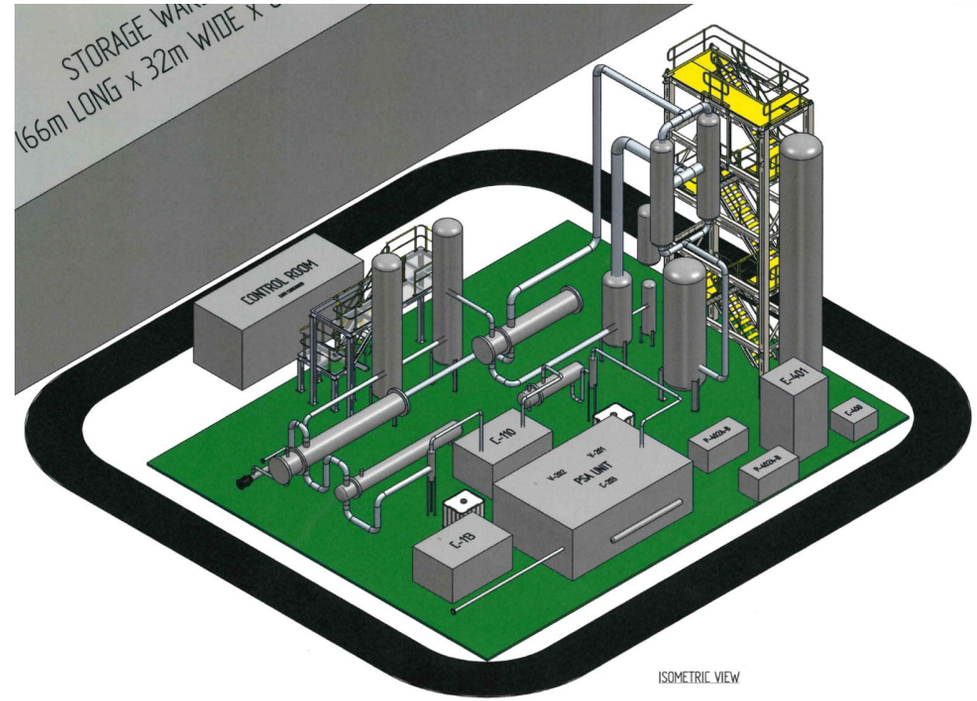
Hazer Group Ltd
ASX:HZR

March 2019

INVESTMENT SUMMARY

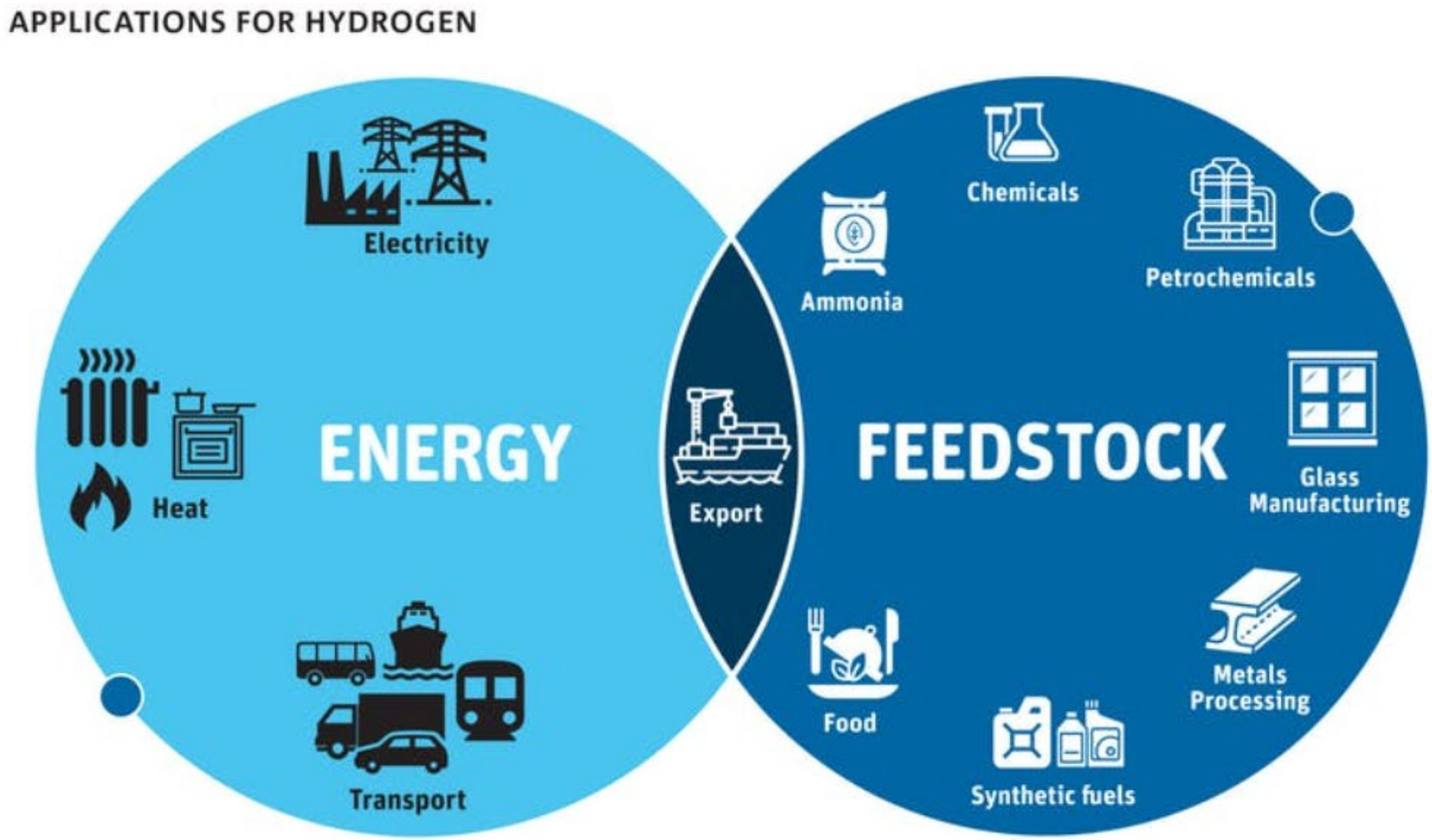
Hazer is a low cost, low emission hydrogen and synthetic graphite production technology

