

entX

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CLEAN ENERGY
TECHNOLOGIES

クリーンエネルギー技術

JETRO Corporate Presentation

29 September 2022



CLEAN ENERGY
TECHNOLOGIES

Clean Energy Technology

Incubation to Commercialization



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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.

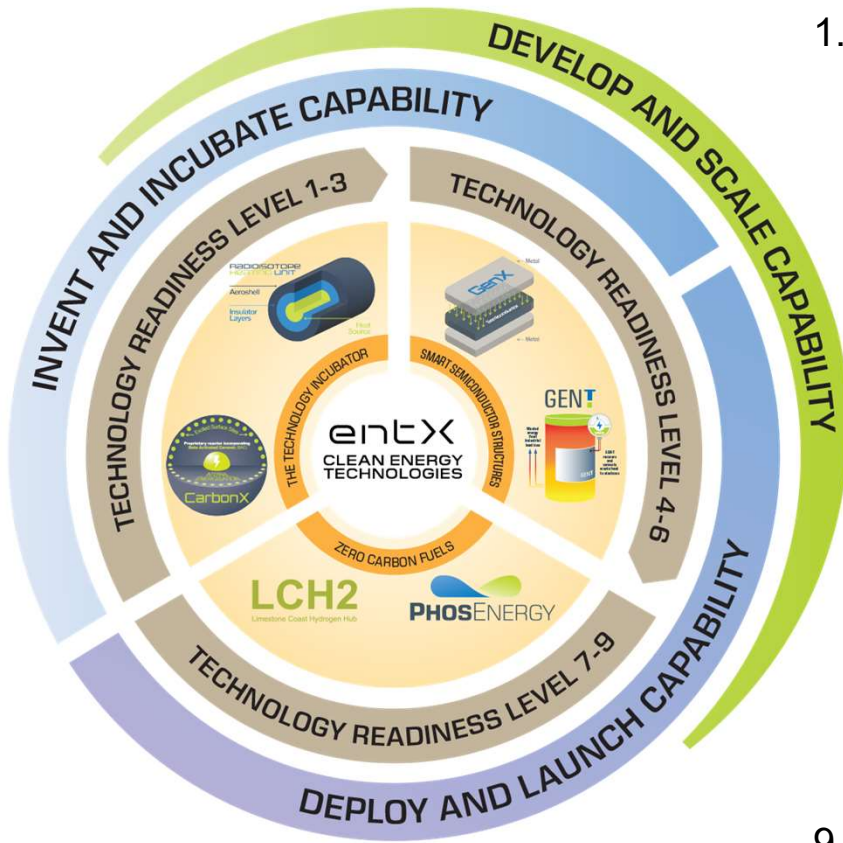
entX focuses on practical commercial innovation in areas such as carbon capture & utilisation, non mining uranium recovery from phosphate fertiliser, green and blue hydrogen, energy & electron harvesting from beta isotopes & industrial heat waste recycling

Key Sectors and Applications

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

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The Way We Do Business



1. Identify a clean energy concept technology
2. Early technical and commercial evaluation
3. Create industry and academic partnerships
4. Develop technologies in R&D programs
5. Develop manufacturing processes
6. Produce demonstrators and early prototypes
7. Refine and deliver prototypes for evaluation
8. Scale manufacturing
9. Commercialisation or monetization event (M&A)

We Operate The Business in 3 Pillars

ZERO CARBON FUELS

PhosEnergy Process – Proven technology for the recovery of uranium from phosphate fertilizer streams

Hydrogen – Hydrogen production integration systems designed to provide alternative net zero carbon fuel sources

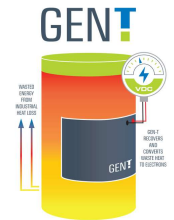
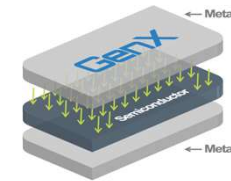


LCH2

SMART SEMICONDUCTOR STRUCTURES

GenT – Energy generation technology designed to harvest waste heat as the fuel source

GenX – Energy generation technology designed to harvest electrons from beta isotopes as the ‘fuel’ source



THE TECHNOLOGY INCUBATOR

Radioisotope Heating Unit – Replacing legacy plutonium-based energy source, RHU uses energetic beta particles to generate heat for space, remote and low temperature environments.

