



**ASX ANNOUNCEMENT**

**FOR IMMEDIATE RELEASE TO THE MARKET**

**PPK Group Limited – ASX Code: PPK**

**Wednesday 4 May 2022**

**Market Update presentation**

PPK Group Limited (ASX Code: PPK) is pleased to provide the following Market Update presentation slides.

This announcement has been made and authorised by the PPK Group Board.

For further information contact:

**Robin Levison**

Executive Chairman of PPK Group Limited  
On 07 3054 4500

**PPK GROUP LIMITED**

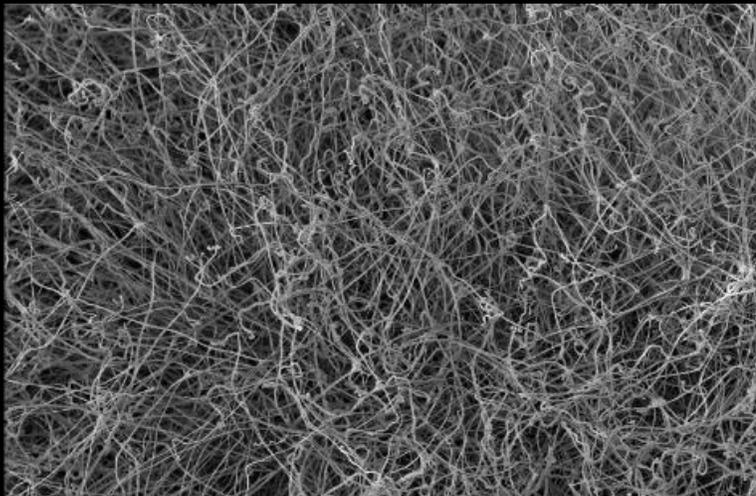
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**MARKET  
UPDATE**



