

ASX ANNOUNCEMENT

FOR IMMEDIATE RELEASE TO THE MARKET

Li-S Energy Limited – ASX Code: LIS

Monday 11 November 2024

Chairman’s Statement and CEO Presentation

Li-S Energy Limited (ASX: LIS) (“LIS” or “the Company”) is pleased to provide the following which will be presented at the Company’s Annual General Meeting today:

- Chairman’s Statement
- CEO Presentation

This announcement has been authorised by the Board.

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Li-S Energy AGM 2024

Chairman's Statement

AGM 11 November 2024

Introduction

Ladies and gentlemen, on behalf of the Board and the entire Li-S Energy team, I would like to welcome you to the 2024 Annual General Meeting of Li-S Energy shareholders.

My name is Ben Spincer, Li-S Energy's Chair, and I am delighted to be hosting the Annual General Meeting for Li-S Energy.

First, I would like to acknowledge the Traditional Owners of the lands on which we meet, the Waddawurrung People, and I pay my respects to their Elders past, present and emerging.

It is particularly pleasing to be able to hold the AGM in Geelong today on the Deakin University campus, and I know that many of you present today have had the opportunity to visit our Phase 3 manufacturing facilities.

I would like to start by introducing the Li-S Energy team who are with me today. I am joined by my fellow Directors, Ms Hedy Cray and Mr Marc Fenton. We are also joined by the CEO, Dr Lee Finniear who you will hear from shortly, the CFO Ms Sarah Price, and the General Counsel and Company Secretary, Mr Will Shiel.

2024 PROGRESS

2024 was the year that Li-S Energy transitioned from being a research-led battery business to an engineering-led manufacturer. Early in the financial year we completed the installation of our Phase 3 facility in Geelong, with Australia's largest dry room as the centrepiece. In this new facility we are able to produce up to 2MWh of our cells each year, making it the largest pouch cell manufacturing facility in the country. Our team has been working to fully commission and optimise the numerous components of the production line in the facility, as well as developing a separate line to manufacture a smaller format of cells for different applications.

To help achieve this, I must also recognise the support of my fellow Board members during the year Robin Levison, Hedy Cray, Marc Fenton (who joined on 1 February 2024) and Tony McDonald (who retired following the 2023 AGM), plus the efforts of the management team led by CEO Dr Lee Finniear with support from CTO Dr Steve Rowlands, CFO Sarah Price, Chief Strategic Advisor, Glenn Molloy and our industry advisory panel of Bob Galyen and Isobel Sheldon OBE.

Finally, Robin Levison retired from the Board at the end of August this year and I would like to thank him for his contributions and insights since the establishment of the company.

R&D UPDATE

LIS continues to commercialise over a decade of research from Deakin University in the development of lithium-sulfur and lithium-metal batteries that utilise boron nitride nanomaterials to improve

performance and cycle life. Following development of a semi-solid-state chemistry in April 2023, we now have a battery with a unique balance of gravimetric and volumetric energy density.

In 2024, the team has focussed on commissioning the \$10m Phase 3 facility to allow the manufacture of commercial size and quality cells using our unique chemistry. This facility has been supported by the Trailblazer Universities program from the Federal Government and enables us to undertake additional significant programs such as the \$1.35m Emerging Aviation Technology Program (EATP) Grant we were awarded in June 2024 to develop a battery for a drone that will fly all day and more recently the \$1.7m grant from the Industry Growth Program (IGP) to develop a sovereign capability in lithium foil manufacture.

Recently, we announced that the large format pouch cells produced on our Phase 3 line are delivering an energy density of 498Wh/kg on their first discharge cycle and 456Wh/kg on subsequent cycles. Few of our peers are willing to report performance beyond the initial formation cycling, but based on the information we do have we believe these outcomes are indicative of what is probably the best performing commercial-sized cell in the world. This is a tremendous credit to all involved.

Over 2024 we brought much of our R&D in-house under the guidance of our CTO, Dr Steve Rowlands as we transitioned from fundamental science to development of commercial cells. However, Professors Ian (Ying) Chen and Maria Forsyth and their teams at Deakin University continued to provide invaluable support for this core research.

