

6 May 2022

#### **Results of Annual General Meeting and Presentation**

EntX Limited (formerly PhosEnergy Limited) (the **Company**) advises that each of the resolutions put to shareholders at the Annual General Meeting held today, 6 May 2022, were passed on a poll.

The numbers of valid proxy votes for each resolution are detailed in the table below.

Resolution details		Instructions given to validly appointed proxies (as at proxy close)				Number of votes cast on the poll (where applicable)			Resolution Result
Resolution	Resolution Type	For	Against	Proxy's Discretion	Abstain	For	Against	Abstain*	Carried / Not Carried
1 - ELECTION OF MS LUCY GAUVIN AS A DIRECTOR	Ordinary	56,590,849 99.90%	4,102 0.01%	48,249 0.09%	43,513	57,251,728 99.99%	4,102 0.01%	578,557	Carried
2 - APPOINTMENT OF AUDITOR	Ordinary	56,636,255 99.91%	0 0.00%	48,249 0.09%	2,209	57,297,134 100.00%	0 0.00%	537,253	Carried
3 - APPROVAL OF NON-EXECUTIVE DIRECTOR FEE POOL	Ordinary	52,465,221 99.77%	73,757 0.14%	48,249 0.09%	4,099,486	53,126,100 99.86%	73,757 0.14%	4,634,530	Carried
4 - CHANGE OF COMPANY NAME	Special	56,608,760 99.87%	20,465 0.04%	48,249 0.09%	9,239	57,269,639 99.96%	20,465 0.04%	544,283	Carried
5 - ADOPTION OF NEW CONSTITUTION	Special	56,572,881 99.89%	10,194 0.02%	48,249 0.09%	55,389	57,233,760 99.98%	10,194 0.02%	590,433	Carried

A copy of the presentation provided to attendees by Mr Bryn Jones, Managing Director is also attached.



PhosEnergy, delivering sustainable power solutions

## **Annual General Meeting**

Friday, 6 May 2022

#### CLEAN ENERGY TECHNOLOGIES

# 2022 AGM Managing Director Presentation

6<sup>th</sup> May 2022



## Disclaimer

#### **Forward-looking statements**

This presentation contains forward-looking statements. Those forward-looking statements reflect views held as at the date of this presentation. Any such statement is subject to inherent risks and uncertainties. Actual events or results may differ materially from the events or results expressed or implied in any forward-looking statement, and such deviations are both normal and to be expected. Recipients must make their own assessment about the likelihood of a matter, about which a forward-looking statement is made, occurring. The Company makes no representation about the likelihood of a matter, about which a forward-looking statement is made, occurring. The Company and its directors, employees, agents, advisers, and consultants: give no representation or warranty to a recipient of this presentation as to the accuracy or completeness of the statements contained in this presentation or in relation to any other matter; and to the fullest extent permitted by law, disclaim responsibility for and have no liability to a recipient of this presentation for any error or omission in or for any statement in this presentation.

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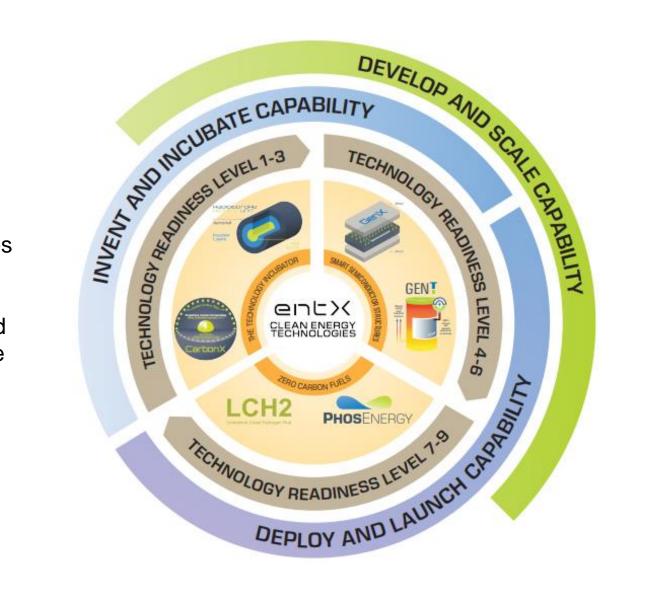
## Overview

**Formation:** PhosEnergy Ltd spins out of Uranium Equities Ltd (now DevEx Ltd) through a sustained uranium price depression.

