

# **SYNERGEN MET LIMITED**

## **ACN 128 765 284**

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### **PROSPECTUS**

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**For an offer of up to 125,000,000 Shares at an issue price of \$0.20 per Share to raise up to \$25,000,000, together with two (2) free attaching Options for every four (4) Shares subscribed for and issued (Public Offer).**

The Public Offer is conditional upon satisfaction of the Conditions, which are detailed further in Section 4.6. No Securities will be issued pursuant to this Prospectus until those Conditions are met.

This Prospectus also contains the Cleansing Offer, which is detailed in Section 4.1.2.

#### **Lead Manager to the Public Offer:**

Lodge Corporate Pty Ltd (ACN 125 323 168) (AFS Representative No. 316212 of AFSL 246271)

#### **IMPORTANT NOTICE**

This document is important and should be read in its entirety. If, after reading this Prospectus you have questions about the Securities being offered under this Prospectus or any other matter, then you should consult your professional advisers without delay.

**The Securities offered by this Prospectus should be considered as highly speculative.**

**This Prospectus may not be released to US wire services or distributed in the United States except by the Company to Accredited Investors.**

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## IMPORTANT NOTICE

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This Prospectus is dated 12 April 2022 and was lodged with the ASIC on that date. The ASIC, the ASX and their officers take no responsibility for the contents of this Prospectus or the merits of the investment to which this Prospectus relates.

No Securities may be issued on the basis of this Prospectus later than 13 months after the date of this Prospectus.

No person is authorised to give information or to make any representation in connection with this Prospectus, which is not contained in the Prospectus. Any information or representation not so contained may not be relied on as having been authorised by the Company in connection with this Prospectus.

It is important that you read this Prospectus in its entirety and seek professional advice where necessary. The Securities the subject of this Prospectus should be considered as highly speculative.

### Exposure Period

This Prospectus will be circulated during the Exposure Period. The purpose of the Exposure Period is to enable this Prospectus to be examined by market participants prior to the raising of funds. You should be aware that this examination may result in the identification of deficiencies in this Prospectus and, in those circumstances, any application that has been received may need to be dealt with in accordance with section 724 of the Corporations Act. Applications for Securities under this Prospectus will not be accepted by the Company until after the expiry of the Exposure Period. No preference will be conferred on applications lodged prior to the expiry of the Exposure Period.

### No offering where offering would be illegal

The distribution of this Prospectus in jurisdictions outside Australia may be restricted by law and persons who come into possession of this Prospectus should observe any of these restrictions, including those set out below. Failure to comply with these restrictions may violate securities laws.

This Prospectus does not constitute an offer in any place in

which, or to any person to whom, it would not be lawful to make such an offer. It is important that investors read this Prospectus in its entirety and seek professional advice where necessary. In particular, this Prospectus may not be distributed in the United States except by the Company to Accredited Investors.

No action has been taken to register or qualify the Securities or the offer, or to otherwise permit a public offering of the Securities in any jurisdiction outside Australia. The Securities have not been, and will not be, registered under the US Securities Act or the securities laws of any state or other jurisdiction of the United States. The Securities may not be offered or sold in the United States except in transactions exempt from, or not subject to, the registration requirements of the US Securities Act and applicable US state securities laws

### Target Market Determination

In accordance with the design and distribution obligations under the Corporations Act, the Company has determined the target market for the offer of free attaching Options issued under this Prospectus. The Company and the Lead Manager will only distribute this Prospectus to those investors who fall within the target market determination (TMD) as set out on the Company's website (<http://synergenmet.com/>). By making an application under the Offer, you warrant that you have read and understood the TMD and that you fall within the target market set out in the TMD.

### Electronic Prospectus

A copy of this Prospectus can be downloaded from the website of the Company at <http://synergenmet.com/>. If you are accessing the electronic version of this Prospectus for the purpose of making an investment in the Company, you must be an Australian resident and must only access this Prospectus from within Australia.

The Corporations Act prohibits any person passing onto another person an Application Form unless it is attached to a hard copy of this Prospectus or it accompanies the complete and unaltered version of this Prospectus. You may obtain a

hard copy of this Prospectus free of charge by contacting the Company by phone on + 61 7 3211 3878 during office hours or by emailing the Company at [Hello@synergenmet.com](mailto:Hello@synergenmet.com).

The Company reserves the right not to accept an Application Form from a person if it has reason to believe that when that person was given access to the electronic Application Form, it was not provided together with the electronic Prospectus and any relevant supplementary or replacement prospectus or any of those documents were incomplete or altered.

### Company Website

No document or other information available on the Company's website is incorporated into this Prospectus by reference.

### No Cooling-Off Rights

Cooling-off rights do not apply to an investment in Securities issued under the Prospectus. This means that, in most circumstances, you cannot withdraw your application once it has been accepted.

### No Investment Advice

The information contained in this Prospectus is not financial product advice or investment advice and does not take into account your financial or investment objectives, financial situation or particular needs (including financial or taxation issues). You should seek professional advice from your accountant, financial adviser, stockbroker, lawyer or other professional adviser before deciding to subscribe for Securities under this Prospectus to determine whether it meets your objectives, financial situation and needs.

### Risks

You should read this document in its entirety and, if in any doubt, consult your professional advisers before deciding whether to apply for Securities. There are risks associated with an investment in the Company. The Securities offered under this Prospectus carry no guarantee with respect to return on capital investment, payment of dividends or the future value of the Securities. Refer to Section D of the Investment Overview as

well as Section 8 for details relating to some of the key risk factors that should be considered by prospective investors. There may be risk factors in addition to these that should be considered in light of your personal circumstances.

### **Forward-Looking Statements**

This Prospectus contains forward-looking statements which are identified by words such as 'may', 'could', 'believes', 'estimates', 'targets', 'expects', or 'intends' and other similar words that involve risks and uncertainties.

These statements are based on an assessment of present economic and operating conditions, and on a number of assumptions regarding future events and actions that, as at the date of this Prospectus, are expected to take place.

Such forward-looking statements are not guarantees of future performance and involve known and unknown risks, uncertainties, assumptions and other important factors, many of which are beyond the control of the Company, the Directors and the Company's management.

The Company cannot and does not give any assurance that the results, performance or achievements expressed or implied by the forward-looking statements contained in this Prospectus will actually occur and investors are cautioned not to place undue reliance on these forward-looking statements.

The Company has no intention to update or revise forward-looking statements, or to publish prospective financial information in the future, regardless of whether new information, future events or any other factors affect the information contained in this Prospectus, except where required by law.

These forward looking statements are subject to various risk factors that could cause the Company's actual results to differ materially from the results expressed or anticipated in these statements. These risk factors are set out in Section 8.

### **Financial Forecasts**

The Directors have considered the matters set out in ASIC Regulatory Guide 170 and believe that they do not have a reasonable basis to forecast future earnings on the basis that

the operations of the Company are inherently uncertain. Accordingly, any forecast or projection information would contain such a broad range of potential outcomes and possibilities that it is not possible to prepare a reliable best estimate forecast or projection.

### **Continuous Disclosure Obligations**

Following admission of the Company to the Official List, the Company will be a "disclosing entity" (as defined in section 111AC of the Corporations Act) and, as such, will be subject to regular reporting and disclosure obligations. Specifically, like all listed companies, the Company will be required to continuously disclose any information it has to the market which a reasonable person would expect to have a material effect on the price or the value of the Securities.

Price sensitive information will be publicly released through ASX before it is disclosed to Shareholders and market participants. Distribution of other information to Shareholders and market participants will also be managed through disclosure to the ASX. In addition, the Company will post this information on its website after the ASX confirms an announcement has been made, with the aim of making the information readily accessible to the widest audience.

### **Clearing House Electronic Sub-Register System (CHES) and Issuer Sponsorship**

The Company will apply to participate in CHES, for those investors who have, or wish to have, a sponsoring stockbroker. Investors who do not wish to participate through CHES will be issuer sponsored by the Company.

Electronic sub-registers mean that the Company will not be issuing certificates to investors. Instead, investors will be provided with statements (similar to a bank account statement) that set out the number of Securities issued to them under this Prospectus. The notice will also advise holders of their Holder Identification Number or Security Holder Reference Number and explain, for future reference, the sale and purchase procedures under CHES and issuer sponsorship.

Electronic sub-registers also mean ownership of securities

can be transferred without having to rely upon paper documentation. Further monthly statements will be provided to holders if there have been any changes in their security holding in the Company during the preceding month.

### **Photographs and Diagrams**

Photographs used in this Prospectus which do not have descriptions are for illustration only and should not be interpreted to mean that any person shown endorses the Prospectus or its contents or that the assets shown in them are owned by the Company. Diagrams used in this Prospectus are illustrative only and may not be drawn to scale.

### **Definitions and Time**

Unless the contrary intention appears or the context otherwise requires, words and phrases contained in this Prospectus have the same meaning and interpretation as given in the Corporations Act and capitalised terms have the meaning given in the Glossary in Section 13.

All references to time in this Prospectus are references to Australian Eastern Standard Time.

### **Privacy Statement**

If you complete an Application Form, you will be providing personal information to the Company. The Company collects, holds and will use that information to assess your application, service your needs as a Shareholder and to facilitate distribution payments and corporate communications to you as a Shareholder.

The information may also be used from time to time and disclosed to persons inspecting the register, including bidders for your Securities in the context of takeovers, regulatory bodies including the Australian Taxation Office, authorised securities brokers, print service providers, mail houses and the share registry.

You can access, correct and update the personal information that we hold about you. If you wish to do so, please contact the share registry at the relevant contact number set out in this Prospectus.

Collection, maintenance and disclosure of certain personal information is governed by legislation including the Privacy

Act 1988 (as amended), the Corporations Act and certain rules such as the ASX Settlement Operating Rules. You should note that if you do not provide the information required on the application for Securities, the Company may not be able to

accept or process your application.

#### **Enquiries**

If you are in any doubt as to how to deal with any of the matters raised in this Prospectus, you should consult with your broker or

legal, financial or other professional adviser without delay. Should you have any questions about the Offers or how to accept the Public Offer please call the Company Secretary on + 61 7 3211 3878.

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## CORPORATE DIRECTORY

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### Directors and Proposed Directors

Lynne Saint  
*Proposed Chairperson\**

Christopher Dunks  
*Managing Director and Chief Executive Officer*

Terence Gray  
*Executive Director*

Dr Geoff Duckworth  
*Technical Director*

Charles Fox  
*Proposed Non-Executive Director\**

Joseph Stopper  
*Proposed Non-Executive Director\**

### Company Key Management

Drew Speedy  
*Chief Financial Officer and Company Secretary*

### Phoenix Key Management

Douglas Frame  
*President and Chief Executive Officer*

### Proposed ASX Code

SH2

### Share Registry\*\*

Link Market Services Limited  
21/10 Eagle Street  
Brisbane City QLD 4000

Telephone: 1800 131 904  
Facsimile: +61 2 9287 0303

### Registered Office

Level 6, 126 Margaret Street  
Brisbane QLD 4000

Telephone: + 61 7 3211 3878

Email: [Hello@synergenmet.com](mailto:Hello@synergenmet.com)

Website: <http://synergenmet.com/>

### Legal advisers

Steinepreis Paganin  
Level 4, 50 Market Street  
Melbourne VIC 3000

### Investigating Accountant

BDO Audit Pty Ltd  
Level 10/12 Creek Street  
Brisbane City QLD 4000

### Company Auditor\*\*

BDO Audit Pty Ltd  
Level 10/12 Creek Street  
Brisbane City QLD 4000

### Phoenix Auditor\*\*

BDO USA, LLP  
101 South Hanley Road, Suite 800  
St Louis MO 63105 United States

### Lead Manager

Lodge Corporate Pty Ltd  
(Authorised Representative of AFSL 246271)  
Level 6, 90 Collins Street  
Melbourne VIC 3000

Telephone: + 61 3 9200 7000

### Intellectual property solicitors

Houlihan<sup>2</sup>  
Patent and Trade Mark Attorneys  
Level 1, 70 Doncaster Road  
Balwyn North VIC 3104

\* To be appointed as Directors upon the admission of the Company to the Official List.

\*\* This entity is included for information purposes only. It has not been involved in the preparation of this Prospectus.

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## TABLE OF CONTENTS

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1.	MANAGING DIRECTOR'S LETTER .....	1
2.	KEY OFFER INFORMATION.....	3
3.	INVESTMENT OVERVIEW .....	5
4.	DETAILS OF THE OFFERS .....	28
5.	INDUSTRY OVERVIEW .....	35
6.	COMPANY OVERVIEW .....	56
7.	FINANCIAL INFORMATION.....	81
8.	RISK FACTORS .....	105
9.	BOARD, MANAGEMENT AND CORPORATE GOVERNANCE .....	122
10.	MATERIAL CONTRACTS .....	136
11.	ADDITIONAL INFORMATION .....	172
12.	DIRECTORS' AUTHORISATION .....	204
13.	GLOSSARY .....	205
	ANNEXURE A – INDEPENDENT LIMITED ASSURANCE REPORT .....	209
	ANNEXURE B – INTELLECTUAL PROPERTY REPORT .....	210

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## 1. MANAGING DIRECTOR'S LETTER

Dear Investor

On behalf of the Board, it is my privilege and pleasure to invite you to become a shareholder of the Company. Synergen Met Limited (the **Company** or **Synergen**) is a "Clean and Green" technology business that is positioned to participate in the decarbonisation of the global economy through the production of "Clean Hydrogen", and the cleaning of the environment by destroying toxic "forever" chemicals.

Over the last 24 months, the global business community has started actions to address the climate crisis. A major part of the revolution that is needed in reducing and eliminating greenhouse gas emissions involves hydrogen. The discussion around hydrogen is everywhere, in daily newspapers, on the television, and entering the conversations of everyday families around the dinner table. Synergen is building capability to play a leading role in both the production of Clean Hydrogen and the rolling out of the enabling technology.

A similar thematic that is emerging in force across the globe is ESG – Environmental, Social, Governance. Synergen is positioning itself to be at the leading edge of the environmental and social solutions when talking about the "forever" chemical, PFAS. Synergen is rolling out innovative, proven proprietary technology that concentrates the PFAS molecule and then destroys it, converting it to a harmless, non-toxic substance.

By participating in this Public Offer, you will be investing in a company that has developed proprietary technologies and innovative applications that are needed by the global community now and into the future. In addition to the Company's existing applications, Synergen has conditionally agreed to acquire Phoenix Solutions Co (**Phoenix**), a business founded over 50 years ago which specialises in the production of high temperature plasma equipment for the global industrial community.

This Prospectus is seeking to raise a minimum of \$20,000,000 and maximum of \$25,000,000 via the issue of Shares at an issue price of \$0.20 per Share, together with two (2) free-attaching Options for every four (4) Shares subscribed and issued, under the Public Offer. Funds raised will be used to progress the Company's hydrogen roll-out strategy starting with the TLOU Energy project, to construct two PFAS destruction facilities (one in Australia and one in the USA), to construct multiple PFAS concentration facilities, to design, fabricate and operate a carbon separation facility, to provide a working capital injection into Phoenix and other administrative and corporate costs. The Board has significant expertise and experience in the industrial technology industry and will aim to ensure that funds raised through the Public Offer will be utilised in a cost-effective manner to advance the Company's business.

This Prospectus is issued for the purpose of supporting an application to list the Company on the ASX. This Prospectus contains detailed information about the Company, its business and the Offers, as well as the risks of investing in the Company, and I encourage you to read it carefully. The Securities offered by this Prospectus should be considered highly speculative.

I look forward to you joining us as a Shareholder and sharing in what we believe are exciting and prospective times ahead for the Company. Before you make your investment decision, I urge you to read this Prospectus in its entirety and seek professional advice if required.



**Christopher Dunks**  
**Managing Director and Chief Executive Officer**

## 2. KEY OFFER INFORMATION

### INDICATIVE TIMETABLE<sup>1</sup>

Lodgement of Prospectus with the ASIC	Tuesday, 12 April 2022
Exposure Period begins	Tuesday, 12 April 2022
Opening Date of Offers	Wednesday, 20 April 2022
Closing Date of the Public Offer	5.00pm (AEST) on Wednesday, 18 May 2022
Issue of Securities under the Public Offer and pursuant to the Acquisition	Monday, 30 May 2022
Despatch of holding statements	Tuesday, 31 May 2022
Expected date for quotation on ASX	Wednesday, 1 June 2022
Closing Date of the Cleansing Offer	Friday, 3 June 2022

- The above dates are indicative only and may change without notice. Unless otherwise indicated, all time given are AEST. The Exposure Period may be extended by the ASIC by not more than 7 days pursuant to section 727(3) of the Corporations Act. The Company reserves the right to extend the Closing Date or close the Offers early without prior notice. The Company also reserves the right not to proceed with the Offers at any time before the issue of Securities to applicants.*
- If the Public Offer is cancelled or withdrawn before completion of the Public Offer, then all application monies will be refunded in full (without interest) as soon as possible in accordance with the requirements of the Corporations Act. Investors are encouraged to submit their applications as soon as possible after the Public Offer opens.*

### KEY STATISTICS OF THE OFFERS

	Minimum Subscription (\$20,000,000) <sup>1</sup>	Maximum Subscription (\$25,000,000) <sup>2</sup>
Public Offer Price per Share	\$0.20	\$0.20
Shares currently on issue <sup>3</sup>	291,037,901	291,037,901
Options currently on issue <sup>4</sup>	2,554,173	2,554,173
Performance Rights currently on issue <sup>5</sup>	11,637,048	11,637,048
Shares to be issued pursuant to conversion of Convertible Notes and Convertible Loans <sup>6</sup>	175,384,713	175,384,713
Shares to be issued pursuant to the Acquisition <sup>7</sup>	34,169,627	34,169,627
Shares to be issued to the Lead Manager <sup>8</sup>	2,000,000	2,000,000
Shares to be issued under the Public Offer	100,000,000	125,000,000
Gross Proceeds of the Public Offer	\$20,000,000	\$25,000,000
<b>Shares on issue Post-Listing (undiluted)<sup>9</sup></b>	<b>602,592,241</b>	<b>627,592,241</b>
<b>Market Capitalisation Post-Listing (undiluted)<sup>10</sup></b>	<b>\$120,518,448</b>	<b>\$125,518,448</b>
Options to be issued under the Public Offer <sup>11</sup>	50,000,000	62,500,000

	Minimum Subscription (\$20,000,000) <sup>1</sup>	Maximum Subscription (\$25,000,000) <sup>2</sup>
Options to be issued pursuant to Tegis Consulting Agreement <sup>12</sup>	10,000,000	10,000,000
<b>Shares on issue Post-Listing (fully diluted)<sup>9</sup></b>	<b>676,783,462</b>	<b>714,283,462</b>
<b>Market Capitalisation Post-Listing (fully diluted)<sup>10</sup></b>	<b>\$135,356,692</b>	<b>\$142,856,692</b>

**Notes:**

1. Assuming the Minimum Subscription of \$20,000,000 is achieved under the Public Offer.
2. Assuming the Maximum Subscription of \$25,000,000 is achieved under the Public Offer.
3. Refer to Section 6.10 for further detail regarding the Shares on issue.
4. Unquoted Options exercisable at \$0.16 each, on or before 31 May 2022 (**Existing Options**). Refer to Section 6.10 for further detail regarding the Existing Options and Section 11.3 for the terms and conditions of the Existing Options. The Company notes that certain holders of the Existing Options may exercise their Existing Options prior to the listing of the Company.
5. Comprising, 4,221,032 Class A Performance Rights and 7,416,016 Class B Performance Rights, Refer to Section 6.10 for further detail regarding the Performance Rights on issue and Section 11.5 for the terms and conditions of the Performance Rights and other key information regarding the issue of the Performance Rights.
6. Assuming the conversion of a total of approximately \$14,277,770 worth of Convertible Notes and Convertible Loans on issue (assuming an AUD/USD exchange rate of 0.72 which is subject to change). Refer to Sections 6.10, 10.1.2, 10.1.3 and 10.1.4 for further detail regarding the material terms and conditions of the Convertible Notes and Convertible Loans on issue in the Company.
7. Refer to Section 10.3 for further detail regarding the terms and conditions of the Acquisition Agreements.
8. Shares to be issued by the Company in respect of advisory fee payable to the Lead Manager in relation to the Public Offer.
9. Certain Shares on issue post-listing will be subject to ASX-imposed escrow and voluntary escrow. Refer to Section 6.12 for a disclaimer with respect to the likely escrow position.
10. Assuming a Share price of \$0.20, however the Company notes that the Shares may trade above or below this price.
11. The Options are free attaching to Shares subscribed for and issued under the Public Offer on a two (2) for four (4) basis and comprise:
  - a. one (1) unquoted Option exercisable at \$0.25 each, on or before the date which is two (2) years from the date of issue of the Options; and
  - b. one (1) unquoted Option exercisable at \$0.40 each, on or before the date which is three (3) years from the date of issue of the Options.

Refer to Section 11.5 for the full terms of the free-attaching Options to be issued under the Public Offer.
12. Unquoted Options exercisable at a 25% premium to the price at which Shares are offered under the Public Offer (being, \$0.25) each, on or before 31 July 2024 (**Executive Options**). The Executive Options are to be issued to Tegis Pty Ltd (an entity controlled by Director, Terence Gray) (or its nominee) upon successful completion of the Public Offer in accordance with the Tegis Consulting Agreement and pursuant to the Company's Employee Securities Incentive Plan (No ASIC Relief). Refer to Section 10.6.1 for further detail regarding the terms and conditions of the Tegis Consulting Agreement and Section 11.8 for the material terms and conditions of the Employee Securities Incentive Plan (No ASIC Relief).

### 3. INVESTMENT OVERVIEW

This Section is a summary only and is not intended to provide full information for investors intending to apply for Securities offered pursuant to this Prospectus. This Prospectus should be read and considered in its entirety.

Item	Summary	Further information
<b>A. Company</b>		
Who is the issuer of this Prospectus?	Synergen Met Limited (ACN 128 765 284) ( <b>Company</b> or <b>Synergen</b> ).	Section 6.1
Who is the Company?	<p>The Company was incorporated on 4 December 2007 as an Australian unlisted public company for the primary purpose of developing specialist applications using its thermal plasma technology (<b>Thermal Plasma Technology</b>) which can be applied to revitalise "dirty" industries with green and economic solutions.</p> <p>Synergen is an Australian-owned and operated business made up of a team of scientific minds with more than 80 years of collective experience working within the global resources industry. Founders Christopher Dunks and Dr Geoff Duckworth have developed the Company's Thermal Plasma Technology over the last 14 years.</p> <p>Through a combination of research, innovative ideas, trial and error in the lab and extensive field trials, the Company has proven its ability to leverage its Thermal Plasma Technology platform into multiple high value applications, including:</p> <ul style="list-style-type: none"><li>(a) hydrogen and carbon production via methane pyrolysis;</li><li>(b) PFAS water treatment and complete contaminant destruction;</li><li>(c) hazardous and toxic waste destruction; and</li><li>(d) waste to energy applications including municipal solid waste, tyres and organics.</li></ul> <p>The Company is currently focused on the commercialisation of its Thermal Plasma Technology. The Company's current priority for commercial development is:</p> <ul style="list-style-type: none"><li>(a) modular hydrogen production; and</li><li>(b) PFAS water treatment and destruction for councils and water utilities.</li></ul>	Sections 6.1 and 6.4

Item	Summary	Further information
	A detailed explanation of the Company's history is provided at Section 6.1 and business overview provided at Section 6.4.	
What is the Acquisition?	<p>The Company has entered into the Acquisition Agreements under which it has conditionally agreed to acquire 100% of the issued stock in Fluidyne Engineering Corporation trading as Phoenix Solutions Co (<b>Phoenix</b>) held by the Phoenix Vendors and convert promissory notes on issue in Phoenix to Shares (the <b>Acquisition</b>).</p> <p>Phoenix is a Minnesota registered corporation founded in 1952 and is a leading global supplier of plasma arc torches and plasma heating systems. Phoenix also supplies custom design and test work to its customers on a contractual basis.</p> <p>The Acquisition forms part of the Company's strategy to vertically integrate its operations and will enable the Company to manufacture plasma heating systems and plasma torches incorporating its Thermal Plasma Technology.</p> <p>Following completion of the Acquisition, Phoenix will manufacture and supply a number of plasma torches for the Company's methane pyrolysis projects / green hydrogen production projects.</p> <p>Refer to Section 10.3 for a summary of the terms and conditions of the Acquisition Agreements.</p>	Section 10.3
Who is the Company Group?	<p>The Company owns 100% of the shares in Treata Environmental Pty Ltd (ACN 634 712 744) (<b>Treata</b> or <b>Synergen Environmental</b>) an Australian proprietary company which owns all of the intellectual property related to PFAS destruction. The Company has granted Sustainable Solutions International Pty Ltd (ACN 094 501 185) (<b>SSI</b>) (an unrelated party of the Company) a right to acquire 10% of the shares in Treata, subject to formal documentation (which has not yet been agreed).</p> <p>In addition, and as set out above, the Company has entered into the Acquisition Agreements under which it has agreed to acquire 100% of the issued stock in Phoenix subject to the satisfaction of certain conditions precedent. As such, following completion of the Acquisition, Phoenix will be a wholly subsidiary of the Company.</p> <p>Please refer to Section 6.7 for further details regarding the Company Group.</p>	Section 6.7

Item	Summary	Further information
What does the Company do?	<p>The Company's main business undertaking is the development and production of its Thermal Plasma Technology platform and commercial development of applications to create sustainable solutions to contemporary environmental challenges. Upon listing, the Company aims to be a leading global provider of plasma equipment and innovative applications using the Thermal Plasma Technology.</p> <p>A detailed explanation of the Company's business is provided at Section 6.1.</p>	Section 6.1
What is the Thermal Plasma Technology?	<p>At the heart of the Company's Thermal Plasma Technology is the plasma torch which is a device for generating a directed flow of plasma or plasma jet. Plasma technology has been used in commercial and industrial applications for decades including in plasma cutting and arc welding, plasma spraying, ash melting, steel tundish heating and plasma waste pyrolysis. Plasma heating generates higher temperatures than oxygen burners or electric resistance heaters. Plasma heating can make vitrification and gasification cost effective and eliminates nearly all of the pollution encouraged with combustion. By offering the ability to breakdown feedstocks to molecular levels while controlling the operating environment of the system, the Company's Thermal Plasma Technology represents a fundamentally new method of processing materials.</p> <p>The Company's Thermal Plasma Technology can be used in multiple applications including:</p> <ul style="list-style-type: none"> <li>(a) hydrogen and solid carbon production via methane pyrolysis;</li> <li>(b) PFAS water treatment and destruction;</li> <li>(c) hazardous and toxic waste destruction; and</li> <li>(d) waste to energy applications including municipal solid waste, tyres and organics.</li> </ul>	Section 6.4.1
What is plasma?	<p>Plasma is often referred to as "the fourth state of matter", along with gas, liquid and solid. Plasma is heated matter, where electrons are ripped away from the atoms forming an ionized gas.</p> <p>In such an environment, molecules are broken down to their base elements. Synergen's intellectual property and know-how is based around how to control this environment to split</p>	Section 6.4

Item	Summary	Further information
	gases and liquids into their base elements and then reform or separate the elements into a desired form.	
What are the Company's key objectives post listing?	<p>The Company's main objectives on completion of the Offers and ASX listing are to:</p> <ul style="list-style-type: none"> <li>(a) become a profitable business and grow the Company by exploiting opportunities using thermal plasma technology applications to create sustainable solutions to contemporary environmental challenges;</li> <li>(b) enhance its public profile in the hydrogen industry and waste management industry as a result of being an ASX listed entity;</li> <li>(c) provide Shareholders with access to a liquid market for Shares;</li> <li>(d) provide the Company with access to equity capital markets for potential future capital raising; and</li> <li>(e) provide working capital for the Company.</li> </ul>	Section 6.5
<b>B. Industry Overview</b>		
What is the industry in which the Company will operate?	The Company is a "clean tech" company committed to the continuous betterment of the global environment to support future generations via its technology applications. The initial applications have the Company operating in the specialty chemical industry producing hydrogen and carbon black and the waste management industry treating and destroying PFAS contamination.	Section 5
Who are the Company's key competitors?	The Company is a global clean tech company with specialist offerings in three distinct industries being hydrogen production, carbon black production and waste management including the specialisation of PFAS contamination treatment and destruction, which has limited competitors. Please refer to the Industry Overview in Section 5, which covers the competitive environment within these markets.	Section 5

Item	Summary	Further information
What is the regulatory environment in which the Company operates?	<p>The Company will operate across multiple industries in multiple jurisdictions and will be subject to both State and Federal regulation both domestically and abroad.</p> <p>Please refer to the Industry Overview in Section 5, which covers the key regulatory issues and changing landscape, which is producing a favourable regulatory and operating environment for the services offered by the Company.</p>	Section 5
<b>C. Business Model</b>		
How will the Company generate revenue?	<p>The Company will generate revenue from plasma equipment sales and recurring revenue from customer consumables used in the operation of plasma equipment.</p> <p>In addition, the Company will generate recurring revenue in the near future through:</p> <ul style="list-style-type: none"> <li>(a) contractual arrangements with energy providers to construct, test and implement its Thermal Plasma Technology to produce hydrogen and carbon black; and</li> <li>(b) PFAS treatment and destruction projects.</li> </ul> <p>Refer to Section 6.5 and Section 10 for further information on the Company's current contracts.</p>	Section 6.5
What are the Company's key assets?	<p>The Company's key asset is its intellectual property and know-how in the application of Thermal Plasma Technology.</p> <p>The Company's intellectual property portfolio is focused on the efficient manufacturing and operation of high temperature plasma systems for multiple applications.</p> <p>Research and development over 14 years has provided the understanding and know-how to develop and apply plasma technology to the production of hydrogen and carbon black as well as the destruction of PFAS contaminants and other hazardous and environmentally harmful materials. The Company is in the process of determining whether patent protection is required for further developments in the Thermal Plasma Technology platform, which will be determined on a case-by-case basis with the balance being held as trade secrets to prevent unnecessary disclosure.</p> <p>The intellectual property portfolio for one of the plasma applications is centred around a single global patent that began as an Australian</p>	Section 6.6

Item	Summary	Further information
	<p>Patent Office approved PCT Patent and is now a patent that has been awarded in the following jurisdictions: Australia, USA, Canada, Turkey, Belgium, Germany, South Africa, Mexico and the two African patent regions of ARIPO and OAPI.</p> <p>Phoenix's key intellectual property consists of unregistered know-how and trade secrets which have been developed in respect of high temperature aeronautical facilities and product testing, its plasma heating systems and plasma torches. Phoenix's intellectual property is centred around how to design, engineer, and construct a long lasting and reliable plasma environment.</p> <p>Please refer to Section 6.6 and the Intellectual Property Report at Annexure B for further detail.</p>	
What are the significant dependencies of the Company post-listing?	<p>The key factors that the Company will depend on to meet its objectives are:</p> <ul style="list-style-type: none"> <li>(a) successful construction, commissioning and operation of the Company's commercial modular clean hydrogen production system;</li> <li>(b) successful commissioning and operation of the Company's commercial PFAS water treatment and destruction plant;</li> <li>(c) conversion of potential projects in Phoenix forward order book to executed contracts; and</li> <li>(d) retaining key management personnel who have significant experience in relevant industries.</li> </ul>	Section 6
What is the Company's Dividend Policy?	<p>The Company anticipates that significant expenditure will be incurred in the evaluation and development of its business strategy. These activities, together with the expansion of the business of Phoenix, are expected to dominate at least the first two-year period following the date of this Prospectus. Accordingly, the Company does not expect to declare any dividends during that period.</p> <p>Any future determination as to the payment of dividends by the Company will be at the discretion of the Directors and will depend on the availability of distributable earnings and operating results and financial condition of the Company, future capital requirements and general business and other factors considered relevant by the Directors. No assurance in relation to the payment of dividends or franking</p>	Section 6.13

Item	Summary	Further information																
	credits attaching to dividends can be given by the Company.																	
D. Financial Information																		
How have the Company and Phoenix performed historically?	<p>The audited historical financial information of the Company (including its subsidiaries) as at 30 June 2020, 30 June 2021 and reviewed financial information of the Company (including its subsidiaries) as at 31 December 2021 is set out in Section 7 and Annexure A.</p> <p>The audited historical financial information of Phoenix as at 27 June 2020, 26 June 2021 and reviewed financial information of Phoenix as at 8 January 2022 is also set out in Section 7 and Annexure A.</p>	Section 7 and Annexure A																
What is the key financial information for the Company and Phoenix?	<p>The Company plans to generate recurring revenue in the near future through:</p> <p>(a) contractual arrangements with energy providers to construct, test and implement its Thermal Plasma Technology to produce hydrogen and carbon black; and</p> <p>(b) PFAS treatment and destruction.</p> <p>However, the Company has not to date generated any revenue from its activities. Accordingly, the Company cannot provide any meaningful key financial information or ratios relating to market performance, profitability or financial stability. Notwithstanding, the Company has entered into its first contractual arrangement to supply a hydrogen production system (refer to Section 6.5.1) and it has entered its first contractual arrangement to supply a PFAS water treatment and destruction plant (refer to Section 6.5.2).</p> <p>The Company does currently have borrowings however, following completion of the Public Offer will have settled outstanding borrowings through either conversion to Shares or repayment in cash.</p> <p>Phoenix's historical earnings summary is represented as follows:</p> <p><b>Earnings Summary (US \$million)</b></p> <table><tr><td></td><td>2022</td><td>2021</td><td>2020</td></tr><tr><td></td><td>8 Jan</td><td>26 Jun</td><td>27 Jun</td></tr><tr><td>Revenue</td><td>1.168</td><td>1.366</td><td>5.034</td></tr><tr><td>Operating income</td><td>(0.170)</td><td>(0.140)</td><td>2.760</td></tr></table>		2022	2021	2020		8 Jan	26 Jun	27 Jun	Revenue	1.168	1.366	5.034	Operating income	(0.170)	(0.140)	2.760	Section 6.5.1, 6.5.2, 6.5.3, 6.9, 7 and Annexure A
	2022	2021	2020															
	8 Jan	26 Jun	27 Jun															
Revenue	1.168	1.366	5.034															
Operating income	(0.170)	(0.140)	2.760															

Item	Summary	Further information
	<p>Phoenix generates revenue from equipment sales and recurring revenue from customer consumables used in the operation of plasma equipment. Prior to 2021, Phoenix has consistently generated revenue and operating income. However, 2021 has been marred by COVID-19 project delays and cancellations. During 2021, COVID uncertainties caused numerous project delays, impacting Phoenix revenues during the FY2021 and financial period to 8 January 2022. As a result, Phoenix has a substantial forward book of potential projects being negotiated. Further details are set out in Section 6.5.3.</p> <p>The Company's financial information, including a pro forma statement of financial position, is set out in Section 7. The Independent Limited Assurance Report is set out in Annexure A. Investors should refer to the pro forma statement of financial position for the effect of the capital raising represented by the Public Offer and completion of the Acquisition of Phoenix on the financial position of the Company, post listing on the ASX. The Company intends to apply the proceeds of the Public Offer as outlined in Section 6.9.</p>	
How will the Company fund its activities	The Company's principal sources of funds are expected to be cash flows generated from operations, existing cash reserves and funds raised under the Public Offer.	Section 7 and Annexure A
<b>E. Key Investment Highlights</b>		
What are the key benefits of an investment in the Company?	<p>The Company is a clean tech company. Completion of the Public Offer and Acquisition will enable Synergen to become a leading global provider of plasma equipment and innovative applications using thermal plasma technology.</p> <p>Utilising the Company's proprietary thermal plasma technology, Synergen will pursue the following business opportunities following listing and using Public Offer proceeds:</p> <ul style="list-style-type: none"> <li>(a) clean hydrogen and carbon black production;</li> <li>(b) PFAS water treatment and contamination destruction; and</li> <li>(c) plasma equipment sales to various global customers with a diverse range of user applications.</li> </ul> <p>The Company's clean hydrogen production is commercially competitive for the following reasons:</p>	Section 6.8

Item	Summary	Further information
	<p>(a) the Company's innovative design of its clean hydrogen production process is mobile and scalable enabling it to be positioned at centralised locations for power generation or at the end users location, such as bus and truck hubs; and</p> <p>(b) the Company has commenced construction of the first commercial hydrogen production plant using the Company's proprietary methane pyrolysis process.</p> <p>In addition, the Company's environmental solutions provide a complete PFAS water treatment and destruction solution at commercially competitive prices as compared to the partial solutions currently offered in the waste management market place:</p> <p>(a) the Company's innovative design of its PFAS water treatment and destruction plant enables treatment and destruction on site, or treatment on-site and destruction offsite, depending on the clients requirements and environmental constraints; and</p> <p>(b) the Company has commenced commissioning of the first commercial PFAS water treatment and destruction plant.</p> <p>The Company has entered into Acquisition Agreements to acquire 100% of Phoenix, a leading global manufacturer of thermal plasma equipment, which has a substantial forward order book to provide plasma equipment to various global customers across a diverse range of applications.</p>	
<b>F. Key Risks</b>		
Contractual Risk	<p>Completion of the Acquisition of Phoenix is subject to the fulfilment of certain conditions precedent. Likewise, some of the Company's operational contracts are subject to the completion of certain requirements. The ability of the Company to achieve its stated objectives will depend on the performance by the parties of their obligations under the agreements. If any party defaults in the performance of their obligations, it may be necessary for the Company to approach a court to seek a legal remedy, which can be costly. If, for any reason, the agreements are breached by any party, the relevant</p>	Section 8.2

Item	Summary	Further information
	transactions may not proceed which may have an adverse impact on the Company.	
Key production costs may increase	The Company is exposed to changes in prices of key inputs including raw materials, energy and natural gas. Any increase in the input cost will increase the operating costs which may decrease in demand for the Company's equipment or services, which in turn could reduce the Company's profitability.	Section 8.2
Workplace incident or accident	The Company will have operating equipment at its initial fabrication and PFAS destruction facility with processes involving exposure to hazardous chemicals and the use of various plant and equipment. There is a risk of workplace incidents or accidents occurring at any site during the commissioning, training and operational phase. The occurrence of any workplace incident may result in a fine imposed by a regulatory authority, an interruption of operations, a worker's compensation claim, a work health and safety claim or damages claim against the Company.	Section 8.2
Development risk	The Company's products and services are the subject of continuous development and need to be substantially developed further. There are no guarantees that the Company will be able to undertake such development successfully.	Section 8.2
Technology risk	The Company cannot assure investors that it will successfully identify new technological opportunities and continue to have the needed financial resources to develop new products in a timely or cost-effective manner. At the same time, products, services and technologies developed by others may render the Company's products and services obsolete or non-competitive.	Section 8.2
New technology risk	<p>The Company cannot assure investors that it will successfully implement new technological opportunities and continue to have the needed financial resources to develop new applications in a timely or cost-effective manner.</p> <p>Further, the Company cannot assure investors that it will successfully be able to develop new technologies or applications that are economically viable or commercialised in a timeframe that would be considered reasonable. If the Company is unable to successfully continue to develop its existing or new technology applications, it may not be able to achieve its growth plans.</p>	Section 8.2

Item	Summary	Further information
Intellectual property risk	A substantial part of the Company's commercial success will depend on its ability to establish and protect the Company's and Phoenix's intellectual property to maintain trade secret protection and operate without infringing the proprietary rights of third parties.	Section 8.2
Other risks	For additional specific risks please refer to Section 8.2. For other risks with respect to the industry in which the Company operates and general investment risks, many of which are largely beyond the control of the Company and its Directors, please refer to Sections 8.3 and 8.4.	Sections 8.2, 8.3 and 8.4

#### **G. Directors and Key Management Personnel**

Who are the Directors and the Proposed Directors of the Company?	<p>As at the date of this Prospectus, the Board consists of:</p> <ul style="list-style-type: none"> <li>(a) Mr Christopher Dunks – Managing Director and Chief Executive Officer;</li> <li>(b) Mr Terence Gray – Executive Director;</li> <li>(c) Dr Geoff Duckworth – Technical Director.</li> </ul> <p>At listing, the following persons will be appointed to the Board:</p> <ul style="list-style-type: none"> <li>(a) Ms Lynne Saint – Independent Non-Executive Chairperson;</li> <li>(b) Mr Charles Fox – Non-Executive Director; and</li> <li>(c) Mr Joseph Stopper – Non-Executive Director.</li> </ul> <p>The profiles of each of the Directors and Proposed Directors are set out in Section 9.1.</p>	Section 9.1
Who are the key management personnel involved in the Company and Phoenix?	<p>Mr Drew Speedy is the Company's Chief Financial Officer and Company Secretary.</p> <p>Mr Douglas Frame is the President and Chief Executive Officer of Phoenix and will continue to be employed by Phoenix after completion of the Acquisition.</p> <p>The profiles of each of the above key management personnel are set out in Section 9.2.</p>	Section 9.2

#### **H. Interests of Key People and Related Party Transactions**

What significant benefits are payable to the Directors and the Proposed Directors?	The benefits being paid to the Directors and Proposed Directors are set out below:	Section 9.3
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Item	Summary				Further information																															
	<table><tr><th>Name</th><th>Year ending 30 June 2020 (Actual)<sup>7</sup></th><th>Year ending 30 June 2021 (Actual)<sup>7</sup></th><th>Year ending 30 June 2022 (Proposed)<sup>7</sup></th></tr><tr><td>Christopher Dunks</td><td>\$300,000</td><td>\$300,000<sup>1</sup></td><td>\$306,131</td></tr><tr><td>Dr. Geoff Duckworth</td><td>\$66,000</td><td>\$66,000<sup>2</sup></td><td>\$88,000</td></tr><tr><td>Terence Gray</td><td>\$245,000<sup>3</sup></td><td>\$300,000<sup>4</sup></td><td>\$300,000</td></tr><tr><td>Lynne Saint<sup>6</sup></td><td>Nil</td><td>Nil</td><td>\$10,000<sup>7</sup></td></tr><tr><td>Charles Fox<sup>6</sup></td><td>Nil</td><td>Nil</td><td>\$5,833<sup>7</sup></td></tr><tr><td>Joseph Stopper<sup>6</sup></td><td>Nil</td><td>Nil</td><td>\$5,833<sup>7</sup></td></tr><tr><td><b>Total</b></td><td><b>\$611,000</b></td><td><b>\$666,000</b></td><td><b>\$715,797</b></td></tr></table>	Name	Year ending 30 June 2020 (Actual) <sup>7</sup>	Year ending 30 June 2021 (Actual) <sup>7</sup>	Year ending 30 June 2022 (Proposed) <sup>7</sup>	Christopher Dunks	\$300,000	\$300,000 <sup>1</sup>	\$306,131	Dr. Geoff Duckworth	\$66,000	\$66,000 <sup>2</sup>	\$88,000	Terence Gray	\$245,000 <sup>3</sup>	\$300,000 <sup>4</sup>	\$300,000	Lynne Saint <sup>6</sup>	Nil	Nil	\$10,000 <sup>7</sup>	Charles Fox <sup>6</sup>	Nil	Nil	\$5,833 <sup>7</sup>	Joseph Stopper <sup>6</sup>	Nil	Nil	\$5,833 <sup>7</sup>	<b>Total</b>	<b>\$611,000</b>	<b>\$666,000</b>	<b>\$715,797</b>			
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	<p><b>Notes:</b></p> <p>1. Includes \$128,333 in Director fees that was settled through the issue of 1,604,167 Shares on 1 July 2021 at a deemed issue price of \$0.08 per Share.</p> <p>2. Includes \$27,500 in Director fees that was settled through the issue of 343,750 Shares on 1 July 2021 at a deemed issue price of \$0.08 per Share.</p> <p>3. The Company notes that in addition to the fees which Mr Terence Gray received for services provided as Executive Director (being \$245,000), Tegis Pty Ltd (ACN 120 347 088) (an entity controlled by Mr Terence Gray) (<b>Tegis</b>) received 1,333,334 Shares at a deemed issue price of \$0.06 per Share in relation to corporate advisory services provided to the Company on standard arm's length commercial terms.</p> <p>4. Includes \$137,500 in Director fees that was settled through the issue of 1,718,750 Shares on 1 July 2021 at a deemed issue price of \$0.08 per Share.</p> <p>5. Lynne Saint, Charles Fox and Joseph Stopper will be appointed as Directors upon listing of the Company. As such, they did not receive any remuneration for the financial years ended 30 June 2020 and 30 June 2021.</p> <p>6. Remuneration for the year ending 30 June 2022 is calculated pro rata from the indicative date of appointment of Lynne Saint, Charles Fox and Joseph Stopper at listing of the Company (assuming a listing date of 1 June 2022).</p> <p>7. Amounts are inclusive of superannuation (if applicable).</p> <p>Please refer to Section 9.3 for further detail.</p>																																			

Item	Summary	Further information																												
What significant benefits are payable to other key persons connected to the Company or the Offers?	<p>The benefits being paid to key management personnel of the Company are set out below:</p> <table><tr><th>Name</th><th>Year ending 30 June 2020 (Actual)<sup>5</sup></th><th>Year ending 30 June 2021 (Actual)<sup>5</sup></th><th>Year ending 30 June 2022 (Proposed)<sup>5</sup></th></tr><tr><td>Drew Speedy</td><td>\$76,570<sup>1</sup></td><td>109,500<sup>2</sup></td><td>\$129,750</td></tr><tr><td>Douglas Frame<sup>3,4</sup></td><td>Nil</td><td>Nil</td><td>\$20,487</td></tr><tr><td><b>Total</b></td><td><b>\$76,570</b></td><td><b>\$109,500</b></td><td><b>\$150,237</b></td></tr></table> <p><b>Notes:</b></p> <ol style="list-style-type: none"><li>1. Drew Speedy was appointed on 21 October 2019. Remuneration for the year ending 30 June 2020 including superannuation is calculated pro rata from the appointment of Drew Speedy on 21 October 2019.</li><li>2. Includes \$50,187.50 in fees that was settled through the issue of 627,344 Shares on 1 July 2021 at a deemed issue price of \$0.08 per Share.</li><li>3. Douglas Frame is presently employed by Phoenix, which will be a subsidiary of the Company following completion of the Acquisition. As such, Douglas Frame has not been paid any remuneration by the Company for the financial years ended 30 June 2020 or 30 June 2021.</li><li>4. Remuneration for the year ending 30 June 2022 is calculated pro rata from the indicative date of completion of the Acquisition (assuming a completion date of 1 June 2022 and a AUD/USD exchange rate of 0.72).</li><li>5. Amounts are inclusive of superannuation (if applicable).</li></ol>	Name	Year ending 30 June 2020 (Actual) <sup>5</sup>	Year ending 30 June 2021 (Actual) <sup>5</sup>	Year ending 30 June 2022 (Proposed) <sup>5</sup>	Drew Speedy	\$76,570 <sup>1</sup>	109,500 <sup>2</sup>	\$129,750	Douglas Frame <sup>3,4</sup>	Nil	Nil	\$20,487	<b>Total</b>	<b>\$76,570</b>	<b>\$109,500</b>	<b>\$150,237</b>	Section 9.3												
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<b>Total</b>	<b>\$76,570</b>	<b>\$109,500</b>	<b>\$150,237</b>																											
What are the interests of Directors and Proposed Directors in the securities of the Company?	<p>As at the date of this Prospectus, the Directors and Proposed Directors have relevant interests in Securities as follows:</p> <table><tr><th>Name</th><th>Shares</th><th>Options</th><th>Performance Rights</th></tr><tr><td>Christopher Dunks</td><td>60,354,167<sup>1</sup></td><td>-</td><td>2,406,250<sup>2</sup></td></tr><tr><td>Dr Geoff Duckworth</td><td>59,093,750<sup>3</sup></td><td>-</td><td>515,625<sup>4</sup></td></tr><tr><td>Terence Gray</td><td>11,183,146<sup>5</sup></td><td>458,334<sup>6</sup></td><td>2,578,125<sup>7</sup></td></tr><tr><td>Charles Fox</td><td>-<sup>8</sup></td><td>-</td><td>-</td></tr><tr><td>Lynne Saint</td><td>-</td><td>-</td><td>-</td></tr><tr><td>Joseph Stopper</td><td>-<sup>9</sup></td><td>-</td><td>-</td></tr></table>	Name	Shares	Options	Performance Rights	Christopher Dunks	60,354,167 <sup>1</sup>	-	2,406,250 <sup>2</sup>	Dr Geoff Duckworth	59,093,750 <sup>3</sup>	-	515,625 <sup>4</sup>	Terence Gray	11,183,146 <sup>5</sup>	458,334 <sup>6</sup>	2,578,125 <sup>7</sup>	Charles Fox	- <sup>8</sup>	-	-	Lynne Saint	-	-	-	Joseph Stopper	- <sup>9</sup>	-	-	Section 9.3
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Joseph Stopper	- <sup>9</sup>	-	-																											

Item	Summary	Further information																								
	<p><b>Notes:</b></p> <ol style="list-style-type: none"><li>Held by The Well Beneath Pty Ltd ATF Duffery Family A/C (an entity controlled by Christopher Dunks).</li><li>Comprising, 2,406,250 Class B Performance Rights held by Christopher Dunks.</li><li>Held by Resource Technology Pty Ltd ATF Geoff Duckworth Family A/C (an entity controlled by Geoff Duckworth).</li><li>Comprising, 515,625 Class B Performance Rights held by Resource Technology Pty Ltd ATF Geoff Duckworth Family A/C (an entity controlled by Geoff Duckworth).</li><li>Comprising, 4,391,668 Shares held by Tegis Pty Ltd (an entity controlled by Terence Gray), 3,368,182 Shares held by Mr Terence Gray and Mrs Elizabeth Gray ATF The T&amp;E Gray S/F A/C (an entity controlled by Terence Gray), 1,136,364 Shares held by Yallipse Pty Ltd (an entity controlled by Terence Gray) and 2,286,923 Shares held by TRG Pty Ltd (an entity controlled by Terence Gray).</li><li>Comprising, 291,667 Options (exercisable at \$0.16 each on or before 31 May 2022) held by Mr Terence Gray and Mrs Elizabeth Gray ATF The T&amp;E Gray S/F A/C (an entity controlled by Terence Gray) and 166,667 Options exercisable at \$0.16 each on or before 31 May 2022 held by Tegis Pty Ltd (an entity controlled by Terence Gray).</li><li>Comprising, 2,578,125 Class B Performance Rights held by TRG Pty Ltd ATF The Terence Gray Family Trust (an entity controlled by Terence Gray).</li><li>Charles Fox has a 4.75% interest in Pure Earth Plasma Holdings LLC (which interest may increase up to 16.80% upon the satisfaction of certain performance criteria). Pure Earth Plasma Holdings LLC holds 8,000,000 USD Notes in the Company.</li><li>Joseph Stopper has a 0.015% interest in Pure Earth Plasma Holdings LLC (which interest may increase up to 0.212% upon the satisfaction of certain performance criteria). Pure Earth Plasma Holdings LLC holds 8,000,000 USD Notes in the Company.</li></ol> <p>Post-completion of the Offers, it is anticipated that the Directors and Proposed Directors will have relevant interests in Securities as follows:</p> <table><tr><th>Name</th><th>Shares</th><th>Options</th><th>Performance Rights</th></tr><tr><td>Christopher Dunks</td><td>60,354,167<sup>1</sup></td><td>-</td><td>2,406,250<sup>2</sup></td></tr><tr><td>Dr. Geoff Duckworth</td><td>59,093,750<sup>3</sup></td><td>-</td><td>515,625<sup>4</sup></td></tr><tr><td>Terence Gray</td><td>11,183,146<sup>5</sup></td><td>10,458,334<sup>6</sup></td><td>2,578,125<sup>7</sup></td></tr><tr><td>Charles Fox</td><td>-<sup>8</sup></td><td>-</td><td>-</td></tr><tr><td>Lynne Saint</td><td>-</td><td>-</td><td>-</td></tr></table>	Name	Shares	Options	Performance Rights	Christopher Dunks	60,354,167 <sup>1</sup>	-	2,406,250 <sup>2</sup>	Dr. Geoff Duckworth	59,093,750 <sup>3</sup>	-	515,625 <sup>4</sup>	Terence Gray	11,183,146 <sup>5</sup>	10,458,334 <sup>6</sup>	2,578,125 <sup>7</sup>	Charles Fox	- <sup>8</sup>	-	-	Lynne Saint	-	-	-	
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Item	Summary				Further information
	Joseph Stopper	- <sup>9</sup>	-	-	
	<p><b>Notes:</b></p> <ol style="list-style-type: none"> <li>1. Held by The Well Beneath Pty Ltd ATF Duffery Family A/C (an entity controlled by Christopher Dunks).</li> <li>2. Comprising, 2,406,250 Class B Performance Rights held by Christopher Dunks.</li> <li>3. Held by Resource Technology Pty Ltd ATF Geoff Duckworth Family A/C (an entity controlled by Geoff Duckworth).</li> <li>4. Comprising, 515,625 Class B Performance Rights held by Resource Technology Pty Ltd ATF Geoff Duckworth Family A/C (an entity controlled by Geoff Duckworth).</li> <li>5. Comprising, 4,391,668 Shares held by Tegis Pty Ltd (an entity controlled by Terence Gray), 3,368,182 Shares held by Mr Terence Gray and Mrs Elizabeth Gray ATF The T&amp;E Gray S/F A/C (an entity controlled by Terence Gray), 1,136,364 Shares held by Yallipse Pty Ltd (an entity controlled by Terence Gray) and 2,286,923 Shares held by TRG Pty Ltd (an entity controlled by Terence Gray).</li> <li>6. Comprising, 291,667 Options exercisable at \$0.16 each on or before 31 May 2022 held by Mr Terence Gray and Mrs Elizabeth Gray ATF The T&amp;E Gray S/F A/C (an entity controlled by Terence Gray), 166,667 Options exercisable at \$0.16 each on or before 31 May 2022 held by Tegis Pty Ltd (an entity controlled by Terence Gray) and 10,000,000 Options held by Tegis Pty Ltd (an entity controlled by Terence Gray) exercisable at \$0.25 each on or before 31 July 2024 (which Options are being issued under the Tegis Consulting Agreement).</li> <li>7. Comprising, 2,578,125 Class B Performance Rights held by TRG Pty Ltd ATF The Terence Gray Family Trust (an entity controlled by Terence Gray).</li> <li>8. Charles Fox holds an interest of 4.75% in Pure Earth Plasma Holdings LLC (which interest may increase up to 16.80% upon the satisfaction of certain performance criteria). Pure Earth Plasma Holdings LLC holds 8,000,000 USD Notes in the Company which will convert into 132,275,132 Shares upon the Company receiving the conditional approval of ASX (on customary terms) to be admitted to the Official List (assuming a AUD/USD exchange rate of 0.72, which the Company notes, is not fixed).</li> <li>9. Joseph Stopper has a 0.015% interest in Pure Earth Plasma Holdings LLC (which interest may increase up to 0.212% upon the satisfaction of certain performance criteria). Pure Earth Plasma Holdings LLC holds 8,000,000 USD Notes in the Company which will convert into 132,275,132 Shares upon the Company receiving the conditional approval of ASX (on customary terms) to be admitted to the Official List (assuming a AUD/USD exchange rate of 0.72, which the Company notes, is not fixed).</li> </ol> <p>Please refer to Section 9.3 for further detail.</p>				

Item	Summary	Further information																								
What are the interests of key management personnel in the securities of the Company?	<p>As at the date of this Prospectus, the key management personnel of the Company and Phoenix have relevant interests in Securities as follows:</p> <table><tr><th>Name</th><th>Shares</th><th>Options</th><th>Performance Rights</th></tr><tr><td>Drew Speedy</td><td>627,344<sup>1</sup></td><td>-</td><td>1,916,016<sup>2</sup></td></tr><tr><td>Douglas Frame<sup>3</sup></td><td>-</td><td>-</td><td>-</td></tr></table> <p><b>Notes:</b></p> <ol style="list-style-type: none"><li>1. Held by Mr Drew Speedy and Mrs Caroline Speedy ATF The Glendower A/C.</li><li>2. Comprising, 1,916,016 Class B Performance Rights held by Mr Drew Speedy and Mrs Caroline Speedy ATF The Glendower A/C.</li><li>3. Douglas Frame and Frame Family Partnership (an entity associated with Mr Frame) are Vendors of Phoenix.</li></ol> <p>Post-completion of the Offers, the key management personnel of the Company and Phoenix will have relevant interests in Securities as follows:</p> <table><tr><th>Name</th><th>Shares</th><th>Options</th><th>Performance Rights</th></tr><tr><td>Drew Speedy</td><td>627,344<sup>1</sup></td><td>-</td><td>1,916,016<sup>2</sup></td></tr><tr><td>Douglas Frame</td><td>14,704,415<sup>3</sup></td><td>-</td><td>-</td></tr></table> <p><b>Notes:</b></p> <ol style="list-style-type: none"><li>1. Held by Mr Drew Speedy and Mrs Caroline Speedy ATF The Glendower A/C.</li><li>2. Comprising, 1,916,016 Class B Performance Rights held by Mr Drew Speedy and Mrs Caroline Speedy ATF The Glendower A/C.</li><li>3. Comprising 4,211,562 Shares issued to Douglas Frame and 10,492,853 Shares issued to Frame Family Partnership (an entity associated with Mr Frame) in consideration for the Acquisition.</li></ol> <p>Please refer to Section 9.3 for further detail.</p>	Name	Shares	Options	Performance Rights	Drew Speedy	627,344 <sup>1</sup>	-	1,916,016 <sup>2</sup>	Douglas Frame <sup>3</sup>	-	-	-	Name	Shares	Options	Performance Rights	Drew Speedy	627,344 <sup>1</sup>	-	1,916,016 <sup>2</sup>	Douglas Frame	14,704,415 <sup>3</sup>	-	-	Section 9.3
Name	Shares	Options	Performance Rights																							
Drew Speedy	627,344 <sup>1</sup>	-	1,916,016 <sup>2</sup>																							
Douglas Frame <sup>3</sup>	-	-	-																							
Name	Shares	Options	Performance Rights																							
Drew Speedy	627,344 <sup>1</sup>	-	1,916,016 <sup>2</sup>																							
Douglas Frame	14,704,415 <sup>3</sup>	-	-																							
Who are the Company's substantial Shareholders and what interest will they have after	Details of the substantial Shareholders and their holdings as at the date of this Prospectus and post-completion of the Offers are set out in Section 6.11.	Section 6.11																								

Item	Summary	Further information
completion of the Offers?		
What related party arrangements exist?	The Company has entered into executive services and or consulting agreements with its Executive Directors and letters of appointment with its Proposed Non-Executive Directors. The Company has also entered into deeds of indemnity, insurance and access with each of the Directors and Proposed Directors.  Presently, no other related party agreements exist.	Section 9.4
What are the significant interests of advisors to the Company?	Currently, no advisors to the Company have any relevant interests in Securities.  At listing, Lodge Corporate Pty Ltd (ACN 125 323 168) (AFS Representative No. 316212 of AFSL 246271) ( <b>Lodge</b> or the <b>Lead Manager</b> ) (or its nominees) will have an interest in 2,000,000 Shares. In addition, the Lead Manager will receive the additional fees described in Sections 4.5 and 10.1.1 as summarised under Part I of this Investment Overview Section below.	Sections 4.5 and 10.1.1
<b>I. Offers</b>		
What is the Public Offer?	The Public Offer is an offer of up to 125,000,000 Shares at an issue price of \$0.20 per Share to raise up to \$25,000,000 (before costs), together with two (2) free attaching Options for every four (4) Shares subscribed for and issued (being up to, 62,500,000 Options), comprising  (a) one (1) unquoted Option exercisable at \$0.25 each, on or before the date which is two (2) years from the date of issue of the Options; and  (b) one (1) unquoted Option exercisable at \$0.40 each, on or before the date which is three (3) years from the date of issue of the Options.	Section 4.1
Is there a minimum subscription under the Public Offer?	The minimum amount to be raised under the Public Offer is \$20,000,000.	Section 4.2
What are the purposes of the Public Offer?	The purposes of the Public Offer are to facilitate an application by the Company for admission to the Official List and to position the Company to seek to achieve the objectives stated at Section A of this Investment Overview.	Section 4.7

