



**INNOVATION ZERO  
AWARDS 2024**

# **Finalists, winners and next steps**



# We help to solve the biggest challenge of climate innovation adoption

Setting up pilot projects or securing initial deals with corporations poses the greatest challenge for startups. Corporations are often hesitant to purchase from startups due to perceived uncertainty.

However, with increasing pressure to decarbonise, there is growing interest in startup solutions, particularly within the climate sector.

Yet, businesses lack effective discovery tools for sourcing "clean solutions." This is where the Innovation Zero Awards come in, bridging the gap and facilitating connections between startups and corporations.

*"We want to build bridges between climate innovators, corporate buyers and investors."*  
**Nastasya Savina, Director of Awards & Showcase**



# Innovation Zero Awards in Numbers

## 6 Categories

1. Land & Water
2. Measurement, Reporting and Verification (MRV)
3. Industry
4. Transport & Logistics
5. Energy & Power
6. Built Environment

## 2 Streams in each category

In each category, we will have a pool of Mature Solutions (Technology Readiness Level 7+) and Promising Solutions (Technology Readiness Level 4-6).

216 Qualified applications

50 Climate expert Judges

60+ Shortlisted candidates  
5-6 candidates in each stream of every category

676 Individual assessments

12 Winners

# Land and Water // Mature solutions

## Company: Cauli Ltd

- Solution: CauliRS **WINNER**
- <https://www.wearecauli.com>
- Cauli Reuse System (CauliRS) is decarbonising the catering industry by helping customers source and track reusable food and beverage packaging.

## Company: Volta Greentech

- Solution: Lome feed additive
- <https://www.voltagreentech.com>
- Lome™ is an advanced high-performance feed supplement for livestock.

## Company: Rare Earth Global

- Solution: A Sustainable Innovation for Food, Agriculture, Biodiversity and the Built Environment
- [www.rareearthglobal.com](http://www.rareearthglobal.com)
- Our first product is a patented hemp seed formulation used in fish feed, which reduces carbon emissions and replaces deforestation-linked soy.

## Company: Hydro Volta

- Solution: SonixED
- [www.hydrovolta.com](http://www.hydrovolta.com)
- SonixED is an advanced desalination technology that combines electrodialysis and ultrasound to efficiently remove dissolved solids from water.

## Company: BX Technologies

- Solution: The BX platform
- <https://www.bx.tech>
- Enabling sustainable agriculture and decarbonising the food supply chain through AI-driven optimisation of farm data

## Company: Materra

- Solution: Future-proof Cotton
- [materra.tech](http://materra.tech)
- Materra builds solutions to grow and source future-proof cotton – with the data to prove it.

# Land and Water // Promising solutions

## Company: ShowerKap Ltd

- Solution: ShowerKap
- [www.showerkap.co.uk](http://www.showerkap.co.uk)
- A shower valve system smart enough to nudge people in making better decisions, whilst macro-monitoring use of water in the bathroom.

## Company: DRIFT Energy Ltd

- Solution: DRIFT Energy
- <https://drift.energy>
- DRIFT creates green hydrogen at sea and delivers it globally on the world's first energy harvesting yacht.

## Company: Hydrogen Refinery

- Solution: Upgrading waste and biogas to hydrogen, ammonia and synthetic fuels
- [www.h2refinery.co.uk](http://www.h2refinery.co.uk)
- Hydrogen Refinery (H2R) is bringing to market the world-leading and patent protected Plasma Electrolysis System (PES)

**WINNER**

## Company: SAGES

- Solution: SAGES make natural dyes from food waste
- <https://www.sageslondon.com>
- SAGES create natural, biodegradable, non-polluting and non-toxic dyes derived from food-waste.

## Company: CO2CO Ltd

- Solution: Sustainable materials from decarbonising microalgae
- <https://www.co2co.earth>
- Using carbonisation we have demonstrated the ability to develop sustainable materials such as biobitumen from microalgae.

## Company: Moree

- Solution Reusable Smart Packaging System
- <https://www.getmoree.com>
- We help food brands ditch single use packaging through our smart reusable packaging.

# Measurement, Reporting and Verification (MRV) // Mature solutions

## Company: Angara Global LTD

- Solution: DecarbonX
- <https://angaraglobal.com>
- DecarbonX, a set of Decarbonization-Centered Maintenance solutions that helps reduce the impact of fouling within heat exchangers.

