

# 2022 ANNUAL REPORT



## Corporate information

ABN 31 164 573 728

### Directors

**Anthony Kiernan AM**  
(Chair)

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**Bryn Jones**  
(Managing Director)

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**Tim Goyder**  
(Non-Executive Director)

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**Tim Wise**  
(Non-Executive Director)

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**Lucy Gauvin**  
(Non-Executive Director)

### Company secretary

**Damien Connor**

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### Registered office

Level 10, 111 Gawler Place  
Adelaide, South Australia 5000

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### Principal place of business

Level 10, 111 Gawler Place  
Adelaide, South Australia 5000

### Share registry

**Computershare Investor  
Services Pty Ltd**

Level 5, 115 Grenfell Street  
Adelaide, South Australia 5000  
+61 8 8236 2300

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### Auditors

**Grant Thornton Audit Pty Ltd**

Level 3, 170 Frome Street  
Adelaide, South Australia 5000



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# Principal activities

entX is founded on a portfolio of innovative technologies designed to deliver clean energy solutions and capability across the space, defence, green hydrogen, industrial decarbonisation and nuclear medicine sectors.

Building on our strong foundation in nuclear science, we have assembled a team of high calibre scientists and engineers to develop sustainable clean energy solutions.

The Company's business strategy is to identify clean energy projects and rapidly assess their commercial and technical potential by utilizing in-house resources and leveraging specialist collaborative external resources and, where appropriate, to develop the projects to commercialization or other value generation opportunities.





# Managing Directors' summary



**2022 was a year of profound growth for entX in delivering its strategy of creating shareholder value through rapidly conceptualising, assessing, and executing technology-based clean energy solutions in its target sectors.**

Through this growth in the Company's technology portfolio, the entX team has grown in numbers and capability both within the group and with our partner organisations.

Our model is to continue to recruit the best and brightest of Australian talent in disciplines that will be pivotal to our New Energy future and retain this talent through exposure to Company success.

Our Green Hydrogen and Clean Fuels business has continued to develop our model of delivering medium scale Green Hydrogen projects, underpinned by industrial offtake, with scope for regional growth, working with trusted OEM partners. The first of these projects is with Kimberly-Clark Australia (KCA) where a staged delivery of Green Hydrogen, supported by Linde Engineering, to the Millicent Mill is planned to help KCA reach their Carbon Neutral by 2030 target.

Following completion of a Scoping Study on the KCA opportunity, we have commenced a Feasibility Study to enable the Board to consider a Final Investment Decision. The Feasibility Study is scheduled for completion Q4 2023.

During the period the Company also secured a rare opportunity in infrastructure scale hydrogen storage in the WEGHAM Project located in South Australia where the Company has secured key hydrogen storage exploration tenure.

The WEGHAM Project will explore the potential for ancient, deep salt caverns to store vast amounts of Green Hydrogen cost effectively. This storage capability has the potential to cornerstone an industrial complex where Green Hydrogen is produced, stored, and utilised to produce commodities such as ammonia and methanol in partnership with major industrial players.

Preliminary geological investigation has highlighted several high potential salt accumulations for immediate follow up on recently granted tenure.

Developing the Space and Defence business has been a focus for the Company over the year with excellent progress being made on the GenX (long term, stable power generation) and RHU (providing heat to critical systems) technologies.

During the Period the Company was awarded a Collaborative Research Project (CRC-P) Grant with academic and industry partners for the GenX technology. The \$6.2 million CRC-P commenced mid-2022 and is working towards a prototype industrial manufacturing process to mass produce GenX devices capable of supplying clean power supplies to the Space and Defence industries.





With the CRC-P team now fully formed the 3-year project is underway and expecting to produce prototype systems in late 2023.

Separately the Company was contracted by the Australian Government to undertake accelerated prototyping of a field deployable GenX unit. This commercial development contract has an 18-month time horizon at a value of \$4.4 million, with an additional mechanism to access a \$1.1m contingency. Work on the rapid prototyping commenced in January 2023 and is expected to be completed in June 2024.

Following a successful supply chain study under an Australian Space Agency (ASA) grant, a prototype RHU (radiation heating unit) fuel pellet is currently being prepared at ANSTO for characterisation and testing. A parallel program is underway to couple the Company's RHU design with a thermal management system designed for space applications. The Company plans to test the combination, initially in laboratory-based space simulators, to be followed by a maiden launch for Australian produced RHUs in 2025.

At the forefront of the Company's intellectual property capture and assessment business is the Clean Energy Technology Incubator (CETI) currently developing the Company's CarbonX (CO2 conversion to products) technology, amongst others.

During the period the CETI identified and established a business model for the development of a Nuclear Medicine business to supply the huge Theragnostic market and the emerging Targeted Alpha Therapy (TAT) markets. These markets are key to the future of cancer therapy and the treatment of certain neurological conditions.

This Nuclear Medical project is now being progressed as a separate business unit within entX. In doing so we work with key industry partners Tellus Holdings Ltd under a Joint Development Agreement and others at the University of South Australia.

Further details on these and other developments can be found in the Review of Operations on the following pages.

**Bryn Jones**  
Managing Director

## Operational structure

The entX technology portfolio experienced substantial growth over the year which enabled the Company to secure highly credentialed leaders for its key business units of:



### Green Hydrogen and Clean Fuels

**Glenn Toogood**

An experienced energy executive.



### Space and Defence

**Dr Scott Edwards**

A chemist and material scientist, formally a thought leader in the commercialization of automotive technology.



### Nuclear Medicine Supply Chains

**Dr Massey de los Reyes**

A Nuclear Engineer experienced in nuclear medicine and material science.



### Clean Energy Technology Incubator

**Dr Julian Kelly**

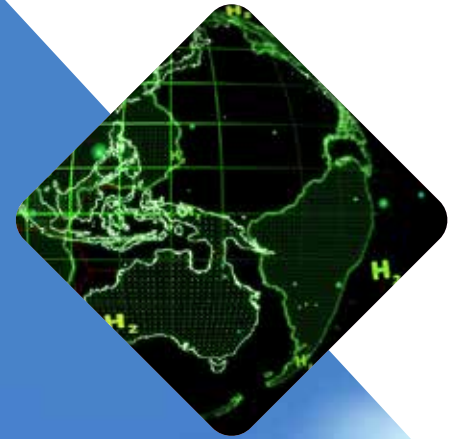
A technology founder and innovator in the nuclear fuel and nuclear medical industries.

# Review of operations

## Green Hydrogen and Clean Fuels

The Green Hydrogen and Clean Fuels pillar of the Company's business is focused on technology deployment into clean, carbon neutral energy projects.

The entX Green Hydrogen business is built on key differentiators: Delivering clean energy solutions to Industrial offtake partners and infrastructure scale hydrogen storage to enable the efficient development of down-stream green products.





## The Limestone Coast Hydrogen Hub (LCH2)

During the period the Company signed an updated Memorandum of Understanding (MOU) and a Letter of Intent (LoI) with Kimberly Clark Australia (KCA) covering future development of, and offtake from the Project.

The updated MOU focuses on the execution of a Feasibility Study (Study) to deliver hydrogen, as part of a carbon neutral energy solution, to KCA's Millicent Mill based in South Australia.

The Company has also signed an MOU with BOC Australia (Linde Engineering) to collaborate on the KCA project delivery and operation as well as future projects where the LCH2 model may be deployed.

The Study, to commence in Q2 2023 and supported by KCA technical and operations staff, will focus on the energy supply strategy to feed a 40 MW electrolyser followed by compression with enough hydrogen storage to ensure uninterrupted hydrogen supply to the Mill for process heat requirements.



The project will utilise excess water from the Mill process as the feedstock for hydrogen production and the Company is in discussions with potential hydrogen transport off-takers for excess hydrogen from the Mill to maximise return on capital.

The Study is expected to be completed in late 2023 allowing commercial offtake negotiations to take place between the Parties in the meantime.



# Review of operations

## The Western Eyre Green Hydrogen, Ammonia and Methanol (WEGHAM) Project

During the period the Company identified a rare opportunity in the development of infrastructure-scale green hydrogen projects in the Polda Basin, on South Australia's Eyre Peninsula.

The Polda has been assessed as a significant site for the future of hydrogen project development in Australia centered around the potential to store vast amounts of hydrogen in ancient, deep salt deposits. Engineered salt caverns are universally recognised as the most cost-effective and safest form of hydrogen storage.

The ability to store vast quantities of hydrogen is pivotal to the development of a green hydrogen production facility as a reliable and cost effective feedstock supply for green industrial users, such as ammonia and methanol processing plants, which could be built in close proximity to the hydrogen storage and production facility.

**In the case of the WEGHAM Project the Western Eyre Peninsula of South Australia is also recognised as:**

- > having ready access to deep water ports – export infrastructure and domestic supply markets
- > having access to regional population centers and agricultural communities.
- > a tier one location for wind energy
- > a high potential solar power region

The Company's strategy is, initially, to explore the extent of salt deposition within the Polda Basin to determine the hydrogen storage capacity of the salt deposits.





Hydrogen storage flexibility is crucial to developing a world-scale green energy and product precinct (Figure 1) underpinned by an environmentally friendly reliable feedstock and fuel source.

Exploration and definition of salt caverns is expected to commence in Q2 2023 with the recent grant of hydrogen storage exploration tenure (refer Table 1).

Figure 1 – Hydrogen storage tenure in the Western Eyre Peninsula

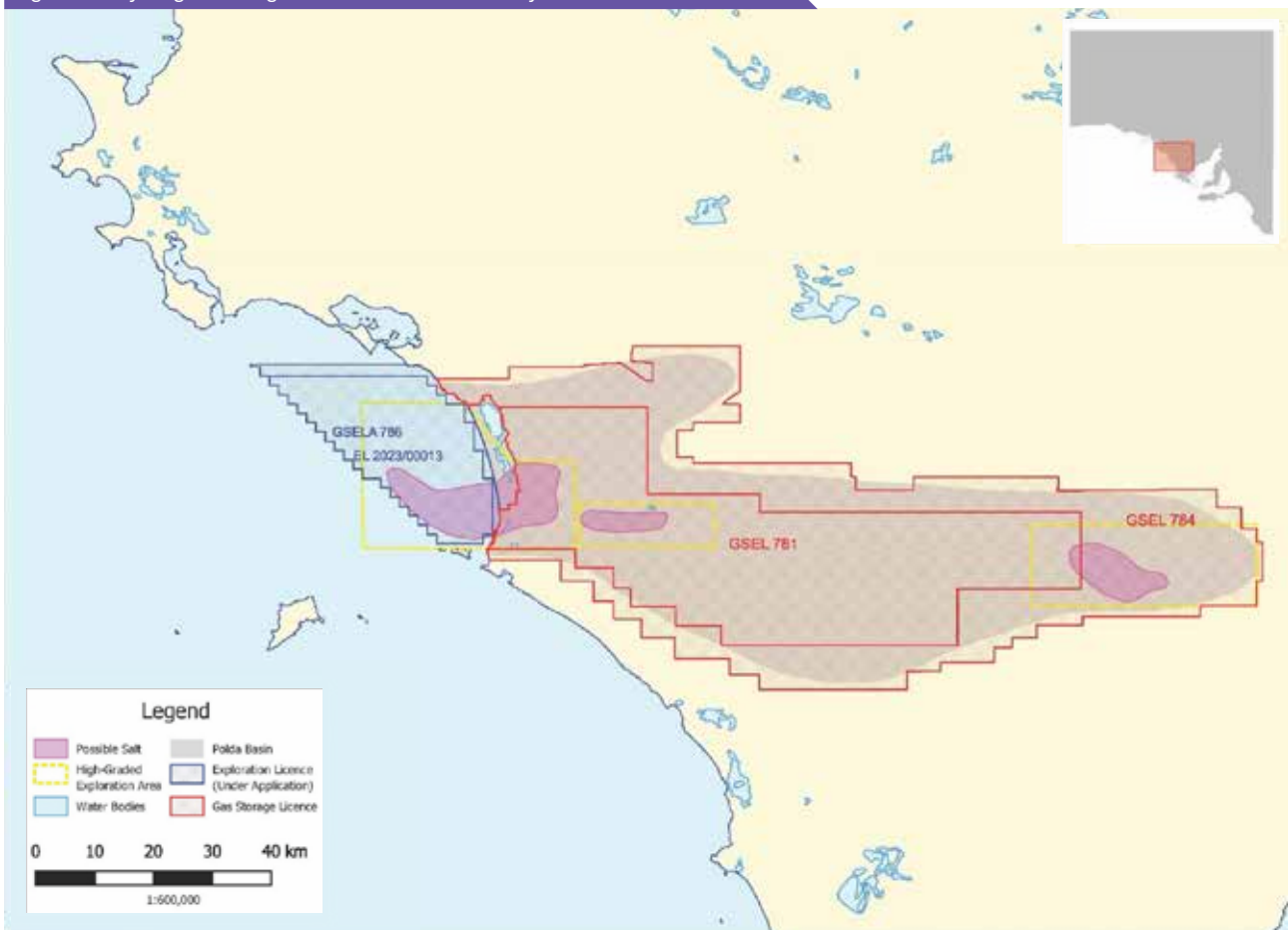
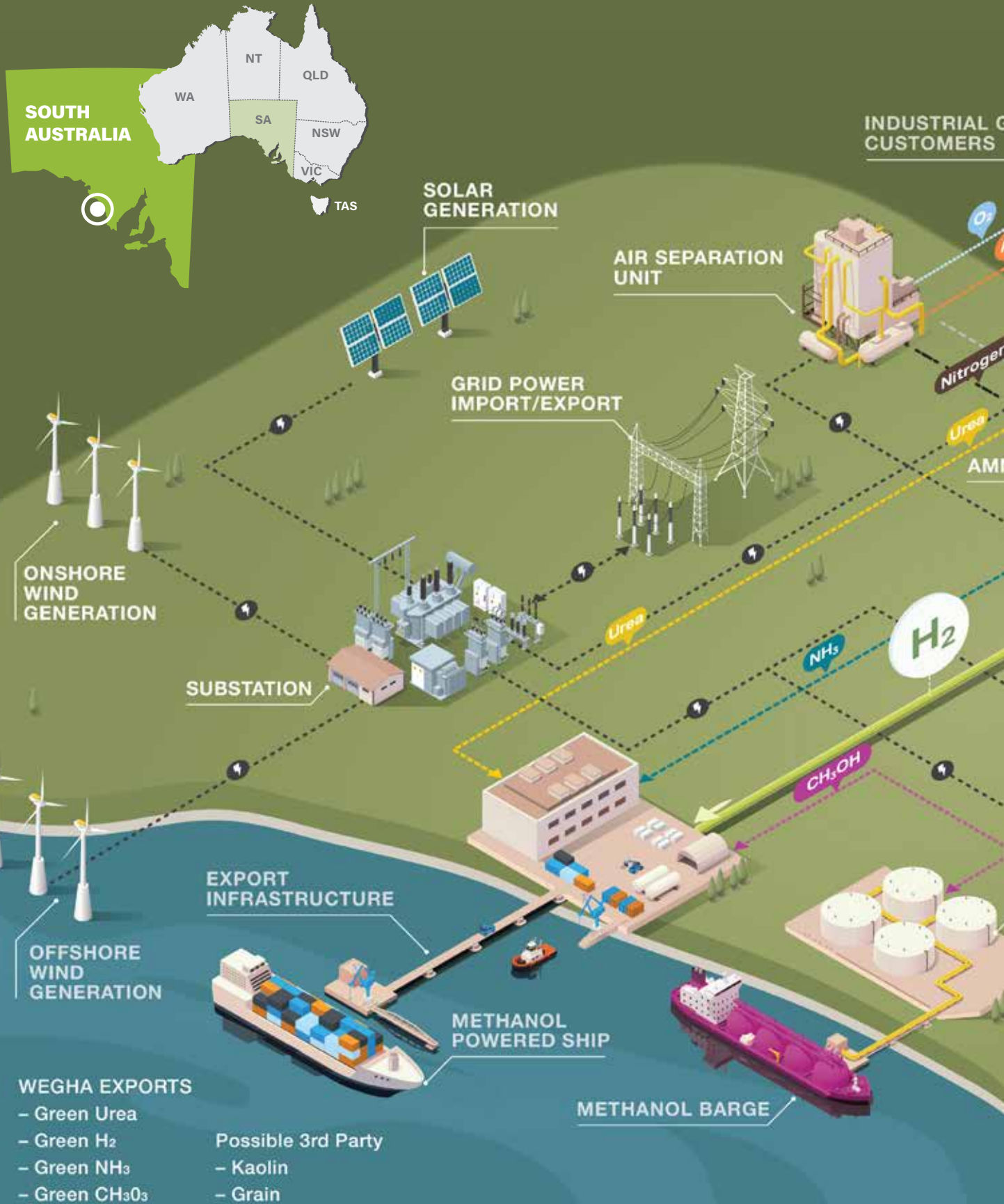