Item	Summary	Further information
Is the Public Offer underwritten?	No, the Public Offer is not underwritten.	Section 4.4
Who is the lead manager to the Public Offer?	<p>The Company has appointed Lodge Corporate as Lead Manager to the Public Offer.</p> <p>Subject to completion of the Public Offer, the Lead Manager will receive the following fees:</p> <ul style="list-style-type: none"> <li>(a) a management fee of 2% of the gross proceeds raised under the Public Offer by the Lead Manager (plus GST) (being, a fee of up to \$500,000 assuming the Maximum Subscription is raised);</li> <li>(b) a selling fee of 4% of the gross proceeds raised under the Public Offer by the Lead Manager (plus GST) (being, a fee of up to \$1,000,000 assuming the Maximum Subscription is raised); and</li> <li>(c) an advisory fee of \$400,000 (plus GST) which will be satisfied by the issue of 2,000,000 Shares to the Lead Manager (or its nominees) upon the Company's admission to the Official List. The GST component of the advisory fee will be satisfied in cash.</li> </ul> <p>The aggregate value of the fees payable to the Lead Manager by the Company in respect of the Public Offer is \$1,900,000 (plus GST) (assuming the Maximum Subscription is raised).</p>	Section 4.5
Who is eligible to participate in the Public Offer?	This Prospectus does not, and is not intended to, constitute an offer in any place or jurisdiction, or to any person to whom, it would not be lawful to make such an offer or to issue this Prospectus. The distribution of this Prospectus in Jurisdictions outside Australia may be restricted by law and persons who come into possession of this Prospectus should observe any of these restrictions. Any failure to comply with such restrictions may constitute a violation of applicable securities laws.	Section 4.13
How do I apply for Securities under the Public Offer?	Applications for Securities under the Public Offer must be made by completing the Application Form attached to this Prospectus in accordance with the instructions set out in the Application Form.	Section 4.9
What is the allocation policy?	The Company retains an absolute discretion to allocate Securities under the Public Offer and will be influenced by the factors set out in Section 4.10.	Section 4.10

Item	Summary	Further information
	There is no assurance that any Applicant will be allocated any Securities, or the number of Securities for which it has applied.	
What is the Cleansing Offer?	<p>The Prospectus also contains an offer of 1,000 Shares in the capital of the Company at an issue price of \$0.20 per Share to raise \$20 (before expenses) (<b>Cleansing Offer</b>).</p> <p>The Cleansing Offer is being undertaken for the purposes of section 708A(11) of the Corporations Act to remove any restrictions on the sale of Shares issued by the Company after the date of this Prospectus and prior to the Cleansing Offer Closing Date.</p> <p>Prospective investors should note that given the Cleansing Offer is not considered material, and as there is no intention to issue the Shares under the Cleansing Offer, the impact of the Cleansing Offer on the Company's capital structure and its financial position have not been factored in or taken into account throughout this Prospectus (including to calculate diluted interests).</p>	Section 4.1.2
What will the Company's capital structure look like on completion of the Offers and Acquisition?	The Company's capital structure on a post-Offers basis is set out in Section 6.10.	Section 6.10
What are the terms of the Securities offered under the Offers?	<p>A summary of the material rights and liabilities attaching to the Shares offered under the Offers are set out in Section 11.2.</p> <p>The terms of the free-attaching Options to be issued under the Public Offer are set out in Section 11.5.</p>	Section 11.2 and 11.5
Will any Securities be subject to escrow?	<p>None of the Securities issued under the Public Offer will be subject to escrow.</p> <p>However, subject to the Company complying with Chapters 1 and 2 of the ASX Listing Rules and completing the Offers, it is anticipated that:</p> <p>(a) 294,466,289 Shares on issue at listing (excluding the Shares issued pursuant to the Acquisition) that are held by related parties, promoters or their associates, will be subject to escrow for 24 months from listing (including all of the Shares to be issued to the Lead Manager (or its nominees));</p>	Section 6.12

Item	Summary	Further information
	<p>(b) 27,584,499 Shares on issue at listing (excluding the Shares issued pursuant to the Acquisition) that are held by unrelated parties will be subject to escrow for 12 months from the date of issue of those Shares, or in respect of the Shares issued in lieu of the Convertible Notes and Loans, 12 months from the date the cash was advanced to the Company under those Convertible Notes and Loans; and</p> <p>(c) 3,255,015 Shares issued to the Phoenix Vendors pursuant to the Acquisition will be subject to an escrow period of up to 12 months from the date of issue of the Shares.</p> <p>In addition, Mr Douglas Frame (a Phoenix Vendor) has entered into a voluntary escrow deed with the Company under which he has agreed that up to 1,394,435 Shares held by him (which are not expected to be subject to ASX escrow) will be subject to escrow from 24 months from listing on the terms and conditions set out in the voluntary escrow deed, with any disposals permitted within that period subject to limited circumstances with the prior approval of the Company.</p> <p>During the period in which restricted Shares are prohibited from being transferred, trading in Shares may be less liquid which may impact on the ability of a Shareholder to dispose of his or her Shares in a timely manner.</p> <p>The Company will announce to ASX full details (quantity and duration) of the Shares required to be held in escrow prior to the Shares commencing trading on ASX.</p> <p>The Company's 'free float' (being the percentage of Shares not subject to escrow and held by Shareholders that are not related parties of the Company (or their associates) at the time of admission to the Official List) will be between approximately 46% based on the Minimum Subscription and 48% based on the Maximum Subscription comprising all shares issued following completion of the Acquisition, other than Shares subject to ASX imposed escrow, voluntary escrow or held by Directors, related parties or promoters.</p>	
Who are the current Shareholders of	Details regarding the current Shareholders of the Company and the terms on which their Shares were issued are set out in Section 6.10.	Section 6.10

Item	Summary	Further information
the Company and on what terms were their Shares issued?		
Will the Securities be quoted on ASX?	<p>Application for quotation of all Shares to be issued under the Public Offer will be made to ASX no later than 7 days after the date of this Prospectus.</p> <p>No Shares are intended to be issued under the Cleansing Offer.</p> <p>The Company will not apply for quotation of the Options to be issued under the Public Offer.</p>	Section 4.11
What are the key dates of the Offers?	The key dates of the Offers are set out in the indicative timetable in the Key Offer Information Section.	Key Offer Information
What is the minimum investment size under the Public Offer?	Applications under the Public Offer must be for a minimum of \$2,000 worth of Shares (10,000 Shares) and thereafter, in multiples of \$500 worth of Shares (2,500 Shares).	Section 4.9
Are there any conditions to the Public Offer?	<p>The Public Offer is conditional on:</p> <p>(a) the Company raising the Minimum Subscription; and</p> <p>(b) ASX granting conditional approval for the Company to be admitted to the Official List,</p> <p>(together, the <b>Conditions</b>).</p> <p>The Public Offer will only proceed if all Conditions are satisfied. Further details are set out in Section 4.6.</p>	Section 4.6
<b>J. Use of funds</b>		
How will the proceeds of the Public Offer be used?	<p>The Public Offer proceeds and the Company's existing cash reserves will be used for:</p> <p>(a) implementing the Company's business objectives as set out in Part C of Investment Overview;</p> <p>(b) consideration of the Phoenix Acquisition and associated expenses;</p> <p>(c) expenses of the Public Offer; and</p> <p>(d) administration and corporate costs, further details of which are set out in Section 6.9.</p>	Section 6.9
Will the Company be adequately funded after completion of	The Directors are satisfied that on completion of the Public Offer, the Company will have sufficient working capital to carry out its objectives as stated in this Prospectus.	Section 6.9

Item	Summary	Further information
the Public Offer?		
<b>K. Additional information</b>		
Is there any brokerage, commission or duty payable by applicants?	<p>No brokerage, commission or duty is payable by applicants on the acquisition of Securities under the Public Offer.</p> <p>However, the Company will pay the Lead Manager an aggregate fee of 6% of the total amount raised under the Public Offer (plus GST) and will issue the Lead Manager (or its nominees) 2,000,000 Shares, subject to completion of the Public Offer and listing of the Company.</p>	Section 10.1.1
Can the Offers be withdrawn?	<p>The Company reserves the right not to proceed with the Offers at any time before the issue or transfer of Securities to successful applicants.</p> <p>If the Offers do not proceed, application monies will be refunded (without interest).</p>	Section 4.16
What are the tax implications of investing in Securities?	<p>Holders of Securities may be subject to Australian tax on dividends and possibly capital gains tax on a future disposal of Securities subscribed for under this Prospectus.</p> <p>The tax consequences of any investment in Securities will depend upon an investor's particular circumstances. Applicants should obtain their own tax advice prior to deciding whether to subscribe for Securities offered under this Prospectus.</p>	Section 4.15
Has the Company adopted an employee incentive scheme?	<p>The Company has adopted an employee incentive scheme entitled "Employee Securities Incentive Plan" (<b>Plan</b>) and an employee incentive scheme for sophisticated investors entitled "Employee Securities Incentive Plan (No ASIC Relief)" (<b>No ASIC Relief Plan</b>).</p> <p>The objective of both the Plan and No ASIC Relief Plan is to:</p> <ul style="list-style-type: none"> <li>(a) assist in the reward, retention and motivation of eligible participants, which includes employees (including executive directors), non-executive directors and key contractors of the Company;</li> <li>(b) link the reward of eligible participants to Shareholder value creation; and</li> <li>(c) align the interests of eligible participants with Shareholders by providing an opportunity to eligible participants to receive an equity interest in the Company in the form of securities.</li> </ul>	Sections 11.7 and 11.8

Item	Summary	Further information
	Summaries of the key terms and conditions of the Plan and the No ASIC Relief Plan are set out in Sections 11.7 and 11.8 respectively.	
What are the corporate governance principles and policies of the Company?	<p>To the extent applicable, in light of the Company's size and nature, the Company has adopted <i>The Corporate Governance Principles and Recommendations (4th Edition)</i> as published by ASX Corporate Governance Council (<b>Recommendations</b>).</p> <p>Prior to listing on the ASX, the Company will announce its main corporate governance policies and practices and the Company's compliance and departures from the Recommendations.</p>	Section 9.5
Where can I find more information?	<p>(a) By speaking to your sharebroker, solicitor, accountant or other independent professional adviser;</p> <p>(b) By contacting the Company Secretary, on + 61 7 3211 3878; or</p> <p>(c) By contacting the Share Registry on 1800 131 904.</p>	

This Section is a summary only and is not intended to provide full information for investors intending to apply for Securities offered pursuant to this Prospectus. This Prospectus should be read and considered in its entirety.

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## **4. DETAILS OF THE OFFERS**

### **4.1 The Offers**

#### **4.1.1 The Public Offer**

The Public Offer is an initial public offering of up to 125,000,000 Shares at an issue price of \$0.20 per Share to raise up to \$25,000,000 (**Maximum Subscription**), together with two (2) free attaching Options for every four (4) Shares subscribed for and issued (being, up to 62,500,000 Options), comprising:

- (a) one (1) unquoted Option, exercisable at \$0.25 each on or before the date which is two (2) years from the date of issue of the Options (being, up to 31,250,000 of the Options); and
- (b) one (1) unquoted Option, exercisable at \$0.40 each on or before the date which is three (3) years from the date of issue of the Options (being, up to 31,250,000 of the Options).

The Shares issued under the Public Offer will be fully paid and will rank equally with all other existing Shares currently on issue. A summary of the material rights and liabilities attaching to the Shares is set out in Section 11.2.

The Options offered under the Public Offer will be issued on the terms and conditions set out in Section 11.5. All Shares issued on conversion of the Options will rank equally with the Shares on issue at the date of this Prospectus. Any fractional entitlement to Options under the Public Offer will be rounded upwards.

#### **4.1.2 The Cleansing Offer**

The Cleansing Offer is an offer of 1,000 Shares at an issue price of \$0.20 per Share, to raise \$20 (before expenses). The Company does not currently intend to issue the Shares under the Cleansing Offer and therefore, no Application Form will be provided for the Cleansing Offer.

The Cleansing Offer is included for the purpose of section 708A(11) of the Corporations Act to remove any trading restrictions on the sale of Shares issued by the Company prior to the Closing Date of the Cleansing Offer, including Shares issued on conversion of the Convertible Notes and Convertible Loans and pursuant to the Acquisition.

Given the Cleansing Offer is not considered material and the Company has no intention to issue the Shares under the Cleansing Offer, the impact of the Cleansing Offer on the Company's capital structure and its financial position have not been factored in or taken into account throughout this Prospectus (including to calculate diluted interests).

### **4.2 Minimum subscription**

The minimum subscription for the Public Offer is \$20,000,000 (100,000,000 Shares) (**Minimum Subscription**).

If the Minimum Subscription has not been raised within four (4) months after the date of this Prospectus, or such period as varied by the ASIC, the Company will not issue any Shares and will repay all application monies for the Shares within the time prescribed under the Corporations Act, without interest.

### 4.3 Oversubscriptions

No oversubscriptions above the Maximum Subscription will be accepted by the Company under the Public Offer.

### 4.4 Not Underwritten

The Public Offer is not underwritten.

### 4.5 Lead Manager

The Company has appointed Lodge Corporate Pty Ltd (ACN 125 323 168) (a Corporate Authorised Representative No. 316212 of Lodge Partners Pty Ltd, AFSL No. 246271) as Lead Manager to the Public Offer. In consideration for its services and subject to completion of the Public Offer, the Company has agreed to pay the following fees to the Lead Manager:

- (a) a management fee of 2% of funds raised under the Public Offer by the Lead Manager (plus GST) (being, a fee of up to \$500,000 assuming the Maximum Subscription is raised);
- (b) a selling fee of 4% of funds raised under the Public Offer by the Lead Manager (plus GST) (being, a fee of up to \$1,000,000 assuming the Maximum Subscription is raised); and
- (c) an advisory fee of \$400,000 (plus GST) which will be satisfied by the issue of 2,000,000 Shares to the Lead Manager (or its nominees) upon the Company's admission to the Official List. The GST component of the advisory fee will be satisfied in cash.

The total value of the Shares to be issued to the Lead Manager in connection with the Public Offer is \$400,000. The aggregate value of the fees payable to the Lead Manager by the Company in respect of the Public Offer is \$1,900,000 (plus GST) (assuming the Maximum Subscription is raised).

In the event the Minimum Subscription is raised and no other Shares are issued, the Lead Manager would hold 0.33% of the total Shares on issue (being the maximum potential voting power of the Lead Manager).

Please refer to Section 10.1.1 for further details relating to the engagement of the Lead Manager by the Company.

### 4.6 Conditions of the Public Offer

The Public Offer is conditional upon the following events occurring:

- (a) the Minimum Subscription to the Public Offer being reached; and
- (b) ASX granting conditional approval for the Company to be admitted to the Official List,

(together the **Conditions**).

If these Conditions are not satisfied then the Public Offer will not proceed and the Company will repay all application monies received under the Public Offer within the time prescribed under the Corporations Act, without interest.

#### **4.7 Purpose of the Public Offer**

The primary purposes of the Public Offer are to:

- (a) assist the Company to meet the admission requirements of ASX under Chapters 1 and 2 of the ASX Listing Rules;
- (b) provide the Company with additional funding for:
  - (i) the capital expenditure requirements of the TLOU Energy Hydrogen Project (as further detailed in Sections 6.5.1 and 10.4.1);
  - (ii) the further development of the Company's Thermal Plasma Technology in the area of methane pyrolysis clean hydrogen production;
  - (iii) the development of carbon black handling and management systems to be used in the Company's methane pyrolysis clean hydrogen production projects;
  - (iv) the capital expenditure requirements of large scale PFAS water treatment and destruction projects;
  - (v) for the Working Capital Payment to Phoenix pursuant to the terms of the Acquisition (refer to Section 10.3.1); and
  - (vi) the further development of the Company's and Phoenix's intellectual property; and
  - (vii) the Company's corporate and administration costs and working capital requirements while it is implementing the above; and
- (c) remove the need for an additional disclosure document to be issued upon the sale of any Shares that are to be issued under the Public Offer.

The Company intends on applying the funds raised under the Public Offer in the manner detailed in Section 6.9.

#### **4.8 Purpose of the Cleansing Offer**

The primary purpose of the Cleansing Offer is to remove any trading restrictions that may have attached to Shares issued by the Company prior to the Cleansing Offer Closing Date (including prior to the date of this Prospectus).

Relevantly, section 708A(11) of the Corporations Act provides that a sale offer does not need disclosure to investors if:

- (a) the relevant securities are in a class of securities that are quoted securities of the body; and
- (b) either:
  - (i) a prospectus is lodged with the ASIC on or after the day on which the relevant securities were issued but before the day on which the sale offer is made; or

- (ii) a prospectus is lodged with ASIC before the day on which the relevant securities are issued and offers of securities that have been made under the prospectus are still open for acceptance on the day on which the relevant securities were issued; and
- (c) the prospectus is for an offer of securities issued by the body that are in the same class of securities as the relevant securities.

No funds will be raised from the Cleansing Offer.

#### 4.9 Applications

Applications for Securities under the Public Offer must be made by using the relevant Application Form as follows:

- (a) using an online Application Form at [events.miraqle.com/synergen-ipo](https://events.miraqle.com/synergen-ipo) and pay the application monies by BPAY; or
- (b) completing a paper-based application using the relevant Application Form attached to, or accompanying, this Prospectus or a printed copy of the relevant Application Form attached to the electronic version of this Prospectus.

By completing an Application Form, each Applicant under the Public Offer will be taken to have declared that all details and statements made by them are complete and accurate and that they have personally received the Application Form together with a complete and unaltered copy of the Prospectus.

Applications for Shares under the Public Offer must be for a minimum of \$2,000 worth of Shares (10,000) Shares and thereafter in multiples of 2,500 Shares and payment for the Shares must be made in full at the issue price of \$0.20 per Share. The Options to be issued under the Public Offer are free attaching to Shares on a two (2) for four (4) basis.

Completed Application Forms and accompanying cheques, made payable to **"Synergen Met Limited"** and crossed **"Not Negotiable"**, must be mailed or delivered to the address set out on the Application Form by no later than 5:00pm (AEST) on the Closing Date, which is scheduled to occur on 18 May 2022.

If paying by BPAY®, please follow the instructions on the Application Form. A unique reference number will be quoted upon completion of the online application. Your BPAY reference number will process your payment to your application electronically and you will be deemed to have applied for such Shares for which you have paid. Applicants using BPAY should be aware of their financial institution's cut-off time (the time payment must be made to be processed overnight) and ensure payment is processed by their financial institution on or before the day prior to the Closing Date of the Public Offer. You do not need to return any documents if you have made payment via BPAY.

DVP settlement details may be provided on request to the Company or Lead Manager.

If an Application Form is not completed correctly or if the accompanying payment is the wrong amount, the Company may, in its discretion, still treat the Application Form to be valid. The Company's decision to treat an application as valid, or how to construe, amend or complete it, will be final.

The Company reserves the right to close the Public Offer early.

Each Applicant in the Public Offer is made under this Prospectus, will be taken to have represented, warranted and agreed as follows:

- (a) It understands that the offer and sale of the Securities have not been, and will not be, registered under the US Securities Act or the securities laws of any state or other jurisdiction of the United States and may not be offered or sold in the United States except pursuant to an exemption from, or in a transaction not subject to, the registration requirements of the US Securities Act and applicable US state securities laws;
- (b) It is either (i) resident or domiciled in Australia and is not acting for the account or benefit of any person in the United States or any other foreign person or (ii) an Accredited Investor in the United States.

It has not sent, and will not send, the Prospectus or any other material relating to the Public Offer to any person in the United States or elsewhere outside Australia.

In addition to submitting an application, each Accredited Investor must complete and return a US investor certificate confirming status as an accredited investor and other customary US securities law matters.

#### **4.10 Allocation policy under the Public Offer**

The Company retains an absolute discretion to allocate Securities under the Public Offer and reserves the right, in its absolute discretion, to allot to an applicant a lesser number of Securities than the number for which the applicant applies or to reject an Application Form. If the number of Securities allotted is fewer than the number applied for, surplus application money will be refunded without interest as soon as practicable.

No applicant under the Public Offer has any assurance of being allocated all or any Securities applied for. The allocation of Securities by Directors (in conjunction with the Lead Manager) will be influenced by the following factors:

- (a) the number of Securities applied for;
- (b) the overall level of demand for the Public Offer;
- (c) the desire for a spread of investors, including institutional investors; and
- (d) the desire for an informed and active market for trading Securities following completion of the Public Offer.

The Company will not be liable to any person not allocated Securities or not allocated the full amount applied for.

#### **4.11 ASX listing**

Application for Official Quotation by ASX of the Shares offered pursuant to this Prospectus will be made within 7 days after the date of this Prospectus. However, applicants should be aware that ASX will not commence Official Quotation of any Shares until the Company has complied with Chapters 1 and 2 of the ASX Listing Rules and has received the approval of ASX to be admitted to the Official List. As such, the Shares may not be able to be traded for some time after the close of the Public Offer.

If the Shares are not admitted to Official Quotation by ASX before the expiration of three (3) months after the date of this Prospectus, or such period as varied by

the ASIC, the Company will not issue any Shares and will repay all application monies for the Shares within the time prescribed under the Corporations Act, without interest.

The fact that ASX may grant Official Quotation to the Shares is not to be taken in any way as an indication of the merits of the Company or the Securities now offered for subscription.

The Company will not apply for quotation of the Options to be issued under this Prospectus.

#### **4.12 Issue**

Subject to the Conditions set out in Section 4.6 being met, the issue of Securities offered by this Prospectus will take place as soon as practicable after the Closing Date.

Pending the issue of the Securities or payment of refunds pursuant to this Prospectus, all application monies will be held by the Company in trust for the applicants in a separate bank account as required by the Corporations Act. The Company, however, will be entitled to retain all interest that accrues on the bank account and each applicant waives the right to claim interest.

The Directors (in conjunction with the Lead Manager will determine the recipients of the issued Securities in their sole discretion in accordance with the allocation policy detailed in Section 4.10). The Directors reserve the right to reject any application or to allocate any applicant fewer Securities than the number applied for. Where the number of Securities issued is less than the number applied for, or where no issue is made, surplus application monies will be refunded without any interest to the applicant as soon as practicable after the Closing Date.

Holding statements for Securities issued to the issuer sponsored subregister and confirmation of issue for Clearing House Electronic Subregister System (CHES) holders will be mailed to applicants being issued Securities pursuant to the Public Offer as soon as practicable after their issue.

#### **4.13 Applicants outside Australia**

This Prospectus does not, and is not intended to, constitute an offer in any place or jurisdiction, or to any person to whom, it would not be lawful to make such an offer or to issue this Prospectus.

The distribution of this Prospectus in jurisdictions outside Australia may be restricted by law and persons who come into possession of this Prospectus should observe any of these restrictions, including those outlined below. Any failure to comply with such restrictions may constitute a violation of applicable securities laws. The return of a completed Application Form will be taken by the Company to constitute a representation and warranty by you that you have complied with these restrictions.

## **United States**

This Prospectus does not constitute an offer to sell, or a solicitation of an offer to buy, securities in the United States. The Securities have not been, and will not be, registered under the US Securities Act or the securities laws of any state or other jurisdiction of the United States. The Securities may not be offered or sold in the United States except in transactions exempt from, or not subject to, the registration requirements of the US Securities Act and applicable US state securities laws.

The Securities will only be offered and sold in the United States by the Company to "accredited investors" as defined in Rule 501(a) under the US Securities Act.

### **4.14 Commissions payable**

The Company reserves the right to pay a commission of up to 6% (exclusive of goods and services tax) of amounts subscribed through any licensed securities dealers or Australian financial services licensee in respect of any valid applications lodged and accepted by the Company and bearing the stamp of the licensed securities dealer or Australian financial services licensee. Payments will be subject to the receipt of a proper tax invoice from the licensed securities dealer or Australian financial services licensee.

The Lead Manager will be responsible for paying all commission that it and the Company agree with any other licensed securities dealers or Australian financial services licensees out of the fees paid by the Company to the Lead Manager under the Lead Manager Mandate.

### **4.15 Taxation**

The acquisition and disposal of Securities will have tax consequences, which will differ depending on the individual financial affairs of each investor.

It is not possible to provide a comprehensive summary of the possible taxation positions of all potential applicants. As such, all potential investors in the Company are urged to obtain independent financial advice about the consequences of acquiring Securities from a taxation viewpoint and generally.

To the maximum extent permitted by law, the Company, its officers and each of their respective advisors accept no liability and responsibility with respect to the taxation consequences of subscribing for Securities under this Prospectus or the reliance of any applicant on any part of the summary contained in this Section.

No brokerage, commission or duty is payable by applicants on the acquisition of Securities under the Public Offer.

### **4.16 Withdrawal of Offers**

The Offers may be withdrawn at any time. In this event, the Company will return all application monies (without interest) in accordance with applicable laws.

## 5. INDUSTRY OVERVIEW

### 5.1 Background on hydrogen and solid carbon markets

#### 5.1.1 Hydrogen market

Hydrogen (**H2**) is the simplest and most abundant element in the universe. Hydrogen is an energy carrier that can be used to store, move, and deliver energy produced from other sources. Hydrogen can be produced without a carbon footprint from a variety of sources, including natural gas, coal, biomass, waste materials (i.e., plastics), or splitting water molecules. Currently mature gasification techniques of fossil fuels, biomass and plastics is expected to be the lowest-cost route to produce hydrogen, but this can only be achieved when using carbon capture, utilization, and storage technologies, which increase capital costs of existing techniques.

#### Types of hydrogen

Currently commentators refer to Hydrogen using colours, with a number of definitions. The colour codes are used to identify a specific hydrogen production process and the intensity of carbon emission associated with that process (refer to Table 1 below). However, there is no universal naming convention, and these colour definitions may change over time.

GHG emissions/kg H2					
High	Low	Low to	Zero	Zero	Zero
Grey H2	Blue H2	Turquoise H2	Turquoise H2	Green H2	Pink H2
Produced by Steam methane reforming (SMR), emits CO and CO <sub>2</sub>	Produced by SMR with carbon capture, storage & use. Reduces CO and CO <sub>2</sub> emissions	Produced using methane pyrolysis, using non-renewable power, makes solid carbon, a valuable by-product	Produced using methane pyrolysis, using renewable power, makes solid carbon a valuable by-product with zero CO and CO <sub>2</sub> emissions	Produced using water electrolysis, using renewable power with zero CO and CO <sub>2</sub> emissions	Produced using water electrolysis using nuclear power with zero CO and CO <sub>2</sub> emissions

**Table 1: Hydrogen types and colours**

Many commentators portray green hydrogen, produced by water electrolysis using renewable power, as the only variety of hydrogen to be a climate-neutral or “Clean” hydrogen, because it emits no greenhouse gases (**GHG**) during the production process. However, this portrayal is technically not correct.

Synergen’s proprietary methane pyrolysis process may be classified by some commentators as “Turquoise Hydrogen” but when powered by renewable power, it also produces “clean hydrogen” with no greenhouse gas emissions. Synergen’s hydrogen is, therefore, as clean as green hydrogen. Further our process creates carbon black a vital chemical normally produced with CO<sub>2</sub> emissions. Hence Synergen’s process can decarbonise two industrial processes.

In fact, when methane pyrolysis is powered by renewable energy, and the feedstock is biomethane rather than natural gas (i.e. fossil methane), then the process can even be carbon negative.

A positive of utilising natural gas is that the hydrogen production process can leverage existing gas infrastructure, substantially reducing capital expenditure and the carbon footprint associated with building the huge infrastructure requirements to make green hydrogen a commercial reality.

Another major problem for green hydrogen is that it requires very clean water, a precious commodity in its own right in most parts of the world. Current and future capital estimates of green hydrogen production do not discuss desalination of salty water, hence by omission assume the use of existing supplies of fresh water. Desalination of salt water is an expensive and electrically “hungry” process even before electrolysis process begins. Therefore, green hydrogen techniques have a long road of process development and capital improvements before being commercially competitive.

On the contrary, Synergen's clean hydrogen production is commercially competitive and can be implemented now to begin the hydrogen revolution and accelerate the global decarbonisation process.

Due to its ability to generate thermal energy (via combustion), electrical energy (via fuel cells) and as a reducing agent for bulk chemical production (e.g., ammonia, polymers, etc) without end-user carbon emissions, hydrogen is well-researched in corporate and industrial settings.

### **Current hydrogen uses**

Hydrogen is used as an industrial gas in numerous industrial processes. Its primary industrial use occurs in the following industries:

- (a) production of ammonia (NH<sub>3</sub>) mainly for fertilisers;
- (b) chemical industry as a feedstock and catalyst;
- (c) food and drug industry as a hydrogenating agent; and
- (d) petroleum industry in refinery processing.

Hydrogen consumed by large volume users, as described above, is typically generated onsite and often referred to as captive hydrogen. Other industries which use hydrogen are glass manufacture and electronics production.

With over 35 billion tons of carbon dioxide (CO<sub>2</sub>) emitted each year, growing recognition of the impact of climate change on the environment, people, and the economy is accelerating the pressure on governments and politicians to counteract carbon increases. Over 100 countries, including China, the United States, and the European Union, have announced plans for reaching net-zero emissions sometime mid-century. However, the energy and transportation sectors in particular continue to rely on carbon-intensive fossil fuels.

## Expected hydrogen uses

The energy transition to a decarbonised world by 2050 will require high-energy, low-emission solutions working alongside the traditional renewables of wind, solar and battery storage. Cost effective carbon zero hydrogen being an energy carrier offers a key component to meeting the world's energy needs, while reducing CO<sub>2</sub> emissions. Hydrogen offers the energy density for use in transport, aviation and industry.

Other attributes which favours hydrogen use are:

- (a) hydrogen is storable, retaining energy longer than batteries;
- (b) hydrogen is transportable as a compressed gas or liquid;
- (c) hydrogen is easily converted from or blended with natural gas to tailor its composition to the end user;
- (d) hydrogen is lighter than battery stacking in heavy vehicle transport.

As a result;

**"Hydrogen decarbonisation has become one of the most pressing issues facing governments and industries today."**

According to United States Department of Energy, "Hydrogen is emerging as a low-carbon fuel option for transportation, electricity generation, and manufacturing applications, because it could decarbonize these three large sectors of the economy."<sup>1</sup>

Used as vehicle fuel, hydrogen has the highest energy value per kg and lowest energy value per volume (at atmospheric conditions). 1kg of hydrogen has the same energy content as 1 gallon (3.2 kg) of gasoline, but to be transported, hydrogen needs to be compressed or liquefied.

Even using the cheapest source of centralised hydrogen production today, typically referenced at US\$2/kg, after adding in the cost of distribution, delivered hydrogen may exceed US\$6/kg (hydrogen production and distribution costs). Therefore, to be commercially viable for transport, aviation and industry, hydrogen producers need to develop distribution strategies and technologies.

Using natural gas and reforming the gas into hydrogen at the point of use (for example, a power generator or refuelling station) can significantly reduce the required hydrogen delivery infrastructure and distribution costs. Synergen's proprietary methane pyrolysis technology which splits natural gas into the components hydrogen and solid carbon can be located at the point of use, hence Synergen's estimated delivered cost can be competitive with existing suppliers.

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<sup>1</sup> Source: U.S. Department of Energy, Office of Fossil Energy, "Hydrogen Strategy Enabling a Low-Carbon Economy" 2020. The U.S. Department of Energy has not consented to the inclusion of this information in the Prospectus.

## Hydrogen production

Currently, practically all industrial manufacturing of hydrogen is produced using the mature technology of Steam Methane Reforming (**SMR**). SMR is a process in which methane from natural gas is heated, with steam, usually with a catalyst, to produce a mixture of CO, CO<sub>2</sub> and hydrogen. However, SMR hydrogen production processes, known as “grey” hydrogen produce close to 10kg CO<sub>2</sub> per kilogram of H<sub>2</sub> product. This high carbon emission diminishes the environmental appeal of hydrogen as an environmentally clean fuel. Thus, there is an urgent need to develop and implement other production processes with low-to-zero CO<sub>2</sub> emissions.

Synergen's hydrogen production process using a proprietary methane pyrolysis process splits natural gas into hydrogen and solid carbon to make clean hydrogen. This production process produces hydrogen 3 times more efficiently than current water electrolysis techniques (i.e. green hydrogen), producing carbon-zero hydrogen and provides a commercially viable path now for energy transition to a decarbonised world.

Using renewable power, Synergen's hydrogen production system is affordable, scalable and can be located at a centralised hub or at the distribution site for the end user resulting in commercially competitive zero carbon hydrogen. As renewable power becomes more affordable over time, so too will hydrogen produced using Synergen's hydrogen production process. Refer to Section 6.5.1 for further detail regarding Synergen's methane pyrolysis clean hydrogen production system.

## Hydrogen industry maturity, size and trends

As of 2020, the most common source for global hydrogen production was methane via steam reforming, with renewable water electrolysis (i.e. green hydrogen - a carbon-free hydrogen production process) only accounting for approximately 2% of production. Hydrogen production by steam reforming is a mature technology generating hydrogen on a centralised basis at a cheap production cost but with high greenhouse gas emissions. Rising industrialisation is boosting the demand for energy production across various industries, thereby boosting the potential growth of hydrogen demand. In addition, the hydrogen industry sees great potential in exploiting renewables, particularly non-dispatchable excess wind and solar power, to manufacture green hydrogen. Worldwide the green hydrogen project pipeline nearly doubled in 2021, with Europe and Australia the most popular locations. The key restraint for green hydrogen is that it currently is not cost competitive, when compared to existing sources of hydrogen, while Synergen's clean hydrogen production process is currently estimated to be cost competitive for numerous applications.

The global hydrogen market is typically segmented on the basis of product type, end-use and by region.

Product type is typically segmented into:

- (a) compressed hydrogen typically used for mobile hydrogen storage in refineries, chemical plants and transport; and
- (b) liquid hydrogen typically used for rocket fuel and specialty applications.

The compressed hydrogen gas segment currently accounts for the largest revenue share in the global hydrogen market and is expected to grow at a compound annual growth rate (**CAGR**) of 7.5% to 2030.

The global hydrogen revenue (US\$154.812bn) market share by product type in 2020 is set out in Figure 1 below.

## Global Hydrogen Revenue Market Share

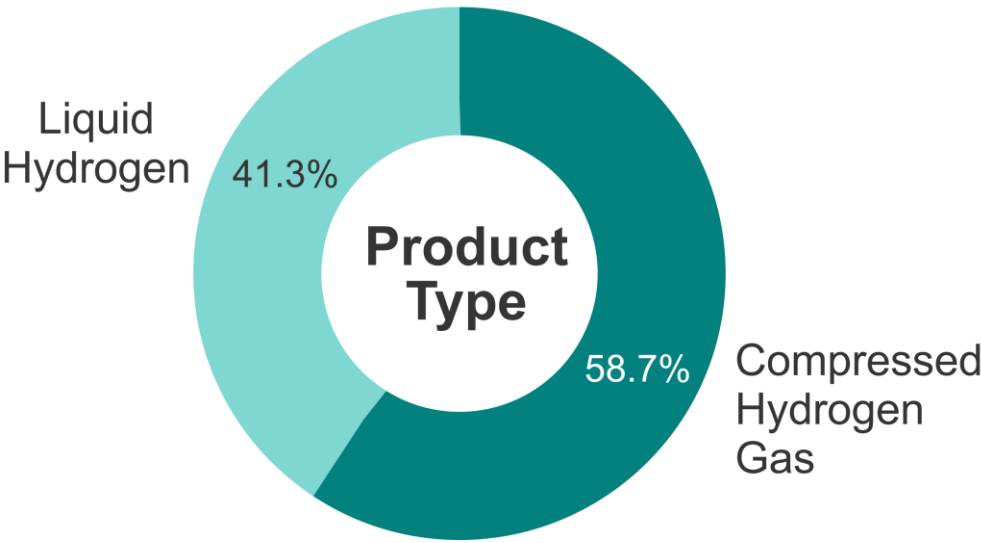


Figure 1: Global Hydrogen Revenue (US\$154.812bn) Market Share by Product type in 2020

End use application is typically segmented into:

- (a) petroleum refining;
- (b) metal processing;
- (c) chemical; and
- (d) other applications.

The global hydrogen revenue (US\$154.812bn) by application in 2020 is set out below in Figure 2.

## Global Hydrogen Revenue Market Share

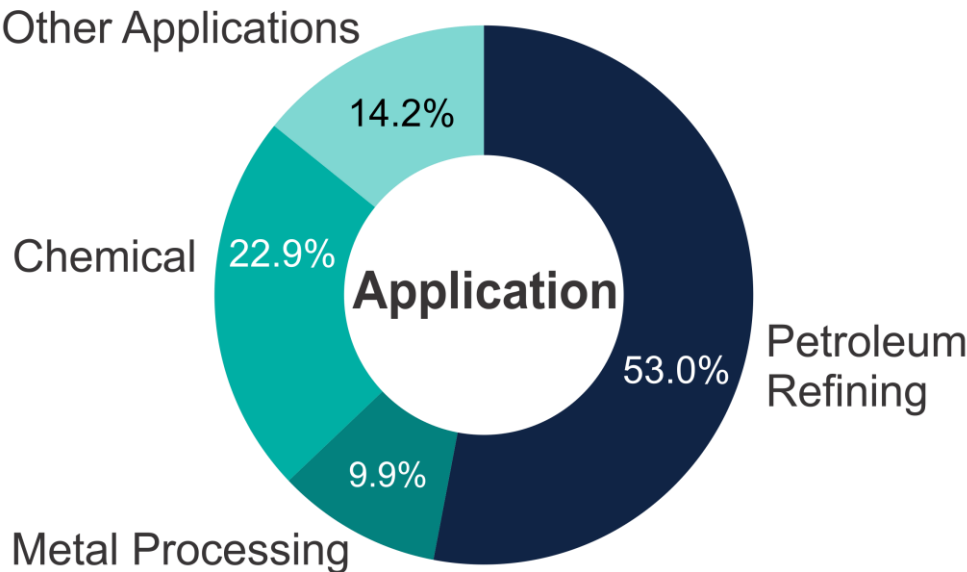


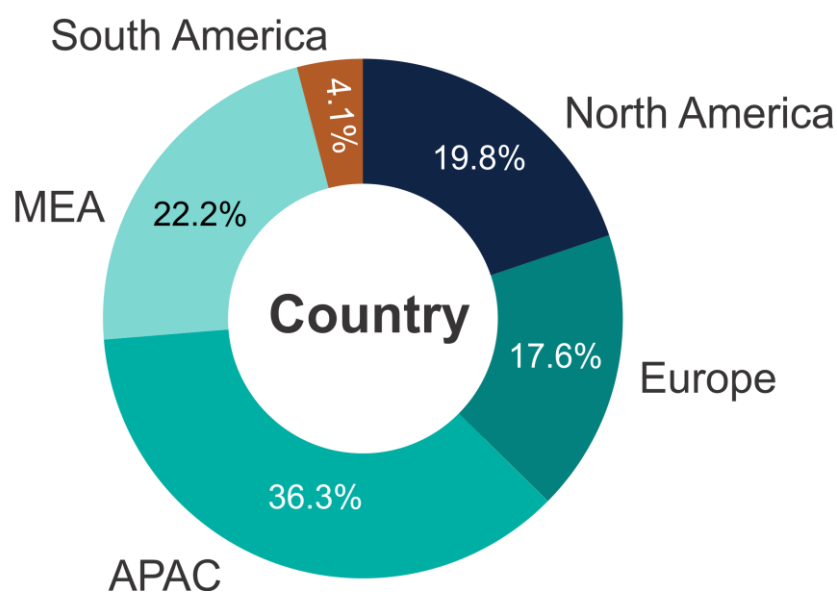
Figure 2: Global Hydrogen Revenue (US\$154.812bn) Market Share by Application in 2020

The global hydrogen market in 2020 was approximately 70 million metric tonnes (**MMT**) with 76% produced from natural gas via SMR, 22% through coal gasification (primarily China), and 2% using electrolysis.

The global hydrogen market is expected to expand at a CAGR of 6.6% and is projected to reach US\$289.234bn in 2030 as governments continue to introduce policies which is expected to see an upsurge in hydrogen demand, thus boosting market growth.

The global hydrogen revenue market share by region in 2020 is set out below in Figure 3.

## Global Hydrogen Revenue Market Share



**Figure 3: Global Hydrogen Revenue Market Share by region in 2020**

The hydrogen market in North America is estimated to account for a revenue share of 19.8% in 2020 and is expected to register a CAGR of 6.7% by 2030.

The market in Europe is estimated to be valued US\$27.247bn in 2020 and register a revenue share of 17.6%. The hydrogen market is expected to reach a value of US\$49.799bn and register a CAGR of 6.3% between 2021 and 2030.

The market in APAC is estimated to be valued US\$56.197bn in 2020 and register a revenue share of 36.3%. The hydrogen market is expected to reach a value of US\$111.397bn and register a CAGR of 7.3% between 2021 and 2030.

Synergen's business development focus will initially be in APAC, North America and South African development region (refer to Section 6.5.1 for further detail).

### Drivers for global hydrogen market

The key drivers for growth of the global hydrogen market are expected to be as follows:

- (a) Increasing awareness concerning the reduction of carbon emissions, is a significant factor increasing the growing demand for hydrogen gas over the next decade.

- (b) Various industries including, metals, glass and semiconductor production are increasing the number of applications presently using hydrogen as these industries seek decarbonisation strategies in their respective production processes.
- (c) The petroleum industry requires a considerable amount of hydrogen to process crude oil into refined fuels, particularly eliminating sulphur from diesel. Continued growing demand in the refinery business will continue to increase hydrogen demand.
- (d) Increasing consumption of hydrogen in the chemical industry is expected to continue, particularly for the production of fertilizers. The petroleum industry is increasingly seeking ways to reduce their carbon emissions or seek carbon offsets.
- (e) Hydrogen compounds have various applications in the treatment of water, such as in pre-treatment and advanced oxidization techniques.
- (f) Increasing demand for these services, which is expected to drive a significant increase in the demand for hydrogen over the next decade.

### **Opportunities in the global hydrogen market**

Opportunities and momentum in the global hydrogen market include:

- (a) Growing political momentum is occurring as a result of climate change concerns, with several leading economies now focused on the formulation of policy strategies necessary to promote the development of hydrogen technologies. Such policy formation is expected to drive the usage and adoption of new hydrogen technologies, resulting in an increasing up take and usage of hydrogen across the broader economy.

More than 35 countries, including United States, Australia, the United Kingdom, the European Union, Canada, China, Japan, South Korea and India have announced regulatory and policy developments to support the growth of hydrogen technology.

- (b) Hydrogen used for the purpose of power generation and storage, is expected to create substantial opportunities for additional hydrogen production, particularly when combined with renewable power. Synergen's heads of agreement with TLOU Energy is an example of such opportunities. Refer to Section 6.5.1 for further detail.
- (c) Utilising existing infrastructure, such as natural gas grids, can provide significant opportunities to create and scale-up low-carbon hydrogen demand, particularly when combined with methane pyrolysis to produce hydrogen. Policies and regulations such as carbon offset programs and renewable fuel standards, support hydrogen blending in the gas grid. Utilising gas infrastructure supported by government policy is expected to substantially increase clean hydrogen demand. Utilisation of existing gas pipelines and using Synergen's hydrogen production process for carbon offset schemes offers immediate business development opportunities for Synergen.

- (d) Respective governments of countries such as, the United States, China, and Japan are taking considerable measures to increase the usage of hydrogen-powered vehicles. Complimentary subsidies encouraging the purchase of fuel cell electric vehicles is expected to further increase hydrogen demand over the next decade, particularly in the heavy transport sector.
- (e) Energy security, resiliency and economic prosperity can all be enhanced through:
  - (i) sourcing and producing hydrogen from multiple resources including natural gas, biomass, waste plastics, and other recyclable materials;
  - (ii) having hydrogen widely available for the chemical and petroleum industry;
  - (iii) using clean or green hydrogen in transportation, and power generation; and
  - (iv) using hydrogen in large scale storage facilities to drive turbines to enable grid stability and reliability with renewable power generation.

### Potential applications for hydrogen usage

In addition to the current hydrogen uses, new uses for a clean energy system are set out in Figure 4 below.

Types of Application	Application	Long Term Potential Scale		
		HIGH	MEDIUM	LOW
<b>Major Hydrogen Uses Today</b>	Chemical (ammonia and methanol)	●		
	Oil Refineries and Biofuels		●	
	Iron and Steel (blending in DRI)			●
<b>New Hydrogen Uses for a Clean Energy System</b>	Buildings (conversion to 100% hydrogen)	●		
	Buildings (conversion to 100% hydrogen)	●		
	Road Freight		●	
	Buildings (blending in the gas grid)			●
	Iron and Steel (conversion to 100% hydrogen)	●		
	Aviation and Marine Transport	●		
	Electricity Storage	●		
	Flexible and Back-up Power Generation		●	
	Industrial High-Temperature Heat			●

Figure 4: Potential Applications for Hydrogen Use

## Transition; the role of hydrogen in a decarbonising economy

Synergen's clean hydrogen production process has the opportunity to be at the centre of the hydrogen revolution and transitioning to a decarbonised economy.

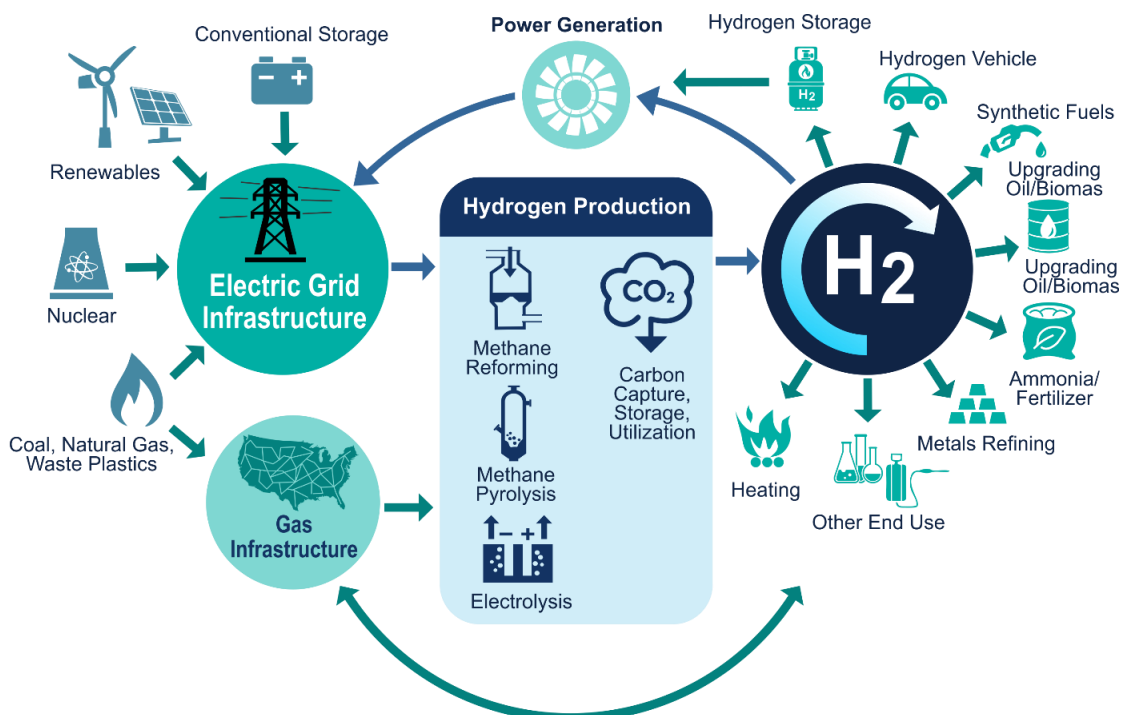


Figure 5: Integration of Fossil Fuel and hydrogen to transition the Economy<sup>2</sup>

## Potential hydrogen demand by 2050

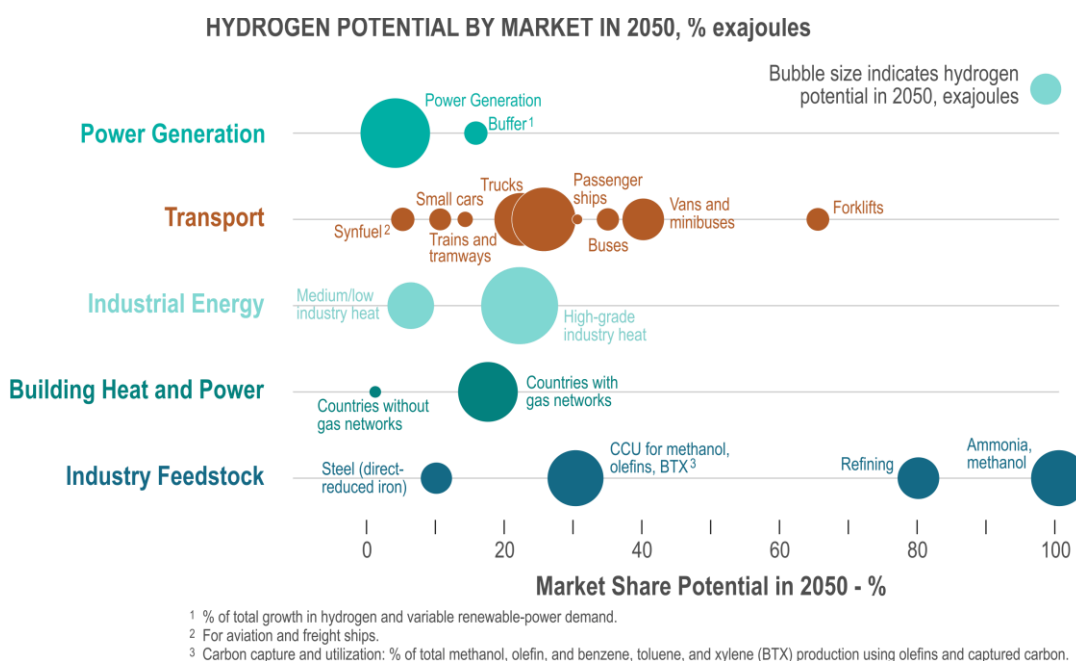
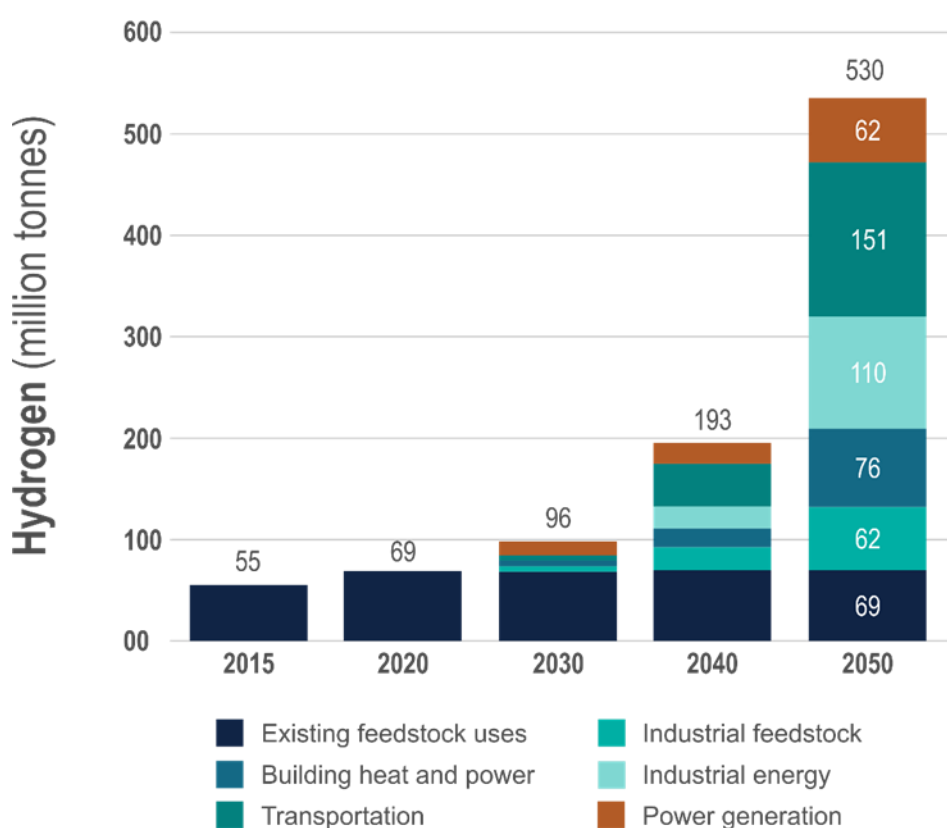


Figure 6: Hydrogen potential by market in 2050<sup>3</sup>

<sup>2</sup> Source: U.S. Department of Energy, Office of Fossil Energy, "Hydrogen Strategy Enabling a Low-Carbon Economy" 2020.

<sup>3</sup> Source: U.S. Department of Energy, Office of Fossil Energy, "Hydrogen Strategy Enabling a Low-Carbon Economy" 2020.

## Global Demand Supplied by Hydrogen (million tonnes)



### Hydrogen production technology comparison

Water electrolysis and steam methane reforming are the two well-known processes of hydrogen production (refer to Section 5.1.1 above for further detail). Currently, water electrolysis (green hydrogen) is expensive, while steam reforming produces significant CO and CO<sub>2</sub> emissions. These two factors are restricting the use of hydrogen in most of the developing countries across the world.

### Current estimated Hydrogen Production Cost (US\$/kg) comparison:

Hydrogen Production Path	Cost Estimate (US\$/kg)	Capex Estimate (US\$M)	Feedstock
SMR w/o CCS	US\$2.08	US\$180.7	Nat Gas
SMR w CCS	US\$2.27	US\$226.4	Nat Gas
Wind Electrolysis	US\$5.96	US\$499.6 to US\$504.8	Water
Solar Thermolysis Electrolysis	US\$5.10 to US\$10.49	US\$421 to US\$22.1	Water
Solar PV Electrolysis	US\$5.78 to \$23.27	US\$12.0 to US\$54.5	Water

**Assumptions:** To qualitatively assess the costs derived from each hydrogen production (renewable and fossil fuel based) method, variables such as, feed stock and capital investment cost, and hydrogen production cost (per kg of hydrogen) have been shown. There are some uncertainties regarding the cost of hydrogen production. This cost is strongly affected by the production technology's advancement level, availability of existing infrastructure, and the feedstock price, which can vary considerably. Business models need to be assessed on a case by case basis. Costs are quoted on a centralised / undistributed production basis. Costs of distribution are estimated to be circa US\$4/kg.

Synergen's hydrogen production process main inputs are natural gas and electricity, so production costs are dependent on feedstock prices at the production site. Nevertheless, in many jurisdictions domestically and internationally, Synergen's current estimated distributed<sup>4</sup> cost of clean hydrogen production is commercially competitive with alternative sources of grey hydrogen, and currently significantly below green hydrogen. As the cost of renewable power declines, so too will the production cost of Synergen's clean hydrogen.

## Competitive environment

The competitive environment for hydrogen is complex and dominated by incumbent major SMR players producing grey hydrogen, with new clean hydrogen entrants having to deal with a fragmented high number of end users. The competitive environment is expected to remain high, however new carbon free technologies offer new possibilities for end users to reduce their carbon footprint.

As many countries are starting to embrace new hydrogen technologies, end users are being provided with a range of options to choose from depending on purity, carbon footprint and competitive pricing.

Synergen's hydrogen production process currently offers potential customers clean hydrogen at competitive prices with zero carbon emissions.

### 5.1.2 Solid Carbon Market

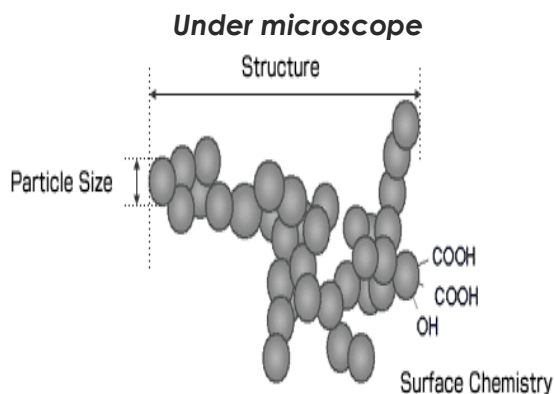
Synergen's modular clean hydrogen production system produces both hydrogen and solid carbon, otherwise referred to as carbon black, which is a valuable industrial commodity.

## Background

The global carbon black market was valued at US\$15.5 billion in 2020, accounting for nearly 14 million metric tons in 2020, and the market is projected to reach \$22.0 billion, growing at a CAGR of around 5.15% between 2021-2026.

Carbon black is a form of crystalline carbon, which contains 95% or higher of pure carbon and enhances the physical and mechanical properties of materials, making the end product more effective.

## Carbon Black



<sup>4</sup> Assumption: Synergen's process can be located at the point of the end user. In such instance, costs can be considered to be on a distributed basis for comparative purposes. Production costs depend on gas and electricity prices available at the production process site.

Observing carbon black particles under the electron microscope shows that they have a complicated structure, with some spheric particles being fused together.

The size of spheric particles is called "particle size," and the size of the particle chain is called "structure." Various functional groups such as the hydroxyl or carboxyl group are found in the surface of carbon black, and their amount or composition is called "surface chemistry." These three - "particle size," "structure," and "surface chemistry" - are the basic properties of carbon black, and together are called the three main characteristics. Our production process is known to produce fine carbon black, graphite and carbon nanotubes (a form of graphene).

Carbon black is graded and priced on these properties. Carbon as carbon black and graphite have well established markets. Carbon black is used as a tyre input (wear resistance and pigment), while graphite is the single largest input to lithium (and many other) batteries. As at September 2021, carbon black had a world market price on the order of US\$800-\$1,1650/tonne averaging approximately US\$1,350/tonne while graphite commands higher prices.

## **Production**

Carbon black is produced with the thermal decomposition method or the partial combustion method using hydrocarbons such as oil or natural gas as raw material.

The characteristics of carbon black vary depending on manufacturing process, and therefore carbon black is classified by manufacturing process.

Carbon black can be segmented by process type, including:

- (a) furnace black;
- (b) channel;
- (c) acetylene black;
- (d) lamp black;
- (e) bone black; and
- (f) thermal black.

The furnace black segment was the highest contributor to the market between 2016 to 2021. Surge in use of furnace black process for rubber reinforcement is expected to drive the future growth of the market for the next five years. In addition, this process is used to produce colour pigments in cosmetics and increase use of it is expected to further boost the market growth.

However, these traditional processes, such as furnace black, used in the production of carbon black, can release harmful air pollutants and generate significant greenhouse gas emissions. Emissions from carbon black manufacture include carbon dioxide, particulate matter, carbon monoxide, organics, nitrogen oxides, sulfur compounds, polycyclic organic matter, and trace elements.

Synergen's proprietary methane pyrolysis process using renewable energy produces clean hydrogen and clean carbon black, effectively decarbonising (i.e. zero carbon gas emissions) not only the hydrogen production but also the production of carbon black. Existing carbon black production processes are estimated on average to emit 2.3 kg CO<sub>2</sub>/kg carbon black.

## Trends and opportunities

Carbon black is used in manufacturing tyres, plastics, industrial rubber products, printing inks, and toners, insulating wires and cables. Moreover, it is used in the production of a wide range of rubber products and pigments.

The tyres and industrial rubber products application is the largest application segment of the carbon black market, with around 75% of the market share. The other segments each make up approximately 5% of the market share.

The global tyre production volume reached 16.8 million metric ton in 2019. Moreover, the total global tyre industry volume is expected to reach 2.75 billion units by 2024 from 2.36 billion units in 2019. Carbon black makes up approximately 30% of a tyre.

Factors that are expected to drive the growth of the carbon black market are surging demand for carbon black from tyre and construction and manufacturing industries, where it is used to provide strength to industrial rubber compounds and other equipment. In addition, it has physical properties such as colour stability, solvent resistance and thermal stability, owing to which it is widely used in paint and coating industries. However, fluctuations in raw material prices, increase in use of silica as substitute, and environmental concerns associated with the manufacturing of carbon black are expected to restrain the growth of the market in upcoming years. Conversely, increase in demand for carbon black due to its UV protection and conductive properties in plastics is expected to create new opportunities for the growth of the market.

Depending on grade, the market is divided into specialty grade and conductive segments. The specialty grade segment was the highest contributor to the market. Specialty carbon black is high-end refined carbon black manufactured from furnace black, channel black, acetylene black, and lamp black process. For manufacturing specialty carbon black, hydrocarbon is burned in limited air supply. Increase in use of specialty carbon blacks in pigmenting, UV stabilizing, and conductive agents is expected to drive the growth of the market.

While the tyres segment is the highest contributor to the market; the plastics segment is estimated to grow with the highest CAGR over the next decade.

Carbon black produced from Synergen's clean hydrogen process, offers customers a new source of greenhouse gas emission free carbon black.

## 5.2 PFAS Contamination Treatment and Destruction

### Background

**The problem with current PFAS treatments is that none actually break down or destroy the PFAS molecules. Current techniques predominantly involve shifting the contamination from one location to another**

PFAS (per- and poly-fluoroalkyl substances) is a group of manufactured chemicals that have been used since the 1950s. This family of chemicals, with a seven decade legacy of use, are resistant to oil, grease, water and heat and as a result have become ubiquitous in modern day living. PFAS chemicals are used in a variety of military, industrial and commercial applications including non-stick cookware (for example, Teflon), fabric, furniture and carpet stain protection applications (for example, Scotch guard), food packaging (for example, fast food wrapper, pizza boxes, microwave popcorn bags), plastic drink bottles, clothing (for example, parkas, boots and other shoes) and many other industrial processes.