- Low cost, low emission hydrogen and synthetic graphite production process
- Low emission hydrogen and graphite are both key products in a de-carbonizing economy
- The Hazer technology offers high value through production of two products:
  - hydrogen; 99.99% + purity
  - synthetic graphite; 80 – 95% TGC
- Hazer is a low or carbon negative technology that does not release greenhouse gas emissions



Illustrative 3D Realisation of 2.5 ktpa Commercial Scale Hazer Plant

THE POTENTIAL FOR LOW-COST, LOW EMISSION HYDROGEN IS COMPELLING



Potential uses for hydrogen. CSIRO, Author provided

HYDROGEN - A GLOBAL FOCUS

There is significant global focus on developing a hydrogen economy as part of a transition to low carbon environment

Target for 800,000 hydrogen Fuel Cell vehicles and 900 filling stations by 2030

National Hydrogen Roadmap* targets: 6.2 million hydrogen vehicles and 1200 filling stations by 2040 with 2000 Fuel Cell Buses by 2022 & 800 police use Fuel Cell Buses by 2021

California Fuel Cell Partnership - active roll–out of hydrogen refueling network

Refueling networks under development; H2 trains operational in Germany

Prof. Alan Finkel – launched National Hydrogen Roadmap (CSIRO) – August 2018

COAG December 2018 – National Hydrogen Strategy to be developed by October 2019*

* President Moon Jae-inn 17 January 2019
COAG – council of Australian Governments

CURRENT HYDROGEN PRODUCTION

Current production technologies are either high in emissions or expensive

H_2

Current hydrogen production

Fossil fuel reforming

$C_nH_m + [O] \blacktriangleright CO_x + H_2$

Electrolysis

$2H_20 (+ \text{ energy}) \blacktriangleright O_2 + 2H_2$

Significant CO_2 emissions

- 95% of total global hydrogen production
- Chemically equivalent to direct combustion, but less energy efficient

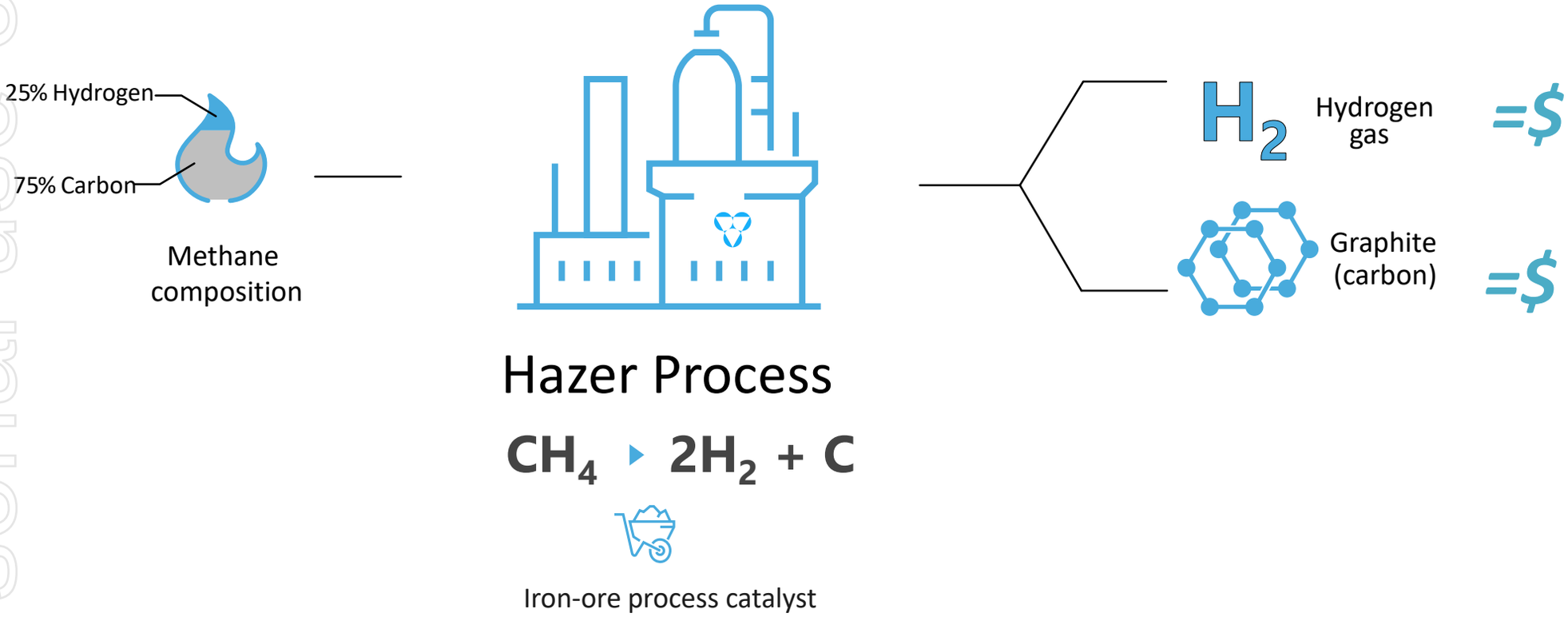
Energy intensive process

- Requires renewable energy source
- Expensive (power consumption)

