released on 14 October 2021.

### Highlights

- Underground Scoping Study completed in response to stakeholder engagement and market demand for battery grade lithium hydroxide in the EU.
- Underground Scoping Study provides environmental and societal improvements from previously published pre-feasibility study including a reduction in surface tailings and visual impact, and significantly increased numbers of direct employment.
- Forecast average steady-state production of 19.5ktpa LCE of battery grade lithium hydroxide over 26 years.

### Scoping Study Outcomes

NPV <sub>10%</sub> (pre-tax)	US\$	811.7m
IRR	%	25.7
LOM Gross Revenues	US\$	7,938m
Average Net Cash Flow (From Production): 26 years	US\$	190.6m
Payback Period	yrs	3.2 <sup>(1)</sup>
LOM Average ROM	tpa	1.9m
Average Steady-State Production Lithium Hydroxide	tpa	19.5k
Pre-Production CAPEX	US\$	532.2m
Direct Employment – Steady State Production	#	400 <sup>(2)</sup>

- (1) Payback period after commercial production of lithium hydroxide
  - (2) 400 ongoing direct project employment positions when in steady-state production, 710 including construction.
- Average price assumption for battery grade lithium hydroxide monohydrate US\$17,000/t.  
Fastmarkets Battery Raw Material Price Update (24 September 2021) battery grade lithium hydroxide monohydrate (56.5% LiOH.H<sub>2</sub>O) spot prices on CIF basis for China, Japan and Korea at a mid-point of US\$21,500 per tonne.

The Scoping Study was completed to highlight the viability of developing the underground mine and the associated production of battery grade lithium hydroxide at San José.

Infinity delivered this Study, leveraging off previously completed Pre-feasibility level studies and subsequent, ongoing feasibility level test work for the processing and production of lithium chemicals from San José. The Study is important as it represents an integrated, wholly-underground mining operation to minimise impact on the environment and local stakeholders.

This proposed solution removes the requirement for any open pit mining, replacing it with underground-only operations and preserves the landform at San José. An increase in scale of proposed production and change in mining method delivers an increase in direct employment over a comparable duration to the previously released Pre-feasibility Study ('PFS') (August 2019).

The Scoping Study provides for a material change in the Project in direct response to societal and local considerations, and stakeholder interaction. The European development of a sustainable lithium-ion battery value chain could be positively affected by the availability of locally sourced and clearly traceable battery materials.

The Company believes this Scoping Study highlights the potential for San José to potentially produce increased quantities of battery grade lithium chemicals and deliver further improvements in social, environmental and visual impacts.

The Company is continuing to engage with in-country and European stakeholders in response to the evolving environmental and societal considerations which are aligned to the increased demand sustainably produced battery grade lithium chemicals.

## **Cautionary Statement – Scoping Study**

*The Scoping Study referred to in this announcement has been undertaken to assess the viability of an underground-only mining operation and integrated lithium chemical production facility at the San José Lithium Project. It is a preliminary technical and economic study of the potential viability of the San José Lithium Project. It is based on low-level (accuracy) technical and economic assessments, (+/- 35% accuracy) and is insufficient to support estimation of Ore Reserves. Further exploration and evaluation work and appropriate studies are required before Infinity will be in a position to estimate any Ore Reserves or to provide assurance of an economic development case at this stage; or to provide certainty that the conclusions of the Study will be realised.*

*Infinity have independently engaged the services of Mining Sense Global S.L. to complete a desktop review for the development of an underground mine. Infinity has previously engaged Wave International Pty Ltd ("Wave") to assess the technical and economic viability to a Pre-Feasibility Study level with regards to producing battery grade lithium hydroxide under the San José Lithium Project. Whilst the Scoping Study has yielded robust outcomes and provided independent perspective on the opportunity to produce battery grade lithium hydroxide, there is no guarantee that the Joint Venture will choose to adopt the outcomes of the study.*

*The Production Target and forecast financial information referred to in this announcement is based on 76% Indicated Resources and 24% Inferred Resources for the life of mine life covered under the Study. In accordance with the twenty-six (26) year mine plan incorporated into the Study, the first 3.2 years of production (covering payback period) will be derived from 92% Indicated material with 8% from the Inferred category. The Inferred material does not have a material impact on the technical and economic viability of the project. There is a low level of geological confidence associated with Inferred Mineral Resources and there is no certainty that further exploration work will result in the determination of Indicated Mineral Resources or that the production target itself will be realised.*