COMMERCIAL UPDATE

As LIS evolves and matures as a business we are increasingly looking to our long-term value proposition for investors, partners, and customers. To that end we are targeting four key strategic objectives over the next two years:

1. **Pathway to core revenue** – through development of data sheets and test cells for partners and investment in battery pack development
2. **Additional funding and revenue streams** – through our significant Government Grants and new products such as lithium foils and laminates
3. **Strong partnerships with offtake agreements** – once test cells are available and tested by partners, we will seek to evolve these end-user partnerships into conditional offtake agreements
4. **A pathway to scale** – offtake agreements and proven manufacturing processes will allow us to develop options for the next scale of commercial facility and open a range of licensing and funding models.

We believe that these four priorities will position us for long-term sustainable growth and the creation of shareholder value. We have recently delivered sample cells to the first of our partners, and intend to extend this to other partners in the coming months. With the support of the Industry Growth Program funding we are able to accelerate the development of our lithium foil and laminate products.

We are also well advanced in the development of a battery management system (BMS) for our cells. This is complex for any new battery system but the BMS IP we are creating is vital to enable us to develop battery modules for customers as well as providing test cells.

I believe that the early development of a BMS may prove to be one of the most important commercial developments at LIS, utilising AI techniques to solve the challenges of monitoring state of charge and state of health in lithium sulfur cells. It is also critical to any sophisticated customer conversation where partners are generally looking for a battery pack to test with defined capacity, voltage and power requirements, not just individual cells.

Our core partners such as V-TOL Aerospace, magniX and others continue to work in concert with our technical team to ensure that our test cells meet their specific requirements for power, energy density and cycle life. In time, we believe that will lead to offtake agreements for our cells.

SHAREHOLDER SUPPORT

LIS continues to value the ongoing support of its major shareholders, PPK Group Limited and Deakin University. However, the Company could not have achieved its goals this year without the support of all its shareholders.

Recently, PPK Group completed a plan to deconsolidate LIS, primarily through an in-specie distribution of LIS shares to PPK shareholders. PPK will remain our largest shareholder, providing significant ongoing support, but in the longer-term I hope this deconsolidation can lead to a larger free-float and greater liquidity in LIS shares. This should increase our attractiveness to new long-term shareholders.

The capital raised at IPO has ensured that not only can the company fund its ongoing development work, but has also retained a healthy balance sheet in difficult economic conditions with \$24.8M in cash and short term investments at the end of the 2024 financial year. This gives us the strategic flexibility to continue to invest in, and develop opportunities as they arise for a number of years and has been instrumental in the awarding of the EATP and IGP grants from the Federal Government in recent months.

OUTLOOK

2024 has been an incredible year for LIS and we now have the core building blocks in place to accelerate the commercialisation of both our lithium sulfur and lithium metal cells in 2025. Our progress has been recognised in the enthusiasm I have personally seen from prospective customers as evidenced at industry tradeshows, and I anticipate that in the next year customer engagement will continue to accelerate.

Our Phase 3 facility is a unique capability that will allow the rapid development of our cells and underlying manufacturing processes.

We have received significant Federal Government support for new programs to extend our capabilities and we look forward to supporting the development of the National Battery Strategy and the Battery Breakthrough Initiative announced by the Government to grow and support Australia's sovereign capability in the battery industry.

Following the successful commissioning of our Phase 3 facility, we continue to turn our minds to the long-term full scale-up of our technologies. We now believe that the next scale-up could be a 500MWh facility in the coming years. We are not tied to a particular model to fund this facility to ensure that we maximise returns for shareholders. We will explore all options from greater Government support to licensing and joint venture or a range of project financing possibilities.

