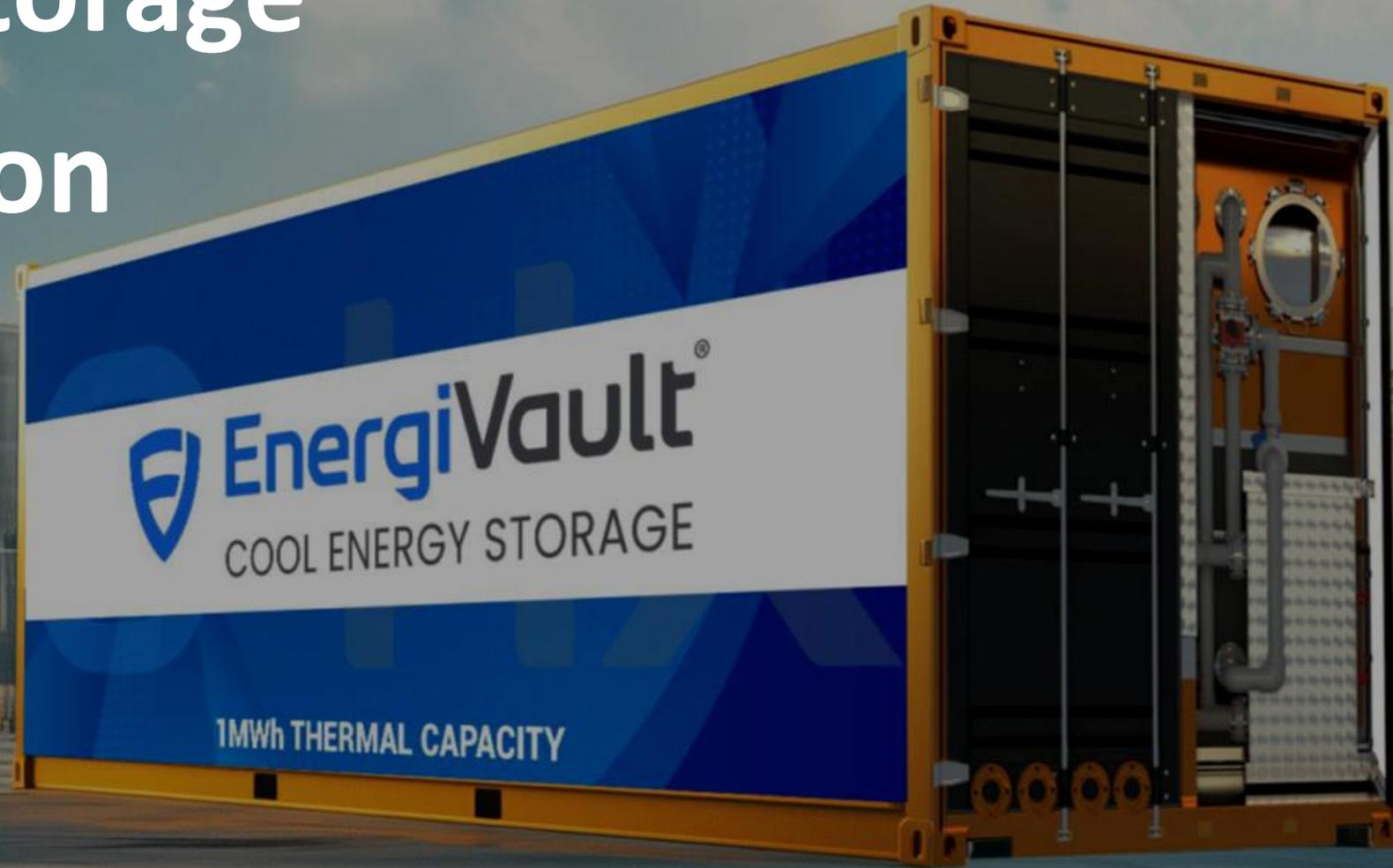


Cold energy storage
Next generation
price and
performance




ORGANIC HEAT EXCHANGERS

Here comes Cool Net Zero

Worldwide, offshore wind has become the de facto utility scale renewable energy providing LCOE's (*Levelised Cost of Electricity*) below all fossil fuels.