*This Scoping Study is based on the material assumptions outlined below. These include assumptions about the availability of funding. While the Company considers all the material assumptions to be based on reasonable grounds, there is no certainty that they will prove to be correct or that the range of outcomes indicated by the Study will be achieved.*

*Infinity is in Joint Venture with Valoriza Minería S.A., a subsidiary of SACYR S.A. over the San José Lithium Project. Infinity currently holds a 75% interest and has an Option to proceed to 100% interest at its election. This Study (on a 100% ownership basis), pre-production capital of US\$459m excluding contingencies, and US\$532.2m including a weighted average 16% contingency) will likely be required to fund the San José Lithium Project. Investors should note that there is no certainty that the Company will be able to raise that amount of funding when needed however the Company has concluded it has a reasonable basis for providing the forward-looking statements included in this announcement and believes that it has a "reasonable basis" to expect it will be able to fund the development of the San José lithium deposit. It is possible that Infinity can pursue a range of funding strategies to provide funding options, and that such funding may only be available on terms that may be dilutive to or otherwise affect the value of Infinity Lithium Corporation Limited's existing shares. It is also possible that Infinity Lithium Corporation Limited could pursue other value realisation strategies such as sale, partial sale, or joint venture of the San José Lithium Project. If it does, this could materially reduce Infinity's proportionate ownership of the San José Lithium Project. Given the uncertainties involved, investors should not make any investment decisions based solely on the results of this Scoping Study.*

## Status of Appeal in the Contentious-Administrative Court in Cáceres

Infinity, through San José Joint Venture ('JV') entity Tecnología Extremeña Del Lito S.L. ('TEL') and with authority under the revised JV amendment with Project JV partners Valoriza Minería S.L.U. ('VM'), continued to contest the cancellation of Investigation Permit Valdeflórez ('PIV') through a contentious-administrative appeal. The Company strongly disputes the basis of the decision regarding the cancellation of PIV and reserves all legal rights against the Junta of Extremadura ('Junta'). A full summary of the events that led to the decision is contained in ASX announcement 17 May 2021.

The quarter ended 31 December 2021 included the administrative progression of the legal process through the Contentious-Administrative Court in Cáceres ('CAC', or 'the Court'). The Company finalised the filings for the matter to be heard before the Court and draft of claim. Subsequent to year end, the final submission of TEL's writ with regards to the status of PIV was lodged with the CAC.

The statement of defence will subsequently be provided to the CAC. Documentary evidence will be considered by the judge presiding over the CAC prior to the issue of the Court's findings and the final judgement.

## Positive Court Decision for San José

In September 2019, the City Council proposed a modified restoration plan and placed a halt on field work at San José. The City Council claimed the Company (through TEL) had acted outside the restoration plan which had been provided by TEL prior to works and was approved under the relevant authority at the Regional Government. TEL disputed the claim and sought resolution through the CAC.

In October 2021 the Company received a positive ruling by the CAC in favour TEL where the CAC upheld the appeal of TEL relating to the rehabilitation and restoration plan of the Project.

The CAC concluded that the City Council resolution was "contrary to law" and declared it null and void. TEL operated under the law, regulations and permits in submitting the restoration plan to the required authority.

The Company welcomed the independent ruling from the CAC to enforce the application of law regarding the administrative status of the Project. The Company remains committed to prioritise community engagement and collaborations with local stakeholders to progress the Project for the benefit of the local community, Spain and the EU.



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.

## **Infinity & Thyssenkrupp to Assess Green Hydrogen at San José**

In December 2021 Infinity Greentech announced a collaboration with 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 San José and the Infinity GreenTech novel lithium hydrometallurgical conversion processes, as referenced below.

## **Infinity GreenTech Launches Next Generation Processing Technology**

In November 2021 the Company incorporated a new wholly owned subsidiary, Infinity Greentech Pty Ltd ('Infinity Greentech'), to focus on the commercialisation of low carbon footprint lithium hard rock processing technologies that provide for a radical departure from traditional processing routes. Infinity has conducted this test work as an adjunct to the ongoing feasibility level test work at San José through the Company's access to industry leading experts.

The results of a comprehensive review of potential alternative extractive technologies for San José 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, likely cost and other benefits of these candidate technologies.