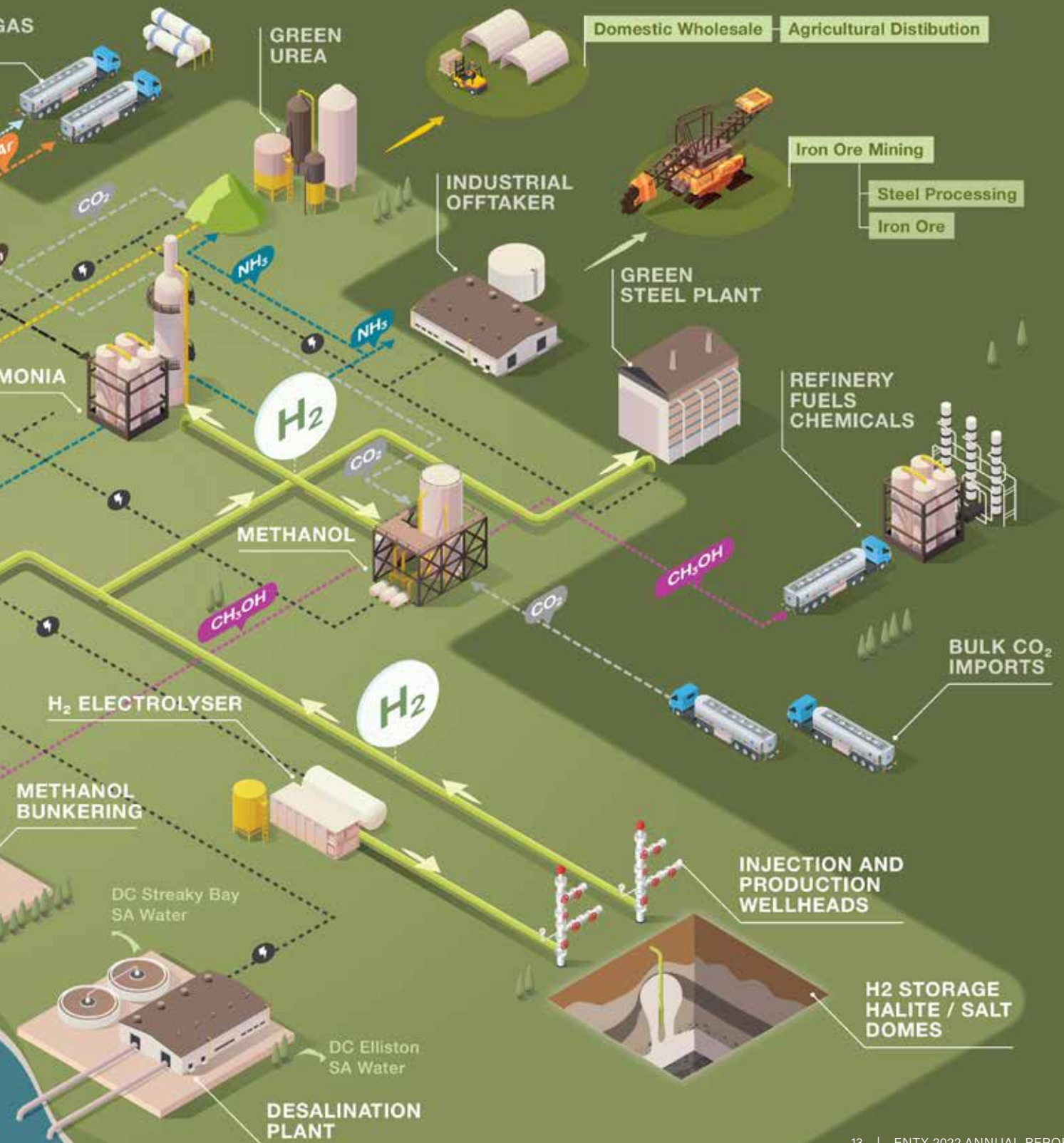
Table 1 – entX Polda Basin gas storage exploration tenure

Tenement	Registered holder/ applicant	Permit status	Grant date (application date)	Expiry date	Area (km2)	Interest
GSEL 781	entX Limited	Granted	3 April 2023	3 April 2028	2,497	100%
GSEL 784	entX Limited	Granted	3 April 2023	3 April 2028	2,500	100%
GSELA 786	entX Limited	Application	21 March 2023	N/A	941	100%
ELA 2023/00013	entX Limited	Application	2 March 2023	N/A	681	100%

# Review of operations


Western Eyre Green Hydrogen Ammonia Methanol precinct conceptual scope





# Review of operations

World class onshore  
and offshore wind  
resource



The Western Eyre Peninsula of South Australia is globally recognised for its renewable wind generation potential, with average wind speeds >8m/sec and capacity factors in the range of 60%. This region has abundant access to low-cost rural land.



## The PhosEnergy Process

The Company's most advanced technology is the PhosEnergy Process, a patented science developed to recover uranium from phosphate fertiliser production.

EntX and global uranium company Cameco Corporation ('Cameco') are jointly commercialising the PhosEnergy Process via a registered Colorado company called Urtek LLC ('Urtek'), which is beneficially owned 74.21% by Cameco and 25.79% by entX.

The Company continues to believe that the long-term fundamentals of the uranium/nuclear fuel market are strong with movement from major world economies to bolster nuclear programs to achieve ambitious carbon emission targets with long term, reliable power.

The PhosEnergy Process has the potential to play a significant role in the strengthening nuclear fuel market with sustainably sourced uranium.

The 'Green' uranium from the PhosEnergy Process not only has the potential to provide cost-competitive uranium but also reduce the environmental distribution of uranium through the broad-acre application of phosphate fertilizers.

During the period a significant and sustained recovery in the uranium market pricing has been observed with positive long term fundamental signals indicating strong market conditions moving forward.

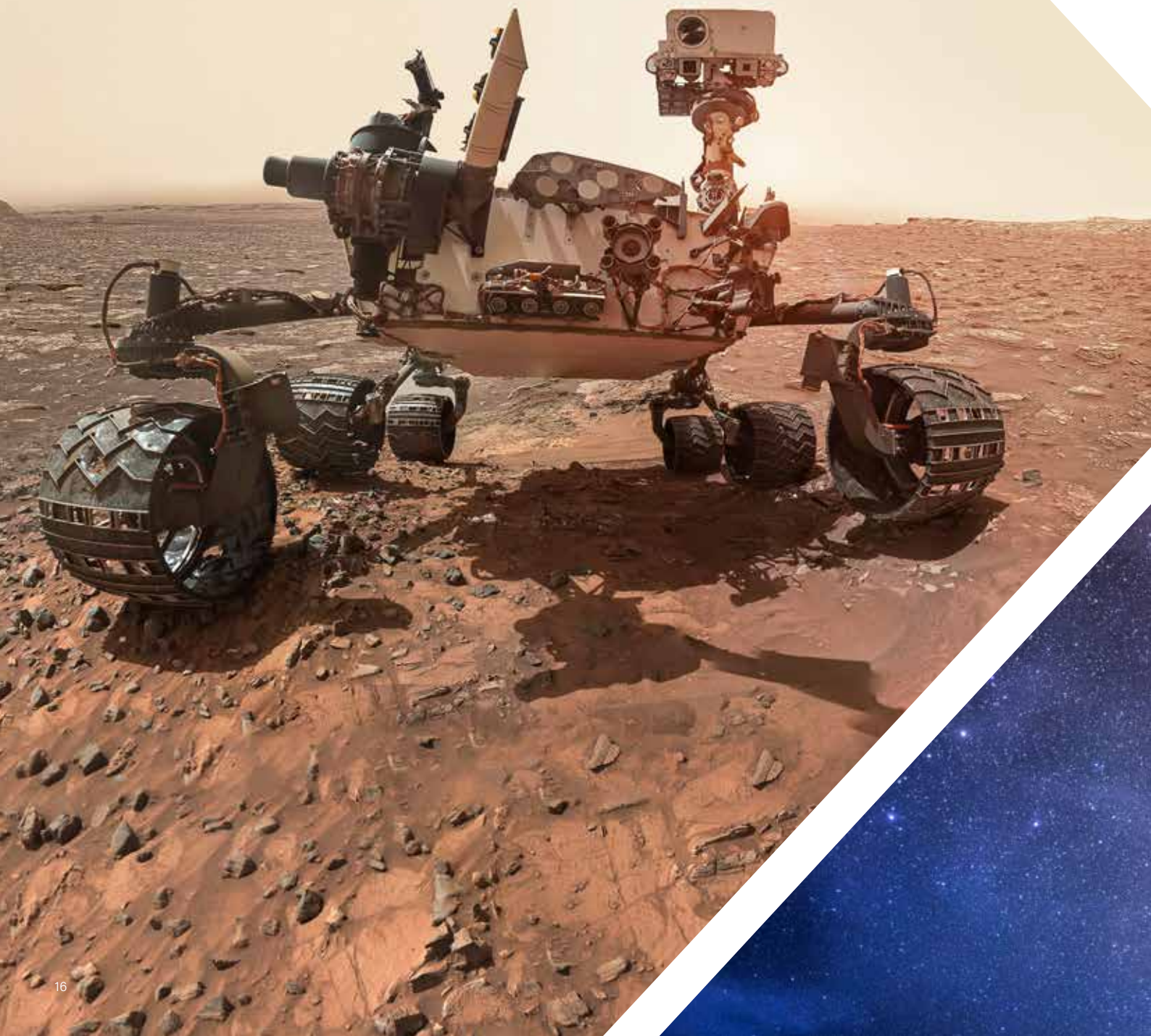
Cameco and entX have agreed to resume business development efforts for the PhosEnergy Process during 2023.



# Review of operations

## Space and Defence

The Space and Defence pillar of the Company's business primarily focuses on energy solutions for applications that require long term, sustainable energy in the form of heat or electrical power.





## Developing an Australian supply chain for Radioisotope Heater Units (“RHUs”)

RHUs have been used in the global space industry for many years to provide internal heat to keep electronics warm in extreme environments, such as lunar night and deep space.

During the period the Company completed a program under the Australian Space Agency Moon to Mars Demonstrator Feasibility grant, with its partners Moonlode (space engineering) and Ouranos (radioisotope and thermal modelling). The program successfully demonstrated a credible Australian RHU supply chain for lunar night survival.

The Company’s unique RHU design is intended to provide a new paradigm of safety advantage over the incumbent RHU technology, eliminating the use of restricted fissile material, reducing costs and thereby creating a commercial opportunity for the Company to develop RHUs for sale to the global space industry.

A program of work with the University of South Australia was initiated during the period to develop the isotope supply chain for the Company’s unique RHU design.

A prototype RHU fuel pellet is currently being prepared at ANSTO for characterisation and testing. If that testing is successful, the Company expects to be able to provide specifications for commercial supply by the end of 2023.

A program is underway to couple the Company’s RHU design with a thermal management system designed for space applications. The Company plans to test the combination, initially in laboratory-based space simulators, followed by a maiden launch for Australian produced RHUs in 2025.



# Review of operations

## GenX Energy

GenX Energy Units (“GenX Units”) uniquely combine metals, semiconductors and beta-radiation into smart structures that produce constant DC power over very long time frames.

The highly reliable, low voltage power that can be produced by GenX Units is vital for a range of terrestrial devices in critical industry applications such as telecommunications and remote sensing systems.

The most immediate application for GenX Units is in the space industry, where high reliability, low maintenance power is critical to the success of missions where the cost of deployment is very high.

GenX Units can potentially replace sub-optimal remote power sources with a simple and safe generator that supplies constant DC power for up to several decades without the need for refuelling or recharging.

In March 2022 the Company was awarded a \$2.4 million Cooperative Research Centre Project Grant (CRC-P Grant) by the Federal Government to develop commercial GenX prototypes.

The CRC-P Grant underpins a \$6 million development program over three years utilising specialist skills from entX’s partners at the University of South Australia, the University of Adelaide, the University of Western Australia as well as important contributions from industry partners Duromer and DEWC Systems (now Asension).

The program is aimed at establishing a highly efficient, economically robust manufacturing process for the GenX units. This will involve building numerous units which will be used in field tests due to start in less than three years.