**Technology Platform Expansion**: Acquisition and development of high impact energy-related technologies with real commercial applications

**entX Ltd**: Recruitment of an experienced, highly skilled team from a range of industries to form entX - a diverse clean energy technology developer and deployer

**3rd Party Endorsement**: Industry, institutional and governmental support for rapid development of key technologies





## **External recognition**

## Gaining strong support from key partners



### Green mandate

....."If PhosEnergy is able to set up a green hydrogen facility there (Kimberly-Clark, Millicent Mill), it will power up to about 10 per cent of our energy needs to begin with. The goal is to set this up by 2025. Green hydrogen is a tremendous opportunity to not only help us reach our carbon neutral 2030 target, it also supports the clean energy transition in regional Australia," .....

Belinda Driscoll, Managing Director Kimberly-Clark Australia

## The Border Match

#### **Hydrogen Support**

..... "While the Clean Hydrogen Industrial Hubs program is expected to be extremely competitive with the Federal Government receiving applications from all around Australia, KCA and PhosEnergy's application has my full support"... **Hon. Tony Pasin** 

Manufacturers' MONTHLY

## PhosEnergy receives \$2.4 million to develop next-gen nuclear batteries

The University of Adelaide's industry partner, PhosEnergy, has received a \$2,427,689 grant to further develop its nuclear battery technology for space and defence industries.

Federal MP Barker (26/11/21)





Cameco buys into PhosEnergy technology

10 November 2009





Australia's Uranium Equities has announced that Canada's Cameco is to partner it in the continued development and commercialization of the PhosEnergy process for extracting uranium from phosphates. Cameco could invest up to \$16.5 million to earn a 63% stake in the technology.



CLEAN ENERGY **TECHNOLOGIES** 

## Clean Energy Technology Incubation to Commercialisation

entX's business is the development and deployment of innovative clean-energy technologies and projects aimed at recovering useful energy resources and chemicals from unconventional, underutilised or waste sources, ultimately unlocking commercial opportunities for Shareholders by meeting the global demand for clean energy sources



#### **Commercialisation Strategy**

entX has structured its business to transition technologies up the Technology Readiness Level (TRL) scale to a point of commercialisation to assess future value generation opportunities for shareholders.

From there, the Company can assess the appropriate method to maximise shareholder returns through a combination of trade sale, spin out or generation of cashflow.

#### **Key Sectors**

- Clean nuclear fuel
- Industrial decarbonisation
- Zero carbon transport
- Space
- Defense
- Remote monitoring / Internet of Things (IoT)



CLEAN ENERGY TECHNOLOGIES

## Sustainability is core to our DNA

### Committed to provide clean energy technologies for a sustainable future



"Sustainability is at the core of our identity as a diversified clean energy technology company utilising advanced resource technologies to power and decarbonise the industrial and aerospace sectors for a cleaner tomorrow."

- Sustainability value proposition is predicated on
  - entX technologies role in reducing carbon emissions
  - Safety and attracting and retaining talent
  - Organic growth through R&D
  - Strong governance
- Inaugural Sustainability report to be released Q2 2022

#### **Environment**

- Greenhouse Gas Emissions
- Waste minimisation
- Protection of water resources
- Protection of land

## Social (our people)

- Health and Safety
- Diversity and inclusion
- Employee numbers including and new hires (plus turnover)

#### Community (building prosperity)

- Economic contribution
- Long term educational outcomes
- R&D Expenditure
- Total taxes paid

## Governance (accountability and stewardship)

- Governance body composition
- Stakeholder engagement
- Risk and opportunity oversight
- Ethical behavious
- Cyber Security



## **Board and Management**



Mr Tim Wise Executive Director

- Corporate and technical advisor with over 25 years experience in public companies and markets
- Founder Kalina Power Ltd
- Director Tamaska Oil & Gas Ltd
- NED Graft Polymer plc
- NED Melchor Pty Ltd



Ms Lucy Gauvin
Non-Executive Director

- Corporate and commercial lawyer with 20 years experience in the energy and resources sectors
- Specialises in M&A, commodity sales, asset acquisition
- Currently General Counsel
   Strike Energy Ltd
- Former Partner Piper Alderman



**Mr Bryn Jones**Managing Director

- Evaluation, development and operational experience in the minerals and technology industry
- Founding co-inventor of the companies technology assets
- Director Boss Energy Ltd
- NED DevEx Resources Ltd
- NED Australian Rare Earths Ltd