A provisional patent application has been lodged for the novel lithium hydrometallurgical conversion processes, and the collaboration with thyssenkrupp Industrial Solutions AG Business Unit Mining ('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.

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.

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 the potential to deliver significant environmental benefits including less waste, significantly reduced emissions and a minimised CO<sub>2</sub> 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

Bench-scale test work is proceeding on schedule with locked-cycle test work ('LCT') commencing in the previous quarter LCT work is targeted to provide key process design criteria and is expected to be completed in Q1 2022.

The Company has further advanced the design and layout of pilot-scale activities, including the lodgement of orders for specialist equipment which is due to be delivered in Q1 2022. Once installed, the specialist equipment will permit considerable acceleration of laboratory scale test work and the start of pilot-scale test work.

LCT and pilot-scale test work will investigate two complementary processes that will use ROM lithium bearing mica ore from San José.

Infinity Greentech intends to broaden the scope of test work to determine the efficacy of the process for the treatment of other lithium-bearing materials, focussing in the first instance on other lithium-containing micas such as lepidolite and zinnwaldite, lithium-containing clays such as hectorite and complex lacustrine materials. Infinity Greentech expects to commence bench scale test work on other lithium-bearing materials in parallel to the current test work in Q1 2022.

Infinity Greentech expects that the purchased pilot-scale equipment will be installed and fully operational in Q2 2022. Pilot-scale test work is anticipated to commence as soon as possible thereafter, with meaningful results anticipated in Q3 2022.

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.

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.

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.

## Corporate

### Related Party Disclosure

Payments to related parties during the quarter as outlined in sections 6.1 and 6.2 of the Appendix 5B consisted of \$153,212 in directors' fees and payments to executive directors under respective service agreements.

### Annual General Meeting

The Company held its Annual General Meeting on 30 November 2021 with all resolutions passed by poll.



## Cash at Bank

As at 31 December 2021 Infinity had available cash of A\$18.71 million. The cash balance is exclusive of the funding commitments under the Project Agreement with EIT InnoEnergy, who have paid €600,000 (approximately A\$1,000,000) tranche 1 and 2 payments directly allocatable to phase one test work. The final tranche 3 payment, totalling up to €200,000 (approximately A\$333,000), will be payable upon completion of phase one test work.

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 Valdeflórez ('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.

## Competent Persons Statement

The Mineral Resource estimates for the San José Lithium Project referred to in this announcement were reported by Infinity Lithium Corporation Limited in accordance with ASX Listing Rule 5.8 in its announcement of 23 May 2018. Infinity Lithium Corporation Limited is not aware of any new information or data that materially affects the information included in the ASX announcement of 23 May 2018 and confirms that all material assumptions and technical parameters underpinning the resource estimates in the announcement of 23 May 2018 continue to apply and have not materially changed.

The Mineral Resource estimates underpinning the production targets disclosed in this announcement have been prepared by a competent person in accordance with the requirements of the Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves (JORC Code), 2012 Edition.

The information in this announcement that relates to the Scoping Study was reviewed by Adrian Byass, an employee of Infinity Lithium Corporation Limited. Adrian Byass is a member of Australian Institute of Geoscientists. Adrian Byass has provided written consent to the form and context in which the outcomes of the Scoping Study and the supporting information are presented in this announcement.

Infinity Lithium Corporation Limited has also engaged Mining Sense S.L. to complete an Underground Option Desktop Review in August of 2021 which informs this Scoping Study. Jesús Montero is a Mining Engineer at Mining Sense Global S.L.

The information in this report that relates to Exploration Results is based on the information compiled or reviewed by Mr Adrian Byass, B.Sc Hons (Geol), B.Econ, FSEG, MAIG and an employee of Infinity. Mr Byass has sufficient experience relevant to the style of mineralisation and type of deposit under consideration and to the activity which he is undertaking to qualify as a Competent Person as defined in the 2012 Edition of the JORC Code for Reporting of Exploration Results, Exploration Targets, Mineral Resources and Ore Reserves. Mr Byass consents to the inclusion in the report of the matters based on this information in the form and context in which it appears.