2024 Annual General Meeting

CEO Presentation

11th November 2024



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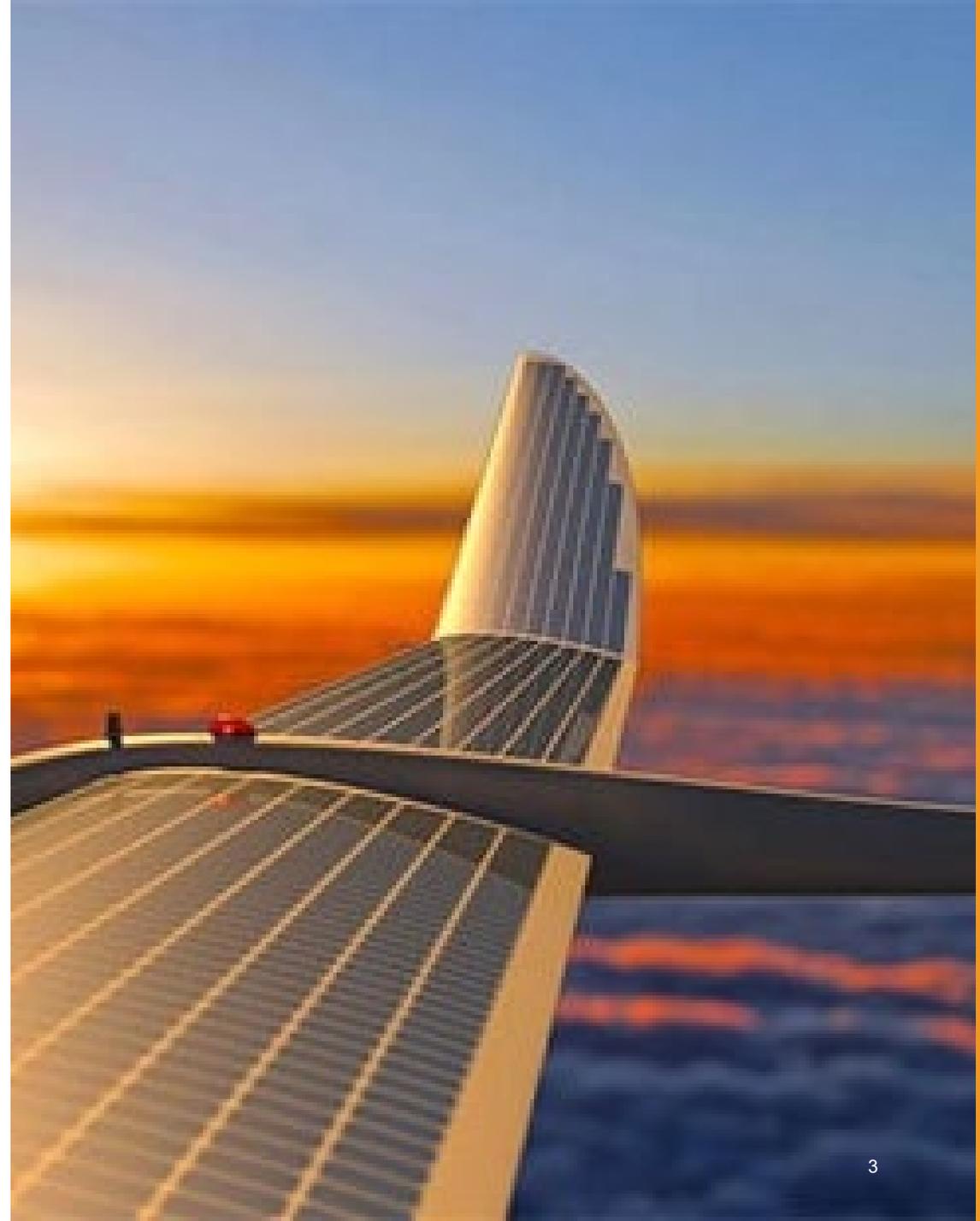
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Forward looking statements

This presentation may contain certain forward looking statements that are based on the Company’s managements’ beliefs, assumptions and expectations and on information currently available to management. Such forward looking statements involve known and unknown risks, uncertainties, and other factors which may cause the actual results or performance of LIS to be materially different from the results or performance expressed or implied by such forward looking statements. Such forward looking statements are based on numerous assumptions regarding the Company’s present and future business strategies and the political and economic environment in which LIS will operate in the future, which are subject to change without notice. Past performance is not necessarily a guide to future performance and no representation or warranty is made as to the likelihood of achievement or reasonableness of any forward looking statements or other forecasts.