But wind comes with its own difficulties and costs. It's intermittent, can't be stored and there are grid constraints. Hence the explosion of energy storage solutions around the world.

O-Hx's EnergiVault provides the ultimate solution if you need to store cold. EnergiVault assists businesses globally with their cooling requirements on their journey to cool net zero, making a significant contribution to reducing the level of CO₂ in the atmosphere and reducing global temperatures.

Key points

Globally, cooling demands are ever-increasing, and a huge energy burden. In some locations, as much as 80% of electricity generation is utilised by cooling.

Designed for use in pharmaceuticals, data centres, food/drink, and industrial sectors.

Supporting chilled water cooling and air conditioning.

1. **EnergiVault** charges when electricity prices are low or even negative, using low-carbon renewable electricity.
2. **EnergiVault** banks your renewable energy for use when it's not sunny or windy.
3. **EnergiVault** builds resilience within existing cooling systems, providing continuity of supply and additional peak demand.
4. **EnergiVault** moves the world towards Cool Net Zero.

A problem worth solving

The problem is huge:

- Cooling systems operate on-demand.
- Power-hungry, dirty, and operationally inflexible.
- Little innovation over decades.

The cost is expensive:

- Inability to load-shift costs £74 billion pa
- Inefficient chiller operations costs £35 billion pa.

75% of industrial cooling systems could be supported by EnergiVault.

“Cold has been much neglected in the energy debate...

This is a serious oversight, since making things cold is energy intensive and can be highly polluting, and demand for cooling in all its forms is booming worldwide .”

Professor Toby Peters, The Cold Economy & Cryogenic Energy Storage

EnergiVault : The solution

Plug-in cooling power



USPs

1. **Binary ice** – provides variable and ultra-fast discharge rate, giving maximum flexibility in supporting cooling needs, supported by optimising software. Patent protected.
2. **Modular plug-and-play design** – allows systems specification to exactly match customer requirements.
3. **Accurate charge/discharge and state-of-charge reporting** – ensures economic returns are demonstrable.
4. **Chargeable from renewable energy** – free cooling provided by solar PV.

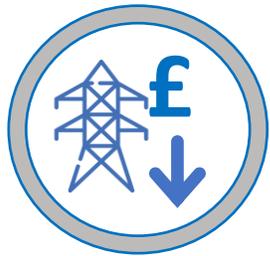
What our customers are saying about us:

“Quotient Sciences is committed to reducing its carbon footprint and energy consumption at every opportunity. It is innovations such as the EnergiVault, and engineers committed to change, that our planet needs now.”

Stuart Munro
Head of Facilities, Quotient Sciences
(Alnwick)
Location of O-HX’s first installed unit.

Compelling customer proposition

EnergiVault drives cost and emissions down, and increases operational efficiency and capabilities.



Reduced energy costs

Financial payback typically 2-5 years



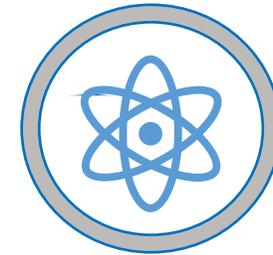
Lower carbon

Using on-site renewables or low-carbon from grid



Operational resilience

Through power outages and temperature squeezes



Smart grid

Facilitated by AI-led optimising software

Net zero cooling

O-Hx's vision is a future where industrial cooling is sustainably managed on a global scale.

Generation of renewable energy is not constant – it wavers.

To bridge the gaps of this fluctuation, and truly embrace renewable energy sources, a diverse set of energy storage solutions is crucial.

EnergiVault plays a pivotal role in this transition by handling all cold energy storage applications.