## Disclaimer

Forward-looking statements are statements that are not historical facts. Words such as “expect(s)”, “feel(s)”, “believe(s)”, “will”, “may”, “anticipate(s)” and similar expressions are intended to identify forward-looking statements. These statements include, but are not limited to statements regarding future production, resources or reserves and exploration results. All of such statements are subject to certain risks and uncertainties, many of which are difficult to predict and generally beyond the control of the Company, that could cause actual results to differ materially from those expressed in, or implied or projected by, the forward-looking information and statements.

These risks and uncertainties include, but are not limited to: (i) those relating to the interpretation of drill results, the geology, grade and continuity of mineral deposits and conclusions of economic evaluations, (ii) risks relating to possible variations in reserves, grade, planned mining dilution and ore loss, or recovery rates and changes in project parameters as plans continue to be refined, (iii) the potential for delays in exploration or development activities or the completion of feasibility studies, (iv) risks related to commodity price and foreign exchange rate fluctuations, (v) risks related to failure to obtain adequate financing on a timely basis and on acceptable terms or delays in obtaining governmental approvals or in the completion of development or construction activities, and (vi) other risks and uncertainties related to the Company’s prospects, properties and business strategy.

Our audience is cautioned not to place undue reliance on these forward-looking statements that speak only as of the date hereof and we do not undertake any obligation to revise and disseminate forward-looking statements to reflect events or circumstances after the date hereof or to reflect the occurrence of or non-occurrence of any events.

**Table 1: SAN JOSÉ MINERAL RESOURCE, REPORTED ABOVE 0.1% LI CUT-OFF**

Classification	Tonnes (Mt)	Li (%)	Li <sub>2</sub> O (%)	Sn ppm
Indicated	59.0	0.29	0.63	217
Inferred	52.2	0.27	0.59	193
<b>TOTAL</b>	<b>111.3</b>	<b>0.28</b>	<b>0.61</b>	<b>206</b>

Estimated using Ordinary Kriging methodology. Note: Small discrepancies may occur due to rounding. Snowden Mining (2017) and Cube Consulting estimated the total Mineral Resource for the San José lithium deposit using Ordinary Kriging interpolation methods and reported above a 0.1% Li cut-off grade. Full details of block modelling and estimation are contained in the ASX announcement dated 5 December 2017 and updated 23 May 2018.

Lithium (Li) mineralisation is commonly expressed as either lithium oxide (Li<sub>2</sub>O) or lithium carbonate (Li<sub>2</sub>CO<sub>3</sub>) or Lithium Carbonate Equivalent (LCE). Lithium Conversion:

1.0% Li = 2.153% Li<sub>2</sub>O,

1.0%Li = 5.32% Li<sub>2</sub>CO<sub>3</sub>

The Resource was announced to the ASX on 5 December 2017 and updated 23 May 2018. Infinity is not aware of any new information or data that materially affects the information included in this ASX release and Infinity confirms that, to the best of its knowledge, all material assumptions and technical parameters underpinning the resource estimates in this release continue to apply and have not materially changed.

**Table 2: SAN JOSÉ JORC ORE RESERVE STATEMENT**

Classification	Tonnes (Mt)	Li (%)	Li2O (%)	Sn ppm
Proven	-	-	-	-
Probable	37.2	0.29	0.63	217
<b>TOTAL</b>	<b>37.2</b>	<b>0.29</b>	<b>0.63</b>	<b>217</b>

100% of the material in the PFS mining schedule is included in the Probable Ore Reserves category. The Ore Reserves were calculated assuming the mining and processing methods determined for the PFS.

The Reserve was announced to the ASX on 22 August 2019. Infinity is not aware of any new information or data that materially affects the information included in this ASX release and Infinity confirms that, to the best of its knowledge, all material assumptions and technical parameters underpinning the reserve estimates in this release continue to apply and have not materially changed.

## Tenement Schedule in accordance with Listing Rule 5.3.3

### San José Lithium Project Spain

Infinity has a 75% beneficial interest in the San José Lithium Project (Applications) from Valoriza Minería and Castilla Mining S.L. All tenure is held under the current Joint Venture.

The San José tenements:

- Valdeflórez: 10C 10343-00 Cancelled – subject to contentious-administrative appeal
- Ampliación a Valdeflórez: 10C 10359-00 Granted

Other applications;

- Extremadura S.E. 10C10386-00 Castilla Mining S.L. Exploration Permit Application
- San José 10C10368-00 Valoriza Minería S.L.U Investigation Permit Application