



ASX ANNOUNCEMENT

FOR IMMEDIATE RELEASE TO THE MARKET

Li-S Energy Limited – ASX Code: LIS

Wednesday 22 December 2021

Li-S Energy Newsletter

Li-S Energy Limited (ASX: LIS) (“LIS” or “the Company”) has today released the attached Newsletter to the market.

This announcement has been authorised by the CEO.

For further information contact:

Dr. Lee Finniear
Chief Executive Officer
On 07 3054 4555

LI-S ENERGY LIMITED

ABN: 12 634 839 857

Level 27, 10 Eagle St, Brisbane QLD 4000
Website: www.lis.energy
Tel: +61 7 3054 4555 Email: info@lis.energy



[News](#) | [Events](#) | [Updates](#)

We are hiring!

We are looking for the best talent for the following roles:

- GM - Commercial
- Marketing Manager
- Senior Scientist
- Facilities Manager
- Project Administrator

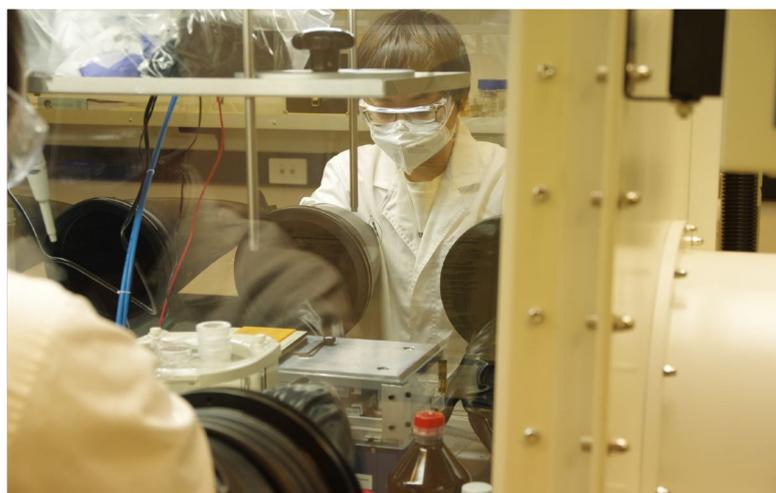
For more information please contact careers@lis.energy

Li-S Team Expands

Since the IPO our core Deakin University based team has grown to 12 highly skilled scientists & technicians. As we scale up our multi-layer cell optimisation and solid state projects, we expect to add more scientific personnel to the team across the first quarter of 2022.

Global Talent Visa

We are pleased to have secured a Global Talent Visa for our CTO, Dr Steve Rowlands. Steve is a unique asset for Li-S Energy having been in charge of a large UK team of lithium-sulphur battery developers for 8 years, including being responsible for the development of an Li-S pilot production plant.



Accelerating Success

We are very pleased to report our continuing success in our development and commercialisation projects, scaling up our team and facilities, and accelerating our partner and business development activities.

Li-S Energy tests exceed 1100 cycles

This is a landmark in lithium-sulphur battery technology. Our single layer BNNT enhanced pouch cell tests have now surpassed 1100 cycles, more than 10x the cycle life of typical lithium sulphur cells.

To put this into context, "range anxiety" and "resale anxiety" are the two major obstacles to EV adoption. Delivering both high energy density and long battery cycle life makes the potential of a 1000km EV with a 1,000,000km battery lifetime far more achievable.

Multi-layer cells now under test

In 2021 we built over 480 test cells. After the success of our single layer pouch cell testing, we are now moving our focus to multi-layer pouch cell testing.

Multi-layer pouch cell testing is a key next step in the



Facilities - Preparing for Production

Optimising the battery composition and scaling up is now key to delivering the best performing Li-S Energy battery cells.

To accelerate this work we are now constructing our new Li-S Energy battery optimisation and testing laboratories in Geelong, Victoria.

The facility includes two new automated cathode coating machines that will enable our team to rapidly scale up test cell production and deliver cells suitable for testing by collaboration partners.

We expect the new facility to be operational before the end of March 2022.

In parallel, we are now designing our pilot manufacturing facility to take the optimised cells into initial production. This facility will include state-of-the-art cathode coaters & automated cell production equipment, capable of producing a more significant volume of Li-S Energy cells for partners and customers.

The facility is planned to include a pouch cell production with dry rooms, clean rooms, labs and offices.

optimisation of Li-S Energy cell technology. Its purpose is to show the performance of the technology in the same multi-layer cell form factor that commercial batteries will use when they are manufactured.

The first batch of 4-layer and 10-layer cells have now been built and have commenced testing.

Li-Metal cells with Li-Nanomesh

We recently announced that our unique Li-Nanomesh nano-material composite can inhibit dendrite formation in symmetric lithium cells. We are now building Li-Metal cells to prove Li-Nanomesh can extend cycle life in Li-Metal batteries.

Li-Metal batteries offer significant performance benefits compared to lithium-ion and are often seen as a “halfway house” to lithium sulphur. The commercial advantage for Li-S Energy is time-to-market. Since Li-Metal uses a conventional Li-ion cathode, existing gigafactories could be more easily adapted, potentially enabling earlier IP licensing and nano-material supply agreements to be reached.

Boeing, Janus and Other Opportunities

Since our IPO in September we have been extremely pleased with the number of enquiries from global companies keen to trial Li-S Energy batteries. We have several discussions under NDA and as agreements are reached we will announce details.

To date we have signed agreements with Boeing’s InSitu Pacific to power drones and Janus Electric to power electric trucks. Please refer to our recent ASX Announcements on these agreements.

The Boeing InSitu agreement is designed to prove that Li-S Energy batteries can deliver substantial performance benefits for lightweight uncrewed aircraft systems (UAS). InSitu has a number of global defence and commercial opportunities where Li-S Energy batteries could enhance the mission capabilities of the UAS fleets being offered.

The electric truck market is huge. In Australia there are 100,000 heavy articulated trucks. When converted to electric each one will need 600 - 1000 kWh of batteries - a battery market worth \$10 billion in Australia alone. Our collaboration with Janus Electric is an early opportunity to tap into this market, with Janus seeking 248MWh of batteries by the end of 2023

In the News:

In case you missed it, interviews with our CEO, Dr Lee Finniear are available on the www.lis.energy News & Media page.