Barrier to growth in energy markets

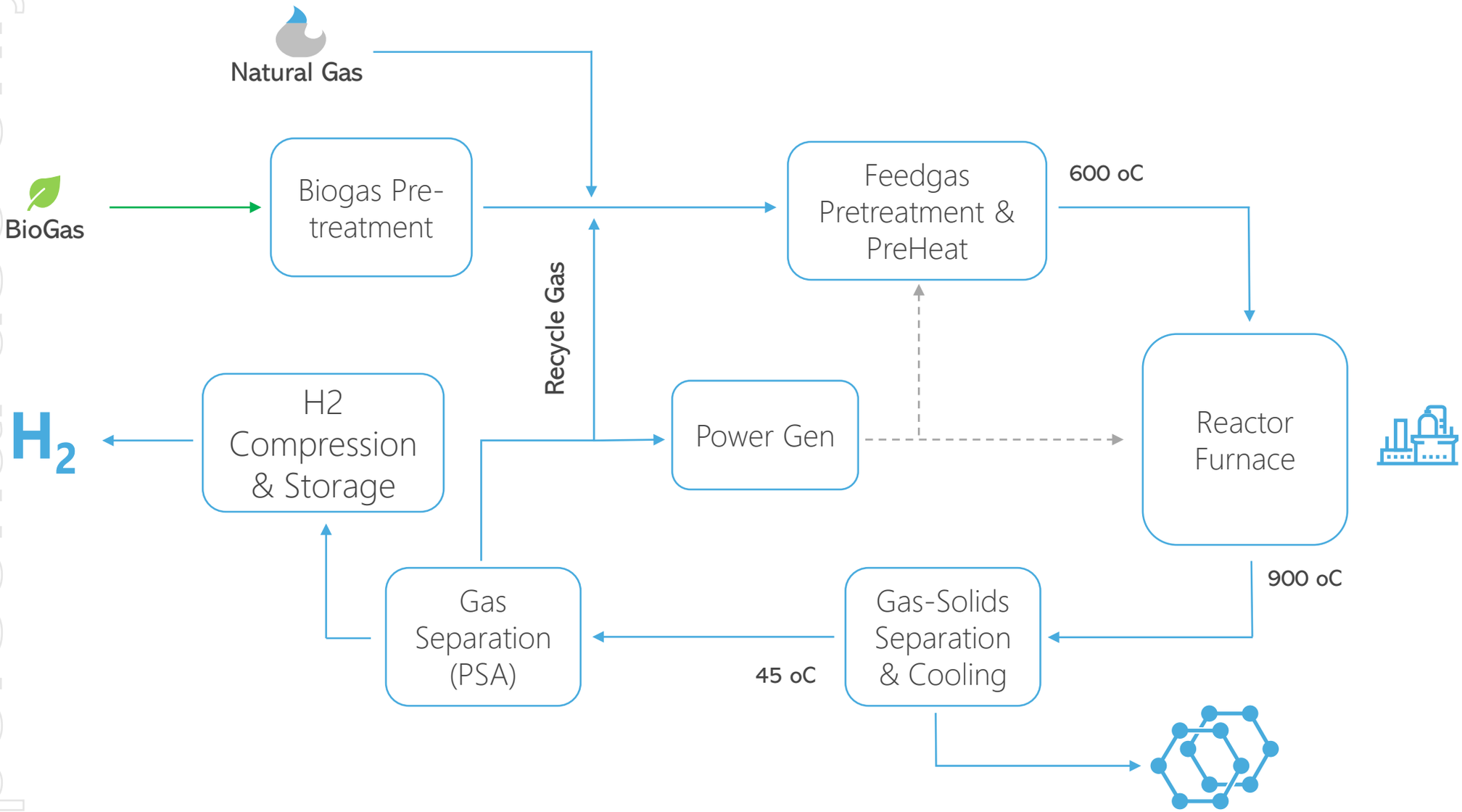
THE HAZER ADVANTAGE

Capture full value of feedstock by producing two valuable products without creating CO_2 in the process