## Company: Kamma

- Solution: Back Book Climate Risk Analytics
- [kammadata.com](http://kammadata.com)
- Using leading-edge address matching and modelling, Kamma's property-level data analysis on the climate risks and opportunities

## Company: InQube Innoventures

- Solution: GreenQube
- [www.inqube.biz](http://www.inqube.biz)
- End-to-end digitization and MRV backbone for Farmer decision support

**WINNER**

## Company: Net0

- Solution: Net0 - Profitable Decarbonization Platform
- [net0.com](http://net0.com)
- Net0 is a world-leading AI-driven profitable decarbonisation platform

## Company: SatVu

1. Solution: SatVu - The World's Thermometer
2. <https://www.satellitevu.com>
3. SatVu captures the highest resolution thermal data from space for a safer and more sustainable Earth.

# Measurement, Reporting and Verification (MRV) // Promising solutions

## Company: GHGBlaze

- Solution: GHGBlaze
- <https://ghgblaze.com>
- GHGBlaze is the first specialised blockchain-based platform for extractive commodity producers and traders to measure and manage emissions across the value chain.

## Company: Endava

- Solution: Carbon Intensity of Digital Services
- <https://www.endava.com>
- Determining the carbon-footprint of digital services, such as of an ecommerce or banking service.

## Company: ATMO Technologies

- Solution: Project financing for Insetting
- [www.atmo.earth](http://www.atmo.earth)
- ATMO is derisking insetting finance and accelerates decarbonisation of supply chains.

**WINNER**

## Company: Circkit

- Solution: Circkit
- <https://circkit.com>
- An AI/ML-powered Circular design Toolkit (D/SaaS) and Product Life Cycle Management suite (PLM) for professionals in the fashion and clothing industry.

## Company: yaiLab

- Solution: Battery analytics and degradation monitoring and forecasting
- <https://yaiLab.com>
- AI-powered software that can estimate and predict battery health and degradation for real-world use cases.

## Company: ZapienSolar

- Solution: AI Smart Prism Solar Roof Tile
- [zapiensolar.com](http://zapiensolar.com)
- We are developing 4 sided glass top Prism oblong/sqaure shaped roof tiles, ingeniously designed to capture sunlight from every conceivable angle

# Industry // Mature solutions

## Company: Multiverse Computing

- Solution: Singularity
- [www.multiversecomputing.com](http://www.multiversecomputing.com)
- Singularity is a platform delivering our own quantum/quantum-inspired solutions to companies to solve Optimization and AI problems

**WINNER**

## Company: Net0

- Solution: Net0 – Profitable Decarbonization Platform
- [net0.com](http://net0.com)
- Net0 is a world-leading AI-driven profitable decarbonisation platform

## Company: In2Tec

- Solution: ReUSE® and ReCYCLE™
- [www.in2tec.com](http://www.in2tec.com)
- ReUSE® is a comprehensive suite of materials, manufacturing processes, and proprietary design techniques facilitating the production of fully unzippable printed circuit boards

## Company: Brill Power

- Solution: BESA BP6 X1 Battery Intelligence Platform
- <https://brillpower.com>
- Brill Power's Battery Intelligence Platform brings transformational advances in longevity, performance, cost and sustainability to electric vehicles and stationary energy storage.

## Company: Heidelberg Materials UK

- Solution: Bay Hydrogen Hub
- <https://www.heidelbergmaterials.co.uk/en>
- This project seeks to employ company knowledge to demonstrate the use of hydrogen as fuel in asphalt production in the world's first trial of its kind.



# Industry // Promising solutions

## Company: Sonichem Technologies

- Solution: Sonichem
- <https://sonichem.com>
- Sonichem is pioneering an innovative ultrasonic biorefinery technology that transforms forestry by-products into valuable, bio-based chemicals.

## Company: Electrogenos Ltd

- Solution: Ground-breaking alkaline electrolyser stacks
- [www.electrogenos.co.uk](http://www.electrogenos.co.uk)
- We produce drastically more hydrogen for a lot less CAPEX and less OPEX

## Company: SAGES

- Solution: SAGES make natural dyes from food waste
- <https://www.sageslondon.com>
- SAGES create natural, biodegradable, non-polluting and non-toxic dyes derived from food-waste.