Key Takeaways

- **Strong cash position** - \$24.8M in cash and short term investments at 30 June 2024
- **Clear strategy** - focused target markets, highly differentiated technology and strategy to scale
- **Phase 3 successfully commissioned** under budget
- **Cells being produced** - 10Ah and 20Ah cells under test – industry leading Li-S energy density > 450Wh/kg.
- **Intelligent battery management system (BMS)** - prototype more rapidly integrates packs into partner products
- **First product integration underway** - integrating Li-S cells and packs into the VTOL "Dawn-'til-Dusk" UAV – awarded \$1.35M Government grant
- **Strong and growing partner pipeline** - particularly in the drone and security markets
- **Building critical sovereign capability** – aligned with National Battery Strategy objectives



Our markets & partners

We are targeting markets where the most energy dense cells are projected to command 5 -10 times the price of normal EV cells¹



- Drone market size by 2027 - \$61B²
- Annual drone battery market by 2027 - \$12B²
- Partners – V-TOL Aerospace, Boeing – others under NDA



- eAircraft sales p.a. by 2035 - 15,000³
- Annual battery market by 2035 - \$20B⁴
- Partners: magniX/NASA – others under NDA



- Key targets: drones and light weight batteries
- \$1.27B annual security battery market by 2030⁵
- Partners currently under NDA

1. Source IDTechEX Report: Solid-State and Polymer Batteries 2021-2031

2. Source Precedence Research – Unmanned Aerial Vehicle (UAV) Drones Market 2022 – 2027

3. Source IDTechEX Report : Manned Electric Aircraft: Smart City and Regional 2021-2041

4. Based on regional passenger aircraft with an estimated pack size of 1500KWh @ \$900 per KWh @ >400Wh/kg

5. VMR Report: Military Battery Market: Global market size, status and forecast to 2030

All amounts in USD

We are delivering on the critical factors that strategic partners seek



PERFORMANCE

- **Highest energy density possible**
- **Sufficient power** for application
- **Sufficient cycle life** for application
- **Safety benefits** and standards adherence

PRODUCTION

- Produce reliable high-quality cells in volume
- Prove automated manufacturing that can scale
- Deliver industry standard performance testing

PRODUCT INTEGRATION

- A battery management system (BMS) & pack
- A team to assist with pack design and integration

PATHWAY TO SCALE

- Show a credible path to scale cell production over time as demand grows
- Ensure manufacturing processes are well understood & risks are mitigated to facilitate expedited scaling as needed.

Enhanced Cell Performance

We are now building commercially sized 10Ah and 20Ah lithium sulfur cells using automated manufacturing equipment on our Phase 3 line.

- GEN3 semi-solid-state cell chemistry
- Achieved 498Wh/kg on first discharge and 456Wh/kg after formation cycling¹
- Performance and safety testing now underway
- Our GEN3 technology has passed both civilian and US Military nail penetration tests
- First GEN3 battery modules have now been assembled and are under test

¹ refer [Li-S Energy announcement 28th October 2024](#)