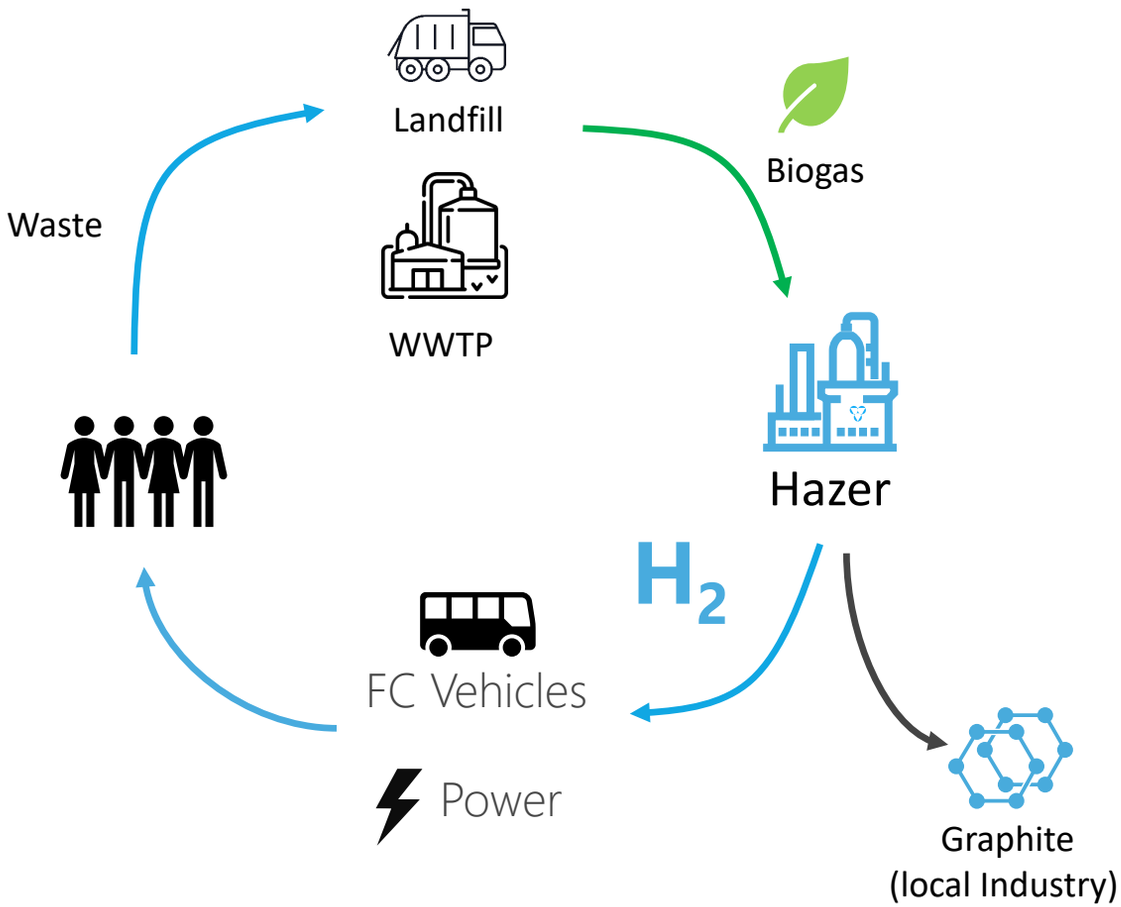
TECHNOLOGY

The Hazer Process is based around a novel, proprietary reaction system



SUSTAINABILITY

The Hazer Process has outstanding sustainable development attributes



- renewable fuel based (biogas)
- low CO_2 emissions
- de-carbonisation of transport
- distributed energy
- domestic energy source
- maximise use of local resources
- "waste-to-resources"
- circular economy

OPPORTUNITIES IN GLOBAL MARKETS

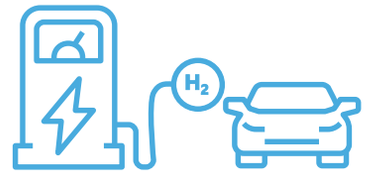
Hazer has opportunities in major existing and developing global markets

Industrial hydrogen
US$130 billion*

Low emission alternative

Currently primarily addressed by fossil fuel reformation processes (high CO_2 byproduct)

Industry is beginning to turn toward cleaner solutions.



Clean hydrogen and energy
US$12 billion[a] by 2023 (FCV)

Multiple applications

Clean (low carbon) hydrogen has price or value premium to standard hydrogen.

Key component of clean energy future (H_2 => H_2O + energy).

Potential to be a lowest cost clean producer.

Synthetic graphite
US$14 billion^

High quality, low cost graphite source

Graphite has a wide range of desirable properties and is used in a range of industrial materials applications.

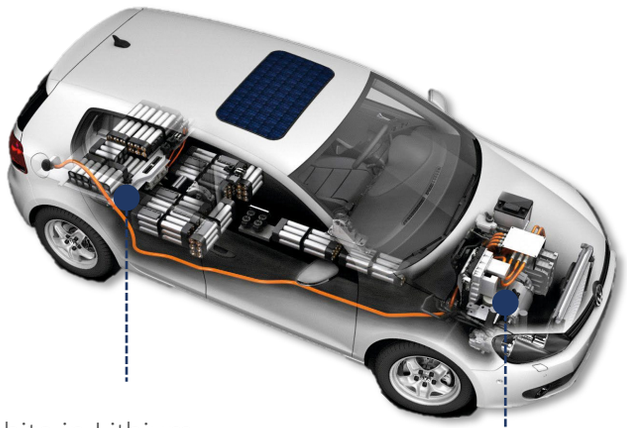
Current methods of graphite production (natural or synthetic) are costly and have significant environmental impacts.

* "Global Hydrogen – A US$2.5 Trillion Industry?", Morgan Stanley Research Report July 22 2018
[a] "Hydrogen Fuel Cell Vehicle Market Overview", Allied Market Research
^ "Global Market Study of Graphite Market", Persistence Market Report, Feb 2015, pg14