Carbon X – Beta Activated Ceramic technology designed to destabilize CO₂ molecules and produce useful chemicals



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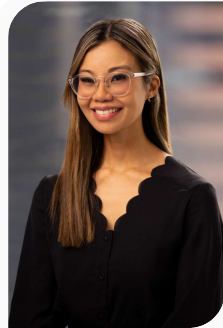
Team – Our People



Mr Bryn Jones
Managing Director



Dr Julian Kelly
Chief Technical Officer



Dr Massey de los Reyes
Principal Scientist



Dr Scott Edwards
General Manager - Generation Technologies



Mr Jake Whittenbury
Development Engineer



Mr Leigh Whicker
Commercial Manager



Mr Glenn Toogood
Head of Hydrogen



Smart Semiconductor Structures Pillar

GenX – Maintenance-free, long-term power for earth and beyond

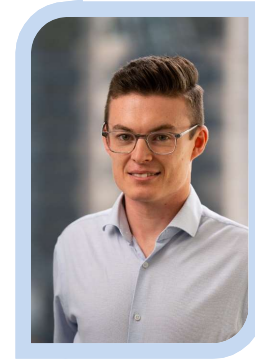
GenT – Turning waste heat into power

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

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



Mr Jake Whittenbury
BE Mech (Hons)
Development Engineer

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

GenX Betavoltaic Battery

Summary/Overview: GenX is a patented betavoltaic power generation technology which uses novel semiconductor-metal electrode materials combined with beta radiation to produce constant long-term power (decades). Simple, safe and effective battery that supplies constant DC power without refueling or recharging.

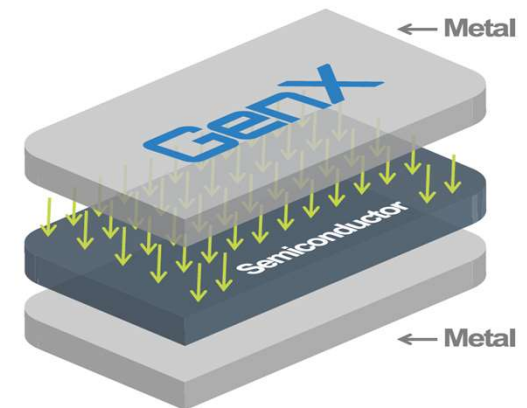
- Replacement for solar panels
- Trickle charge lithium batteries
- Comparable energy density (Watt / Kg) to conventional batteries.
- Compact, weight saving and space efficient.

Markets

- The global **Space** power market to grow to US\$5 billion by 2026
- Global **Defence** and **Earth Observation** remote monitoring markets

Strategic Partnership Grants and Agreements:

- \$2.4 million CRC-P awarded funding for a \$6 million program. Partners UniSA, University of Adelaide, University of Western Australia, Duomer and Asension.
- MOU with Fleet Space, Space Machines Company and University of Adelaide



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GenT Waste Industrial Heat to Energy

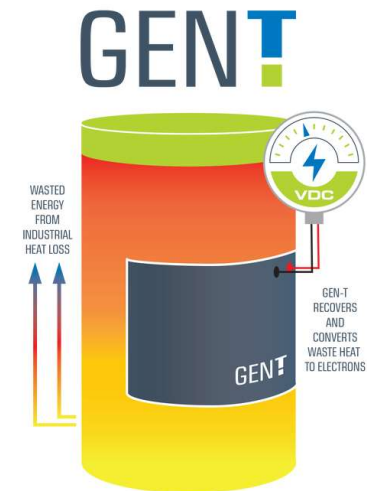
Summary/Overview: An associated technology with GenX, GenT is a recently developed and patented system to convert infrared energy from waste heat sources into electrical power, affordably and efficiently. The technology will be produced into large sheets of semiconductor, that will be formed / molded to fit industrial heat emitting equipment and assets.

Markets:

- Once developed to commercial prototype scale the technology will be tested in industries with large waste heat loads such as **steel making**, **cement manufacture** and **metal refining**.
- Large industrial heat emitting operators.

Strategic Partners/Agreements:

- The Future Industries Institute at UniSA is our strategic development partner for GenT prototyping
- IMCRC Activate funding of \$63k has been awarded, funding resources at UniSA during 2021-22 on a 9-month project aimed at developing initial prototypes



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Our Strategic Objective

Key milestones and value adding activities continue to improve the overall value of entX technology

GenX

- Complete agreement for supply of commercial demonstration units
- Have a commercial agreement to proceed on the design and development of an entX manufacturing facility (2H 2022)

GenT

- In collaboration with partner UniSA, complete a 9-month project aimed at developing initial prototypes

CarbonX

- ANSTO engaged to commence development of a program to meet the Company's pilot plant evaluation timeline of 2024

LCH2

- Finalise the LCH2 Scoping Study
- Commence commercial discussions with KCA to underpin entX investment in feasibility study