Mr Tim Goyder
Non-Executive Director

- Highly successful entrepreneur and company Director
- Over 30 years experience in the resources industry
- Chair of Liontown Resources
- · Chair of DevEx Resources
- · Ex-Chair Chalice Gold
- Ex-NED Strike Energy



Mr Anthony Kiernan Non- Executive Chairman

- Corporate advisor with over 35 years experience in the operation of public companies
- · Chair of Redbank Copper Ltd
- · Chair of Pilbara Minerals Ltd
- Ex-Non-executive Director of:
  - Northern Star Resources Ltd
  - Saracen Mineral Holdings Ltd



## Pillar 1: Zero Carbon Fuels

Clean Hydrogen for industrial users

The PhosEnergy
Process – Uranium
from phosphate
streams



Mr Leigh Whicker MBA, AdvDipRBM Hydrogen Advisor and Commercial Manager

- Technical and management professional with key strengths in defence, space and energy
- Extensive networks in Industry and Government
- Strong Project
   Management and Asset
   Integrity skills



Mr Glenn Toogood BAppSc, MCESM, Hydrogen Lead

- Corporate and operations executive with over 20 years experience in energy and sustainability sector
- Former Asset General Manager SA Otway – Beach Energy
- Board Member SA
   Ministerial Advisory
   Council on Minerals and
   Energy (MEAC)



## Clean Hydrogen – LCH2

**Summary/Overview:** entX has identified several potential green and blue hydrogen production opportunities across Australia.

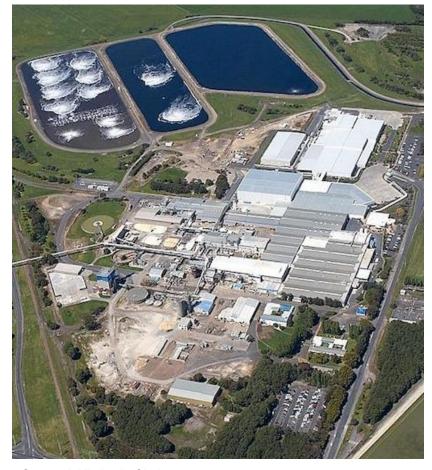
#### **Limestone Coast Hydrogen Hub (LCH2):**

- Concept incubation to MoU with Kimberly-Clark (8weeks)
- Strategy focused on domestic supply to the industrial and transport sectors
- MOU signed with Kimberly-Clark Australia in Q4 2021 to collaborate on delivering a scoping study
- Scoping study is scheduled for completion in Q2 2022 at an initial 9MW electrolyser capacity expanding to 30MW
- Project development is progressing aiming at first hydrogen gas by 2026

#### **Growth:**

- Opportunity to leverage other entX technologies to build the LCH2 cluster leveraging the strong Kimberly-Clark relationship
- Opportunity to deploy LCH2 and other entX technologies globally with Kimberly-Clark as a technology partner
- Expansion to leverage major transport operators, OEMs and renewable energy generators





Sourced: Kimberly-Clark



## **PhosEnergy Process**

#### **Summary/Overview:**

The PhosEnergy process extracts this Uranium from the phosphate fertilizer streams. The PhosEnergy process has the potential to unlock  $U_3O_8$  production equivalent to 15% of current global production.

#### **Market Size/Opportunity:**

- A 2014 PFS on a small facility (~350klb/a) in the USA indicated cash costs in the low US\$20/lb range and an incentive price near recent spot uranium prices
- Much larger facilities exist in the USA and globally which should offer superior pricing structures

#### **Strategic Partners/Agreements:**

- Cameco Co-Owner (75%) of IP vehicle and significant uranium company
- ANSTO Early-stage development partner and royalty holder
- 2 Major US based phosphate producers technology development partners

#### **Next steps**

 Development of 'new' marketing strategy to engage and unlock opportunities across USA and global phosphate production facilities to allow first scale project



#### **Major phosphate production**

- USA
- Morocco
- Tunisia
- Saudi Arabia
- China





## Pillar 2: Smart Semiconductor Structures

GenX – Maintenance free power for earth and beyond

GenT – Turning waste heat into power



Dr Scott Edwards
BAppSc(Hons), PhD, MBA
General Manager Generation Technologies

- Project management and operations experience in the global automotive industry
- Experience with collaborative development with leading national and international research institutes
- Launching new technology into volume manufacturing



Mr Jake Whittenbury
BE Mech (Hons)
Development
Engineer

- Project and design engineer with proven experience in the manufacturing industry
- Hands on technology commercialisation experience



## GenX

**Summary/Overview:** GenX is a betavoltaic power generation technology which uses novel semiconductor-metal electrode materials combined with beta radiation to produce constant power over long time frames.