HYDROGEN & GRAPHITE SYNERGY

Potential to be a major part of the revolution in future mobility

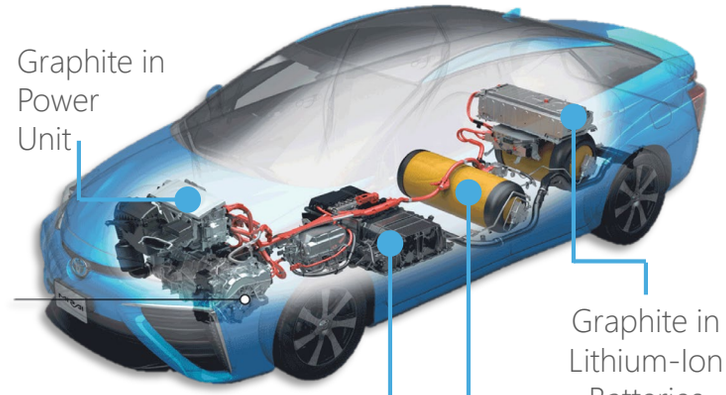
Electric Vehicle



Graphite in Lithium-Ion Batteries

Graphite in Power Unit

Fuel Cell Vehicle



Graphite in Power Unit

Graphite in Lithium-Ion Batteries

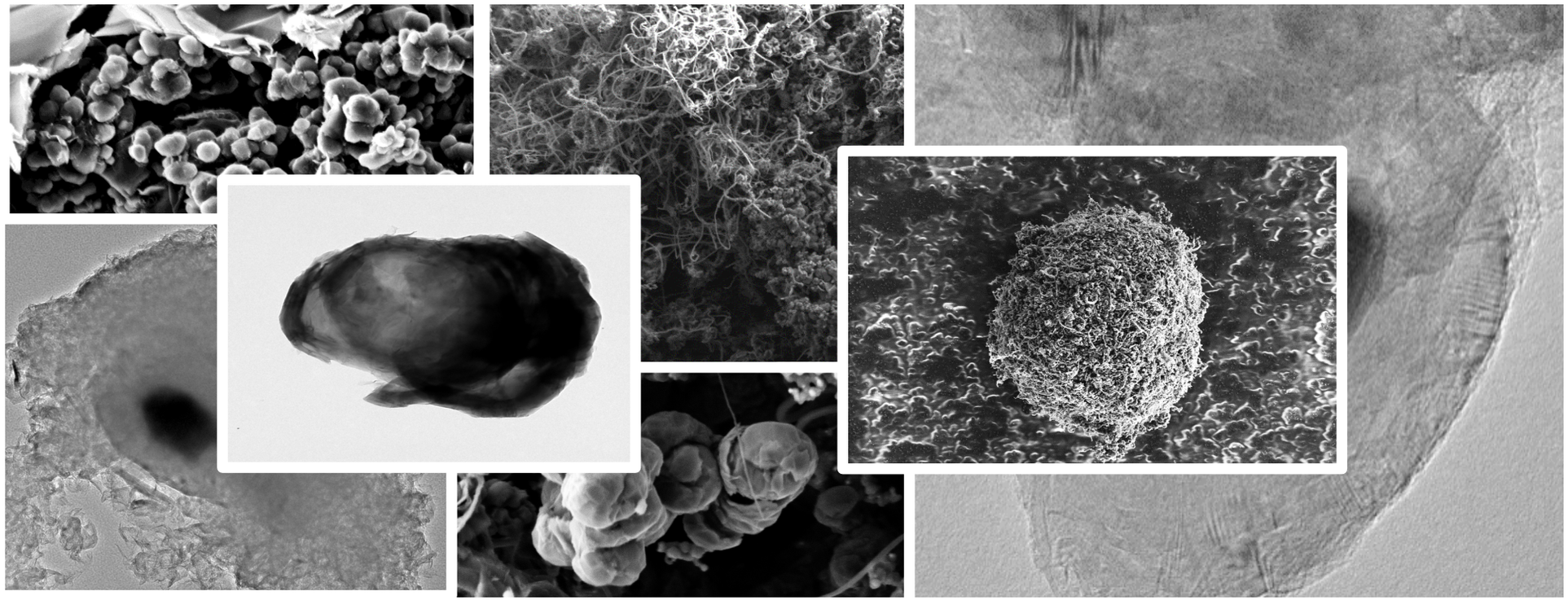
Graphite in Fuel Cell Stack

Low carbon Hydrogen in Storage Tank

HAZER GRAPHITE

Versatile properties – many opportunities

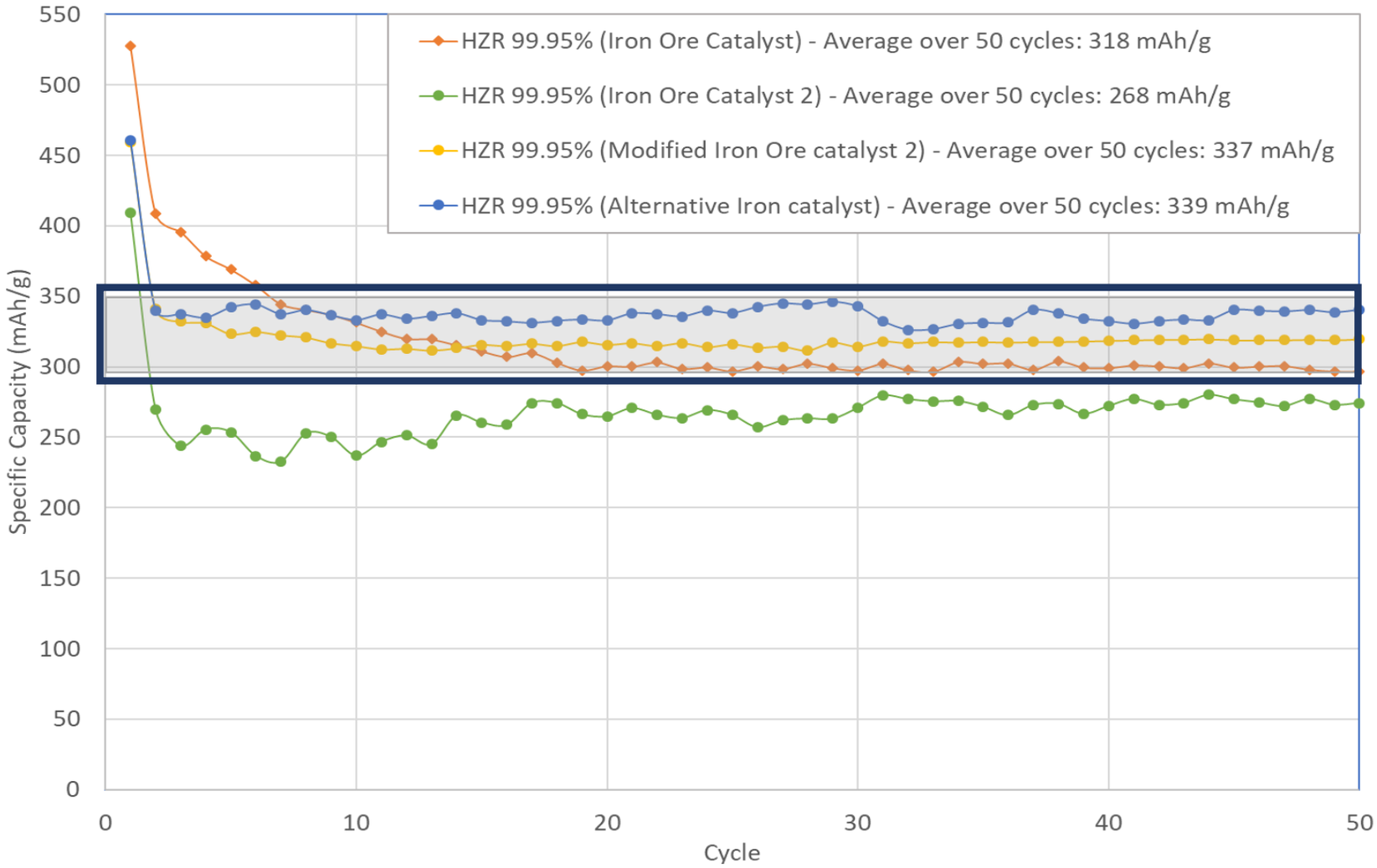
- Current graphite market value in excess of US$ 14 Billion per annum^
- Hazer graphite structure and properties can be altered to potentially suit different market by changing the process conditions
- Graphite purity ex reactor can range between 80-95%wt, and can be purified to 99.9%> with standard purification techniques
- Promising preliminary results in using Hazer Graphite in Li-ion batteries