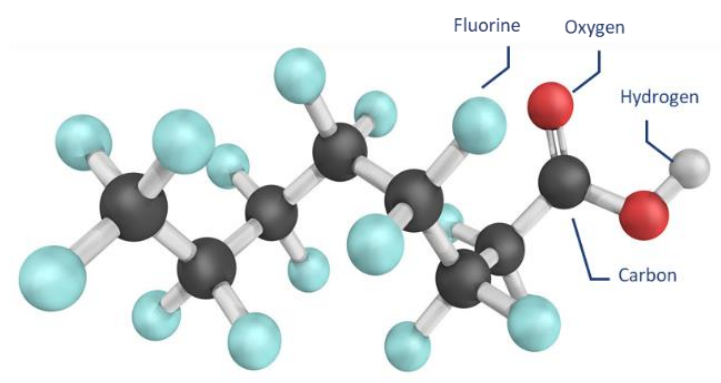
Until around 2012, PFAS compounds were also present in firefighting foam which was used for decades across the globe, particularly at airports and military installations.

Sources of PFAS are set out in Figure 7 below.



**Figure 7: PFAS Sources**

### **“PFAS - The forever chemical”**



**Figure 8: PFAS: Fluorine-rich long-chain molecules, many of which are dangerous to human and ecological health**

The carbon fluorine bond is amongst the strongest bonds in chemistry, and do not breakdown in nature. Hence PFAS compounds are very stable chemicals that do not have a natural or remediation process which means toxins stay at contaminated sites indefinitely and can bioaccumulate through food chains. These chemicals are commonly referred to as “forever chemicals”. What's more, these compounds are highly mobile, meaning they will eventually reach groundwater levels in soil, and then travel with the groundwater from one location to another which has the potential of spreading the contamination further.

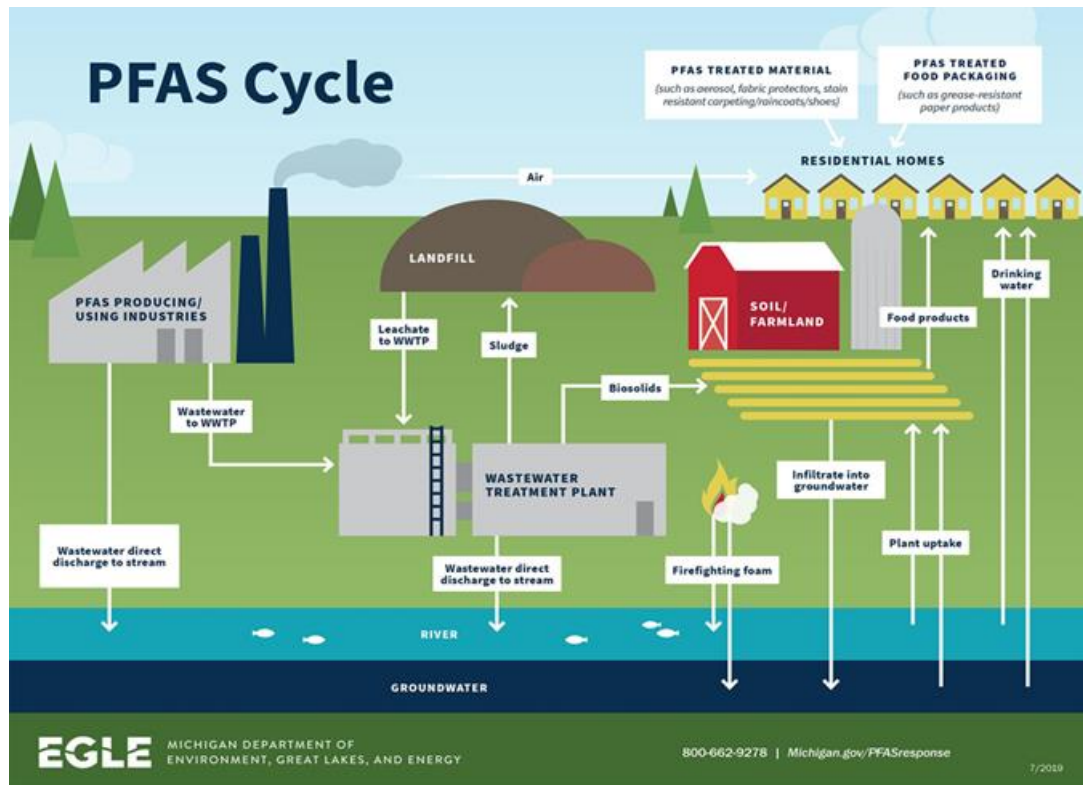


Figure 9: PFAS Cycle<sup>5</sup>

The key attributes that make of PFAS substances so problematic is their mobility via surface water movement and subsequent entry into ground water combined with bio-accumulation of these substances with the presence of these compounds in food that humans and animals consume.

Contamination pathways include:

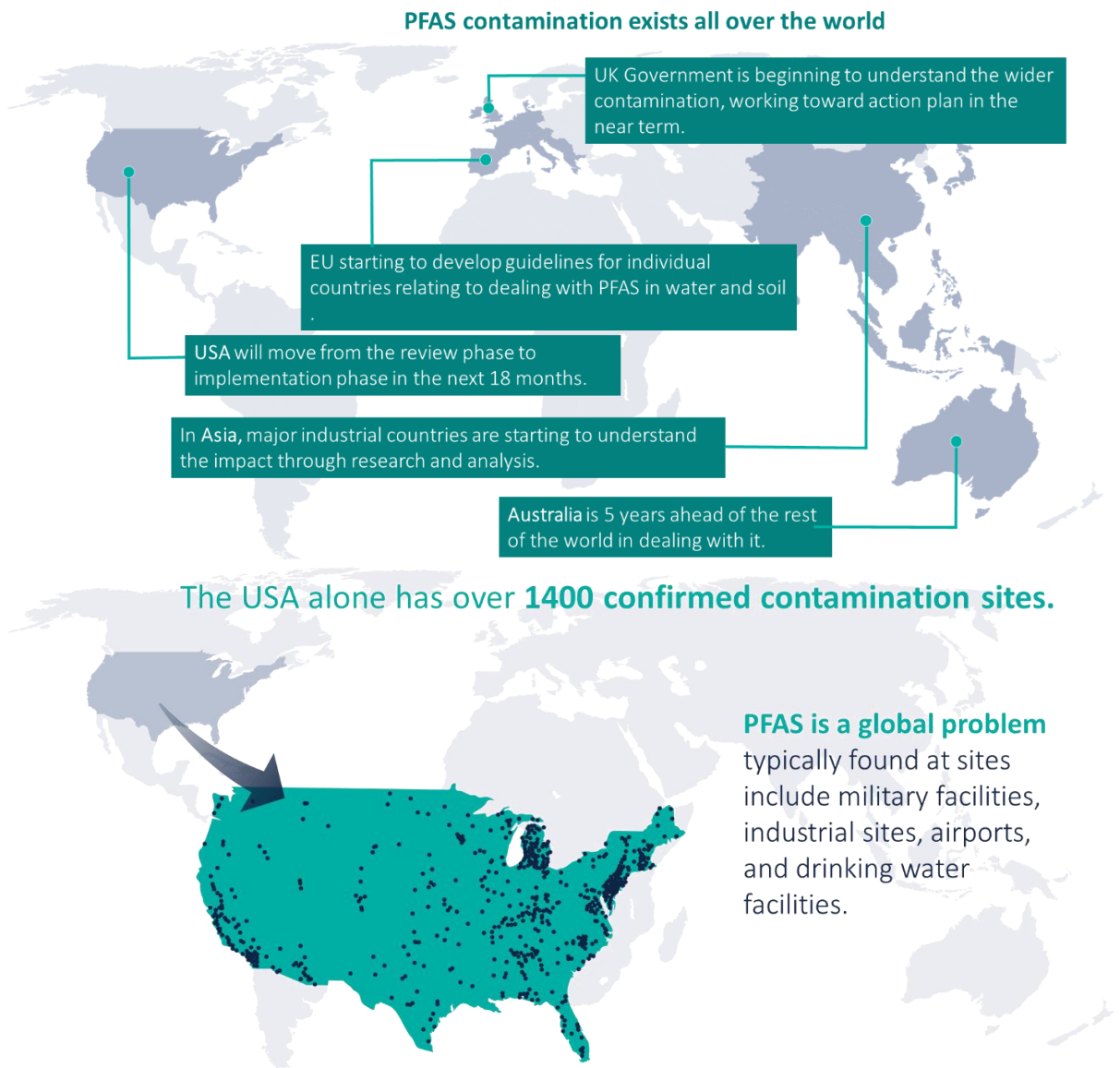
- (a) absorption by soils and sediments;
- (b) leaching from soil and infiltration into groundwater;
- (c) groundwater discharge into rivers and drinking water;
- (d) bioaccumulation in the food chain, examples include seafood and cattle;
- (e) accumulation and discharge in the sewerage system;
- (f) wastewater discharge from treated effluent;

<sup>5</sup> Source: Michigan Department of Environment, Great Lakes and Energy 'IPP PFAS Initiative' accessible from [https://www.michigan.gov/egle/0,9429,7-135-3313\\_71618\\_3682\\_3683\\_3721-531869--,00.html](https://www.michigan.gov/egle/0,9429,7-135-3313_71618_3682_3683_3721-531869--,00.html).

- (g) uptake by plants and pasture when irrigated with contaminated water;
- (h) uptake by livestock by grazing contaminated plant material;
- (i) uptake by people and animals when eating contaminated garden produce; and
- (j) uptake by people when consuming contaminated meat, dairy and animal products (for example, milk and eggs).

The health dangers from PFAS— and public awareness have risen dramatically over the past few years. While the extent of PFAS contamination and the concentrations that produce adverse health effects in the human body are in their early stages, the evidence and growing concern by expert opinion that PFAS exposure is a serious risk for humans and wildlife, will ensure the PFAS contamination issue will endure for years, if not decades, requiring responsible treatment and remediation of contaminated water and sites.

PFAS substances have been linked to various cancers, liver and kidney damage, birth deficiencies and other negative health conditions.



**Figure 10: Size of potential market: PFAS, it's a global problem**

As of Q1 2020, approximately 1,400 sites have been identified in the United States in 49 states with varying amount of PFAS. Identifiable PFAS impacted sites are proliferating at drinking water facilities, military bases, or other sites surrounding population centres and industrial hubs.

### **Opportunities and drivers of growth**

In the US, approximately 50,000 water systems were evaluated and over 1,400 sites have PFAS contamination issues. While the number of states and systems addressing PFAS is limited to 29, more states will need to adopt policies for an acceleration of expenditure to occur.

However, PFAS contamination has sparked legal action, both in Australia and the US, resulting in class action settlements of AU\$212m in Australia, US\$671m in West Virginia USA in 2017 and \$850m in Minnesota USA in 2018. As litigation spreads, issues of water system ownership and liability for contamination are expected to be contentious due to the long-term legacy of PFAS use. Such action is forcing water treatment utilities to seek remediation techniques, for identified and known PFAS contamination.

Estimates in 2020, had capital and operating expenditure on implementing PFAS remediation technology at >US\$3.0bn annually by 2030 in the US alone.

These estimates were made prior to the Biden-Harris Administration implementing US Infrastructure Legislation in November 2021 allocating US\$10billion to assist cleaning up PFAS contaminated drinking water.

Synergen's business strategy is to specifically target water treatment facilities and utilities for the concentration, removal and destruction of PFAS at water treatment sites (refer to Section 6.5.2 for further detail).

### **Political momentum for PFAS solutions**

In Australia, responsibility for regulation of industrial chemicals is shared across the Commonwealth, states and territories.

In response to the growing public concern and media coverage of the PFAS problem, in 2019 the Commonwealth Government began a coordinate intergovernmental response to the PFAS issue resulting in the implementation of the following guidelines:

- (a) the PFAS Contamination Response Protocol - provides information on roles and responsibilities when responding to PFAS contamination;
- (b) the PFAS National Environmental Management Plan (NEMP) - outlines consistent environmental management requirements from regulators across Australia;
- (c) the PFAS Information Sharing, Communication and Engagement Guidelines - contains information on how governments should share information about PFAS.

While not particularly prescriptive on how to treat and remove PFAS contamination, as the range of treatment facilities and technology options commercially available to remove and/or destroy PFAS compounds is limited, the Government guidance puts the onus on the responsible person or organisation to take all reasonable and practicable measures to prevent or minimise potential environmental harm from PFAS-related activities and contamination. Therefore both private and semi government organisations cannot simply ignore PFAS and must begin to deal with the problem.

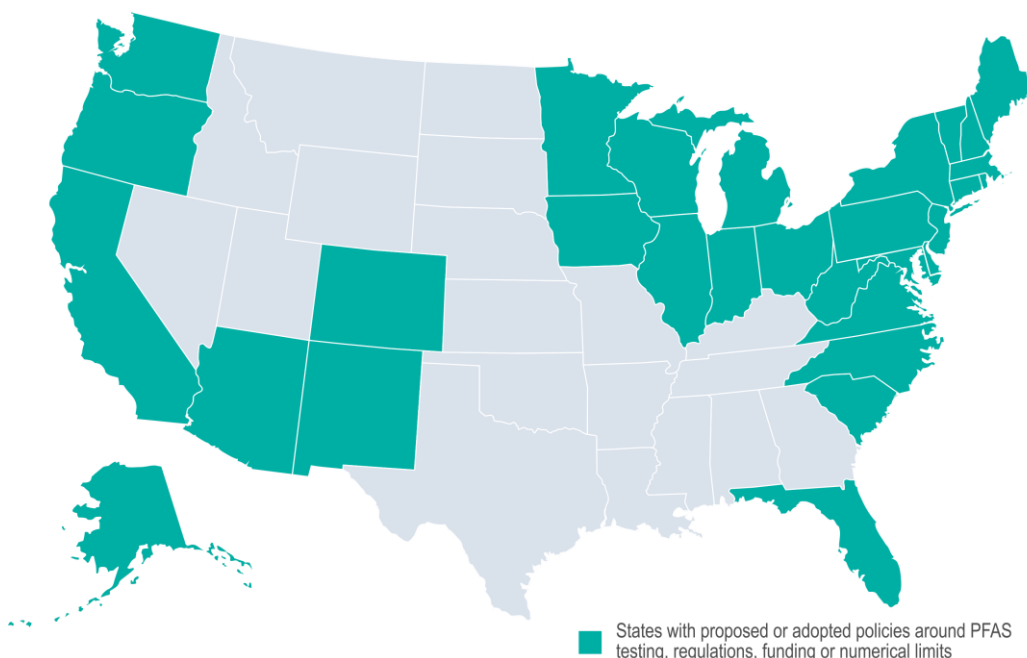
In Australia, there is currently no maximum contamination limit, but the the Australian EPA has recommended an advisory level not above 70 parts per trillion (**ppt**) for the sum of perfluorooctanoic acid (**PFOA**) and perfluorooctanesulfonic acid (**PFOS**).

In the US, the US EPA issued a health advisory limit in 2016 of 70 ppt for PFAS contamination, which was an 88% reduction from previous levels.

Even so, until recently the US government response was more fragmented than Australia, with policy responses being driven on a State by State basis.

States to act tended to be those States that have been highly affected due to industry and military installation legacies and establishing testing and regulatory regimes at lower concentrations than the EPA health advisory. Michigan and New Jersey, are examples of States which have identified a high number of PFAS sites due to the implementation of such policies.

As at June 2020, 29 US States had implemented policy efforts to address PFAS, including testing requirements and prohibition on specific materials for packaging, manufacturing and firefighting foam.



**Figure 11: US States with proposed or adopted PFAS policies**

In November 2021, the political momentum in the US swung dramatically towards dealing with the PFAS contamination problem, with implementation of the Biden-Harris Infrastructure Investment and Jobs Act which includes US\$10 billion to address PFAS in drinking water. This has occurred just behind the US EPA announcing in October 2021, its PFAS Strategic Roadmap – EPA's Commitment to Action 2021-2024, which outlines a comprehensive strategy over the next 3 years to control PFAS and hold polluters accountable.

With these favourable tail winds, Synergen is pursuing a business development strategy in the United States of partnering with US engineering and procurement companies specialising in water treatment. Synergen has engaged Black and Veatch to provide preliminary engineering design and support with the aim of developing projects in the United States. Refer to Section 6.5.2 for further detail.

### **Competitive environment for PFAS treatment and remediation**

Treatment and remediation to destroy or remove PFAS from contaminated materials, including solids and liquids, represents an enormous global opportunity.

However, remediation and treatment can be impeded by:

- (a) the resistance of PFAS to common physical, chemical, and biological processes;
- (b) the solubility and mobility of PFAS in the environment;
- (c) the potential for production of other PFAS during the treatment process; and
- (d) the generation of additional contaminated by-products and wastes if appropriate precautions are not implemented.

Listed below is the guidance of the preferred approaches to treatment and remediation of PFAS:

- (a) Separation, treatment and destruction. This involves on-site or off-site treatment of the PFAS contaminated material so that it is destroyed, removed, or the associated risk is reduced to an acceptable level.
- (b) On-site encapsulation in constructed stockpiles or engineered storage and containment facilities, with or without chemical immobilisation.
- (c) Off-site removal to a specific landfill cell. This may or may not include immobilisation prior to landfill disposal, noting that the conditions in the landfill may reverse or diminish the immobilisation chemistry in ways that are difficult to predict.

However, the range of treatment facilities and technology options commercially available to remove and/or destroy PFAS compounds is currently limited.

The following techniques are the common approach to separation and treatment of water:

Treatment Technology	Concentration	Long Chain PFAS	Short Chain PFAS	Destruction
Granular Activated Carbon	More effective at lower concentrations than Ion Exchange	Treats >90% long chain PFAS	Less effective on short chain PFAS unless replaced frequently	No
Ion Exchange Resin	More effective at higher concentrations	Treats >90% long chain PFAS	Can be more effective than GAC	No
Reverse Osmosis	Suited for all concentrations	Treats >95% long chain PFAS	Can be effective to >95% short chain PFAS	No
Synergen PFAS technology	Suited for all concentrations	100% long chain PFAS	Can be effective to 99% short chain PFAS	Yes

### Granular Activated Carbon Treatment (GAC)

A filter with granular activated carbon (**GAC**) is a proven technique to absorb and remove certain chemicals and organic compounds, from water. Adsorption is both the physical and chemical process of accumulating a substance, such as PFAS. GAC has been shown to effectively remove greater than 90% of PFAS from drinking water when it is used in a flow through filter technique. Even so, PFAS can still be present after treatment. GAC works well on longer-chain PFAS like PFOA and PFOS, but is less effective on short chain PFAS like PFBS PFBA.

### Ion exchange treatment

The ion exchange chemical process works by removing dissolved ionic contaminants from the water. In this process an ion exchange resin is added to the water. These resins are highly porous materials that are acid, base, and water insoluble. The ion exchange resins attract and hold the contaminated materials from passing through the water system. Negatively charged ions of PFAS are attracted to the positively charged ion resins. While ion exchange treatment is greater than 90% effective for PFAS removal, the resins are expensive, hence the treatment typically has a higher cost than GAC.

### High-pressure membranes

High-pressure membranes, such as nanofiltration or reverse osmosis, have been shown to be effective at removing PFAS.

Research shows that these types of membranes are typically more than 90% effective at removing both long chain and short chain PFAS.

Using high pressure membrane, typically approximately 80% of the water passing through the treatment system, passes through the membrane as effluent (treated water). Approximately 20% of the water is retained as a concentrated waste. When treating water for PFAS contamination, this concentrated contaminant is extremely difficult to treat or dispose.

Existing water treatment techniques (as listed above) are relatively expensive, and all have contaminated material which must then be destroyed or landfilled. Landfilling such waste product simply moves PFAS from one location to the other.

The only alternative commercial destruction technique is via incineration which typically does not reach high enough temperatures for full destruction of PFAS to occur and can produce dioxins more harmful than the PFAS compounds.

Disadvantages of existing high-temperature destruction process:

- (a) fluorine cannot be easily oxidised and there are not enough protons available in high-temperature and oxidation processes to stabilise fluoride ions; and
- (b) while conventional incineration will break carbon-fluoride bonds in PFAS at  $>2000^{\circ}\text{C}$ , these unfortunately recombine as soon as the temperature drops again, leaving behind toxic fluorocarbons.

In comparison, Synergen's PFAS water treatment and destruction process removed greater than 99.9% of PFAS from the treated water, with the resultant concentrates being 100% destroyed in Synergen's plasma destruction process. Refer to Section 6.5.2 for further detail.

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## 6. COMPANY OVERVIEW

### 6.1 Background

The Company was incorporated on 4 December 2007 as an Australian unlisted public company for the primary purpose of developing specialist applications using the Company's plasma technology (the **Thermal Plasma Technology**), which can be applied to revitalise "dirty" industries, including energy production and waste management, with green economic solutions. Presently, the Company has one subsidiary, Treata Environmental Pty Ltd (referred to as "**Synergen Environmental**"), which specialises in PFAS (per- and poly-fluoroalkyl substances) water treatment and destruction (refer to Section 6.7) for details of the Company Group structure at listing).

Synergen is an Australian-owned and operated business made up of a team of scientific minds with more than 80 years of collective experience working within the global resources industry. Founders, Christopher Dunks and Dr Geoff Duckworth, have developed the Company's Thermal Plasma Technology over the last 14 years.

Through a combination of research, innovative ideas, trial and error in the lab, extensive field trials, and close collaboration with our key equipment supplier, the Company has proven its ability to leverage its Thermal Plasma Technology applications platform into multiple high value applications, including:

- (a) hydrogen and solid carbon production via methane pyrolysis;
- (b) PFAS water treatment and complete contaminant destruction;
- (c) hazardous and toxic waste destruction; and
- (d) waste to energy applications including municipal solid waste, tyres and organics.

### 6.2 History of Company Activities

#### 6.2.1 Synergen NaCN Plant and technology development

Originally, Synergen was incorporated to develop technology for a modular sodium cyanide process plant using plasma technology, so sodium cyanide (NaCN) could be made at a mine site, improve environmental and safety issues and meet the precise needs of the world's gold, silver and base metal mineral processing operations.

The Synergen modular cyanide plant concept was first developed by Synergen's Technical Director and founder, Dr Geoff Duckworth in the early 1990's following Dr Duckworth's work experience both in North America in association with Westinghouse Technology and in Australia as Chief Process Engineer on Minproc's Sodium Cyanide plant development in Gladstone.

In 2008, Synergen commissioned the University of Queensland (**UQ**) to build a small test facility using a small plasma torch and reactor that was made in the University's workshop. This was a non-optimised reactor that was built only to prove that sodium cyanide could be made in this manner. This was successful, with the test results confirming that a pilot plant should be built to clarify reagent consumption and plant efficiencies.



**Figure 12: Dr. Pradeep Shukla standing next to the plasma process facility built at UQ's Long Pocket facility.**

Professor Victor Rudolph at UQ led the test work program on behalf of UniQuest (the main commercialisation company of UQ). Following this successful operation, Synergen developed a pilot test operation also at the UQ in 2011 and 2012. This operation was focused on the use of commercially available plasma equipment and was structured to provide the team with proof that the original process operation concept would scale up effectively and work economically.

The pilot plant operation was successful, with the team running over 80 experiments and generating a NaCN yield that would be considered "economic" in the global supply market. Throughout this experimental process, the team optimized the plasma production process, understood plasma plant operations, and generated results that confirmed the next phase of development.



**Figure 13: Pilot Plant skid being assembled and pre-commissioned**

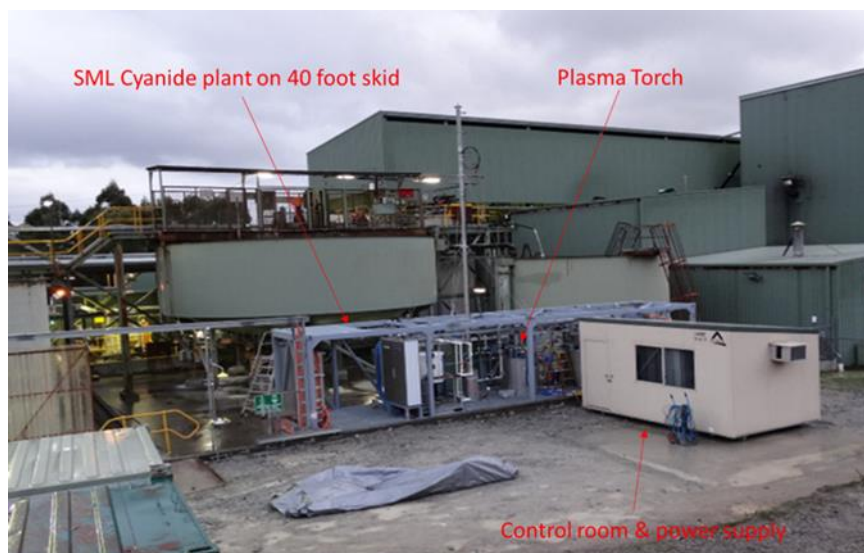


**Figure 14: Synergen pilot plant being lowered into position at Henty Gold Mine in Tasmania**

The ensuing development process resulted in the invention of the Company's Synergen NaCN plant where cyanide is produced on site at a mine, where the chemical is needed, while also removing transportation risk of a hazardous chemical and improving environmental and safety outcomes.

During this development period, the Synergen NaCN plant has undergone more than six years of rigorous development and testing, including 12 months at an operating environment located at the Henty Gold Mine in Tasmania.

The Synergen NaCN plant is a modular, stand-alone production plant for the manufacturing of sodium cyanide. Each plant is the size of a standard 40-foot shipping container and is readily transportable.



**Figure 15: Synergen pilot plant operating at Henty Gold Mine**

The Company believes the Synergen NaCN plant has the potential to eliminate a range of dangerous activities associated with the use of cyanide such as transportation, on-site handling, and maintaining large cyanide inventories.

The plant's technology has been through the Patent Cooperation Treaty (**PCT**) patent process and full patents have been granted in Australia, USA, Canada, Germany, Belgium, Turkey, Mexico, South Africa and the two African patent regions of OAPI and ARIPO. Please refer to Section 6.6 and the Intellectual Property Report at Annexure B for further detail.

Whilst further development of the Synergen NaCN plant is not a commercial priority of the Company, the development work undertaken, and know-how generated in its creation, directly lead to both the invention and application of the Synergen clean hydrogen production process and the PFAS water treatment and destruction process explained below.

### 6.2.2 Thermal Plasma Application Development

Synergen's 14 years of test work and development for the Synergen NaCN plant has given the Company's management team extensive experience and knowledge to become global specialists in the applications of thermal plasma technology. As a result of the extensive test and development work conducted, management identified additional applications for the Company's plasma technology to provide beneficial solutions for a number of environmental issues.

Subsequent innovation, test work and development has led to multiple applications. Whilst mobile cyanide production was previously a focus of the Company and commercial opportunities exist, the two current priority applications for commercial development of the Company's technology are the **modular hydrogen production system** and the **PFAS water treatment and destruction system**. Both of these proprietary processes operate as a variation of the original portable, modular design concept conceived and proven with the Synergen NaCN plant.

### 6.3 Acquisition of Phoenix Solutions Co

On 28 October 2021, the Company entered into a binding share sale agreement in respect of the acquisition of 100% of the issued capital of Fluidyne Engineering Corporation trading as Phoenix Solutions Co, a Minnesota registered corporation operating in the field of plasma heating systems and plasma torch construction (**Phoenix**) with the Majority Common Stockholders of Phoenix (the **Acquisition Agreement**) (the **Acquisition**). The Acquisition forms part of the Company's strategy to vertically integrate its operations and will enable the Company to manufacture plasma heating systems and plasma torches incorporating its Thermal Plasma Technology. The key terms and conditions of the Acquisition Agreement are summarised in Section 10.3.1. Subsequently, the Company entered into binding agreements with each of the Minority Vendors, the terms and conditions of which are summarised in Sections 10.3.2 and 10.3.3.

Phoenix was founded over 50 years ago as Fluidyne Engineering Corporation (**Fluidyne**). At the forefront of aeronautical and aerospace research for more than 30 years, Fluidyne designed and built high temperature aeronautical facilities and conducted aeronautical product testing.

In 1993, Fluidyne reformed as "Phoenix Solutions Co" and became a leading supplier of plasma heating systems and plasma arc torches. Building on the long history of Fluidyne, Phoenix is the vanguard of innovation in the plasma heating industry.

Some milestones from Phoenix's history include:

- (a) 1993: Phoenix delivered its first plasma heating system to Kobe Steel, in Japan.
- (b) 2000: Phoenix became a globally significant supplier of plasma technology in the world.
- (c) 2002: Phoenix celebrated its 50th year and opened the Hutchinson Test Facility.
- (d) 2004: Phoenix demonstrated 2,300 hours of electrode life.
- (e) 2006: Phoenix began fabrication of corrosion-resistant collimators.

Since 2011, Phoenix has supplied its plasma heating systems to the Company.

The Board views the Acquisition as strategically important for a number of reasons, including but not limited to:

- (a) vertical integration and ownership of core technology;
- (b) adds valuable intellectual property (**IP**) and know-how to the Company's existing IP portfolio;
- (c) adds engineering, manufacturing and fabrication skills to the Company Group;
- (d) adds significant growth opportunities in hazardous waste destruction and waste to energy gasification applications; and
- (e) provides a central USA base of operations for addressing business development opportunities both in the US and Canada.

In addition, the Acquisition provides surety of supply of plasma torches for Synergen for its methane pyrolysis projects to produce clean hydrogen production (refer to Section 6.5.1 for further detail).

## **6.4 Business Overview**

The Company's main business undertaking is the development and production of its Thermal Plasma Technology that revitalise "dirty" industries, including energy production and waste management with green economic solutions. Upon listing, the Board considers that the merged entity of Synergen and Phoenix will be a leading global provider of plasma equipment and innovative applications using Thermal Plasma Technology.

Plasma is often referred to as "the fourth state of matter", along with gas, liquid and solid. Plasma is heated matter, where electrons are ripped away from the atoms forming an ionized gas. In such an environment, molecules are broken down to their base elements.



**Solid**

**Liquid**

**Gas**

**Plasma**

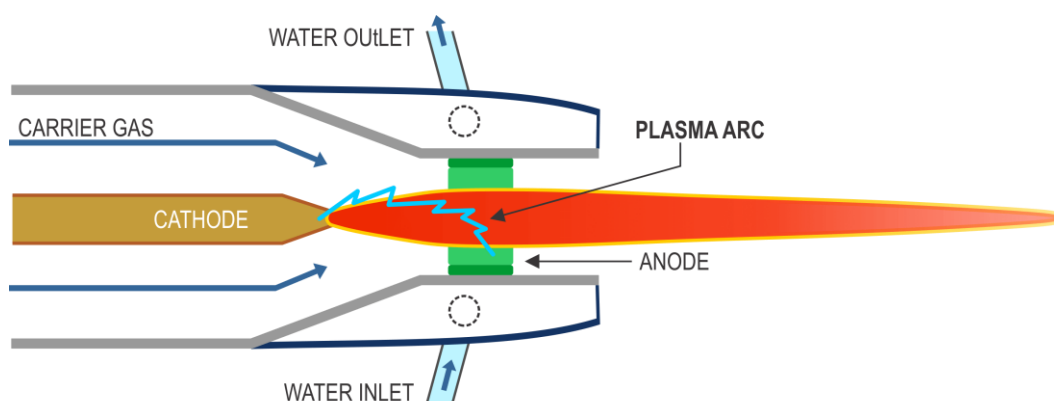
Synergen's IP and know-how is based around how to control this environment to split gases and liquids into their base elements and then reform or separate the elements into a desired form.

For example, in simple terms, the following are descriptions of the process experienced in two of Synergen's Thermal Plasma Technology applications:

- (a) **Hydrogen production:** The process starts with natural gas or methane ( $\text{CH}_4$ ) being fed into the plasma system which transforms the gas into its constituent parts being hydrogen ( $\text{H}_2$ ) and solid carbon (**C**) in the form of carbon black, graphene and/or carbon nano tubes). Hydrogen can then be sold as a carbon emission free fuel (where renewable energy is used to power the system), while the carbon can be sold into the global industrial commodity market for the various forms of valuable solid carbon (carbon black, graphite, graphene).
- (b) **PFAS Destruction:** Toxic PFAS matter is fed into the process as a liquid concentrate, the plasma system then breaks it down into the base elements before being reformed into inert gases and sodium fluoride, being a benign compound.

#### 6.4.1 Thermal Plasma Technology

At the heart of the Company's Thermal Plasma Technology is the plasma torch, also known as a plasma arc, plasma gun, or plasma cutter, plasmatron, which is a device for generating a directed flow of plasma or plasma jet.



**PLASMA TORCH SCHEMATIC**

Plasma technology has been used in commercial and industrial applications for decades including:

- (a) plasma cutting and plasma arc welding;
- (b) plasma spraying;
- (c) ash melting;
- (d) steel tundish heating; and
- (e) plasma waste pyrolysis.

The unique characteristics of plasma heating offer incredible opportunities for green technology, particularly when combined with renewable power sources. Plasma heating generates higher temperatures than oxygen burners or electric resistance heaters. Plasma heating can make vitrification and gasification cost-effective and eliminates nearly all the pollution encountered with combustion. By offering the ability to break down feedstocks to molecular levels while controlling the operating environment of the system, the Company Group's plasma heating technology represents a fundamentally new method of processing materials.

## 6.5 Business model

The proposed activities and business model of the Company Group on completion of the Acquisition and Public Offer are:

- (a) hydrogen and carbon black production – Synergen;
- (b) PFAS contamination treatment and destruction – Synergen Environmental;
- (c) plasma system equipment sales – Phoenix; and
- (d) customer consulting at the Hutchinson Test Facility.

### 6.5.1 Modular Hydrogen and Carbon Black Production

#### Background

The Company has modified its existing modular plasma skid technology (refer to Section 6.2.2 above) to economically produce clean hydrogen via methane pyrolysis. Methane pyrolysis utilises plasma technology to split natural gas or biomethane directly into its components of hydrogen and solid carbon. The Company has been developing this hydrogen production technology in various forms for the last 14 years.

Whilst the process of producing hydrogen via methane pyrolysis is not new, Synergen's technology is innovative, patentable, more efficient and superior to existing applications for the following reasons.

Synergen's proprietary methane pyrolysis process is driven through the use of **modular and scalable plasma heating systems** that provide very high energy density and allow a process of ionisation at very high temperatures to split methane into carbon and hydrogen. The process enables **100% conversion of the gas into hydrogen and solid carbon**, with **no green house gas emissions**. The final products are hydrogen and solid carbon. Synergen's technology can be powered from renewable and non-renewable technologies. If Synergen's

technology is powered by renewable energy, the hydrogen is produced completely free of carbon gas emissions, thus being **clean hydrogen**.

In short, Synergen's hydrogen production process can already produce clean hydrogen, with zero carbon dioxide or monoxide emissions, at economically competitive prices to replace hydrocarbon fuels.

Other reasons why the Board believe Synergen's hydrogen production system is innovative are as follows:

- (a) Synergen's technology is based on a modular, transportable, rapidly scalable platform, which has been in development for 14 years. The Company has completed pilot and small-scale commercial sized operations making hydrogen, acetylene and other chemicals. These tests were completed under managed conditions at the University of Queensland and at the Henty Gold Mine in Tasmania over extended time periods. This is the only way testing of this nature can be completed and can be considered comprehensive enough to move to full commercial design and scale up. Based on the results achieved, these pilot and small scale commercial sized operations are now being scaled up for full commercial operations. Synergen has executed a binding heads of agreement with TLOU Energy Ltd (ASX:TOU) (**TLOU**) (**TLOU HOA**) for a commercially scaled hydrogen plant intended to be operational in Botswana in 2022 (refer below for further detail regarding the TLOU HOA).
- (b) Synergen's technology can be used in both a temporary mobile hydrogen production platform and a permanent production facility.
- (c) As a temporary platform, Synergen's skid equipment is mobile and can be located at the gas well head or export flange from a natural gas resource. Once this resource is exhausted, Synergen's equipment can be quickly redeployed. As the production grows, additional skids can be added to boost outputs.
- (d) As a permanent model, Synergen's equipment can be built to be a permanent plant, and then additional trains added as required.
- (e) Synergen's plant footprint is relatively small and can be located close to the end customer. Examples of this could be a service station or bus/taxi hub for transport refuelling.

Initially, subject to securing commercial agreements, Synergen intends to own and operate two hydrogen production system projects via joint venture structures. These systems are expected to run at 1,350kg/day and produce 4,050kg of value-added carbon black product. Once all fabrication, construction and commissioning issues have been fully standardised, Synergen will seek to licence clean hydrogen production systems to interested parties. This capital light strategy will enable a quicker global rollout of the technology.

### **Contract for hydrogen production**

As set out above, the Company has entered into the binding TLOU HOA. TLOU is focused on delivering power projects to Botswana and sub-Saharan Africa, with an objective of carbon neutrality. The TLOU HOA envisages the construction and commissioning of a hydrogen and solid carbon pilot plant to be installed at the Lesedi Project in Botswana.

Pursuant to the TLOU HOA, the Synergen pilot plant will be constructed and tested in Queensland prior to transport to TLOU's Lesedi Project in the second half of 2022.

Assuming a successful pilot trial at Lesedi Project, the objective is to expand hydrogen gas production capacity of the joint venture with TLOU throughout the Southern African Development Community (**SADC**) region and potentially beyond, subject to mutual agreement.

TLOU's methane will be fed into the plant to be converted via a plasma torch into hydrogen and solid carbon and producing no greenhouse gas emissions when using renewable energy and with recycling of miniscule residual gases. In addition to methane as an input, electricity is required to power the plasma torch. TLOU intends to supply solar power to the plant which will assist in achieving carbon neutrality and ability to produce clean hydrogen and carbon black.

The hydrogen will be compressed and stored for use as a clean vehicle fuel as well as to produce electricity for the Lesedi gas to power project assisting with carbon neutrality objectives. The solid carbon will be transported by road to a point of sale. Design modifications are intended to be introduced with time to increase the value of the solid carbon products produced.

Please refer to Section 10.4.1 for a summary of the material terms and conditions of the TLOU HOA.

### **Carbon black development**

Part of the Public Offer proceeds will be used for solid carbon product development, including deliverable carbon black and the potential for high value synthetic graphite, graphene flakes and/or carbon nanotubes. Use of proceeds will include design and engineering and construction of carbon black separation units (i.e. graded carbon black, graphene flakes and carbon nanotubes) and safe material handling and packaging equipment for final product sales. In addition, research and development work will begin on upgrading the carbon black to high value synthetic graphite and or other high value products. Refer Section 6.9 for further detail.

## **6.5.2 PFAS Water Treatment and Destruction**

In addition to its hydrogen production technology, the Company has developed superior technology over a period of 14 years, to treat PFAS contaminated water and destroy the resultant PFAS concentrate. The Company's approach uses foam fractionation to separate PFAS chemicals concentrated from contaminated liquids (for example, concentrates, contaminated ground water, sludge water, waste dump leachate) and the Company's Thermal Plasma Technology used to ionise the PFAS concentrate, breaking the PFAS into gaseous base molecules, then reforming the gases into easily managed inert compounds. Via this two-step process, the PFAS molecule is completely destroyed, and residual water is cleaned to below EPA standard discharge levels.

Synergen's PFAS plant uses a similar modular, stand-alone equipment design as the Synergen hydrogen plant. The PFAS destruction application takes the Synergen standard platform, changes the type of plasma system used and changes the way the liquid containing PFAS is fed into the high temperature system to ensure destruction. The PFAS water treatment and destruction process has taken over 4 years to develop with Synergen's existing plasma technology know-how.

The PFAS plant is fully transportable which means Synergen is able to bring the plant to any contaminated site to destroy the toxins on-site.

Over the previous 12 months, the Company has achieved the following milestones and is now in the process of commercialising its PFAS technology:

- (a) **Destruction of aqueous film forming foams (AFFF)** – This is the original chemical created to make firefighting foam and is the main cause of the global PFAS issue. Firefighting training has been occurring for decades on airfields, in local communities, in facilities where hydrocarbons (fuel) has been stored. The training has meant foam is used, and this foam has then seeped into the ground where the PFAS molecules are absorbed onto soil and then migrate in groundwater systems if they are present. AFFF has been destroyed directly by Synergen's plasma system;
- (b) **Destroyed PFAS in groundwater concentrate** – This is a significant issue globally because of the sheer volume of water that needs to be treated initially by froth flotation to form a concentrate. Synergen's team has concentrated the PFAS in the groundwater and then destroyed the PFAS concentrate;
- (c) **Destruction of PFAS in waste water treatment plant sludge pond water** – This has been a major focus of Synergen's testwork. Every urban centre around the world will have PFAS in their waste water systems. Synergen's team has concentrated the PFAS in the wastewater and then destroyed the PFAS concentrate; and
- (d) **Destroyed PFAS in council waste dump leachate**– Leachate is the most difficult waste water pollutant to treat because it generally contains over 2,000 chemicals. Synergen's team has managed to isolate the PFAS molecules through flotation and has then destroyed the PFAS concentrate.

These milestones represent the majority of where PFAS is found in liquid form all around the world.

The Company has entered into the following PFAS destruction contracts:

(a) **Waste dump leachate from a municipal city council**

Synergen has signed a binding contract with an Australian municipal city council for a PFAS destruction test pilot plant at a local waste dump to process and destroy leachate sourced from this site. This dump is decades old, and as water filters from the surface through the legacy waste it picks up PFAS, transporting it into a sump, where the leachate gathers before being pumped to the regional wastewater treatment utility. The utility has refused to accept any PFAS into their treatment facilities, and the council is required to find a solution to remove it. This is the purpose of this project.

Synergen's initial test work has demonstrated Synergen's PFAS destruction technology destroys PFAS that has been concentrated by the Company's process.

Leachate chemicals are very complex and contain many unknown elements (over 2,000 different chemicals present), but when presented to Synergen's plasma system, everything is processed, decomposed with no dioxins or furans forming.

Councils have severe restrictions around discharge from waste dumps because of the high PFAS concentrations. The council has reviewed multiple other technologies and is now only involved with Synergen to finalise a contract for the destruction of leachate.

Successful trials will lead to a larger commercial sized plant processing up to 200,000 litres of leachate per day at multiple sites, and become the business development role model for waste dumps and water utilities globally.

Please refer to Section 10.4.2 for a summary of the material terms and conditions of the PFAS Destruction Agreement.

(b) **PFAS sludge water treatment and destruction projects**

The Company is also in negotiations with several other organisations in respect of both domestic and international PFAS water treatment and destruction projects.

### 6.5.3 Plasma system equipment sales - Phoenix

#### **Background**

As set out above, the Company has entered into the Acquisition Agreements under which it has agreed to acquire 100% of the issued capital of Phoenix from the vendors of Phoenix and convert existing promissory notes on issue in Phoenix to Shares. The Acquisition forms part of the Company's strategy to vertically integrate its operations and will enable the Company to manufacture plasma heating systems and expand the applications under its Thermal Plasma Technology.

#### **Plasma heating system uses**

Phoenix's plasma heating systems are versatile and used worldwide in a variety of applications. These uses fall into three general categories:

- (a) **Energy production** – Phoenix's plasma arc torches offer the high temperatures and controllable operating environment required for cutting edge waste-to-energy processes.

Phoenix's plasma heating systems operate worldwide in proprietary processes. Global customers, use a variety of feedstocks such as municipal solid waste, corn stover and other biomass to produce energy-rich biogas (synthetic fuel) which is then used to fire generators and produce profitable electricity from renewable sources. Phoenix technologies deliver the extreme temperatures, reliability and performance required for the customers' 24/7 production schedules.

- (b) **Waste processing** - Phoenix's plasma heating systems excel in ash melting applications and waste pyrolysis. Phoenix systems melt incinerator and fly ash, can process nuclear and biomedical waste and destroy PCBs (Polychlorinated biphenyls) which are a highly toxic product.

Phoenix's plasma heating systems are used in waste processing applications worldwide.

- (c) **Metallurgical refinement** – Phoenix's plasma heating systems offer the intense heat required for metallurgical applications including steel

tundish heating, materials processing and nanometric particle synthesis. Phoenix systems are used to recover platinum group metals and cobalt from dross and to process silicon ingots for solar cell fabrication.

Phoenix's technology provides round-the-clock reliability and durability for heavy industry demands. Applications using Phoenix's systems include secondary tundish heating, production of poly-crystalline silicon ingots, recovery of platinum group metals.

Many metals manufacturers are seeking ways to decarbonise their processes. Synergen's innovative applications, such as its hydrogen production system, combined with Phoenix's robust plasma equipment offers economic solutions previously unavailable.

Phoenix will manufacture and supply a number of plasma torches for the Company's methane pyrolysis projects /green hydrogen production projects.

- (d) **Nanoparticle generation** - Phoenix plasma heating systems have been deployed in the production of nanometric particles, the building materials of the future.

Nanomaterials related technologies offer immense opportunities for material sciences. Currently, production of nanoparticles exists on a limited scale. Phoenix Plasma Heating is the enabling technology to immediately address the gap between pilot-scale R&D and full-scale nanometric particle production. Thermal plasma has been identified as the most effective means to produce nanoparticles on a production basis. Phoenix is working to transition nanoparticle applications from the laboratory to practical implementation for industry, government, military and public health.

Phoenix will continue research into the opportunities and applications of plasma systems to produce nanoparticles.

### Phoenix profitability

Phoenix's business model focusses on the delivery of plasma heating systems and plasma torches to various global customers for numerous specialist applications. Phoenix systems operate on scales from small research and design to full scale industrial installations, for both the commercial sector and municipal government sector.

The business model generates revenue from different projects charging customers for engineering and design work, installation of equipment and selling its proprietary equipment which is manufactured and fabricated by Phoenix. Contracts are typically completed over a 12 to 24 month period.

### Earnings summary (US \$million)

	8 January 2022	26 June 2021	27 June 2020
Revenue	1.168	1.366	5.034
Operating Income	(0.170)	(0.140)	2.760

As set out in the table above, prior to 2021, Phoenix has consistently generated revenue and operating income. However, 2021 was marred by COVID-19 project delays and cancellations. During 2021, COVID uncertainties caused numerous project delays, impacting Phoenix revenues. These projects have accumulated, and as global vaccine rates and lockdowns diminish across most geographic regions, projects have begun to recommence and Phoenix's forward book has improved dramatically.

Phoenix has a substantial existing forward order book. The forward book is determined after initial discussions with potential clients leads to a proposal being issued to a potential client. Experience indicates contracts may or may not be forth coming after a proposal is issued.

Further, notwithstanding the significant forward order book which is expected to drive Phoenix's equipment sales business model, upon completion of the Acquisition, the Board intend to expand Phoenix's existing business model to include owner/operator recurring revenue opportunities. The Company will seek and develop applications for Thermal Plasma Technology where Synergen/Phoenix can generate recurring revenues by being the owner and/or operator of the specialist equipment and specialist application of the technology.

The owner/operator revenue models provide a smoothing of revenue and earnings for the combined businesses and will provide an opportunity for the Company to steadily grow its technical and operating team.

Phoenix's technology is alive with technological developments that, with an injection of capital and renewed focus, are expected to provide the foundation for the combined business that thrive. Phoenix has developed a number of critical technologies through to commercialisation phase that have not yet been realised due to funding and marketing constraints. Some examples of Phoenix's broader gasification technology and applications are listed in the summary below. There is also a developing understanding of the impact that Phoenix's heating systems can have to reduce carbon emissions in general heating processes and produce clean renewable power from various waste streams.

Execution of projects where Phoenix and Synergen are the operator and developer, across a diverse range of applications, is expected to provide a diverse operating base, with a global impact on carbon emission reduction, whilst building a profitable company with a growing technical team who will be the backbone of the Company's business moving forward.

### **Summary of existing forward order book**

As set out above, Phoenix's equipment sales business has operated for decades. The business is characterised by a forward order book of potential contracts with different projects, which are typically completed over a period of 12 to 24 months. As contracts are completed, revenue is recognised. The Company uses regional agents and direct sales approach to maintain a strong forward book, which is key to ensuring consistent profit from year to year.

Post completion of a project, in most instances, plasma equipment requires ongoing consumables, in particular electrodes, which results in subsequent recurring sales. Phoenix's existing forward order book consists of a diverse range of environmentally friendly project opportunities in a diverse range of global locations focussed on opportunities in waste management and hydrogen production. Two examples of material contracts in the forward order book are as follows:

- (a) **Sojitz Machinery Corporation, Japan:** Phoenix has a long-standing partnership with Sojitz Machinery Corporation (**SMC**) who acts as an agent of and representative of Phoenix in Japan. SMC annually negotiates a consumable spare parts contract worth circa US\$500,000 – 700,000 per annum for Phoenix in Japan required to support Phoenix's current multiple operating systems in the Japanese steel industry. This is a recurring annual agreement, managed by SMC. SMC also brings to Phoenix all new projects in Japan where Phoenix's heating systems can be deployed, either in waste destruction or the turning of incinerator ash into a non-toxic landfill.
- (b) **Aventum Waste Project, Spain:** This project is designed to treat medical waste from a hospital network and is funded by a large civil Infrastructure group. Phoenix's scope of work is the design, fabrication, supply, pre-commissioning and commissioning of a plasma-based waste gasification destruction system. This will eliminate all medical waste, including organic and toxic pharmaceutical waste. This project will be moving ahead in first half 2022 and is expected to be operational within 18 months of the commencement of engineering works.

It is expected that the next 5 years will be dominated by projects that will address waste minimisation (gasification), de-carbonisation of industry and the environment (replacing gas combustion heating with plasma heating), and innovative uses of the plasma heating system, such as Synergen's Thermal Plasma Technology application to produce hydrogen, value added carbon products and nanoparticle production. Synergen will continue to progress the existing forward order book contracts and will announce the key terms and conditions of any material contracts which are successfully negotiated as and when entered into by Phoenix.

#### 6.5.4 Hutchinson Test Facility

Phoenix operates a testing facility in Hutchinson, MN, USA for equipment evaluation and process testing. Located 60 miles west of Minneapolis, the Hutchinson Test Facility gives Phoenix the ability to install, evaluate and prove each system in operating conditions prior to shipment. This reduces the time to start-up, ensuring our customers meet their demanding operation deadlines.

The Phoenix team regularly provide additional consulting activities to customers for difficult application development. This consulting and test work is typically billed to clients and included in the design and engineering phase of a project.



Figure 15: Hutchinson Test Facility

Phoenix's Hutchinson Test Facility handles systems up to 3 megawatts (**MW**) torches, fully instrumented with a human machine interface (for example, a control screen) and data logging. The facility includes pilot-scale test set up for melting, destruction and waste-to-energy reclamation systems and is equipped to evaluate nanoparticle generation and gasification projects.



**Figure 16: Materials Evaluation Vessel**

The Materials Evaluation Vessel (**MEV**) at Phoenix's Hutchinson Test Facility is a fully equipped furnace with multiple viewports and tapping capability. The MEV can accept any Phoenix Plasma Torch and is equipped with a dedicated water/gas manifold. Waste gas is handled by a state-of-the-art treatment system, effectively eliminating air pollution from MEV tests.

At completion of the Acquisition the Hutchinson Test Facility (owned by Phoenix) will be a key asset for the research and development of additional applications using Synergen's Thermal Plasma technology.



**Figure 17: The Off-Gas Treatment System at Phoenix's Hutchinson Test Facility**

## **6.6 Intellectual Property**

### **(a) Synergen**

Synergen's IP and know-how has been developed over 14 years and is centred around controlling the plasma environment, controlling the inputs and outputs, and understanding when to quench the process and reform gases to get the desired outcome.

The Company's IP and know-how is focused on controlling the plasma environment to split gases and liquids into their base elements and then reform or separate the elements into a desired form.

Synergen's IP and know-how also involves customising the design, and the plasma environment for the specific application required. Where appropriate Synergen will patent the design, but in other instances, trade secrets and confidentiality agreements are used to protect the Company's IP. Combining the Company Group's specialist knowledge with innovative thought has produced the following unique thermal plasma process applications:

- (i) modular clean hydrogen production;
- (ii) PFAS contaminant treatment and complete destruction;
- (iii) mobile cyanide production;
- (iv) toxic waste destruction; and
- (v) waste to energy applications in municipal solid waste, tyres and organics.

A detailed description of Synergen's IP (comprising patents and unregistered trade marks) is set out in the Intellectual Property Report included at Annexure B.

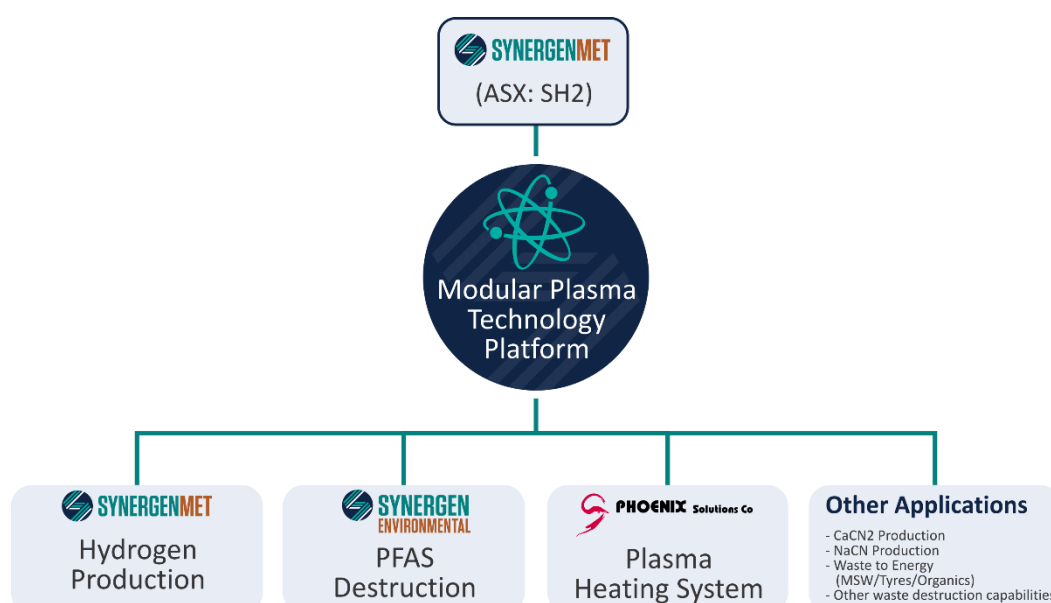
## (b) **Phoenix**

Phoenix's IP and know-how has been developed since its inception in 1952 building high temperature aeronautical facilities and product testing which led to Phoenix specialising in plasma technology and becoming a leading global supplier of plasma heating systems and plasma arc torches.

Phoenix's IP and know-how is centred around how to custom design, engineer and construct robust long lasting and reliable plasma environment to meet the client's specific application. Phoenix does not hold any registered IP.

## 6.7 **Company Group Structure**

At listing, the Company Group structure will be as follows:



Synergen Environmental is a wholly owned subsidiary which undertakes services to concentrate wastewater that is contaminated with PFAS, followed by destruction of the PFAS concentrate. The Company has granted Sustainable Solutions International Pty Ltd (**SSI**) (an unrelated party) a right to acquire 10% of the shares in Synergen Environmental, subject to formal documentation (which has not yet been agreed).

Following completion of the Acquisition, Phoenix will be a wholly owned subsidiary of the Company.

## **6.8 Key investment highlights**

- (a) Synergen is a clean tech company. Completion of the Public Offer and Acquisition will enable Synergen to become a leading global provider of plasma equipment and innovative applications using thermal plasma technology.
- (b) Utilising the Company's proprietary thermal plasma technology, Synergen is currently focussed on the following business opportunities:
  - (i) clean hydrogen production;
  - (ii) PFAS water treatment and contamination destruction; and
  - (iii) plasma equipment sales to various global customers with a diverse range of user applications.
- (c) Synergen's clean hydrogen production is currently commercially competitive and can be implemented now to begin the hydrogen revolution and accelerate global decarbonisation:
  - (i) Synergen's innovative design of its clean hydrogen production process is mobile and scalable enabling location at centralised locations for power generation or at the end users location, such as bus and truck hubs; and
  - (ii) Synergen has commenced construction of the first commercial hydrogen production plant using the Company's proprietary methane pyrolysis process.
- (d) Synergen Environmental provides a complete PFAS water treatment and PFAS destruction solution at commercially competitive prices compared to partial solutions currently offered in the waste management market place:
  - (i) Synergen's innovative design of its PFAS water treatment and destruction plant enables treatment and destruction on-site or treatment on-site and destruction offsite depending on the clients requirements and environmental constraints; and
  - (ii) Synergen has commenced commissioning of the first commercial PFAS water treatment and PFAS destruction plant.
- (e) Phoenix, a leading global manufacturer of thermal plasma equipment and has a substantial forward order book to provide plasma equipment to various global customers across a diverse range of applications.

## 6.9 Use of funds

The Company intends to apply funds raised from the Public Offer over the first two years following admission of the Company to the Official List of ASX as follows:

Funds available	Minimum Subscription (\$20,000,000)	Percentage of Funds (%)	Maximum Subscription (\$25,000,000)	Percentage of Funds (%)
<b>Allocation of funds</b>				
Capital Expenditure for TLOU Energy Hydrogen Project <sup>1</sup>	1,650,000	8.3	1,650,000	6.6
Modular hydrogen production <sup>1</sup>	3,100,000	15.5	7,797,668	31.2
Development of carbon black handling and management system <sup>1</sup>	1,500,000	7.5	1,500,000	6.0
Capital expenditure for large scale PFAS flotation and destruction projects <sup>2</sup>	3,600,000	18.0	3,600,000	14.4
Working Capital Payment under Phoenix Acquisition and Acquisition expenses <sup>3</sup>	4,166,667	20.8	4,166,667	16.7
Intellectual property development <sup>4</sup>	250,000	1.3	250,000	1.0
Expenses of the Offers <sup>5</sup>	1,681,955	8.4	1,984,287	7.9
Administration and corporate costs <sup>6</sup>	4,051,378	20.3	4,051,378	16.2
<b>Total</b>	<b>20,000,000</b>	<b>100</b>	<b>25,000,000</b>	<b>100</b>

### Notes:

1. Refer to Section 6.5.1 for further details.
2. Refer to Section 6.5.2 for further details.
3. Refer to Section 10.3.1 for a summary of the terms and conditions of the Acquisition Agreement, including further details regarding the Working Capital Payment.
4. Refer to Section 6.6 for further details.
5. Refer to Section 11.13 for further details.
6. Administration costs include the general costs associated with the management and operation of the Company's business including administration expenses, management salaries, directors' fees, rent and other associated costs and general working capital.

It is anticipated that the funds raised under the Public Offer will enable 2 years of full operations (if the Minimum Subscription is raised). It should be noted that the Company may not be fully self-funding through its own operational cash flow at the end of this period. Accordingly, the Company may require additional capital beyond this point, which will likely involve the use of additional debt or equity funding. Future capital needs will also depend on the success or failure of the Projects and the Acquisition. The use of further debt or equity funding will be considered by the Board where it is appropriate to fund additional Projects or to capitalise on acquisition opportunities in the clean energy technology sector.

In the event the Company raises more than the Minimum Subscription of \$20,000,000 under the Public Offer but less than the Maximum Subscription of \$25,000,000, the additional funds raised will be first applied towards the expenses of the Public Offer and then hydrogen technology development.

The above table is a statement of current intentions as of the date of this Prospectus. As with any budget, intervening events such as project delays or advancements and new circumstances have the potential to affect the manner in which the funds are ultimately applied. The Board reserves the right to alter the way funds are applied on this basis.

The Directors consider that following completion of the Public Offer, the Company will have sufficient working capital to carry out its stated objectives. It should however be noted that an investment in the Company is speculative and investors are encouraged to read the risk factors outlined in Section 8.