During the Period the entX team has established supply chains for the manufacture of GenX prototypes, established a methodology for rapid testing of prototype systems and is optimising the manufacturing technology to create reproducible structure suitable for continuous manufacturing systems.

During the period the Company was contracted by the Australian Government to undertake accelerated prototyping to a final field-deployable GenX unit. This commercial development contract has an 18-month time horizon at a value of \$4.4 million, with an additional mechanism to access a \$1.1m contingency. Work on the rapid prototyping commenced in January 2023 and is expected to be completed in June 2024.

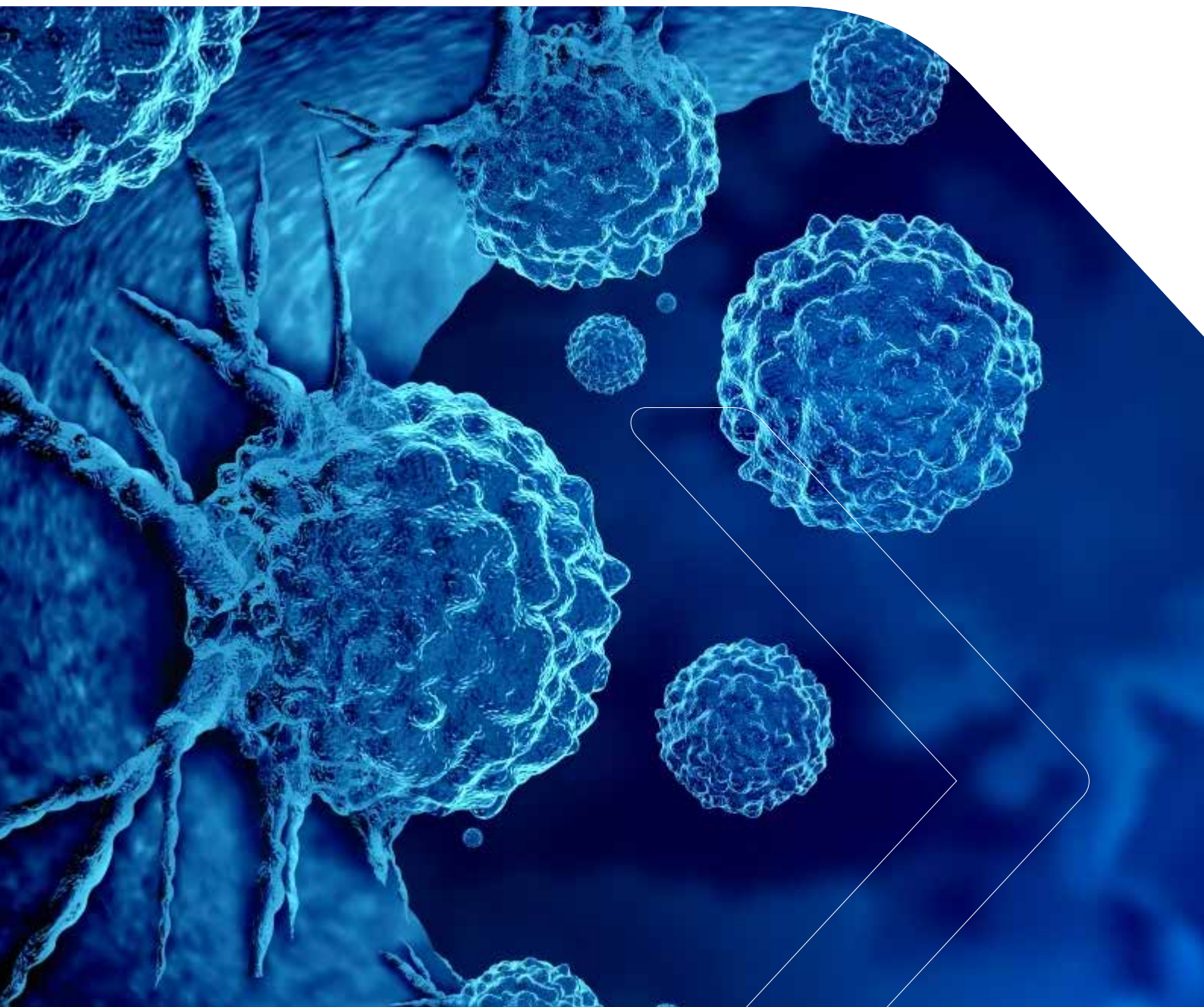




# Review of operations

## Nuclear Medicine Supply Chains

The team at entX has an in-depth working knowledge of the nuclear medicine industry. Following a review of current and emerging nuclear medicine applications entX is developing processes and technologies to feed the exponential growth of the Theragnostic and Targeted Alpha Therapy cancer treatment markets as well as certain neurological treatments.





The initial target markets the Company is seeking to address are:

## Lutitium-177

<sup>177</sup>Lu is currently the most used radiometal for targeted radionuclide therapy due to its commercial availability and the clinical success of <sup>177</sup>Lu-based peptide receptor radionuclide therapy (prtr) for the treatment of neuroendocrine tumors and prostate cancer (ref Lutathera and Pluvicto).

Supply of <sup>177</sup>Lu is currently considered a risk, as isotopically purified <sup>176</sup>Yb (the precursor to <sup>177</sup>Lu) is almost exclusively sourced from Russia. Sovereign supply chains for <sup>177</sup>Lu is a high priority for the Australian Nuclear Medical industry.

The Company is working with the University of South Australia (UniSA) to prove the viability of a unique process for the commercial supply of <sup>176</sup>Yb as a feedstock to <sup>177</sup>Lu production. This initial proof-of-concept work has been highly successful and planning is underway to test the developed technology at a scale approaching commercial scale.

Once proven the Company plans to engage with Nuclear Medicine supply companies to discuss commercial off-take requirements.

## Lead-212

<sup>212</sup>Pb is an emerging Targeted Alpha Therapy isotope which is projected for rapid uptake in the nuclear medicine industry due to its favourable in-body chemistry.

The Company has been developing technologies for the recovery of <sup>212</sup>Pb feedstocks and other potentially valuable streams from wastes derived from the oil & gas and mining industries.

During the period the Company signed a Joint Development Agreement (JDA) with Tellus Holdings Ltd (Tellus) and aims to extract valuable chemical elements of medical importance from wastes managed by Tellus' innovation and circular economy subsidiary, Sandy Ridge Labs Pty Ltd, in Western Australia.

Tellus is an innovative environmental services company cleaning up hazardous materials across Australia by developing and operating geological repositories and reinvesting in its communities to build circular economies. Sandy Ridge Labs, located north of Kalgoorlie in Western Australia, is the home of Australia's first commercial geological repository and the only nationwide licensed disposal facility for low level radioactive waste.

The Joint Development Agreement aims at developing novel technological approaches that reuse and recycle LLW and NORM wastes, primarily radioisotopes to feed nuclear medicine applications. This will initially involve laboratory-scale experiments to extract the radioisotopes. The partners are also considering a pilot-scale assessment at Tellus' Sandy Ridge facility.

Subject to successful development, the Company expects to be able to begin producing commercial quantities of these nuclear medical feedstocks in 2024.



# Review of operations

## Clean Energy Technology Incubator (CETI)

The team at entX has an in-depth working knowledge The CETI has been established as a pillar of the business dedicated to opportunity evaluation, IP capture and proof of concept.

It is where the entX team monitors trends in sector and technology development and conceptualises or acquires new technology opportunities for rapid testing and evaluation.

During the Period the Company's Nuclear Medicine Technologies were Incubated in the CETI before gaining enough commercial viability to establish a stand-alone operation within the business.

Among other, early-stage technologies the CETI is currently developing the CarbonX Process.

## CarbonX Process

The CarbonX Process is a technology for the conversion of waste carbon dioxide (CO<sub>2</sub>) into methanol and other commercial organic compounds without prohibitive energy input.

This technology has the potential to revolutionise carbon emitting industries that are currently reliant on emerging carbon capture, utilisation and storage technologies (CCUS) to meet emissions targets.

Until now, the conversion of CO<sub>2</sub> into useable chemicals has been technically possible but commercially challenging, with existing technologies hampered by the large amount of energy input required.

The CarbonX Process offers the opportunity of a low-cost solution with low energy input to deliver a range of commercially viable products, including methanol and other C1 and C2 carbon compounds.

During the period the Company kicked off a program at the Australian Nuclear Science and Technology Organisation (ANSTO) to optimise both the CarbonX reactor environment and the catalyst structure to provide design inputs for a pilot plant facility planned for deployment in 2024. Initial program results are expected in Q3 2023.





## Sustainable Development

At entX, we understand that developing the energy technologies of the future in a sustainable way is essential to our operating and financial success.

We are committed to integrating and promoting sustainability into all facets of our business.

For us, that means, building the foundations of Trust, Respect and Acceptance through:

- › minimising our environmental footprint.
- › managing our people (social) ensuring we provide a safe, respectful and inclusive workplace.
- › building prosperity within the local communities at locations where we operate; and
- › providing strong governance frameworks to maintain accountability and uphold company values.

As we continue to grow, we maintain a steady focus on our efforts to demonstrate greater levels of transparency, consistency, and comparability across our environmental, social and governance (ESG) disclosures.

This will provide a benchmark to not only measure our performance as a leader in the development of new clean energy technologies and implementation of clean fuels projects, but ensure we maintain a 'first mover' advantage within the market.



# Directors Report

**Your Directors present their report together with the financial statements of the consolidated entity, being entX Limited (“entX”, “Company”) and its controlled entities (“the Group”) for the year ended 31 December 2022 and the Independent Audit Report thereon.**

Following shareholder approval at the Company’s Annual General Meeting held on 6 May 2022, effective from that date, the Company changed its name to from PhosEnergy Limited to entX Limited.

## Director details

The names of Directors who held office during or since the end of the financial year and until the date of this report are as below.

Directors were in office for this entire period unless otherwise stated.

### Mr Anthony Kiernan AM

Non-executive Chairman  
(Appointed 1 July 2013)

### Mr Bryn Jones

Managing Director  
(Appointed 1 July 2013)

### Mr Timothy Goyder

Non-executive Director  
(Appointed 1 July 2013)

### Mr Timothy Wise

Non-executive Director  
(Appointed 26 March 2019)

### Ms Lucy Gauvin

Non-executive Director  
(Appointed 31 December 2021)

### Mr Richard Hacker<sup>1</sup>

Alternate Director (Mr T Goyder)

<sup>1</sup> Mr Hacker resigned as an alternate director to Mr Goyder on 22 February 2022.





## Information on continuing Directors



### Mr Anthony Kiernan AM

LLB

#### Non-executive Chairman

Mr Kiernan is a former solicitor with extensive experience gained over 35 years' in the management and operation of listed public companies.

Mr Kiernan is the Non-executive Chair of Pilbara Minerals Limited (ASX: PLS) and Non-executive Chair of Genesis Minerals Limited (ASX: GMD). He is a former Non-executive Chair of Saracen Mineral Holdings Limited (ASX: SAR) and Northern Star Resources Limited (ASX: NST).

Mr Kiernan is Chair of the Fiona Wood Foundation which focuses on research into burns injuries and is a member of the Order of Australia.



### Bryn Jones

BAppSc, MMinEng, FAusIMM

#### Managing Director

Mr Jones is an Industrial Chemist with extensive evaluation, development and operational experience in the minerals industry across various commodities.

Mr Jones has also been at the forefront of entX Limited's technology commercialisation and has participated in several other technology commercialisation and innovation efforts over his career.

Mr Jones is also a Non-Executive Director of Boss Resources Ltd (ASX: BOE), DevEx Resources Ltd (ASX: DEV) and Australian Rare Earths Ltd (ASX:AR3).



### Mr Timothy Goyder

#### Non-executive Director

Mr Goyder is a Perth-based mining investor with a strong record of successful investments and value creation in the Australian and international resources sector.

He is a major shareholder of entX Limited. Mr Goyder is experienced in all facets of the exploration and mining industries both in Australia and internationally and has a thorough understanding of the Australian and global equities markets having raised significant capital on the ASX during his career.

Mr Goyder is currently the Chairman of Liontown Resources Limited (ASX: LTR), Chairman of DevEx Resources Limited (ASX: DEV), Non-Executive Director of Minerals 260 Limited (ASX: MI6) and former Chairman of Chalice Mining Limited (ASX: CHN).

# Directors Report





## Information on continuing Directors



### Mr Timothy Wise

BSc.

#### Non-executive Director

Mr Wise has over 25 years' experience in both public and private companies.

He is a founder and former CEO of The Tap Doctor and Kalina Power Limited (ASX: KPO). He is an advisor to the Harry Butler Institute based at Murdoch University.

Mr Wise is a non-executive director of Environmental Clean Technologies Limited (ASX: ECT) and TMK Energy Limited (ASX: TMK).



### Ms Lucy Gauvin

BCom (CorpFin), LLB

Ms Gauvin has 20 years' experience as a corporate and commercial lawyer with a primary focus in the energy and resources industry.

Ms Gauvin is General Counsel of ASX listed Strike Energy Limited (ASX: STX), and prior to that was a Partner in the Corporate and Commercial team at national law firm Piper Alderman.

Ms Gauvin's corporate and commercial experience includes asset acquisitions and disposals, commodity sales, joint ventures, project development and financing, IPOs, capital raisings, mergers and acquisitions, corporate governance and compliance.



### Mr Damien Connor

B.Com, CA, GAICD, AGIA

#### Company Secretary

Mr Connor is an experienced Company Secretary and CFO, with over 20 years finance and accounting experience including 15 years in the mining and mineral exploration industry.

Mr Connor is a member of the Chartered Accountants of Australia and New Zealand (Chartered Accountant), an associate member of the Governance Institute of Australia (Chartered Secretary) and a graduate of the Australian Institute of Company Directors.

Mr Connor has been providing Company Secretary and CFO services to a number of ASX listed and unlisted entities since 2011.

# Directors Report

## Financial review

At 31 December 2022, the Group had net assets of \$3,177,931 (31 December 2021: \$4,796,114) and cash at bank of \$3,169,076 (31 December 2021: \$4,686,819).

The Group reported a net loss for the year of \$2,855,767 (31 December 2021: \$1,529,966). The increased loss is the result of increased staffing and activity associated with progression of the Company's technologies, having raised additional funds in June 2021 for this purpose.

During the reporting period the Company reported a net cash outflow of \$1,517,743 (31 December 2021: net cash inflow of \$4,430,937). Offsetting expenses for the period were cash receipts of \$2,052,683, comprising cash inflows from the issue of new shares (\$798,750), Grant receipts (\$636,794), Research and Development tax incentive claims for FY20 (\$100,436) & FY21 (\$335,427), Corporate office rental (\$128,197), Urtek LLC management fees (\$43,692) and interest receipts (\$9,387).