## Company: Reblade ApS

- Solution: Valkyrie: A flying repair factory for wind turbine blades
- <https://reblade.dk>
- We lower the cost of wind energy by a drone-based solution for automated repairs of eroded wind turbine blades

## Company: Nuada

- Solution: Nuada's MOF-based VPSA Carbon Capture solution **WINNER**
- <https://nuadaCO2.com>
- Nuada builds energy-efficient filtration machines that capture CO2 from industrial off-gases to decarbonise hard-to-abate sectors.

## Company: Immaterial Ltd

- Solution: Lowest Cost Carbon Capture Monolithic MOFs
- <https://nuadaCO2.com>
- We have created a technology for producing advanced materials, integrated with conventional engineering designs to deliver carbon capture systems

# Transport & Logistics // Mature solutions

## Company: Hubl Logistics Ltd

- Solution: CoolRun System
- [www.coolrun.co.uk](http://www.coolrun.co.uk)
- CoolRun revolutionises temperature-controlled logistics, replacing traditional chiller units with modular, tracked, insulated containers with zero refrigeration emissions

## Company: Sunswap Ltd

- Solution: Sunswap Endurance
- [www.sunswap.co.uk](http://www.sunswap.co.uk)
- Sunswap Endurance is a purpose-built, zero direct emission transport refrigeration unit powered by batteries and solar panels.

**WINNER**

## Company: InQube Innoventures Limited

- Solution: GreenQube
- [www.inqube.biz](http://www.inqube.biz)
- End-to-end digitization and MRV backbone

## Company: FLIT

- Solution: FLIT M2 Folding Ebike
- <https://flit.bike>
- The FLIT M2 is a folding ebike designed for urban commuters that is small enough to fit in a train luggage rack

## Company: Trojan Energy Limited

- Solution: Trojan Energy Charging System
- [www.trojan.energy](http://www.trojan.energy)
- A system for on-street residential charging, that minimises street clutter and leaves no residual presence when no car is charging

## Company: Heidelberg Materials UK

- Solution: CarbonLock BioAsphalt
- <https://www.heidelbergmaterials.co.uk/en>
- Heidelberg Materials UK developed bio-asphalt, reducing carbon emissions by 25% by incorporating a biogenic binder in place of traditional bitumen binder.

# Transport & Logistics // Promising solutions

## Company: water stuff & sun GmbH

- Solution: H2 battery (SFEERS) - Energy Storage System
- <https://www.waterstuffandsun.com>
- SFEERS are tennis ball-sized spherical carbon fibre tanks for gaseous hydrogen with a microvalve system that regulates the hydrogen

## Company: Optimal Cities Ltd

- Solution: Optimal Cities
- <https://optimalcities.com>
- Optimal Cities is the World's City Planning Companion, leveraging GeoAI and satellite intelligence to enable urban planners, developers and authorities to make cities that heal.

## Company: FLIMAX Ltd

- Solution: FLIMAX battery-electric aircraft
- [www.flimax.ltd](http://www.flimax.ltd)
- FLIMAX is an electric aircraft company that plans to be a major player in the zero-carbon aircraft revolution.

## Company: Flux Aviation

- Solution: FLUX-75
- <https://www.fluxaviation.com>
- FLUX-75 is an electric propulsion system designed for light training aircraft.

**WINNER**

## Company: Avioxx Limited

- Solution: The Avioxx Process
- <https://www.avioxx.co.uk>
- The Avioxx Process is an innovative engineering solution to lower the environmental and economic costs of producing aviation fuel from household municipal waste.

# Energy and Power // Mature solutions

## Company: Naked Energy Ltd

- Solution: Virtu
- <https://nakedenergy.com>
- Naked Energy manufactures two solar thermal collectors (VirtuHOT and VirtuPVT) which are the highest energy density solar appliances on the market.

## Company: GeoPura

- Solution: HPU - hydrogen-powered generator
- [www.geopura.com](http://www.geopura.com) **WINNER**
- GeoPura HPU technology harnesses green hydrogen to provide zero-emission electricity, augmenting the grid where the local supply is insufficient

## Company: Multiverse Computing

- Solution: Singularity
- [www.multiversecomputing.com](http://www.multiversecomputing.com)
- Singularity is a platform delivering our own quantum/quantum-inspired solutions to companies to solve Optimization and AI problems

## Company: Rendesco Ltd.

- Solution: Rendesco Ground Source Heat Networks
- <https://www.rendesco.com>
- Funded, heat-pump-based heat networks which provide commercial and domestic developments with low-cost, low-carbon heating, cooling, and domestic hot water as a service

## Company: Kensa Group

- Networked Ground Source Heat Pumps
- <https://www.kensaheatpumps.com>
- Networked Ground Source Heat Pumps ease the transition to low-carbon heating at a scale akin to the gas grid.