## 6.10 Capital structure

The capital structure of the Company following completion of the Offers (assuming both Minimum Subscription and Maximum Subscription under the Public Offer) and the Acquisition is summarised below:

### Shares<sup>1</sup>

	Minimum Subscription	Maximum Subscription
Shares currently on issue <sup>2</sup>	291,037,901	291,037,901
Shares to be issued pursuant to conversion of Synergen Convertible Notes and Convertible Loans <sup>3</sup>	175,384,713	175,384,713
Shares to be issued under the Acquisition <sup>4</sup>	34,169,627	34,169,627
Shares to be issued pursuant to the Public Offer <sup>5</sup>	100,000,000	125,000,000
Shares to be issued to the Lead Manager <sup>6</sup>	2,000,000	2,000,000
<b>Total Shares on issue after completion of the Offers and Acquisition</b>	<b>602,592,241</b>	<b>627,592,241</b>

### Notes:

1. The rights attaching to the Shares are summarised in Section 11.2.
2. The Shares currently on issue are comprised of:
  - a. 117,500,000 Shares issued to the founding Shareholders on 4 December 2007 for nil consideration;

- b. 2,500,000 Shares issued to various seed investors for total consideration of \$25,000 on 21 May 2010;
  - c. 55,522,728 Shares issued to various seed investors for total consideration of \$555,227 on 13 October 2014;
  - d. 5,500,000 Shares issued to Victor Rudolph and Pradeep Shukla on 13 October 2014 and 1 July 2015 (respectively) for mine site-based research and development activities undertaken on behalf of the Company;
  - e. 11,897,731 Shares to various seed investors for total consideration of \$523,500 between May and November 2017;
  - f. 6,994,698 Shares issued to Tegis Pty Ltd, Mr Terence and Mrs Elizabeth Gray ATF the T&E Gray S/F A/C and TRG Pty Ltd (entities associated with Mr Terence Gray) for total consideration of \$224,167 between May 2017 and September 2019;
  - g. 1,333,334 Shares issued to Tegis Pty Ltd (an entity controlled by Mr Terence Gray) at a deemed issue price of \$0.06 per Share on 30 January 2019 in relation to corporate advisory services provided to the Company on standard arm's length commercial terms;
  - h. 20,119,997 Shares issued to various seed investors for total consideration of \$523,120 on 19 September 2019;
  - i. 52,500,000 Shares issued to Andrew Greig for total consideration of \$3,150,000 on 3 August 2020;
  - j. 1,833,334 Shares issued to Victorian Clean Technology Fund Pty Ltd for \$110,000 on 2 June 2021;
  - k. 3,227,334 Shares issued on 22 June 2021 and 1 July 2021 to Torking Pty Ltd <King Family Superannuation Fund> and Mr Drew Speedy and Mrs Caroline Speedy <Glendower A/C> (respectively) in consideration for services provided to the Company;
  - l. 3,666,667 Shares issued to The Well Beneath Pty Ltd, TRG Pty Ltd and Resource Technology Pty Ltd (entities associated with the current Directors) on 1 July 2021 consideration for Director services provided to the Company; and
  - m. 8,442,068 Shares issued to Victor Rudolph and Pradeep Shukla on 31 December 2021 upon conversion of vested performance rights held by them.
3. Assuming the conversion of a total of approximately \$14,277,770 worth of Convertible Notes and Convertible Loans on issue (assuming an AUD/USD exchange rate of 0.72 which is subject to change). The Convertible Notes and Convertible Loans on issue in the Company comprise:
- a. \$1,500,000 worth of unsecured convertible notes in the Company (**AU Notes**) which will convert into 17,857,163 Shares (assuming a conversion price of \$0.084 per AU Note and subject to rounding) immediately prior to completion of the Public Offer. Refer to Section 10.1.2 for a summary of the material terms and conditions of the AU Notes on issue in the Company;
  - b. US\$8,000,000 worth of unsecured convertible notes in the Company (**USD Notes**) which will convert into 132,275,132 Shares (assuming an AUD/USD exchange rate of \$0.72 (which is subject to change), a conversion price of \$0.084 per USD Note and subject to rounding) upon the Company receiving the conditional approval of ASX (on customary terms) to be admitted to the Official List. Refer to Section 10.1.3 for a summary of the material terms and conditions of the USD Notes on issue in the Company; and
  - c. a total of \$1,200,000 worth of secured syndicated convertible loan notes in the Company (**Loan Notes**) and an aggregate amount of \$466,659.23 of accrued but unpaid interest on the Loan Notes which will convert into 25,252,418 Shares (assuming a conversion price of \$0.066 per Loan Note and subject to rounding) upon the Company receiving the conditional approval of ASX (on customary terms) to be admitted to the Official List. Refer to Section 10.1.4 for a summary of the material terms and conditions of the Loan Notes on issue in the Company.

4. Refer to Sections 10.3 for a summary of the Acquisition Agreements.
5. 100,000,000 Shares to be issued at an issue price of \$0.20 per share to raise a minimum of \$20,000,000 under the Public Offer and 125,000,000 Shares to be issued at an issue price of \$0.20 per share to raise a maximum of \$25,000,000 under the Public Offer.
6. Shares to be issued by the Company in respect of the advisory fee payable to the Lead Manager to the Public Offer.

## Options

	Minimum Subscription	Maximum Subscription
Options currently on issue <sup>1</sup>	2,554,173	2,554,173
Options to be issued pursuant to the Tegis Consulting Agreement <sup>2</sup>	10,000,000	10,000,000
Options to be issued under the Public Offer <sup>3</sup>	50,000,000	62,500,000
<b>Total Options on issue after completion of the Offers and Acquisition</b>	<b>62,554,173</b>	<b>75,054,173</b>

### Notes:

1. Unquoted Options exercisable at \$0.16 each, on or before 31 May 2022 (**Existing Options**). Refer to Section 11.3 for the terms and conditions of the Existing Options. The Company sought and ASX has confirmed that, on receipt of an application for admission to the Official List, ASX is likely to grant the Company a waiver from ASX Listing Rule 1.1 Condition 12 to the extent necessary as to permit the Company to have these Options on issue on issue with an exercise price of less than \$0.20. The Company notes that certain holders of the Existing Options may exercise their Existing Options prior to listing of the Company.
2. Tegis Pty Ltd (or its nominee) (an entity controlled by Director, Terence Gray) will receive 10,000,000 unquoted Options, exercisable at \$0.25 each on or before 31 July 2024 pursuant to the Tegis Consulting Agreement (**Executive Options**). Refer to Section 10.6.1 for a summary of the Tegis Consulting Agreement and Section 11.4 for the terms and conditions of the Executive Options.
3. Unquoted Options free attaching to Shares to be issued under the Public Offer, on the basis of two (2) Options for every four (4) Shares subscribed for and issued under the Public Offer, being:
  - a. 50,000,000 Options assuming the Minimum Subscription is raised, of which:
    - (i) 25,000,000 Options are exercisable at \$0.25 each, on or before the date which is two (2) years from the date of issue of the Options
    - (ii) 25,000,000 Options are exercisable at \$0.40 each, on or before the date which is three (3) years from the date of issue of the Options
  - a. 62,500,000 Options assuming the Maximum Subscription is raised, of which:
    - (i) 31,250,000 Options are exercisable at \$0.25 each, on or before the date which is two (2) years from the date of issue of the Options
    - (ii) 31,250,000 Options are exercisable at \$0.40 each, on or before the date which is three (3) years from the date of issue of the Options

Refer to Section 11.5 for the full terms of the free-attaching Options to be issued under the Public Offer.

## Performance Rights

	Minimum Subscription	Maximum Subscription
Performance Rights currently on issue <sup>1,2</sup>	11,637,048	11,637,048
Performance Rights to be issued under the Public Offer	Nil	Nil
<b>Total Performance Rights on issue after completion of the Offers and Acquisition</b>	<b>11,637,048</b>	<b>11,637,048</b>

### Notes:

1. Comprising 4,221,032 Class A Performance Rights and 7,416,016 Class B Performance Rights. Refer to Section 11.5 for a summary of the terms and conditions of the Performance Rights.
2. The Company sought and ASX has confirmed that, on receipt of an application for admission to the Official List, ASX is likely to grant the Company a waiver from ASX Listing Rule 1.1 Condition 12 to the extent necessary as to permit the Company to have these Performance Rights on issue with an exercise price of less than \$0.20.

## 6.11 Substantial Shareholders

Those Shareholders holding 5% or more of the Shares on issue both as at the date of this Prospectus and on completion of the Offers are set out in the respective tables below.

### *As at the date of the Prospectus*

Shareholder	Shares	Options	Performance Rights	Percentage (%) (undiluted)	Percentage (%) (fully diluted)
Andrew Greig	95,522,728	-	-	32.82%	31.30%
Christopher Dunks	60,354,167 <sup>1</sup>	-	2,406,250	20.74%	20.56%
Dr. Geoff Duckworth	59,093,750 <sup>2</sup>	-	515,625 <sup>2</sup>	20.30%	21.05%

### Notes:

1. Indirectly held by The Well Beneath Pty Ltd ATF the Duffery Family A/C (an entity controlled by Christopher Dunks).
2. Indirectly by Resource Technology Pty Ltd ATF Geoff Duckworth Family A/C (an entity controlled by Dr. Geoff Duckworth).

**On completion of the issue of Shares under the Offers with Minimum Subscription and the Acquisition (assuming no existing substantial Shareholder subscribes and receives additional Securities pursuant to the Offers)**

Shareholder	Shares	Options	Performance Rights	Percentage (%) (undiluted)	Percentage (%) (fully diluted)
Pure Earth Plasma Holdings LLC <sup>1</sup>	132,275,132 <sup>2</sup>	-	-	21.96%	19.54%
Andrew Greig	105,894,482 <sup>3</sup>	-	-	17.58%	15.65%
Christopher Dunks	60,354,167 <sup>4</sup>	-	2,406,250	10.02%	9.27%
Dr. Geoff Duckworth	59,093,750 <sup>5</sup>	-	515,625 <sup>5</sup>	9.81%	8.81%

**Notes:**

1. Director, Charles Fox holds an interest of 4.75% in Pure Earth Plasma Holdings LLC (which interest may increase up to 16.80% upon the satisfaction of certain performance criteria).
2. Pure Earth Plasma Holdings LLC holds 8,000,000 USD Notes, which will convert into 132,275,132 Shares (assuming an AUD/USD exchange rate of \$0.72 (which is subject to change), a conversion price of \$0.084 per USD Note and subject to rounding) upon the Company receiving the conditional approval of ASX (on customary terms) to be admitted to the Official List. Refer to Section 10.1.3 for a summary of the material terms and conditions of the USD Notes.
3. Andrew Greig holds 500,000 Loan Notes in the Company which will convert into 10,371,754 Shares upon the Company receiving the conditional approval of ASX (on customary terms) to be admitted to the Official List. Refer to Section 10.1.4 for a summary of the material terms and conditions of the Loan Notes.
4. Indirectly held by The Well Beneath Pty Ltd ATF the Duffery Family A/C (an entity controlled by Christopher Dunks).
5. Indirectly by Resource Technology Pty Ltd ATF Geoff Duckworth Family A/C (an entity controlled by Dr. Geoff Duckworth).

**On completion of the issue of Shares under the Offers with Maximum Subscription and the Acquisition (assuming no existing substantial Shareholder subscribes and receives additional Securities pursuant to the Offers)**

Shareholder	Shares	Options	Performance Rights	Percentage (%) (undiluted)	Percentage (%) (fully diluted)
Pure Earth Plasma Holdings LLC <sup>1,2</sup>	132,275,132 <sup>2</sup>	-	-	21.08%	18.52%
Andrew Greig	105,894,482 <sup>3</sup>	-	-	16.87%	14.83%
Christopher Dunks	60,354,167 <sup>4</sup>	-	2,406,250	9.62%	8.79%
Dr. Geoff Duckworth	59,093,750 <sup>5</sup>	-	515,625 <sup>5</sup>	9.42%	8.35%

**Notes:**

1. Director, Charles Fox holds an interest of 4.75% in Pure Earth Plasma Holdings LLC (which interest may increase up to 16.80% upon the satisfaction of certain performance criteria).
2. Pure Earth Plasma Holdings LLC holds US\$8,000,000 worth of USD Notes, which will convert into 132,275,132 Shares (assuming an AUD/USD exchange rate of \$0.72 (which is subject to change), a conversion price of \$0.084 per USD Note and subject to rounding) upon the Company receiving the conditional approval of ASX (on customary terms) to be admitted to the Official List. Refer to Section 10.1.3 for a summary of the material terms and conditions of the USD Notes.
3. Andrew Greig holds 500,000 Loan Notes in the Company which will convert into 10,371,754 Shares upon the Company receiving the conditional approval of ASX (on customary terms) to be admitted to the Official List. Refer to Section 10.1.4 for a summary of the material terms and conditions of the Loan Notes.
4. Indirectly held by The Well Beneath Pty Ltd ATF the Duffery Family A/C (an entity controlled by Christopher Dunks).
5. Indirectly by Resource Technology Pty Ltd ATF Geoff Duckworth Family A/C (an entity controlled by Dr. Geoff Duckworth).

The Company will announce to the ASX details of its top-20 Shareholders following completion of the Offers prior to the Securities commencing trading on ASX.

**6.12 Restricted Securities**

Subject to the Company being admitted to the Official List and completing the Offers, certain Securities will be classified by ASX as restricted securities and will be required to be held in escrow for up to 24 months from the date of Official Quotation. During the period in which these Securities are prohibited from being transferred, trading in Shares may be less liquid which may impact on the ability of a Shareholder to dispose of his or her Shares in a timely manner.

While the ASX has not yet confirmed the final escrow position applicable to the Company's Shareholders, the Company anticipates that the following Shares will be subject to escrow:

- (a) 294,466,289 Shares on issue at listing (excluding the Shares issued pursuant to the Acquisition) that are held by related parties, promoters or their associates, will be subject to escrow for 24 months from listing (including all of the Shares to be issued to the Lead Manager (or its nominees));
- (b) 27,584,499 Shares on issue at listing (excluding the Shares issued pursuant to the Acquisition) that are held by unrelated parties will be subject to escrow for 12 months from the date of issue of those Shares, or in respect of the Shares issued in lieu of the Convertible Notes and Loans, 12 months from the date the cash was advanced to the Company under those Convertible Notes and Loans; and
- (c) 3,255,015 Shares issued to the Phoenix Vendors pursuant to the Acquisition will be subject to an escrow period of up to 12 months from the date of issue of the Shares.

In addition, Mr Douglas Frame (a Phoenix Vendor) has entered into a voluntary escrow deed with the Company under which he has agreed that up to 1,394,435 Shares held by him (which are not expected to be subject to ASX escrow) will be subject to escrow from 24 months from listing on the terms and conditions set out in the voluntary escrow deed, with any disposals permitted within that period subject to limited circumstances with the prior approval of the Company.

The Company will announce to the ASX full details (quantity and duration) of the Securities required to be held in escrow prior to the Shares commencing trading on ASX (which admission is subject to ASX's discretion and approval).

#### **6.13 Dividend policy**

The Company anticipates that significant expenditure will be incurred in the development and commercialisation of the Thermal Plasma Technology and Projects. These activities are expected to dominate at least the first two-year period following the date of this Prospectus. Accordingly, the Company does not expect to declare any dividends during that period.

Any future determination as to the payment of dividends by the Company will be at the discretion of the Directors and will depend on the availability of distributable earnings and the operating results and financial condition of the Company, future capital requirements and general business and other factors considered relevant by the Directors. No assurance in relation to the payment of dividends or franking credits attaching to dividends can be given by the Company.

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## 7. FINANCIAL INFORMATION

### 7.1 Introduction

The historical financial information contained in this Section 7 has been prepared by the Directors.

The historical financial information has been provided by the Directors to potential investors to assist with their understanding of the historical financial performance, cash flows and financial position of the Company.

This Section contains a summary of the historical financial information of Synergen Met Limited (and its controlled entities) and Fluidyne Engineering Corporation trading as Phoenix Solutions Co (**Phoenix**) (together "**the Group**"), which comprises the:

- (a) historical consolidated statements of profit or loss and other comprehensive income of Synergen Met Limited for the financial years ended 30 June 2020, 30 June 2021 and period ended 31 December 2021 and of Phoenix for the financial years ended 27 June 2020, 26 June 2021 and period ended 8 January 2022;
- (b) historical consolidated statements of cashflows of Synergen Met Limited for the financial years ended 30 June 2020, 30 June 2021 and period ended 31 December 2021 and of Phoenix for the financial years ended 27 June 2020, 26 June 2021 and period ended 8 January 2022;
- (c) historical consolidated statements of financial position of Synergen Met Limited as at 31 December 2021 and Phoenix as at 8 January 2022; and
- (d) the pro forma historical financial information, which comprises the pro forma historical consolidated statement of financial position as at 31 December 2022.

The pro forma historical financial information has been prepared based on the reviewed statutory financial information as at 31 December 2021, adjusted for the anticipated effect of the Initial Public Offer (**Public Offer**), and other transactions as set out in Section 7.6.

The pro forma historical financial information is unaudited but has been reviewed by BDO Audit Pty Ltd (see the Independent Limited Assurance Report in Annexure A of this Prospectus).

### 7.2 Basis of Preparation

The historical financial information of Synergen Met Limited and pro forma historical financial information have been prepared in accordance with the recognition and measurement principles of Australian Accounting Standards, other mandatory professional reporting requirements and the Group's adopted accounting policies. The historical financial information of Phoenix has been prepared in accordance with the recognition and measurement principles contained in accounting principles generally accepted in the United States of America and Phoenix's adopted accounting policies. Significant accounting policies that apply to the Group are set out in Section 7.11 of this Prospectus.

The historical financial information and pro forma historical financial information are presented in an abbreviated form and do not contain all the disclosures that are usually provided in an annual financial report or half year financial report prepared in accordance with Australian Accounting Standards and the Corporations Act.

The historical financial information of Synergen Met Limited has been extracted from the general purpose financial statements of the Group for the financial period ended 31 December 2021 which were reviewed by BDO Audit Pty Ltd, who issued an unmodified opinion.

The historical financial information of Phoenix has been extracted from the financial statements for the financial period ended 8 January 2022 which were reviewed by BDO USA, LLP, who issued an unmodified opinion.

### 7.3 Historical Consolidated Statement of Profit or Loss and Other Comprehensive Income

#### Synergen Met Limited

	1 July 2019 to 30 June 2020 (audited) AUD	1 July 2020 to 30 June 2021 (audited) AUD	1 July 2021 to 31 December 2021 (reviewed) AUD
<b>Income</b>			
Interest income	4	-	12,093
Government Covid-19 assistance	10,000	10,000	-
Research & Development credits	403,860	166,485	149,091
Foreign currency gain	-	-	273,481
<b>Expenses</b>			
Research and Development expenditure	(670,636)	(218,150)	(196,583)
Corporate and administrative expenses	(3,491,312)	(2,214,441)	(5,837,421)
<b>Loss before income tax expense</b>	(3,748,084)	(2,256,106)	(5,599,339)
Income tax expense			-
<b>Loss after income tax expense for the period</b>	(3,748,084)	(2,256,106)	(5,599,339)
<b>Other comprehensive income/(loss)</b>			
Other comprehensive income/(loss) for the period, net of tax	-	-	-
<b>Total comprehensive loss for the period</b>	(3,748,084)	(2,256,106)	(5,599,339)

Please refer to Section 7.11 for the basis of preparation.

## Fluidyne Engineering Corporation

	30 June 2019 to 27 June 2020 (audited) USD	28 June 2020 to 26 June 2021 (audited) USD	27 June 2021 to 8 January 2022 (reviewed) USD
Contract Revenues	4,184,267	1,366,309	1,168,887
License Revenues	850,000	-	-
Contract Costs	(1,649,416)	(810,250)	(996,597)
<b>Gross Profit</b>	<b>3,384,851</b>	<b>556,059</b>	<b>172,290</b>
Operating Expenses	(624,459)	(696,381)	(342,492)
<b>Income / (loss) from operations</b>	<b>2,760,392</b>	<b>(140,322)</b>	<b>(170,202)</b>
<b>Other Income / (Expense)</b>			
Interest expense	(498,684)	(426,004)	(194,614)
Other income	8,936	7,568	41,187
SBA loan forgiveness	76,696	306,858	184,428
<b>Net other income / (expenses)</b>	<b>(413,052)</b>	<b>(111,578)</b>	<b>31,001</b>
<b>Income / (loss) before income taxes</b>	<b>2,347,340</b>	<b>(251,900)</b>	<b>(139,201)</b>
<b>Provision for / (benefit from) Income Taxes</b>			
Current	(66,416)	14,710	600
Deferred	-	-	-
<b>Total provision for / (benefit from) income taxes</b>	<b>(66,416)</b>	<b>14,710</b>	<b>600</b>
<b>Net Income / (loss)</b>	<b>2,413,756</b>	<b>(266,610)</b>	<b>(139,801)</b>

## 7.4 Historical Consolidated Statement of Financial Position

### Synergen Met Limited as at 31 December 2021

	31 December 2021 (reviewed)
	AUD
<b>CURRENT ASSETS</b>	
Cash and cash equivalents	2,876,167

Trade and other receivables	490,677
Other current assets	109,321
<b>TOTAL CURRENT ASSETS</b>	<b>3,476,165</b>
<b>NON-CURRENT ASSETS</b>	
Property plant & equipment	1,576,877
Intangible assets	842,408
Loans	6,896,552
<b>TOTAL NON-CURRENT ASSETS</b>	<b>9,315,837</b>
<b>TOTAL ASSETS</b>	<b>12,792,002</b>
<b>CURRENT LIABILITIES</b>	
Trade and other payables	856,960
Leases	200,539
Borrowings	10,588,808
Derivative financial liabilities	6,047,974
<b>TOTAL CURRENT LIABILITIES</b>	<b>17,694,281</b>
<b>NON-CURRENT LIABILITIES</b>	
Leases	970,967
<b>TOTAL NON-CURRENT LIABILITIES</b>	<b>970,967</b>
<b>TOTAL LIABILITIES</b>	<b>18,665,248</b>
<b>NET LIABILITIES</b>	<b>(5,873,246)</b>
<b>EQUITY</b>	
Contributed equity	7,822,743
Convertible notes	1,416,000
Reserves	1,082,888
Accumulated losses	(16,194,877)
<b>TOTAL EQUITY</b>	<b>(5,873,246)</b>

Please refer to Section 7.11 for the basis of preparation.

Fluidyne Engineering Corporation as at 8 January 2022

	8 January 2022 (reviewed) USD
<b>CURRENT ASSETS</b>	
Cash and cash equivalents	327,292
Accounts receivables	260,179
Inventories	1,128,659
Contract assets	337,532
Other current assets	76,107
<b>TOTAL CURRENT ASSETS</b>	<b>2,129,769</b>
<b>NON-CURRENT ASSETS</b>	
Property plant & equipment	2,153,485
Right of use assets	186,718
Other assets	34,150
<b>TOTAL NON-CURRENT ASSETS</b>	<b>2,374,353</b>
<b>TOTAL ASSETS</b>	<b>4,504,122</b>
<b>CURRENT LIABILITIES</b>	
Debt	1,606,635
Finance lease obligations	12,452
Lease liability on right of use assets	59,788
Accounts payable	588,588
Contract liabilities	803,647
Deferred revenue	133,857
Accrued expenses	2,144,942
<b>TOTAL CURRENT LIABILITIES</b>	<b>5,349,909</b>
<b>NON-CURRENT LIABILITIES</b>	
Debt	4,802,473
Finance lease obligations	6,466
Lease liability on right of use assets	150,273
<b>TOTAL NON-CURRENT LIABILITIES</b>	<b>4,959,212</b>
<b>TOTAL LIABILITIES</b>	<b>10,309,121</b>
<b>NET LIABILITIES</b>	<b>(5,804,999)</b>

<b>EQUITY</b>	
Redeemable Preferred Stock	1,100,000
Stockholders deficit	36,141
Accumulated deficit	(6,941,140)
<b>TOTAL EQUITY</b>	<b>(5,804,999)</b>

## 7.5 Historical Consolidated Statement of Cash Flows

### Synergen Met Limited

	1 July 2019 to 30 June 2020 (audited) AUD	1 July 2020 to 30 June 2021 (audited) AUD	1 July 2021 to 31 December 2021 (reviewed) AUD
<b>Cash flows from operating activities</b>			
Cash receipts from customers	-	-	-
Payments to suppliers and employees	(1,667,286)	(846,686)	(1,499,013)
Receipt of research & development credits	282,454	403,860	-
Government COVID assistance	10,000	10,000	-
Interest received	4	-	-
Interest paid	(5,252)	(44,652)	(7,804)
<b>Net cash from/(used in) operating activities</b>	<b>(1,380,080)</b>	<b>(477,478)</b>	<b>(1,506,817)</b>
<b>Cash flows from investing activities</b>			
Payments for plant and equipment	-	(141,177)	(305,096)
Payments of security deposits	-	-	(91,201)
Loan to Phoenix Solutions Co.	-	-	(6,639,751)
Payments for intangible assets	(1,684,815)	-	-
<b>Net cash from/(used in) investing activities</b>	<b>(1,684,815)</b>	<b>(141,177)</b>	<b>(7,036,048)</b>
<b>Cash flows from financing activities</b>			
-Proceeds from issue of shares	-	2,610,000	-
Proceeds from issue of convertible notes	3,500,000	1,225,000	10,918,716
Costs associated with issue of convertible notes	(453,259)	(73,500)	(251,520)
Repayment of convertible notes	-	(3,149,384)	-
Payment of principal portion of lease costs	(12,474)	(13,197)	(16,564)
Proceeds from borrowings	-	700,000	-
Repayment of borrowings	(100,000)	-	-
<b>Net cash from/(used in) financing activities</b>	<b>2,934,267</b>	<b>1,298,919</b>	<b>10,650,632</b>
Net increase in cash and cash equivalents held	(130,628)	680,264	2,107,767
Net foreign exchange difference	-	-	16,681
Cash and cash equivalents at beginning of the period	202,083	71,455	751,719
<b>Cash and cash equivalents at end of the period</b>	<b>71,455</b>	<b>751,719</b>	<b>2,876,167</b>

Please refer to Section 7.11 for the basis of preparation.

## Fluidyne Engineering Corporation

	30 June 2019 to 27 June 2020 (audited) USD	28 June 2020 to 26 June 2021 (audited) USD	27 June 2021 to 8 January 2022 (reviewed) USD
<b>Cash flows from operating activities</b>			
Net Income / (loss)	2,413,756	(266,610)	(139,801)
Adjustments to reconcile net income / (loss) to net cash flows from operating activities:			
Depreciation and amortisation	192,796	204,771	72,724
Amortisation of loan fees	5,472	-	-
Forgiveness of principal on lines of credit, PPP loan and long-term debt	(76,696)	(306,858)	(234,210)
Changes in operating assets and liabilities:			
Accounts receivable	1,073,736	(148,851)	24,084
Inventories	(741)	26,310	352,850
Costs and estimated earnings in excess of billings	159,807	(33,135)	(214,756)
Other current assets	(48,999)	(3,714)	(11,465)
Accounts payable	(316,862)	262,765	(255,716)
Billings in excess of costs and estimated earnings	309,803	369,855	(164,011)
Deferred revenues	(212,304)	-	-
Accrued expenses	37,396	304,067	(46,175)
Lease liability and right of use asset	(906)	8,677	(880)
<b>Net cash from/(used in) operating activities</b>	<b>3,536,258</b>	<b>417,277</b>	<b>(617,356)</b>
<b>Cash flows from investing activities</b>			
Purchases of property and equipment	(234,866)	(472,777)	(74,972)
<b>Net cash from/(used in) investing activities</b>	<b>(234,866)</b>	<b>(472,777)</b>	<b>(74,972)</b>
<b>Cash flows from financing activities</b>			
Net payments on lines of credit - bank	(3,074,663)	(165,908)	(3,722,256)
Proceeds from long-term debt	193,300	398,028	5,000,000
Payment on long-term debt	(312,980)	(135,082)	(331,801)
Payments on capital lease obligations	(11,017)	(11,588)	(7,274)
Redeemable preferred stock dividends paid	(108,336)	-	-
<b>Net cash from/(used in) financing activities</b>	<b>(3,313,696)</b>	<b>85,450</b>	<b>938,669</b>
Net increase in cash and cash equivalents held	(12,304)	29,950	246,341
Cash and cash equivalents at beginning of the period	63,305	51,001	80,951
<b>Cash and cash equivalents at end of the period</b>	<b>51,001</b>	<b>80,951</b>	<b>327,292</b>

## 7.6 Historical Consolidated Statement of Financial Position and Pro Forma Historical Consolidated Statement of Financial Position

The historical consolidated statement of financial position and the pro forma historical consolidated statement of financial position have been reviewed by BDO Audit Pty Ltd. Please refer to the Independent Limited Assurance Report in Annexure A.

		Reviewed		Pro Forma Min Raise	Note	Pro Forma Max Raise	Note
		31-Dec-21					
		\$		\$		\$	
	<b>Current Assets</b>						
	Cash and cash equivalents	2,876,167		21,056,296	4,5,6	25,753,964	4,5,7
	Trade and other receivables	490,677		847,087	4	847,087	4
	Contract assets	-		462,373	4	462,373	4
	Inventories	-		1,546,108	4	1,546,108	4
	Other current assets	109,321		213,577	4	213,577	4
	<b>Total Current Assets</b>	<b>3,476,165</b>		<b>24,125,441</b>		<b>28,823,109</b>	
	<b>Non-current Assets</b>						
	Property plant and equipment	1,576,877		4,829,076	4,5	4,829,076	4,5
	Intangible assets	842,408		-	4	-	4
	Loans	6,896,552		-	4	-	4
	Goodwill	-		12,338,497	4	12,338,497	4
	Other non-current assets	-		46,781	4	46,781	4
	<b>Total Non-current Assets</b>	<b>9,315,837</b>		<b>17,214,354</b>		<b>17,214,354</b>	
	<b>Total Assets</b>	<b>12,792,002</b>		<b>41,339,795</b>		<b>46,037,463</b>	
	<b>Current Liabilities</b>						
	Trade and other payables	856,960		4,023,252	4	4,023,252	4
	Contract liabilities	-		1,100,886	4	1,100,886	4
	Deferred revenue	-		183,366	4	183,366	4
	Leases	200,539		299,498	4	299,498	4
	Borrowings	10,588,808		913,836	2,3	913,836	2,3

	Derivative financial liabilities	6,047,974	-	2,3	-	2,3
	<b>Total Current Liabilities</b>	<b>17,694,281</b>	<b>6,520,838</b>		<b>6,520,838</b>	
	<b>Non-current Liabilities</b>					
	Leases	970,967	1,185,678	4	1,185,678	4
	<b>Total Non-current Liabilities</b>	<b>970,967</b>	<b>1,185,678</b>		<b>1,185,678</b>	
	<b>Total Liabilities</b>	<b>18,665,248</b>	<b>7,706,516</b>		<b>7,706,516</b>	
	<b>Net Assets / (Liabilities)</b>	<b>(5,873,246)</b>	<b>33,633,279</b>		<b>38,330,947</b>	
	<b>Equity</b>					
	Contributed equity	7,822,743	66,298,198	1,2,3,4,6	70,981,713	1,2,3,4,7
	Convertible notes	1,416,000	-	1	-	1
	Reserves	1,082,888	1,835,967	8	1,835,967	8
	Accumulated losses	(16,194,877)	(34,500,886)	4,5,6,8	(34,486,733)	4,5,7,8
	<b>Total Equity</b>	<b>(5,873,246)</b>	<b>33,633,279</b>		<b>38,330,947</b>	

Please refer to Section 7.11 on basis of preparation.

## Notes to the Pro Forma Historical Consolidated Statement of Financial Position

Note	Description
1	<p>Prior to the Public Offer, the Group completed a convertible note raise of \$1,500,000 through the issue of 1,500,000 unsecured notes (the <b>"AU Notes"</b>) with a face value of \$1.00. On completion of the Public Offer, the 1,500,000 notes will convert to 17,857,163 ordinary shares at a conversion price of \$0.084 per ordinary share.</p> <p>Contributed equity (\$1,416,000)  Convertible notes \$1,500,000  Convertible notes (costs) (\$84,000)</p>
2	<p>During September 2019 the Company issued 1,200,000 unsecured convertible loan notes (the <b>"Loan Notes"</b>) with a 15% coupon rate and interest capitalising quarterly via the issue of additional notes. From inception to settlement an additional 466,660 <b>Loan Notes</b> were issued as interest. On completion of the Public Offer, a total of 1,666,660 <b>Loan Notes</b> will convert to 25,252,418 ordinary shares at a conversion price of \$0.066 per ordinary share.</p> <p>On settlement and each reporting date, the derivative liability is required to be remeasured at fair value. The IPO price of \$0.20 determines the value of contributed equity issued to settle the notes. The derivative liability is valued as the difference between the value of the contributed equity issued and the amortised cost of the borrowings. The movement in the fair value of the derivative liability since 31 December 2021, and based on a settlement at IPO, of \$2,665,697 is recognised in profit or loss.</p> <p>Contributed equity (\$5,050,484)  Borrowings \$1,433,632  Derivative financial liabilities \$951,155  Fair value loss on derivative financial liability \$2,665,697</p>
3	<p>Prior to the Public Offer, the Company completed a convertible note raise of US\$8,000,000 through the issue of 8,000,000 unsecured notes (the <b>"USD Notes"</b>) with a face value of US\$1.00. On completion of the Public Offer, the 8,000,000 USD Notes will convert to 132,275,132 ordinary shares at a conversion price of \$0.084 per ordinary share.</p> <p>On settlement and at each reporting date, the derivative liability is required to be remeasured at fair value. The IPO price of \$0.20 determines the value of contributed equity issued to settle the notes. The derivative liability is valued as the difference between the value of the contributed equity issued and the amortised cost of the borrowings. The movement in the fair value of the derivative liability since 31 December 2021, and based on a settlement at IPO, of \$13,103,031 is recognised in profit or loss.</p> <p>Contributed equity (\$26,455,026)  Borrowings \$8,255,176  Derivative Financial Liability \$5,096,819  Fair value loss on derivative financial liability \$13,103,031</p>

## Notes to the Pro Forma Historical Consolidated Statement of Financial Position

Note	Description																																						
4	<p>During October 2021, the Company entered into the Acquisition Agreement with the major common stockholders of Phoenix, Mr Douglas Frame and the Frame Family Partnership, under which the Company conditionally agreed, amongst other things, to acquire all of the issued stock in Phoenix and convert all of the promissory notes on issue in Phoenix such that it will be a 100% owned subsidiary at completion <b>(Acquisition)</b>.</p> <p>Based on the 8 January 2022 reviewed accounts of Phoenix translated into Australian dollars at a rate of US\$0.73, the net assets of Phoenix consisted of:</p> <table style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th></th><th style="text-align: right;">AUD</th></tr> </thead> <tbody> <tr> <td>Cash</td><td style="text-align: right;">\$448,345</td></tr> <tr> <td>Trade receivables</td><td style="text-align: right;">\$356,410</td></tr> <tr> <td>Contract assets</td><td style="text-align: right;">\$462,373</td></tr> <tr> <td>Other current assets</td><td style="text-align: right;">\$104,256</td></tr> <tr> <td>Inventories</td><td style="text-align: right;">\$1,546,108</td></tr> <tr> <td>Plant and equipment</td><td style="text-align: right;">\$3,205,758</td></tr> <tr> <td>Other non-current assets</td><td style="text-align: right;">\$46,781</td></tr> <tr> <td>Trade and other payables</td><td style="text-align: right;">(\$3,213,530)</td></tr> <tr> <td>Contract liabilities</td><td style="text-align: right;">(\$1,100,886)</td></tr> <tr> <td>Deferred revenue</td><td style="text-align: right;">(\$183,366)</td></tr> <tr> <td>Leases - current</td><td style="text-align: right;">(\$98,959)</td></tr> <tr> <td>Leases – non-current</td><td style="text-align: right;">(\$214,711)</td></tr> <tr> <td>Borrowings</td><td style="text-align: right;">(\$13,836)</td></tr> <tr> <td>Loan payable to Synergen Met Limited</td><td style="text-align: right;">(\$6,849,315)</td></tr> <tr> <td><b>Net Liabilities</b></td><td style="text-align: right;"><b>(\$5,504,572)</b></td></tr> <tr> <td>Purchase consideration</td><td style="text-align: right;">\$6,833,925</td></tr> <tr> <td>Excess allocated to:</td><td></td></tr> <tr> <td>Goodwill</td><td style="text-align: right;">\$12,338,497</td></tr> </tbody> </table> <p>The total consideration for the Acquisition of \$6,833,925 will be settled through the issue of 34,169,627 ordinary shares in Synergen Met Limited to the Phoenix Vendors at a deemed issue price of \$0.20 per share (the Share based consideration is based on a fixed AUD/USD exchange rate of \$0.7422). The consideration shares to be issued include shares issued to settle Phoenix debt totalling USD\$1,399,008 (AUD\$1,916,449) and accrued payroll of USD\$387,653 (AUD\$531,032).</p> <p>The Acquisition of Phoenix once completed, will be subject to a full purchase price allocation, the results of which may differ to the above.</p> <p>The pre existing licence agreement between the Company and Phoenix had a carrying value of \$842,408 in the accounts of the Company at 31 December 2021. In accordance with AASB 3 this pre existing licence will be expensed on completion of the acquisition.</p>		AUD	Cash	\$448,345	Trade receivables	\$356,410	Contract assets	\$462,373	Other current assets	\$104,256	Inventories	\$1,546,108	Plant and equipment	\$3,205,758	Other non-current assets	\$46,781	Trade and other payables	(\$3,213,530)	Contract liabilities	(\$1,100,886)	Deferred revenue	(\$183,366)	Leases - current	(\$98,959)	Leases – non-current	(\$214,711)	Borrowings	(\$13,836)	Loan payable to Synergen Met Limited	(\$6,849,315)	<b>Net Liabilities</b>	<b>(\$5,504,572)</b>	Purchase consideration	\$6,833,925	Excess allocated to:		Goodwill	\$12,338,497
	AUD																																						
Cash	\$448,345																																						
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Trade and other payables	(\$3,213,530)																																						
Contract liabilities	(\$1,100,886)																																						
Deferred revenue	(\$183,366)																																						
Leases - current	(\$98,959)																																						
Leases – non-current	(\$214,711)																																						
Borrowings	(\$13,836)																																						
Loan payable to Synergen Met Limited	(\$6,849,315)																																						
<b>Net Liabilities</b>	<b>(\$5,504,572)</b>																																						
Purchase consideration	\$6,833,925																																						
Excess allocated to:																																							
Goodwill	\$12,338,497																																						
5	<p>The impact of the Company Group's activities for the period of 1 January 2021 to 28 February 2022 is shown as an adjustment to the pro forma historical consolidated statement of financial position. The Company Group's ongoing activities resulted in a reduction of cash of \$586,261, spent primarily on property plant &amp; equipment \$46,442, salary and consulting fees \$283,933, business development \$137,246 and operating and administration costs \$118,640.</p>																																						

Notes to the Pro Forma Historical Consolidated Statement of Financial Position													
Note	Description												
6	<p>The Public Offer is set to raise a minimum of \$20,000,000 (before costs).</p> <p>The costs of the raise at this amount are:</p> <table> <tr> <td>Cash costs</td><td>\$1,681,955</td></tr> <tr> <td>Share based payments</td><td><u>\$400,000</u></td></tr> <tr> <td>Total costs</td><td><u>\$2,081,955</u></td></tr> </table> <p>Based on the required accounting treatment these costs are allocated against equity or expensed based on nature.</p> <table> <tr> <td>Charged to equity</td><td>\$1,679,980</td></tr> <tr> <td>Expensed</td><td><u>\$401,975</u></td></tr> <tr> <td>Total costs</td><td><u>\$2,081,955</u></td></tr> </table>	Cash costs	\$1,681,955	Share based payments	<u>\$400,000</u>	Total costs	<u>\$2,081,955</u>	Charged to equity	\$1,679,980	Expensed	<u>\$401,975</u>	Total costs	<u>\$2,081,955</u>
Cash costs	\$1,681,955												
Share based payments	<u>\$400,000</u>												
Total costs	<u>\$2,081,955</u>												
Charged to equity	\$1,679,980												
Expensed	<u>\$401,975</u>												
Total costs	<u>\$2,081,955</u>												
7	<p>The Public Offer is set to raise a maximum of \$25,000,000 (before costs).</p> <p>The costs of the raise at this amount are:</p> <table> <tr> <td>Cash costs</td><td>\$1,984,287</td></tr> <tr> <td>Share based payments</td><td><u>\$400,000</u></td></tr> <tr> <td>Total costs</td><td><u>\$2,384,287</u></td></tr> </table> <p>Based on the required accounting treatment these costs are allocated against equity or expensed based on nature.</p> <table> <tr> <td>Charged to equity</td><td>\$1,996,457</td></tr> <tr> <td>Expensed</td><td><u>\$387,830</u></td></tr> <tr> <td>Total costs</td><td><u>\$2,384,287</u></td></tr> </table>	Cash costs	\$1,984,287	Share based payments	<u>\$400,000</u>	Total costs	<u>\$2,384,287</u>	Charged to equity	\$1,996,457	Expensed	<u>\$387,830</u>	Total costs	<u>\$2,384,287</u>
Cash costs	\$1,984,287												
Share based payments	<u>\$400,000</u>												
Total costs	<u>\$2,384,287</u>												
Charged to equity	\$1,996,457												
Expensed	<u>\$387,830</u>												
Total costs	<u>\$2,384,287</u>												
8	<p>Upon the successful listing of the Company on the Australian Stock Exchange Tegis Pty Ltd (or its nominee) (an entity controlled by Director, Terence Gray) will receive 10,000,000 unquoted Options, exercisable at \$0.25 each on or before 31 July 2024 pursuant to the Tegis Consulting Agreement (Executive Options). These have been measured at fair value and expensed in accordance with AASB 2 <i>Share Based Payments</i>.</p> <table> <tr> <td>Reserves</td><td>\$753,079</td></tr> <tr> <td>Share based payment expense</td><td>(\$753,079)</td></tr> </table>	Reserves	\$753,079	Share based payment expense	(\$753,079)								
Reserves	\$753,079												
Share based payment expense	(\$753,079)												

## 7.7 Summary of all pro forma adjustments impacting cash:

	Cash Min Raise	Cash Max Raise
As at 31 December 2021	2,876,167	2,876,167
Public Offer capital raising (net)	18,318,045	23,015,713
Acquired with PSC	448,345	448,345
Pre-Public Offer pro forma transactions	(586,261)	(586,261)
<b>Total</b>	<b>21,056,296</b>	<b>25,753,964</b>

## 7.8 Summary of all pro forma adjustments impacting issued capital:

### Share Capital

The table below sets out the Shares, the issue of the Shares under and in relation to the Public Offer and pursuant to the Acquisition.

Share numbers issued	Note	Minimum Subscription	Maximum Subscription
Total Shares on issue at 31 December 2021		291,037,901	291,037,901
Conversion of AU Notes	1	17,857,163	17,857,163
Conversion of Loan Notes	2	25,252,418	25,252,418
Conversion of USD Notes	3	132,275,132	132,275,132
Issue of Consideration Shares for Acquisition of Phoenix	4	34,169,627	34,169,627
Shares issued pursuant to the Public Offer	6,7	100,000,000	125,000,000
Shares to be issued to the Lead Manager	6	2,000,000	2,000,000
<b>Total Share numbers on issue Post-Public Offer</b>		<b>602,592,241</b>	<b>627,592,241</b>

Contributed equity	Note	Minimum Subscription	Maximum Subscription
Total contributed equity at 31 December 2021		7,822,743	7,822,743
Conversion of AU Notes	1	1,416,000	1,416,000
Conversion of Loan Notes	2	5,050,484	5,050,484
Conversion of USD Notes	3	26,455,026	26,455,026
Issue of Consideration Shares for Acquisition of Phoenix	4	6,833,925	6,833,925
Shares issued pursuant to the Public Offer	6,7	20,000,000	25,000,000
Shares to be issued to the Lead Manager	6	400,000	400,000
Costs of the raise	6,7	(1,679,980)	(1,996,465)
<b>Total Contributed equity Post-Public Offer</b>		<b>66,298,198</b>	<b>70,981,713</b>

## Public Offer

The Public Offer and related costs are also a pro forma transaction. The minimum capital to be raised is \$20,000,000 from the issue of 100,000,000 Shares at \$0.20 each or the maximum capital to be raised is \$25,000,000 from the issue of 125,000,000 Shares at \$0.20 each.

The Lead Manager to the Public Offer is Lodge Corporate Pty Ltd, who will receive cash fees of 2% Management Fee of all funds raised under the Public Offer and 4% Selling Fee of all funds raised under the Public Offer.

Total of net (cash) proceeds from the Public Offer are summarised in the table below.

Cash raised from the Offer	Minimum Subscription\$	Maximum Subscription \$
Total Capital Raised	20,000,000	25,000,000
Less Total commissions paid in cash to the Lead Manager	1,200,000	1,500,000
Less other cash costs of the Public Offer	481,955	484,287
<b>Total (net) cash raised</b>	<b>18,318,045</b>	<b>23,015,713</b>

Other (cash) costs related to the Public Offer are in the table below.

Other (cash) costs of the Offer	Minimum Subscription\$	Maximum Subscription \$
Legal fees	250,000	250,000
Intellectual Property Report	5,000	5,000
Independent Limited Assurance Report	25,000	25,000
Share registry services	4,500	4,500
Design and Printing	10,000	10,000
ASX fees	178,586	180,977
ASIC fees	3,206	3,206
Other miscellaneous expenses	5,663	5,604
<b>Total Other Public Offer capital raising (cash) costs</b>	<b>481,955</b>	<b>484,287</b>

Public Offer Equity raised	Minimum Subscription \$	Maximum Subscription \$
Public Offer equity raised	20,000,000	25,000,000
Equity issued – share based payments	400,000	400,000
	20,400,000	25,400,000
Less costs:		
Commissions paid in cash and shares to the Lead Manager (capital raising costs apportioned to equity).	1,600,000	1,900,000
Other cash costs of the Public Offer apportioned to equity (refer Note 6/7 respectively in Section 7.6 above).	79,980	96,457
Other cash costs of the Public Offer apportioned to expenses (refer Note 6/7 respectively in Section 7.6 above).	401,975	387,830
<b>Net equity following the close of the Public Offer</b>	<b>18,318,045</b>	<b>23,015,713</b>

## Options

Participants of the Public Offer will also receive the following free attaching unlisted Options:

- (a) on the basis of one (1) Option for every four (4) Shares issued, exercisable at \$0.25 on or before the date which is two (2) years from the date of Admission.
- (b) on the basis of one (1) Option for every four (4) Shares issued, exercisable at \$0.40 on or before the date which is three (3) years from the date of Admission.

The table below sets out the Options, the issue of the Options under and in relation to the Public Offer.

Total Options issued	Exercise Price	Minimum Subscription Options	Maximum Subscription Options
Total Options on issue (31-Dec-2021)	\$0.16	2,554,173	2,554,173
Options issued to consultant pursuant to the offer (refer Note 8 in Section 7.6 above)	\$0.25	10,000,000	10,000,000
Options issued pursuant to the Public Offer	\$0.25	25,000,000	31,250,000
Options issued pursuant to the Public Offer	\$0.40	25,000,000	31,250,000
<b>Total Options numbers on issue Post-Offer</b>		<b>62,554,173</b>	<b>75,054,173</b>

## 7.9 Summary of all pro forma adjustments impacting debt:

The table below sets out the movement in debt following the Public Offer.

	Note	Total
Total borrowings at 31 December 2021		10,588,808
Total derivative financial liability at 31 December 2021		6,047,974
<b>Total debt as at 31 December 2021</b>		<b>16,636,782</b>
Conversion of Loan Notes	2	(2,384,787)
Conversion of USD Notes	3	(13,351,995)
Acquired with PSC	4	13,836
<b>Total debt following close of the Public Offer</b>		<b>913,836</b>

## 7.10 No forecasts

The Company is currently in the pre-revenue stage of operations. Consequently, there are significant uncertainties associated with forecasting future revenues (if any) and expenses associated with the Group's proposed activities. The Directors have considered the matters detailed in ASIC Regulatory Guide 170 and believe that they do not have a reasonable basis to forecast future earnings on the basis that the operations of the Group are inherently uncertain. Accordingly, any forecast or projection information would contain such a broad range of potential outcomes and possibilities that it is not possible to prepare a reliable best estimate forecast or projection.

The Directors consequently believe that, given these inherent uncertainties, it is not possible to include reliable forecasts in this Prospectus.

## 7.11 Accounting Policies

The principal accounting policies adopted in the preparation of the historical financial information and the pro forma historical information are set out below:

### (a) Basis of Preparation

The historical financial information and pro forma historical financial information have been prepared in accordance with the recognition and measurement principles of Australian Accounting Standards, other mandatory professional reporting requirements and Synergen Met Limited's adopted accounting policies. Significant accounting policies that apply to Synergen Met Limited are set out below.

The historical financial information and pro forma historical financial information are presented in an abbreviated form and do not contain all the disclosures that are usually provided in an annual financial report or half year financial report prepared in accordance with Australian Accounting Standards and the Corporations Act.

The historical financial information of Synergen Met Limited has been extracted from the general purpose financial statements of the Group for the financial period ended 31 December 2021 which were reviewed by BDO Audit Pty Ltd, who issued an unmodified opinion.

The historical financial information of Phoenix has been extracted from the financial statements for the financial period ended 8 January 2022 which were reviewed by BDO USA, LLP, who issued an unmodified opinion. There were no differences in the measurement and recognition principles adopted by Phoenix to those adopted by Synergen Met Limited.

(b) **Principles of consolidation**

The consolidated Financial Statements incorporate all of the assets, liabilities and results of the parent (Synergen Met Limited) and all of the subsidiaries (including any structured entities). Subsidiaries are entities the parent controls. The parent controls an entity when it is exposed to, or has rights to, variable returns from its involvement with the entity and has the ability to affect those returns through its power over the entity.

The assets, liabilities and results of all subsidiaries are fully consolidated into the Financial Statements of the consolidated entity from the date on which control is obtained by the consolidated entity. The consolidation of a subsidiary is discontinued from the date that control ceases. Intercompany transactions, balances and unrealised gains or losses on transactions between group entities are fully eliminated on consolidation. Accounting policies of subsidiaries have been changed and adjustments made where necessary to ensure uniformity of the accounting policies adopted by the consolidated entity.

(c) **Adoption of new and revised standards**

The Group has adopted all of the new or amended Accounting Standards and Interpretations issued by the AASB that are necessary for the current reporting period.

(d) **Income Tax**

Deferred income tax is provided on all temporary differences at the balance date between the tax bases of assets and liabilities and their carrying amounts for financial reporting purposes.

Deferred income tax liabilities are recognised for all taxable temporary differences:

- (i) except where the deferred income tax liability arises from the initial recognition of an asset or liability in a transaction that is not a business combination and, at the time of the transaction, affects neither that accounting profit nor taxable profit or loss; and

- (ii) in respect of taxable temporary differences associated with investments in subsidiaries, associates and interests in joint ventures, except where the timing of the reversal of the temporary differences will not reverse in the foreseeable future.

Deferred income tax assets are recognised for all deductible temporary differences, carry-forward of unused tax assets and unused tax losses, to the extent that it is probable that taxable profit will be available against which the deductible temporary differences, and the carry-forward of unused tax assets and unused tax losses can be utilised:

- (iii) except where the deferred income tax asset relating to the deductible temporary difference arises from the initial recognition of an asset or liability in a transaction that is not a business combination and, at the time of the transaction, affects neither the accounting profit nor taxable profit or loss; and
- (iv) in respect of deductible temporary differences with investments in subsidiaries, associates and interests in joint ventures, deferred tax assets are only recognised to the extent that it is probable that the temporary differences will reverse in the foreseeable future and taxable profit will be available against which the temporary differences can be utilised.

The carrying amount of deferred income tax assets is reviewed at each balance date and reduced to the extent that it is no longer probable that sufficient taxable profit will be available to allow all or part of the deferred income tax asset to be utilised.

Deferred income tax assets and liabilities are measured at the tax rates that are expected to apply to the year when the asset is realised or the liability is settled, based on tax rates (and tax laws) that have been enacted or substantively enacted at the balance date.

Income taxes relating to items recognised directly in equity are recognised in equity, not in the statement of comprehensive income.

The consolidated entity has implemented the tax consolidation legislation.

The Group has carried forward income tax losses which are available to be recouped against future taxable income in accordance with regulations regarding income tax applicable at the time of recoupment. These are unrecognised in the Financial Statements as at 31 December 2021.

(e) **Revenue recognition**

Revenue is recognised at an amount that reflects the consideration to which the consolidated entity is expected to be entitled in exchange for transferring goods or services to a customer.

For each contract with a customer, the consolidated entity: identifies the contract with a customer; identifies the performance obligations in the contract; determines the transaction price which takes into account estimates of variable consideration and the time value of money; allocates the transaction price to the separate performance obligations on the basis of the relative stand-alone selling price of each distinct good

or service to be delivered; and recognises revenue when or as each performance obligation is satisfied in a manner that depicts the transfer to the customer of the goods or services promised.

(f) **Interest**

Interest income is recognised as interest accrues (using the effective interest method, which is the rate that exactly discounts estimated future cash receipts through the expected life of the financial instrument) to the net carrying amount of the financial asset.

(g) **Cash and cash Equivalents**

Cash and cash equivalents in the statement of financial position comprise cash at bank and in hand and short-term deposits with an original maturity of three months or less.

For the purposes of the statement of cash flows, cash and cash equivalents consist of cash and cash equivalents as defined above, net of outstanding bank overdrafts.

(h) **Trade and other receivables**

Trade receivables are initially recognised at fair value and subsequently measured at amortised cost using the effective interest method, less any allowance for expected credit losses. Trade receivables are generally due for settlement within 30 days.

The consolidated entity has applied the simplified approach to measuring expected credit losses, which uses a lifetime expected loss allowance. To measure the expected credit losses, trade receivables have been grouped based on days overdue.

Other receivables are recognised at amortised cost, less any allowance for expected credit losses.

(i) **Employee Benefits**

Provision is made for the consolidated entity's liability for employee benefits arising from services rendered by employees to balance date. Employee benefits expected to be settled within one year together with entitlements arising from wages and salaries and annual leave which will be settled after one year, have been measured at the amounts expected to be paid when the liability is settled, plus related on-costs. Other employee benefits payable later than one year have been measured at the present value of the estimated future cash outflows to be made for those benefits.

Contributions are made by the consolidated entity to employee superannuation funds and are charged as expenses when incurred.

(j) **Impairment of assets**

The Group assesses at each balance date whether there is an indication that an asset may be impaired. If any such indication exists, or when annual impairment testing for an asset is required, the Group makes an estimate of the asset's recoverable amount. An asset's recoverable amount is the higher of its fair value less costs to sell and its value in use and is determined for an individual asset, unless the asset does not generate cash inflows that are largely independent of those from other assets or Group's assets and the asset's value in use cannot be estimated to be close to its fair value. In such cases the asset is tested for impairment as part of the cash-generating unit to which it belongs. When the carrying amount of an asset or cash-generating unit exceeds its recoverable amount, the asset or cash-generating unit is considered impaired and is written down to its recoverable amount.

In assessing value in use, the estimated future cash flows are discounted to their present value using a pre-tax discount rate that reflects current market assessments of the time value of money and the risks specific to the asset. Impairment losses relating to continuing operations are recognised in those expense categories consistent with the function of the impaired asset unless the asset is carried at revalued amount (in which case the impairment loss is treated as a revaluation decrease).

An assessment is also made at each reporting date as to whether there is any indication that previously recognised impairment losses may no longer exist or may have decreased. If such indication exists, the recoverable amount is estimated. A previously recognised impairment loss is reversed only if there has been a change in the estimates used to determine the asset's recoverable amount since the last impairment loss was recognised. If that is the case the carrying amount of the asset is increased to its recoverable amount. That increased amount cannot exceed the carrying amount that would have been determined, net of depreciation, had no impairment loss been recognised for the asset in prior years. Such reversal is recognised in profit or loss unless the asset is carried at revalued amount, in which case the reversal is treated as a revaluation increase. After such a reversal the depreciation charge is adjusted in future periods to allocate the asset's revised carrying amount, less any residual value, on a systematic basis over its remaining useful life.

(k) **Earnings per share (EPS)**

Basic earnings per share is calculated as net profit / loss attributable to members of the parent, adjusted to exclude any costs of servicing equity (other than dividends) and preference share dividends, divided by the weighted average number of ordinary shares, adjusted for any bonus element.

(l) **Goods and Services Tax (GST)**

Revenues, expenses and assets are recognised net of the amount of GST, except where the amount of GST incurred is not recoverable from the Australian Tax Office. In these circumstances, the GST is recognised as part of the cost of acquisition of the asset or as part of an item of the expense. Receivables and payables in the statement of financial position are shown inclusive of GST.

Cash flows are presented in the statement of cash flows on a gross basis, except for the GST component of investing and financing activities, which are disclosed as operating cash flows.

(m) **Investment and other financial assets**

Investments and other financial assets are initially measured at fair value. Transaction costs are included as part of the initial measurement, except for financial assets at fair value through profit or loss. Such assets are subsequently measured at either amortised cost or fair value depending on their classification. Classification is determined based on both the business model within which such assets are held and the contractual cash flow characteristics of the financial asset unless, an accounting mismatch is being avoided.

Financial assets are derecognised when the rights to receive cash flows have expired or have been transferred and the consolidated entity has transferred substantially all the risks and rewards of ownership. When there is no reasonable expectation of recovering part or all of a financial asset, its carrying value is written off.

(n) **Financial assets at fair value through profit or loss**

Financial assets not measured at amortised cost or at fair value through other comprehensive income are classified as financial assets at fair value through profit or loss. Typically, such financial assets will be either: (i) held for trading, where they are acquired for the purpose of selling in the short-term with an intention of making a profit, or a derivative; or (ii) designated as such upon initial recognition where permitted. Fair value movements are recognised in profit or loss.

(o) **Impairment of financial assets**

The consolidated entity recognises a loss allowance for expected credit losses on financial assets which are either measured at amortised cost or fair value through other comprehensive income. The measurement of the loss allowance depends upon the consolidated entity's assessment at the end of each reporting period as to whether the financial instrument's credit risk has increased significantly since initial recognition, based on reasonable and supportable information that is available, without undue cost or effort to obtain.

Where there has not been a significant increase in exposure to credit risk since initial recognition, a 12-month expected credit loss allowance is estimated. This represents a portion of the asset's lifetime expected credit losses that is attributable to a default event that is possible within the next 12 months. Where a financial asset has become credit impaired or where it is determined that credit risk has increased significantly, the loss allowance is based on the asset's lifetime expected credit losses. The amount of expected credit loss recognised is measured on the basis of the probability weighted present value of anticipated cash shortfalls over the life of the instrument discounted at the original effective interest rate.

For financial assets measured at fair value through other comprehensive income, the loss allowance is recognised within other comprehensive income. In all other cases, the loss allowance is recognised in profit or loss.

(p) **Issued capital**

Ordinary shares and options are classified as equity. Incremental costs directly attributable to the issue of new shares or options are shown in equity as a deduction, net of tax, from the proceeds.

(q) **Leases**

AASB 16 *Leases* and its consequential amendments were applied from 1 July 2019, replacing the accounting requirements applicable to leases in AASB 117 *Leases* and related interpretations. AASB 16 introduces a single lessee accounting model that eliminates the requirement for leases to be classified as operating or finance leases. This means that for most leases, a right-of-use asset and a lease liability will be recognised, with the right-of-use asset being depreciated and the lease liability being unwound in principal and interest components over the life of the lease. The Group does not have any leases that meet the AASB 16 definition.

(r) **Derecognition of financial assets and financial liabilities**

**Financial assets**

A financial asset (or, where applicable, a part of a financial asset or part of the consolidated entity of similar financial assets) is derecognised when:

- (i) the rights to receive cash flows from the asset have expired;
- (ii) the consolidated entity retains the right to receive cash flows from the asset, but has assumed an obligation to pay them in full without material delay to a third party under a 'pass-through' arrangement; or
- (iii) the consolidated entity has transferred its rights to receive cash flows from the asset and either:
  - (A) has transferred substantially all the risks and rewards of the asset, or
  - (B) has neither transferred nor retained substantially all the risks and rewards of the asset, but has transferred control of the asset.

When the consolidated entity has transferred its rights to receive cash flows from an asset and has neither transferred nor retained substantially all the risks and rewards of the asset nor transferred control of the asset, the asset is recognised to the extent of the consolidated entity's continuing involvement in the asset. Continuing involvement that takes the form of a guarantee over the transferred asset is measured at the lower of the original carrying amount of the asset and the maximum amount of consideration received that the consolidated entity could be required to repay.

When continuing involvement takes the form of a written and/or purchased option (including a cash-settled option or similar provision) on the transferred asset, the extent of the consolidated entity's continuing involvement is the amount of the transferred asset that the consolidated entity may repurchase, except that in the case of a written put option (including a cash-settled option or similar provision) on an asset measured at fair value, the extent of the consolidated entity's continuing involvement is limited to the lower of the fair value of the transferred asset and the option exercise price.

### **Financial liabilities**

A financial liability is derecognised when the obligation under the liability is discharged or cancelled or expires.

When an existing financial liability is replaced by another from the same lender on substantially different terms, or the terms of an existing liability are substantially modified, such an exchange or modification is treated as a de-recognition of the original liability and the recognition of a new liability, and the difference in the respective carrying amounts is recognised in profit or loss.

Where a financial liability is extinguished through the issue of equity instruments, the equity instruments are measured at their fair value on date of issue. The difference between the carrying amount of the financial liability extinguished and the consideration paid is recognised in profit or loss.

#### **(s) Critical accounting estimates and judgement**

The application of accounting policies requires the use of judgements, estimates and assumptions about carrying values of assets and liabilities that are not readily apparent from other sources. The estimates and associated assumptions are based on historical experience and other factors that are considered to be relevant. Actual results may differ from these estimates.

The estimates and underlying assumptions are reviewed on an ongoing basis. Revisions are recognised in the period in which the estimate is revised if it affects only that period, or in the period of the revision and future periods if the revision affects both current and future periods.