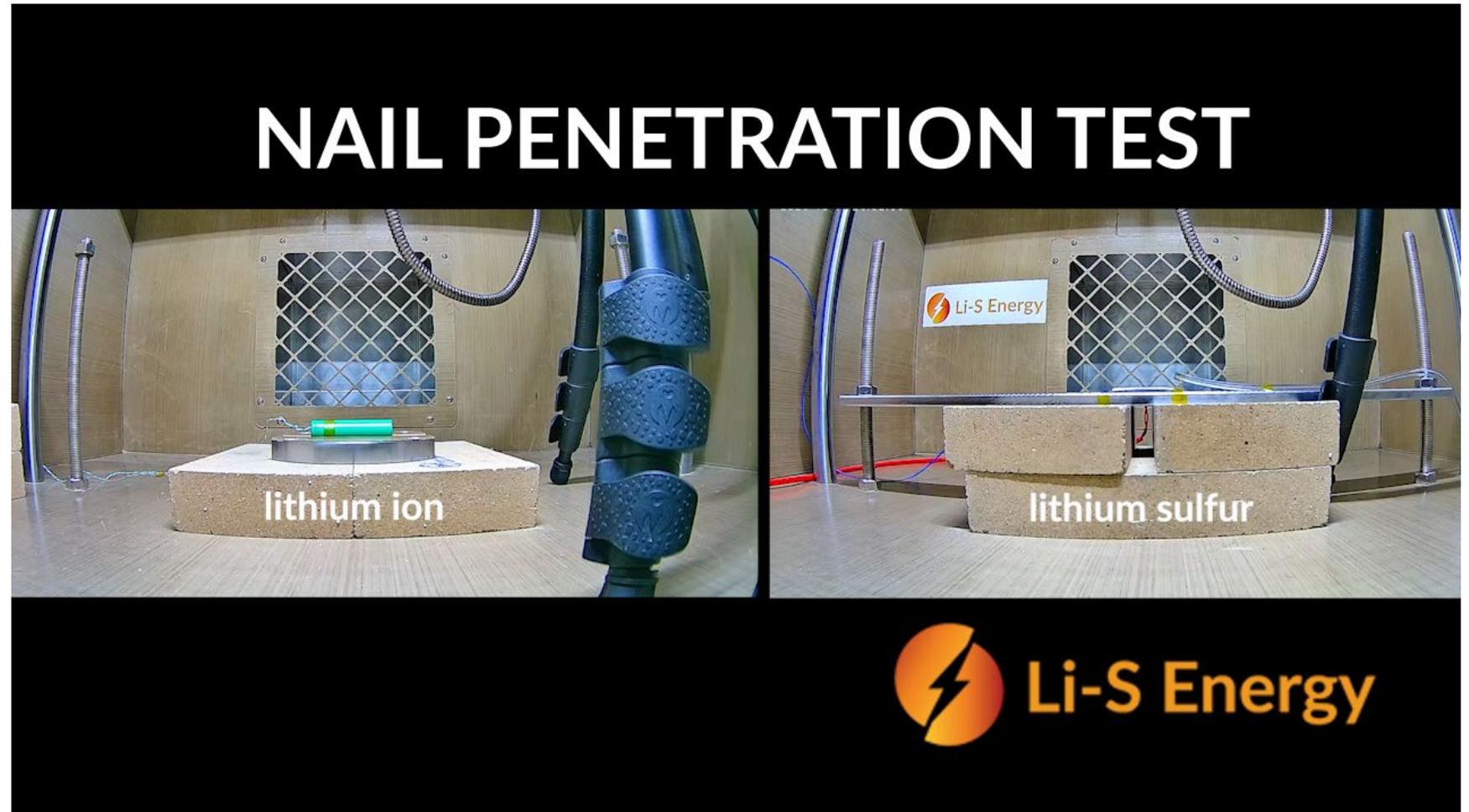


Nail Penetration Safety Test



Video showing nail penetration on Li-S Energy 2.5Ah multi-layer GEN3 lithium sulfur cell, alongside a comparable lithium-ion cell from an internationally recognised manufacturer (2.5Ah 21700 25R cylindrical LCO cell)

Use this QR code or [click here](#) to see the video.