# Energy and Power // Promising solutions

## Company: RFC Power Ltd

- Solution: Manganese flow battery
- [www.rfcpower.com](http://www.rfcpower.com)
- RFC Power's manganese flow battery uses low cost, widely available materials to deliver the long duration energy storage solution required by a net-zero energy system.

## Company: Hydrogen Refinery

- Solution: Upgrading waste and biogas to hydrogen, ammonia and synthetic fuels
- [www.h2refinery.co.uk](http://www.h2refinery.co.uk)
- Hydrogen Refinery (H2R) is bringing to market the world-leading and patent protected Plasma Electrolysis System (PES)

**WINNER**

## Company: Carbon Re

- Solution: Delta Zero
- <https://carbonre.com>
- Delta Zero® is an AI-powered optimization software solution designed for the cement industry.

## Company: VOLTQUANT

- Solution: Grid Search Platform
- [www.voltquant.com](http://www.voltquant.com)
- VOLTQUANT aims to reduce the 15-year delay in connecting net-zero projects to the grid, facilitating a quicker transition to clean energy.

## Company: Camfridge Ltd.

- Solution: Netzero Magnetic Cooling
- <https://camfridge.com>
- Magnetic cooling technology that helps cut the carbon intensity of cooling to meet NetZero goals, whilst reducing costs and enhancing sales

# Built Environment // Mature solutions

## Company: Naked Energy Ltd

- Solution: Virtu
- <https://nakedenergy.com>
- Naked Energy manufactures two solar thermal collectors (VirtuHOT and VirtuPVT) which are the highest energy density solar appliances on the market.

**WINNER**

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- Solution: Rendesco Ground Source Heat Networks
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## Company: Adaptavate

- Solution: Breathaboard
- <https://adaptavate.com>
- Breathaboard is a bio-based, carbon sequestering alternative to plasterboard.

## Company: ZED PODS Limited

- Solution: The UK's truly affordable, zero-carbon, high-quality modular housing solution
- [www.zedpods.com](http://www.zedpods.com)
- Our solution addresses social inequality in housing and contributes to climate change mitigation through its zero operational carbon design

## Company: Kensa Group

- Solution: Networked Ground Source Heat Pumps
- <https://www.kensaheatpumps.com>
- Networked Ground Source Heat Pumps ease the transition to low-carbon heating at a scale akin to the gas grid.

# Built Environment // Promising solutions

## Company: Optimal Cities Ltd

- Solution: Optimal Cities
- <https://optimalcities.com>
- Optimal Cities is the World's City Planning Companion, leveraging GeoAI and satellite intelligence to enable urban planners, developers and authorities to make cities that heal.

## Company: Seratech

- Solution: Seratech **WINNER**
- <https://www.seratechcement.com>
- Seratech's technology focuses on decarbonising cement and creating building materials made from CO2 emissions in a circular process.

## Company: Carbon Re

- Solution: Delta Zero
- <https://carbonre.com>
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## Company: Natural Building Systems

- Solution: ADEPT®
- <https://naturalbuildingsystems.com>
- ADEPT combines low embodied-carbon materials with modern construction methods to transform the industry.

# Next Steps

## Catalogue of green solutions

Our online database of green solutions will be available year-round, equipped with search and filter functions for seamless navigation. Serving as a vital discovery tool for sustainable procurement managers, it will feature prominently the Innovation Zero Awards applicants. Listing in the catalogue will be free for developers of climate-friendly green solutions.

## New formats

We intend to experiment with new formats to help connect climate innovators, sustainable corporate buyers and investors. From matchmaking sessions, roadshows and trade missions to technology challenges and targeted panels, we're open to experimentation. If you're interested in collaborating, let's chat!

## Going global

Innovation Zero Awards can be extended to other regions, e.g. the Middle East and/or the US





# INNOVATION ZERO AWARDS 2024

# Thank you!

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