## Changes in equity

The following changes in equity took place during the year ended 31 December 2022:

### Shares

The number of fully paid ordinary shares (**Shares**) on issue increased from 120,037,609 (1 January 2022) to 133,187,609 (31 December 2022), consisting of:

- 1,500,000 Shares issued to a third-party service provider. The issue price of the Shares was \$0.10, raising \$150,000.
- 8,650,000 Shares issued following the exercise of options, raising \$648,750. The options had an exercise price of \$0.075 each and expiry of 31 March 2022.
- 3,000,000 Shares issued following the vesting and exercise of an equivalent number of Performance Rights. No funds were raised from the issue of these Shares.

### Unlisted Options

The number of unlisted options (**Options**) on issue decreased from 26,910,416 (1 January 2022) to 16,229,334 (31 December 2022), consisting of:

- 8,650,000 Options exercisable at \$0.075 each and expiring on 31 March 2022, were exercised into Shares. 1,600,000 Options exercisable on the same terms, expired unexercised on 31 March 2022.
- 1,181,082 Short Term Incentive (**STI**) Options, previously issued to management as part of their respective employment agreements, lapsed following an assessment against performance targets for the performance period ended 31 December 2021. The remaining 629,334 STI Options vested during the period. STI Options are exercisable at \$0.04 each on or before 31 December 2024.
- 750,000 Options were issued to an employee of the Company pursuant to their employment agreement with the Company. The exercise price, expiry and vesting dates of the Options are linked to the Company being admitted to the official list of ASX. As at the date of this report the Company has not been admitted to the Official List of ASX, therefore none of the Options have vested and the exercise price, expiry and vesting dates remain unknown.

Refer Note 18 for further details regarding Options on issue and associated movements during the year.

### Performance Rights

The number of performance rights (**Rights**) on issue decreased from 3,000,000 (1 January 2022) to nil (31 December 2022), with 3,000,000 Rights vesting and being exercised into Shares during the reporting period.



## Significant changes in the state of affairs

Following shareholder approval at the Company's Annual General Meeting held on 6 May 2022, effective from that date, the Company:

- changed its name to entX Limited;
- adopted a new Constitution; and
- appointed Grant Thornton Audit Pty Ltd as the Company's Auditor.

There were no further significant changes in the state of affairs of the Company not otherwise stated herein.

## Dividends

There were no dividends declared or paid during the reporting period and the Directors recommend that no dividend be paid.

## Events arising since the end of the reporting period

On 31 March 2023, the Company was offered the grant of two Poldia Basin gas storage exploration licenses (GSEL 781 and GSEL 784) which it subsequently accepted.

There were no further significant events after the reporting date.

## Likely developments

There are no likely developments that will impact on the Group other than as disclosed elsewhere in this report.

# Directors Report

## Directors' meetings

The number of formal meetings of Directors held during the year and the number of meetings attended by each Director are tabled below.

DIRECTOR	BOARD OF DIRECTORS		AUDIT & RISK MANAGEMENT COMMITTEE	
	A	B	A	B
Anthony Kiernan	12	11	-	-
Bryn Jones	12	12	2	2
Timothy Goyder	12	9	-	-
Timothy Wise	12	12	2	2
Lucy Gauvin	12	12	2	2

### Where:

**Column A** is the number of meetings the Director was entitled to attend.

**Column B** is the number of meetings the Director attended

## Option holdings of Directors and other Key Management Personnel

The movement during the reporting period in the number of Options over Shares in the Company held directly, indirectly or beneficially by each Director and other members of the Key Management Personnel, including their related parties, is listed below.

	HELD AT 1 JANUARY 2022	GRANTED AS COMPENSATION	EXERCISED	LAPSED/ FORFEITED	HELD AT 31 DECEMBER 2022	VESTED AND EXERCISABLE AT 31 DECEMBER 2021
<b>DIRECTORS</b>						
Anthony Kiernan	2,250,000	-	(1,000,000)	-	1,250,000	833,334
Timothy Goyder	2,000,000	-	(1,000,000)	-	1,000,000	666,667
Bryn Jones	6,327,083	-	(2,000,000)	(664,416)	3,662,667	312,667
Timothy Wise	3,000,000	-	(2,000,000)	-	1,000,000	666,667
Lucy Gauvin	1,000,000	-	-	-	1,000,000	666,667
<b>EXECUTIVES</b>						
Damien Connor <sup>1</sup>	750,000	-	-	-	750,000	500,000
<b>TOTAL</b>	<b>15,327,083</b>	<b>-</b>	<b>(6,000,000)</b>	<b>(664,416)</b>	<b>8,662,667</b>	<b>3,646,002</b>

977,083 STI Options were previously issued to Mr Jones as part of his executive services agreement with the Company. During the reporting period 664,416 of those STI Options were lapsed following an assessment against performance targets for the performance period ended 31 December 2021. The remaining 312,667 STI Options vested. STI Options are exercisable at \$0.04 each on or before 31 December 2024.

6,000,000 Options previously issued as remuneration to key management personnel, exercisable at \$0.075 each and expiring on 31 March 2022, were exercised into Shares.

No further Options have been issued, exercised into Shares, forfeited or cancelled subsequent to the end of the reporting period and as at the date of this report.



## Performance Right holdings of Directors and other Key Management Personnel

The movement during the reporting period in the number of Rights over Shares in the Company held directly, indirectly or beneficially, by each Director and other members of the Key Management Personnel, including their related parties, is listed below.

	HELD AT 1 JANUARY 2022	GRANTED AS COMPENSATION	EXERCISED	LAPSED/ FORFEITED	HELD AT 31 DECEMBER 2022
<b>DIRECTORS</b>					
Bryn Jones	1,000,000	-	(1,000,000)	-	-
Timothy Wise	1,000,000	-	(1,000,000)	-	-
<b>TOTAL</b>	<b>2,000,000</b>	<b>-</b>	<b>(2,000,000)</b>	<b>-</b>	<b>-</b>

2,000,000 Rights, previously issued as compensation to Key Management Personnel, were vested and exercised into an equivalent number of Shares.

No further Rights have been issued, exercised into Shares, forfeited or cancelled since the end of the reporting period and as at the date of this report.

## Unissued shares under options and performance rights

At the date of this report, there are 16,229,334 Options and zero Rights on issue. Refer to Note 18 for further details of the Options outstanding as at 31 December 2022.

## Shares issued during or since the end of the reporting period as a result of exercise of options and performance rights

During the reporting period:

- 8,650,000 Options, exercisable at \$0.075 each were exercised into Shares; and
- 3,000,000 Performance Rights vested and were exercised into Shares.

No further Shares have been issued since the end of the reporting period as a result of exercise of Options or Rights.

## Environmental legislation

EntX's operations are not subject to any particular or significant environmental regulation under a law of the Commonwealth or of a State or Territory in Australia.

# Directors Report

## Indemnities given to, insurance premiums paid for, auditors and officers

During the reporting period, entX paid a premium to insure officers of the Group. The officers of the Group covered by the insurance policy include all Directors and Officers of the Company.

The liabilities insured are legal costs that may be incurred in defending civil or criminal proceedings that may be brought against the officers in their capacity as officers of the Group, and any other payments arising from liabilities incurred by the officers in connection with such proceedings, other than where such liabilities arise out of conduct involving a wilful breach of duty by the officers or the improper use by the officers of their position or of information to gain advantage for themselves or someone else to cause detriment to the Group.

Details of the amount of the premium paid in respect of the insurance policies are not disclosed as such disclosure is prohibited under the terms of the contract.

The Group has not otherwise, during or since the end of the reporting period, except to the extent permitted by law, indemnified or agreed to indemnify any current or former officer or auditor of the Group against a liability incurred as such by an officer or auditor.

## Proceedings on behalf of the company

No person has applied to the Court under section 237 of the Corporations Act 2001 for leave to bring proceedings on behalf of the Company, or to intervene in any proceedings to which the Company is a party, for the purpose of taking responsibility on behalf of the Company for all or part of those proceedings.

## Non-audit services

Details of the amounts paid or payable to the auditor for services provided during the financial year by the auditor, Grant Thornton Audit Pty Ltd, are outlined in Note 23 to the financial statements.

The Directors are satisfied that the provision of non-audit services during the financial year, by the auditor (or by another person or firm on the auditor's behalf), is compatible with the general standard of independence for auditors imposed by the Corporations Act 2001.

The Directors are of the opinion that the services as disclosed in Note 23 to the financial statements do not compromise the external auditor's independence requirements of the Corporations Act 2001 for the following reasons:

- all non-audit services have been reviewed and approved to ensure that they do not impact the integrity and objectivity of the auditor; and
- none of the services undermine the general principles relating to auditor independence as set out in APES 110 Code of Ethics for Professional Accountants issued by the Accounting Professional and Ethical Standards Board, including reviewing or auditing the auditor's own work, acting in a management or decision-making capacity for the Company, acting as advocate for the Company or jointly sharing economic risks and rewards.

## Auditor's independence declaration

A copy of the Auditor's Independence Declaration as required under section 307C of the Corporations Act 2001 is included on page 33 of this annual report and forms part of this Directors' Report.

Signed in accordance with a resolution of Directors.



**Bryn Jones**  
Managing Director

5 April 2023



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**Grant Thornton Audit Pty Ltd**  
Grant Thornton House  
Level 3  
170 Frome Street  
Adelaide SA 5000  
GPO Box 1270  
Adelaide SA 5001  
T +61 8 8372 6666

## Auditor's Independence Declaration

### To the Directors of entX Limited

In accordance with the requirements of section 307C of the *Corporations Act 2001*, as lead auditor for the audit of entX Limited for the year ended 31 December 2022, I declare that, to the best of my knowledge and belief, there have been:

- a no contraventions of the auditor independence requirements of the *Corporations Act 2001* in relation to the audit; and
- b no contraventions of any applicable code of professional conduct in relation to the audit.

GRANT THORNTON AUDIT PTY LTD  
Chartered Accountants

J L Humphrey  
Partner - Audit & Assurance

Adelaide, 5 April 2023

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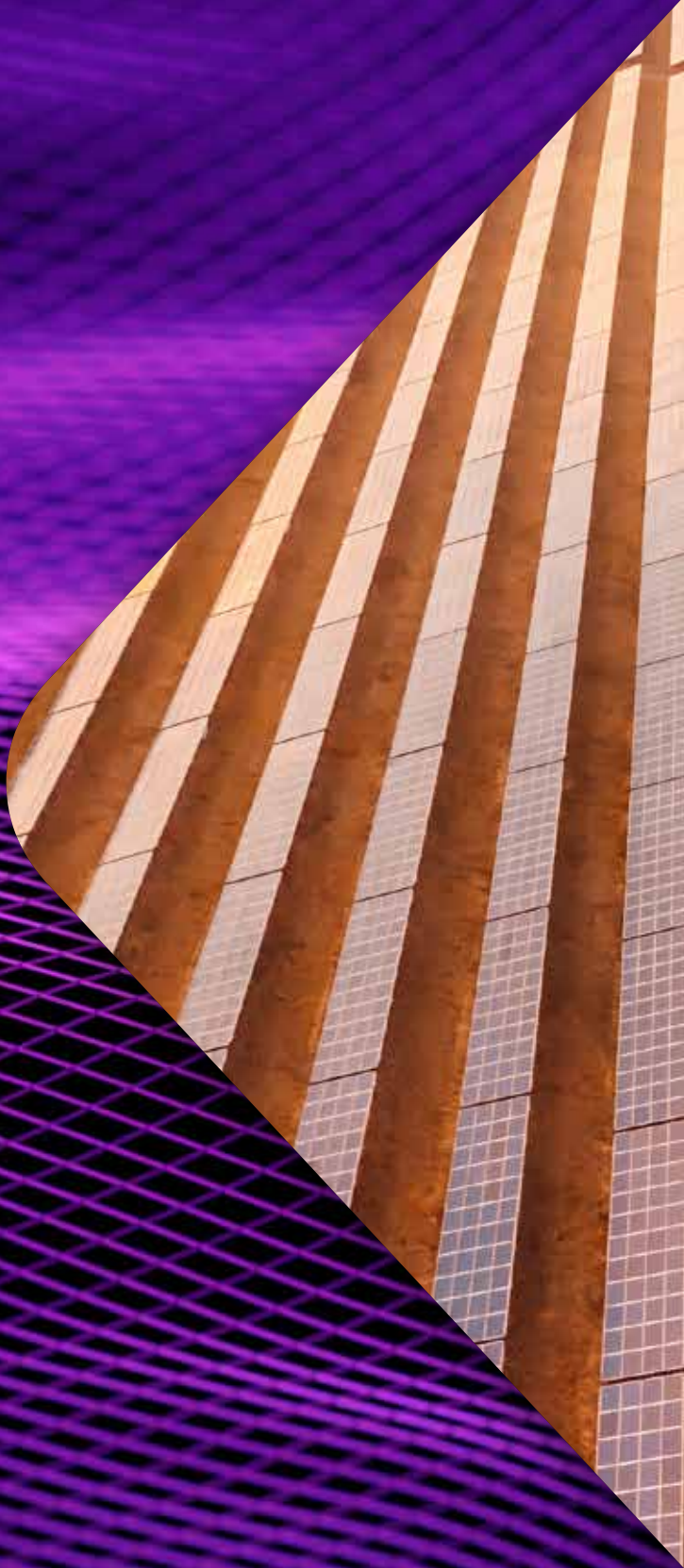
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# Financial Report

For the year ended 31 December 2022





# Statement of profit or loss and other comprehensive income

FOR THE YEAR ENDED 31 DECEMBER 2022

	NOTES	31 DECEMBER 2022 \$	31 DECEMBER 2021 \$
<b>REVENUE</b>			
Revenue from ordinary activities	5(a)	43,692	52,704
Other income	5(b)	1,525,158	173,157
		<b>1,568,850</b>	<b>225,861</b>
<b>EXPENSES</b>			
Depreciation and lease amortisation expense		(138,497)	(55,786)
Amortisation of intangibles		(18,209)	(6,461)
Research and development expenses		(1,657,743)	(480,082)
Corporate consulting and business development expenses		(325,607)	(170,226)
Employee benefits expense		(1,476,554)	(611,426)
Share based payments	18	(439,511)	(205,570)
Other expenses	6	(355,695)	(216,433)
		<b>(4,411,816)</b>	<b>(1,745,984)</b>
<b>Loss before financing costs</b>		<b>(2,842,966)</b>	<b>(1,520,123)</b>
Finance costs		(12,801)	(9,843)
<b>Loss before income tax</b>		<b>(2,855,767)</b>	<b>(1,529,966)</b>
Income tax benefit	7	-	-
<b>Loss attributable to owners of the parent</b>		<b>(2,855,767)</b>	<b>(1,529,966)</b>
<b>Other comprehensive income, net of income tax</b>			
<i>Items that may be reclassified to profit or loss</i>			
Exchange differences on translation of foreign operations – gain / (loss)		(677)	(1,269)
Other comprehensive loss net of tax		<b>(677)</b>	<b>(1,269)</b>
<b>Other comprehensive income, net of income tax</b>		<b>(2,856,444)</b>	<b>(1,531,235)</b>
Basic and diluted loss per share (cents per share)	8	(2.19)	(1.74)

The accompanying notes form part of the financial statements.