Phase 3 : 2MWh production line



Scan or Click to
watch the full guided
walkthrough

VISUAL HIGHLIGHTS



Australia's largest dry room
for battery cell production



SCAN TO
WATCH ON
YOUTUBE



Phase 3: 2MWh cell Production Facility

- ✓ among the most advanced in the industry.
- ✓ 2 production lines – large format and small format cells for different industry applications

Transformative impact to:

- Deliver high quality full-size cells to Partners
- Lock in unique manufacturing IP
- Enhance Partner confidence that *we are serious* about delivering commercial cells they can rely on for the future
- Prove cells can be manufactured using processes that scale to GWh production
- Provides a capability that empowers our team to continuously innovate at pace



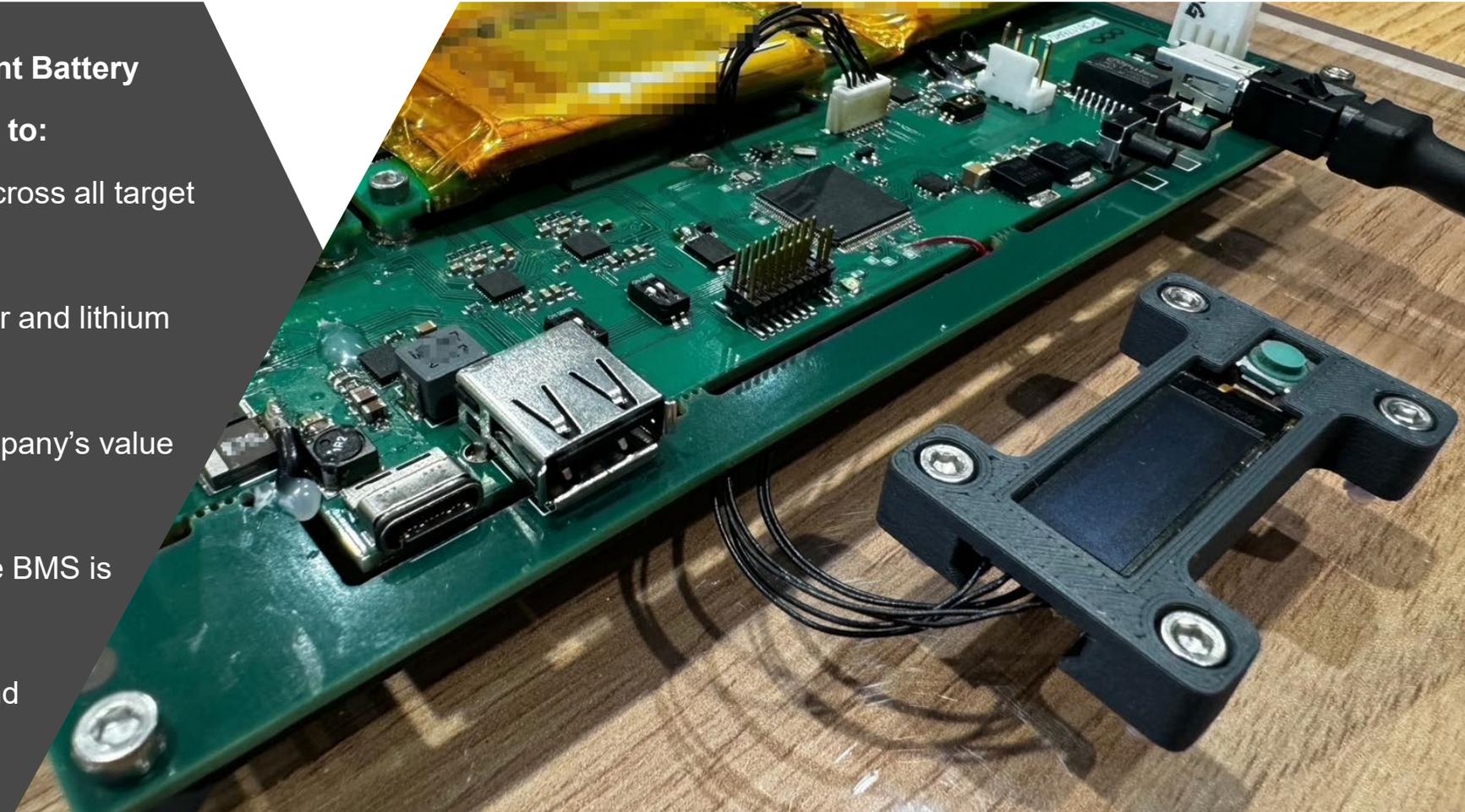
Phase 3 facility is the largest pouch cell production plant in Australia