The key estimates and assumptions that have a significant risk of causing a material adjustment to the carrying amounts of certain assets and liabilities within the next annual reporting period are:

#### **(t) Derivative instruments – conversion feature of convertible notes.**

The fair value of the conversion feature of the convertible notes is estimated using present value techniques, by discounting the probability-weighted estimated future cash outflows. Any changes to the critical inputs underlying the estimated fair value of the conversion feature of the convertible note may impact the fair value of the derivative.

(u) **Intangible Assets**

The Group acquired an intangible asset in relation to the exclusive use of Phoenix's plasma torch technology to the extent that it relates to the Company's specific business operations. The asset had a carrying value of \$842,408 at 31 December 2021. The Company estimates the useful life of the license to be at least 5 years however the actual useful life may be shorter or longer than five years, depending on the successful commercialisation of the Company's technology.

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## 8. RISK FACTORS

### 8.1 Introduction

The Securities offered under this Prospectus should be considered as highly speculative and an investment in the Company is not risk free.

The future performance of the Company and the value of the Securities may be influenced by a range of factors, many of which are largely beyond the control of the Company and the Directors. The key risks that have a direct influence on the Company, the ongoing development and commercialisation of technical applications utilising the Thermal Plasma Technology, and general business activities are set out in Sections 3 and 8.1. Those key risks as well as other risks associated with the Company's business, the industry in which it operates and general risks applicable to all investments in listed securities and financial markets generally are described below.

The risk factors set out in this Section 8, or other risk factors not specifically referred to, may have a materially adverse impact on the performance of the Company and the value of the Securities. This Section 8 is not intended to provide an exhaustive list of the risk factors to which the Company is exposed.

The Directors strongly recommend that prospective investors consider the risk factors set out in this Section 8, together with all other information contained in this Prospectus.

Before determining whether to invest in the Company you should ensure that you have a sufficient understanding of the risks described in this Section 8 and all of the other information set out in this Prospectus and consider whether an investment in the Company is suitable for you, taking into account your objectives, financial situation and needs.

If you do not understand any matters contained in this Prospectus or have any queries about whether to invest in the Company, you should consult your accountant, financial adviser, stockbroker, lawyer or other professional adviser.

### 8.2 Company specific risks

Risk Category	Risk
<b>Going concern risk</b>	<p>While completing the review of the Company's financial report for the half year ended 31 December 2021, the Company's auditor, BDO Audit Pty Ltd, noted the following:</p> <p>"The Company Group has not generated any revenues from operations. As at 31 December 2021, the Company Group had cash reserves of \$2,876,167, net current liabilities of \$14,218,116 and net liabilities of \$5,873,246. The Company Group incurred a net loss of \$5,599,339 for the half-year ended 31 December 2021 and had an outflow of \$1,506,817 of cash from operating activities.</p>

Risk Category	Risk
	<p>The ability of the Company Group to maintain continuity of normal business activities and to pay its debts as and when they fall due is dependent on the ability of the Company Group to successfully raise additional capital and/or successful development and commercialisation of technology.</p> <p>These conditions give rise to material uncertainty which may cast significant doubt over the Company Group's ability to continue as a going concern."</p> <p>In addition, while completing the review of Phoenix's financial report for the half-year ended 8 January 2022, Phoenix's auditor, BDO USA, LLP, noted the following:</p> <p>"[Phoenix] has negative working capital and an accumulated deficit of \$6,941,140 as of January 8, 2022, and additionally, [Phoenix] generated a net loss and negative cash flows from operations for the six month period then ended. [Phoenix] does not have adequate liquidity to fund its operations for the one year period after the issuance date. These factors raise substantial doubt about its ability to continue as a going concern."</p> <p>Notwithstanding the 'going concern' qualifications included in the financial reports, the Directors believe that upon the successful completion of the Offer, the Company Group will have sufficient funds to adequately meet the Company Group's current commitments and short term working capital requirements. However, it is highly likely that further funding will be required to meet the medium to long term working capital costs of the Company Group.</p> <p>In the event that the Public Offer is not completed successfully there is significant uncertainty as to whether the Company Group or Phoenix can continue as a going concern, and which is likely to have a material adverse effect on the Company Group and Phoenix's activities.</p>
<b>Contractual risk</b>	<p>Completion of the Acquisition is subject to the fulfilment of certain conditions precedent. Likewise, some of the Company's operational contracts are subject the completion of certain requirements. The ability of the Company to achieve its stated objectives will depend on the performance by the parties of their obligations under the Acquisition Agreements and the relevant operational contracts. If any party defaults in the performance of their obligations, it may be necessary for the Company to approach a court to seek a legal remedy, which can be costly.</p>

Risk Category	Risk
	<p>If, for any reason, the Acquisition Agreements or operational contracts are breached by any party, the Acquisition may not proceed in which case the Company will need to evaluate its future strategy. In the event that the Acquisition does not proceed, the Company will not issue any Securities under this Prospectus and will return investment funds to Applicants.</p> <p>See Sections 10.3 for further details in relation to the Acquisition Agreements.</p>
<p><b>Key production costs may increase</b></p>	<p>The Company depends on suppliers for raw materials, including steel and copper, which are key manufacturing inputs for the Company's plasma equipment. In addition, the Company's Thermal Plasma Technology uses a substantial amount of energy in its production and destruction processes, with the result that the Company may be exposed to changes in energy prices or energy policy. The Company is exposed to changes in prices of key inputs including raw materials, energy and natural gas. Any increase in the input cost will increase the operating costs which may decrease in demand for the Company's equipment or services which could reduce the Company's profitability.</p>
<p><b>Workplace incident or accident</b></p>	<p>The Company's initial fabrication and PFAS destruction facility will be located in Wacol, Queensland. The Company will have operating equipment at other sites around the globe as the Company grows with processes involving exposure to hazardous chemicals and the use of various plant and equipment. There is a risk of workplace incidents or accidents occurring at any site during the commissioning, training and operational phase. There may be an incident or accident facility that results in serious injury or death to employees, contractors or other third parties, or damage to property.</p> <p>The occurrence of any workplace incident may result in a fine imposed by a regulatory authority, an interruption of operations, a worker's compensation claim, a work health and safety claim or damages claim against the Company. Such claims or events may not be covered by the Company's insurance or may exceed the insured limits. They may also adversely impact the Company's business and reputation.</p>
<p><b>Protection of intellectual property rights</b></p>	<p>The Company has a patent portfolio of 10 patents and unregistered trademarks, which are largely built around a method, apparatus and system using a plasma reactor (refer to the Intellectual Property Report in Annexure B for further detail). The Company relies on laws relating to patents, trade secrets, copyright and trademarks to assist to protect its proprietary rights.</p>

Risk Category	Risk
	<p>In addition, following completion of the Acquisition, a substantial part of the Company's commercial success in respect of the Phoenix operations will depend on its ability to establish and protect the Phoenix IP (which consists of unregistered trade secrets and know-how) to maintain trade secret protection and operate without infringing the proprietary rights of third parties.</p> <p>The commercial value of the Company Group's IP assets is dependent on any relevant legal protections. These legal mechanisms, however, do not guarantee that the IP will be protected or that the Company's competitive position will be maintained. No assurance can be given that employees or third parties will not breach confidentiality agreements, infringe or misappropriate the Company's IP or commercially sensitive information, or that competitors will not be able to produce non-infringing competitive products. Competition in retaining and sustaining protection of technologies and the complex nature of technologies can lead to expensive and lengthy disputes for which there can be no guaranteed outcome. There can be no assurance that any IP which the Company (or entities it deals with) may have an interest in now or in the future will afford the Company commercially significant protection of technologies, or that any of the projects that may arise from technologies will have commercial applications.</p> <p>It is possible that third parties may assert IP infringement, unfair competition or like claims against the Company under copyright, trade secret, patent, or other laws. While the Company is not aware of any claims of this nature in relation to any of the IP rights in which it has or will acquire an interest, such claims, if made, may harm, directly or indirectly, the Company's business. If the Company is forced to defend claims of IP infringement, whether they are with or without merit or are determined in the Company's favour, the costs of such litigation may be potentially significant and may divert management's attention from normal commercial operations.</p> <p>Additionally, securing rights to (or developing) technologies complementing the Company's existing IP will also play an important part in the commercial success of the Company. There is no guarantee that such rights can be secured, or that such technologies can be developed.</p>

Risk Category	Risk
<b>Technology risk</b>	<p>The Company's market involves rapidly evolving products and technological change. The Company cannot guarantee that it will be able to engage in research and development at the requisite levels. The Company cannot assure investors that it will successfully identify new technological opportunities and continue to have the needed financial resources to develop new products in a timely or cost-effective manner. At the same time, products, services and technologies developed by others may render the Company's products and services obsolete or non-competitive.</p>
<b>Rapid growth risk</b>	<p>The Company aims to experience rapid growth in the scope of its operating activities which may expand operations in new jurisdictions or markets. This growth is anticipated to result in an increased level of responsibility which, if unable to be managed, will result in the Company not being able to take advantage of market opportunities and execute its business plan or respond to competitive pressure.</p>
<b>New technology risk</b>	<p>There are many risks inherent in the development and use of new technology, and in particular, the implementation of which may be challenging. The Company cannot assure investors that it will successfully implement new technological opportunities and continue to have the needed financial resources to develop new applications in a timely or cost-effective manner. At the same time, products, services and technologies developed by others may render the Company's products and services obsolete or non-competitive.</p> <p>Further, the Company cannot assure investors that it will successfully be able to develop new technologies or applications that are economically viable or commercialised in a timeframe that would be considered reasonable. Significant scientific discovery is required before new technologies and applications are deemed successful or not, and there is a risk that after significant time and investment, new technologies may not achieve the outcomes originally planned.</p> <p>If the Company is unable to successfully continue to develop its existing or new technology applications, it may not be able to achieve its growth plans, which would adversely affect its operations, financial position and performance.</p>
<b>Third party relationships</b>	<p>The Company is dependent in part upon its relationships and alliances with industry participants who assist the Company in the development of its products. There is a risk that, if any of the Company's existing relationships with partners were impaired or terminated, the Company will experience significant delays in the development of products and would incur additional costs.</p>

Risk Category	Risk
<b>Development risk</b>	<p>The Company's products and services are the subject of continuous development and need to be substantially developed further in order to gain and maintain competitive and technological advantage, and to improve the products' and services' usability, scalability and accuracy. There are no guarantees that the Company will be able to undertake such development successfully. Failure to successfully undertake such research and development, anticipate technical problems, or estimate research and development costs or timeframes accurately will adversely affect the Company's results and viability.</p>
<b>Competition</b>	<p>The market in which the Company operates includes large and well-funded technology companies whose resources exceed those currently available to the Company. There can be no assurance that the Company will be able to match or compete with the efforts of such competitors that release competing products to market.</p> <p>Rival product offerings by existing and new competitors as well as technology developments by competitors may have an adverse effect on the Company's business operations, financial performance and prospects as well as on the value and market price of Securities.</p>
<b>Reliance on key personnel</b>	<p>The responsibility of overseeing the day-to-day operations and the strategic management of the Company depends substantially on its senior management and its key personnel. There can be no assurance given that there will be no detrimental impact on the Company if one or more of these employees cease their employment.</p> <p>The Company's future depends, in part, on its ability to attract and retain key personnel. It may not be able to hire and retain such personnel at compensation levels consistent with its existing compensation and salary structure. Its future also depends on the continued contributions of its executive management team and other key management and technical personnel, the loss of whose services would be difficult to replace. In addition, the inability to continue to attract appropriately qualified personnel could have a material adverse effect on the Company's business.</p>

Risk Category	Risk
<b>Restraints of the global hydrogen market</b>	<p>The production and transportation of hydrogen gas is both complex and challenging, as it is an extremely flammable gas that requires specialty spherical bullet tanks and controlling systems, thereby limiting its usage or adoption for varying applications. This is a factor that may influence operational costs of the Company and its associated risks.</p> <p>The numerous challenges faced by various end-users of hydrogen refuelling, such as the lack of adequate infrastructure, are additional factors that are slated to limit the usage of hydrogen fuel-based vehicles. Additionally, stringent safety requirements concerning the storage and subsequent transportation of hydrogen may also regress the adoption of this technology in the years to come which could have an adverse impact on the Company's business.</p>
<b>Environmental approvals to operate</b>	<p>The Company's operations involve the use and handling of hazardous and environmentally harmful materials and chemicals, including PFAS. For this and other reasons, its operations are subject to environmental protection laws and regulations, including those regulating air emissions, water discharges and waste management and disposal. The Company's technology applications will require regulatory approval in order to operate as designed and contracted. The main approval will be related to air and discharge emissions. Whilst the Company's applications are novel and designed to reduce or eliminate emissions relating to their scope, these decisions are made by regulatory agencies who take into consideration novelty, data, technology, track record and other key points.</p> <p>There is a risk that, if the regulators delayed or rejected the Company's application, the Company will experience significant delays in the development of products, revenue and business growth and would incur additional costs. If the Company were to breach or otherwise fail to comply with any such law or regulation, the cost of curing a breach or resolving associated enforcement actions initiated by government authorities could be substantial and may impact the Company's financial position.</p>
<b>Changes in regulations and policies</b>	<p>Government legislation and policies are subject to review and change from time to time. The Company's operations may be affected by changes in international, federal, state or local government laws, regulations or policies which impact on the Company's ability to operate, or sell products or operate equipment in particular markets. In particular, the Company will sell products overseas, and the introduction of tariffs or other regulations impacting international trade could impact its ability to sell its products or the price it receives for them, and this could adversely impact its ability to generate revenue, and consequently its financial performance and position.</p>

Risk Category	Risk
	<p>In addition, the Company is exposed to risks arising from failure or inability to comply with applicable laws, regulations that apply in Australia and the international jurisdictions in which the Company operates and sells its products. As a result, the Company may be exposed to fines, litigation, or compensation to customers, regulators or other stakeholders. This may adversely impact the Company's reputation and financial performance and position.</p>
<b>Regulatory risk</b>	<p>The Company is subject to continuing regulation, including quality regulations applicable to the manufacture and operation of its products and delivery of its services. The Company has policies and procedures in place which are designed to ensure continuing compliance with applicable regulations for its existing products in the jurisdictions in which it operates. There can be no guarantee that the regulatory environment in which the Company operates may not change in the future which may impact on the Company's existing approvals and products.</p> <p>As set out in Section 6, the Company intends to expand the application of its products and services in target jurisdictions (including the United States of America by virtue of the Acquisition). Further regulatory approvals may be required to expand into these jurisdictions including but not limited to IP protection, marking requirements and other product quality and safety standards specific to the applicable target jurisdiction. The Company may not be able to obtain the necessary approvals and clearances in a timely fashion or may not be able to obtain the necessary approvals and clearances at all. In addition, the Company may face issues associated with conflicting national laws which may negatively impact the operations and financial condition of the Company.</p> <p>Special considerations or risks associated with companies operating in an international setting (including how relevant governments respond to such factors), including any of the following:</p> <ul style="list-style-type: none"> <li>(a) costs and difficulties inherent in managing cross-border business operations and complying with commercial and legal requirements of overseas markets;</li> <li>(b) rules and regulations regarding currency redemption;</li> <li>(c) complex corporate withholding taxes on individuals;</li> <li>(d) laws governing the manner in which future business combinations may be effected;</li> <li>(e) tariffs and trade barriers;</li> <li>(f) regulations related to customs and import/export matters;</li> </ul>

Risk Category	Risk
	<ul style="list-style-type: none"> <li>(g) longer payment cycles;</li> <li>(h) tax consequences, such as tax law changes, including termination or reduction of tax and other incentives that the applicable government provides to domestic companies, and variations in tax laws as compared to Australia;</li> <li>(i) currency fluctuations and exchange controls, including devaluations and other exchange rate movements;</li> <li>(j) rates of inflation, price instability and interest rate fluctuations;</li> <li>(k) liquidity of domestic capital and lending markets;</li> <li>(l) challenges in collecting accounts receivable;</li> <li>(m) cultural and language differences;</li> <li>(n) employment regulations;</li> <li>(o) energy shortages;</li> <li>(p) crime, strikes, riots, civil disturbances, terrorist attacks, natural disasters, wars and other forms of social instability;</li> <li>(q) deterioration of political relations with Australia;</li> <li>(r) obligatory military service by personnel; and</li> <li>(s) government appropriation of assets.</li> </ul>
<b>Forward looking statements risk</b>	<p>This Prospectus and in particular, the Industry Overview (Section 5) contains forward-looking statements which are identified by words such as 'may', 'could', 'believes', 'estimates', 'targets', 'expects', or 'intends' and other similar words that involve risks and uncertainties.</p> <p>These statements are based on an assessment of present economic and operating conditions, and on a number of assumptions regarding future events and actions that, as at the date of this Prospectus, are expected to take place.</p> <p>Such forward-looking statements, including those in respect of the market in which the Company operates, are not guarantees of future performance and involve known and unknown risks, uncertainties, assumptions and other important factors, many of which are beyond the control of the Company, the Directors and the Company's management.</p> <p>The Company cannot and does not give any assurance that the results, performance or achievements expressed or implied by the forward-looking statements contained in this Prospectus will actually occur and investors are cautioned not to place undue reliance on these forward-looking statements.</p> <p>The Company has no intention to update or revise forward-looking statements, or to publish prospective financial information in the future, regardless of whether new information, future events or any other factors affect the information contained in this Prospectus, except where required by law.</p>

Risk Category	Risk
	<p>These forward looking statements are subject to various risk factors that could cause the Company's actual results to differ materially from the results expressed or anticipated in these statements.</p>
<p><b>Foreign exchange</b></p>	<p>The Company will be operating in a variety of jurisdictions, including Australia, the United States of America, Canada, the Middle East and parts of Africa, and as such, expects to generate revenue and incur costs and expenses in AUD, USD, CAD, EUR, AED, SAR and BWP. Consequently, movements in currency exchange rates may adversely or beneficially affect the Company's results or operations and cash flows. For example, the appreciation or depreciation of the US dollar relative to the Australian dollar would result in a foreign currency loss or gain. Any depreciation of currencies in foreign jurisdictions in which the Company operates may result in lower than anticipated revenue, profit and earnings of the Company. In addition, the Company notes that certain cash payments under the Acquisition Agreements are stated in USD and as such, movements in the AUD/USD exchange rate may adversely or beneficially affect the Company and the value of the Acquisition. Further, the total cash consideration payable by the Company will not be known until completion of the Acquisition.</p>
<p><b>COVID-19 risk</b></p>	<p>The outbreak of the coronavirus disease (<b>COVID-19</b>) is impacting global economic markets. The nature and extent of the effect of the outbreak on the performance of the Company remains unknown. The Company's Share price may be adversely affected in the short to medium term by the economic uncertainty caused by COVID-19. Further, any governmental or industry measures taken in response to COVID-19 may adversely impact the Company's operations and are likely to be beyond the control of the Company.</p> <p>The COVID-19 pandemic may also give rise to issues, delays or restrictions in product processing and packaging and the Company's ability to deliver products to customers, which may result in cost increases or adverse impacts on sales. In addition, the effects of COVID-19 on the Company's Share price and global financial markets generally may also affect the Company's ability to raise equity or debt or require the Company to issue capital at a discount, which may in turn cause dilution to Shareholders.</p> <p>The COVID-19 pandemic may also give rise to issues, delays or restrictions in relation to the Company's ability to freely move people and equipment and may cause delays or cost increases. The effects of COVID -19 on the Company's Share price and global financial markets generally may also affect the Company's ability to raise equity or debt or require the Company to issue capital at a discount, which may in turn cause dilution to Shareholders.</p>

Risk Category	Risk
	The Directors are monitoring the situation closely and have considered the impact of COVID-19 on the Company's business and financial performance. However, the situation is continually evolving, and the consequences are therefore inevitably uncertain. If any of these impacts appear material prior to close of the Public Offer, the Company will notify investors under a supplementary prospectus.

### 8.3 Industry specific risks

Risk Category	Risk
<b>Product liability</b>	As with all products, there is no assurance that unforeseen adverse events or defects will not arise in the Company's products. Adverse events could expose the Company to product liability claims or litigation, resulting in the removal of regulatory approval for the relevant products and/or monetary damages being awarded against the Company. In such event, the Company's liability may exceed the Company's insurance coverage, if any.
<b>Disputes</b>	<p>The activities of the Company may result in disputes with third parties, including, without limitation, the Company's investors, competitors, regulators, partners, suppliers, distributors, customers, directors, officers and employees, and service providers. The Company may incur substantial costs in connection with such disputes.</p> <p>Further, a change in strategy may involve material and as yet unanticipated risks, as well as a high degree of risk, including a higher degree of risk than the Company's strategy in place as of the date of this Prospectus.</p>
<b>Loss of customers</b>	The Company has established important relationships through development of its business to date. The loss of one or more customers through termination or expiry of contracts may adversely affect the operating results of the Company.
<b>Litigation</b>	The Company is exposed to possible litigation risks including, but not limited to, IP ownership disputes, contractual claims, environmental claims, occupational health and safety claims and employee claims. Further, the Company may be involved in disputes with other parties in the future which may result in litigation. Any such claim or dispute if proven, may impact adversely on the Company's operations, financial performance and financial position. The Company is not currently engaged in any litigation.

Risk Category	Risk
<b>Data loss, theft or corruption</b>	<p>The Company stores data in its own systems and networks and also with a variety of third-party service providers. The Company holds sensitive employee and customer data and information related to its proprietary designs and processes. The Company's IT systems may be adversely affected by damage to computer equipment or network systems, equipment faults, power failures, computer viruses, misuse of systems or inadequate business continuity planning.</p> <p>Any failure of the Company's IT systems as a result of these factors may compromise the Company's data integrity (which may result in an inadvertent security breach in relation to such data) and lead to unauthorised access to the Company's IP. This in turn may adversely affect the Company's reputation, business operations, and financial performance and profitability or expose the Company to third party liability.</p> <p>Additionally, as the Company's operations grow they will also become more complex and require more complex IT support. Introducing more complex and sophisticated IT systems may require additional resources, or divert management attention. Further, any failure or delay in implementing required IT systems may adversely impact the Company's operations, and consequently its financial position or performance.</p> <p>Exploitation, unauthorised access or hacking of any of the Company's systems or networks could lead to corruption, theft or loss of the data which could have a material adverse effect on the Company's business, financial condition and results. Further, if the Company's systems, networks or technology are subject to any type of 'cyber' crime, its technology may be perceived as unsecure which may lead to a decrease in the number of customers.</p> <p>The Company has not been hacked, but it is possible that the Company may experience negative publicity if their systems are able to be hacked at some point in the future.</p>
<b>Insurance coverage</b>	<p>The Company faces various risks in conducting its business and may lack adequate insurance coverage or may not have the relevant insurance coverage. The Company proposes to arrange and maintain insurance coverage for its employees, as well as Directors and Officers liability insurance, however it does not currently propose to arrange and maintain business interruption insurance or insurance against claims for certain property damage. The Company will need to review its insurance requirements periodically. If the Company incurs substantial losses or liabilities and its insurance coverage is unavailable or inadequate to cover such losses or liabilities, the Company's financial position and financial performance may be adversely affected.</p>

Risk Category	Risk
	<p>The Company considers that it has sufficient insurance policies in place in respect of its business and assets. However, the occurrence of an event that is not covered or fully covered by insurance could have a material adverse effect on the business, financial condition and results of the Company.</p>
<b>Price risks</b>	<p>The price of the Company's products may be too high compared to other products, in particular within emerging markets and the regions where the Company presently operates, where there is a high price pressure. This may lead to difficulties in the market acceptance for the Company's products, as customers may switch to cheaper products, which may require the Company to decrease its prices. As a result, there could be lower operating margins.</p>
<b>Reputational risk</b>	<p>Any negative publicity regarding the Company, or its Board, officers or employees, or the performance of its products, will adversely affect the Company's ability to generate revenue.</p>
<b>Strategies</b>	<p>The strategy discussed in this Prospectus may evolve over time due to, among other things, market developments and trends, technical challenges, the emergence of new or enhanced technology, changing regulation and/or industry practice, and otherwise in the Company's sole discretion. Such a change might also be required due to ever changing nature of the Company's industry. As a result, the strategy, approaches, markets and products described in this Prospectus may not reflect the strategies, approaches, markets and products relevant to, or pursued by, the Company at a later date.</p> <p>Further, a change in strategy may involve material and as yet unanticipated risks, as well as a high degree of risk, including a higher degree of risk than the Company's strategy in place as of the date hereof.</p>
<b>Unforeseen expenditure risk</b>	<p>Expenditure may need to be incurred that has not been taken into account in the preparation of this Prospectus. Although the Company is not aware of any such additional expenditure requirements, if such expenditure is subsequently incurred, this may adversely affect the expenditure proposals of the Company.</p>

## 8.4 General risks

Risk Category	Risk
<b>Additional requirements for capital</b>	<p>The Company's capital requirements depend on numerous factors. The Company may require further financing in addition to amounts raised under the Public Offer. Any additional equity financing will dilute shareholdings, and debt financing, if available, may involve restrictions on financing and operating activities. If the Company is unable to obtain additional financing as needed, it may be required to reduce the scope of its operations and scale back its Projects as the case may be. There is however no guarantee that the Company will be able to secure any additional funding or be able to secure funding on terms favourable to the Company.</p>
<b>Economic conditions and other global or national issues</b>	<p>General economic conditions, laws relating to taxation, new legislation, trade barriers, movements in interest and inflation rates, currency exchange controls and rates, national and international political circumstances (including wars, terrorist acts, sabotage, subversive activities, security operations, labour unrest, civil disorder, and states of emergency), natural disasters (including fires, earthquakes and floods), and quarantine restrictions, epidemics and pandemics, may have an adverse effect on the Company's operations.</p>
<b>Currently no market</b>	<p>There is currently no public market for the Company's Shares, the price of its Shares is subject to uncertainty and there can be no assurance that an active market for the Company's Shares will develop or continue after the Public Offer.</p> <p>The price at which the Company's Shares trade on ASX after listing may be higher or lower than the issue price of Shares offered under this Prospectus and could be subject to fluctuations in response to variations in operating performance and general operations and business risk, as well as external operating factors over which the Directors and the Company have no control, such as movements in commodity prices and exchange rates, changes to government policy, legislation or regulation and other events or factors.</p> <p>There can be no guarantee that an active market in the Company's Shares will develop or that the price of the Shares will increase. There may be relatively few or many potential buyers or sellers of the Shares on ASX at any given time. This may increase the volatility of the market price of the Shares. It may also affect the prevailing market price at which Shareholders are able to sell their Shares. This may result in Shareholders receiving a market price for their Shares that is above or below the price that Shareholders paid.</p>

Risk Category	Risk
<b>Dependence on outside parties</b>	<p>The Company may pursue a strategy that forms strategic business relationships with the other organisations for the manufacture and distribution of products and services. The manufacture and global distribution of products and services is important to the overall success of the Company. There can be no assurance that the Company will be able to attract such prospective organisations and to negotiate appropriate terms and conditions with these organisations.</p>
<b>Funding risk</b>	<p>The Company's ability to effectively implement its business and operations plans in the future, to take advantage of opportunities for acquisitions, joint ventures or other business opportunities and to meet any unanticipated liabilities or expenses which the Company may incur may depend in part on its ability to raise additional funds. The Company may seek to raise further funds through equity or debt financing, joint ventures, production sharing arrangements or other means. Failure to obtain sufficient financing for the Company's activities and future projects may result in delay and indefinite postponement of development or research. There can be no assurance that additional finance will be available when needed or, if available, the terms of the financing might not be favourable to the Company and might involve substantial dilution to Shareholders.</p> <p>Further, the Company, in the ordinary course of its operations and developments, is required to issue financial assurances, particularly insurances and bond/bank guarantee instruments to secure statutory and environmental performance undertakings and commercial arrangements. The Company's ability to provide such assurances is subject to external financial and credit market assessments, and its own financial position.</p> <p>Loan agreements and other financing rearrangements such as debt facilities, convertible note issue and finance leases (and any related guarantee and security) that may be entered into by the Company may contain covenants, undertakings and other provisions which, if breached, may entitle lenders to accelerate repayment of loans and there is no assurance that the Company would be able to repay such loans in the event of an acceleration. Enforcement of any security granted by the Company or default under a finance lease could also result in the loss of assets.</p>

Risk Category	Risk
	<p>The Company is exposed to risks associated with its financial instruments (consisting of cash, receivables, accounts payable and accrued liabilities due to third parties from time to time). This includes the risk that a third party to a financial instrument fails to meet its contractual obligations; the risk that the Company will not be able to meet its financial obligations as they fall due; and the risk that market prices may vary which will affect the Company's income.</p>
<b>Market conditions</b>	<p>Share market conditions may affect the value of the Company's quoted securities regardless of the Company's operating performance. Share market conditions are affected by many factors such as:</p> <ul style="list-style-type: none"> <li>(a) general economic outlook;</li> <li>(b) introduction of tax reform or other new legislation;</li> <li>(c) interest rates and inflation rates;</li> <li>(d) changes in investor sentiment toward particular market sectors;</li> <li>(e) the demand for, and supply of, capital; and</li> <li>(f) terrorism or other hostilities.</li> </ul> <p>The market price of securities can fall as well as rise and may be subject to varied and unpredictable influences on the market for equities in general and technology or defence stocks in particular. Neither the Company nor the Directors warrant the future performance of the Company or any return on an investment in the Company. The value of the Shares may fluctuate more sharply than that of other securities, given the low per Share pricing of the Shares under the Prospectus, and the fact that investment in the Company is highly speculative.</p> <p>Further, after the end of the relevant escrow periods affecting Shares in the Company, a significant sale of then tradeable Shares (or the market perception that such a sale might occur) could have an adverse effect on the Company's Share price. Please refer to Section 6.12 for further details on the Shares likely to be classified by the ASX as restricted securities.</p>
<b>Ukraine conflict</b>	<p>The current evolving conflict between Ukraine and Russia (<b>Ukraine Conflict</b>) is impacting global economic markets. The nature and extent of the effect of the Ukraine Conflict on the performance of the Company remains unknown. The Company's Share price may be adversely affected in the short to medium term by the economic uncertainty caused by the Ukraine Conflict.</p>

Risk Category	Risk
	<p>The Directors are continuing to closely monitor the potential secondary and tertiary macroeconomic impacts of the unfolding events, including the changing pricing of commodity and energy markets and the potential of cyber activity impacting governments and businesses. Further, any governmental or industry measures taken in response to the Ukraine Conflict, including limitations on travel and changes to import/export restrictions and arrangements involving Russia, may adversely impact the Company's operations and are likely to be beyond the control of the Company. The Company is monitoring the situation closely and considers the impact of the Ukraine Conflict on the Company's business and financial performance to, at this stage, be limited. However, the situation is continually evolving, and the consequences are therefore inevitably uncertain.</p>
<b>Joint venture, acquisitions or other strategic investments</b>	<p>The Company may make strategic investments in complementary businesses, or enter into strategic partnerships or alliances with third parties in order to enhance its business. At the date of this Prospectus, the Company is not aware of the occurrence or likely occurrence of any such risks which would have a material adverse effect on the Company or its subsidiaries.</p>
<b>Taxation risk</b>	<p>The acquisition and disposal of Securities will have tax consequences for investors, which will vary depending on the individual financial affairs of each investor. All potential investors in the Company are urged to obtain independent professional taxation and financial advice about the consequences of acquiring and disposing of Securities from a taxation viewpoint and generally.</p>

## 8.5 Investment speculative

The risk factors described above, and other risks factors not specifically referred to, may have a materially adverse impact on the performance of the Company and the value of the Securities.

Prospective investors should consider that an investment in the Company is highly speculative.

There is no guarantee that the Securities offered under this Prospectus will provide a return on capital, payment of dividends or increases in the market value of those Shares.

Before deciding whether to subscribe for Securities under this Prospectus you should read this Prospectus in its entirety and consider all factors, taking into account your objectives, financial situation and needs.

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## 9. BOARD, MANAGEMENT AND CORPORATE GOVERNANCE

### 9.1 Directors, Proposed Director and key personnel

The Board of the Company consists of:

- (a) **Lynne Saint (BCom, GradDip Ed Studies, FCPA, FAICD, Cert Business Administration)** – *Proposed Non-Executive Chairperson*

Ms Saint contributes over 30 years' financial, auditing, corporate governance, enterprise risk, supply chain management, project management, and commercial experience both within Australia and internationally.

Ms Saint will join the Board from Bechtel Group, where she acquired more than 19 years' leadership experience in her executive career. Having most recently served as Chief Audit Executive, Ms Saint was formerly Chief Financial Officer of Bechtel's Mining and Metals Global Business Unit.

Prior to Bechtel, Ms Saint worked in commercial roles at Fluor Daniel and Placer Dome. Ms Saint also held consulting and auditing roles with PwC and KPMG.

Ms Saint currently serves as a non-executive Director of Nufarm Limited (ASX:NUF), Iluka Resources Limited (ASX:ILU) and Ventia Services Group Pty Ltd. In 2003, Ms Saint was recognised as the Telstra Queensland Business Woman of the Year.

The Board considers that Ms Saint will be an independent Director.

- (b) **Christopher Dunks (BEng (Mech))** – *Managing Director and Chief Executive Officer*

Christopher is a founding Shareholder and Director of the Company.

Christopher has spent the past 20 years working on major minerals processing, refining and power projects both in Australia and the USA. Christopher was a Founder and Executive Director of ASX-listed Elementos Ltd (ASX:ELT). Christopher's experience is in mechanical design, construction management and supervision, project controls, project management, contract negotiation, business development and new technology commercialisation.

The Board does not consider that Christopher is an independent Director.

- (c) **Terence Gray (BBus, GradDip App.Fin&Inv)** – *Executive Director*

Terence is a corporate finance professional who has deep knowledge of funds management and the Australian equity market providing expertise in company valuation, corporate financing and M&A activity.

Terence is the principal of Tegis Pty Ltd (ACN 120 347 088) (**Tegis**), an investment management and corporate advisory services company and is a director of ASX listed Leaf Resources Limited (ASX:LER).

Terence was a non-executive director of Spirit Telecom Limited, an ASX listed telecommunications company from 2014 to 2020 and chair of the audit and risk committee during his tenor. Other previous roles include Head of Equities at ANZ Funds Management, Chief Investment Officer at Allianz Equity Management, Head of Research at Allianz Dresdner Asset Management, Director of Corporate Finance at Grange Securities and Corporate Consultant nominated as a Responsible Manager for Lodge Partners stockbroking.

The Board does not consider that Terence is an independent Director.

(d) **Dr Geoff Duckworth (B.Eng.(Chem), M.Eng.Sc., PhD, FIChemE, FAusIMM, MIEAust, GradDip(Tech Mgmt), RPEQ 2702) – Technical Director**

Dr Geoff Duckworth is a founding Shareholder and Director of the Company.

Geoff has over 45 years of experience, predominantly in project development, process design and process design management. Geoff's experience covers a wide spectrum of industries including oil refining, petrochemicals, inorganic chemicals, fertilisers, mineral dressing, hydrometallurgy, metals refining, food processing and effluent treatment.

The Board does not consider that Geoff is an independent Director.

(e) **Charles Fox (BS (ME) MS (Pet.Eng))– Proposed Non-Executive Director**

Charles E. (Chuck) Fox has extensive experience in operations, engineering, marketing and business development. Charles is chief executive officer and founder of Pure Earth Plasma Holdings LLC. Prior to Pure Earth, he was the CEO of Windy Cove Energy and Windy Cove Energy II. Previously, he was vice president of operations and engineering for Kinder Morgan CO2 Company and managed annual expenditures of approximately \$800 million. Chuck was also vice president of marketing for Shell CO2 Company. Chuck is a co-author of the SPE monograph, Practical Aspects of CO2 Flooding and is an SPE distinguished lecturer on carbon capture utilization and storage. He has taught numerous classes about CO2 flooding and carbon storage. He holds a M.S. degree in petroleum engineering from Stanford University and a B.S. degree in mechanical engineering from Rice University. He is a registered professional engineer in Texas and New Mexico. Chuck currently serves on the audit committee of the Society of Petroleum Engineers, a non-profit global society with more than 140,000 members in 144 countries.

The Board does not consider that Chuck will be an independent Director.

(f) **Joseph Stopper (BA (Ec)) - Proposed Non-Executive Director**

Joseph M. Stopper is a founding director of Pure Earth Plasma Holdings LLC and a partner at Yorktown, a New York based private equity firm that has been making investments in the energy industry since 1997.

Joseph has worked at Yorktown Partners since 2013 and presently serves on the board of a variety of other portfolio companies including Evergreen Natural Resources, Windy Cove Energy II, and Triple Oak Power. He served on the board of Solaris Midstream from inception in 2016 to its initial public offering in 2021 as Aris Water Solutions (NYSE: ARIS).

From 2013 through 2018, he was also involved with Oakcliff Partners, a firm that makes long-term investments in publicly traded companies across a range of industries and geographies. He also serves as a director of not-for-profit organizations including Oakcliff Sailing and the New York School of the Arts. Joseph obtained a B.A. in Economics from Yale University.

The Board does not consider that Joseph will be an independent Director.

## 9.2 Key management

The key management of the Company consists of:

- (a) **Drew Speedy (BBus, CPA, AGIA)** – *Chief Financial Officer and Company Secretary*

Drew has held numerous finance roles within ASX listed companies over the past 19 years. Most recently, Drew was CFO and Company Secretary of UIL Energy Ltd (previously ASX:UIL) until its (Board Recommended) takeover by Strike Energy Ltd (ASX:STX). Prior to that he was Financial Controller of Bow Energy Ltd until its sale to Arrow Energy Holdings Pty Ltd and has held senior finance roles with other companies including Arrow Energy Holdings Pty Ltd, Blue Energy Limited (ASX:BLU) and Queensland Gas Company during the company's market cap growth phase from \$20 million to ~\$2 billion.

Drew has extensive experience in company financial reporting, regulatory and governance areas, business acquisition and disposal due diligence and capital raisings.

Drew has a Bachelor of Business from the Queensland University of Technology. He is a member of the Certified Practising Accountants and the Governance Institute of Australia.

The key management of Phoenix consists of:

- (b) **Douglas Frame BS (Bus)** – *President and Chief Executive Officer of Phoenix*

Douglas has spent over 30 years working with high temperature applications, first with FluiDyne Engineering Corporation on aerospace applications and then with Phoenix with plasma heating and process applications. Douglas has been the President and CEO of Phoenix for more than 20 years. Douglas is also a board member of Phoenix.

Douglas works in management and marketing – his strengths are project management, contract negotiations, business development and large system sales.

Douglas holds BS Business from the University of Minnesota, Carlson School of Management.

The Company is aware of the need to have sufficient management to properly supervise its operations, expansion and research and development, and the Board will continually monitor the management roles in the Company Group. The Board will look to appoint additional management and/or consultants when and where appropriate to ensure proper management oversight of the Company Group's activities.

### 9.3 Disclosure of interests

#### Remuneration

Details of the Directors and Proposed Directors' remuneration for the previous two completed financial years, the current financial year and the next financial year (on an annualised basis) are set out in the table below:

Name	Remuneration for the year ended 30 June 2020 <sup>7</sup>	Remuneration for the year ended 30 June 2021 <sup>7</sup>	Proposed remuneration for the year ending 30 June 2022 <sup>7</sup>	Proposed remuneration for the year ending 30 June 2023 <sup>7</sup>
<b>Director</b>				
Christopher Dunks	\$300,000	\$300,000 <sup>1</sup>	\$306,131	\$373,568
Dr. Geoff Duckworth	\$66,000	\$66,000 <sup>2</sup>	\$88,000	\$330,000
Terence Gray	\$245,000 <sup>3</sup>	\$300,000 <sup>4</sup>	\$300,000	\$300,000
<b>Proposed Director</b>				
Lynne Saint <sup>5</sup>	Nil	Nil	\$10,000 <sup>6</sup>	\$120,000
Charles Fox <sup>5</sup>	Nil	Nil	\$5,833 <sup>6</sup>	\$70,000
Joseph Stopper <sup>5</sup>	Nil	Nil	\$5,833 <sup>6</sup>	\$70,000

#### **Notes:**

1. Includes \$128,333 in Director fees that was settled through the issue of 1,604,167 Shares on 1 July 2021 at a deemed issue price of \$0.08 per Share.
2. Includes \$27,500 in Director fees that was settled through the issue of 343,750 Shares on 1 July 2021 at a deemed issue price of \$0.08 per Share.
3. The Company notes that in addition to the fees which Mr Terence Gray received for services provided as Executive Director of the Company (being \$245,000), Tegis Pty Ltd (ACN 120 347 088) (an entity controlled by Mr Terence Gray) (**Tegis**) received 1,333,334 Shares at a value of \$0.03 per Share in relation to corporate advisory services provided to the Company on standard arm's length commercial terms.
4. Includes \$137,500 in Director fees that was settled through the issue of 1,718,750 Shares on 1 July 2021 at a deemed issue price of \$0.08 per Share.
5. Lynne Saint, Charles Fox and Joseph Stopper will be appointed as Directors upon listing of the Company. As such, they did not receive any remuneration for the financial years ended 30 June 2020 and 30 June 2021.
6. Remuneration for the year ending 30 June 2022 is calculated pro rata from the indicative date of appointment of Lynne Saint, Charles Fox and Joseph Stopper at listing of the Company (assuming a listing date of 1 June 2022).
7. Inclusive of superannuation (if applicable).

#### Interests in Securities – Directors

##### **As at the date of this Prospectus**

Directors are not required under the Company's Constitution to hold any Shares to be eligible to act as a director. As at the date of this Prospectus, the Directors have relevant interests in securities as follows:

Name	Shares	Options	Performance Rights	Percentage (%) (Undiluted)	Percentage (%) (Fully Diluted)
<b>Director</b>					
Christopher Dunks	60,354,167 <sup>1</sup>	-	2,406,250 <sup>2</sup>	20.74%	20.56%
Dr. Geoff Duckworth	59,093,750 <sup>3</sup>	-	515,625 <sup>4</sup>	20.30%	19.53%
Terence Gray	11,183,146 <sup>5</sup>	458,334 <sup>6</sup>	2,578,125 <sup>7</sup>	3.84%	4.66%
<b>Proposed Director</b>					
Lynne Saint	-	-	-	0.00%	0.00%
Charles Fox	- <sup>8</sup>	-	-	0.00%	0.00%
Joseph Stopper	- <sup>9</sup>	-	-	0.00%	0.00%

**Notes:**

1. Held by The Well Beneath Pty Ltd ATF Duffery Family A/C (an entity controlled by Christopher Dunks).
2. Comprising, 2,406,250 Class B Performance Rights held by Christopher Dunks.
3. Held by Resource Technology Pty Ltd ATF Geoff Duckworth Family A/C (an entity controlled by Dr. Geoff Duckworth).
4. Comprising, 515,625 Class B Performance Rights held by Resource Technology Pty Ltd ATF Geoff Duckworth Family A/C (an entity controlled by Geoff Duckworth).
5. Comprising, 4,391,668 Shares held by Tegis Pty Ltd (an entity controlled by Terence Gray), 3,368,182 Shares held by Mr Terence Gray and Mrs Elizabeth Gray ATF The T&E Gray S/F A/C (an entity controlled by Terence Gray), 1,136,364 Shares held by Yallipse Pty Ltd (an entity controlled by Terence Gray) and 2,286,923 Shares held by TRG Pty Ltd (an entity controlled by Terence Gray).
6. Comprising, 291,667 Options (exercisable at \$0.16 each on or before 31 May 2022) held by Mr Terence Gray and Mrs Elizabeth Gray ATF The T&E Gray S/F A/C (an entity controlled by Terence Gray) and 166,667 Options exercisable at \$0.16 each on or before 31 May 2022 held by Tegis Pty Ltd (an entity controlled by Terence Gray).
7. Comprising, 2,578,125 Class B Performance Rights held by TRG Pty Ltd ATF The Terence Gray Family Trust (an entity controlled by Terence Gray).
8. Charles Fox has a 4.75% interest in Pure Earth Plasma Holdings LLC (which interest may increase up to 16.80% upon the satisfaction of certain performance criteria). Pure Earth Plasma Holdings LLC holds 8,000,000 USD Notes in the Company.
9. Joseph Stopper has a 0.015% interest in Pure Earth Plasma Holdings LLC (which interest may increase up to 0.212% upon the satisfaction of certain performance criteria). Pure Earth Plasma Holdings LLC holds 8,000,000 USD Notes in the Company.

The Directors may participate in the Public Offer. This is subject to the allocation policy set out in Section 4.10 of this Prospectus.

## Post-completion of the Offers (Minimum Subscription) and Acquisition

Name	Shares	Options	Performance Rights	Percentage (%) (Undiluted)	Percentage (%) (Fully Diluted)
<b>Director</b>					
Christopher Dunks	60,354,167 <sup>1</sup>	-	2,406,250 <sup>2</sup>	10.02%	9.27%
Dr. Geoff Duckworth	59,093,750 <sup>3</sup>	-	515,625 <sup>4</sup>	9.81%	8.81%
Terence Gray	11,183,146 <sup>5</sup>	10,458,334 <sup>6</sup>	2,578,125 <sup>7</sup>	1.86%	3.58%
<b>Proposed Director</b>					
Lynne Saint	-	-	-	0.00%	0.00%
Charles Fox	- <sup>8</sup>	-	-	0.00%	0.00%
Joseph Stopper	- <sup>9</sup>	-	-	0.00%	0.00%

### Notes:

- Held by The Well Beneath Pty Ltd ATF Duffery Family A/C (an entity controlled by Christopher Dunks).
- Comprising, 2,406,250 Class B Performance Rights held by Christopher Dunks.
- Held by Resource Technology Pty Ltd ATF Geoff Duckworth Family A/C (an entity controlled by Geoff Duckworth).
- Comprising, 515,625 Class B Performance Rights held by Resource Technology Pty Ltd ATF Geoff Duckworth Family A/C (an entity controlled by Dr. Geoff Duckworth).
- Comprising, 4,391,668 Shares held by Tegis Pty Ltd (an entity controlled by Terence Gray), 3,368,182 Shares held by Mr Terence Gray and Mrs Elizabeth Gray ATF The T&E Gray S/F A/C (an entity controlled by Terence Gray), 1,136,364 Shares held by Yallipse Pty Ltd (an entity controlled by Terence Gray) and 2,286,923 Shares held by TRG Pty Ltd (an entity controlled by Terence Gray).
- Comprising, 291,667 Options exercisable at \$0.16 each on or before 31 May 2022 held by Mr Terence Gray and Mrs Elizabeth Gray ATF The T&E Gray S/F A/C (an entity controlled by Terence Gray), 166,667 Options exercisable at \$0.16 each on or before 31 May 2022 held by Tegis Pty Ltd (an entity controlled by Terence Gray) and 10,000,000 Options held by Tegis Pty Ltd (an entity controlled by Terence Gray) exercisable at \$0.25 each on or before 31 July 2024 (which Options are being issued under the Tegis Consulting Agreement).
- Comprising, 2,578,125 Class B Performance Rights held by TRG Pty Ltd ATF The Terence Gray Family Trust (an entity controlled by Terence Gray).
- Charles Fox has a 4.75% interest in Pure Earth Plasma Holdings LLC (which interest may increase up to 16.80% subject to satisfaction of certain performance criteria). Pure Earth Plasma Holdings LLC holds 8,000,000 USD Notes in the Company which will convert into 132,275,132 Shares upon the Company receiving the conditional approval of ASX (on customary terms) to be admitted to the Official List (assuming an AUD/USD exchange rate of 0.72 which is subject to change).
- Joseph Stopper has a 0.015% interest in Pure Earth Plasma Holdings LLC (which interest may increase up to 0.212% upon the satisfaction of certain performance criteria). Pure Earth Plasma Holdings LLC holds 8,000,000 USD Notes in the Company which will convert into 132,275,132 Shares upon the Company receiving the conditional approval of ASX (on customary terms) to be admitted to the Official List (assuming an AUD/USD exchange rate of 0.72 which is subject to change).

## Post-completion of the Offers (Maximum Subscription) and Acquisition

Name	Shares	Options	Performance Rights	Percentage (%) (Undiluted)	Percentage (%) (Fully Diluted)
<b>Director</b>					
Christopher Dunks	60,354,167 <sup>1</sup>	-	2,406,250 <sup>2</sup>	9.62%	8.79%
Dr. Geoff Duckworth	59,093,750 <sup>3</sup>	-	515,625 <sup>4</sup>	9.42%	8.35%
Terence Gray	11,183,146 <sup>5</sup>	10,458,334 <sup>6</sup>	2,578,125 <sup>7</sup>	1.78%	3.39%
<b>Proposed Director</b>					
Lynne Saint	-	-	-	0.00%	0.00%
Charles Fox	- <sup>8</sup>	-	-	0.00%	0.00%
Joseph Stopper	- <sup>9</sup>	-	-	0.00%	0.00%

### Notes:

1. Held by The Well Beneath Pty Ltd ATF Duffery Family A/C (an entity controlled by Christopher Dunks).
2. Comprising, 2,406,250 Class B Performance Rights held by Christopher Dunks.
3. Held by Resource Technology Pty Ltd ATF Geoff Duckworth Family A/C (an entity controlled by Geoff Duckworth).
4. Comprising, 515,625 Class B Performance Rights held by Resource Technology Pty Ltd ATF Geoff Duckworth Family A/C (an entity controlled by Dr. Geoff Duckworth).
5. Comprising, 4,391,668 Shares held by Tegis Pty Ltd (an entity controlled by Terence Gray), 3,368,182 Shares held by Mr Terence Gray and Mrs Elizabeth Gray ATF The T&E Gray S/F A/C (an entity controlled by Terence Gray), 1,136,364 Shares held by Yallipse Pty Ltd (an entity controlled by Terence Gray) and 2,286,923 Shares held by TRG Pty Ltd (an entity controlled by Terence Gray).
6. Comprising, 291,667 Options exercisable at \$0.16 each on or before 31 May 2022 held by Mr Terence Gray and Mrs Elizabeth Gray ATF The T&E Gray S/F A/C (an entity controlled by Terence Gray), 166,667 Options exercisable at \$0.16 each on or before 31 May 2022 held by Tegis Pty Ltd (an entity controlled by Terence Gray) and 10,000,000 Options held by Tegis Pty Ltd (an entity controlled by Terence Gray) exercisable at \$0.25 each on or before 31 July 2024 (which Options are being issued under the Tegis Consulting Agreement).
7. Comprising, 2,578,125 Class B Performance Rights held by TRG Pty Ltd ATF The Terence Gray Family Trust (an entity controlled by Terence Gray).
8. Charles Fox has a 4.75% interest in Pure Earth Plasma Holdings LLC (which may increase up to 16.80% upon the satisfaction of certain performance criteria). Pure Earth Plasma Holdings LLC holds 8,000,000 USD Notes in the Company which will convert into 132,275,132 Shares upon the Company receiving the conditional approval of ASX (on customary terms) to be admitted to the Official List (assuming an AUD/USD exchange rate of 0.72 which is subject to change).
9. Joseph Stopper has a 0.015% interest in Pure Earth Plasma Holdings LLC (which interest may increase up to 0.212% upon the satisfaction of certain performance criteria). Pure Earth Plasma Holdings LLC holds 8,000,000 USD Notes in the Company which will convert into 132,275,132 Shares upon the Company receiving the conditional approval of ASX (on customary terms) to be admitted to the Official List (assuming an AUD/USD exchange rate of 0.72 which is subject to change).

The Company's constitution provides that the remuneration of non-executive Directors will be not more than the aggregate fixed sum determined by a general meeting. The aggregate remuneration for non-executive Directors is \$700,000 per annum although may be varied by ordinary resolution of the Shareholders in general meeting.

The remuneration of any executive director that may be appointed to the Board will be fixed by the Board and may be paid by way of fixed salary or consultancy fee.

### **Remuneration**

Details of the key management personnel's remuneration for the previous two completed and the current financial year (on an annualised basis) are set out in the table below:

Name	Remuneration for the year ended 30 June 2020 <sup>5</sup>	Remuneration for the year ended 30 June 2021 <sup>5</sup>	Proposed remuneration for the year ending 30 June 2022 <sup>5</sup>
Drew Speedy	\$76,570 <sup>1</sup>	\$109,500 <sup>2</sup>	\$129,750
Douglas Frame <sup>3,4</sup>	Nil	Nil	\$20,487

#### **Notes:**

1. Drew Speedy was appointed on 21 October 2019. Remuneration for the year ending 30 June 2020 including superannuation is calculated pro rata from the appointment of Drew Speedy on 21 October 2019.
2. Includes \$50,187.50 in fees that was settled through the issue of 627,344 Shares on 1 July 2021 at a deemed issue price of \$0.08 per Share.
3. Douglas Frame is presently employed by Phoenix, which will be a subsidiary of the Company following completion of the Acquisition. As such, Douglas Frame has not been paid any remuneration by the Company for the financial years ended 30 June 2020 or 30 June 2021.
4. Remuneration for the year ending 30 June 2022 is calculated pro rata from the indicative date of completion of the Acquisition (assuming a completion date of 1 June 2022 and a AUD/USD exchange rate of 0.72).
5. Amounts are inclusive of superannuation (if applicable).

### **Interests in Securities – Key Management**

#### **As at the date of this Prospectus**

As at the date of this Prospectus, the key management personnel of the Company and Phoenix have relevant interests in securities as follows:

Name	Shares	Options	Performance Rights	Percentage (%) (Undiluted)	Percentage (%) (Fully Diluted)
Drew Speedy	627,344 <sup>1</sup>	-	1,916,016 <sup>2</sup>	0.22%	0.83%
Douglas Frame <sup>3</sup>	-	-	-	0.00%	0.00%

#### **Notes:**

1. Held by Mr Drew Speedy and Mrs Caroline Speedy ATF The Glendower A/C.

2. Comprising, 1,916,016 Class B Performance Rights held by Mr Drew Speedy and Mrs Caroline Speedy ATF The Glendower A/C.
3. Douglas Frame and Frame Family Partnership (an entity associated with Douglas Frame) are Phoenix Vendors.

#### Post-completion of the Public Offer – Minimum Subscription

Name	Shares	Options	Performance Rights	Percentage (%) (Undiluted)	Percentage (%) (Fully Diluted)
Drew Speedy	627,344 <sup>1</sup>	-	1,916,016 <sup>2</sup>	0.10%	0.38%
Douglas Frame	14,704,415 <sup>3</sup>	-	-	2.44%	2.17%

#### Notes:

1. Held by Mr Drew Speedy and Mrs Caroline Speedy ATF The Glendower A/C.
2. Comprising, 1,916,016 Class B Performance Rights held by Mr Drew Speedy and Mrs Caroline Speedy ATF The Glendower A/C.
3. Comprising 4,211,562 Shares issued to Douglas Frame and 10,492,853 Shares issued to Frame Family Partnership (an entity associated with Mr Frame) in consideration for the Acquisition.

#### Post-completion of the Public Offer – Maximum Subscription

Name	Shares	Options	Performance Rights	Percentage (%) (Undiluted)	Percentage (%) (Fully Diluted)
Drew Speedy	627,344 <sup>1</sup>	-	1,916,016 <sup>2</sup>	0.10%	0.36%
Douglas Frame	14,704,415 <sup>3</sup>	-	-	2.34%	2.06%

#### Notes:

1. Held by Mr Drew Speedy and Mrs Caroline Speedy ATF The Glendower A/C.
2. Comprising, 1,916,016 Class B Performance Rights held by Mr Drew Speedy and Mrs Caroline Speedy ATF The Glendower A/C.
3. Comprising 4,211,562 Shares issued to Douglas Frame and 10,492,853 Shares issued to Frame Family Partnership LLC (an entity associated with Mr Frame) in consideration for the Acquisition.

## 9.4 Agreements with Directors and related parties

The Company's policy in respect of related party arrangements is:

- (a) a Director with a material personal interest in a matter is required to give notice to the other Directors before such a matter is considered by the Board; and
- (b) for the Board to consider such a matter, the Director who has a material personal interest is not present while the matter is being considered at the meeting and does not vote on the matter.

The agreements between the Company and related parties are summarised in Sections 10.6.

## 9.5 Corporate governance

### (a) **ASX Corporate Governance Council Principles and Recommendations**

The Company has adopted comprehensive systems of control and accountability as the basis for the administration of corporate governance. The Board is committed to administering the policies and procedures with openness and integrity, pursuing the true spirit of corporate governance commensurate with the Company's needs.

To the extent applicable, the Company has adopted *The Corporate Governance Principles and Recommendations (4th Edition)* as published by ASX Corporate Governance Council (**Recommendations**).

In light of the Company's size and nature, the Board considers that the current board is a cost effective and practical method of directing and managing the Company. As the Company's activities develop in size, nature and scope, the size of the Board and the implementation of additional corporate governance policies and structures will be reviewed.

The Company's main corporate governance policies and practices as at the date of this Prospectus are outlined below and the Company's full Corporate Governance Plan is available in a dedicated corporate governance information section of the Company's website <http://www.synergenmet.com/>.

### (b) **Board of Directors**

The Board is responsible for corporate governance of the Company. The Board develops strategies for the Company, reviews strategic objectives and monitors performance against those objectives. The goals of the corporate governance processes are to:

- (i) maintain and increase Shareholder value;
- (ii) ensure a prudential and ethical basis for the Company's conduct and activities consistent with the Company's stated values; and
- (iii) ensure compliance with the Company's legal and regulatory objectives.

Consistent with these goals, the Board assumes the following responsibilities:

- (i) leading and setting the strategic direction, values and objectives of the Company;
- (ii) appointing the Chairperson of the Board, Managing Director or Chief Executive Officer and approving the appointment of senior executives and the Company Secretary;
- (iii) overseeing the implementation of the Company's strategic objectives, values, code of conduct and performance generally;
- (iv) approving operating budgets, major capital expenditure and significant acquisitions and divestitures;

- (v) overseeing the integrity of the Company's accounting and corporate reporting systems, including any external audit (satisfying itself financial statements released to the market fairly and accurately reflect the Company's financial position and performance);
- (vi) establishing procedures for verifying the integrity of those periodic reports which are not audited or reviewed by an external auditor, to ensure that each periodic report is materially accurate, balanced and provides investors with appropriate information to make informed investment decisions;
- (vii) overseeing the Company's procedures and processes for making timely and balanced disclosure of all material information that a reasonable person would expect to have a material effect on the price or value of the Company's securities;
- (viii) reviewing, ratifying and monitoring the effectiveness of the Company's risk management framework, corporate governance policies and systems designed to ensure legal compliance; and
- (ix) approving the Company's remuneration framework.

The Company is committed to the circulation of relevant materials to Directors in a timely manner to facilitate Directors' participation in the Board discussions on a fully-informed basis.

(c) **Composition of the Board**

Election of Board members is substantially the province of the Shareholders in general meeting, subject to the following:

- (i) membership of the Board of Directors will be reviewed regularly to ensure the mix of skills and expertise is appropriate; and
- (ii) the composition of the Board has been structured so as to provide the Company with an adequate mix of directors with industry knowledge, technical, commercial and financial skills together with integrity and judgment considered necessary to represent Shareholders and fulfil the business objectives and values of the Company as well as to deal with new and emerging business and governance issues.

At listing, the Board will consist of six Directors (three non-executive Directors and three executive Directors) of whom Lynne Saint is considered independent. The Board considers the current balance of skills and expertise to be appropriate given the Company's currently planned level of activity.

To assist in evaluating the appropriateness of the Board's mix of qualifications, experience and expertise, the Board intends to maintain a Board Skills Matrix to ensure that the Board has the skills to discharge its obligations effectively and to add value.

The Board undertakes appropriate checks before appointing a person as a Director or putting forward to Shareholders a candidate for election as a Director or senior executive.

The Board ensures that Shareholders are provided with all material information in the Board's possession relevant to a decision on whether or not to elect or re-elect a Director.

The Company shall develop and implement a formal induction program for Directors, which is tailored to their existing skills, knowledge and experience. The purpose of this program is to allow new directors to participate fully and actively in Board decision-making at the earliest opportunity, and to enable new directors to gain an understanding of the Company's policies and procedures.

The Board maintains oversight and responsibility for the Company's continual monitoring of its diversity practices. The Company's Diversity Policy provides a framework for the Company to achieve enhanced recruitment practices whereby the best person for the job is employed, which requires the consideration of a broad and diverse pool of talent.

(d) **Identification and management of risk**

The Board's collective experience will enable accurate identification of the principal risks that may affect the Company's business. Key operational risks and their management will be recurring items for deliberation at Board meetings.

(e) **Ethical standards**

The Board is committed to the establishment and maintenance of appropriate ethical standards and to conducting all of the Company's business activities fairly, honestly with integrity, and in compliance with all applicable laws, rules and regulations. In particular, the Company and the Board are committed to preventing any form of bribery or corruption and to upholding all laws relevant to these issues as set out in the Company's Anti-Bribery and Anti-Corruption Policy. In addition, the Company encourages reporting of actual and suspected violations of the Company's Code of Conduct or other instances of illegal, unethical or improper conduct. The Company and the Board provide effective protection from victimisation or dismissal to those reporting such conduct as set out in its Whistleblower Protection Policy.