PhosEnergy Process

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

RHU

- Develop prototypes and collect performance data for marketing

Long term Mission Target – 2026

Commercialise a minimum 3 revenue generating technologies

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Contact Details

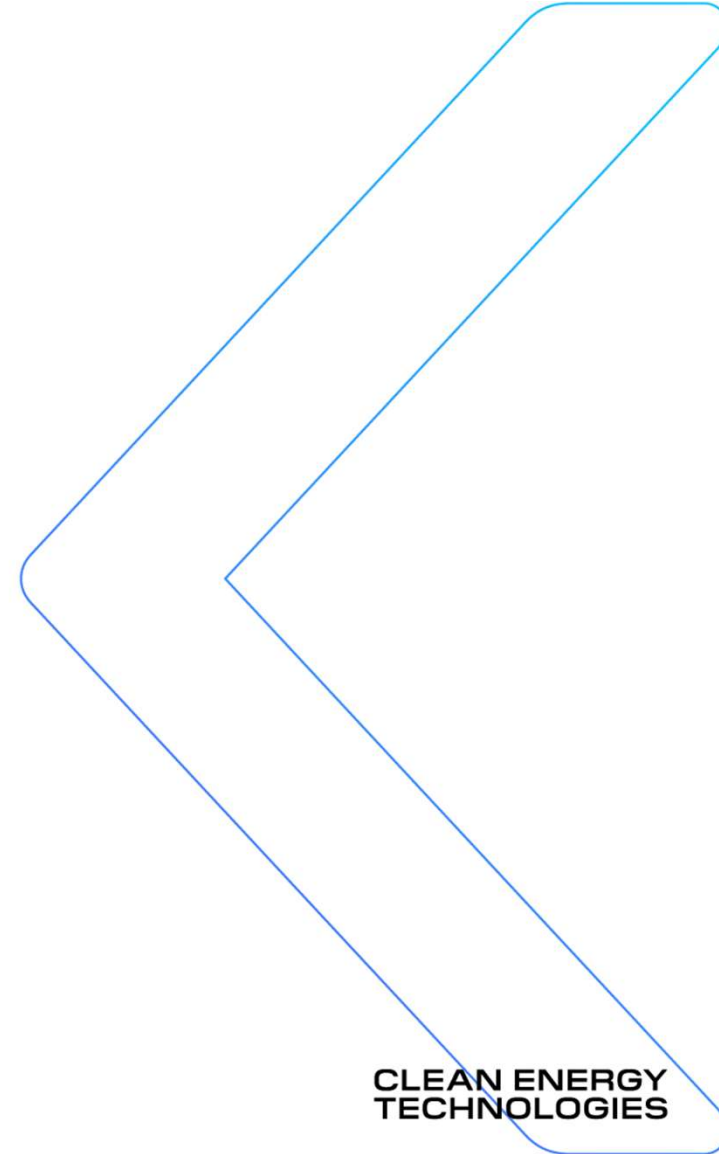
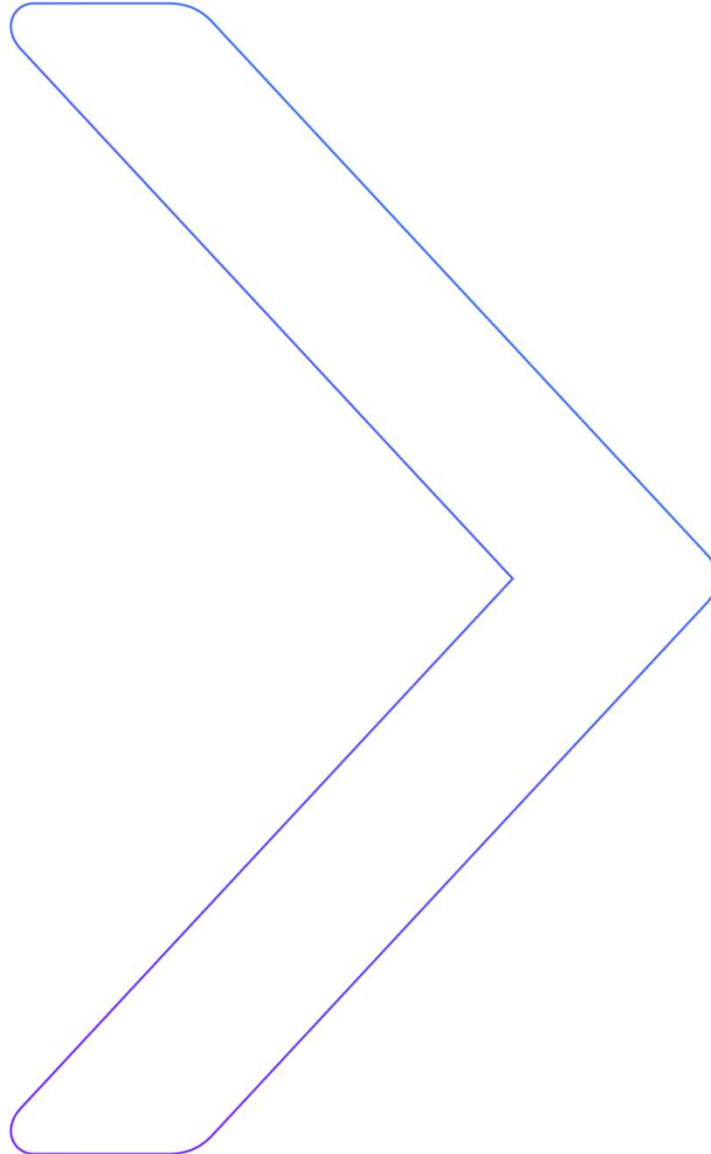
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