# Statement of financial position

AS AT 31 DECEMBER 2022

	NOTES	31 DECEMBER 2022 \$	31 DECEMBER 2021 \$
<b>ASSETS</b>			
<b>Current assets</b>			
Cash and cash equivalents	9	3,169,076	4,686,819
Trade and other receivables	10	1,872,615	239,790
<b>Total current assets</b>		<b>5,041,691</b>	<b>4,926,609</b>
<b>Non-current assets</b>			
Intangible assets	12	361,537	201,894
Property, plant and equipment		58,059	53,080
Right to use asset – office Lease	14	230,014	355,476
<b>Total non-current assets</b>		<b>649,610</b>	<b>610,450</b>
<b>Total assets</b>		<b>5,691,301</b>	<b>5,537,059</b>
<b>LIABILITIES</b>			
<b>Current liabilities</b>			
Trade and other payables	13	392,824	152,878
Deferred income	5(b), 26	1,343,558	49,278
Lease liability	14	124,070	115,356
Employee benefits	17	519,094	157,647
<b>Total current liabilities</b>		<b>2,379,546</b>	<b>475,159</b>
<b>Non-current liabilities</b>			
Lease liability	14	130,857	265,108
Employee benefits	17	2,967	678
<b>Total non-current liabilities</b>		<b>133,824</b>	<b>265,786</b>
<b>Total liabilities</b>		<b>2,513,370</b>	<b>740,945</b>
<b>NET ASSETS</b>		<b>3,177,931</b>	<b>4,796,114</b>
<b>EQUITY</b>			
Issued capital	15	9,512,854	8,714,104
Reserves	16	919,258	537,055
Accumulated losses		(7,254,181)	(4,455,045)
<b>Total Equity</b>		<b>3,177,931</b>	<b>4,796,114</b>

The accompanying notes form part of the financial statements.

# Consolidated statement of changes in equity

FOR THE YEAR ENDED 31 DECEMBER 2022

31 DECEMBER 2022	ISSUED CAPITAL \$	FOREIGN CURRENCY TRANSLATION RESERVE \$	SHARE BASED PAYMENT RESERVE \$	ACCUMULATED LOSSES \$	TOTAL \$
<b>Balance at 1 January 2022</b>	8,714,104	276,921	260,134	(4,455,045)	4,796,114
Loss for the year	-	-	-	(2,855,767)	(2,855,767)
Other comprehensive loss, net of income tax	-	(677)	-	-	(677)
<b>Total comprehensive loss</b>	-	(677)	-	(2,855,767)	(2,856,444)
Shares issued during the year	798,750	-	-	-	798,750
Share based payments	-	-	439,511	-	439,511
Transfer between equity items	-	-	(56,631)	(56,631)	-
<b>Balance as at 31 December 2022</b>	<b>9,512,854</b>	<b>276,244</b>	<b>643,014</b>	<b>(7,254,181)</b>	<b>3,177,931</b>

31 DECEMBER 2021	ISSUED CAPITAL \$	FOREIGN CURRENCY TRANSLATION RESERVE \$	SHARE BASED PAYMENT RESERVE \$	ACCUMULATED LOSSES \$	TOTAL \$
<b>Balance at 1 January 2021</b>	2,791,452	278,190	54,564	(2,925,079)	199,127
Loss for the year	-	-	-	(1,529,966)	(1,529,966)
Other comprehensive loss, net of income tax	-	(1,269)	-	-	(1,269)
<b>Total comprehensive loss</b>	-	(1,269)	-	(1,529,966)	(1,531,235)
Shares issued during the year	6,195,000	-	-	-	6,195,000
Cost of shares issued during the year	(272,348)	-	-	-	(272,348)
Share based payments	-	-	205,570	-	205,570
<b>Balance as at 31 December 2021</b>	<b>8,714,104</b>	<b>276,921</b>	<b>260,134</b>	<b>(4,455,045)</b>	<b>4,796,114</b>

The accompanying notes form part of the financial statements.

# Consolidated statement of cash flows

FOR THE YEAR ENDED 31 DECEMBER 2022

	NOTES	31 DECEMBER 2022 \$	31 DECEMBER 2021 \$
<b>CASH FLOWS FROM OPERATING ACTIVITIES</b>			
Receipts from customers		171,889	103,674
Grant income received		636,794	66,000
Research and development tax concession		435,863	-
Interest received		9,387	13
Payments to suppliers and employees		(3,260,097)	(1,423,667)
<b>Net cash outflows from operating activities</b>	25	<b>(2,006,164)</b>	<b>(1,253,980)</b>
<b>CASH FLOWS FROM INVESTING ACTIVITIES</b>			
Payments for property, plant and equipment		(18,013)	(54,209)
Payments for intellectual property assets		(153,978)	(146,395)
<b>Net cash inflows/(outflows) from investing activities</b>		<b>(171,991)</b>	<b>(200,604)</b>
<b>CASH FLOWS FROM FINANCING ACTIVITIES</b>			
Repayment of lease liability	14	(138,338)	(34,069)
Proceeds from issue of shares	15	798,750	6,195,000
Payments for the costs of shares issued		-	(272,348)
Proceeds of loans from directors	19	-	100,000
Re-payment of loans from directors	19	-	(100,000)
Interest paid		-	(3,062)
<b>Net cash inflows from financing activities</b>		<b>660,412</b>	<b>5,885,521</b>
Net (decrease) / increase in cash and cash equivalents		(1,517,743)	4,430,937
Cash and cash equivalents at beginning of the period		4,686,819	256,972
Effect of exchange rate fluctuations on cash held – gain/ (loss)		-	(1,090)
<b>Cash and cash equivalents at 31 December</b>	9	<b>3,169,076</b>	<b>4,686,819</b>

The accompanying notes form part of the financial statements.

# Notes to the consolidated financial statements

FOR THE YEAR ENDED 31 DECEMBER 2022

## Basis of preparation

**Note 1:** Corporate information

**Note 2:** Reporting entity

**Note 3:** Basis of preparation

## Basis of performance for the year

**Note 4:** Segment reporting

**Note 5:** Revenue and other income

**Note 6:** Other expenses

**Note 7:** Income tax

**Note 8:** Loss per share

## Assets

**Note 9:** Cash and cash equivalents

**Note 10:** Trade and other receivables

**Note 11:** Investment in associate

**Note 12:** Intangible assets

## Liabilities and equity

**Note 13:** Trade and other payables

**Note 14:** Right-of-use assets and lease liabilities

**Note 15:** Issued capital

**Note 16:** Reserves

## Employee benefits and Share-based payments

**Note 17:** Employee benefits

**Note 18:** Share-based payments

**Note 19:** Key management personnel disclosures

## Financial instruments

**Note 20:** Financial instruments

## Group composition

**Note 21:** Parent entity

**Note 22:** List of subsidiaries

## Liabilities and equity

**Note 23:** Auditor's remuneration

**Note 24:** Related parties

**Note 25:** Cashflow information

**Note 26:** Commitments and contingencies

**Note 27:** Events subsequent to reporting date

## Accounting policies

**Note 28:** Goods and Services Taxes (GST)

**Note 29:** Changes in accounting policies

**Note 30:** Adoption of new and revised accounting standards

## Basis of preparation

This Section of the financial report sets out the Group's (being entX Limited and its controlled entities) accounting policies that relate to the Financial Statements as a whole. Where the accounting policy is specific to one Note, the policy is described in the Note to which it relates.

The Notes include information which is required to understand the Financial Statements and is material and relevant to the operations and the financial position and performance of the Group.

Information is considered relevant and material if:

- The amount is significant due to its size or nature
- The amount is important in understanding the results of the Group
- It helps to explain the impact of significant changes in the Group's business
- It relates to an aspect of the Group's operations that is important to its future performance.

## NOTE 1 – Corporate information

The consolidated financial report of entX Limited for the year ended 31 December 2022 was authorised for issue in accordance with a resolution of Directors on 5 April 2023.

entX is founded on a portfolio of innovative technologies delivering clean energy solutions and capability across the space and defence, green hydrogen, industrial decarbonisation and nuclear medicine sectors.

## Note 2 – Reporting entity

The consolidated financial report comprises the financial statements of entX Limited ("Company" or "Parent" or "entX") and its subsidiaries ("the Group") for the year ended 31 December 2022. A list of the Group's subsidiaries is provided at Note 22.

## NOTE 3 – Basis of preparation

The financial report is a general purpose financial report which has been prepared in accordance with the requirements of the Corporations Act 2001, Australian Accounting Standards and other authoritative pronouncements of the Australian Accounting Standards Board. The financial report also complies with International Financial Reporting Standards (IFRS) as issued by the International Accounting Standards Board.

# Notes to the consolidated financial statements

FOR THE YEAR ENDED 31 DECEMBER 2022

The financial report has been prepared on a historical cost basis, except for financial assets, which have been measured at fair value. Cost is based on the fair values of the consideration given in exchange for certain assets. entX is domiciled in Australia and all amounts are presented in Australian dollars, unless otherwise indicated year ended 31 December 2022.

## (a) Significant accounting judgements, estimates and assumptions

The preparation of a financial report in conformity with Australian Accounting Standards requires management to make judgements, estimates and assumptions that affect the application of policies and reported amounts of assets, liabilities, income and expenses. The estimates and associated assumptions are based on historical experience and various other factors that are believed to be reasonable under the circumstances, the results of which form the basis of making the judgements about carrying values of assets and liabilities that are not readily apparent from other sources. Actual results may differ from these estimates. These accounting policies have been consistently applied by the Group.

Uncertainty about these assumptions and estimates could require a material adjustment to the carrying amount of assets or liabilities affected in future periods. The Group also discloses its exposure to risks and uncertainties in Note 20. 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:

### (i) Share-based payment transactions

The Group measures the cost of equity-settled share-based payments of options at fair value at the grant date using a Black-Scholes Option model and performance rights are measured using a binomial model, taking into account the terms and conditions upon which the instruments were granted.

The details and assumptions used in determining the value of these transactions are detailed in Note 18.

### (ii) Non-market vesting conditions

At each reporting date non-market vesting conditions in relation to performance rights are assessed in order to determine the probability of the likelihood that the non-market vesting conditions are met.

## (b) Foreign currency translation

The functional currency of the Company is Australian dollars (AUD) and the functional currency of subsidiaries based in the United States of America is United States Dollars (USD).

The Group's consolidated financial statements are presented in Australian Dollars (AUD), which is also the parent company's functional currency. Transactions in foreign currencies are initially recorded in the functional currency by applying the exchange rates ruling at the date of the transaction. Monetary assets and liabilities denominated in foreign currencies are retranslated at the functional currency spot rates of exchange at the reporting date.

All exchange differences in the consolidated financial report are taken to profit or loss as incurred. Non-monetary items that are measured in terms of historical cost in a foreign currency are translated at exchange rates as at the date of the initial transaction. As at the balance date the assets and liabilities of foreign subsidiaries are translated into the presentation currency of PhosEnergy at the rate of exchange ruling at the balance date and profit or loss is translated at the average exchange rate for the year. The exchange differences arising on the translation are recognised in the foreign currency translation reserve in equity.

## (c) Impairment of assets other than financial assets

At each reporting date, the Group assesses whether there is any indication that an asset may be impaired. Where an indicator of impairment exists, or when annual impairment testing for an asset is required, the Group makes a formal estimate of recoverable amount. An asset's recoverable amount is the higher of an asset's or cash generating unit's (CGU's) fair value less costs of disposal and its value in use.

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. In determining fair value less costs of disposal, recent market transactions are taken into account. If no such transactions can be identified, an appropriate valuation model is used.

Impairment losses are recognised in the statement of profit or loss in expense categories consistent with the function of the impaired asset unless the asset has previously been revalued, in which case the impairment loss is recognised as a reversal to the extent of that previous revaluation with any excess recognised through the statement of profit or loss. Receivables with a short duration are not discounted.

# Notes to the consolidated financial statements

FOR THE YEAR ENDED 31 DECEMBER 2022

## Note 4 – Segment reporting

The Directors have considered the requirements of AASB 8 – Operating Segments and the internal reports that are reviewed by the chief operating decision maker (the Board) in allocating resources and have concluded that at this time there are no separately identifiable segments.

## Note 5 – Revenue and other income

### a) Revenue

	31 DECEMBER 2022 \$	31 DECEMBER 2021 \$
Management fees	43,692	52,704

The Group's revenue comprises management fees charged to Urtek LLC. Refer to Note 11 for details in relation to Urtek LLC and to Note 24 for details in relation to the management services provided to Urtek LLC.

### b) Other Income

	31 DECEMBER 2022 \$	31 DECEMBER 2021 \$
Research and development tax concession <sup>1</sup>	765,427	100,436
Grant income	600,044	16,722
Rental income – shared corporate office	150,194	55,854
Interest income	9,387	56
Foreign exchange gain	106	89
	<b>1,525,158</b>	<b>173,157</b>

<sup>1</sup> Represents the research and development tax concession amounts for:

- FY21 claim received during the reporting period (\$335,427); and
- Estimate of claim for FY22 based on research and development expenditure for the year ended 31 December 2022 (\$430,000).

## Accounting Policies

### Research and development (R&D) tax concession

The Group is entitled to claim R&D tax incentives in Australia. The R&D tax incentive is calculated using the estimated eligible expenditures multiplied by a 43.5% non-refundable tax offset. It has been established that the conditions of the R&D incentive have been met and that the expected amount of the incentive can be reliably measured. Estimated amounts receivable are recognised as research and development tax concession income.

### Government and other Grant Income

Government and other grants are not recognised until there is reasonable assurance that the Group will comply with the conditions attaching to them and that the grants will be received. Government grants shall be recognised as income over the periods necessary to match them with the related costs which they are intended to compensate on the systematic basis. Government grants that are receivable as compensation for expenses or losses already incurred or for the purpose of giving immediate financial support to the Group with no future related costs are recognised in profit or loss in the period in which they become receivable.