“Storing energy so it can be used later, when and where it is most needed, is key for an increased renewable energy production, energy efficiency and for energy security.” *EU's European Commission*

Market potential

TAM

Globally,
number of
>400kW
systems:

2,014,235
installed base

SAM

Europe and
North America
only; 5°C+
systems only:

361,354
installed base

SOM

Forecast unit
sales of
EnergiVault in
Year 5

1,500 EV
installations

Competitive landscape

| Typical customer demand: 500kW cooling capacity, for 4 hour | | | | | |
|---|---------------------------|--|--|------------------------------|--------------------------|
| Technology solution | | EnergiVault | Additional chiller | Block ice | Chilled water |
| Comparative installation | | 2 x 1MWh EnergiVaults | 500kW ammonia chiller | 6MWh ice storage system | 2MWh chilled water silos |
| Suppliers | |  | Trane : GEA : JCI : Carrier | Calmac : IceBat: Nostromo | Araner : Mibec : CB&I |
| Capital cost | | £400k | £300k | £750k | £350k |
| Performance | Load-shifting capability | ✓ | ✗ | ✓ | ✓ |
| | Peak demand support | ✓ | ✓ | ✗ | ✓ |
| | Power transfer efficiency | High | N/A – on-demand supply, not energy storage | Low | Med |
| | Energy density | High | | High | Low |
| | State-of-charge awareness | High | | Med | Low |

Our management team



Bob Long, Founder & Executive Chairman

40+ years in refrigeration industry. Set up Cape Cooling in South Africa, then Coolideas in UK, as specialist refrigeration contractor, building expertise in thermal energy management, culminating in development of EnergiVault energy storage concept.



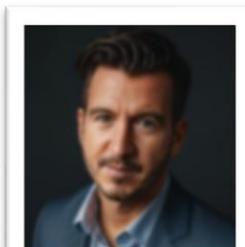
David Grundy, Finance & Commercial Director

Extensive track record in finance sector. 20 years at Grant Thornton, partner specialising in M&A and IPOs. 12 years as independent consultant, Chairman and NED, across public and private sectors, driving growth strategies forward.



Geoff Barker, Product Director

Over 30 years of engineering experience, occupying numerous roles in heating, generation and energy management sectors. His roles have evolved from pure engineering to blending technical expertise with product offerings and alignment to market demand.



Lee Storey, Sales Director

A decade of experience in the renewable energy sector, and deep expertise in energy storage. His strategic insight, industry connections, and hands-on experience enable him to deliver scalable, high-value solutions that support long-term sustainability and commercial success.

Progress to date

2022 and prior

- Proof-of-concept trials successfully concluded; awards achieved
- Patents awarded, across key geographies

2022-23

- Commercial demonstration unit designed, and in production
- Supply chain established
- AI-led optimising software developed

2023-24

- Commercial demonstration unit installed, testing commenced
- Charger production design completed (CE design approval granted 2024)
- Operational and commercial planning completed, inc market research

2024-25

- Commercial trials successfully completed
- V2 battery and propane charger installed and tested
- Critical sub-component designs undergoing value engineering

Traction

Food chain

Typically used for process cooling

- *Awaiting order confirmation with Mondalez*
- *Accelerator 100 participation, inc ABInBev*



Pharmaceutical

Typically used for space cooling and resilience

- *Organon scoping 3-unit system*
- *Quotient Sciences*



Data centres

Typically used for uninterruptable cooling

- *Quote issued to Vertiv*
- *Discussions with Red Engineering*
- *Enquiry received from Stack*



Airports

Typically used for air-con

- *Potential PoC – Stansted Airport*
- *Discussions with Dublin and Heathrow*



Global opportunities

The global market potential, and evidence from enquiries received to date, necessitates an expedited expansion strategy:

1. Current focus is on gaining commercial traction from the UK. This will target refrigeration contractors and energy manager consultants as the route to end-customers. Sub-contract manufacturing will deliver product, with capital sales representing primary income stream. European enquiries can be serviced from UK.
2. Once established in UK, internationalisation will be key milestones for a subsequent funding round. Overseas markets will be exploited by technology license arrangements with distributors and manufacturers in respective territories.
3. Product diversification, and add-on services such as financing, will follow successful internationalisation.