Final

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# Current position

## FACTS



PPK fully funded for next 3-4 years



Significant science results received



Clear focus on technology

## CRITICAL SUCCESS FACTORS



Deliver current prioritised opportunities with careful assessment of new ones



Maintain focus on proving the science



Create new markets and build key customer and manufacturing partnerships

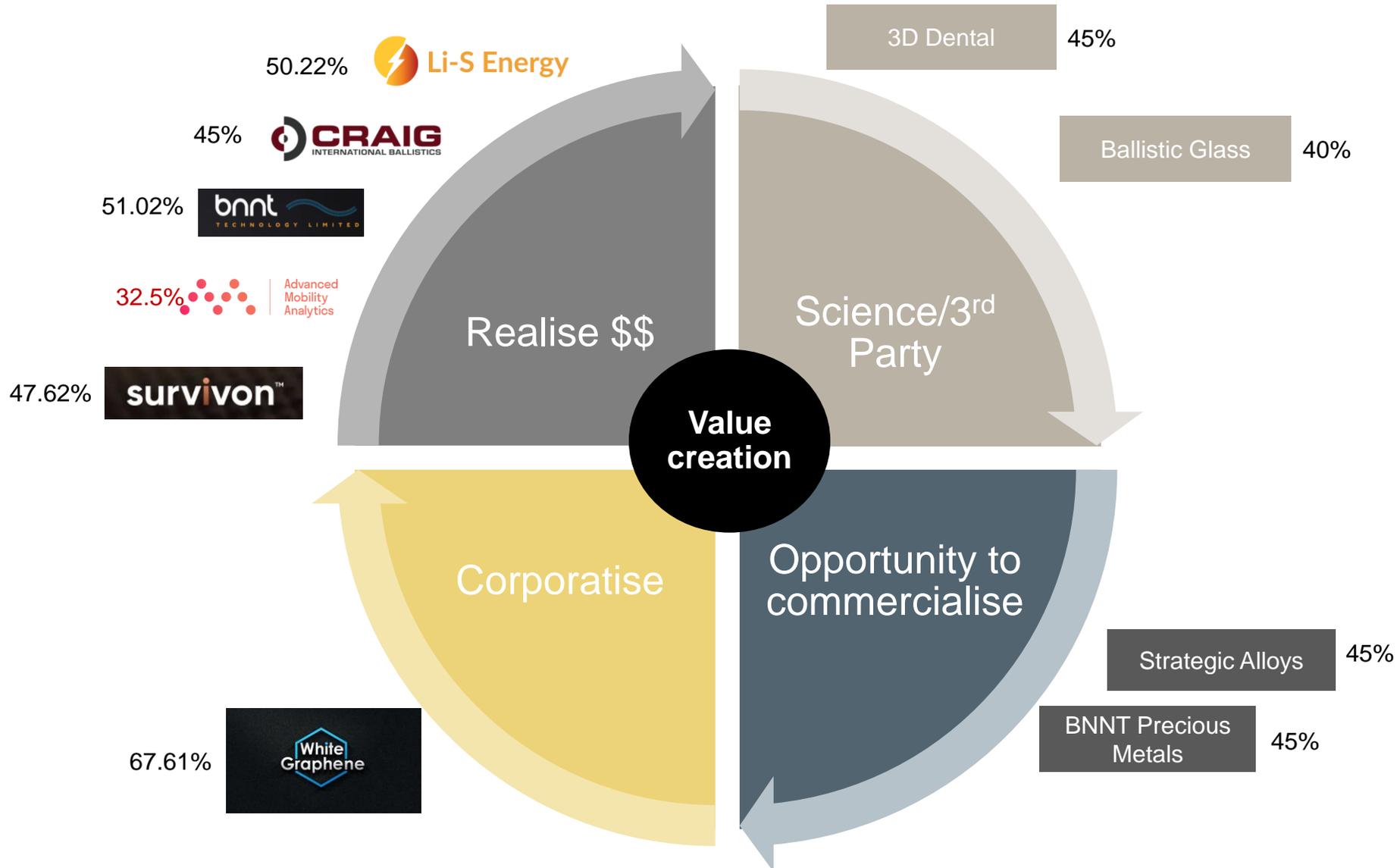
# A balanced scorecard against prior commitments highlights we have made great progress but significant work remains

| June and November 2020 guidance      | Scorecard   |
|--------------------------------------|---|
| List Li-S Energy                     |    |
| Expand BNNT production               |    |
| Automate BNNT production             |    |
| Reduce BNNT production cost          |    |
| Expand BNNT sales                    |    |
| Separation of PPKME                  |    |
| Integrate BNNT into other technology |    |
| Industry partnerships for BNNT use   |    |
| BNNT Precious Metals R&D             |   |
| Ballistic Glass R&D                  |  |
| Strategic Alloys R&D                 |  |
| White Graphene R&D                   |  |
| 3D Dental R&D                        |  |