# Notes to the consolidated financial statements

FOR THE YEAR ENDED 31 DECEMBER 2022

## Note 6 – Other expenses

	31 DECEMBER 2022 \$	31 DECEMBER 2021 \$
Compliance	45,342	17,856
Legal, insurance, share registry	75,575	87,905
Travel expenses	89,838	46,422
Share registry	37,435	7,157
Other expenses	107,505	57,093
	<b>355,695</b>	<b>216,433</b>

# Notes to the consolidated financial statements

FOR THE YEAR ENDED 31 DECEMBER 2022

## Note 7 – Income tax

The prima facie income tax benefit on pre-tax accounting profit/(loss) from operations reconciles to the income tax benefit in the financial statements as follows:

	31 DECEMBER 2022 \$	31 DECEMBER 2021 \$
Accounting loss before income tax	(2,855,767)	(1,529,966)
Income tax benefit calculated at 25% (2021: 25%)	(713,942)	(382,492)
<b>Tax effect of amounts which are not deductible/(taxable) in calculating taxable income:</b>		
Non-Deductible expenses	358,251	87,186
Current and deferred tax expense not recognised	547,047	320,415
Non-assessable income	(191,357)	(25,109)
Income tax expense benefit on profit/(loss) before tax reported in the Consolidated Statement of Profit or Loss and Other Comprehensive Income	-	-

The tax rate used in the above reconciliation is the corporate tax rate of 25% payable by Australian corporate entities on taxable profits under Australian tax law.

### Unrecognised deferred tax assets

Deferred tax assets have not been recognised in respect of the following items:

	31 DECEMBER 2022 \$	31 DECEMBER 2021 \$
Unrecognised tax losses – Revenue	3,177,115	1,805,938
Unrecognised deferred tax asset on unused tax losses	794,279	451,484

These tax losses may be available for offset against future taxable profits of the Group subject to continuing to meet the relevant statutory tests.

### Accounting policy

The income tax expense or benefit for the period is the tax payable on the current period's taxable income based on the applicable income tax rate for each jurisdiction adjusted by changes in deferred tax assets and liabilities attributable to temporary difference and to unused tax losses.

The tax losses do not expire under current tax legislation. Deferred tax assets have not been recognised in respect of these items because it is not probable that future taxable profit will be available against which the Group can utilise the benefits thereof.

Current tax assets and liabilities for the current and prior periods are measured at the amount expected to be recovered from or paid to the taxation authorities. The tax rates and tax laws used to compute the amount are those that are enacted or substantively enacted by the balance date. 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.

Income taxes relating to items recognised directly in equity are recognised in equity and not in profit or loss. Deferred tax assets and deferred tax liabilities are offset only if a legally enforceable right exists to set off current tax assets against current tax liabilities.

# Notes to the consolidated financial statements

FOR THE YEAR ENDED 31 DECEMBER 2022

## Note 8 – Loss per share

### Basic and diluted loss per share

The calculation of basic loss per share for the year ended 31 December 2022 was based on the loss attributed to ordinary equity holders of the parent of \$2,855,767 (2021: Loss of \$1,529,966) and a weighted average number of ordinary shares outstanding during the year ended 31 December 2022 of 130,109,253 (2021: 87,742,527).

## Note 9 – Cash and cash equivalents

	31 DECEMBER 2022 \$	31 DECEMBER 2021 \$
Cash at bank and on hand	3,169,076	4,686,819

### Accounting policy

Cash and cash equivalents in the statement of financial position comprise cash balances which are subject to an insignificant risk of changes in value. The carrying value of cash and cash equivalents is considered to be approximate fair value.

## Note 10 – Trade and other receivables

	NOTE	31 DECEMBER 2022 \$	31 DECEMBER 2021 \$
Trade receivables <sup>1</sup>	26	1,419,028	-
Research and development tax concession <sup>2</sup>		430,000	100,436
Prepayments		23,587	120,582
Other receivables		-	18,772
		<b>1,872,615</b>	<b>239,790</b>

1 \$1,383,283 of this amount relates to the first progress invoice raised under the Government Services Agreement. Refer to Note 26 for details.

2 Estimate of claim for FY22 based on research and development expenditure for the year ended 31 December 2022.

### Accounting policy

Trade and other receivables are measured at fair value which is usually the value of the invoice sent to the counterparty and subsequently at the amounts considered recoverable (amortised cost less expected credit losses). Trade receivables are generally due for settlement within periods ranging from 15 days to 30 days and are not discounted for expected losses.

# Notes to the consolidated financial statements

FOR THE YEAR ENDED 31 DECEMBER 2022

## Note 11 – Investment in associate

The Company and Cameco Corporation developed a process for the extraction of uranium from phosphoric acid streams produced in the production of phosphate-based fertilisers, 'the PhosEnergy Process'. Urtek LLC, a USA incorporated company is the entity in which the research and development is being undertaken. UFP Investments LLC (UFP), a USA incorporated company in which the Company has a legal and beneficial interest of 28.66%, holds the joint investment of 90% in Urtek LLC with Cameco owning the remaining 10% directly.

The beneficial ownership in the PhosEnergy Process held through Urtek LLC is Cameco Corporation 74.21% (2021: 74.21%); PhosEnergy Inc. 25.79% (2021: 25.79%).

The share of the associate's losses for the year is US\$15,687 (31 December 2021: US\$18,494), which has not been recognised as the carrying amount of the Company's equity accounted interest in this associate is \$0 (31 December 2021: \$0). The associate's net assets as at 31 December 2022 is US\$29,701 (31 December 2021: US\$81,583).

### Accounting policy

An associate is an entity over which the Group has significant influence. Significant influence is the power to participate in the financial and operating decisions of the investee but is not control or joint control over those policies.

The Group's investment in its associate is accounted for using the equity method of accounting in the consolidated financial statements, after initially being recognised at cost. The requirements of AASB 139 are applied to determine whether it is necessary to recognise any impairment loss with respect to the Group's investment in associate. Any impairment loss recognised forms part of the carrying amount of the investment. When the Group's share of losses in an associate equals or exceeds its interest in the associate, including any unsecured long-term receivable and loans, the Group does not recognise further losses, unless it has incurred obligations or made payments on behalf of the associate.

## Note 12 – Intangible assets

	31 DECEMBER 2022 \$	31 DECEMBER 2021 \$
Cost	391,937	214,085
Accumulated amortisation	(30,400)	(12,191)
<b>Net carrying amount</b>	<b>361,537</b>	<b>201,894</b>
<b>Reconciliation of intangible assets</b>		
Carrying amount at the beginning of the year	201,894	61,961
Additions	177,852	146,395
Amortisation charges for the year	(18,209)	(6,462)
<b>Carrying amount at the end of the year</b>	<b>361,537</b>	<b>201,894</b>

Intangible assets consist of the patent and intellectual property associated with the CarbonX Process, GenX devices and GenT Energy Units measured at cost. Additional capitalised costs during the year ended 31 December 2022 mostly comprised of international patent application filing costs for the GenX Betavoltaic device patents.

# Notes to the consolidated financial statements

FOR THE YEAR ENDED 31 DECEMBER 2022

## Note 12 – Intangible assets continued

### Accounting policy

An intangible asset is recognised if it is probable that the expected future economic benefits that are attributable to the asset will flow to the entity and can be measured reliably. The asset must be identifiable i.e. is capable of being separated or divided from the entity and sold or transferred. No intangible asset arising from research (or from the research phase of an internal project) shall be recognised.

After initial recognition, an intangible asset shall be carried at its cost less any accumulated amortisation and any accumulated impairment losses. Amortisation is recognised in the Statement of Comprehensive Income on a straight-line basis over the estimated useful life of the intangible asset. The estimated useful life of the CarbonX Process is 20 years, being the term of the patent. The estimated useful life of the GenT Energy Units is 20 years, being the term of the patent. The estimated useful life of the GenX Betavoltaic devices is 20 years, being the term of the patent.

## Note 13 – Trade and other payables

	31 DECEMBER 2022 \$	31 DECEMBER 2021 \$
Trade payables	142,204	81,912
Accrued expenses	117,360	40,859
Other payables	133,260	30,107
	<b>392,824</b>	<b>152,878</b>

### Accounting policy

Trade and other payables are carried at amortised cost and represent liabilities for goods and services provided to the Group prior to the end of the financial year that are unpaid and arise when the Group becomes obliged to make future payments in respect of the purchase of these goods and services. Trade and other payables are presented as current liabilities as they are part of the working capital used in the entities operating cycle.

# Notes to the consolidated financial statements

FOR THE YEAR ENDED 31 DECEMBER 2022

## Note 14 – Right-of-use assets and lease liabilities

	31 DECEMBER 2022 \$	31 DECEMBER 2021 \$
<b>LEASE LIABILITIES</b>		
Opening balance	(380,464)	(407,752)
Interest during the year	(12,801)	(6,781)
Lease payment during the year	138,338	34,069
<b>Balance at the end of the year</b>	<b>(254,927)</b>	<b>(380,464)</b>
Classified as:		
Current	(124,070)	(115,356)
Non-current	(130,857)	(265,108)
	<b>(254,927)</b>	<b>(380,464)</b>
<b>RIGHT-OF-USE ASSET</b>		
Balance on initial recognition	407,752	407,752
<i>Accumulated amortisation</i>		
Balance at the beginning of the year	(52,276)	-
Amortisation during the year	(125,462)	(52,276)
Balance at the end of the year	(177,738)	(52,276)
<b>Balance at the end of the year</b>	<b>230,014</b>	<b>355,476</b>

The Group has entered into a lease contract for commercial offices in Adelaide, South Australia. With the exception of short-term leases and leases of low value underlying assets, each lease is reflected on the statement of financial position as a right-of-use asset and a lease liability.

Where a lease has an extension option the Group has used its judgement to determine whether or not an option would be reasonably certain to be exercised. The Group considers all facts and circumstances including any significant improvements, current stage of projects, location, and their past practice to help them determine the lease term. The Group has not included the current extension option in determining the lease term. The Adelaide office lease has a term of 3 years (from August 2021), with an option to extend for a further 5 years.

Lease liability was measured at the present value of the remaining lease payments, discounted using the lessee's incremental borrowing rate at commencement date of the lease. The weighted average incremental borrowing rate applied to the lease liability was 4.1%.

In the consolidated statement of cash flows, the Group has recognised cash payments for the principal portion of the lease liability within financing activities, cash payments for the interest portion of the lease liability as interest paid within operating activities and short-term lease payments and payments for lease of low-value assets within operating activities.

# Notes to the consolidated financial statements

FOR THE YEAR ENDED 31 DECEMBER 2022

## Note 15 – Issued capital

The capital structure of the Group consists of issued capital, reserves and accumulated losses. Ordinary shares are classified as equity. Incremental costs directly attributable to the issue of new Shares or Options are shown in equity as a deduction, from the proceeds.

### a) Movement in ordinary shares on issue

	31 DECEMBER 2022		31 DECEMBER 2021	
	NUMBER	\$	NUMBER	\$
<b>Balance at beginning of period</b>	<b>120,037,609</b>	<b>8,714,104</b>	<b>58,087,609</b>	<b>2,791,452</b>
Shares issued – Placement	1,500,000	150,000	41,950,000	4,195,000
Shares issued – Entitlement Offer and Additional Offer	-	-	20,000,000	2,000,000
Transaction costs on issue of shares	-	-	-	(272,348)
Shares issued – exercise of options	8,650,000	648,750	-	-
Shares issued - vested performance rights	3,000,000	-	-	-
<b>Balance at end of period</b>	<b>133,187,609</b>	<b>9,512,854</b>	<b>120,037,609</b>	<b>8,714,104</b>

#### Placement

During the year, 1,500,000 Shares were issued to a third party service provider. The issue price of the Shares was \$0.10, raising \$150,000.

#### Exercise of Options

8,650,000 Shares issued following the exercise of Options during the year, raising \$648,750. The Options had an exercise price of \$0.075 each and expiry date of 31 March 2022.

#### Vested Performance Rights

During the year 3,000,000 Shares issued following the vesting and exercise of an equivalent number of Performance Rights. No funds were raised from the issue of these Shares.

#### Rights attaching to ordinary shares

Ordinary shares entitle the holder to participate in dividends and the proceeds on winding up of the Company in proportion to the number of and amounts paid on the shares held.

On a show of hands every holder of ordinary shares present at a meeting in person or by proxy, is entitled to one vote, and upon a poll each ordinary share is entitled to one vote.

Ordinary shares have no par value and the Company does not have a limited amount of authorised capital.

# Notes to the consolidated financial statements

FOR THE YEAR ENDED 31 DECEMBER 2022

## Note 16 – Reserves

### a) Share based payments reserve

The share-based payments reserve is used to recognise the value of equity-settled share-based payment transactions provided to Directors, other Key Management Personnel, staff and consultants. Refer to Note 18 for further details.

	31 DECEMBER 2022 \$	31 DECEMBER 2021 \$
Share based payment reserve	643,014	260,134
<b>Movement associated with Rights and Options during the period</b>		
Balance at the beginning of the period	260,134	54,564
Options granted	439,511	205,570
Transfer between equity items	(56,631)	-
Balance at the end of the period	643,014	260,134

The share-based payments reserve records items recognised as an expense on the valuation of Options or Rights. Refer Note 18 for further details regarding the movement in Options issued during the reporting period.

The Company did not issue any Rights during the year ended 31 December 2022 (2021: Nil).

### b) Foreign currency translation reserve

The foreign currency translation reserve is used to record the exchange differences arising from the translation of the financial statements of foreign subsidiaries.

	31 DECEMBER 2022 \$	31 DECEMBER 2021 \$
Foreign currency translation reserve	276,244	276,921

# Notes to the consolidated financial statements

FOR THE YEAR ENDED 31 DECEMBER 2022

## Note 17 – Employee benefits

	31 DECEMBER 2022 \$	31 DECEMBER 2021 \$
<b>Current</b>		
Annual leave accrued	79,878	50,080
Long Service Leave accrued	51,716	42,634
Bonuses accrued	387,500	64,933
	<b>519,094</b>	<b>157,647</b>
<b>Non-current</b>		
Long Service Leave accrued	2,967	678
	<b>2,967</b>	<b>678</b>

### Accounting policy

Liabilities for annual leave expected to be settled within 12 months of the balance date are recognised in other payables in respect of employees' services up to the balance date. They are measured at the amounts expected to be paid when the liabilities are settled.