(f) **Independent professional advice**

Subject to the Chairperson's approval (not to be unreasonably withheld), the Directors, at the Company's expense, may obtain independent professional advice on issues arising in the course of their duties.

(g) **Remuneration arrangements**

The remuneration of an executive Director will be decided by the Board, without the affected executive Director participating in that decision-making process.

In accordance with the Constitution, the total maximum remuneration of non-executive Directors is initially set by the Board and subsequent variation is by ordinary resolution of Shareholders in general meeting in accordance with the Constitution, the Corporations Act and the ASX Listing Rules, as applicable. The determination of non-executive Directors' remuneration within that maximum will be made by the Board having regard to the inputs and value to the Company of the respective

contributions by each non-executive Director. The current amount has been set at an amount not to exceed \$700,000 per annum.

In addition, a Director may be paid fees or other amounts (for example, and subject to any necessary Shareholder approval, non-cash performance incentives such as Options) as the Directors determine where a Director performs special duties or otherwise performs services outside the scope of the ordinary duties of a Director.

Directors are also entitled to be paid reasonable travelling, hotel and other expenses incurred by them respectively in the performance of their duties as Directors.

The Board reviews and approves the remuneration policy to enable the Company to attract and retain executives and Directors who will create value for Shareholders having regard to the amount considered to be commensurate for a company of its size and level of activity as well as the relevant Directors' time, commitment and responsibility. The Board is also responsible for reviewing any employee incentive and equity-based plans including the appropriateness of performance hurdles and total payments proposed.

(h) **Trading policy**

The Board has adopted a policy that sets out the guidelines on the sale and purchase of securities in the Company by its key management personnel (i.e. Directors and, if applicable, any employees reporting directly to the managing director). The policy generally provides that the written acknowledgement of the Chair (or the Board in the case of the Chairperson) must be obtained prior to trading.

(i) **External audit**

The Company in general meetings is responsible for the appointment of the external auditors of the Company. From time to time, the Board will review the scope, performance and fees of those external auditors.

(j) **Audit committee**

The Company has a separate audit committee. The committee will carry out the duties assigned to it under the written terms of reference for that committee, including but not limited to:

- (i) monitoring and reviewing any matters of significance affecting financial reporting and compliance;
- (ii) verifying the integrity of those periodic reports which are not audited or reviewed by an external auditor;
- (iii) monitoring and reviewing the Company's internal audit and financial control system, risk management systems; and
- (iv) management of the Company's relationships with external auditors.

(k) **Diversity policy**

The Company is committed to workplace diversity. The Company is committed to inclusion at all levels of the organisation, regardless of gender, marital or family status, sexual orientation, gender identity, age, disabilities, ethnicity, religious beliefs, cultural background, socio-economic background, perspective and experience.

The Board has adopted a diversity policy which provides a framework for the Company to achieve, amongst other things, a diverse and skilled workforce, a workplace culture characterised by inclusive practices and behaviours for the benefit of all staff, improved employment and career development opportunities for women and a work environment that values and utilises the contributions of employees with diverse backgrounds, experiences and perspectives.

(l) **Departures from Recommendations**

Under the ASX Listing Rules the Company will be required to provide a statement in its annual financial report or on its website disclosing the extent to which it has followed the Recommendations during each reporting period. Where the Company has not followed a Recommendation, it must identify the Recommendation that has not been followed and give reasons for not following it.

The Company's compliance and departures from the Recommendations will also be announced prior to admission to the Official List of the ASX.

## 10. MATERIAL CONTRACTS

Set out below is a brief summary of the certain contracts to which the Company is a party and which the Directors have identified as material to the Company or are of such a nature that an investor may wish to have details of particulars of them when making an assessment of whether to apply for Securities.

To fully understand all rights and obligations of a material contract, it would be necessary to review it in full and these summaries should be read in this light.

### 10.1 Capital raising agreements

#### 10.1.1 Lead Manager Mandate – Lodge Corporate

The Company has signed a mandate letter to engage Lodge Corporate Pty Ltd (ACN 125 323 168) (Corporate Authorised Representative No. 316212 of Lodge Partners Pty Ltd (ACN 053 432 769) AFSL No. 246271) (**Lodge Corporate**) to act as lead manager of the Public Offer (**Lead Manager Mandate**), the material terms and conditions of which are summarised below:

<b>Services</b>	<p>The Lead Manager will provide the Company with the following advisory services:</p> <ul style="list-style-type: none"><li>(a) co-manage the ASX listing process;</li><li>(b) assist with the preparation of the Prospectus, investor presentations and information package for presentation to potential investors;</li><li>(c) manage the Company's bookbuild process;</li><li>(d) assist the Company in structuring the Public Offer;</li><li>(e) participate in the due diligence process in relation to the Public Offer;</li><li>(f) source the required spread to list on the ASX;</li><li>(g) provide general advice as requested by the company; and</li><li>(h) develop a marketing and distribution strategy.</li></ul>
<b>Fees</b>	<ul style="list-style-type: none"><li>(a) Under the terms of the Lead Manager Mandate, the Company will pay the Lead Manager an advisory fee of \$400,000 (plus GST) to be paid in Shares at the Public Offer price upon the Company's admission to the Official List (being, 2,000,000 Shares). The GST component of the advisory fee will be satisfied in cash.</li><li>(b) Upon completion of the Lead Manager Mandate, the Company will pay the Lead Manager the following completion fees:<ul style="list-style-type: none"><li>(i) a management fee of 2.0% (plus GST) of all total funds raised from all sources under the Public Offer (<b>Management Fee</b>); and</li><li>(ii) a 4.0% selling fee (plus GST) on gross proceeds raised by the Lead Manager and</li></ul></li></ul>

	<p>its associates under the Public Offer (plus GST) in consideration for raising capital under the Public Offer (<b>Selling Fee</b>),</p> <p>(together, the <b>Completion Fees</b>).</p> <p>(c) The Company agrees to pay the Management Fee and Selling Fee to the Lead Manager by way of a deduction from the gross amount raised (excluding GST) from the amount raised under the Public Offer.</p> <p>(d) The Lead Manager may pay away some of the Completion Fees to approved introducing parties holding an Australian Financial Services Licence at its absolute discretion.</p>
<b>Expenses</b>	<p>The Company shall reimburse the Lead Manager for all reasonable out-of-pocket expenses incurred under the Lead Manager Mandate. Prior consent for all expenses must be obtained prior to incurring any costs in excess of \$500 (other than legal fees).</p>
<b>Indemnity and release</b>	<p>The Company agrees to indemnify the Lead Manager from and against all claims, losses, damages or proceedings that arise out of the Lead Manager Mandate as a result of any public or media announcements made by the Company in connection with the Public Offer, breach of the Lead Manager Mandate by the Company or non-compliance by the Company with any applicable law (among other things).</p>
<b>Lock-up and other financing</b>	<p>Prior to the allotment of any Shares under the Public Offer:</p> <p>(a) the Company shall not make any other equity or debt financing of any type will be made by the without prior written consent of the Lead Manager; and</p> <p>(b) the Company will not enter into any agreement or commitment which is material in the context of the Company and which contains a substantial or onerous obligation without the prior written consent of the Lead Manager.</p>
<b>Termination</b>	<p>(a) The Lead Manager Mandate may be terminated without cause at any time by the Company or the Lead Manager by giving written notice at any time.</p> <p>(b) If the Lead Manager Mandate is terminated, the Lead Manager will be entitled to reimbursement of any incurred and accrued expenses up to the date of termination.</p> <p>If the Lead Manager Mandate is terminated, the entitlement of the Lead Manager to any fees will survive termination of this Agreement.</p>

The Lead Manager Mandate otherwise contains provisions considered standard for an agreement of its nature (including representations and warranties and confidentiality provisions).

### 10.1.2 AUD Converting Note Agreement

The Company has entered into a converting note agreement (**AUD Converting Note Agreement**) pursuant to which the Company has issued 1,500,000 convertible notes (**AUD Notes**) to certain investors (**Subscribers**) at a face value of AUD\$1.00 each to raise a total of \$1,500,000. The material terms of the AUD Converting Note Agreement are:

<b>Maturity Date</b>	The maturity date of the AUD Notes is 27 May 2022 ( <b>Maturity Date</b> ). The Company is currently negotiating an extension to the Maturity Date.
<b>Conversion Event</b>	The conversion event is the first to occur of: (a) the completion of the Public Offer; (b) the sale of all of the Shares on issue or the sale of the whole of the Company's business and assets ( <b>Exit</b> ); and (c) the Maturity Date, (each a <b>Conversion Event</b> ).
<b>Conversion</b>	(a) The AUD Notes will automatically convert into Shares immediately prior to a Conversion Event. (b) If the Conversion Event is the completion of the Public Offer or an Exit, the AUD Notes will convert into Shares at a conversion price of \$0.084.
<b>Interest</b>	No interest will accrue or be paid on each AUD Note.
<b>Security</b>	The AUD Notes are unsecured obligations of the Company.

The AUD Converting Note Agreement also contains other representations, warranties, covenants and conditions considered standard for an agreement of this nature.

### 10.1.3 USD Converting Note Agreement

The Company has entered into a USD converting note agreement (**USD Converting Note Agreement**) pursuant to which the Company has issued 8,000,000 convertible notes (**USD Notes**) to Pure Earth Plasma Holdings LLC (**Pure Earth**) at a face value of US\$1.00 each to raise a total of US\$8,000,000. The material terms of the USD Converting Note Agreement are:

<b>Maturity Date</b>	Means the earlier of: (a) 25 May 2022; and (b) 12 August 2022 (being the date that is 12 months from the date that the USD Converting Notes were first issued), ( <b>Maturity Date</b> ). The Company is currently negotiating an extension to the Maturity Date with Pure Earth.
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<b>Conversion Event</b>	<p>The conversion event is the first to occur of:</p> <ul style="list-style-type: none"> <li>(a) the Company receiving conditional approval from ASX (on customary terms) to be admitted to quotation on the Official List of ASX (<b>Approval</b>);</li> <li>(b) the sale of all of the Shares on issue or the sale of the whole of the Company's business and assets (<b>Exit</b>); and</li> <li>(c) the Maturity Date,</li> </ul> <p>(each a <b>Conversion Event</b>).</p>
<b>Conversion</b>	<ul style="list-style-type: none"> <li>(a) The USD Notes will automatically convert into Shares immediately prior to a Conversion Event.</li> <li>(b) If the Conversion Event is receipt of the Approval or an Exit, the USD Notes will convert into Shares at a conversion price of \$0.084.</li> </ul>
<b>Exchange Rate</b>	The USD:AUD exchange rate for the purposes of calculating the number of Shares into which the USD Notes will convert shall be the exchange rate as at the date of settlement of the USD Converting Note Agreement.
<b>Interest</b>	No interest will accrue or be paid on each USD Note.
<b>Security</b>	The USD Notes are unsecured obligations of the Company.
<b>Event of Default</b>	<ul style="list-style-type: none"> <li>(a) An event of default occurs if: <ul style="list-style-type: none"> <li>(i) the Company defaults in performing and observing any provision of the USD Converting Note Agreement which is not remedied within 10 business days;</li> <li>(ii) the Company defaults in performing or observing any of its obligations under the AUD Converting Note Agreement or the Syndicated Loan Note Agreement (defined below) which is not remedied within 10 business days;</li> <li>(iii) a representation or warranty made under the USD Converting Note Agreement; or</li> <li>(iv) an application is made for the Company to be wound up, or a liquidator, administrator or receiver is appointed to a substantial part of the Company's assets,</li> </ul> <p>(each an <b>Event of Default</b>).</p> </li> <li>(b) If an Event of Default occurs, the Noteholder may by notice to the Company declare that the total face value in respect of the USD Notes be immediately due for payment.</li> </ul>

The USD Converting Note Agreement also contains other representations, warranties, covenants and conditions considered standard for an agreement of this nature.

#### 10.1.4 Syndicated Loan Note Agreement

The Company is party to a syndicated loan note subscription agreement, loan note deed poll and security documentation dated 13 September 2019 (as

subsequently amended) (together, the **Subscription Agreement**) with various lenders (**Lenders**) and a facility agent, being EQT Australia Pty Ltd (ACN 111 042 132) (**Facility Agent**) pursuant to which the Lenders agreed to subscribe for secured loan notes in the Company (**Loan Notes**) for a total subscription price of \$1,200,000. The material terms of the Subscription Agreement are:

<b>Loan amount and drawdown</b>	<p>(a) A facility with a total commitment from all Lenders of an amount not exceeding \$4,000,000 (<b>Facility</b>) was provided to the Company. The Company made a request for the outstanding principal amount of a drawdown of the Facility (<b>Drawing</b>) of \$1,200,000 on 13 September 2019 in one lump sum.</p> <p>(b) In exchange for the Drawing, the Company agreed to issue to the Lenders Loan Notes.</p>
<b>Purpose</b>	<p>The Drawing must only be used by the Company for the following purposes:</p> <p>(a) to pay the licence fee payable under a licence agreement between Phoenix and the Company;</p> <p>(b) to fund the general working capital of the Company and Treata (<b>Group</b>); and</p> <p>(c) to pay the transaction costs and expenses which the Group are required to pay under the Subscription Agreement.</p>
<b>Conversion of Principal and Interest owing under Loan Notes</b>	<p>(a) The Lender may, at any time following the Company taking any steps to undertake or participate in an initial public offering (amongst other things), require the Company to redeem some or all of the Loan Notes by delivering a written notice (<b>Conversion Notice</b>) to the Company.</p> <p>(b) Upon receipt of the Conversion Notice, the Company must issue Shares to the Lender such that the number of Shares issued is calculated as:</p> $\text{Number of Shares} = \frac{B}{A}$ <p><i>A = \$0.06 (<b>Issue Price</b>) multiplied by 1.1</i>  <i>B – the value of the Loan Notes redeemed in accordance with the Subscription Agreement.</i></p> <p>(c) The Lenders have provided the Company with executed Conversion Notices under which they have agreed to convert all of the principal and accrued but unpaid interest up to 31 October 2021 on the Loan Notes held by them to Shares in accordance with paragraph (b) above, subject to the Company receiving formal confirmation from the ASX that the Company will be admitted to the Official List prior to 30 June 2022.</p>
<b>Fees and interest</b>	<p>(a) On the date on which a Drawing is made (<b>Drawdown Date</b>), the Company must pay to the Facility Agent (for the account of the Lenders) an amount equal to the Drawing on that Drawdown Date multiplied by a distribution fee rate of 5%.</p> <p>(b) Interest is payable on the Loan Notes at a fixed rate of 15% per annum (other than in respect of one</p>

	<p>Lender who receives an additional 5%) from the date of subscription until 1 April 2022 (subject to Company receiving formal confirmation from the ASX that the Company will be admitted to the Official List prior to 30 June 2022).</p> <p>(c) Unpaid interest (being, interest which has accrued between 1 November 2021 and 31 March 2022) is payable in cash upon the Company being admitted to the Official List.</p>
<b>Security</b>	<p>(a) A General Security Deed and Security Trust Deed exists in relation to the Loan.</p> <p>(b) Security is granted by both the Company and Treata in all of their present and future property, assets, rights and undertaking, irrespective of the capacity in which they hold the same or comes to hold the same, including as trustee of any trust (<b>Security</b>).</p> <p>(c) EQT Secured Finance Services Pty Ltd acts as the security trustee on behalf of the Lenders (<b>Security Trustee</b>).</p> <p>(d) Security can be immediately enforced when an Event of Default (as defined below) occurs.</p>
<b>Guarantee</b>	Treata has unconditionally and irrevocably guaranteed the due and punctual payment by the Company of all money which is or at any time may become actually or contingently liable to pay to or for the account of any Lender under the Subscription Agreement.
<b>Restrictive undertaking</b>	The Company or Treata may not, among other things, affect or agree to a change of control or ownership (in the Facility Agent's opinion) without the Facility Agent's prior written consent.
<b>Event of Default</b>	<p>(a) An event of default occurs if:</p> <p>(i) <b>Monetary obligation</b> – the Company does not pay any amount payable under the Subscription Agreement on time and in the agreed manner unless the failure was due to an administrative or technical error;</p> <p>(ii) <b>Breach of undertaking</b>: the Company breaches any covenant or undertaking, other than those relating to monetary obligation as referred to above, and the breach is not remedied within 30 days, if capable of remedy;</p> <p>(iii) <b>Breach of representation or warranty</b>: a representation or warranty made or taken to be made by the Company is incorrect or misleading in any material respect;</p> <p>(iv) <b>Monetary obligation not complied with</b>: any monetary obligation other than those referred to at (a)(i) above which is more than \$50,000 is not satisfied on its due date;</p>

	<ul style="list-style-type: none"> <li>(v) <b>Insolvency Event:</b> an insolvency event subsists in connection with the Company or Treata;</li> <li>(vi) <b>Unlawful:</b> it is or becomes unlawful for the Company or Treata to perform any of its obligations under the Subscription Agreement;</li> <li>(vii) <b>Material adverse effect:</b> an event, or series of events (whether related or not) occurs which in the opinion of the Facility Agent, acting reasonably, has or is likely to have a material adverse effect on the ability of a Lender to exercise its rights under the Subscription Agreement;</li> <li>(viii) <b>Change in Control:</b> there is a change in the control or ownership of the Company without the Facility Agent's consent;</li> <li>(ix) <b>Subscription Agreement enforceable:</b> an event of default subsists under the Subscription Agreement, or the Subscription Agreement otherwise becomes enforceable; or</li> <li>(x) <b>Exclusivity:</b> the Company breaches the Company's obligations regarding the Exclusive Lender,</li> </ul> <p>(each an <b>Event of Default</b>).</p> <p>(b) If an Event of Default occurs, the Facility Agent may, by notice to the Company:</p> <ul style="list-style-type: none"> <li>(i) declare all amounts owing to a Lender as immediately due or payable or payable on demand;</li> <li>(ii) terminate the obligations of any Lender; or</li> <li>(iii) notify the Company by written notice of the Lender's election to convert some or all of the Loan Notes.</li> </ul>
<b>Termination</b>	<p>If an Event of Default occurs, the Facility Agent may, and will if the majority of the Lenders direct, by notice to the Company terminate the obligations of any Lender which are specified in the notice.</p>

The Subscription Agreement otherwise contains provisions considered standard for an agreement of its nature (including representations and warranties, undertakings and confidentiality provisions).

## 10.2 Loan Agreements

### 10.2.1 Loan Agreement – Andrew Greig

The Company has entered into a loan agreement (**Agreement**) with Mr Andrew Greig (**Lender**) whereby the Lender has agreed to provide a loan of \$700,000 to the Company (**Loan Amount**), the material terms and conditions of which are summarised below.

<b>Purpose</b>	The Company must use the Loan Amount for the repayment of existing debt.
<b>Interest</b>	The Company must pay to the Lender interest on the Loan Amount at an interest rate of 12.00% per annum ( <b>Interest</b> ) until the Loan Amount is repaid.
<b>Repayment</b>	<p>(a) The Loan Amount and all accrued but unpaid Interest is repayable on the date that is 24 months from the date of the Agreement, being 23 July 2022 (<b>Execution Date</b>).</p> <p>(b) The Company may elect to make early repayment out of the Loan Amount and accrued but unpaid Interest in full and without penalty at any time after the Execution Date.</p>
<b>Negative pledge</b>	<p>Until the Loan Amount and Interest are paid in full, the Company covenants that it will not, without the prior consent of the Lender:</p> <p>(a) deal with, sell or dispose of; or</p> <p>(b) create, permit, or agree to an interest or encumbrance over,</p> <p>any of its assets, except in the ordinary course of business.</p>
<b>Default</b>	<p>(a) It is an event of default if:</p> <ul style="list-style-type: none"> <li>(i) the Company fails to repay the Loan Amount or Interest;</li> <li>(ii) the Company fails to perform an obligation under the Agreement and does not remedy that obligation within 14 days;</li> <li>(iii) any warranty, representation or statement of the Company becomes false, misleading or incorrect;</li> <li>(iv) a judgment in an amount exceeding \$100,000 is obtained against the Company;</li> <li>(v) a receiver, manager, trustee, administrator or similar official is appointed over any assets of the Company;</li> <li>(vi) the Company becomes unable to pay its debts when they become due;</li> <li>(vii) the Company enters into an arrangement with its creditors otherwise than while solvent;</li> <li>(viii) an application order is made for the winding up of the Company; or</li> <li>(ix) the Company suspends payment of its debts generally,</li> </ul> <p>(each an <b>Event of Default</b>).</p> <p>(b) Upon an Event of Default, the Loan Amount outstanding may become payable immediately at the option of the Lender.</p>
<b>Security</b>	The Loan Amount is unsecured.

The Agreement otherwise contains provisions considered standard for an agreement of its nature (including representations and warranties and confidentiality provisions).

### 10.2.2 Second Loan Agreement – Andrew Greig

The Company has entered into a second loan agreement (**Agreement**) with Mr Andrew Greig (**Lender**) whereby the Lender has agreed to provide a further loan of \$200,000 to the Company (**Loan Amount**), the material terms and conditions of which are summarised below.

<b>Advance and repayment</b>	<p>(a) In return for the advance of the Loan Amount, the Company has granted to the Lender an unsecured note.</p> <p>(b) In order to have the unsecured note discharged, the Company must repay the Loan Amount on the later of:</p> <p>(i) whichever is the earlier of:</p> <p>(A) the date which is no later than 14 days following the receipt of an R&amp;D Tax Offset or tax refund (or refunds) by the Company from the Australian Taxation Office equal to or exceeding the Loan Amount outstanding;</p> <p>(B) 2 years from the date of the Agreement, being 12 August 2020; or</p> <p>(C) the date which is 2 business days after the admission of the Company to the Official List,</p> <p><b>(Repayment Date)</b>; and</p> <p>(ii) such other later date specified by the Lender.</p>
<b>Interest</b>	The Company must pay to the Lender interest on the Loan Amount at an interest rate of 12.00% per annum until the Loan Amount is repaid.
<b>Default</b>	<p>(a) The Company agrees to indemnify the Lender upon any failure by the Company to comply with the terms of the Agreement (<b>Default</b>) in respect of all related reasonable legal costs and expenses incurred by the Lender.</p> <p>(b) Upon any Default, the Loan Amount outstanding may become payable immediately at the option of the Lender.</p> <p>(c) If the Company seeks an extension of the Repayment Date, the Company must pay interest at a rate of 15.00% per annum until the Loan Amount is repaid.</p>
<b>Security</b>	The Loan Amount is secured by way of a security interest in favour of the Lender in an R&D tax offset received by the Company from the Australian Taxation Office.

The Agreement otherwise contains provisions considered standard for an agreement of its nature.

### 10.3 Phoenix Solutions Co Acquisition Agreements

#### 10.3.1 Acquisition Agreement – Majority Common Stockholders

On 28 October 2021, the Company entered into a formal binding share sale agreement (**Acquisition Agreement** or **Agreement**) with Mr Douglas Frame and Frame Family Limited Liability Limited Partnership (a Minnesota limited liability partnership) (**Frame Family Partnership**) (the majority common stockholders of Phoenix) (**Majority Common Stockholders**) under which the Company agreed to acquire the common stock in Phoenix held by the Majority Common Stockholders. The material terms and conditions of the Acquisition Agreement (as amended) are as follows:

<b>Conditions for completion</b>	<p>(a) The sale and purchase of Phoenix is subject to each of the following conditions being satisfied or waived:</p> <ul style="list-style-type: none"> <li>(i) the Company being satisfied with its due diligence review of Phoenix;</li> <li>(ii) the Company receiving conditional listing approval from ASX;</li> <li>(iii) the minority stockholders, preferred stockholders, deferred stockholders and ESOP holders of Phoenix (other than Sojitz Machine Corporation) entering into agreements with the Company in respect of the sale of all of their interests in Phoenix to the Company;</li> <li>(iv) the noteholders of Phoenix (<b>Noteholders</b>) entering into binding agreements with the Company in respect of the conversion of the debt owing to the Noteholders under promissory notes on issue in Phoenix to Shares;</li> <li>(v) Phoenix entering into binding executive and management agreements with Messrs Douglas Frame and Luke Young;</li> <li>(vi) no event having occurred prior to completion of the sale and purchase of Phoenix under the Acquisition Agreement (<b>Completion</b>) or settlement which has a material adverse effect in relation to the Majority Common Stockholders, Phoenix or the Company; and</li> <li>(vii) the Majority Common Stockholders and Phoenix obtaining all necessary third-party approvals, consents or waivers to give effect to the Acquisition Agreement,</li> </ul> <p>(together, the <b>Conditions</b>).</p>
<b>Cut off date</b>	<p>A party may terminate this agreement before Completion if:</p> <ul style="list-style-type: none"> <li>(a) the Conditions are not satisfied or waived by the date that is one year after the date of the Acquisition</li> </ul>

	<p>Agreement (or such other later date as agreed) (<b>Cut Off Date</b>); or</p> <p>(b) the Conditions become incapable of satisfaction.</p>
<b>Sale and purchase and Consideration</b>	<p>(a) The Majority Common Stockholders have agreed to sell all the common stock on issue in Phoenix owned by the Majority Common Stockholders (<b>Sale Shares</b>) to the Company in consideration for the following Shares in the Company:</p> <p>(i) Frame Family Partnership: 10,492,853 Shares; and</p> <p>(ii) Douglas Frame: 386, 098 Shares, (<b>Consideration Shares</b>).</p> <p>(b) If ASX considers the Consideration Shares to be restricted securities, the Majority Common Stockholders agree that some of the Consideration Shares issued to Mr Douglas Frame (including any Shares issued to Mr Douglas Frame in his capacity as a deferred capitalisation stock, ESOP stock and or promissory note holder pursuant to the Exchange Deeds or Conversion Letters (as applicable)) will be subject to voluntary escrow for a period of 24 months from the date of quotation of the Shares. The Company and Mr Douglas Frame entered into a voluntary escrow deed on 15 January 2022.</p>
<b>Loan to Phoenix</b>	<p>In addition to the Consideration Shares, the Company agrees to advance US\$5,000,000 to Phoenix within 5 business days of the Company completing its pre-Public Offer capital raising (<b>Loan</b>) to be used for debt repayment and general working capital. The Company notes that this Loan has been advanced to Phoenix by way of a secured promissory note.</p>
<b>Carrying on business</b>	<p>Between the date of the Acquisition Agreement and the earlier of Completion and termination of the Agreement, the Majority Common Stockholders must ensure that the business of Phoenix is conducted materially in the ordinary course.</p>
<b>Termination</b>	<p>The Company may terminate the Acquisition Agreement before Completion by notice to the Majority Common Stockholders, and the Majority Common Stockholders may terminate the Acquisition Agreement by notice to the Company, if:</p> <p>(a) in the case of termination by the Company, an order is made for the winding up of Phoenix or the Majority Common Stockholders and, in the case of termination by the Majority Common Stockholders, an order is made for the winding up of the Company;</p> <p>(b) in the case of termination by the Company, a receiver, liquidator or like official is appointed over the property of the Majority Common Stockholders or Phoenix and, in the case of termination by the Majority Common Stockholders, such official is appointed over the property of the Company; or</p> <p>(c) in the case of termination by the Company, a holder of an encumbrance (including a mortgage, pledge,</p>

	charge or lien) ( <b>Encumbrance</b> ) takes possession of the property of the Majority Common Stockholders or Phoenix and, in the case of termination by the Majority Common Stockholders, a holder of an Encumbrance takes possession of the property of the Company.
<b>Completion obligations</b>	<p>(a) Completion shall take place on the day that is 5 business days after the satisfaction or waiver of the Conditions (or such other time and date as the parties agree).</p> <p>(b) At Completion, the Majority Common Stockholders must give the Company:</p> <ul style="list-style-type: none"> <li>(i) confirmation evidencing no material adverse change to the financial position of Phoenix between the period beginning 26 June 2021 and the date of Completion;</li> <li>(ii) confirmation that the amount of total liabilities of Phoenix less the Loan do not exceed US\$4,100,000;</li> <li>(iii) share certificates and completed share transfers for the Sale Shares; and</li> <li>(iv) signed resignations of each director, secretary and public officer of Phoenix (if applicable).</li> </ul> <p>(c) At Completion, subject to the Majority Common Stockholders performing their Completion obligations, the Company must issue the Consideration Shares to the Majority Common Stockholders and execute and deliver the share transfers of the Sale Shares.</p>
<b>Post-Completion payments</b>	<p>Following Completion and within 5 business days of the Company being admitted to the Official List, the Company will:</p> <ul style="list-style-type: none"> <li>(a) advance a further loan of US\$3,000,000 to Phoenix for the purposes of funding the working capital of Phoenix (<b>Working Capital Payment</b>); and</li> <li>(b) satisfy all amounts owing to the estate of J. Leonard Frame in respect of deferred payroll of US\$387,653.21 in Shares at a deemed issue of AU\$0.20.</li> </ul>
<b>Vendor protection of the business</b>	<p>During the period of 2 years from the date of Completion, the Majority Common Stockholders must not:</p> <ul style="list-style-type: none"> <li>(a) be involved in or engage in a business that is the same or substantially the same as the business of Phoenix (<b>Business</b>);</li> <li>(b) approach any person who is a customer or client of Phoenix for the purpose of persuading them to cease doing business with Phoenix; or</li> <li>(c) approach or solicit any person who is an agent or employee of Phoenix for the purpose of recruiting that person.</li> </ul>

<b>Purchaser protection of the business</b>	<p>During the period from the date of the Agreement to the date of Completion (or if Completion does not occur, up to the expiration of 2 years from the date of termination), the Company must not:</p> <ul style="list-style-type: none"> <li>(a) be involved in or engage in a business that is the same or substantially the same as the Business;</li> <li>(b) approach any person who is a customer or client of Phoenix for the purpose of persuading them to cease doing business with Phoenix; or</li> <li>(c) approach or solicit any person who is an agent or employee of Phoenix for the purpose of recruiting that person.</li> </ul>
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The Acquisition Agreement otherwise contains provisions considered standard for an agreement of its nature (including representations and warranties, indemnity and confidentiality provisions).

### 10.3.2 Stock Exchange Agreements – Minority Stockholders

In December 2021, the Company entered into share exchange deeds with the minority holders of common stock (excluding, for the avoidance of doubt, Mr Douglas Frame and the Frame Family Partnership), preferred stock, deferred capitalisation stock and ESOP stock in Phoenix (each a **Minority Vendor**) pursuant to the Acquisition (each an **Exchange Deed**), the material terms and conditions of which are summarised below.

<b>Acquisition</b>	<ul style="list-style-type: none"> <li>(a) The Minority Vendors have agreed to sell and the Company has agreed to purchase all of the common stock, preferred stock, deferred capitalisation stock and ESOP stock in Phoenix (as applicable) held by the Minority Vendors (excluding for the avoidance of doubt, the common stock held by Douglas Frame and the Frame Family Partnership which is being acquired pursuant to the Acquisition Agreement) (<b>Minority Vendor Shares</b>).</li> <li>(b) The Minority Vendors have waived all rights of pre-emption over the Minority Vendor Shares held by them conferred by either Phoenix's articles of association or any stockholders agreement.</li> </ul>
<b>Conditions precedent</b>	Each Exchange Deed is conditional on the completion of Acquisition Agreement summarised at Section 10.6.1 above ( <b>Condition</b> ).
<b>Consideration</b>	<ul style="list-style-type: none"> <li>(a) In consideration for the sale of the Minority Vendor Shares to the Company, the Company has agreed to issue an aggregate of 11,254,413 Shares to the Minority Vendors (other than SMC) (<b>Consideration Shares</b>).</li> <li>(b) In consideration for the sale of the Minority Vendor Shares held by SMC and the outstanding dividend owed to SMC as at 31 December 2021, Phoenix has agreed to pay SMC an aggregate amount of US\$406,666.67 out of the Working Capital Payment</li> </ul>

	<p>advanced to the Company under the Acquisition Agreement.</p> <p>(c) In addition, the Company has agreed to satisfy the outstanding dividend owed in respect of the balance of the preferred stock held by the Minority Vendors being an aggregate amount of US\$439,303, out of the Working Capital Payment advanced to the Company under the Acquisition Agreement.</p>
<b>Settlement</b>	Settlement under the Exchange Deeds will occur on the date which is two business days after the satisfaction of the Condition, or such other date as agreed between the parties.
<b>Restriction Deed</b>	The Minority Vendors acknowledge that some or all of the Consideration Shares may be subject to escrow restrictions in accordance with the Listing Rules and agrees to do all things necessary to comply with the requirements of the ASX, including entering into an ASX restriction deed for those Consideration Shares.

The Exchange Deeds otherwise contain provisions considered standard for an agreement of its nature (including representations and warranties).

### 10.3.3 Promissory Note Conversion Letters – Phoenix Noteholders

In December 2021, the Company entered into conversion letters with the holders of an aggregate of US\$1,786,662 worth of promissory notes in Phoenix (each a **Phoenix Noteholder**) pursuant to the Acquisition (each a **Conversion Letter**), the material terms and conditions of which are summarised below.

<b>Debt</b>	The parties agree that, as at the date of each Conversion Letter, Phoenix owes a debt to each Phoenix Noteholder, comprising a principal component and in certain cases, an interest component ( <b>Debt</b> ).
<b>Conversion Shares</b>	The Company has agreed to issue, and the Phoenix Noteholders agreed to accept, an aggregate of 12,036,263 Shares ( <b>Conversion Shares</b> ) for the conversion of 100% of the principal component of the Debt.
<b>Interest</b>	Phoenix has agreed to pay an aggregate amount of US\$428,843.23 in respect of the accrued and unpaid interest component of the Debt owing to certain of the Phoenix Noteholders, out of the Working Capital Payment provided by the Company under the Acquisition Agreement. No further interest is payable in respect of the promissory notes in Phoenix.
<b>Restriction Deed</b>	The Noteholder acknowledges that some or all of the Conversion Shares may be subject to escrow restrictions in accordance with the Listing Rules and agrees to do all things necessary to comply with the requirements of the ASX, including entering into an ASX restriction deed for those Conversion Shares.

The Conversion Letters otherwise contains provisions considered standard for an agreement of their nature (including representations and warranties).

## 10.4 Operational Agreements – Synergen

### 10.4.1 Heads of Agreement - TLOU Energy Ltd

The Company has entered into a binding heads of agreement with TLOU Energy Ltd (ASX:TOU) (**TLOU**) (**TLOU HOA**) for the construction and commissioning of a hydrogen and solid carbon pilot plant to be installed at the Lesedi Project in Botswana using TLOU's gas and the Company's Thermal Plasma Technology (**Prototype**), the material terms and conditions of which are summarised below:

<b>Background</b>	<ul style="list-style-type: none"> <li>(a) TLOU is an established gas field operator in Botswana and has all approvals for gas and solar power generation. TLOU has access to flowing Coal Bed Methane gas, operational field camp to produce power, gas production licence and several environmental approvals for gas and solar power generation.</li> <li>(b) TLOU has entered into various agreements with power providers and regulatory authorities including Botswana Power Corporation and the Botswana Energy Regulatory Authority, which provide the infrastructure for TLOU to carry out its activities.</li> </ul>
<b>Structure</b>	<p>Under the TLOU HOA,</p> <ul style="list-style-type: none"> <li>(a) TLOU will provide the Company as follows: <ul style="list-style-type: none"> <li>(i) available Coal Bed Methane gas from Lesedi 4P and electricity from either Lesedi 3P and/or solar for the Prototype;</li> <li>(ii) logistical and operational expertise; and</li> <li>(iii) an operation site for the Prototype in Botswana, and</li> </ul> </li> <li>(b) the Company will provide TLOU with a fully operational Prototype designed to produce hydrogen and solid carbon from methane.</li> </ul>
<b>Interests of parties</b>	<ul style="list-style-type: none"> <li>(a) The Prototype will be jointly-owned by TLOU and the Company on a 50:50 basis.</li> <li>(b) Each party will pay 50% of third-party invoiced costs directly associated with the Prototype. For the avoidance of doubt, TLOU will not be paid for the use of staff or gas and the Company will not be paid for use of staff or IP.</li> <li>(c) Estimated third party costs are to be agreed before building of the Prototype is commenced.</li> <li>(d) Each party will share any returns generated on a 50:50 basis as a result of: <ul style="list-style-type: none"> <li>(i) the Prototype producing hydrogen and carbon products for sales; and</li> <li>(ii) on the expansion of the Prototype into other projects.</li> </ul> </li> <li>(e) TLOU will retain a 100% interest in its gas and solar assets used to develop the Prototype.</li> <li>(f) The Company will retain a 100% interest in its Thermal Plasma Technology and associated IP.</li> </ul>

<b>Right of first refusal</b>	TLOU has the right of first refusal to supply gas within the South African Development Community ( <b>SADC</b> ) region to the Company in relation to any new business opportunities that may arise outside of the TLOU HOA.
<b>Negotiation of gas price on successful Prototype</b>	Post a successful Prototype being developed, the parties will negotiate a gas price in relation to any potential interest TLOU may have moving forward.
<b>Joint venture agreement for future projects</b>	Expansion beyond the Prototype will initially be in Botswana and then expand throughout the SADC region. Expansion beyond the Prototype will be via the parties entering into a joint venture agreement that will require the parties to adhere to certain financial protocols.
<b>Termination</b>	The TLOU HOA can be terminated by mutual agreement of the parties.

The TLOU HOA otherwise contains provisions considered standard for an agreement of its nature (including confidentiality provisions).

#### 10.4.2 PFAS Destruction Agreement with municipal city council

The Company has signed a binding contract with an Australian municipal city council (**Council**) for a PFAS destruction test pilot plant to process and destroy leachate sourced from this site and the provision of related services (**PFAS Destruction Agreement**), the material terms and conditions of which are summarised below:

<b>Term</b>	The PFAS Destruction Agreement commenced on 15 September 2021 and shall continue until 20 December 2021. An extension to the PFAS Destruction Agreement is currently being finalised between the parties ( <b>Term</b> ).
<b>Services</b>	<p>The Company will provide the following services:</p> <ul style="list-style-type: none"> <li>(a) install PFAS concentration equipment (<b>Plant</b>);</li> <li>(b) provide necessary human resources and equipment to operate the Plant for the duration of the Term;</li> <li>(c) collect and analyse all required samples before and after installation of the Plant;</li> <li>(d) prepare detailed engineering drawings of the Plant;</li> <li>(e) prepare all necessary safety documentation and take all necessary safety precautions;</li> <li>(f) dispose of PFAS concentrate at the end of the Term;</li> <li>(g) remove the Plant and restore the site to its original condition at the expiry of the Term; and</li> <li>(h) prepare a scientific report in relation to the Plant and submit to the Council for review,</li> </ul> <p>(together, the <b>Services</b>).</p>
<b>Council assistance</b>	<p>The Council will provide:</p> <ul style="list-style-type: none"> <li>(a) a suitable flat area for the Plant installation;</li> <li>(b) access to the site;</li> </ul>

	<p>(c) access to utility connections (including water and electricity); and</p> <p>(d) 4,000 litres of leachate water per day to conduct the trial.</p>
<b>Contract price</b>	The Services are to be provided for a fee ( <b>Contract Price</b> ).
<b>Title</b>	<p>(a) The Company warrants that it has full legal and equitable title in the Services.</p> <p>(b) Title in all Services shall pass to the Council upon payment of the Contract Price.</p>
<b>Insurance</b>	The Company must maintain public liability, product liability and motor vehicle insurance up to the amount of \$20,000,000 at its own cost.
<b>Confidentiality</b>	<p>(a) The Company must treat and keep strictly confidential all information which the Council owns or has nominated as being confidential in nature, except as required by law.</p> <p>(b) The Company must not make any statements to any other party about the PFAS Destruction Agreement without the prior written approval of the Council.</p>
<b>Termination</b>	<p>(a) The Council may terminate the PFAS Destruction Agreement in its sole discretion at any time without notice if:</p> <ul style="list-style-type: none"> <li>(i) the Company enters into insolvency administration;</li> <li>(ii) the Company has breached any legislative requirements applicable to the provision of any Services or has infringed the IP rights of a third party;</li> <li>(iii) the Company has engaged in any conduct that is harmful to the reputation or interests of the Council;</li> <li>(iv) the Company is found to have given any gratuity or bribe to a member of the Council;</li> <li>(v) the Company has failed to rectify a default within the period specified in a written notice provided by the Council (<b>Default Notice</b>);</li> <li>(vi) the PFAS Destruction Agreement (in the Council's opinion) either no longer meets the Council's current or future business requirements or no longer provides the Council with value for money in relation to the Services.</li> </ul> <p>(b) Such termination shall be affected by the Council providing the Company written notice (<b>Termination Notice</b>) and termination shall occur 7 days after the Termination Notice (<b>Termination Date</b>).</p> <p>(c) The Council will only be liable to pay the Company for the Services provided up to the Termination Date.</p> <p>(d) The parties may otherwise terminate the PFAS Destruction Agreement by mutual agreement.</p>

The PFAS Destruction Agreement otherwise contains provisions considered standard for an agreement of its nature (including assignment and variation provisions).

#### 10.4.3 Wacol Lease Agreement

The Company has entered into a lease agreement with East Coast Woodshavings Pty Ltd as trustee under instrument 707144655 (**Lessor**) whereby the Lessor has agreed to lease the whole of the ground floor of the building at Unit 4, 95 Industrial Avenue, Wacol, QLD 4076 (**Premises**) to the Company for industrial use (particularly, gas processing, hydrogen production, machining and manufacturing) (**Lease Agreement**). The material terms and conditions of the Lease Agreement are as follows:

<b>Term</b>	<p>(a) The term of the Lease Agreement commenced on 15 December 2021 (<b>Commencement Date</b>) and will continue for an initial term of 5 years (<b>Initial Term</b>).</p> <p>(b) The Company may renew the Initial Term for a further 5-year period (<b>Option Period</b>), provided that the Company is not in breach of the Lease Agreement and provides the Lessor with written notice of its intention to renew the Lease Agreement.</p>
<b>Rent</b>	<p>(a) The Company will pay the Lessor \$218,190 in rent, to be paid in monthly instalments (plus GST) (<b>Base Rent</b>) for the period commencing on the Commencement Date until the first anniversary of the Lease Agreement.</p> <p>(b) For each successive year during the Initial Term (<b>Rent Period</b>), the Company will pay the Lessor the greater of (per annum):</p> <p>(i) Base Rent for the Rent Period x 1.03; or</p> <p>(ii) the sum calculated by using the following formula:</p> $A = \frac{B \times C}{D}$ <p>Where:-</p> <p>A = Base Rent for the Rent Period commencing on the first day of each successive year;</p> <p>B = Base Rent for the Rent Period last concluded;</p> <p>C = Consumer Price Index for the quarter ending immediately prior to the first day of each successive year; and</p> <p>D = Consumer Price Index for the quarter ending immediately prior to the commencement of the Rent Period last concluded.</p> <p>(c) The Lessor has agreed to provide the Company with a rent-free period of 3 months' rent and outgoings from 15 December 2021.</p>

	(d) The Base Rent for the Rent Period commencing on the first year of the Option Period shall be the greater of the Base Rent for the Rent Period last concluded and the market rent for the Premises calculated in accordance with the terms of the Lease Agreement.
<b>Bank guarantee</b>	<p>(a) The Company has agreed to provide a bank guarantee equal to three months' Base Rent (including GST) to the Lessor (<b>Bank Guarantee</b>).</p> <p>(b) The Lessor may demand payment under the Bank Guarantee if the Company fails to pay the Base Rent for any Rent Period, outgoings or costs when due.</p>
<b>Insurance</b>	<p>The Company must maintain the following insurances for the duration of the lease:</p> <p>(a) public risk insurance of no less than \$20,000,000, making the Premises as the 'risk premises';</p> <p>(b) plate glass insurance; and</p> <p>(c) a policy of insurance over the Company's fixtures, fittings, plant and equipment.</p>
<b>Outgoings</b>	The Company has agreed to pay all outgoings which are not recouped in whole by the Lessor according to the proportion of the lettable area of the Premises to the lettable area of all buildings on the land (equal to 23.6%) including all rates, taxes (including land tax), charges, assessments, charges in relation to the supply of water or drainage services, insurance and reasonable costs of operation, maintenance and repair.
<b>Lease and other costs</b>	<p>The Company must pay to the Lessor on demand:</p> <p>(a) all stamp duty (if applicable) and registration fees of the Lease Agreement;</p> <p>(b) any amount charged by a mortgagee of the Lessor for consenting to the Lease Agreement;</p> <p>(c) the Lessor's reasonable legal costs;</p> <p>(d) costs of consents required under the Lease Agreement (including costs incurred where the Company's request for consent is withdrawn);</p> <p>(e) costs of assignment or subletting;</p> <p>(f) costs of surrender or termination of the Lease Agreement;</p> <p>(g) costs incurred as a result of the Company's failure to observe or perform any covenants contained in the Lease Agreement; and</p> <p>(h) costs of any notice delivered by the Lessor pursuant to the Lease Agreement.</p>
<b>Encumbering and Assignment</b>	<p>The Company must not:</p> <p>(a) mortgage, charge or otherwise encumber the lease over the Premises, other than granting a floating charge of the whole of the Company's assets; or</p>

	(b) assign, transfer or sublet the lease of the Premises, without prior consent of the Lessor.
<b>Default</b>	<p>(a) The following constitute events of default:</p> <ul style="list-style-type: none"> <li>(i) if any Base Rent for any Rent Period, outgoings or costs payable remain unpaid 7 days after the required payment date;</li> <li>(ii) if the Company fails to observe or perform the terms of the Lease Agreement;</li> <li>(iii) if an application for the winding up of the Company is made or the Company appoints a voluntary administrator or liquidator,</li> </ul> <p>(each an <b>Event of Default</b>).</p> <p>(b) Where there is an Event of Default, the Lessor may:</p> <ul style="list-style-type: none"> <li>(i) re-enter and take possession of the Premises, at which time the Lease Agreement is terminated;</li> <li>(ii) by notice to the Company, terminate the Lease Agreement; or</li> <li>(iii) by notice to the Company, elect to convert the balance of the term into a tenancy from month to month.</li> </ul>
<b>Termination of Lease Agreement</b>	<p>If the Premises is taken for any public purpose by any authority or the whole or part of the Premises is damaged by fire, flood, lightening or storm so as to render the Premises unfit for occupation by the Company, the Lease Agreement may be terminated by the Company or Lessor upon not less than one month's notice to the other party. The Company's right to terminate the Lease Agreement is subject to the Lessor failing to rebuild or reinstate the Premises within a reasonable time.</p>

The Lease Agreement otherwise contains provisions considered standard for an agreement of its nature (including representations and warranties, covenant and indemnity provisions).

#### 10.4.4 Collaborative Research Agreement for ARC Linkage Projects – PFAS

The Company has collaborated with the University of Queensland (**UQ**) in the preparation and submission of a proposal under the industry linkage research grant scheme (**Proposal**) as operated by the Australian Research Council (**ARC**). UQ has received funding from the ARC (**Grant**) for the program of research relating to a skid-based transportable plant for PFAS contaminated site remediation that is contemplated by the Proposal (**Project**) and entered into a collaborative research agreement with sustainable solutions international Pty Ltd (**SSI**) and the Company (**ARC PFAS Agreement**) under which the parties have agreed to jointly undertake the Project and commercialise any IP created under the Project (**Project IP**) or physical samples created during the course of the Project (**Project Material**), the material terms and conditions of which are summarised below. The Parties have agreed that the sole commercialisation of the Project IP is through Treata (a subsidiary of the Company).

<b>Participation</b>	Each party must actively participate in the Project and must ensure that the Project is carried out substantially in accordance with the Proposal.
<b>Funding Agreement</b>	<p>(a) The parties acknowledge that UQ has entered into a funding agreement with the ARC in relation to the Project (<b>Funding Agreement</b>).</p> <p>(b) The Company agrees to assist UQ to comply with the relevant provisions of the Funding Agreement and not to do anything or omit to do anything that may cause UQ to be in breach of its obligations under the Funding Agreement.</p>
<b>Project Management Group</b>	<p>(a) A group will be established to develop and oversee the implementation of a plan (<b>Plan</b>) which sets out the strategies to achieve the Project objectives (<b>Project Management Group</b>).</p> <p>(b) Each party must nominate one representative to be a member of the Project Management Group within 30 days of 24 April 2019. (<b>Commencement Date</b>).</p>
<b>Cash and In-Kind Contributions</b>	<p>(a) UQ will disburse the Grant in accordance with the Funding Agreement.</p> <p>(b) The Company must make cash and in-kind contributions in accordance with the terms and conditions of the Funding Agreement.</p>
<b>Term and Termination</b>	<p>(a) The ARC PFAS Agreement commences on the Commencement Date and continues for 3 years (<b>Expiry Date</b>) unless UQ notifies the Company and SSI that the Project has been completed prior to the Expiry Date (<b>Term</b>). The parties are in the process of finalising an extension of the Term.</p> <p>(b) The ARC PFAS Agreement may be terminated at any time by mutual agreement between the parties.</p> <p>(c) Each party may terminate the ARC PFAS Agreement by written notice to the other parties if:</p>

	<p>(i) a party commits a material breach of the ARC PFAS Agreement that is not remedied within 30 days of the breach (or remedied by UQ at its election) or is unable to obtain ethical clearance from the relevant ethical committee to conduct the Project,</p> <p>in which case the ARC PFAS Agreement will bind the remaining parties.</p> <p>(d) UQ may terminate the ARC PFAS Agreement by written notice to all other parties if:</p> <p>(i) the Company or SSI commits a material breach of the ARC PFAS Agreement that is not remedied within 30 days of the breach;</p> <p>(ii) an event of insolvency occurs in respect of the Company or SSI;</p> <p>(iii) the ARC ceases to provide all or part of the funds contemplated by the Proposal;</p> <p>(iv) the Funding Agreement is terminated;</p> <p>(v) the Company or SSI notifies UQ that it can no longer carry out its obligations under the ARC PFAS Agreement or that it is unwilling to do so; or</p> <p>(vi) UQ determines that sufficient insurance cover is unable to be obtained with respect to the Project.</p> <p>(e) UQ may terminate either the Company's or SSI's involvement in the ARC PFAS Agreement by written notice to the Company or SSI if:</p> <p>(i) the Company or SSI commits a material breach of the ARC PFAS Agreement that is not remedied within 30 days of the breach;</p> <p>(ii) an event of insolvency occurs in respect of the Company or SSI;</p> <p>(iii) the Company or SSI notifies UQ that it can no longer carry out its obligations under the ARC PFAS Agreement or that it is unwilling to do so.</p>
<b>Background IP and Background Material</b>	Each party grants the other a non-exclusive, non-transferable, irrevocable, royalty free licence to use that party's registered or unregistered IP ( <b>Background IP</b> ) or physical samples ( <b>Background Material</b> ) in existence at the Commencement Date or developed by that party independently of the Project for the purpose of conducting the Project.
<b>Project IP</b>	(a) The parties agree that ownership of all Project IP and Project Material shall be assigned to Treata and all Project IP and Project Materials that are created shall vest in Treata.

	<p>(b) The Company and SSI grant UQ a non-exclusive, non-transferable, royalty free licence to use:</p> <ul style="list-style-type: none"> <li>(i) the Project IP and Project Material during the Term; and</li> <li>(ii) the Project IP as it exists on the date of termination for UQ's perpetual internal use.</li> </ul> <p>(c) The parties acknowledge that, under the Funding Agreement, UQ grants to the Commonwealth and State / Territory Governments a permanent, non-exclusive, irrevocable, royalty-free licence to use the documents, equipment, software, information and data (<b>Material</b>) produced by the Project, subject to the Company's or SSI's consent if the Material contains any Background IP or Background Material.</p>
<b>Commercialisation</b>	<p>(a) The parties agree to commercialise the Project IP and Project Materials through Treata and that Treata shall be the sole and exclusive entity to commercialise the Project IP.</p> <p>(b) The parties agree to negotiate in good faith the terms of a licence to use each party's Background IP or Background Material where such Background IP or Background Material is required by the other party for the commercialisation of the Project IP or Project Material.</p>
<b>IP protection</b>	<p>(a) The parties may determine the scope and content of any application for the protection of the Project IP in the name of Treata.</p> <p>(b) If the Company or SSI notify UQ that they will not seek protection of the Project IP, UQ may pursue protection of the Project IP in UQ's name after obtaining the other parties' prior consent.</p>
<b>Confidentiality</b>	<p>(a) Each party must, during the Term and thereafter keep secret, confidential and secure the confidential information of the other party, including the details of the ARC PFAS Agreement (<b>Confidential Information</b>).</p> <p>(b) The obligation at (a) above does not apply to the extent that the Confidential Information is required to be disclosed under applicable law, provided that the disclosing party has given the other party all available notice to enable the other party to attempt to remove that requirement and the disclosing party only discloses the minimum information required.</p> <p>(c) If a party wishes to make disclosure of the Confidential Information of another party by means of a conference paper, article for a journal, portion of a book or broadcast, that party must first obtain the written consent of all the</p>

other parties, which consent may not be unreasonably withheld or delayed.

The ARC PFAS Agreement otherwise contains provisions considered standard for an agreement of its nature (including representations and warranties and indemnity provisions).

#### 10.4.5 Collaborative Research Agreement for ARC Linkage Projects – Acetylene

The Company has collaborated with the University of Queensland (**UQ**) in the preparation and submission of a proposal under the industry linkage research grant scheme (**Proposal**) as operated by the Australian Research Council (**ARC**). UQ has received funding from the ARC (**Grant**) for the program of research relating to the skid mounted process for on-demand acetylene that is contemplated by the Proposal (**Project**) and entered into a collaborative research agreement with the Company (**ARC Acetylene Agreement**) under which the parties have agreed to jointly undertake the Project.

The ARC Acetylene Agreement is subject to the same material terms and conditions as the ARC PFAS Agreement summarised at Section 10.4.4 above, with the exception of the following material terms and conditions:

<b>Project Management Group</b>	<p>(a) A group will be established to develop and oversee the implementation of a plan (<b>Plan</b>) which sets out the strategies to achieve the Project objectives (<b>Project Management Group</b>).</p> <p>(b) Each party must nominate one representative to be a member of the Project Management Group within 30 days of 8 December 2017 (<b>Commencement Date</b>).</p>
<b>Cash and In-Kind Contributions</b>	<p>(a) UQ will disburse the Grant in accordance with the Funding Agreement.</p> <p>(b) The Company must make cash and in-kind contributions in accordance with the terms and conditions of the Funding Agreement.</p>
<b>Term and Termination</b>	<p>(a) The ARC Acetylene Agreement commences on the Commencement Date and continues until 31 May 2022 (<b>Expiry Date</b>) unless:</p> <p>(i) the parties agree that the Project has been completed prior to the Expiry Date; and</p> <p>(ii) the ARC Acetylene Agreement is otherwise terminated earlier by either party,</p> <p>(<b>Term</b>). The parties are currently negotiating an extension to the Expiry Date.</p> <p>(b) The ARC Acetylene Agreement may be terminated at any time by mutual agreement between the parties.</p> <p>(c) UQ may terminate the ARC Acetylene Agreement by written notice to the Company if:</p> <p>(i) the Company commits a material breach of the ARC Acetylene</p>

	<p>Agreement that is not remedied within 30 days of the breach;</p> <p>(ii) an event of insolvency occurs in respect of the Company;</p> <p>(iii) the ARC ceases to provide all or part of the funds contemplated by the Proposal; or</p> <p>(iv) the Funding Agreement is terminated;</p> <p>(v) the Company notifies UQ that it can no longer carry out its obligations under the ARC Acetylene Agreement or that it is unwilling to do so.</p> <p>(d) The Company may terminate the ARC Acetylene Agreement by written notice to UQ if:</p> <p>(i) UQ commits a material breach of the ARC Acetylene Agreement that is not remedied within 30 days of the breach;</p> <p>(ii) UQ notifies the Company that it can no longer carry out its obligations under the ARC Acetylene Agreement or that it is unwilling to do so.</p>
<b>Project IP</b>	<p>(a) The parties agree that ownership of the IP created under the Project (<b>Project IP</b>) or physical samples created during the course of the Project (<b>Project Material</b>) will vest in the Company on creation.</p> <p>(b) UQ assigns all right, title and interest in the Project IP and Project Material to the Company and agrees to take all steps necessary to obtain an agreement from its employees that they waive all rights in relation to the Project IP and Project Material.</p> <p>(c) The Company grants UQ a non-exclusive, non-transferable, royalty free licence to use:</p> <p>(i) the Project IP and Project Material during the Term; and</p> <p>(ii) the Project IP as it exists on the date of termination for UQ's perpetual internal use.</p>
<b>Commercialisation</b>	Synergen owns all IP to this application for commercialisation purposes.

The ARC Acetylene Agreement otherwise contains provisions considered standard for an agreement of its nature (including representations and warranties and indemnity provisions).

## 10.5 Operational Agreements – Phoenix

### 10.5.1 Aventum Exclusivity Framework Agreement

On 22 February 2021 Phoenix entered into an exclusive framework agreement with Ingenieria Y Consultoria Del Suroeste, SL (**Aventum**), a well-known Spanish infrastructure company, whereby Aventum will acquire a licence, in an exclusive mode for some territories (**Exclusive Areas**), for the gasification process developed by Phoenix (with the exception of the plasma heating systems developed by Phoenix) for the amount of US\$1,500,000 (**Purchase Price**) (**Aventum Exclusivity Agreement** or **Agreement**). The material terms and conditions of the Aventum Exclusivity Agreement are as follows:

<b>Term</b>	The Aventum Exclusivity Agreement shall commence on 22 February 2021 for a period of five years and shall be extended for another period of five years (unless otherwise notified by one of the parties in writing).
<b>Obligations of Phoenix</b>	For the 5 tonnes per day of medical waste system and 125 tonnes per day of residues derived fuel ( <b>RDF</b> ) system (each a <b>System</b> and together, the <b>Systems</b> ), Phoenix will deliver the preliminary equipment, final design and specifications, and equipment drawings and specifications ( <b>Deliverables</b> ).
<b>Obligations of Aventum</b>	Aventum: <ul style="list-style-type: none"><li>(a) will define the composition of each system to be considered;</li><li>(b) accepts to purchase from Phoenix reactor, plasma heating system and process control, which includes plasma heating system controls and gasification core controls;</li><li>(c) will obtain Phoenix's approval to modify the supply from Phoenix to a new supplier, in which case, Phoenix will charge Aventum 10% of the cost of new supplier;</li><li>(d) acknowledges that Phoenix shall qualify and sell to Aventum the plasma heating system marker, if Aventum is considering the incorporation of a different power supply into the system; and</li><li>(e) accepts that all spare and consumable parts of the plasma heating system can only be provided by Phoenix.</li></ul>
<b>Payment</b>	In consideration for the Deliverables to be provided by Phoenix above and the first Exclusivity period (as defined below), Aventum will pay Phoenix as follows: <ul style="list-style-type: none"><li>(a) <b>Progress payment 1:</b> US\$500,000 immediately upon execution of the Agreement. As security for this amount, Phoenix has agreed to provide a pledge over a list of equipment of their inventory relevant to its Valencia waste project, until completion of the works in relation to or the sale of the Valencia waste project;</li><li>(b) <b>Progress payment 2:</b> Phoenix will receive US\$250,000 for delivery of the preliminary medical waste system design;</li></ul>

	<p>(c) <b>Progress payment 3:</b> Phoenix will receive US\$250,000 for delivery of the preliminary RDF system design;</p> <p>(d) <b>Progress payment 4:</b> Phoenix will receive US\$250,000 for delivery of Deliverables and the final medical waste system design; and</p> <p>(e) <b>Progress payment 5:</b> Phoenix will receive US\$250,000 for delivery of Deliverables and the final RDF system design.</p>
<b>Engineering Review</b>	Phoenix will review the engineering of each project Aventure is in charge of prior to execution of the project and once Phoenix accepts the project, Phoenix will assume the guarantee of the project. Phoenix will be paid €100,000 for each project ten days after acceptance.
<b>Integration Services</b>	Integration services will be delivered by Phoenix with the support and participation of Aventure for a minimum of the first 5 systems. Once Aventure is qualified to do it, these services will be provided by Aventure. Phoenix will be paid €200,000 plus travel fees for each project 10 days after completion of the services. After the first 5 systems, Aventure may ask Phoenix to provide some help or full integration services.
<b>Exclusivity</b>	<p>(a) Phoenix grants to Aventure the exclusive rights for the sale of gasification and waste processing systems and Aventure agrees to be exclusive to Phoenix for gasification and waste processing for a period of 4 years in the following Exclusive Areas:</p> <ul style="list-style-type: none"> <li>(i) Europe;</li> <li>(ii) Africa;</li> <li>(iii) South and Central America; and</li> <li>(iv) Mexico, subject to Aventure achieving a project during 2021,</li> </ul> <p><b>(Exclusivity).</b></p> <p>(b) Renewal of the Exclusivity will be determined for each area individually and Exclusivity for a given area will be renewed when Aventure achieves the following in that area (all tonnes per day (TPD) for renewal are based on the plasma island processing):</p> <ul style="list-style-type: none"> <li>(i) Renewal of Exclusivity shall be for a period of 4 years for each area where Aventure produces contracts for the production of 350 TPD of medical waste and/or RDF and 350TPD is achieved;</li> <li>(ii) Renewal of Exclusivity shall be for a period of 6 years for each area where Aventure produces contracts for the production of 500 TPD of medical waste and/or RDF and 500TPD is achieved; and</li> <li>(iii) Renewal of Exclusivity shall be for a period of 6 years for each area where Aventure produces contracts for the production of 1,000 TPD of medical waste and/or RDF and 1,000TPD is achieved.</li> </ul>

	<p>(c) Prior to the end of each Exclusivity period, Aventus may request Phoenix to provide an extension if one of the projects will be viable in the year after the Exclusivity ends. Phoenix shall not arbitrarily deny Aventus's request.</p> <p>(d) The Exclusivity rights do not include Phoenix's plasma heating systems, for which Aventus has no licence and therefore, Phoenix may supply its own plasma heating systems to buyers with their own processes.</p> <p>(e) Phoenix has the right to reject projects to fulfill USA laws in relation to the sale of plasma systems.</p> <p>(f) In the case of circumvention, the parties agree that, on the basis that it may not be possible to accurately quantify the damages resulting from such a breach, the party in breach shall pay compensation amounting to US\$1,000,000 for each transaction that breaches the terms of the Agreement.</p>
<b>Termination</b>	<p>Either party may terminate the immediately and without prior notice by giving written notice if:</p> <p>(a) the other party is declared insolvent; or</p> <p>(b) the other party violates any or all of its obligations under the Aventus Exclusivity Agreement and that violation cannot be remedied within 10 calendar days.</p>

The Aventus Exclusivity Agreement otherwise contains provisions considered standard for an agreement of its nature (including confidentiality provisions).