^ "Global Market Study of Graphite Market", Persistence Market Report, pg 14

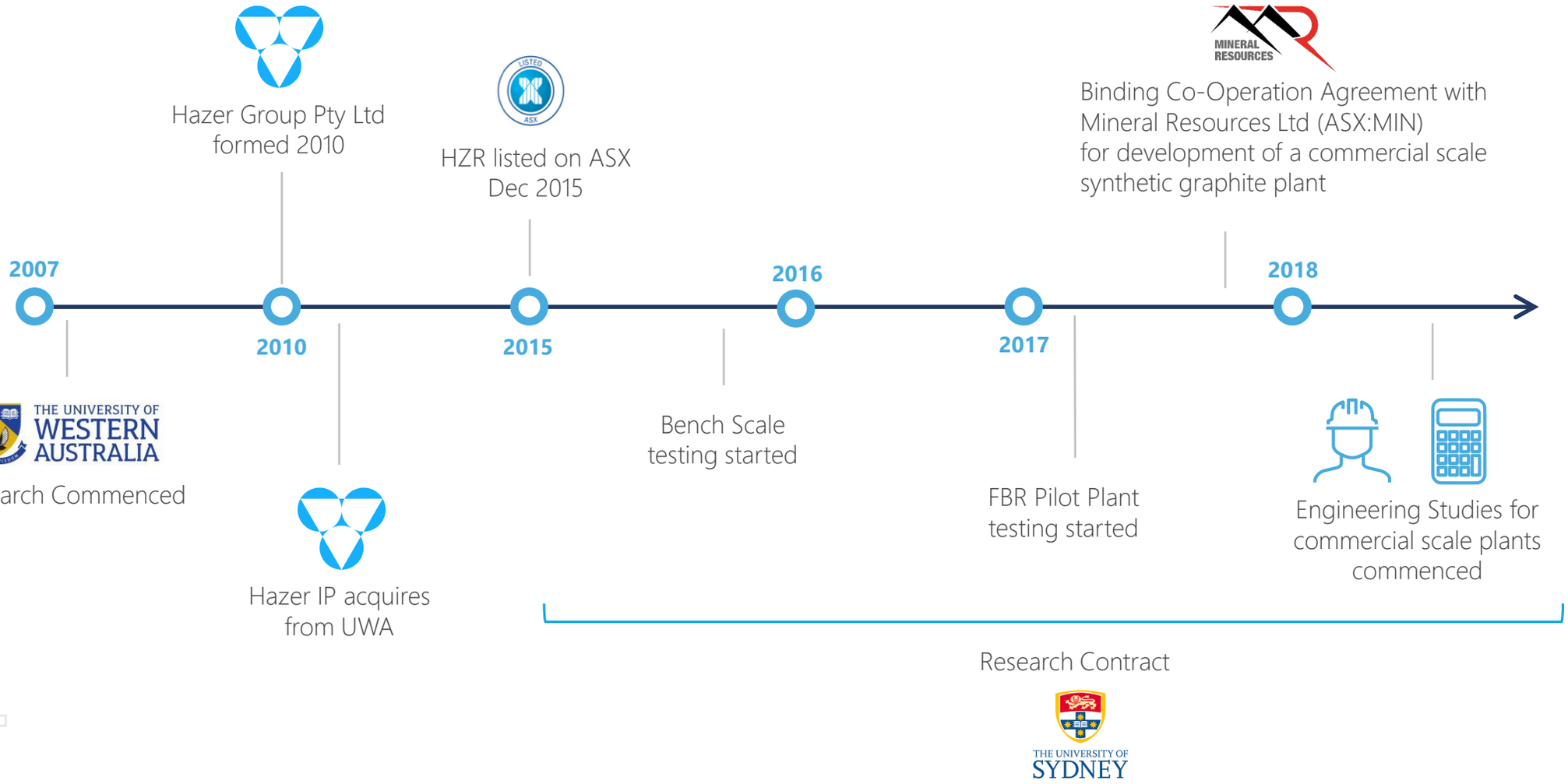
HAZER GRAPHITE IN Li-ION BATTERIES

Preliminary testing of Hazer graphite in coin cell Li-ion batteries show equivalent performance to commercial synthetic spherical graphite



STRONG PROGRESS IN 2018

Successful pilot plant program in 2018 has given sufficient confidence to progress to FEED Study for first commercial plant



COLLABORATION WITH ASX:MIN

Investment and Commercial Partner

MINERAL RESOURCES

March 2017 MIN made a A$5M strategic investment in HZR (current holding ~11%.)

December 2017 HZR & MIN executed a binding collaboration agreement for the potential development of a commercial scale synthetic graphite facility – Key Terms:

- MIN to fully fund all stages of the commercial development.
- Hazer to receive royalties from graphite sales
- Stage 1 – Pilot Plant – commissioned March 2019
- Stage 2 – Demonstration Plant – target 1,000 tpa (graphite)
- Stage 3 - Expansion - target production of 10,000 tpa