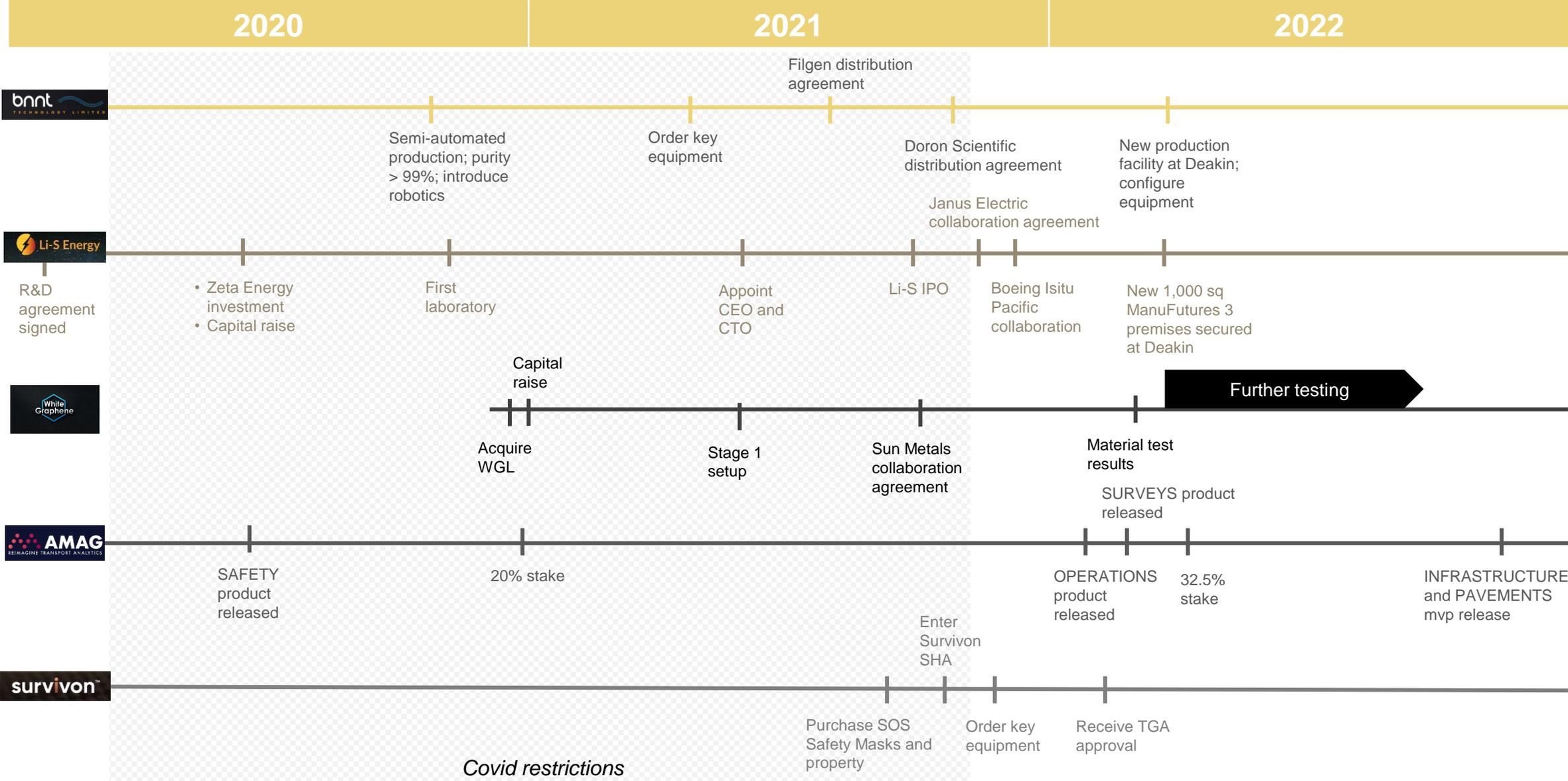
**Legend**

-  Completed
-  In progress
-  Not completed

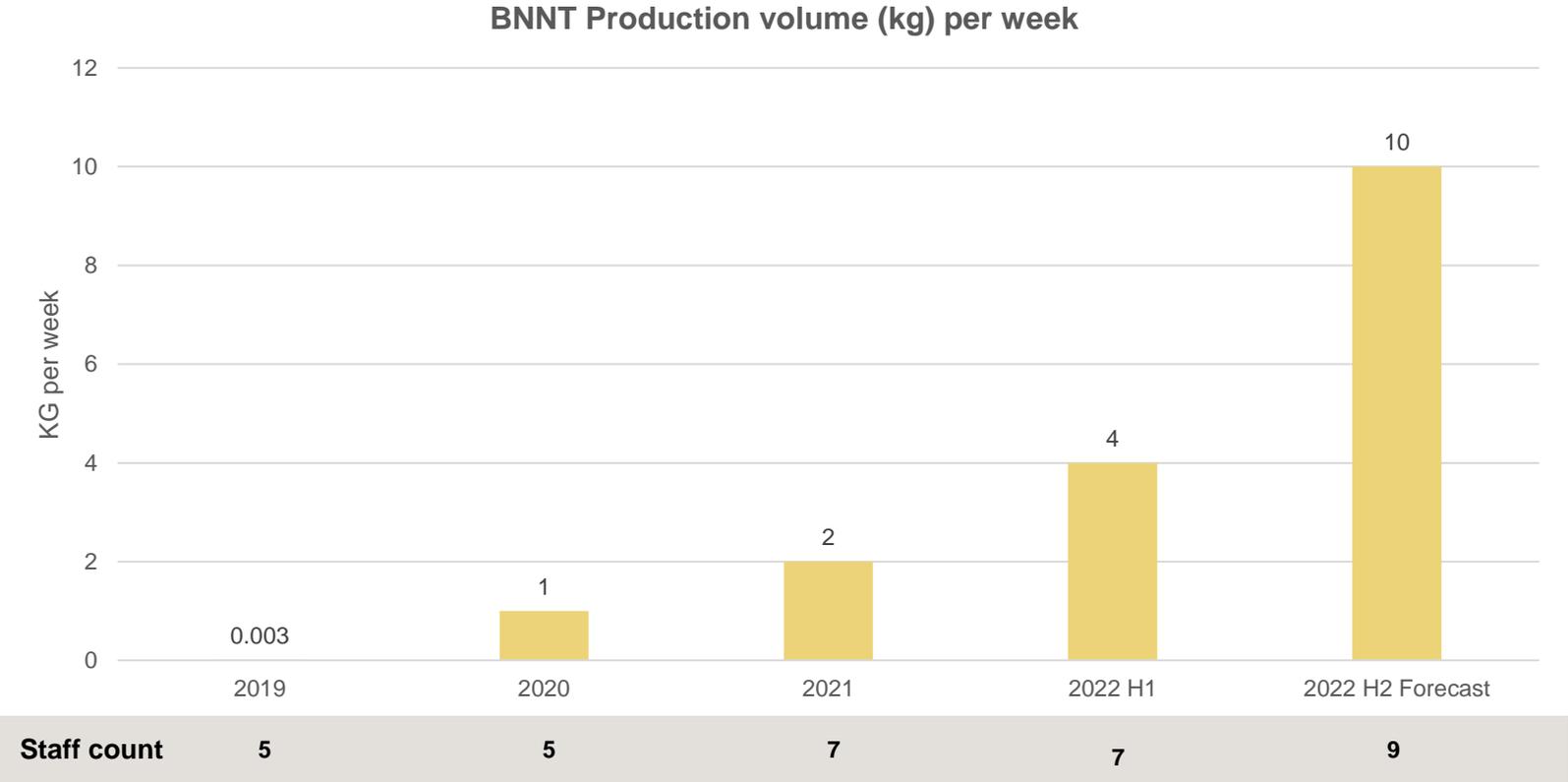
# Our business model will continue to be refined based upon lessons learnt and future opportunities



# We have made significant scientific progress despite Covid restrictions, and over the next six months there are a number of key milestones



Increasing BNNT production, automation, reducing production cost and optimising labour cost have been a priority enabling us to become the worlds lowest-cost producer