Intelligent Battery Management System



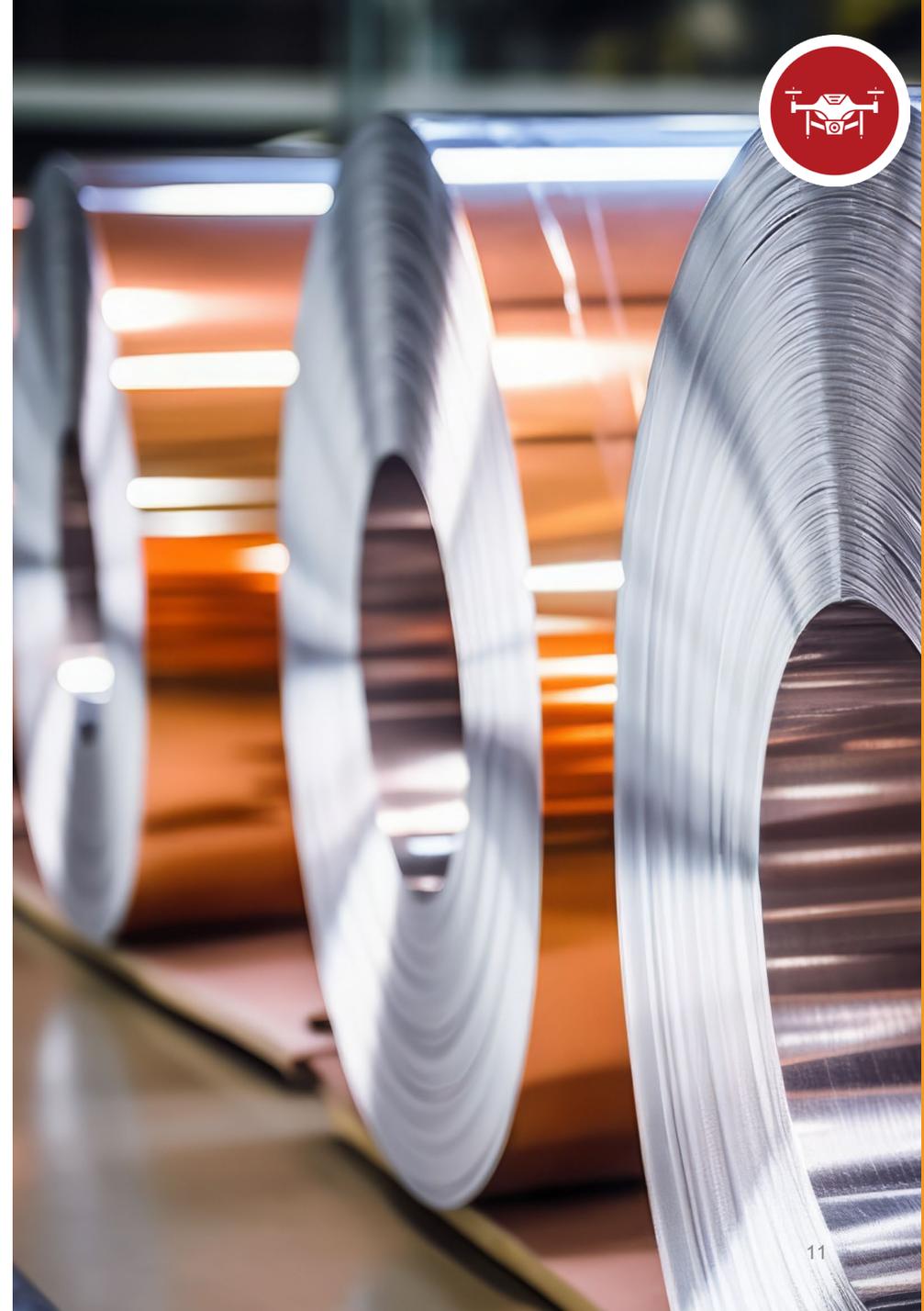
We have developed a prototype intelligent Battery Management System (BMS) to enable us to:

- Deliver battery packs, not just cells, across all target markets.
- Use AI to manage unique lithium sulfur and lithium metal cell chemistries.
- create BMS IP that enhances the company's value proposition.
- On-board partners more rapidly as the BMS is already built.
- Increase speed of partner adoption and pathway to volume sales.