Financial projections

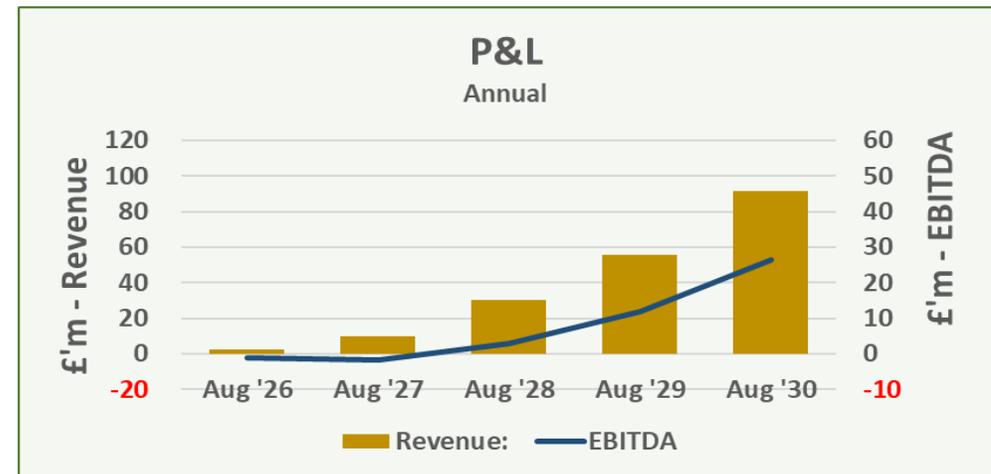
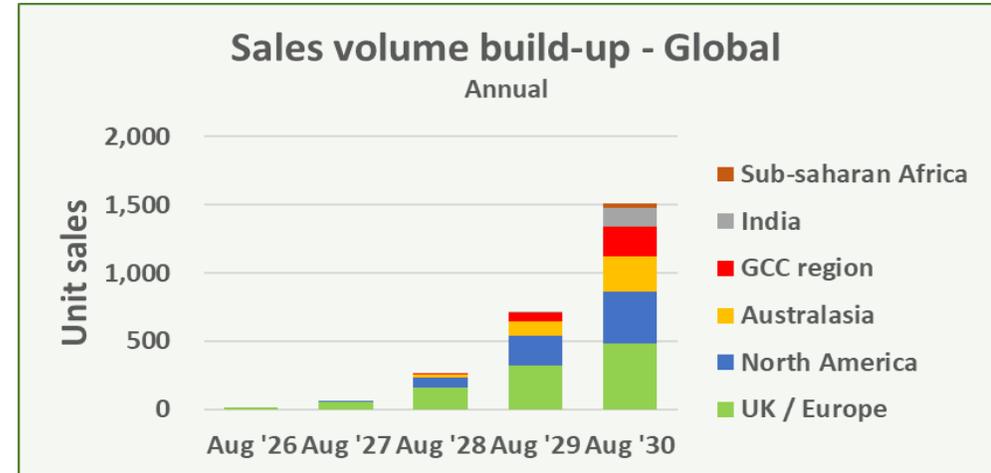
With sales commencing in early 2026, a substantial inflexion point in valuation will occur.

From current £20m valuation, a projected valuation of £100m is expected in 2027.

A trade sale is anticipated, targeted at £250m valuation.

“EnergiVault has huge potential in the American market. It’s rapid and flexible discharge capabilities makes it the best thermal storage system in the market, and we are excited to be working with O-Hx in bringing this to our customers.”

Dave March, CEO, Exergy Energy



What our customers
are saying about us:
**“Marks out of 100?
95% because I never
give 100%.”**

Stuart Munroe, Head of Facilities,
Quotient Sciences.



Funding requirements

Raising £1m to propel our commercial strategy forward and underpin a series of pivotal activities.

EIS qualifying.

Allocation of funds:

1. Intensification of UK-based sales and marketing efforts (25%)
2. Staff recruitment to deliver scalability (50%)
3. On-going product and manufacturing development (25%)

For further information please contact:

Vincent Bithell: vincentb@o-hx.com

David Grundy: davidg@o-hx.com

“This fundraising round presents an exceptional opportunity for early investors to be part of a visionary journey towards reshaping the landscape of industrial cooling with a sustainable, profitable, and scalable solution. O-Hx is poised to be one of the fastest growing global industrial brands over the next decade.”

*Bob Long, Executive
Chairman*



www.o-hx.com

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