**BNNT Application Projects**



51.02%



50.22%



67.61%



45%



45%



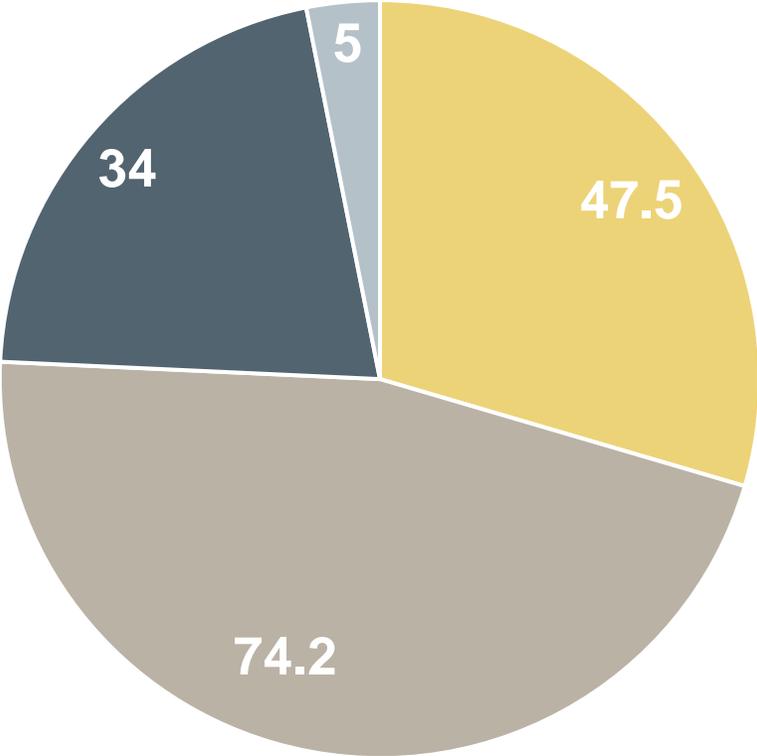
45%



40%

# Portfolio market size > USD \$140 Billion

Estimated market size  
USD Billions



■ Global defence   ■ Manufacturing coating   ■ Lithium-ion batteries   ■ Hydrogen storage

# Li-S Energy is making progress on a number of fronts



## Building talented and experienced team

- Dr Stephen Rowlands (CTO)
- Professor Maria Forsyth and her team



## Positive Li-S multi layer cell testing

- Specific capacity 24% higher
- Capacity retention 21% higher
- Coulombic efficiency 18%
- Lean electrolyte loading
- Rapid prototyping



## Positive Li-Nanomesh testing

- Protection for Aluminium and Zinc electrodes
- Protection on lithium dendrites



## Promising Europe trip

- Potential customers and partners
- Large European battery and R&D companies
- Battery materials companies



## Secured production space at ManuFutures 3

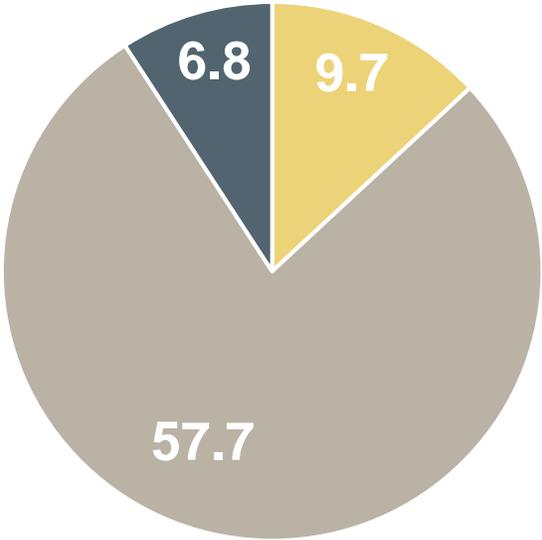
- > 1,000 sq
- Adjacent to research labs
- Goal of 2 Megawatt per hour annual production
- Now two spaces at Geelong Waurn Ponds

# White Graphene — material property benefits

|  |   |   |  |
|--|---|---|--|
|  <p>138 times stronger than 304 stainless steel but 4 times lighter</p> |  <p>Bending millions of times without fracture</p>      |  <p>Resistant to corrosion from acids/alkalines and salt water</p> | $H_2$ <p>Highly impermeable to hydrogen gas</p>  |
| <b>2X</b> <p>More thermally conductive than copper</p>   |  <p>Huge surface area (&lt; 20g covers MCG stadium)</p> |  <p>Thermal stability and conductive</p>                           |  <p>Radiation shielding</p> |

# Recent science results\* highlight the White Graphene global opportunities ahead

Global estimated market  
USD (Billions)