Government funded Projects

- Lithium metal foil production line
 - Australia's first sovereign manufacturing capability
 - Funded by IGP Grant of \$1.76M
 - Eliminates poor quality foil and reduces our cost per cell
 - Global revenue expected from high quality foil and laminate sales
- Dawn-'til-Dusk Drone Program
 - Currently integrating our cells and intelligent BMS into a long endurance uncrewed air vehicle (UAV)
 - Target markets mapping, surveillance, agriculture, security, defence
 - Awarded \$1.35M EATP Grant for development
 - Partners: V-TOL Aerospace & Halocell



A Message from our Partner

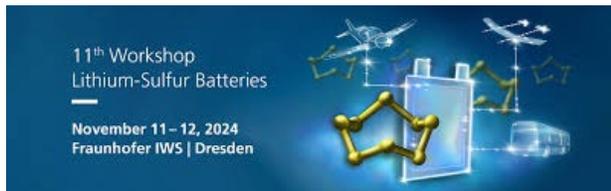
Mark Xavier
CEO/MD



Scan or Click to
watch on YouTube



Strengthened Industry engagement



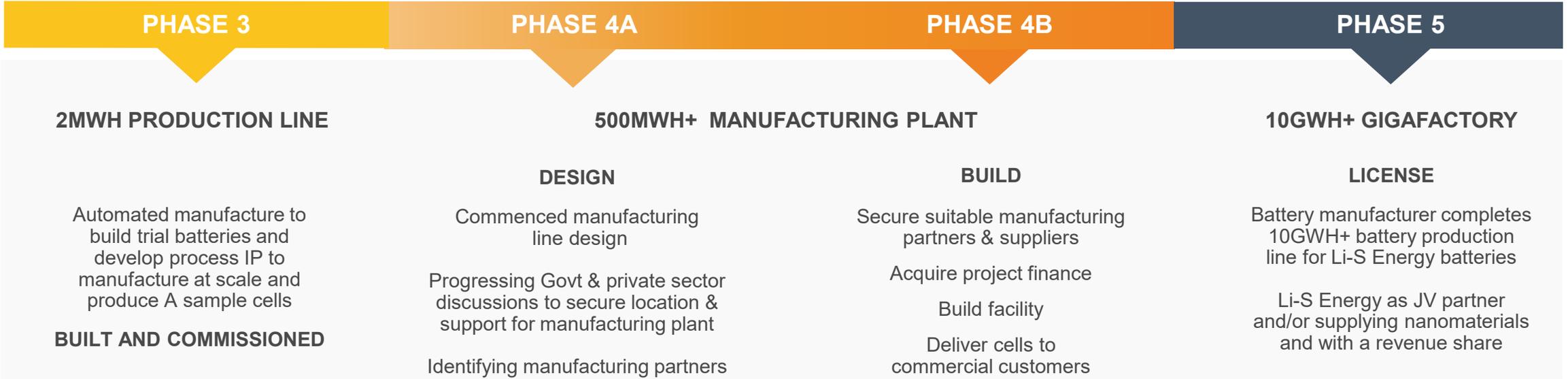
Production scale-up strategy



TIMELINE



ACTIONS



COMMERCIAL



Going Forward

Our key focus areas over the next two years are:

- Developing a path to core revenue
- Acquiring additional funding to support core activities
- Strong partnerships that lead to conditional offtake agreements
- A clear pathway to scale



One more thing ...

First successful
UAV flights



GEN3 Lithium sulfur cells
built on Phase 3 line



12 cell 6S2P battery pack
– 11.4V 20Ah



Scan or Click to
watch on YouTube

Thank you

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