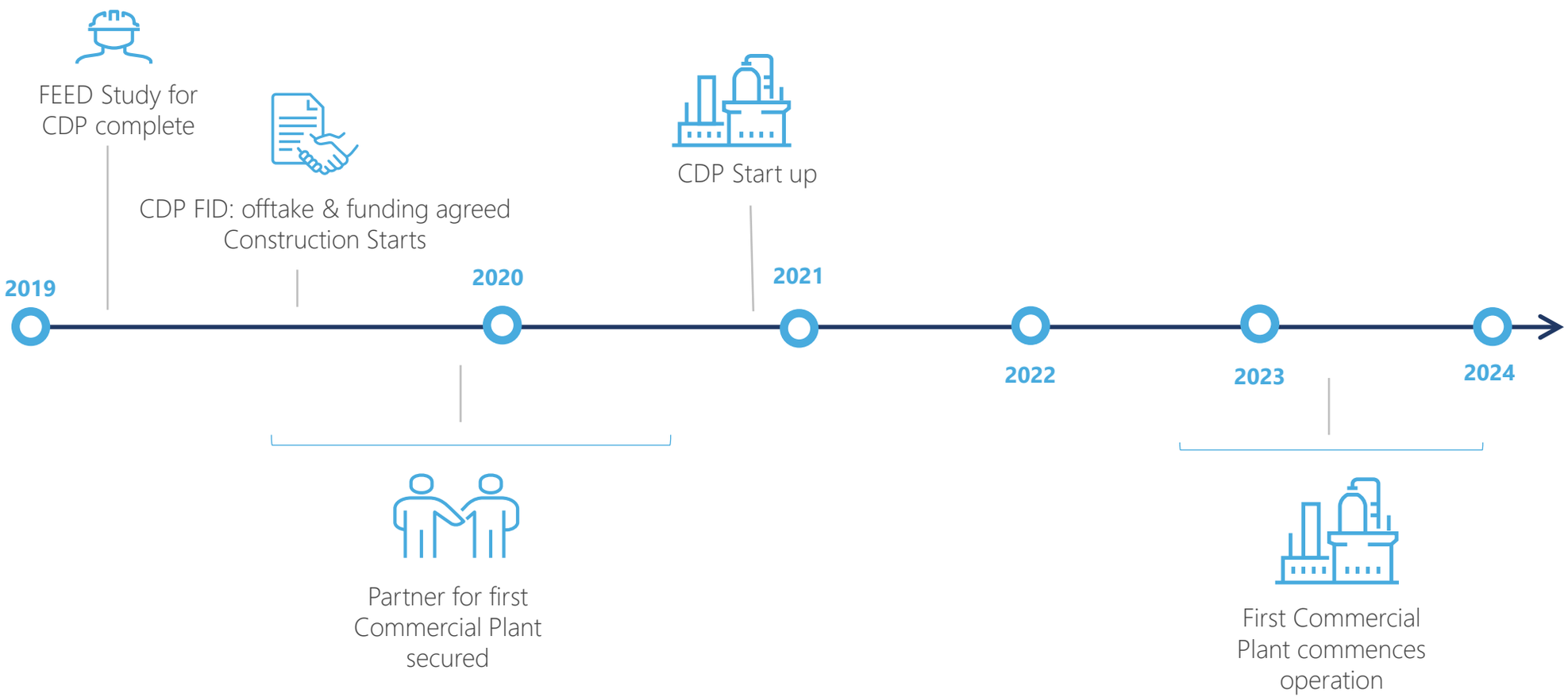
PILOT PLANT OPERATIONS

The Hazer FBR Pilot Plant & Mineral Resource's PTR Pilot Plant were commissioned on-site in Kwinana in March 2019

- Hazer Pressurised Fluidised Bed Reactor (FBR) Pilot Plant re-commissioned at Mineral Resource's Kwinana site in March
- Ongoing test program will provide further engineering data to optimize CDP FEED and Concept Studies
- Mineral Resource's Paddle Tube Reactor (PTR) Pilot Plant commenced commissioning in March 2019
- Test Program for PTR Pilot Plant will be undertaken over next 3-6 month period
- PTR Pilot Plant is focused on production of higher purity graphite product with desire to target higher value end markets

DEVELOPMENT PATHWAY

Hazer is focused on securing a commercial demonstration plant (CDP) by mid 2019 with commencement of operations in 2020



INVESTMENT SUMMARY

Hazer process is a low emission, low cost, flexible hydrogen & graphite production process

Successful pilot program completed in 2018; engineering and concept studies to up-scale to commercial operations underway

Producing clean, cost competitive hydrogen and graphite

Working with potential partners and customers to secure contracts for first large scale commercial plant through 2019 / 2020

Hazer Group is the first listed Australian clean hydrogen company

TIGHTLY HELD REGISTER

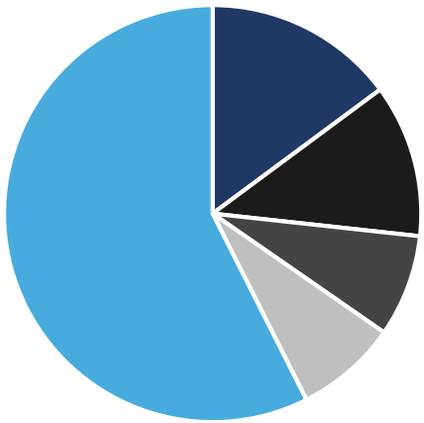
Top 20 own 39%

Capital Structure

Current Shares on Issue	97.26m
Market Capitalisation @$0.22	$21.4m
Cash @ 31 December 2018	$6.6m
Total Options (ex prices from $0.40 to $1.20)	42.42m

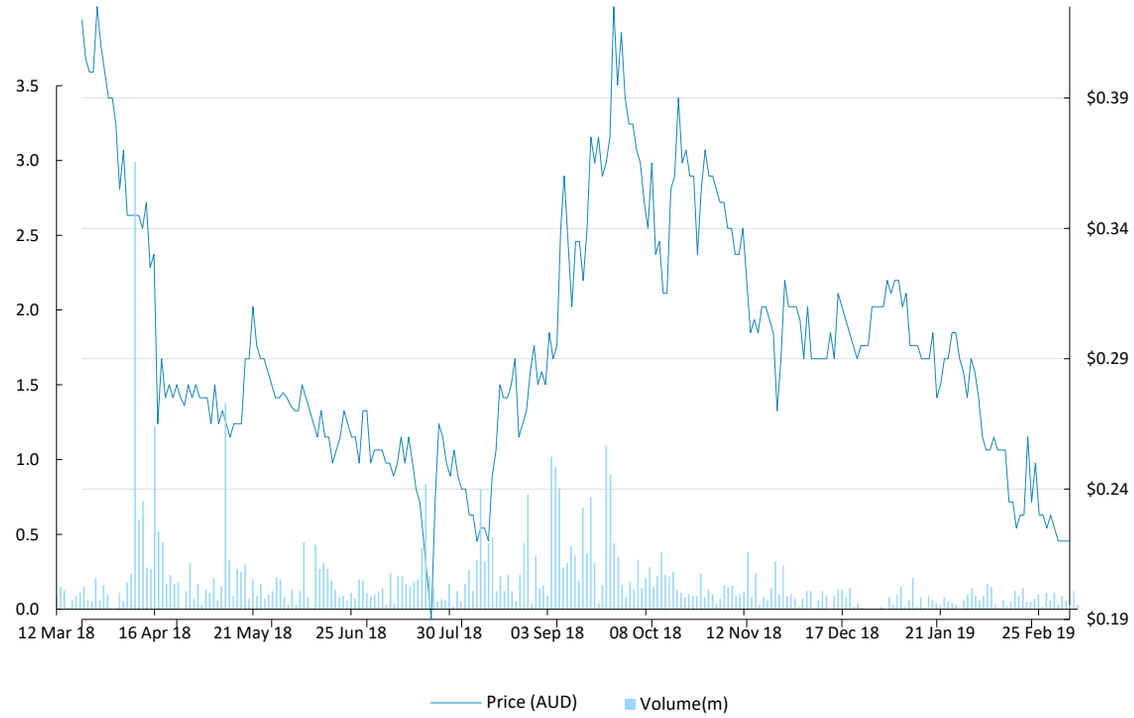
*includes$0.9m of option exercise proceeds held in trust at 31 December 2018