Provision is made for the Company's liability for employee benefits arising from services rendered by employees to reporting date. Employee benefits that are expected to be settled wholly within one year have been measured at the amounts expected to be paid when the liability is settled, plus related on-costs. Employee benefits payable later than one year have been measured at the present value of the estimated future cash outflows to be made for these benefits. Those cashflows are discounted using market yields on high quality corporation bonds with terms to maturity that match the expected timing of cashflows.

# Notes to the consolidated financial statements

FOR THE YEAR ENDED 31 DECEMBER 2022

## Note 18 – Share based payments

### a) Recognised share-based payment expense

The expense recognised during the year is shown in the table below:

	31 DECEMBER 2022 \$	31 DECEMBER 2021 \$
Share options	439,511	205,570

Share-based payments expense recognised on the Statement of Profit or Loss and Other Comprehensive income as 'Share based payments' during the year, was in relation to Options previously issued that were subject to vesting conditions. The expense recognised during the year is impacted by estimates in relation to timing and likelihood of vesting.

### b) General terms of share-based payments

#### Options

The following table outlines the details of outstanding Options at 31 December 2022:

OTHER TERMS	NO. OF OPTIONS	EARLIEST VESTING DATE
<p><b>Exercise Price</b> Each Option is exercisable at price equal to the issue price of Shares in the Company to be offered pursuant to the Prospectus for an Initial Public Offering of the Company.<sup>1</sup></p> <p><b>Expiry Date</b> Each Option expires on the third anniversary of the date of the Company's admission to the official list of ASX. 1</p> <p><i>In the event the recipient (who has been assisting with tasks relating to possible listing on ASX) is no longer an eligible person, these Options will lapse in accordance with the rules of the Company's Employee Incentive Plan.</i></p>	<ul style="list-style-type: none"> <li>▪ 250,000 will vest on the date of the Company's admission to the official list of ASX;</li> <li>▪ 250,000 will vest 12 months from the date of the Company's admission to the official list of ASX; and</li> <li>▪ 250,000 will vest 24 months from the date of the Company's admission to the official list of ASX.</li> </ul>	<p style="text-align: center;">Date of the Company's admission to the official list of ASX<sup>1</sup></p>
Exercisable at \$0.145, expiry 31 December 2024	2,250,003	31 Dec 21
Exercisable at \$0.145, expiry 31 December 2024	2,249,999	31 Dec 22
Exercisable at \$0.145, expiry 31 December 2024	2,249,998	31 Dec 23
Exercisable at \$0.04, expiry 31 December 2024	250,000	31-Dec-21

# Notes to the consolidated financial statements

FOR THE YEAR ENDED 31 DECEMBER 2022

## b) General terms of share-based payments continued

OTHER TERMS	NO. OF OPTIONS	EARLIEST VESTING DATE
<p><b>Incentive options</b> Options vest subject to satisfaction of performance criteria over the period to the expiry date. Options not vested by the expiry date, will lapse. Performance criteria for the Incentive Options relate to the achievement of corporate and key project milestones. As at 31 December 2022, none of these options have vested.</p> <p>Exercisable at \$0.04, expiry 31 December 2024</p>	500,000	31-Dec-21
<p><b>Short-term incentive (STI) options</b> Options vested subject to satisfaction of performance criteria for the performance period ended 31 December 2021. Unvested Options lapse. Performance criteria for the STI Options related to the achievement of short-term corporate and technical milestones. During the year, 629,334 options vested and 1,181,082 lapsed.</p> <p>Exercisable at \$0.04, expiry 31 December 2024</p>	629,334	31 Dec 21
<p><b>Long-term incentive (LTI) options</b> Options vest subject to satisfaction of performance criteria for the performance period ended 31 December 2023. Unvested Options lapse. Performance criteria for the LTI Options relate to the achievement of long-term corporate and technical milestones. As at 31 December 2022, none of these options have vested.</p> <p>Exercisable at \$0.04, expiry 31 December 2024</p>	7,350,000	31 Dec 23
	<b>16,229,334</b>	

<sup>1</sup> The Company may make a future application to the ASX for admission to the Official List. There is no guarantee that an application will be made in the future. There can also be no certainty that any such application would be successful.

# Notes to the consolidated financial statements

FOR THE YEAR ENDED 31 DECEMBER 2022

## Note 18 – Share based payments continued

The movement in the number of options and weighted average exercise prices are as follows for the reporting period:

	WEIGHTED AVERAGE EXERCISE PRICE	31 DECEMBER 2022	WEIGHTED AVERAGE EXERCISE PRICE	31 DECEMBER 2021
<b>Balance at the beginning of the period</b>	<b>\$0.080</b>	<b>26,910,416</b>	<b>\$0.075</b>	<b>10,250,000</b>
Granted during the period	-	750,000	\$0.083	16,660,416
Exercised during the period	\$0.075	(8,650,000)	-	-
Lapsed/forfeited during the period	\$0.060	(2,781,082)	-	-
<b>Balance at the end of the period</b>	<b>\$0.086</b>	<b>16,229,334</b>	<b>\$0.080</b>	<b>26,910,416</b>
Vested and exercisable at the end of the period	\$0.128	5,379,336	\$0.087	12,570,003

Weighted average remaining contractual life of Options as at 31 December 2022 is 1.91 years (31 December 2021: 1.95 years), excluding the 750,000 Options granted during the year where the expiry date is unknown.

### Options granted during the year

On 24 March 2022, 750,000 Options were issued, at nil cost, to an eligible employee of the Company. Each option is exercisable at a price equal to the issue price of Shares in the Company to be offered pursuant to the Prospectus for an Initial Public Offering of the Company and expire on the third anniversary of the date of the Company's admission to the official list of ASX. The Options vest as follows:

- 250,000 vest on the date of the Company's admission to the official list of ASX;
- 250,000 vest 12 months from the date of the Company's admission to the official list of ASX; and
- 250,000 vest 24 months from the date of the Company's admission to the official list of ASX.

During the reporting period the Company progressed activities to support a possible future application and admission to the official list of ASX. There is no guarantee that an application will be made in the future. There can also be no certainty that any such application would be successful. As at 31 December 2022 and as at the date of this report the Company has not listed on the ASX and does not have an application pending.

Given the Option particulars (exercise price, expiry and vesting dates) are contingent on the Company's admission to the official list of ASX, the Company has concluded that the fair value of the Options is unable to be reliably valued and as such no amount has been recorded in the Statement of Profit or Loss and Other Comprehensive Income for the year ended 31 December 2022. The Company will continue to reassess the fair value of these options as circumstances change; in particular when there is greater certainty regarding the possibility of the Company being admitted to the official list of ASX.

### Options exercised during the year

8,650,000 Options, exercisable at \$0.075 each and expiring on 31 March 2022, were exercised into an equivalent number of fully paid ordinary Shares in the Company.

### Options lapsed/forfeited during the year

1,650,000 Options, exercisable at \$0.075 each and expiring on 31 March 2022, expired and lapsed unexercised.

A further 1,181,082 STI Options, exercisable at \$0.04 and expiring on 31 December 2024, lapsed during the year, following an assessment against the performance criteria for the performance period ended 31 December 2021. The performance criteria for the STI Options related to the achievement of short-term corporate and technical milestones.

## Note 18 – Share based payments continued

### Performance rights (Rights)

During the year 3,000,000 Rights vested and were exercised into an equivalent number of Shares in the Company following an assessment against the respective performance conditions. The Rights were granted to key executives of the Company in 2019 for no consideration and had an expiry date of 31 March 2022.

No Rights were issued during the year.

### Accounting policy

The cost of share-based payments is recognised as an expense in the Statement of Profit or Loss and Other Comprehensive Income, together with a corresponding increase in Share-based Payments Reserve in equity, over the period in which the performance and/or service conditions are fulfilled (the vesting period). The cumulative expense recognised for equity-settled transactions at each reporting date until the vesting date reflects the extent to which the vesting period has expired and the Group's best estimate of the number of equity instruments that will ultimately vest. No adjustment is made for the likelihood of market performance conditions being met as the effect of these conditions is included in the determination of fair value at grant date. The charge or credit for a period represents the movement in cumulative expense recognised as at the beginning and end of that period.

Non-market performance conditions are not taken into account in the grant date fair value measurement of the services received. Where the grant of the Options is a replacement for the cancellation of Options, any incremental fair value in addition to the fair value of the original award is accounted for. The incremental fair value is the difference between the fair value of the replacement award and the net fair value of the cancelled award measured at the date the replacement award is issued.

The Group measures the cost of equity-settled share based payments at fair value at the grant date using a Black Scholes options pricing model taking into account the terms and conditions upon which the instruments were granted. The dilutive effect, if any, of outstanding Options is reflected as additional share dilution in the computation of earnings per share.

The fair value of Rights has been calculated at the grant date and allocated to each reporting period evenly over the period from grant date to vesting date. The value disclosed is the portion of fair value of the rights allocated to this reporting period. The vesting period has been estimated to be three years.

# Notes to the consolidated financial statements

FOR THE YEAR ENDED 31 DECEMBER 2022

## Note 19 – Key Management Personnel disclosures

Details of Key Management Personnel during the reporting period:

### Directors:

<b>Mr Anthony Kiernan</b>	Non-executive Chairman
<b>Mr Bryn Jones</b>	Managing Director
<b>Mr Timothy Goyder</b>	Non-executive Director
<b>Mr Timothy Wise</b>	Non-executive Director
<b>Ms Lucy Gauvin</b>	Non-executive Director
<b>Mr Richard Hacker</b> <sup>1</sup>	Alternate Director (Mr T Goyder)

### Executive:

<b>Mr Damien Connor</b>	Chief Financial Officer and Company Secretary
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<sup>1</sup> Mr Hacker resigned as an alternate director to Mr Goyder on 22 February 2022.

The key management personnel compensation incurred during the year is as follows:

	31 DECEMBER 2022 \$	31 DECEMBER 2021 \$
Short-term employee benefits	762,526	431,519
Long-term employee benefits	9,172	67,845
Post-employment benefits	62,059	34,735
Share based payments	243,306	126,197
	<b>1,077,063</b>	<b>660,296</b>

### Transactions with Key Management Personnel

During the year ended 31 December 2022, Key Management Personnel, including Non-executive Directors, received compensation in the form of short-term employee benefits and post-employment benefits as part of their respective employment arrangements with the Company. As at 31 December 2022, executive personnel received short-term employee benefits of \$762,526 (2021: \$431,519).

During the year ended 31 December 2021, the Company entered into loan agreements on arm's length equivalent terms, for \$50,000 each, with Mr Kiernan and Lotaka Pty Ltd ("Lotaka"), an entity of which Mr Goyder is the sole director. The loans were settled in cash in August 2021.

### Option and performance rights holdings of Key Management Personnel

Options and Rights holdings by Key Management Personnel are detailed in the Directors' report.

# Notes to the consolidated financial statements

FOR THE YEAR ENDED 31 DECEMBER 2022

## Note 20 – Financial instruments

### a) Financial risk management policies

The Group's financial instruments consist mainly of deposits with banks, short-term investments, accounts receivable and payables.

### b) Non-cash financing and investing activities

There were no non-cash financing and investing activities undertaken during the current or prior reporting periods.

### i) Treasury risk management

The Board meets on a regular basis to analyse financial risk exposure and to evaluate treasury management strategies in the context of the most recent economic conditions and forecasts.

The Board's overall risk management strategy seeks to assist the consolidated group in meeting its financial targets, whilst minimizing potential adverse effects on financial performance.

### ii) Financial risk exposure and management

The main risk the group is exposed to through its financial instruments is interest rate risk.

#### Interest rate risk

Interest rate risk is managed with a mixture of fixed and floating rate cash deposits. It is the policy of the group to keep surplus cash in high yielding deposits.

### c) Sensitivity analysis

#### Interest rate and price risk

The Group has performed a sensitivity analysis relating to its exposure to interest rate risk and price risk at reporting date. This sensitivity analysis demonstrates the effect on the current year results and equity which could result from a change in these risks.

#### Interest rate sensitivity analysis

As at 31 December 2022, the effect on loss and equity as a result of changes in the interest rate, with all other variables remaining constant would be as follows:

	31 DECEMBER 2022 \$	31 DECEMBER 2021 \$
<b>Change in loss</b>		
- Increase in interest rates by 2%	63,437	93,736
- Decrease in interest rates by 2%	(63,437)	(93,736)
<b>Change in equity</b>		
- Increase in interest rates by 2%	63,437	93,736
- Decrease in interest rates by 2%	(63,437)	(93,736)

### d) Net fair value of financial assets and liabilities

The net fair value of cash and cash equivalent and non-interest bearing monetary financial assets and financial liabilities of the consolidated entity approximate their carrying value.

The net fair value of other monetary financial assets and financial liabilities is based on discounting future cash flows by the current interest rates for assets and liabilities with similar risk profiles. The balances are not materially different from those disclosed in the balance sheet of the consolidated entity.

# Notes to the consolidated financial statements

FOR THE YEAR ENDED 31 DECEMBER 2022

## e) Credit Risk

The maximum exposure to credit risk, excluding the value of any collateral or other security, at the reporting date to recognised financial assets, is the carrying amount, net of any provisions for doubtful debts of those assets, as disclosed in the balance sheet and notes to the financial statements.

The consolidated entity does not have any material credit risk exposure to any single debtor or group of debtors under financial instruments entered into by the consolidated entity.

## f) Liquidity risk

Vigilant liquidity risk management requires the Group to maintain sufficient liquid assets (mainly cash and cash equivalents) to be able to pay debts as and when they become due and payable.

The Group manages liquidity risk by maintaining adequate cash reserves by continuously monitoring actual and forecast cash flows and matching the maturity profiles of financial assets and liabilities.

Trade payables are generally payable on 30-day terms.

## Remaining contractual maturities

The following tables detail the Group's remaining contractual maturity for its financial instrument liabilities. The tables have been drawn up based on the undiscounted cash flows of financial liabilities based on the earliest date on which the financial liabilities are required to be paid. The tables include both interest and principal cash flows disclosed as remaining contractual maturities and therefore these totals may differ from their carrying amount in the statement of financial position.