## 10.6 Agreements with Directors and Management

### 10.6.1 Consultancy Agreement – Tegis Pty Ltd

The Company has entered into a consultancy agreement with Tegis Pty Ltd (ACN 120 347 088) as trustee for the TEG Unit Trust (**Tegis**) (an entity controlled by Director, Terence Gray) (**Tegis Consultancy Agreement** or **Agreement**) whereby Terence Gray (**Executive**) has agreed to perform the obligations of Tegis as Executive Director of the Company, the material terms and conditions of which are summarised below.

<b>Term</b>	The Tegis Consultancy Agreement commenced on 1 August 2021 ( <b>Commencement Date</b> ) and will continue unless terminated or extended in accordance with the Agreement ( <b>Term</b> ).
<b>Obligations</b>	<p>Tegis agrees to engage the Executive to perform the following services:</p> <p>(a) support and partner with the Managing Director and board members on all major fundraising initiatives, collaborate to develop and implement the Company's financial strategy and work with the Managing Director to design and elaborate business development plans;</p> <p>(b) facilitate business growth by working with stakeholders as required;</p>

	<p>(c) advise, prepare and help coordinate the Company's resources to a successful listing on the ASX;</p> <p>(together, the <b>Services</b>).</p>
<b>Contractor</b>	<p>Tegis is engaged by the Company as an independent contractor and acknowledges that Tegis and the Executive are not employees of the Company.</p>
<b>Payment for Services</b>	<p>(a) The Company will pay Tegis the following fees:</p> <ul style="list-style-type: none"> <li>(i) \$20,000 per month, from the Commencement Date to the date of the Company's admission to the Official List of the ASX;</li> <li>(ii) \$25,000 per month from the Company's admission to the Official List of the ASX; and</li> <li>(iii) 10,000,000 unquoted Options, exercisable at \$0.25 each on or before 31 July 2024 upon the Company's admission to the Official List of the ASX, which will be issued pursuant to the Company's applicable employee securities incentive plan (refer Sections 11.7 and 11.7),</li> </ul> <p>(together, the <b>Service Fee</b>).</p> <p>(b) The Company may at any time during the Term pay to the Executive a performance-based bonus over and above the Salary in cash or non-cash form.</p>
<b>Confidential Information</b>	<p>Tegis must, and must ensure that the Executive, only uses information regarding the current or future business and affairs of the Company which is confidential in nature (<b>Confidential Information</b>) for the purposes of performing the Services and not disclose any Confidential Information without the consent of the Company.</p>
<b>IP</b>	<p>(a) Tegis must, and must ensure that the Executive does not, use the IP rights of the Company in any inventions, materials and technical information (<b>IP Rights</b>) for any purpose other than providing the Services or use the IP Rights after the conclusion of the Term.</p> <p>(b) Tegis and the Executive acknowledge that the IP developed by the Executive under the Agreement is owned by the Company.</p>
<b>Restraints</b>	<p>Tegis agrees and will ensure that, during the Term, the Executive does not:</p> <ul style="list-style-type: none"> <li>(a) carry on, advise or provide services to any business which is the same as, substantially similar to, the business carried on by the Company;</li> <li>(b) solicit or entice away any person or entity which was or is a client, customer or employee of the Company;</li> <li>(c) interfere with the business of the Company or divulge any information concerning the business of the Company; or</li> </ul>

	(d) interfere to the detriment of the Company with the relationship between the Company and any of its clients, customers, employees or suppliers, within Australia for a period of 3 months commencing on the termination date of the Agreement.
<b>Termination</b>	<p>The Agreement may be terminated by:</p> <p>(a) Tegis at any time for any reason by giving the Company 3 months' notice in writing;</p> <p>(b) the Company at any time for any reason by giving Tegis 3 months' notice in writing; or</p> <p>(c) the Company, at any time with immediate effect by giving written notice to Tegis if Tegis materially breaches any other provision of the Agreement.</p>

The Tegis Consultancy Agreement otherwise contains provisions considered standard for an agreement of its nature (including representations and warranties).

#### 10.6.2 Executive Services Agreement – Christopher Dunks – Managing Director and Chief Executive Officer

The Company has entered into an executive service agreement with Christopher Dunks (**Dunks Agreement**). Pursuant to the Dunks Agreement, Mr Dunks is employed as the full-time Managing Director and Chief Executive Officer of the Company. The material terms and conditions of the Dunks Agreement are summarised below.

<b>Term</b>	The engagement of Mr Dunks pursuant to the Dunks Agreement commences on the date the Company is admitted to the Official List and continues until validly terminated by either party.
<b>Payment for Services</b>	<p>(a) Mr Dunks will be paid a base salary of \$350,000 per annum, plus statutory superannuation (<b>Base Salary</b>).</p> <p>(b) Mr Dunks will be provided with a laptop, mobile phone and associated call and data plan, a vehicle, and office parking, and will have fuel and two international business trips per year with his spouse paid for by the Company.</p>
<b>Incentives</b>	<p>Subject to key performance indicators set by the Company, Mr Dunks may be entitled to:</p> <p>(a) an annual performance-based bonus or incentive payment up to the value of 50% of Mr Dunks' Base Salary under a short term incentive scheme; and/or</p> <p>(b) annual performance rights up to the value of 50% of Mr Dunks' Base Salary, every year for a three (3) year period.</p>
<b>Termination</b>	<p>The Company and Mr Dunks may terminate Mr Dunks' employment at any time for any reason by providing three (3) months' notice in writing to the other party.</p> <p>The Company may make a payment in lieu of part or all of the notice period, calculated on the basis of Mr Dunks' Base Salary.</p>

<b>Resignation for Good Reason</b>	<p>If a change of control occurs and, at any time during the 12 month period following such change of control, Mr Dunks resigns due to the occurrence of any of the following events prior to or at the time of the change of control:</p> <ul style="list-style-type: none"> <li>(a) a material adverse change in Mr Dunks status or position;</li> <li>(b) a material reduction in Mr Dunks' Base Salary;</li> <li>(c) a failure by the Company to continue any executive benefit program in which Mr Dunks is participating, other than as a result of the expiration of the program;</li> <li>(d) a failure by the Company to provide and credit Mr Dunks with his entitled vacation days;</li> <li>(e) the Company requiring Mr Dunks to be based anywhere other than where he is based at the time of the change of control;</li> <li>(f) the Company repudiating any of its material obligations under the executive services agreement; or</li> <li>(g) the Company requiring Mr Dunks to report to a person of lower apparent or ostensible authority,</li> </ul> <p>Mr Dunks will be entitled to a payment of \$175,000, to be paid in monthly instalments.</p>
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The Dunks Agreement otherwise contains provisions considered standard for an agreement of its nature (including representations and warranties).

#### 10.6.3 Consultancy Agreement – Dr. Geoff Duckworth – Executive Director Technical

The Company has entered into a services agreement with Resource Technology Pty Ltd (ACN 8 512 612) (an entity controlled by Director, Dr Duckworth) (**Resource Technology**) and Dr Geoff Duckworth (**Duckworth Agreement**) whereby Dr Duckworth has agreed to perform the obligations of Resource Technology as Technical Director of the Company. The material terms and conditions of the Duckworth Agreement are summarised below.

<b>Term</b>	<ul style="list-style-type: none"> <li>(a) The engagement of Dr Duckworth commences on the date the Company is admitted to the Official List (<b>Commencement Date</b>).</li> <li>(b) The Duckworth Agreement will continue until terminated in accordance with its terms (<b>Term</b>).</li> <li>(c) Notwithstanding the Commencement Date of the Duckworth Agreement, the parties acknowledge that Dr Duckworth's appointment as Technical Director commenced prior to the Commencement Date.</li> </ul>
<b>Services</b>	Resource Technology must provide to the Company the services of Dr Duckworth in the role of Technical Director on a part-time basis ( <b>Services</b> ) and other such services as may be required by the Company that are within the scope of Resource Technology's expertise ( <b>Additional Services</b> ).

<b>Payment for Services</b>	<p>(a) The Company will pay Resource Technology the following fees for providing the Services:</p> <p>(i) \$330,000 per annum for the first year of the Term; and</p> <p>(ii) \$180,000 per annum from the second year of the Term onwards (<b>Salary</b>).</p> <p>(b) If, at the request of the Company, Resource Technology or Dr Duckworth provides Additional Services, Resource Technology shall be paid by way of remuneration at a rate of \$180.00 per hour.</p> <p>(c) The Company shall reimburse Resource Technology for all reasonable and necessary expenses.</p>
<b>Incentives</b>	<p>(a) The Company may at any time during the Term pay to Dr Duckworth a performance-based bonus.</p> <p>(b) The Board will determine every 12 months whether Dr Duckworth will be entitled to a performance-based bonus, subject to key performance indicators under a short-term incentive structure, of up to 50% of the Salary and Performance Rights to the value of 50% of the Salary.</p>
<b>Indemnity</b>	<p>(a) Resource Technology agrees to indemnify and save harmless the Company, its officers and employees from and against all claims, actions, losses, expenses, injuries or death to persons or property caused by or sustained from Resource Technology's acts and omissions.</p> <p>(b) The Company must provide Resource Technology with written notice of any claim, suit or demand giving rise to indemnification by Resource Technology, in which Resource Technology can defend and direct the defence, and the Company agrees to co-operate in the defence.</p> <p>(c) The Company agrees to indemnify and save harmless Dr Duckworth, Resource Technology, its officers and employees from and against all claims, actions, expenses, losses and damages to persons or property caused by or sustained from the Company's international or negligent acts and omissions.</p> <p>(d) Resource Technology must provide the Company with written notice of any claim, suit or demand giving rise to indemnification by the Company, in which the Company can defend and direct the defence, and Resource Technology must co-operate in the defence.</p>
<b>Confidential Information</b>	<p>(a) Resource Technology and Dr Duckworth acknowledge that all confidential information which is of commercial value to the Company is owed by and remains the property of the Company.</p> <p>(b) Resource Technology and Dr Duckworth must only use confidential information for the purposes of performing the Services and not disclose any</p>

	confidential information without the consent of the Company.
<b>Intellectual Property</b>	<p>(a) Resource Technology and Dr Duckworth acknowledge and agree that the Company owns all intellectual property and all right title and interest in the intellectual property vests exclusively in the Company.</p> <p>(b) If, within one year after the end of the Term, the parties alone or jointly invent or conceive any invention, improvement or innovation (<b>Invention</b>) or new computer software (<b>Works</b>) in relation to any product or process that Resource Technology or Dr Duckworth worked or came to their attention during the last two years of their appointment by the Company, such Invention or Works shall automatically vest in the Company.</p>
<b>Termination</b>	<p>(a) Either party may terminate the Duckworth Agreement:</p> <ul style="list-style-type: none"> <li>(i) by giving 3 months' notice in writing; or</li> <li>(ii) if any term in the Duckworth Agreement is breached by the other party.</li> </ul> <p>(b) The Company may terminate the Duckworth Agreement if Resource Technology:</p> <ul style="list-style-type: none"> <li>(i) breaches any of the terms of the Duckworth Agreement;</li> <li>(ii) misappropriates any property of the Company;</li> <li>(iii) Resource Technology or an officer of Resource Technology is charged with a criminal offence which brings the Company into serious disrepute;</li> <li>(iv) fails to fulfill the duties of its position for longer than 6 consecutive months;</li> <li>(v) disobeys or neglects any of the Company's or the Board's lawful directions; or</li> <li>(vi) is guilty of gross mismanagement of the Company's assets.</li> </ul> <p>(c) Either party may terminate the Duckworth Agreement if the other party:</p> <ul style="list-style-type: none"> <li>(i) suspends or threatens to suspend payment of all or a class of its debts;</li> <li>(ii) becomes insolvent;</li> <li>(iii) fails to comply with a statutory demand;</li> <li>(iv) has an administrator, controller or like officer appointed to the whole or a substantial part of its assets or undertaking;</li> <li>(v) has an order made or a resolution passed for its winding up or dissolution;</li> <li>(vi) has a security enforced over, distress, execution or similar process levied or served</li> </ul>

	<p>against the whole or a substantial part of its assets or undertaking; or</p> <p>(vii) is subject to any event that has an analogous or equivalent effect to any of the events listed above.</p>
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The Duckworth Agreement otherwise contains provisions considered standard for an agreement of its nature (including non-solicitation clauses, warranties and general provisions).

#### 10.6.4 Services Agreement – DSC Corporate Pty Ltd

The Company has entered into a services agreement with DSC Corporate Pty Ltd (ACN 655 780 153) (**DSC Corporate**) (an entity controlled by Drew Speedy) (**DSC Agreement**) whereby Drew Speedy (**Chief Financial Officer** or **CFO**) has agreed to perform the obligations of DTS Corporate as CFO of the Company (**Loan Amount**), the material terms and conditions of which are summarised below.

<b>Term</b>	<p>(a) The DSC Agreement commenced on 1 January 2022 (<b>Commencement Date</b>).</p> <p>(b) The DSC Agreement will continue until terminated in accordance with its terms (<b>Term</b>).</p>
<b>Services</b>	<p>(a) DSC Corporate must cause and procure the availability to the Company of a CFO (<b>Services</b>) and other such services as may be required that are within the scope of DSC Corporate's expertise (<b>Additional Services</b>).</p> <p>(b) Mr Speedy accepts appointment as CFO and Company Secretary of the Company effective from 7 December 2021. Mr Speedy was previously appointed as CFO on 21 October 2019 by the Company.</p>
<b>Payment for Services</b>	<p>(a) The Company will pay DSC Corporate \$150,000 per annum for providing the Services.</p> <p>(b) If, at the request of the Company, DSC Corporate or Mr Speedy provides Additional Services, DSC Corporate shall be paid by way of remuneration at a rate of \$125.00 per hour.</p> <p>(c) The Company shall reimburse DSC Corporate for all reasonable and necessary expenses.</p>
<b>Indemnity</b>	<p>(a) DSC Corporate agrees to indemnify and save harmless the Company, its officers and employees from and against all claims, actions, losses, expenses, injuries or death to persons or property caused by or sustained from DSC Corporate's acts and omissions.</p> <p>(b) The Company must provide DSC Corporate with written notice of any claim, suit or demand giving rise to indemnification by DSC Corporate, in which DSC Corporate can defend and direct the defence, and the Company agrees to co-operate in the defence.</p> <p>(c) The Company agrees to indemnify and save harmless Mr Speedy, DSC Corporate, its officers and employees from and against all claims, actions,</p>

	<p>expenses, losses and damages to persons or property caused by or sustained from the Company's international or negligent acts and omissions.</p> <p>(d) DSC Corporate must provide the Company with written notice of any claim, suit or demand giving rise to indemnification by the Company, in which the Company can defend and direct the defence, and DSC Corporate must co-operate in the defence.</p>
<b>Confidential Information</b>	<p>(a) DSC Corporate and Mr Speedy acknowledge that all confidential information which is of commercial value to the Company is owed by and remains the property of the Company.</p> <p>(b) DSC Corporate and Mr Speedy must only use confidential information for the purposes of performing the Services and not disclose any confidential information without the consent of the Company.</p>
<b>Intellectual Property</b>	<p>(a) DSC Corporate and Mr Speedy acknowledge and agree that the Company owns all intellectual property and all right title and interest in the intellectual property vests exclusively in the Company.</p> <p>(b) If, within one year after the end of the Term, the parties alone or jointly invent or conceive any invention, improvement or innovation (<b>Invention</b>) or new computer software (<b>Works</b>) in relation to any product or process that DSC Corporate or Mr Speedy worked or came to their attention during the last two years of their appointment by the Company, such Invention or Works shall automatically vest in the Company.</p>
<b>Termination</b>	<p>(a) Either party may terminate the DSC Agreement:</p> <ul style="list-style-type: none"> <li>(i) by giving 3 months' notice in writing; or</li> <li>(ii) if any term in the DSC Agreement is breached by the other party.</li> </ul> <p>(b) The Company may terminate the DSC Agreement if DSC Corporate:</p> <ul style="list-style-type: none"> <li>(i) breaches any of the terms of the DSC Agreement;</li> <li>(ii) misappropriates any property of the Company;</li> <li>(iii) DSC Corporate or an officer of DSC is charged with a criminal offence which brings the Company into serious disrepute;</li> <li>(iv) fails to fulfill the duties of its position for longer than 6 consecutive months;</li> <li>(v) disobeys or neglects any of the Company's or the Board's lawful directions; or</li> <li>(vi) is guilty of gross mismanagement of the Company's assets.</li> </ul>

	<p>(c) Either party may terminate the DSC Agreement if the other party:</p> <ul style="list-style-type: none"> <li>(i) suspends or threatens to suspend payment of all or a class of its debts;</li> <li>(ii) becomes insolvent;</li> <li>(iii) fails to comply with a statutory demand;</li> <li>(iv) has an administrator, controller or like officer appointed to the whole or a substantial part of its assets or undertaking;</li> <li>(v) has an order made or a resolution passed for its winding up or dissolution;</li> <li>(vi) has a security enforced over, distress, execution or similar process levied or served against the whole or a substantial part of its assets or undertaking; or</li> <li>(vii) is subject to any event that has an analogous or equivalent effect to any of the events listed above.</li> </ul>
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The DSC Agreement otherwise contains provisions considered standard for an agreement of its nature (including non-solicitation clauses, warranties and general provisions).

#### **10.6.5 Non-executive Director appointments**

Lynne Saint, Charles Fox and Joseph Stopper have entered into appointment letters with the Company to act in the capacity of non-executive Chairperson and non-executive Directors respectively. These Directors will receive the remuneration set out in Section 9.3.

#### **10.6.6 Deeds of indemnity, insurance and access**

The Company has entered into a deed of indemnity, insurance and access with each of the Directors and Proposed Directors. Under these deeds, the Company will agree to indemnify each officer to the extent permitted by the Corporations Act against any liability arising as a result of the officer acting as an officer of the Company. The Company will also be required to maintain insurance policies for the benefit of the relevant officer and allow the officers to inspect board papers in certain circumstances.

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## **11. ADDITIONAL INFORMATION**

### **11.1 Litigation**

As at the date of this Prospectus, the Company is not involved in any legal proceedings and the Directors are not aware of any legal proceedings pending or threatened against the Company.

### **11.2 Rights and liabilities attaching to Shares**

The following is a summary of the more significant rights and liabilities attaching to the Shares being offered pursuant to this Prospectus. This summary is not exhaustive and does not constitute a definitive statement of the rights and liabilities of Shareholders. To obtain such a statement, persons should seek independent legal advice.

Full details of the rights and liabilities attaching to Shares are set out in the Constitution, a copy of which is available for inspection at the Company's registered office during normal business hours.

#### **(a) General meetings**

Shareholders are entitled to be present in person, or by proxy, attorney or representative to attend and vote at general meetings of the Company.

Shareholders may requisition meetings in accordance with section 249D of the Corporations Act and the Constitution of the Company.

#### **(b) Voting rights**

Subject to any rights or restrictions for the time being attached to any class or classes of shares, at general meetings of shareholders or classes of shareholders:

- (i) each Shareholder entitled to vote may vote in person or by proxy, attorney or representative;
- (ii) on a show of hands, every person present who is a Shareholder or a proxy, attorney or representative of a Shareholder has one vote; and
- (iii) on a poll, every person present who is a Shareholder or a proxy, attorney or representative of a Shareholder shall, in respect of each fully paid Share held by him, or in respect of which he is appointed a proxy, attorney or representative, have one vote for each Share held, but in respect of partly paid shares shall have such number of votes as bears the same proportion to the total of such Shares registered in the Shareholder's name as the amount paid (not credited) bears to the total amounts paid and payable (excluding amounts credited).

(c) **Dividend rights**

Subject to the rights of any preference Shareholders and to the rights of the holders of any shares created or raised under any special arrangement as to dividend, the Directors may from time to time declare a dividend to be paid to the Shareholders entitled to the dividend which shall be payable on all Shares according to the proportion that the amount paid (not credited) is of the total amounts paid and payable (excluding amounts credited) in respect of such Shares.

The Directors may from time to time pay to the Shareholders any interim dividends as they may determine. No dividend shall carry interest as against the Company. The Directors may set aside out of the profits of the Company any amounts that they may determine as reserves, to be applied at the discretion of the Directors, for any purpose for which the profits of the Company may be properly applied.

Subject to the ASX Listing Rules and the Corporations Act, the Company may, by resolution of the Directors, implement a dividend reinvestment plan on such terms and conditions as the Directors think fit and which provides for any dividend which the Directors may declare from time to time payable on Shares which are participating Shares in the dividend reinvestment plan, less any amount which the Company shall either pursuant to the Constitution or any law be entitled or obliged to retain, be applied by the Company to the payment of the subscription price of Shares.

(d) **Winding-up**

If the Company is wound up, the liquidator may, with the authority of a special resolution, divide among the Shareholders in kind the whole or any part of the property of the Company, and may for that purpose set such value as he considers fair upon any property to be so divided, and may determine how the division is to be carried out as between the Shareholders or different classes of Shareholders.

The liquidator may, with the authority of a special resolution, vest the whole or any part of any such property in trustees upon such trusts for the benefit of the contributories as the liquidator thinks fit, but so that no Shareholder is compelled to accept any shares or other securities in respect of which there is any liability.

(e) **Shareholder liability**

As the Shares issued will be fully paid shares, they will not be subject to any calls for money by the Directors and will therefore not become liable for forfeiture.

(f) **Transfer of shares**

Generally, shares in the Company are freely transferable, subject to formal requirements, the registration of the transfer not resulting in a contravention of or failure to observe the provisions of a law of Australia and the transfer not being in breach of the Corporations Act and the ASX Listing Rules.

(g) **Future increase in capital**

The issue of any new Shares is under the control of the Directors of the Company. Subject to restrictions on the issue or grant of securities contained in the ASX Listing Rules, the Constitution and the Corporations Act (and without affecting any special right previously conferred on the holder of an existing share or class of shares), the Directors may issue Shares as they shall, in their absolute discretion, determine.

(h) **Variation of rights**

Under section 246B of the Corporations Act, the Company may, with the sanction of a special resolution passed at a meeting of Shareholders vary or abrogate the rights attaching to Shares.

If at any time the share capital is divided into different classes of shares, the rights attached to any class (unless otherwise provided by the terms of issue of the shares of that class), whether or not the Company is being wound up, may be varied or abrogated with the consent in writing of the holders of three quarters of the issued shares of that class, or if authorised by a special resolution passed at a separate meeting of the holders of the shares of that class.

(i) **Alteration of constitution**

In accordance with the Corporations Act, the Constitution can only be amended by a special resolution passed by at least three quarters of Shareholders present and voting at the general meeting. In addition, at least 28 days written notice specifying the intention to propose the resolution as a special resolution must be given.

### 11.3 **Terms and conditions of Existing Options**

(a) **Entitlement**

Each Option entitles the holder to subscribe for 1 Share upon exercise of the Option.

(b) **Exercise Price**

Subject to paragraph (j), the amount payable upon exercise of each Option will be \$0.16 (**Exercise Price**).

(c) **Expiry Date**

Each Option will expire at 5:00 pm (AEST) on 31 May 2022 (**Expiry Date**). An Option not exercised before the Expiry Date will automatically lapse on the Expiry Date.

(d) **Exercise Period**

The Options are exercisable at any time on or prior to the Expiry Date (**Exercise Period**).

(e) **Notice of Exercise**

The Options may be exercised during the Exercise Period by notice in writing to the Company in the manner specified on the Option certificate (**Notice of Exercise**) and payment of the Exercise Price for each Option being exercised in Australian currency by electronic funds transfer or other means of payment acceptable to the Company.

(f) **Exercise Date**

A Notice of Exercise is only effective on and from the later of the date of receipt of the Notice of Exercise and the date of receipt of the payment of the Exercise Price for each Option being exercised in cleared funds (**Exercise Date**).

(g) **Timing of issue of Shares on exercise**

Within 5 Business Days after the later of the following:

- (i) the Exercise Date; and
- (ii) when excluded information in respect to the Company (as defined in section 708A(7) of the Corporations Act) (if any) ceases to be excluded information,

but in any case, no later than 20 Business Days after the Exercise Date, the Company will:

- (iii) issue the number of Shares required under these terms and conditions in respect of the number of Options specified in the Notice of Exercise and for which cleared funds have been received by the Company;
- (iv) if required, give ASX a notice that complies with section 708A(5)(e) of the Corporations Act, or, if the Company is unable to issue such a notice, lodge with ASIC a prospectus prepared in accordance with the Corporations Act and do all such things necessary to satisfy section 708A(11) of the Corporations Act to ensure that an offer for sale of the Shares does not require disclosure to investors; and
- (v) if admitted to the official list of ASX at the time, apply for official quotation on ASX of Shares issued pursuant to the exercise of the Options.

If a notice delivered under 11.3(g)(iv) for any reason is not effective to ensure that an offer for sale of the Shares does not require disclosure to investors, the Company must, no later than 20 Business Days after becoming aware of such notice being ineffective, lodge with ASIC a prospectus prepared in accordance with the Corporations Act and do all such things necessary to satisfy section 708A(11) of the Corporations Act to ensure that an offer for sale of the Shares does not require disclosure to investors.

(h) **Shares issued on exercise**

Shares issued on exercise of the Options rank equally with the then issued shares of the Company.

(i) **Quotation of Shares issued on exercise**

If admitted to the official list of ASX at the time, application will be made by the Company to ASX for quotation of the Shares issued upon the exercise of the Options.

(j) **Reconstruction of capital**

If at any time the issued capital of the Company is reconstructed, all rights of an Optionholder are to be changed in a manner consistent with the Corporations Act and the ASX Listing Rules at the time of the reconstruction.

(k) **Participation in new issues**

There are no participation rights or entitlements inherent in the Options and holders will not be entitled to participate in new issues of capital offered to Shareholders during the currency of the Options without exercising the Options.

(l) **Change in exercise price**

An Option does not confer the right to a change in Exercise Price or a change in the number of underlying securities over which the Option can be exercised.

(m) **Transferability**

The Options are transferable subject to any restriction or escrow arrangements imposed by ASX or under applicable Australian securities laws.

#### **11.4 Terms and conditions of Executive Options**

Set out below are the terms and conditions of the Executive Options to be issued in accordance with the Tegis Consulting Agreement:

(a) **Entitlement**

Each Option entitles the holder to subscribe for 1 Share upon exercise of the Option.

(b) **Exercise Price**

Subject to paragraph (j), the amount payable upon exercise of each Option will be \$0.25 (**Exercise Price**).

(c) **Expiry Date**

Each Option will expire at 5:00 pm (AEST) on 31 July 2024 (**Expiry Date**). An Option not exercised before the Expiry Date will automatically lapse on the Expiry Date.

(d) **Exercise Period**

The Options are exercisable at any time on or prior to the Expiry Date (**Exercise Period**).

(e) **Notice of Exercise**

The Options may be exercised during the Exercise Period by notice in writing to the Company in the manner specified on the Option certificate (**Notice of Exercise**) and payment of the Exercise Price for each Option being exercised in Australian currency by electronic funds transfer or other means of payment acceptable to the Company.

(f) **Exercise Date**

A Notice of Exercise is only effective on and from the later of the date of receipt of the Notice of Exercise and the date of receipt of the payment of the Exercise Price for each Option being exercised in cleared funds (**Exercise Date**).

(g) **Timing of issue of Shares on exercise**

Within 5 Business Days after the later of the following:

- (i) the Exercise Date; and
- (ii) when excluded information in respect to the Company (as defined in section 708A(7) of the Corporations Act) (if any) ceases to be excluded information,

but in any case, no later than 20 Business Days after the Exercise Date, the Company will:

- (iii) issue the number of Shares required under these terms and conditions in respect of the number of Options specified in the Notice of Exercise and for which cleared funds have been received by the Company;
- (iv) if required, give ASX a notice that complies with section 708A(5)(e) of the Corporations Act, or, if the Company is unable to issue such a notice, lodge with ASIC a prospectus prepared in accordance with the Corporations Act and do all such things necessary to satisfy section 708A(11) of the Corporations Act to ensure that an offer for sale of the Shares does not require disclosure to investors; and
- (v) if admitted to the official list of ASX at the time, apply for official quotation on ASX of Shares issued pursuant to the exercise of the Options.

If a notice delivered under 11.3(g)(iv) for any reason is not effective to ensure that an offer for sale of the Shares does not require disclosure to investors, the Company must, no later than 20 Business Days after becoming aware of such notice being ineffective, lodge with ASIC a prospectus prepared in accordance with the Corporations Act and do all such things necessary to satisfy section 708A(11) of the Corporations Act to ensure that an offer for sale of the Shares does not require disclosure to investors.

(h) **Shares issued on exercise**

Shares issued on exercise of the Options rank equally with the then issued shares of the Company.

(i) **Quotation of Shares issued on exercise**

If admitted to the official list of ASX at the time, application will be made by the Company to ASX for quotation of the Shares issued upon the exercise of the Options.

(j) **Reconstruction of capital**

If at any time the issued capital of the Company is reconstructed, all rights of an Optionholder are to be changed in a manner consistent with the Corporations Act and the ASX Listing Rules at the time of the reconstruction.

(k) **Participation in new issues**

There are no participation rights or entitlements inherent in the Options and holders will not be entitled to participate in new issues of capital offered to Shareholders during the currency of the Options without exercising the Options.

(l) **Change in exercise price**

An Option does not confer the right to a change in Exercise Price or a change in the number of underlying securities over which the Option can be exercised.

(m) **Transferability**

The Options are transferable subject to any restriction or escrow arrangements imposed by ASX or under applicable Australian securities laws.

## **11.5 Terms and conditions of the Options to be issued under the Public Offer**

Set out below are the terms and conditions of the Options to be issued free-attaching to Shares under the Public Offer on a two (2) for four (4) basis (**Free-Attaching Options**).

(a) **Entitlement**

Each Option entitles the holder to subscribe for 1 Share upon exercise of the Option.

(b) **Exercise Price**

Subject to paragraph (j), the amount payable upon exercise of each Option will be as follows:

(i) **50% of the Free-Attaching Options:** \$0.25; and

(ii) **50% of the Free-Attaching Options:** \$0.40,

**(Exercise Price).**

(c) **Expiry Date**

Each Option will expire at 5:00 pm (AEST) on:

- (i) **50% of the Free-Attaching Options:** two years from the date of issue of the Options; and
- (ii) **50% of the Free-Attaching Options:** three years from the date of issue of the Options,

**(Expiry Date).** An Option not exercised before the Expiry Date will automatically lapse on the Expiry Date.

(d) **Exercise Period**

The Options are exercisable at any time on or prior to the Expiry Date **(Exercise Period)**.

(e) **Notice of Exercise**

The Options may be exercised during the Exercise Period by notice in writing to the Company in the manner specified on the Option certificate **(Notice of Exercise)** and payment of the Exercise Price for each Option being exercised in Australian currency by electronic funds transfer or other means of payment acceptable to the Company.

(f) **Exercise Date**

A Notice of Exercise is only effective on and from the later of the date of receipt of the Notice of Exercise and the date of receipt of the payment of the Exercise Price for each Option being exercised in cleared funds **(Exercise Date)**.

(g) **Timing of issue of Shares on exercise**

Within 5 Business Days after the later of the following:

- (i) the Exercise Date; and
- (ii) when excluded information in respect to the Company (as defined in section 708A(7) of the Corporations Act) (if any) ceases to be excluded information,

but in any case, no later than 20 Business Days after the Exercise Date, the Company will:

- (iii) issue the number of Shares required under these terms and conditions in respect of the number of Options specified in the Notice of Exercise and for which cleared funds have been received by the Company;
- (iv) if required, give ASX a notice that complies with section 708A(5)(e) of the Corporations Act, or, if the Company is unable to issue such a notice, lodge with ASIC a prospectus prepared in accordance with the Corporations Act and do all such things necessary to satisfy section 708A(11) of the Corporations Act to ensure that an offer for sale of the Shares does not require disclosure to investors; and
- (v) if admitted to the official list of ASX at the time, apply for official quotation on ASX of Shares issued pursuant to the exercise of the Options.

If a notice delivered under 11.3(g)(iv) for any reason is not effective to ensure that an offer for sale of the Shares does not require disclosure to investors, the Company must, no later than 20 Business Days after becoming aware of such notice being ineffective, lodge with ASIC a prospectus prepared in accordance with the Corporations Act and do all such things necessary to satisfy section 708A(11) of the Corporations Act to ensure that an offer for sale of the Shares does not require disclosure to investors.

(h) **Shares issued on exercise**

Shares issued on exercise of the Options rank equally with the then issued shares of the Company.

(i) **Quotation of Shares issued on exercise**

If admitted to the official list of ASX at the time, application will be made by the Company to ASX for quotation of the Shares issued upon the exercise of the Options.

(j) **Reconstruction of capital**

If at any time the issued capital of the Company is reconstructed, all rights of an Optionholder are to be changed in a manner consistent with the Corporations Act and the ASX Listing Rules at the time of the reconstruction.

(k) **Participation in new issues**

There are no participation rights or entitlements inherent in the Options and holders will not be entitled to participate in new issues of capital offered to Shareholders during the currency of the Options without exercising the Options.

(l) **Change in exercise price**

An Option does not confer the right to a change in Exercise Price or a change in the number of underlying securities over which the Option can be exercised.

(m) **Transferability**

The Options are transferable subject to any restriction or escrow arrangements imposed by ASX or under applicable Australian securities laws.

(n) **US restrictions**

The Options, and the underlying ordinary shares, have not been and will not be, registered under the US Securities Act or the securities laws of any state or other jurisdiction of the United States. Accordingly, the Options, and the underlying ordinary shares, may not be offered or sold in the United States, except in transactions exempt from or not subject to the registration requirements of the US Securities Act or other applicable US state securities laws.

## 11.6 Performance Rights

### 11.6.1 Terms and conditions of Performance Rights

The Company currently has 11,637,048 Performance Rights on issue, comprising:

Name and Title	Number of Class A Performance Rights	Number of Class B Performance Rights
Victor Rudolf (Proposed Chairman of the Technical Advisory Board)	2,110,516	-
Pradeep Shukla (Proposed General Manager of Synergen Environmental)	2,110,516	-
Christopher Dunks (Managing Director and Chief Executive Officer)	-	2,406,250
Geoff Duckworth (Technical Director)	-	515,625
Terence Gray (Executive Director)	-	2,578,125
Drew Speedy (Chief Financial Officer and Company Secretary)	-	1,916,016
<b>TOTAL</b>	<b>4,221,032</b>	<b>7,416,016</b>

Set out below are the terms and conditions of the Performance Rights:

#### (a) Vesting Conditions

Subject to paragraph (p), the Performance Rights will vest as follows:

- (i) **Class A Performance Rights:** The Class A Performance Rights will vest on 31 March 2022, subject to the holder continuing to be employed or contracted by the Company (or one of its subsidiaries) on that date (**Class A Milestone**); and
- (ii) **Class B Performance Rights:** All of the Class B Performance Rights will vest on satisfaction of the following:
  - (A) the Company being admitted to the Official List of the ASX on or before 31 July 2023;
  - (B) the Company generating revenue from a hydrogen or PFAS project (excluding for the avoidance of doubt, any revenue generated as a result of the acquisition of Phoenix) on or before 31 July 2023; and
  - (C) the holder continuing to be employed or contracted by the Company (or one of its subsidiaries) on 31 July 2023,(together, the **Class B Milestone**).

The Class A Milestone and the Class B Milestone are together, referred to as a **Milestone**.

#### (b) Notification to holder

The Company shall notify the holder in writing when the Milestone has been satisfied.

(c) **Conversion**

Subject to paragraph (m), upon vesting, each Performance Right will, at the election of the holder, convert into one Share.

(d) **Share ranking**

All Shares issued upon the vesting of Performance Rights will upon issue rank pari passu in all respects with other Shares.

(e) **Application to ASX**

The Performance Rights will not be quoted on ASX. The Company must apply for the official quotation of a Share issued on conversion of a Performance Right on ASX within the time period required by the ASX Listing Rules.

(f) **Transfer of Performance Rights**

The Performance Rights are not transferable.

(g) **Lapse of a Performance Right**

If the Milestone attached to the relevant Performance Right has not been satisfied within the relevant time period set out in paragraph (a), the relevant Performance Rights will automatically lapse.

(h) **Participation in new issues**

A Performance Right does not entitle a holder (in their capacity as a holder of a Performance Right) to participate in new issues of capital offered to holders of Shares such as bonus issues and entitlement issues.

(i) **Reorganisation of capital**

If at any time the issued capital of the Company is reconstructed, all rights of a holder will be changed in a manner consistent with the applicable ASX Listing Rules and the Corporations Act at the time of reorganisation.

(j) **Adjustment for bonus issue**

If the Company makes a bonus issue of Shares or other securities to existing Shareholders (other than an issue in lieu or in satisfaction of dividends or by way of dividend reinvestment) the number of Shares or other securities which must be issued on the conversion of a Performance Right will be increased by the number of Shares or other securities which the holder would have received if the holder had converted the Performance Right before the record date for the bonus issue.

(k) **Dividend and Voting Rights**

The Performance Rights do not confer on the holder an entitlement to vote (except as otherwise required by law) or receive dividends.

(l) **Change in Control**

Subject to paragraph (m), upon:

- (i) a takeover bid under Chapter 6 of the Corporations Act having been made in respect of the Company and:
  - (A) having received acceptances for not less than 50.1% of the Company's Shares on issue; and
  - (B) having been declared unconditional by the bidder.
- (ii) a Court granting orders approving a compromise or arrangement for the purposes of or in connection with a scheme of arrangement for the reconstruction of the Company or its amalgamation with any other company or companies,

then, to the extent Performance Rights have not converted into Shares due to satisfaction of the Milestone, Performance Rights will accelerate vesting conditions and will automatically convert into Shares on a one-for-one basis.

(m) **Deferral of conversion if resulting in a prohibited acquisition of Shares**

If the conversion of a Performance Right under paragraph (c) or (l) would result in any person being in contravention of section 606(1) of the *Corporations Act 2001* (Cth) (**General Prohibition**) then the conversion of that Performance Right shall be deferred until such later time or times that the conversion would not result in a contravention of the General Prohibition. In assessing whether a conversion of a Performance Right would result in a contravention of the General Prohibition:

- (i) holders may give written notification to the Company if they consider that the conversion of a Performance Right may result in the contravention of the General Prohibition. The absence of such written notification from the holder will entitle the Company to assume the conversion of a Performance Right will not result in any person being in contravention of the General Prohibition; and
- (ii) the Company may (but is not obliged to) by written notice to a holder request a holder to provide the written notice referred to in paragraph (i) within seven days if the Company considers that the conversion of a Performance Right may result in a contravention of the General Prohibition. The absence of such written notification from the holder will entitle the Company to assume the conversion of a Performance Right will not result in any person being in contravention of the General Prohibition.

(n) **No rights to return of capital**

A Performance Right does not entitle the holder to a return of capital, whether in a winding up, upon a reduction of capital or otherwise.

(o) **Rights on winding up**

A Performance Right does not entitle the holder to participate in the surplus profits or assets of the Company upon winding up.

(p) **Good Leaver and Bad Leaver**

Where the holder becomes a Good Leaver:

- (i) any and all vested Performance Rights held by the holder which have not been exercised will continue in force and remain exercisable; and
- (ii) the Board may determine, in its sole and absolute discretion, the manner in which any unvested Performance Rights held by the holder will be dealt with, including but not limited to:
  - (A) allowing some or all of those unvested Performance Rights to continue to be held by the holder, and be subject to existing vesting conditions; and
  - (B) requiring that any remaining unvested Performance Rights automatically lapse.

Where the holder becomes a Bad Leaver, unless the Board in its sole and absolute discretion determines otherwise:

- (iii) any and all vested Performance Rights held by the holder which have not been exercised will:
  - (A) continue in force and remain exercisable until 1 month after the holder's employment or appointment terminates; and
  - (B) thereafter, will automatically lapse; and
- (iv) any and all unvested Performance Rights held by the holder will automatically lapse.

(q) **No other rights**

A Performance Right gives the holder no rights other than those expressly provided by these terms and those provided at law where such rights at law cannot be excluded by these terms.

(r) **Definitions:**

The following terms have the below meanings:

- (i) **Bad Leaver** means, unless otherwise determined by the Board in its sole and absolute discretion, the holder who ceases employment in any of the following circumstances:
  - (A) the holder resigns from their employment or office;
  - (B) the employment of the holder is terminated due to poor performance; or
  - (C) the holder's employment is terminated, or the holder is dismissed from their office, for any of the following reasons:
    - (I) the holder has committed any serious or persistent breach of the provisions of any employment contract entered into by the holder with the Company;

- (II) the holder has been guilty of fraudulent or dishonest conduct in the performance of the holder's duties, which in the reasonable opinion of the Company, effects the holder's suitability for employment with the Company, or brings the holder or the Company into disrepute;
  - (III) the holder has been convicted of any criminal offence which involves fraud or dishonesty;
  - (IV) the holder has committed any wrongful or negligent act or omission which has caused the Company substantial liability;
  - (V) the holder has become disqualified from managing corporations in accordance with Part 2D.6 of the Corporations Act or has committed any act that may result in the holder being banned from managing a corporation under the Corporations Act; or
  - (VI) the holder has committed serious or gross misconduct, wilful disobedience or any other conduct justifying termination of employment without notice.
- (ii) **Board** means the board of directors of the Company.
  - (iii) **Good Leaver** means the holder who ceases employment or office with the Company and is not a Bad Leaver.

#### 11.6.2 Additional Information regarding Performance Rights

The following additional information is provided in respect of the Performance Rights held by the persons set out in Section 11.6.1 above (together, the **Performance Rights Holders**):

- (a) the Performance Rights were issued to remunerate and incentivise the Performance Rights Holders;
- (b) if the Milestone(s) are not achieved within the required timeframe for satisfaction, the entitlements of the Performance Rights Holders to the respective Performance Rights will lapse and no new Shares will be issued;
- (c) all Performance Rights are to convert into fully paid ordinary shares in the capital of the Company, ranking pari-passu with all other Shares on issue at the time of issue;
- (d) upon admission to the Official List (assuming the Minimum Subscription is raised under the Public Offer and conversion of the Performance Rights

to Shares), the Performance Rights Holders will have the following interests in the Company (on an undiluted basis):

Name of Recipient	Number of Shares	% interest
Christopher Dunks	62,760,417	10.42%
Terence Gray <sup>1</sup>	13,761,271	2.28%
Geoff Duckworth	59,609,375	9.89%
Drew Speedy	2,543,360	0.42%
Victor Rudolph	8,831,550	1.47%
Dr Pradeep Shukla	9,931,550	1.55%
<b>Total</b>	<b>156,837,523</b>	<b>26.03%</b>

**Note:**

1. In addition, Terence Gray will hold 458,334 Options exercisable at \$0.16 each on or before 31 May 2022 and 10,000,000 Options exercisable at a 25% premium to the price at which Shares are offered under the Public Offer (being, \$0.25 assuming Shares are issued under the Public Offer at \$0.20 each) on or before 31 July 2024, at listing. These Options have not been incorporated into the percentage interest held above.
- (e) the Performance Rights are consistent with the base requirements for performance securities set out in section 9 of Guidance Note 19 (no securities will be issuable until the Milestone is achieved);
- (f) the Performance Rights are compliant with sections 10 and 11 of Guidance Note 19 for the following reasons:
- (i) the number of Shares into which the Performance Rights will convert upon satisfaction of the relevant Milestones is appropriate and equitable for the purposes of Listing Rule 6.1 on the basis that:
    - (A) the number of Shares issuable upon satisfaction of the relevant Milestones is fixed, which allows investors and analysts to readily understand and have reasonable certainty as to the impact on the Company's capital structure if the Milestones are achieved;
    - (B) there is an appropriate link to the benefit of shareholders and the Company at large through the achievement of the Milestones, which have been constructed so that satisfaction of the Milestones will be consistent with increases in the value of Company's business; and
    - (C) the Milestones are objectively fair and reasonable, for the reasons outlined in this submission. None of the examples set out in section 10 of Guidance Note 19 that are unacceptable to ASX apply to the Performance Rights;

- (ii) the Milestones attaching to the Performance Rights are appropriate and equitable as:
  - (I) the Performance Rights have been issued to the Directors and certain key management personnel of the Company to incentivise them to act in accordance with the Company's strategy following its listing on ASX. Accordingly, the Milestones are linked to achieving revenue, which aligns with the Company's growth strategy;
  - (II) there is an appropriate link to the benefit of shareholders and the Company at large through the achievement of the Milestones, which have been constructed so that satisfaction of the Milestones will be consistent with increases in the value of the Company's business;
  - (III) the Milestones are clearly articulated by reference to objective criteria which allows investors and analysts to readily understand and have reasonable certainty as to the circumstances in which the Milestones will be taken to have been met; and
  - (IV) if the Milestones are not achieved, the entitlements of the Performance Rights Holders to the Performance Rights will lapse;
- (g) the Company does not require shareholder approval for the issue of the Performance Rights under the ASX Listing Rules as it is not admitted to the Official List of the ASX;
- (h) upon the Company being admitted to the Official List of the ASX, the number of Performance Rights on issue, as a percentage of the Company's share capital will be less than 10% and therefore an independent expert's report is not required in accordance with section 13 of Guidance Note 19; and
- (i) the Company confirms that it will not have more convertible securities on issue than the total number of Shares on issue at the date of proposed listing on the ASX, as set out in the capital structure in Section 6.10.

## 11.7 Employee Securities Incentive Plan

The Company has adopted an Employee Securities Incentive Plan (**Incentive Plan**) to allow eligible participants to be granted Options, Performance Rights and Shares in the Company. The principle terms of the Incentive Plan are summarised below:

### (a) Eligibility

**Eligible Participant** means a person who is a full-time or part-time employee, officer, or contractor of the Company, or an Associated Body Corporate (as defined in ASIC Class Order 14/1000), or such other person who has been determined by the Board to be eligible to participate in the Incentive Plan from time to time.

The Company will seek Shareholder approval for Director and related party participation in accordance with Listing Rule 10.14.

(b) **Purpose**

The purpose of the Plan is to:

- (i) assist in the reward, retention and motivation of Eligible Participants;
- (ii) link the reward of Eligible Participants to Shareholder value creation; and
- (iii) align the interests of Eligible Participants with shareholders of the Company Group (being the Company and each of its Associated Bodies Corporate), by providing an opportunity to Eligible Participants to receive an equity interest in the Company in the form of Securities.

(c) **Incentive Plan Administration**

The Incentive Plan will be administered by the Board. The Board may exercise any power or discretion conferred on it by the Incentive Plan rules in its sole and absolute discretion. The Board may delegate its powers and discretion.

(d) **Eligibility, invitation and application**

The Board may from time to time determine that an Eligible Participant may participate in the Incentive Plan and make an invitation to that Eligible Participant to apply for Securities on such terms and conditions as the Board decides.

On receipt of an Invitation, an Eligible Participant may apply for the Securities the subject of the invitation by sending a completed application form to the Company. The Board may accept an application from an Eligible Participant in whole or in part.

If an Eligible Participant is permitted in the invitation, the Eligible Participant may, by notice in writing to the Board, nominate a party in whose favour the Eligible Participant wishes to renounce the invitation.

(e) **Grant of Securities**

The Company will, to the extent that it has accepted a duly completed application, grant the Eligible Participant the relevant number of Securities, subject to the terms and conditions set out in the invitation, the Incentive Plan rules and any ancillary documentation required.

(f) **Terms of Convertible Securities**

Each 'Convertible Security' represents a right to acquire one or more Shares (for example, under an option or performance right), subject to the terms and conditions of the Incentive Plan. Prior to a Convertible Security being exercised, a participant (being an Eligible Participant who has been granted any Securities under the Incentive Plan) (**Participant**) does not have any interest (legal, equitable or otherwise) in any Share the subject of the Convertible Security by virtue of holding the Convertible Security. A Participant may not sell, assign, transfer, grant a security interest over or otherwise deal with a Convertible Security that has been granted to them unless otherwise determined by the Board. A Participant must not enter into any arrangement for the purpose of hedging their economic exposure to a Convertible Security that has been granted to them.

(g) **Vesting of Convertible Securities**

Any vesting conditions applicable to the grant of Convertible Securities will be described in the invitation. If all the vesting conditions are satisfied and/or otherwise waived by the Board, a vesting notice will be sent to the Participant by the Company informing them that the relevant Convertible Securities have vested. Unless and until the vesting notice is issued by the Company, the Convertible Securities will not be considered to have vested. For the avoidance of doubt, if the vesting conditions relevant to a Convertible Security are not satisfied and/or otherwise waived by the Board, that Convertible Security will lapse.

(h) **Exercise of Convertible Securities and cashless exercise**

To exercise a Convertible Security, the Participant must deliver a signed notice of exercise and, subject to a cashless exercise of Convertible Securities (see below), pay the exercise price (if any) to or as directed by the Company, at any time following vesting of the Convertible Security (if subject to vesting conditions) and prior to the expiry date as set out in the invitation or vesting notice.

An invitation may specify that at the time of exercise of the Convertible Securities, the Participant may elect not to be required to provide payment of the exercise price for the number of Convertible Securities specified in a notice of exercise, but that on exercise of those Convertible Securities the Company will transfer or issue to the Participant that number of Shares equal in value to the positive difference between the Market Value of the Shares at the time of exercise and the exercise price that would otherwise be payable to exercise those Convertible Securities.

Market Value means, at any given date, the volume weighted average price per Share traded on the ASX over the 5 trading days immediately preceding that given date, unless otherwise specified in an invitation.

A Convertible Security may not be exercised unless and until that Convertible Security has vested in accordance with the Incentive Plan rules, or such earlier date as set out in the Incentive Plan rules.

(i) **Delivery of Shares on exercise of Convertible Securities**

As soon as practicable after the valid exercise of a Convertible Security by a Participant, the Company will issue or cause to be transferred to that Participant the number of Shares to which the Participant is entitled under the Incentive Plan rules and issue a substitute certificate for any remaining unexercised Convertible Securities held by that Participant.

(j) **Forfeiture of Convertible Securities**

Where a Participant who holds Convertible Securities ceases to be an Eligible Participant or becomes insolvent, all unvested Convertible Securities will automatically be forfeited by the Participant, unless the Board otherwise determines in its discretion to permit some or all of the Convertible Securities to vest.

Where the Board determines that a Participant has acted fraudulently or dishonestly; committed an act which has brought the Company, the Company Group or any entity within the Company Group into disrepute, or wilfully breached his or her duties to the Company Group or where a Participant is convicted of an offence in connection with the affairs of the Company Group; or has a judgment entered against him or her in any civil proceedings in respect of the contravention by the Participant of his or her duties at law, in equity or under statute, in his or her capacity as an employee, consultant or officer of the Company Group, the Board may in its discretion deem all unvested Convertible Securities held by that Participant to have been forfeited.

Unless the Board otherwise determines, or as otherwise set out in the Incentive Plan rules:

- (i) any Convertible Securities which have not yet vested will be forfeited immediately on the date that the Board determines (acting reasonably and in good faith) that any applicable vesting conditions have not been met or cannot be met by the relevant date; and
- (ii) any Convertible Securities which have not yet vested will be automatically forfeited on the expiry date specified in the invitation or vesting notice.

(k) **Change of Control**

If a change of control event occurs in relation to the Company, or the Board determines that such an event is likely to occur, the Board may in its discretion determine the manner in which any or all of the Participant's Convertible Securities will be dealt with, including, without limitation, in a manner that allows the Participant to participate in and/or benefit from any transaction arising from or in connection with the change of control event.

(l) **Rights attaching to Plan Shares**

All Shares issued or transferred under the Incentive Plan or issued or transferred to a Participant upon the valid exercise of a Convertible Security, (**Plan Shares**) will rank pari passu in all respects with the Shares of the same class. A Participant will be entitled to any dividends declared and distributed by the Company on the Plan Shares and may participate in any dividend reinvestment plan operated by the Company in respect of Plan Shares. A Participant may exercise any voting rights attaching to Plan Shares.

(m) **Disposal restrictions on Plan Shares**

If the invitation provides that any Plan Shares are subject to any restrictions as to the disposal or other dealing by a Participant for a period, the Board may implement any procedure it deems appropriate to ensure the compliance by the Participant with this restriction.

For so long as a Plan Share is subject to any disposal restrictions under the Incentive Plan, the Participant will not:

- (i) transfer, encumber or otherwise dispose of, or have a security interest granted over that Plan Share; or
- (ii) take any action or permit another person to take any action to remove or circumvent the disposal restrictions without the express written consent of the Company.

(n) **Adjustment of Convertible Securities**

If there is a reorganisation of the issued share capital of the Company (including any subdivision, consolidation, reduction, return or cancellation of such issued capital of the Company), the rights of each Participant holding Convertible Securities will be changed to the extent necessary to comply with the Listing Rules applicable to a reorganisation of capital at the time of the reorganisation.

If Shares are issued by the Company by way of bonus issue (other than an issue in lieu of dividends or by way of dividend reinvestment), the holder of Convertible Securities is entitled, upon exercise of the Convertible Securities, to receive an issue of as many additional Shares as would have been issued to the holder if the holder held Shares equal in number to the Shares in respect of which the Convertible Securities are exercised.

Unless otherwise determined by the Board, a holder of Convertible Securities does not have the right to participate in a pro rata issue of Shares made by the Company or sell renounceable rights.

(o) **Participation in new issues**

There are no participation rights or entitlements inherent in the Convertible Securities and holders are not entitled to participate in any new issue of Shares of the Company during the currency of the Convertible Securities without exercising the Convertible Securities.

(p) **Compliance with applicable law**

No Security may be offered, granted, vested or exercised if to do so would contravene any applicable law. In particular, the Company must have reasonable grounds to believe, when making an invitation, that the total number of Plan Shares that may be issued upon exercise of Convertible Securities offered under an invitation, when aggregated with the number of Shares issued or that may be issued as a result of offers made at any time during the previous three year period under:

- (i) an employee incentive scheme of the Company covered by ASIC Class Order 14/1000; or
- (ii) an ASIC exempt arrangement of a similar kind to an employee incentive scheme,

but disregarding any offer made or securities issued in the capital of the Company by way of or as a result of:

- (iii) an offer to a person situated at the time of receipt of the offer outside Australia;
- (iv) an offer that did not need disclosure to investors because of section 708 of the Corporations Act (exempts the requirement for a disclosure document for the issue of securities in certain circumstances to investors who are deemed to have sufficient investment knowledge to make informed decisions, including professional investors, sophisticated investors and senior managers of the Company); or
- (v) an offer made under a disclosure document,

would not exceed 5% (or such other maximum permitted under any applicable law) of the total number of Shares on issue at the date of the invitation.

(q) **Amendment of Incentive Plan**

Subject to the following paragraph, the Board may at any time amend any provisions of the Incentive Plan rules, including (without limitation) the terms and conditions upon which any Securities have been granted under the Incentive Plan and determine that any amendments to the Incentive Plan rules be given retrospective effect, immediate effect or future effect.

No amendment to any provision of the Incentive Plan rules may be made if the amendment materially reduces the rights of any Participant as they existed before the date of the amendment, other than an amendment introduced primarily for the purpose of complying with legislation or to correct manifest error or mistake, amongst other things, or is agreed to in writing by all Participants.

(r) **Incentive Plan duration**

The Incentive Plan continues in operation until the Board decides to end it. The Board may from time to time suspend the operation of the Incentive Plan for a fixed period or indefinitely and may end any suspension. If the Incentive Plan is terminated or suspended for any reason, that termination or suspension must not prejudice the accrued rights of the Participants.

If a Participant and the Company (acting by the Board) agree in writing that some or all of the Securities granted to that Participant are to be cancelled on a specified date or on the occurrence of a particular event, then those Securities may be cancelled in the manner agreed between the Company and the Participant.

(s) **Deferred Taxation**

The Incentive Plan is a plan to which Subdivision 83A-C of the *Income Tax Assessment Act 1997* (Cth) applies (subject to the conditions in that Act), except to the extent an offer provides otherwise.

(t) **Maximum Number of Securities**

The maximum number of equity securities proposed to be issued under the Incentive Plan is 71,428,346 Securities (being 10% of the issued capital on a fully diluted basis at listing assuming the Maximum Subscription is raised under the Public Offer). It is not envisaged that the maximum number of Securities will be issued immediately.

## 11.8 **Employee Securities Incentive Plan (no ASIC relief) (for Senior Management)**

The Company has adopted an Employee Securities Incentive Plan which is not subject to ASIC Class Order 14/1000 (**No ASIC Relief Plan**) to allow eligible participants to be granted Options, Performance Rights and Shares in the Company. The principle terms of the Incentive Plan are summarised below:

(a) **Eligibility**

**Eligible Participant** means:

- (i) a Director of the Company, its subsidiaries or any other related body corporate of the Company (**Group Company**);
- (ii) a full or part time employee of any Group Company; or
- (iii) a casual employee or contractor of a Group Company,

who is declared by the Board to be eligible to participate in the Plan and who satisfies sections 708, 761G(7) or 761GA of the Corporations Act (as applicable).

The Company will seek Shareholder approval for Director and related party participation in accordance with Listing Rule 10.14.

(b) **Purpose**

The purpose of the No ASIC Relief Plan is to:

- (i) assist in the reward, retention and motivation of Eligible Participants;
- (ii) link the reward of Eligible Participants to Shareholder value creation; and
- (iii) align the interests of Eligible Participants with shareholders of the Group (being the Company and each of its Associated Bodies Corporate), by providing an opportunity to Eligible Participants to receive an equity interest in the Company in the form of Securities.

(c) **Incentive Plan Administration**

The No ASIC Relief Plan will be administered by the Board. The Board may exercise any power or discretion conferred on it by the No ASIC Relief Plan rules in its sole and absolute discretion. The Board may delegate its powers and discretion.

(d) **Eligibility, invitation and application**

The Board may from time to time determine that an Eligible Participant may participate in the Incentive Plan and make an invitation to that Eligible Participant to apply for Securities on such terms and conditions as the Board decides.

On receipt of an Invitation, an Eligible Participant may apply for the Securities the subject of the invitation by sending a completed application form to the Company. The Board may accept an application from an Eligible Participant in whole or in part.

If an Eligible Participant is permitted in the invitation, the Eligible Participant may, by notice in writing to the Board, nominate a party in whose favour the Eligible Participant wishes to renounce the invitation.

(e) **Grant of Securities**

The Company will, to the extent that it has accepted a duly completed application, grant the Eligible Participant the relevant number of Securities, subject to the terms and conditions set out in the invitation, the No ASIC Relief Plan rules and any ancillary documentation required.

(f) **Terms of Convertible Securities**

Each 'Convertible Security' represents a right to acquire one or more Shares (for example, under an option or performance right), subject to the terms and conditions of the No ASIC Relief Plan. Prior to a Convertible Security being exercised, a participant (being an Eligible Participant who has been granted any Securities under the No ASIC Relief Plan) (**Participant**) does not have any interest (legal, equitable or otherwise) in any Share the subject of the Convertible Security by virtue of holding the Convertible Security. A Participant may not sell, assign, transfer, grant a security interest over or otherwise deal with a Convertible Security that has been granted to them unless otherwise determined by the Board. A Participant must not

enter into any arrangement for the purpose of hedging their economic exposure to a Convertible Security that has been granted to them.