Substantial Shareholders



15.1%	Top 20 ex substantial shareholders holding >5%
11.1%	Mineral Resources Ltd
5.8%	Geoff Pocock Entities
6.9%	Andrew Cornejo
61.0%	Other

Share Price & Volume



STRONG MANAGEMENT TEAM WITH PROJECT EXP.

Engineering, Technical, Marketing & Corporate expertise

Mr Geoff Ward
Chief Executive Officer

- 25 years experience in senior executive roles in the energy sector, covering operations, commodity marketing, strategy and planning, development and execution of major capital projects.
- Specialised experience leading transactions in capital markets, financing, M&A and joint ventures.
- B.E Chem (Hons) and MBA. Member of the Australian Institute of Company Directors.

Mr Mark Edwards
Chief Operating Officer

- Mechanical engineer with 25 years experience in project management, site maintenance and operation.
- Former AUA Regional Director for Light Metals division at Hatch Pty Ltd.
- Technical specialist with focus on delivery of complex technical projects.

Ms Emma Waldon
CFO & Company Secretary

- 20 years experience in finance and corporate advisory roles including ASX listed companies.
- Specialist in risk management.
- Member of the Australian Institute of Chartered Accountants, a Fellow of the Financial Services Institute of Australasia and a Certificated Member of the Governance Institute of Australia.

Dr Andrew Cornejo
Co-Founder and Chief Technical Officer

- PhD; inventor of the Hazer Process.
- Co-Founder of Hazer Group Limited.
- 15 years technical engineering experience in R&D, advisory and resource development roles.
- B.E (Mech) (Hons), B.Comm, Grad Cert (Research Commercialisation).

Mr Luc Kox
Business Development Manager

- 20 years' experience in engineering and clean tech industries, including energy recovery from biogas.
- Extensive experience in international business development, including project finance and contract development, in particular throughout Asia Pacific region.
- Master of Science plus post grad Qualified Export Marketing Manager (The Netherlands).

EXPERIENCED, INDEPENDENT BOARD

Commercial, Technical, Contract & Regulatory expertise

Mr Tim Goldsmith
Chairman

- Over 20 years as Partner with global professional services group PwC.
- Leader of PwC's Mining Group, and National China Desk Practice.
- Over 30 years corporate and commercial experience across international mining and industrial business operations.

Ms Danielle Lee
NED

- Corporate lawyer with more than 23 years' experience shared between private law firms and the ASX.
- Main practice areas are corporate advisory, governance and equity capital markets; regularly advises on issues relating to the Corporations Act and ASX Listing Rules.

Mr Simon Rushton
NED

- Executive General Manager - Corporate Development at Mineral Resources Limited.
- 18 years global corporate experience in financial, advisory and legal roles.
- Corporate contracts including M&A expertise within the mining sector.

Dr Andrew Harris
NED

- Lead Director of the Engineering Excellence Group, Laing O'Rourke.
- Professor of Chemical and Biomolecular Engineering at the University of Sydney.
- Previously the CTO of Zenogen, a hydrogen production technology company, and a co-founder of Oak Nano, a start-up commercialising novel carbon nanotube technology.

HAZER GROUP LTD ASX:HZR

Investor Relations Enquiries:
contact@hazergroup.com.au

Media Enquiries:
Nat Bradford nbradford@we-buchan.com

DISCLAIMER

Important Information

This presentation has been prepared by Hazer Group Limited ("Hazer" or "the Company")

This presentation is not a financial product or investment advice or recommendation, offer or invitation by any person or to any person to sell or purchase securities in Hazer in any jurisdiction. This presentation contains general information only and does not consider the investment objectives, financial situation and needs of individual investors. Investors should make their own independent assessment of the information in this presentation and obtain their own independent advice from a qualified financial adviser having regard to their personal objectives, financial situation and needs before taking any action.

No representation or warranty, express or implied, is made as to the accuracy, completeness, reliability or adequacy of any statements, estimates, opinions or other information, or the reasonableness of any assumption or other statement, contained in this presentation. Nor is any representation or warranty (express or implied) given as to the accuracy, completeness, likelihood of achievement or reasonableness of any forecasts, prospective statements or returns contained in this presentation. Such forecasts, prospective statements or returns are by their nature subject to significant uncertainties and contingencies, many of which are outside the control of Hazer.

To the maximum extent permitted by law, Hazer and its related bodies corporate, directors, officers, employees, advisers and agents disclaim all liability and responsibility (including without limitation any liability arising from fault or negligence) for any direct or indirect loss or damage which may arise or be suffered through use or reliance on anything contained in, or omitted from, this presentation. An investment in Hazer securities should be considered speculative and is subject to investment and other known and unknown risks, some of which are beyond the control of Hazer. Hazer does not guarantee any rate of return or the absolute or relative investment performance of Hazer securities. The distribution of this presentation including in jurisdictions outside Australia, may be restricted by law. Any person who receives this presentation must seek advice on and observe any such restrictions.