CONSOLIDATED 31 DECEMBER 2022	WEIGHTED AVERAGE INTEREST RATE	1 YEAR OR LESS \$	BETWEEN 1 AND 2 YEARS \$	BETWEEN 2 AND 5 YEARS \$	OVER 5 YEARS \$
<b>Non-interest bearing</b>					
Trade and other payables		392,824	-	-	-
<b>Interest bearing - variable</b>					
Lease liability	4.10%	142,488	121,756	-	-
		<b>535,312</b>	<b>121,756</b>	-	-

CONSOLIDATED 31 DECEMBER 2021	WEIGHTED AVERAGE INTEREST RATE	1 YEAR OR LESS \$	BETWEEN 1 AND 2 YEARS \$	BETWEEN 2 AND 5 YEARS \$	OVER 5 YEARS \$
<b>Non-interest bearing</b>					
Trade and other payables		152,878	-	-	-
<b>Interest bearing - variable</b>					
Lease liability	4.10%	138,338	142,488	121,756	-
		<b>291,216</b>	<b>142,488</b>	<b>121,756</b>	-

# Notes to the consolidated financial statements

FOR THE YEAR ENDED 31 DECEMBER 2022

## **g) Market risk**

### **Foreign currency risk**

Foreign exchange risk arises when future commercial transactions and recognised assets and liabilities are denominated in a currency that is not the Company's functional currency. The Company operates internationally and is exposed to foreign exchange risk arising from various currency exposures, primarily with respect to the USD.

### **Price risk**

The Group is not exposed to any significant price risk.

### **Accounting policy**

The Group measures financial instruments at fair value at each balance date. Fair value is the price that would be received to sell an asset or paid to transfer a liability in an orderly transaction between market participants at measurement date. The exception is for trade receivables which are measured at the transaction price due to their short-term maturities.

# Notes to the consolidated financial statements

FOR THE YEAR ENDED 31 DECEMBER 2022

## Note 21 – Parent entity disclosures

	31 DECEMBER 2022 \$	31 DECEMBER 2021 \$
<b>FINANCIAL POSITION</b>		
<b>Assets</b>		
Current assets	4,984,821	4,926,609
Non-current assets	649,616	610,450
Total assets	<b>5,634,437</b>	<b>5,537,059</b>
<b>Liabilities</b>		
Current liabilities	2,635,642	475,159
Non-current liabilities	182,573	265,786
Total liabilities	<b>2,818,215</b>	<b>740,945</b>
<b>Equity</b>		
Issued capital	9,512,854	8,714,104
Reserves	643,015	260,134
Accumulated losses	(7,339,647)	(4,178,124)
Total equity/(deficiency)	<b>2,816,222</b>	<b>4,796,114</b>

	31 DECEMBER 2022 \$	31 DECEMBER 2021 \$
<b>FINANCIAL PERFORMANCE</b>		
Loss for the reporting period	(3,161,523)	(1,535,779)
Other comprehensive income	-	-
Total comprehensive loss	<b>(3,161,523)</b>	<b>(1,535,779)</b>

There were no parent entity contingencies or capital commitments as at 31 December 2022.

# Notes to the consolidated financial statements

FOR THE YEAR ENDED 31 DECEMBER 2022

## Note 22 – List of subsidiaries

The consolidated financial statements include the financial statements of entX Limited and its subsidiaries listed in the following table:

NAME	COUNTRY OF INCORPORATION	% EQUITY INTEREST	
		31 DECEMBER 2022	31 DECEMBER 2021
<b>Parent Entity</b>			
entX Limited	Australia	100	100
<b>Subsidiaries</b>			
PhosEnergy Inc.	USA	100	100
HPEL Developments Pty Ltd	Australia	100	100
CarbonX Developments Pty Ltd <sup>1</sup>	Australia	100	-
GenT Developments Pty Ltd <sup>1</sup>	Australia	100	-
GenX Energy Pty Ltd <sup>1</sup>	Australia	100	-
RHU Solutions Pty Ltd <sup>1</sup>	Australia	100	-

<sup>1</sup> CarbonX Developments Pty Ltd, GenT Developments Pty Ltd, GenX Energy Pty Ltd and RHU Solutions Pty Ltd ("New Subsidiaries") were incorporated in Australia on 2 February 2022. The New Subsidiaries are each wholly owned subsidiaries of entX.

# Notes to the consolidated financial statements

FOR THE YEAR ENDED 31 DECEMBER 2022

## Note 23 – Auditor’s remuneration

Total fees paid or payable for services provided by Grant Thornton Audit Pty Ltd and its related practices were as follows:

	31 DECEMBER 2022 \$	31 DECEMBER 2021 \$
<b>Audit Services</b>		
Audit and review of the financial statements	44,000	22,350
<b>Other Services</b>		
Tax advisory services	5,200	-

## Note 24 – Related parties

The consolidated financial statements include the financial statements of entX Limited and its subsidiaries: PhosEnergy Inc., HPEL Developments Pty Ltd, CarbonX Developments Pty Ltd, GenT Developments Pty Ltd, GenX Energy Pty Ltd and RHU Solutions Pty Ltd. entX Limited is the ultimate parent of the Group.

### Transactions with Key Management Personnel

Refer Note 19 for Key Management Personnel disclosures.

### Transactions with other related parties

The following table provides the aggregate income recognised during the year relating to related parties as follows:

RELATED PARTIES	NOTE	31 DECEMBER 2022 \$	31 DECEMBER 2021 \$
UFP Investments LLC	(i)	-	-
Urtek LLC	(ii)	43,692	52,704

- (i) The Group has a 28.66% (2021: 28.66%) legal and beneficial interest in UFP Investments LLC and is accordingly an associate – see Note 11. The Group did not have any transactions with UFP during the reporting period.
- (ii) The Group has a 25.79% (2021: 25.79%) beneficial interest in Urtek LLC and is accordingly an associate – see Note 11. The Company provided management services to Urtek LLC during the year. Amounts were billed at an amount agreed between the Company and Cameco Corporation and are due and payable under normal payment terms. No amounts were outstanding as at 31 December 2022 (31 December 2021: \$Nil).

### Terms and conditions of transactions with related parties

Other than where stated, services provided by related parties are made on arm’s length basis both at normal market prices and on normal commercial terms.

# Notes to the consolidated financial statements

FOR THE YEAR ENDED 31 DECEMBER 2022

## Note 25 – Cashflow information

Reconciliation of loss to net cash used in operating activities

	31 DECEMBER 2022 \$	31 DECEMBER 2021 \$
Loss for the reporting period	(2,855,767)	(1,529,966)
Share based payments	439,511	205,570
Amortisation of intangible assets	18,209	6,461
Depreciation of property, plant and equipment	13,035	3,510
Amortisation – right-of-use asset	125,462	52,276
Interest expenses	12,801	9,843
Foreign exchange (gain) / loss	(677)	(89)
<b>Operating loss before changes in working capital</b>	<b>(2,247,426)</b>	<b>(1,252,395)</b>
<b>(Increase)/decrease in assets:</b>		
Trade and other receivables	(150,646)	(220,509)
<b>Increase/(decrease) in liabilities:</b>		
Trade and other payables	28,172	81,611
Provision for annual leave, long-service leave/bonus	363,736	137,313
<b>Net cash outflows from operating activities</b>	<b>(2,006,164)</b>	<b>(1,253,980)</b>

## Note 26 – Commitments and contingencies

### GenX – CRCP Grant

During the reporting period the Company was awarded a \$2,427,689 cash funding grant from the Commonwealth Department of Industry, Science, Energy and Resources (Commonwealth) as part of a Cooperative Research Centres Projects (CRCP) grant for development of the Company's GenX Betavoltaic Battery Pilot Manufacturing Process technology (the "CRCP Grant"). The CRCP Grant commenced in May 2022 and is expected to conclude in April 2025. The cash funding for the CRCP Grant is being received by the Company in quarterly receipts from the Commonwealth, in advance of required cash outflows. As part of the CRCP Grant, the Company will work collaboratively with three research institutions and two industry partners and together are committed to contributing \$3,597,067 (net of grant funds) over the life of the project (end date April 2025), including in-kind contributions of \$1,653,509.

As at 31 December 2022, the Company has received \$606,794, in respect of the CRCP Grant funding. In respect of the grant funds received during the year, an amount of \$520,766 has been recognised on the Statement of Profit or Loss as 'Other income' with the remaining \$86,028 being recognised on the Statement of Financial Position as 'Deferred income'. Refer to Note 5(b) for the accounting policy for recognition of 'Government and other Grant Income'.

# Notes to the consolidated financial statements

FOR THE YEAR ENDED 31 DECEMBER 2022

## Note 26: Commitments and contingencies continued

### GenX – Australian Government Services contract

In December 2022, the Company was awarded an Australian Government contract to rapidly prototype a particular aspect of the GenX technology. The total contract award is \$5,520,189 for development until June 2024, with the Company being paid in quarterly instalments in advance in accordance with a payment schedule that aligns with development milestones.

An amount of \$1,383,283 (incl. GST) has been included the Statement of Financial Position under 'trade and other receivables' in respect of the first progress invoice raised under the Government Services Agreement. A corresponding amount of \$1,257,530 (GST exclusive) has been recorded as 'Deferred Income' on the Statement of Financial Position. Refer to Note 5(b) for the accounting policy for recognition of 'Government and other Grant Income.'

There are no further commitments and contingencies as at 31 December 2022.

## Note 27 – Events subsequent to reporting date

On 31 March 2023, the Company was offered the grant of two Poldo Basin gas storage exploration licenses (GSEL 781 and GSEL 784) which it subsequently accepted.

There were no further significant events after the reporting date.

## Note 28 – Goods and services (gst)

Revenue, expenses and assets are recognised net of the amount of goods and services tax GST, except where the amount of GST incurred is not recoverable from the taxation authority. In these circumstances, the GST is recognised as part of the cost of acquisition of the asset or as part of the expense.

Receivables and payables are stated at the amount of GST included. The net amount of GST recoverable from, or payable, to the Australian Taxation Office ('ATO') is included as a current asset or current liability in the Statement of Financial Position.

Cash flows are included in the Statement of Cash Flows on a gross basis. The GST component of cash flows arising from investing and financing activities which are recoverable from, or payable to the ATO are classified as operating cash flows.

## Note 29 – Changes in accounting policies

During the year ended 31 December 2022, the Directors adopted all of the new and revised Standards and Interpretations issued by the Australian Accounting Standards Board that are relevant to the Group and effective for the current annual reporting period. The adoption of these Standards and Interpretations did result in any material change to Group accounting policies.

## Note 30 – New accounting standards and interpretations not yet mandatory or early adopted

Australian Accounting Standards and Interpretations that have recently been issued or amended but are not yet mandatory have not been early adopted by the Group for the year ended 31 December 2022. The Group has determined that there is no material impact of the Standards and Interpretations not yet mandatory or early adopted.

# Notes to the consolidated financial statements

FOR THE YEAR ENDED 31 DECEMBER 2022

## Directors' declaration

In the opinion of the directors of entX Limited (the 'Company'):

- (a) the accompanying financial statements and notes:
  - i. give a true and fair view of the Group's financial position as at 31 December 2022 and of its performance for the year then ended; and
  - ii. comply with Australian Accounting Standards.
- (b) there are reasonable grounds to believe that the Company will be able to pay its debts as and when they become due and payable.
- (c) the financial statements and notes thereto are in accordance with International Financial Reporting Standards issued by the International Accounting Standards Board.

This declaration is signed in accordance with a resolution of the Board of Directors.



**Bryn Jones**  
Managing Director

5 April 2023



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## Independent Auditor's Report

To the Members of entX Limited

### Report on the audit of the financial report

#### Opinion

We have audited the financial report of entX Limited (the Company) and its subsidiaries (the Group), which comprises the consolidated statement of financial position as at 31 December 2022, the consolidated statement of profit or loss and other comprehensive income, consolidated statement of changes in equity and consolidated statement of cash flows for the year then ended, and notes to the consolidated financial statements, including a summary of significant accounting policies, and the Directors' declaration.

In our opinion, the accompanying financial report of the Group is in accordance with the *Corporations Act 2001*, including:

- a giving a true and fair view of the Group's financial position as at 31 December 2022 and of its performance for the year ended on that date; and
- b complying with Australian Accounting Standards and the *Corporations Regulations 2001*.

#### Basis for opinion

We conducted our audit in accordance with Australian Auditing Standards. Our responsibilities under those standards are further described in the *Auditor's Responsibilities for the Audit of the Financial Report* section of our report. We are independent of the Group in accordance with the *Corporations Act 2001* and the ethical requirements of the Accounting Professional and Ethical Standards Board's APES 110 *Code of Ethics for Professional Accountants (including Independence Standards)* (the Code) that are relevant to our audit of the financial report in Australia. We have also fulfilled our other ethical responsibilities in accordance with the Code.

We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our opinion.

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#### Information other than the financial report and auditor's report thereon

The Directors are responsible for the other information. The other information comprises the information included in the Group's annual report for the year ended 31 December 2022, but does not include the financial report and our auditor's report thereon.

Our opinion on the financial report does not cover the other information and accordingly we do not express any form of assurance conclusion thereon.

In connection with our audit of the financial report, our responsibility is to read the other information and, in doing so, consider whether the other information is materially inconsistent with the financial report or our knowledge obtained in the audit or otherwise appears to be materially misstated.

If, based on the work we have performed, we conclude that there is a material misstatement of this other information, we are required to report that fact. We have nothing to report in this regard.

#### Responsibilities of the Directors' for the financial report

The Directors of the Company are responsible for the preparation of the financial report that gives a true and fair view in accordance with Australian Accounting Standards and the *Corporations Act 2001*. The Directors' responsibility also includes such internal control as the Directors determine is necessary to enable the preparation of the financial report that gives a true and fair view and is free from material misstatement, whether due to fraud or error.

In preparing the financial report, the Directors are responsible for assessing the Group's ability to continue as a going concern, disclosing, as applicable, matters related to going concern and using the going concern basis of accounting unless the Directors either intend to liquidate the Group or to cease operations, or have no realistic alternative but to do so.


#### Auditor's responsibilities for the audit of the financial report

Our objectives are to obtain reasonable assurance about whether the financial report as a whole is free from material misstatement, whether due to fraud or error, and to issue an auditor's report that includes our opinion. Reasonable assurance is a high level of assurance, but is not a guarantee that an audit conducted in accordance with the Australian Auditing Standards will always detect a material misstatement when it exists. Misstatements can arise from fraud or error and are considered material if, individually or in the aggregate, they could reasonably be expected to influence the economic decisions of users taken on the basis of this financial report.

A further description of our responsibilities for the audit of the financial report is located at the Auditing and Assurance Standards Board website at: [http://www.auasb.gov.au/auditors\\_responsibilities/ar3.pdf](http://www.auasb.gov.au/auditors_responsibilities/ar3.pdf). This description forms part of our auditor's report.



GRANT THORNTON AUDIT PTY LTD  
Chartered Accountants



J.L. Humphrey  
Partner – Audit & Assurance

Adelaide, 5 April 2023



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