GenX can replace incumbent remote power sources with a simple, safe and effective generator that supplies constant DC power for up to several decades without the need for refueling or recharging.

#### **Markets**

- The global space power supply market logged growth of more than 100% (year-over-year) to reach US\$ 2.8 billion in 2020 and is forecast to grow to US\$5 billion by 2026
- Global (terrestrial) defence and remote monitoring markets also represent a substantial additional opportunity for GenX

#### **Strategic Partnerships and Agreements:**

- \$2.4 million CRC-P awarded in a combined \$6 million program with strategic partners UniSA, University of Adelaide, University of Western Australia and industry partners Duromer and DEWC systems.
- MOU with Fleet Space to collaborate on GenX opportunities
- MOU with Space Machines Company around flight heritage opportunities
- MOU with UoA Andy Thomas Centre for Space Resources

#### Space Power Supply Market Trend and Forecast (US\$ Million)

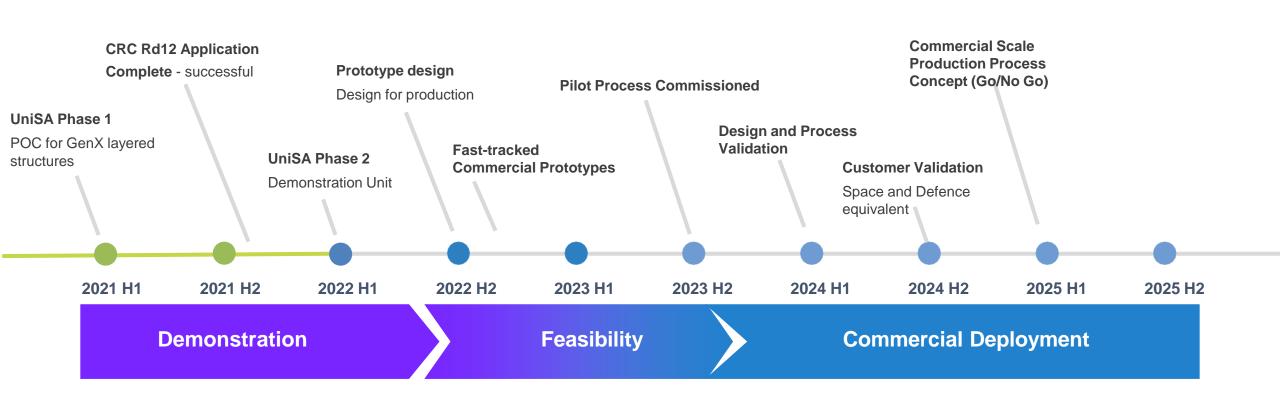






## GenX

#### Recent Achievements and Conceptual Development Pathway





## GenT

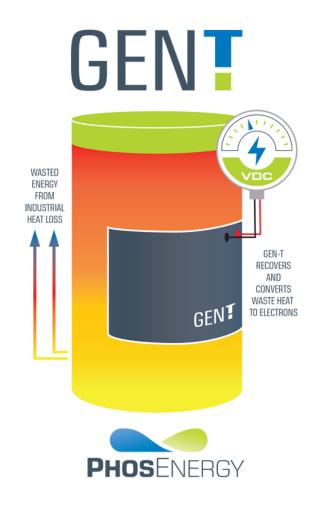
**Summary/Overview:** A spin-out technology from GenX, GenT is a recently developed and patented system to convert infrared energy from waste heat sources into electrical power, cheaply and efficiently.

#### **Sector Opportunity:**

 Once developed to commercial prototype scale the technology will be tested in industries with large waste heat loads including steel making, cement manufacture and metal refining.