(g) **Vesting of Convertible Securities**

Any vesting conditions applicable to the grant of Convertible Securities will be described in the invitation. If all the vesting conditions are satisfied and/or otherwise waived by the Board, a vesting notice will be sent to the Participant by the Company informing them that the relevant Convertible Securities have vested. Unless and until the vesting notice is issued by the Company, the Convertible Securities will not be considered to have vested. For the avoidance of doubt, if the vesting conditions relevant to a Convertible Security are not satisfied and/or otherwise waived by the Board, that Convertible Security will lapse.

(h) **Exercise of Convertible Securities and cashless exercise**

To exercise a Convertible Security, the Participant must deliver a signed notice of exercise and, subject to a cashless exercise of Convertible Securities (see below), pay the exercise price (if any) to or as directed by the Company, at any time following vesting of the Convertible Security (if subject to vesting conditions) and prior to the expiry date as set out in the invitation or vesting notice.

An invitation may specify that at the time of exercise of the Convertible Securities, the Participant may elect not to be required to provide payment of the exercise price for the number of Convertible Securities specified in a notice of exercise, but that on exercise of those Convertible Securities the Company will transfer or issue to the Participant that number of Shares equal in value to the positive difference between the Market Value of the Shares at the time of exercise and the exercise price that would otherwise be payable to exercise those Convertible Securities.

Market Value means, at any given date, the volume weighted average price per Share traded on the ASX over the 5 trading days immediately preceding that given date, unless otherwise specified in an invitation.

A Convertible Security may not be exercised unless and until that Convertible Security has vested in accordance with the No ASIC Relief Plan rules, or such earlier date as set out in the No ASIC Relief Plan rules.

(i) **Delivery of Shares on exercise of Convertible Securities**

As soon as practicable after the valid exercise of a Convertible Security by a Participant, the Company will issue or cause to be transferred to that Participant the number of Shares to which the Participant is entitled under the No ASIC Relief Plan rules and issue a substitute certificate for any remaining unexercised Convertible Securities held by that Participant.

(j) **Forfeiture of Convertible Securities**

Where a Participant who holds Convertible Securities ceases to be an Eligible Participant or becomes insolvent, all unvested Convertible Securities will automatically be forfeited by the Participant, unless the Board otherwise determines in its discretion to permit some or all of the Convertible Securities to vest.

Where the Board determines that a Participant has acted fraudulently or dishonestly; committed an act which has brought the Company, the Group or any entity within the Group into disrepute, or wilfully breached his or her duties to the Group or where a Participant is convicted of an offence in connection with the affairs of the Group; or has a judgment entered against him or her in any civil proceedings in respect of the contravention by the Participant of his or her duties at law, in equity or under statute, in his or her capacity as an employee, consultant or officer of the Group, the Board may in its discretion deem all unvested Convertible Securities held by that Participant to have been forfeited.

Unless the Board otherwise determines, or as otherwise set out in the No ASIC Relief Plan rules:

- (i) any Convertible Securities which have not yet vested will be forfeited immediately on the date that the Board determines (acting reasonably and in good faith) that any applicable vesting conditions have not been met or cannot be met by the relevant date; and
- (ii) any Convertible Securities which have not yet vested will be automatically forfeited on the expiry date specified in the invitation or vesting notice.

(k) **Change of Control**

If a change of control event occurs in relation to the Company, or the Board determines that such an event is likely to occur, the Board may in its discretion determine the manner in which any or all of the Participant's Convertible Securities will be dealt with, including, without limitation, in a manner that allows the Participant to participate in and/or benefit from any transaction arising from or in connection with the change of control event.

(l) **Rights attaching to Plan Shares**

All Shares issued or transferred under the No ASIC Relief Plan or issued or transferred to a Participant upon the valid exercise of a Convertible Security, **(Plan Shares)** will rank pari passu in all respects with the Shares of the same class. A Participant will be entitled to any dividends declared and distributed by the Company on the Plan Shares and may participate in any dividend reinvestment plan operated by the Company in respect of Plan Shares. A Participant may exercise any voting rights attaching to Plan Shares.

(m) **Disposal restrictions on Plan Shares**

If the invitation provides that any Plan Shares are subject to any restrictions as to the disposal or other dealing by a Participant for a period, the Board may implement any procedure it deems appropriate to ensure the compliance by the Participant with this restriction.

For so long as a Plan Share is subject to any disposal restrictions under the No ASIC Relief Plan, the Participant will not:

- (i) transfer, encumber or otherwise dispose of, or have a security interest granted over that Plan Share; or

- (ii) take any action or permit another person to take any action to remove or circumvent the disposal restrictions without the express written consent of the Company.

(n) **Adjustment of Convertible Securities**

If there is a reorganisation of the issued share capital of the Company (including any subdivision, consolidation, reduction, return or cancellation of such issued capital of the Company), the rights of each Participant holding Convertible Securities will be changed to the extent necessary to comply with the Listing Rules applicable to a reorganisation of capital at the time of the reorganisation.

If Shares are issued by the Company by way of bonus issue (other than an issue in lieu of dividends or by way of dividend reinvestment), the holder of Convertible Securities is entitled, upon exercise of the Convertible Securities, to receive an issue of as many additional Shares as would have been issued to the holder if the holder held Shares equal in number to the Shares in respect of which the Convertible Securities are exercised.

Unless otherwise determined by the Board, a holder of Convertible Securities does not have the right to participate in a pro rata issue of Shares made by the Company or sell renounceable rights.

(o) **Participation in new issues**

There are no participation rights or entitlements inherent in the Convertible Securities and holders are not entitled to participate in any new issue of Shares of the Company during the currency of the Convertible Securities without exercising the Convertible Securities.

(p) **Compliance with applicable law**

No Security may be offered, granted, vested or exercised if to do so would contravene any applicable law.

(q) **Amendment of No ASIC Relief Plan**

Subject to the following paragraph, the Board may at any time amend any provisions of the No ASIC Relief Plan rules, including (without limitation) the terms and conditions upon which any Securities have been granted under the No ASIC Relief Plan and determine that any amendments to the No ASIC Relief Plan rules be given retrospective effect, immediate effect or future effect.

No amendment to any provision of the No ASIC Relief Plan rules may be made if the amendment materially reduces the rights of any Participant as they existed before the date of the amendment, other than an amendment introduced primarily for the purpose of complying with legislation or to correct manifest error or mistake, amongst other things, or is agreed to in writing by all Participants.

(r) **No ASIC Relief Plan duration**

The No ASIC Relief Plan continues in operation until the Board decides to end it. The Board may from time to time suspend the operation of the No ASIC Relief Plan for a fixed period or indefinitely and may end any suspension. If the No ASIC Relief Plan is terminated or suspended for any reason, that termination or suspension must not prejudice the accrued rights of the Participants.

If a Participant and the Company (acting by the Board) agree in writing that some or all of the Securities granted to that Participant are to be cancelled on a specified date or on the occurrence of a particular event, then those Securities may be cancelled in the manner agreed between the Company and the Participant.

(s) **Deferred Taxation**

The No ASIC Relief Plan is a plan to which Subdivision 83A-C of the *Income Tax Assessment Act 1997* (Cth) applies (subject to the conditions in that Act), except to the extent an offer provides otherwise.

(t) **Maximum Number of Securities**

The maximum number of equity securities proposed to be issued under the No ASIC Relief Plan is 71,428,346 Securities (being 10% of the issued capital on a fully diluted basis at listing assuming the Maximum Subscription is raised under the Public Offer). It is not envisaged that the maximum number of Securities will be issued immediately.

## 11.9 ASX waiver

Listing Rule 1.1 (Condition 12) provides that if an entity has options on issue, the exercise price for each underlying security must be at least 20 cents.

Listing Rule 6.1 provides that the terms that apply to each class of securities of an entity must, in ASX's opinion, be appropriate and equitable.

Listing Rule 9.1(b) and 9.1(c) require that, where an entity issues 'restricted securities' (as defined in Chapter 19 of the ASX Listing Rules), or has them on issue, it must enter into restriction deeds with the holders and controllers of those restricted securities in the form set out in Appendix 9A and apply the restrictions outlined in Appendix 9B or, at the election of ASX, give a restriction notice in writing to the holder of the restricted securities in the form set out in Appendix 9C.

The Company has received the following confirmation and waivers from ASX:

- (a) confirmation that, on receipt of an application for admission to the Official List of ASX by the Company, ASX is likely to grant the Company a waiver from Listing Rule 1.1 (Condition 12) to the extent necessary to permit the Company to have on issue up to 2,554,167 Options and 20,079,167 Performance Rights, less a total of 8,442,066 Performance Rights already vested and which will be converted to Shares at or before the time of the application for admission to the Official List, with an exercise price of less than A\$0.20 on condition that the terms and conditions of the Options and Performance Rights are clearly disclosed in the Prospectus;

- (b) confirmation that, on receipt of an application for admission to the Official List of ASX by the Company, ASX is likely to confirm that the terms of the 20,079,167 Performance Rights less a total of 8,442,066 Performance Rights already vested and which will be converted to Shares at the time of the application for admission to the Official List, are appropriate and equitable for the purposes of Listing Rule 6.1 subject to the following conditions:
- (i) the Prospectus provides full disclosure of the dilutionary effect of the Company securities and their terms and conditions in accordance with Guidance Note 19;
  - (ii) the Company makes an announcement immediately upon the satisfaction of any milestones, the conversion of any of the Performance Rights and the expiry of any of the Performance Rights;
  - (iii) the terms and conditions of the Performance Rights, including without limitation the relevant milestones that have to be satisfied before each Performance Right is converted into a Share, are not to be changed without the prior approval of ASX and the Shareholders;
  - (iv) upon conversion of the Performance Rights into Shares, the Company will apply to the ASX for quotation of the Shares within the requisite time period;
  - (v) the Company discloses the following in each annual report, annual audited financial accounts, and half-yearly report issued by the Company in respect of any period during which any of the Performance Rights remain on issue or were converted or cancelled:
    - (A) the number of Performance Rights on issue during the relevant period;
    - (B) a summary of the terms and conditions of the Performance Rights, including without limitation the number of Shares into which they are convertible and the relevant milestones;
    - (C) whether any of the Performance Rights were converted or cancelled during that period; and
    - (D) whether any milestones were met during the period.
- (c) confirmation that, on receipt of an application for admission to the Official List of ASX by the Company, ASX is likely to grant the Company a waiver from Listing Rule 9.1 to the extent necessary to permit the Company to apply the restrictions in paragraphs 1 and 2 of Appendix 9B (as applicable) to the Shares issued to the vendors of common stock, preferred stock or subordinated promissory notes of Phoenix (such securities, the **Phoenix Seed Securities**, and the vendors of Phoenix Seed Securities, the **Seed Vendors**) and to the ordinary shares issued to the vendors of deferred stock of Phoenix and to the beneficial holders of units in the Phoenix Employee Stock Ownership Plan (**ESOP**) in exchange for the acquisition of ESOP stock held by Mr Douglas Frame as trustee for the ESOP (such units and deferred stock, the **Employee Securities**, the vendors of

Employee Securities, the **Employee Vendors** and the Seed Vendors together with the Employee Vendors, the **Vendors**), in each case on condition that the Company acquires 100% of the issued securities of Phoenix, and the consideration paid or provided directly or indirectly by the Company to the holders of securities in Phoenix consists solely of securities in the Company, as follows:

- (i) the Shares issued to the Seed Vendors who subscribed with cash for the Phoenix Seed Securities are treated as being held by a related party, promoter or unrelated party seed capitalist (as appropriate) of the Company, provided ASX is satisfied with the evidence submitted to substantiate the cash amounts paid to Phoenix;
- (ii) the Shares issued to the Employee Vendors are treated as being held by a related party, promoter or unrelated party seed capitalist (as appropriate) of the Company;
- (iii) cash formula relief is applicable to those shares that are issued to the Seed Vendors who subscribed for their Phoenix Seed Securities for cash consideration, provided ASX is satisfied with the evidence submitted to substantiate the cash amounts paid to Phoenix;
- (iv) for the purposes of determining the length of the escrow period for Shares issued to unrelated seed capitalists as consideration for Phoenix Seed Securities or Employee Securities which are subject to 12 month escrow, the 12 month escrow period will be deemed to begin on the date of issue of the Phoenix Seed Securities or Employee Securities, as applicable; and
- (v) for the purposes of determining the length of the escrow period for Shares issued to seed capitalists who are related parties or promoters of the Company as consideration for Phoenix Seed Securities or Employee Securities which are subject to 24 month escrow, the 24 month escrow period will be deemed to begin on the date of issue of official quotation of the Company's securities.

#### **11.10 Interests of Directors**

Other than as set out in this Prospectus, no Director or proposed Director holds, or has held within the 2 years preceding lodgement of this Prospectus with the ASIC, any interest in:

- (a) the formation or promotion of the Company;
- (b) any property acquired or proposed to be acquired by the Company in connection with:
  - (i) its formation or promotion; or
  - (ii) the Offers; or
- (c) the Offers,

and no amounts have been paid or agreed to be paid and no benefits have been given or agreed to be given to a Director or proposed Director:

- (d) as an inducement to become, or to qualify as, a Director; or

- (e) for services provided in connection with:
  - (i) the formation or promotion of the Company; or
  - (ii) the Offers.

### 11.11 Interests of Experts and Advisers

Other than as set out below or elsewhere in this Prospectus, no:

- (a) person named in this Prospectus as performing a function in a professional, advisory or other capacity in connection with the preparation or distribution of this Prospectus;
- (b) promoter of the Company; or
- (c) underwriter (but not a sub-underwriter) to the issue or a financial services licensee named in this Prospectus as a financial services licensee involved in the issue,

holds, or has held within the 2 years preceding lodgement of this Prospectus with the ASIC, any interest in:

- (d) the formation or promotion of the Company;
- (e) any property acquired or proposed to be acquired by the Company in connection with:
  - (i) its formation or promotion; or
  - (ii) the Offers; or
- (f) the Offers,

and no amounts have been paid or agreed to be paid and no benefits have been given or agreed to be given to any of these persons for services provided in connection with:

- (g) the formation or promotion of the Company; or
- (h) the Offers.

BDO Audit Pty Ltd has acted as Investigating Accountant and has prepared the Independent Limited Assurance Report which is included in Annexure A. The Company estimates it will pay BDO Audit Pty Ltd a total of \$25,000 (excluding GST) for these services. During the 24 months preceding lodgement of this Prospectus with the ASIC, BDO Audit Pty Ltd has received \$52,768 in fees from the Company for audit services.

BDO Audit Pty Ltd has been appointed as the Company's auditor. The Company estimates it will pay BDO Audit Pty Ltd a total of \$25,000 (excluding GST) for audit services for the current financial year.

BDO USA, LLP has been appointed as Phoenix's auditor. The Company estimates it will pay BDO USA LLP a total of US\$167,500 for audit services provided during the current financial year.

Lodge Corporate Pty Ltd will receive those fees set out in Section 4.5 following the successful completion of the Public Offer for its services as Lead Manager to the Public Offer. The Lead Manager will be responsible for paying all capital raising fees that the Lead Manager and the Company agree with any other financial service licensees. Further details in respect to the Lead Manager Mandate are summarised in Section 10.1.1. During the 24 months preceding lodgement of this Prospectus with the ASIC, the Lead Manager has not received fees from the Company for any services.

Steinepreis Paganin has acted as the Australian legal advisers to the Company in relation to the Public Offer. The Company estimates it will pay Steinepreis Paganin \$250,000 (excluding GST) for these services. Subsequently, fees will be charged in accordance with normal charge out rates. During the 24 months preceding lodgement of this Prospectus with the ASIC, Steinepreis Paganin has not received fees from the Company for any services.

Houlihan<sup>2</sup> has acted as Intellectual Property Solicitors and has prepared the Intellectual Property Report which is included in Annexure B . The Company estimates it will pay Houlihan<sup>2</sup> a total of \$5,000 (excluding GST) for these services. During the 24 months preceding lodgement of this Prospectus with the ASIC, Houlihan<sup>2</sup> has received \$41,494 (excluding GST) from the Company for patent application services.

## **11.12 Consents**

Chapter 6D of the Corporations Act imposes a liability regime on the Company (as the offer or of the Shares), the Directors, any underwriters, persons named in the Prospectus with their consent having made a statement in the Prospectus and persons involved in a contravention in relation to the Prospectus, with regard to misleading and deceptive statements made in the Prospectus. Although the Company bears primary responsibility for the Prospectus, the other parties involved in the preparation of the Prospectus can also be responsible for certain statements made in it.

Each of the parties referred to in this Section:

- (a) does not make, or purport to make, any statement in this Prospectus other than those referred to in this Section;
- (b) in light of the above, only to the maximum extent permitted by law, expressly disclaim and take no responsibility for any part of this Prospectus other than a reference to its name and a statement included in this Prospectus with the consent of that party as specified in this Section; and
- (c) has not withdrawn its consent prior to the lodgement of this Prospectus with the ASIC.

BDO Audit Pty Ltd has given its written consent to being named as Investigating Accountant in this Prospectus and to the inclusion of the Independent Limited Assurance Report in Annexure A in the form and context in which the information and report is included.

BDO Audit Pty Ltd has given its written consent to being named as auditor of the Company in this Prospectus and the inclusion of the audited and audit reviewed financial information of the Company contained in Section 7 this Prospectus in the form and context in which it appears.

BDO USA LLP has given its written consent to being named as auditor of Phoenix in this Prospectus and the inclusion of the audited and audit reviewed financial information of Phoenix contained in Section 7 this Prospectus in the form and context in which it appears.

Steinepreis Paganin has given its written consent to being named as the Australian legal advisers to the Company in relation to the Offers in this Prospectus.

Lodge Corporate Pty Ltd has given its written consent to being named as Lead Manager to the Company in this Prospectus.

Houlihan<sup>2</sup> has given its written consent to being named as Intellectual Property Solicitors to the Company in this Prospectus and the inclusion of the Intellectual Property Report included in Annexure A to this Prospectus in the form and context in which it appears.

Link Market Services Limited has given its written consent to being named as the share registry to the Company in this Prospectus.

### 11.13 Expenses of the Offers

The total expenses of the Offers (excluding GST) are estimated to be approximately \$1,681,955 for the Minimum Subscription and approximately \$1,984,287 for the Maximum Subscription and are expected to be applied towards the items set out in the table below:

Item of Expenditure	Minimum Subscription (\$20,000,000)	Maximum Subscription (\$25,000,000)
ASIC fees	3,206	3,206
ASX fees	178,586	180,977
Lead Manager Fees <sup>1</sup>	1,200,000	1,500,000
Legal Fees <sup>2</sup>	255,000	255,000
Investigating Accountant's Fees	25,000	25,000
Printing and Distribution	10,000	10,000
Miscellaneous	10,163	10,104
<b>TOTAL</b>	<b>1,681,955</b>	<b>1,984,287</b>

**Notes:**

1. Refer to Section 10.1.1 for further detail regarding the fees payable to the Lead Manager.
2. Including the fees payable to the Intellectual Property Solicitors.

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**12. DIRECTORS' AUTHORISATION**

This Prospectus is issued by the Company and its issue has been authorised by a resolution of the Directors and Proposed Directors.

In accordance with section 720 of the Corporations Act, each Director and Proposed Director has consented to the lodgement of this Prospectus with the ASIC.

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**Christopher Dunks**  
**For and on behalf of**  
**Synergen Met Limited**

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## 13. GLOSSARY

Where the following terms are used in this Prospectus they have the following meanings:

**\$** means an Australian dollar.

**Accredited Investor** means an “accredited investor” as defined in Rule 501(a) under the US Securities Act.

**Acquisition** means the acquisition by the Company of Phoenix on the terms and conditions set out in Section 10.3.1.

**Acquisition Agreements** means the agreements summarised under Section 10.3.

**AEST** means Australian Eastern Standard Time as observed in Sydney, New South Wales.

**Application Form** means the application form attached to or accompanying this Prospectus relating to the Public Offer.

**ASIC** means Australian Securities & Investments Commission.

**ASX** means ASX Limited (ACN 008 624 691) or the financial market operated by it as the context requires.

**ASX Listing Rules** means the official listing rules of ASX.

**Board** means the board of Directors as constituted from time to time.

**Business Days** means Monday to Friday inclusive, except New Year's Day, Good Friday, Easter Monday, Christmas Day, Boxing Day, and any other day that ASX declares is not a business day.

**CAGR** means compound annual growth rate.

**CHESS** means the Clearing House Electronic Subregister System operated by ASX Settlement.

**Cleansing Offer Closing Date** means the closing date of the Cleansing Offer as set out in the indicative timetable in the Key Offer Information Section (subject to the Company reserving the right to extend the Cleansing Offer Closing Date or close the Cleansing Offer early).

**Closing Date** or **Public Offer Closing Date** means the closing date of the Public Offer as set out in the indicative timetable in the Key Offer Information Section (subject to the Company reserving the right to extend the Closing Date or close the Public Offer early).

**Company** or **Synergen** means Synergen Met Limited (ACN 128 765 284).

**Company Group** means the Company and its subsidiaries.

**Conditions** has the meaning set out in Section 4.6.

**Convertible Loans** means the Loan Notes on issue in the Company, the material terms and conditions of which are summarised in Section 10.1.4.

**Convertible Notes** means the AU Notes and USD Notes on issue in the Company, the material terms and conditions of which are summarised in Sections 10.1.2 and 10.1.3 (respectively).

**Constitution** means the constitution of the Company.

**Corporations Act** means *the Corporations Act 2001* (Cth).

**Directors** means the directors of the Company at the date of this Prospectus.

**Existing Options** means the Options on issue as at lodgement of the Prospectus, the terms and conditions of which are set out in Section 11.3.

**Executive Options** means the Options to be issued to Tegis Pty Ltd (or its nominee), the terms and conditions of which are set out in Section 11.4.

**Exposure Period** means the period of 7 days after the date of lodgement of this Prospectus, which period may be extended by the ASIC by not more than 7 days pursuant to section 727(3) of the Corporations Act.

**Frame Family Partnership** means Frame Family Limited Liability Limited Partnership (a Minnesota limited liability partnership), a Majority Common Stockholder.

**Incentive Plan** has the meaning set out in Section 11.7.

**IP** means intellectual property.

**Lead Manager** means Lodge Corporate.

**Lodge Corporate** means Lodge Corporate Pty Ltd (ACN 125 323 168) (Corporate Authorised Representative No. 316212 of Lodge Partners Pty Ltd (ACN 053 432 769) AFSL No. 246271).

**Lead Manager Mandates** means the agreements with the Lead Manager summarised in Section 10.1.1.

**Majority Common Stockholders** means Mr Douglas Frame and the Frame Family Partnership, who together hold 62.46% of the common stock on issue in Phoenix.

**Maximum Subscription** means the maximum amount to be raised under the Public Offer, being \$25,000,000, which is also the Full Subscription.

**Minimum Subscription** means the minimum amount to be raised under the Public Offer, being \$20,000,000.

**Minority Common Stockholders** means all of the minority common stockholders of Phoenix (excluding, for the avoidance of doubt, the Majority Common Stockholders) who together hold 37.54% of the common stock on issue in Phoenix.

**Minority Vendor Agreements** means the agreements entered into between the Company and the Minority Vendors and the Phoenix Noteholders in respect of the sale of their common stock and promissory notes in Phoenix (respectively) to the Company.

**Minority Vendors** means the Minority Common Stockholders, all of the preferred stockholders, all of the deferred capitalisation stockholders and all of the ESOP stockholders in Phoenix.

**Notice of Exercise** has the meaning given in Section 11.3.

**Offers** means the Cleansing Offer and Public Offer.

**Official List** means the official list of ASX.

**Official Quotation** means official quotation by ASX in accordance with the ASX Listing Rules.

**Option** means an option to acquire a Share.

**Optionholder** means a holder of an Option.

**PFAS** means Per- and poly-fluoroalkyl substances, also known as "PFASs", are a group of manufactured chemicals that have been used since the 1950s in a range of common household products and specialty applications.

**PFBA** means perfluorobutyrate a type of shorter chain PFAS as referred to in Section 5.2.

**PFBS** means perfluorobutanesulfonic acid, a type of shorter chain PFAS as referred to in Section 5.2.

**PFOA** means perfluorooctanoic acid, a type of longer chain PFAS as referred to in Section 5.2.

**PFOS** means perfluorooctanesulfonic acid, a type of longer chain PFAS as referred to in Section 5.2.

**Phoenix** means Fluidyne Engineering Corporation trading as Phoenix Solutions Co, a Minnesota registered corporation operating in the field of plasma heating systems and plasma torch construction.

**Phoenix Noteholders** means all of the holders of promissory notes in Phoenix.

**Phoenix Vendors** means the Majority Common Stockholders, the Minority Vendors and Phoenix Noteholders.

**Performance Right** means a performance right convertible into a Share.

**Proposed Directors** means Ms Lynne Saint, Mr Charles Fox and Mr Joseph Stopper.

**Prospectus** means this prospectus.

**Public Offer** means the offer of Shares and Options pursuant to this Prospectus as set out in Section 4.1.

**Recommendations** has the meaning set out in Section 9.5.

**Section** means a Section of this Prospectus.

**Securities** means Shares, Options and Performance Rights.

**Share** means a fully paid ordinary share in the capital of the Company.

**Shareholder** means a holder of Shares.

**Synergen Environmental or Treata** means Treata Environmental Pty Ltd (ACN 634 712 744).

**Tegis Consulting Agreement** means the agreement entered into between the Company and Tegis Pty Ltd (an entity controlled by Terence Gray) as summarised in Section 10.6.1.

**Thermal Plasma Technology** has the meaning given in Section 6.4.1.

**Treata** means Treata Environmental Pty Ltd (ACN 634 712 744). **US** means United States of America.

**US\$** means a US dollar.

**US Securities Act** means the US Securities Act of 1933.

**Working Capital Payment** has the meaning given to that term in Section 10.3.1.

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## ANNEXURE A – INDEPENDENT LIMITED ASSURANCE REPORT

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The Directors  
Synergen Met Ltd  
Level 6, 126 Margaret Street  
Brisbane, QLD 4000

12 April 2022

Dear Directors,

## **INDEPENDENT LIMITED ASSURANCE REPORT**

### **Introduction**

BDO Audit Pty Ltd ('BDO') has been engaged by Synergen Met Ltd ('the Company', or 'Synergen') to prepare this Independent Limited Assurance Report ('this Report') for inclusion in a prospectus proposed to be issued, in relation to, amongst other things, the initial public offering of shares in the Company, on or about 12 April 2022 ('Prospectus') and listing on the Australian Securities Exchange ('ASX') ('the Offer').

Unless stated otherwise in this Report, expressions defined in the Prospectus have the same meaning in this Report.

Our limited assurance engagement has been carried out in accordance with auditing or other standards and practices generally accepted within Australia. This Report cannot be assumed to have been compiled with practices or standards applicable in other jurisdictions.

### **Scope**

#### *Statutory Historical Financial Information*

BDO has been engaged to review the following statutory historical financial information ('the Statutory Historical Financial Information') included in the Prospectus, being:

- ▶ The statutory historical consolidated statements of profit or loss and other comprehensive income for the years ended 30 June 2020 and 30 June 2021, and period ended 31 December 2021 of Synergen Met Ltd.
- ▶ The statutory historical consolidated statements of profit or loss and other comprehensive income for the years ended 27 June 2020 and 26 June 2021, and period ended 8 January 2022 of Fluidyne Engineering Corporation.
- ▶ The statutory historical consolidated statements of cashflows for the years ended 30 June 2020 and 30 June 2021, and period ended 31 December 2021 of Synergen Met Ltd.
- ▶ The statutory historical consolidated statements of cashflows for the years ended 27 June 2020 and 26 June 2021, and 8 January 2022 of Fluidyne Engineering Corporation.
- ▶ The statutory historical consolidated statement of financial position as at 31 December 2021 of Synergen Met Ltd.
- ▶ The statutory historical consolidated statement of financial position as at 8 January 2022 of Fluidyne Engineering Corporation.

The Statutory Historical Financial Information of Synergen Met Ltd has been prepared in accordance with the stated basis of preparation, being the recognition and measurement principles contained in Australian Accounting Standards and Synergen's adopted accounting policies.

The Statutory Historical Financial Information of Synergen has been extracted from the financial reports for the years ended 30 June 2020 and 30 June 2021, which were audited by BDO Audit Pty Ltd, and the period ended 31 December 2021 which was reviewed by BDO Audit Pty Ltd. The audits and review were conducted in accordance with Australian Auditing Standards.

The Statutory Historical Financial Information of Fluidyne Engineering Corporation has been prepared in accordance with the stated basis of preparation, being the recognition and measurement principles contained in accounting principles generally accepted in the United States of America and Fluidyne Engineering Corporation's adopted accounting policies.

The Statutory Historical Financial Information of Fluidyne Engineering Corporation has been extracted from the financial report for the years ended 27 June 2020 and 26 June 2021, which was audited by BDO USA LLP and the period ended 8 January 2022, which was reviewed by BDO USA LLC. The audits and review were conducted in accordance with auditing standards generally accepted in the United States of America.

The Statutory Historical Financial Information is presented in the public document in an abbreviated form, insofar as it does not include all of the presentation and disclosures required by Australian Accounting Standards and other mandatory professional reporting requirements applicable to general purpose financial reports prepared in accordance with the *Corporations Act 2001*.

#### *Pro Forma Historical Financial Information*

BDO has been engaged to review the following pro forma historical financial information ('the Pro Forma Historical Financial Information') included in the Prospectus, being:

- ▶ The pro forma historical consolidated statement of financial position as at 31 December 2021.

The Pro Forma Historical Financial Information has been derived from the Statutory Historical Financial Information of Synergen, after adjusting for the effects of pro forma adjustments described in Section 7.6 of the Prospectus. The stated basis of preparation is the recognition and measurement principles contained in Australian Accounting Standards and Synergen's adopted accounting policies, applied to the historical financial information and the event(s) or transaction(s) to which the pro forma adjustments relate, as described in Section 7.6 of the Prospectus, as if those event(s) or transaction(s) had occurred as at the date of the Statutory Historical Financial Information. Due to its nature, the Pro Forma Historical Financial Information does not represent the company's actual or prospective financial position, financial performance, and/or cash flows.

#### **Directors' Responsibility**

The directors of Synergen Met Ltd are responsible for:

- ▶ The preparation and presentation of the Statutory Historical Financial Information and the Pro forma Historical Financial Information, including the selection and determination of the pro forma adjustments made to the Statutory Historical Financial Information and included in the Pro forma Historical Financial Information; and
- ▶ The information contained within the Prospectus.

This includes responsibility for such internal controls as the directors determine are necessary to enable the preparation of the Statutory Historical Financial Information and Pro Forma Historical Financial Information to be free from material misstatement, whether due to fraud or error.

### **Our Responsibility**

Our responsibility is to express a limited assurance conclusion on the Statutory Historical Financial Information and the Pro Forma Historical Financial Information, based on the procedures performed and the evidence we have obtained.

We have conducted our engagement in accordance with the Standard on Assurance Engagement ASAE 3450 *Assurance Engagements involving Corporate Fundraisings and/or Prospective Financial Information*, issued by the Auditing and Assurance Standards Board.

Our limited assurance procedures consisted of making enquiries, primarily of persons responsible for financial and accounting matters, observation of processes performed, inspection of documents, analytical procedures, evaluating the appropriateness of supporting documentation and agreeing or reconciling with underlying records and applying analytical and other review procedures. A limited assurance engagement is substantially less in scope than an audit conducted in accordance with Australian Auditing Standards and consequently does not enable us to obtain reasonable assurance that we would become aware of all significant matters that might be identified in an audit. Accordingly, we do not express an audit opinion.

Our engagement did not involve updating or re-issuing any previously issued audit on any financial information used as a source of the Financial Information.

### **Conclusions**

#### *Statutory Historical Financial Information*

Based on our review, which is not an audit, nothing has come to our attention that causes us to believe that the Statutory Historical Financial Information, as described in Section 7 of the Prospectus, and comprising:

- ▶ The statutory historical consolidated statements of profit or loss and other comprehensive income for the years ended 30 June 2020 and 30 June 2021, and period ended 31 December 2021 of Synergen Met Ltd;
- ▶ The statutory historical consolidated statements of profit or loss and other comprehensive income for the years ended 27 June 2020 and 26 June 2021, and period ended 8 January 2022 of Fluidyne Engineering Corporation;
- ▶ The statutory historical consolidated statements of cashflows for the years ended 30 June 2020 and 30 June 2021, and period ended 31 December 2021 of Synergen Met Ltd;
- ▶ The statutory historical consolidated statements of cashflows for the years ended 27 June 2020 and 26 June 2021, and period ended 8 January 2022 of Fluidyne Engineering Corporation;
- ▶ The statutory historical consolidated statement of financial position as at 31 December 2021 of Synergen Met Ltd; and
- ▶ The statutory historical consolidated statement of financial position as at 8 January 2021 of Fluidyne Engineering Corporation,

are not presented fairly, in all material respects, in accordance with the stated basis of preparation, as described in Section 7 of the Prospectus.

### *Pro Forma Historical Financial Information*

Based on our review, which is not an audit, nothing has come to our attention that causes us to believe that the Pro Forma Historical Financial Information, as described in Section 7 of the Prospectus, and comprising the pro forma historical consolidated statement of financial position as at 31 December 2021, is not presented fairly in all material respects, in accordance with the stated basis of preparation as described in Section 7 of the Prospectus.

### **Restriction on Use**

Without modifying our conclusions, we draw attention to Section 7 of the Prospectus, which describes the purpose of the Financial Information, being for inclusion in the Prospectus. As a result, the Financial Information may not be suitable for use for another purpose. We disclaim any liability for use of this Report, or reliance on the Financial Information by any other persons or for any other purpose than that set out in Section 7 of the Prospectus.

### **Consent**

We have consented to the inclusion of this Report in the Prospectus in the form and context in which it is included. At the date of this Report, our consent has not been withdrawn. However, BDO has not authorised the issue of the Prospectus. BDO makes no representation regarding, or responsibility for, any other statements, material in (or omissions from) the Prospectus.

### **Liability**

The liability of BDO is limited to the inclusion of this Report in the Prospectus. BDO makes no representation regarding, and takes no responsibility for, any other statements, or material in, or omissions from, the Prospectus.

### **General Advice Warning**

This Report has been prepared, and included in the Prospectus to provide investors with general information only and does not take into account the objectives, financial situation or needs of any specific investor. It is not intended to take the place of professional advice and investors should not make specific investment decisions in reliance on information contained in this Report. Before acting or relying on any information, an investor should consider whether it is appropriate for their circumstances having regard to their objectives, financial situation or needs.

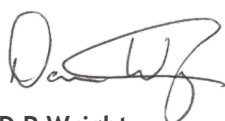
### **Declaration of Interest**

BDO does not have any interest in the outcome of proposed listing, or any other interest that could reasonably be regarded as being capable of affecting its ability to give an unbiased conclusion in this matter. BDO will receive normal professional fees for the preparation of this Report.

If you require any additional information and/or clarification on any matter please contact us.

**BDO Audit Pty Ltd**

BDO



**D P Wright**  
Director

Brisbane, 12 April 2022



31 March 2022

Synergen Met Limited  
Level 1  
163 Leichhardt Street  
Spring Hill QLD 4000

Your Ref: *Please advise*

Our Ref: TF103

Attention: Mr. Christopher Dunks  
Managing Director

Dear Chris,

Re: **Synergen IP Report for Prospectus**

## 1. BACKGROUND AND SCOPE

This Report has been prepared by Houlihan<sup>2</sup> Patent and Trade Mark Attorneys (“H<sup>2</sup>”) at the request of Synergen Met Limited (“Synergen”) in relation to Synergen’s intellectual property (“IP”) portfolio. The present Report has been prepared for inclusion in a Prospectus to be lodged at the Australian Securities and Investments Commission.

The Report summarises the details and status of the granted patents and unregistered trade marks owned by Synergen. To the best of our knowledge the Report is accurate as at its date, subject to the limitations and qualifications set out in Section 5.

## 2. OVERVIEW OF IP

Intellectual property includes registered rights such as patents, trade marks, registered designs, plant breeders’ rights and copyright (registered in some countries, e.g. the U.S.A.), other rights that are not registered such as, copyright and “know how” and/or “trade secret” rights.

Patents, trade marks, copyright and registered designs are the most common forms of IP which can be enforced to prevent unauthorised exploitation without the owner’s permission.

This Report deals with intellectual property in the form of patents in the name of Synergen Met Limited.

### **2.1 Patents – a right of exclusion**

A patent is a right granted, for a limited period of time, by a patent office in a particular jurisdiction to the inventor of a product or method, which is new, inventive and useful. The

right is offered in a *quid pro quo* exchange, which requires the disclosure of the product or method to the public. The inventor(s) can assign or license their patent rights.

Patents provide the inventor(s), or assignee(s), with the exclusive right to “*exploit*” the invention for the life of the patent, which is generally 20 years. This right of exclusion allows the patentee(s) to prevent others from exploiting the invention covered by the patent in the jurisdiction(s) of grant by instituting an infringement action against the infringing party.

Under Australian law, as defined in the *Patents Act 1990*, “*exploit*” includes:

- a. where the invention is a product – to make, hire, sell or otherwise dispose of the product, to offer to make, sell, hire or otherwise dispose of it, to use or import it, or to keep it for the purpose of doing any of those things; or
- b. where the invention is a method or process – to use the method or process or do any act mentioned in paragraph (a) in respect of a product resulting from such use.

In brief, in order to be validly granted as a patent right, the invention must, *inter alia*, be new, not be obvious at the time of lodging the patent application and directed to qualifying subject matter. Subject to limited exceptions, demonstrating, selling, publishing, or discussing the invention in public is likely to preclude the inventor's or its assignee's ability to obtain a valid patent.

The detailed description of the invention (contained in the complete patent specification) is published eighteen (18) months after lodgement of an initial patent application, so as to be available for public inspection or open to public inspection (OPI).

## **2.2 The concept of patent validity**

The grant of a patent does not guarantee it is valid. A granted patent may be invalid for reasons including lack of novelty and/or inventive step. An invalid patent is unenforceable.

The claims of a patent define the metes and bounds of the legal right of exclusion. The grant of a patent does not guarantee that all claims of that patent are valid.

As noted above, patents are rights of exclusion. Accordingly, the grant of a patent does not guarantee that the invention defined therein can be exploited without infringing the rights of others.

As at the date of this Report, H<sup>2</sup> is unaware of any relevant proceedings in relation to the patents referred to in this Report.

Significantly, all of the patents referred to in this Report have proceeded to grant. This means that the claims in the same form as they currently are may be enforced against an infringer.

## **2.3 Annual fees for patents**

Patent applications and patents are subject to the payment of annual fees (annuities or renewal taxes). The timing of requisite payments differs from jurisdiction to jurisdiction. If these payments are not made, the patent (or patent application) may lapse.

Renewals of Synergen's respective patent portfolios are managed and handled by H<sup>2</sup>. H<sup>2</sup> have determined that at the time of writing of there are no overdue fees relating to the annuity or renewal payments.

## **2.4 Pursuing international patent protection using conventions**

There are a number of international conventions that relate to IP. Many of these are administered by the designated agency with the United Nations, the World Intellectual Property Organisation (WIPO). Some features of the most important conventions are discussed below.

### *2.4.1 International patent protection utilising the Paris Convention*

The Paris Convention for the Protection of Industrial Property ("Paris Convention"), first adopted in 1803, currently has one hundred and seventy-eight (178) member states, including Australia. Notably, Taiwan is not a member of this Paris Convention. To obtain valid patent protection it is necessary to lodge a separate application in each country or region where protection is desired. This may be done under the provisions of the Paris Convention within twelve (12) months of the date of lodging a corresponding patent application in Australia.

### *2.4.2 International Patent Protection using the Patent Cooperation Treaty ("PCT")*

Although there is no international patent which confers granted patent rights in multiple countries, the PCT allows for the lodgement of an international patent application. That is, the PCT provides for a single application to designate any number of member states in which the patent is to be pursued and provides the ability to claim priority to an earlier filed application in those member states. At the time of writing, the PCT has one hundred and fifty-four (154) contracting states, including most industrialised countries. Australia is a member state of the PCT. It is also possible to mature a PCT application into a European regional phase application before the European Patent Office ("EPO"; see below).

The effect of filing a PCT application is to have a pending application, or an inchoate right, in place for the duration of the international stage in the designated countries. Usually, the international application is filed within twelve (12) months of lodging an application in one country, e.g. Australia, and claims priority from that provisional application. The utility of the PCT is that it permits the effective lodgement and associated fees for each of the designated countries to be delayed by up to a further eighteen (18) or nineteen (19) months from the twelve (12) month deadline available with the Paris Convention. The "international phase" is initiated with the filing of a PCT application and ends with the filing of one or more national applications (or in the case of the EPO, a regional application), generally referred to as entering the "national phase".

### *2.4.3 The International Stage includes an International Search Report and Written Opinion*

The fees incurred in filing a PCT application include a search fee. The search is conducted by a patent examiner, who issues an International Search Report ("ISR") and a Written Opinion ("WO"), which present the results of a "prior art search" for publications pre-dating the filing date of the application, which may be relevant to the patentability of the invention. The ISR and WO indicate an initial, preliminary, non-binding opinion on the novelty and

inventiveness of the invention. The ISR and WO become publicly available before the deadline for paying the national phase fees in the designated countries.

#### *2.4.4 Replying to the WO is optional*

Although it is not compulsory, a reply to the WO with rebutting arguments and/or amendments can be submitted. One or more further WO may issue. At the end of this process, an International Preliminary Report on Patentability (“IPRP”) issues.

#### *2.4.5 International Preliminary Report on Patentability (IPRP)*

Under this procedure, if all claims are said to meet the three main examined patentability requirements, (novelty, inventive step, industrial applicability), then the IPRP is said to be “clear”. Although not binding, a “clear” IPRP can be helpful in obtaining national patent protection in many jurisdictions. It is also important to note that a non-clear IPRP is not finally determinative of corresponding subsequent national patent application/s filed.

#### *2.4.6 An indication of patentability is distinct from freedom to operate*

Searches of prior art are not designed to, and do not, indicate whether the commercial exploitation of the patent applicant’s invention will infringe the patent rights of others. An invention with a “clear” IPRP may still infringe patent rights of third parties that a prior art search would not identify.

#### *2.4.7 National patents*

As mentioned above, there is no such thing as a “global” or “world wide” patent. In order to obtain patent protection in any individual country, an application must be lodged in each relevant nation. This can be via the PCT, or via the Paris Convention. The result of examination of a patent application in one country is not binding on any other country. Similarly, in the case of a national phase patent application, which has matured from a PCT application, a clear or positive IPRP is not binding on a national patent office. Most national patent offices will conduct their own comprehensive search and examination and may raise rejections or objections that cannot be overcome. This may occur on the basis of documents which were not recognised as prejudicial in an IPRP or by the patent office of another country. If an objection or rejection raised by a national office cannot be overcome by one or both of argument and amendment, the patent application will be refused. In summary, the grant of a patent in one country does not guarantee grant in any other. Similarly, any challenge to the validity of a patent must generally be made in each country of interest. The inchoate nature of patent rights means that it is not until grant of a patent in a particular country that the patentee has enforceable rights for the invention defined in the claims of the granted patent and in that country.

#### *2.4.8 European Patent Convention (EPC)*

Under the European Patent Convention (“EPC”), it is possible to lodge a single patent application, before the EPO, to seek protection in any, or all, of the members. At the time of writing the following European countries were members of the EPC:

Albania, Austria, Belgium, Bulgaria, Croatia, Cyprus, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Liechtenstein, Lithuania, Luxembourg, Latvia, Monaco, Malta, Netherlands,

H<sup>2</sup>

Norway, North Macedonia, Poland, Portugal, Romania, San Marino, Serbia, Slovakia, Slovenia, Spain, Sweden, Switzerland, Turkey and the United Kingdom.

Upon payment of an additional fee, one or both of the following “extension states” may be elected:

Bosnia and Herzegovina, and Montenegro.

Additionally, once a European patent application has passed examination and been granted, it may be validated in one or more of the following validation states:

Morocco, Republic of Moldova; Tunisia; and Cambodia.

Under the EPC a single examination of the “regional” application is conducted by the EPO. The EPO will conduct their own comprehensive search and examination of an application according to their laws and may raise rejections or objections that cannot be overcome, even on the basis of documents which were recognised as not prejudicial in the IPRP. If an objection or rejection raised by the EPO cannot be overcome by amendment or by submissions, or by a combination of both, the patent application will be refused. Refusal of an application by the EPO means refusal of the application for the purposes of all of the member countries. Allowance (or acceptance) of the application by the EPO can lead to grant of a European patent, which must then be registered (or validated) in the chosen countries of those covered by the EPC to have effect in those countries.

## **2.5 Synopsis of the Patenting Process**

The usual first step in obtaining patent protection for an invention is to file a “provisional” patent application. The provisional application contains a specification describing the invention and provides a twelve (12) month “priority” period within which to carry out additional experimental work or trials to further characterise the invention. The date of lodging the provisional application establishes a “priority date”.

At the conclusion of the twelve (12) month period, the provisional application lapses. To continue to pursue patent rights and maintain the priority date, a “complete” or “standard” patent application must be filed prior on or before the end of priority period.

To “buy more time”, and maintain the right to pursue patent protection in member countries, the complete application may take the form of a PCT application as described above. In this manner, a PCT application represents a bundle of applications allowing patent protection to be pursued in each country which is a signatory to the PCT. In some instances, for example, where patent protection is only required in a few countries, instead of filing a PCT application, is preferable to file multiple complete applications in individual countries under the Paris Convention, also described above.

If a PCT application is filed, after the “international phase”, the “national” or “regional” phase is entered in individual signatory countries or regions as desired. Once the international (PCT) application enters this phase, it undergoes examination before the relevant national patent office to determine whether the application proceeds to grant or is refused. An identical or similar examination is followed in each country, regardless of whether the application is a convention or a PCT application. Typically, substantive

H<sup>2</sup>

examination will include an assessment of whether the claimed invention satisfies the requirements of that jurisdiction for patentable subject matter, novelty, inventiveness and appropriate claim scope in view of what is described in the patent application.

The patent family owned by SYNERGEN MET LIMITED, as summarised in Schedule 1, followed this typical pattern of the filing of an Australian provisional patent application (AU 2008901186), then an international patent application filed under the PCT (PCT/AU2009/000288), which matured into the regional phase entry and national phase entry applications detailed in Section 3 and Schedule 1.

### 3. SYNERGEN'S INTELLECTUAL PROPERTY PORTFOLIO

This section only includes the granted patents and does not contain any applications which have not yet been filed. H<sup>2</sup> is engaged in its professional capacity to provide patent services in respect of Synergen's IP portfolio.

Further details and the status of Synergen's IP portfolio are provided in Schedule 1 of this report.

*Patent Family 1 - METHOD, APPARATUS AND SYSTEM FOR MANUFACTURE OF A CYANIDE (International Patent Application No.: PCT/AU2015/050389, published as WO 2009/111828)*

This patent family relates to a method, apparatus and system for manufacture of a cyanide using a plasma reactor.

In brief, each member of this patent family has now proceeded to grant and remains in force. Those members are:

- Australian Patent No. 2009225243;
- ARIPO<sup>1</sup> Patent No. AP/P/2010/005427;
- Belgian Patent No. 2262733;
- Canadian Patent No. 2718122;
- German Patent No. 60 2009 046 124.9;
- Mexican Patent No. MX/A/2010/009977;
- OAPI<sup>2</sup> Patent No. 1201000306;
- Turkish Patent No. 09719177.9;
- US Patent No. 12/922,104;
- South African Patent No. 2010/07194.

<sup>1</sup>ARIPO African Regional Industrial Property Organisation

<sup>2</sup>OAPI African Intellectual Property Organisation (*Organisation Africaine de la Propriété Intellectuelle*)

H<sup>2</sup> has not reviewed any documentation regarding ownership of the present patent family set out in Schedule 1.

Legal mechanisms exist by which third parties can bring evidence that they have sole or joint entitlement to an invention and any patent application or patent attained for that invention. At this time, we are not aware of any such third party in relation to the patent and patent applications in Schedule 1.

Additionally, and to the best of our knowledge, there has been no third party challenge to the validity or ownership of the patents or patent applications outlined in Schedule 1 to date.

### Unregistered Trade Marks

A review of the Synergen website (<http://synergenmet.com>) shows several trade marks which include the company name are being used that have not been registered.

These trade marks are shown in Schedule 2. The marks SYNERGENMET, SYNERGEN NaCN PLANT; ON-SITE CYANIDE PLANT; SYNERGEN'S PFAS DESTRUCTION; and SYNERGEN MET HYDROGEN PRODUCTION TECHNOLOGY should be used with the <sup>TM</sup> symbol.

Under Australian law, a trade mark can either be: (a) registered under the Trade Marks Act 1995, or (b) unregistered ("common law" trade marks).

Distinct rights are associated with registered trade mark compared to those associated with an unregistered trade mark. Also, the practical implications surrounding enforcement and dealing with the trade mark as property are different for registered trade marks compared with unregistered trade marks.

Unregistered trade mark rights can be protected via an action for breach of the Australian Consumer Law (specifically, sections 18 and 29 which prohibit misleading and deceptive conduct), and/or the common law tort of passing off.

The use of an unregistered trade mark can also give rise to a claim for proprietorship of the trade mark at common law. In some cases, such a claim may be used to oppose or invalidate an identical or near identical registered trade mark, or justify registration of a trade mark in the face of an earlier similar registered mark owned by another entity.

Unregistered trade marks do have some significant disadvantages. The enforcement of rights in an unregistered trade mark is more difficult and generally depends on establishing that the unregistered trade mark has a reputation for the particular goods or services. This reputation may be limited to particular geographic area, which can make enforcement difficult outside of that area.

In addition to being easier to enforce, a registered trade mark also provides a statutory defence to its owner against a claim of infringement of other registered trade marks, provided that the alleged infringer is using the mark in the form it is registered, and for the goods and/or services covered by their registration.

A registered trade mark also grants access to filing overseas trade marks under the Madrid Protocol (an international system of filing trade marks in multiple foreign countries via one International Application).

If a trade mark or trade marks are important to the business, we strongly recommend that these trade marks be registered. While unregistered trade mark rights are enforceable and have some value, they are inferior in almost all practical respects to registered trade marks.

## **4. LIMITATIONS AND DISCLAIMERS**

### **4.1 Search limitations**

#### *4.1.1 General*

The prior art (or “novelty”) searches conducted by the various patent offices to determine whether a patent should be granted are limited in terms of the time periods and the geographical areas covered. Accordingly, the databases used in searching may not reveal some relevant documents including older published documents and may not cover certain jurisdictions. Additionally, all searches are subject to the accuracy and scope of the material searched, including reliance on material being correctly classified. Also, any search is subject to the classification criteria used for that search. Accordingly, whilst the searches conducted by various patent offices provide a reasonable indication of patentability, these and other factors make it impossible to guarantee that every relevant prior art record has been identified and considered. In view of this, any conclusions regarding the validity of a patent based on patent office searches should be regarded as indicative rather than conclusive.

#### *4.1.2 Unpublished Documents*

Searches cannot locate documents which have not been published at the time of conducting the search. In most countries, publication of a patent application does not occur until eighteen (18) months from the earliest priority date. Delays between official publication and the implementation of information onto the relevant databases can also occur.

#### *4.1.3 Non-patent prior art documents and disclosure*

No search can ever be considered entirely conclusive or exhaustive because some forms of prior art such as prior public use, oral disclosures, prior commercial exploitation and prior publication in non-patent literature, cannot be searched systematically.

#### *4.1.4 Commercialisation/Secret Use*

The commercialisation or secret use of an invention that is the subject of a patent application can affect the patentability of the invention and the validity of any patent granted on the invention. Such commercialisation or secret use is unlikely to be identified by documentary searches of publicly accessible databases.

#### *4.1.5 Reliance on cited prior art classification*

The views expressed in relation to relevance of the prior art cited in various searching and examination reports are based on the relevant classification attributed in such reports.

#### *4.1.6 Searching and other matters relevant to validity*

Searching may not disclose other matters relevant to validity including, for example, matters relevant to obviousness (i.e. inventive step).

#### **4.2 Examination Reports in one Country Not Binding in Other Countries**

Patent applications lodged in each country are generally subject to an independent search and examination by the local patent office, the results of which are not binding in other jurisdictions. Equally, international PCT search and examination reports are not binding on national patent applications during examination in the national phase. Such search and/or examination reports should therefore be regarded as relevant to patentability in the particular jurisdiction and not determinative of patentability elsewhere. Furthermore, grant of a patent in one country does not guarantee that patent/s for the same or related inventions will be granted in other countries.

#### **4.3 Grant of Patent Provides no Guarantee of Validity**

The grant of the patents listed herein by the relevant national patent offices provides an indication rather than a guarantee of validity. In most of the relevant jurisdictions, the patent application was subject to substantive examination prior to grant. Although this process confers an initial presumption of validity, a patent may be challenged at any time after grant by way of revocation proceedings undertaken in a court of competent jurisdiction. In certain countries a granted patent may be subjected to re-examination by the patent office, particularly if relevant prior art is identified that was not considered during initial examination of the application.

#### **4.4 Grant of Patent Provides no Guarantee of Non-infringement**

Grant of a patent provides no guarantee that the patentee is entitled to commercially exploit the patented invention. For example, the working of an invention, even if validly patented, may nevertheless infringe an earlier patent or other intellectual property rights.

#### **4.5 Scope of Claims May Vary During Examination**

It may be possible, and is often necessary, during the examination of a patent application to define the invention more specifically by amendment of the claims to distinguish the invention over relevant prior art. This occurred in some of the patents listed herein and explains the variations in the claims between the patents issued in various countries, reflecting in part the different national examination procedures and threshold patentability requirements. Such amendments may affect the scope and hence the commercial significance of the resultant patent protection.

#### **4.6 Enforcement of Patent Rights**

Upon grant of a patent, a patentee may initiate proceedings against an alleged infringer of the patent. In many jurisdictions, damages for infringement may be awarded for infringements occurring from the date of publication of the patent specification, provided certain criteria are met.

#### **4.7 Infringement of the rights of others**

As noted above, searches conducted during patent prosecution do not provide any guarantee that the subject inventions may be commercially exploited without risk of infringement of third parties. More particularly, searches focused on novelty and inventive step have different strategies from infringement searches (which seek to establish whether a specific activity is likely to infringe other parties' patent rights).

#### **4.8 Entitlement to Priority**

In order for material disclosed in a patent application to be entitled to the priority date of a corresponding provisional application, there must have been (for Australia under the current patent law) a “real and reasonably clear disclosure” of such material in the provisional application. Similar provisions apply in other jurisdictions. Subject matter not so disclosed is not entitled to the claim to priority, which may affect patentability of the subject invention or the validity of any patent that may be granted.

#### **4.9 Changes to Patent and Trade Mark Law**

From time to time the statutory basis governing patents in a particular jurisdiction may be amended by the relevant authority, typically the government of that jurisdiction. In addition, the practical effect of the statute may evolve by the development of case law, that is, by the interpretation of the statute by the relevant courts.

#### **4.10 Duty of disclosure**

In some jurisdictions, including the USA, there is a duty to disclose certain information to the relevant patent office. This information can include search results issued in respect of corresponding foreign applications, and/or any prior art information known to the applicant or its agents, which can be considered material to the patentability of the relevant invention. Failure to disclose such information in accordance with jurisdictional requirements can adversely affect the validity and/or enforceability of the relevant patent.

#### **4.11 Reliance on information provided**

The preparation of this Report has included access to and reliance on information contained in publicly available databases relevant to the patent applications and trade marks. H<sup>2</sup> is not responsible for the accuracy of information available in public databases.

In addition, in conducting due diligence enquiries and preparing this report, we have assumed that:

- all copies of documents reviewed are accurate and complete and all factual statements and representations made in each document are accurate and complete;
- except where expressly stated otherwise, each agreement reviewed has been duly authorised and validly executed by all parties, binds the parties in accordance with its terms, is not liable to be terminated, varied, revoked or repudiated by any party, and the parties have complied with their obligations under the agreement;
- factual matters referred to in this Report are based on our instructions from Synergen. We have not conducted any independent enquiries as to the accuracy or completeness of the information provided to us;
- Synergen are not aware of any information that could affect the correctness of the opinions expressed in this report which was not communicated to us; and
- the laws of Victoria and the Commonwealth of Australia apply and we have not made any investigation into, or express any opinion with regard to, the laws of any other jurisdiction.

**H<sup>2</sup>****5. H<sup>2</sup>'S INTEREST**

H<sup>2</sup> are engaged by Synergen for professional patent services. H<sup>2</sup> has been and continues to be involved in the preparation, filing and prosecution of patent applications for Synergen, including those set out in this Report. To this end, Synergen has given their consent for H<sup>2</sup> to prepare the present report in relation to their IP portfolio. H<sup>2</sup> has no financial interest in Synergen over and above the fees charged for the professional work done. The fees charged for that professional work, including the preparation of this Report, are based upon H<sup>2</sup>'s standard rates of charging.

H<sup>2</sup> has no involvement in the preparation of the Prospectus by Synergen, other than the preparation of the present report. As such, H<sup>2</sup> is considered independent of Synergen for the purpose of preparing this report and gives its consent for inclusion of this report in the prospectus.

Yours sincerely,

**Houlihan<sup>2</sup>**



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Encl.    *Schedule 1 and 2*

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### Schedule 1 – Synergen's Patents

Patent/Patent Application No.	Title	Owners	Case Status	JURISDICTION	Property Type	Next Renewal Date	Next Action Due
Australian Patent No. 2009225243;	METHOD, APPARATUS AND SYSTEM FOR MANUFACTURE OF A CYANIDE	SYNERGEN MET LIMITED	GRANTED	AUSTRALIA	Patent	11 March 2022	Renewals only
ARIPO Patent No. AP/P/2010/005427;	METHOD, APPARATUS AND SYSTEM FOR MANUFACTURE OF A CYANIDE	SYNERGEN MET LIMITED	GRANTED	ARIPO	Patent	11 March 2022	Renewals only
Belgian Patent No. 2262733;	METHOD, APPARATUS AND SYSTEM FOR MANUFACTURE OF A CYANIDE	SYNERGEN MET LIMITED	GRANTED	Belgium	Patent	11 March 2022	Renewals only
Canadian Patent No. 2718122;	METHOD, APPARATUS AND SYSTEM FOR MANUFACTURE OF A CYANIDE	SYNERGEN MET LIMITED	GRANTED	Canada	Patent	11 March 2022	Renewals only
German Patent No. 60 2009 046 124.9;	METHOD, APPARATUS AND SYSTEM FOR MANUFACTURE OF A CYANIDE	SYNERGEN MET LIMITED	GRANTED	Germany	Patent	11 March 2022	Renewals only

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Patent/Patent Application No.	Title	Owners	Case Status	JURISDICTION	Property Type	Next Renewal Date	Next Action Due
Mexican Patent No. MX/A/2010/009977;	METHOD, APPARATUS AND SYSTEM FOR MANUFACTURE OF A CYANIDE	SYNERGEN MET LIMITED	GRANTED	Mexico	Patent	11 March 2024	Renewals only
OAPI Patent No. 1201000306;	METHOD, APPARATUS AND SYSTEM FOR MANUFACTURE OF A CYANIDE	SYNERGEN MET LIMITED	GRANTED	OAPI	Patent	11 March 2022	Renewals only
Turkish Patent No. 09719177.9;	METHOD, APPARATUS AND SYSTEM FOR MANUFACTURE OF A CYANIDE	SYNERGEN MET LIMITED	GRANTED	Turkey	Patent	11 March 2022	Renewals only
US Patent No. 12/922,104;	METHOD, APPARATUS AND SYSTEM FOR MANUFACTURE OF A CYANIDE	SYNERGEN MET LIMITED	GRANTED	U.S.A.	Patent	24 May 2024	Renewals only
South African Patent No. 2010/07194.	METHOD, APPARATUS AND SYSTEM FOR MANUFACTURE OF A CYANIDE	SYNERGEN MET LIMITED	GRANTED	South Africa	Patent	11 March 2022	Renewals only

## Schedule 2 – Synergen’s Unregistered Trade Marks

Mark	Goods/Services	Owner	Comment
SYNERGEN MET	Manufacture of plasma torches; Production of cyanide; Manufacture and provision of equipment for the production of cyanide; services relating to the decontamination of PFAS; manufacture and provision of equipment for the destruction of PFAS; services relating to the production of hydrogen; manufacture and provision of equipment for the manufacture of hydrogen; services relating to the conversion of waste to energy; manufacture and provision of equipment for the conversion of waste to energy;	Synergen Met Limited	The TM symbol should be used.
	As above	Synergen Met Limited	The TM symbol should be used.
Synergen NaCN Plant	As above	Synergen Met Limited	The TM symbol should be used.
On-site cyanide plant	As above	Synergen Met Limited	The TM symbol should be used.
Synergen Met Hydrogen Production Technology	As above	Synergen Met Limited	The TM symbol should be used.