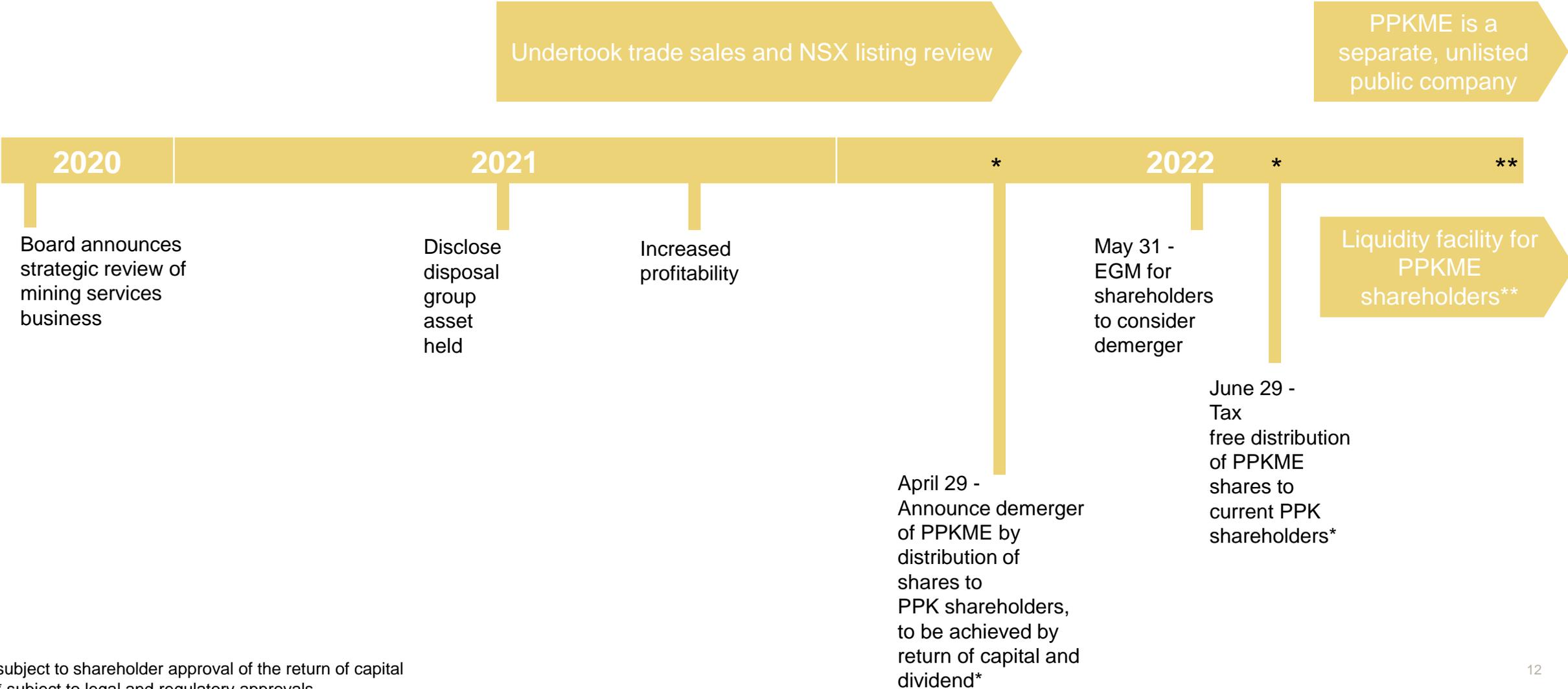
■ Timber coating ■ Interior wall paint ■ Epoxy flooring

| KEY MARKET PRODUCT ATTRIBUTES |
|-------------------------------|
| Water resistance              |
| Moisture permeability         |
| Wear resistance               |
| Hardness                      |
| Adhesion                      |
| Anti-bacteria                 |

With White Graphene applied a material uplift across all attributes ranging from 9% to 1700%

\* [Positivetestresultsreceivedforwhitegraphene \(ppkgroup.com.au\)](http://positivetestresultsreceivedforwhitegraphene(ppkgroup.com.au))

# Demerger of PPK Mining Equipment – divestment to shareholders



\*subject to shareholder approval of the return of capital  
 \*\* subject to legal and regulatory approvals

# Our priorities remain consistent as outlined in the August 2020 Executive Chairman Report



## Increase production and sales of BNNT

- Production of 500kg+ per annum
- Lowered cost of production by > 45%
- Consistent purity of 95+%



## Optimise the technology incubation

- Li-S Energy
- White Graphene
- Ballistic Glass
- Precious Metals



## Sustain a diverse prioritised portfolio

- Under review: 3D Dental



## Expand University & Partner relationships



## Divest PPK Mining Equipment

- On track for June 2022

Corporate Governance

Focused on

Shareholder value creation



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**THANK  
YOU**