#### **Strategic Partners/Agreements:**

- The Future Industries Institute at UniSA is our strategic development partner for GenT prototyping
- IMCRC Activate funding of \$62,888 has been awarded, funding resources at UniSA during 2021-22 on 9-month project aimed at developing initial prototypes





## Pillar 3: The Technology Incubator

- CarbonX Turning CO<sub>2</sub>
   into revenue
- RHU Heat for electronics survival in space
- Opportunity Evaluation and IP Capture





- Chemical Physics professional with a career in the development of advanced materials
- Former ANSTO nuclea policy expert
- SA Nuclear Royal Commission Technical Director
- Thor Energy (Norway) Advanced thorium fuel development



Dr Massey de los Reyes PhD (Nuclear Materials) BSc Chem (Hons) Principal Scientist

- Nuclear Materials and Policy professional with hands on research experience
- Former ANSTO Project Managers and Research Fellow



## CarbonX

**Summary/Overview:** CarbonX is a groundbreaking technology, which has the potential to profitably convert CO<sub>2</sub> to methanol and other commercial products without prohibitive energy input. This technology has the potential to revolutionise carbon emitting industries that are at risk as scrutiny on emissions increases

#### **Market Size/Opportunity:**

- Global CO<sub>2</sub> emissions 2020 were circa 40 BtCO2e 30% created directly from industry and energy use in industry
- Global revenue opportunity is a percentage of AUD360 billion on recent value of ACCU

#### **Strategic Partners/Agreements:**

 Engaged with energy companies with carbon capture, utilization and storage (CCUS) programs for pilot opportunities

#### Next steps

 ANSTO – engaged to develop a program to meet the Company's pilot plant evaluation timeline of 2024





## **Radiation Heating Unit - RHU**

**Summary/Overview:** A differentiated, Australian supply-chain Radioisotope Heating Unit (RHU) technology, allowing a lunar surface payload to survive and operate over multiple lunar nights

#### **Market Size/Opportunity:**

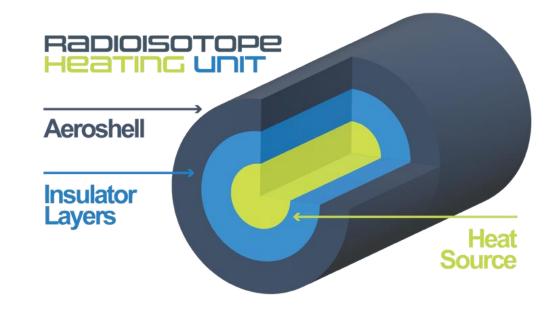
- RHUs are currently manufactured using Plutonium which represents significant health and proliferation risks as well as high cost
- As lunar, deep space and Mars exploration programs progress heating becomes increasingly relevant

#### **Strategic Partners/Agreements:**

- The Australian Space Agency (ASA) has awarded the RHU development \$90,000 through the Moon to Mars Program
- ANSTO has been engaged to provide prototype beta heat sources

#### **Next Steps:**

Develop prototypes and collect performance data for marketing



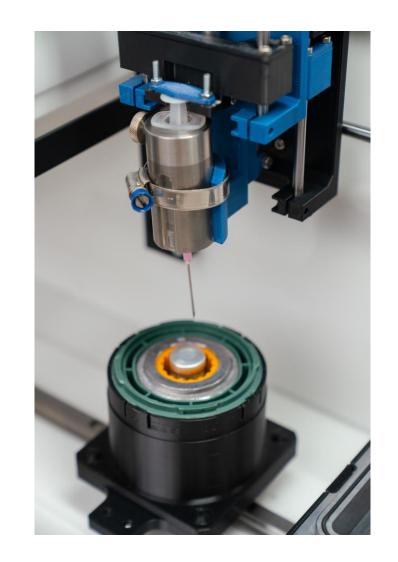


## **Summary**

A unique growth vehicle to provide shareholders with exposure to a portfolio of disruptive clean energy technologies

A highly successful Board and experienced management team to rapidly drive projects from the laboratory to commercial deployment

Strong strategic partnerships with industry, institutions and government





## **Contact Details**

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www.entX.com.au





## The Technology Readiness Level (TRL) Scale

TRL1 no

 Basic Research. Principles postulated and observed but no experimental proof

TRL

Technology Formulation. Concept and application have been formulated

TRL3

 Applied Research. First lab tests completed – Proof of Concept

TRI

 Small scale prototype built in a lab environment "rough and ready"

TRI

Large Scale prototype tested in intended environment

TRI 6

 Prototype tested in intended environment close to expected performance

-

Demonstrated system operated in operational environment at pre-commercial scale

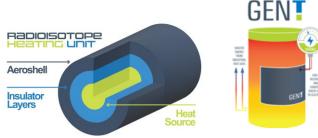
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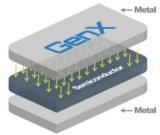
• First commercial system. Manufacturing issues solved

RL9

Full commercial application. Technology available for consumers.









LCH2

