

Broccoli protein, waste-cardboard manufacturing and accessible home-owning – all in this week's Maddymoney

Every week, Maddyness brings you the latest investment news from the UK startup ecosystem. Here's a recap of this week's investments.

Total

£200.49M

Number of deals

15

upp bags 500K investment for its waste-broccoli protein upcycling

Shropshire-based [upp™](#) aims to combine AI-harvest automation technology and side stream upcycling to deliver clean, sustainable and nutritious broccoli protein. Elbow Beach Capital has invested £500K to support the commercialisation of the company's unique harvest automation and upcycling technologies.

The UK is one of the largest producers of broccoli in the world but leaves 80% of the food grade biomass (stem, stalk and roots) unused. upp's breakthrough harvesting equipment uses 3D cameras and machine learning to harvest the broccoli; separating heads from the rest of the plant. upp's harvest automation replaces seven seasonal agricultural workers, and can work at night. After the broccoli heads have been harvested and delivered to market, upp focuses on the 80% of the broccoli plant that would otherwise go to waste.

Boston Consulting Group recently estimated that the food system currently accounts for 26% of global CO2 emissions and concluded that switching to alternative, plant-based proteins is one of the most impactful ways to combat the climate crisis. The two most popular protein alternatives, however, are either carbon intensive (pea) or a contributor to deforestation and farmer displacement (soya). upp's broccoli protein is four times less carbon intensive than pea protein and avoids the ecological and social issues caused by over-reliance on soya farming.

The funding from this round will be used to pilot both upp's harvest and uppcycling™ technology this year, with the company aiming to complete three field-to-protein pilots in the UK, Spain and California by the end of 2024. First commercial production of upp's broccoli protein is expected to commence in late 2024.

Read also

[80% of harvested broccoli goes unused, meet upp, the agri-robotics startup changing the game](#)

Waste-to-material manufacture

Unwasted secures £1.5M seed round

Unwasted, the producer of premium manufacturing materials from waste cardboard has strengthened its balance sheet ahead of the construction of its first full-scale production plant. Elbow Beach Capital – who focus on decarbonisation, sustainable energy, and social impact businesses – made the £1.5M investment into waste-to-material pioneers, *Unwasted*. The London-headquartered company, which converts waste cardboard into premium panel boards will benefit from a strengthened balance sheet and EBC's commercial expertise ahead of its upcoming Series A.

Unwasted's Neverwaste™ is a high performance, mass production panel board made entirely from waste cardboard and packaging. By refining and modifying the fibres of cardboard, Neverwaste™ avoids the use of glues, resins and toxic chemicals in the production of a premium-specification material for use in construction, furniture, kitchens and flooring. Accelerated by the growth of e-commerce, average households now throw away 13,000 separate pieces of cardboard every year with cardboard and paper making up 41% of the solid waste stream worldwide. Much of this waste is either sent to landfill or burned, producing significant carbon emissions and wasting a potentially valuable feedstock.

Following the successful validation of its technology at its pilot manufacturing plant in Deeside, North Wales, the company aims to raise a £72M Series A through new and existing investors to build its first full-scale production plant in Denmark. The 75,000m² site in Jutland will be fully powered by renewable energy and operate a closed loop water system, making it one of the most sustainable factory sites in the world.

Read also

[Decarbonisation, sustainable energy and social impact, a profile of Elbow Beach Capital](#)

VR workforce training platform Gemba secures \$18M

Gemba, the virtual reality workforce learning platform, announced today it has raised an \$18M Series A funding round at a \$60M valuation led by New York investor *Parkway Venture Capital*.

Through its proprietary Virtual Reality (VR) offering combining software, content, and service, Gemba helps global enterprises seeking to train distributed workforces across multiple sites through highly immersive learning programs, simulated factory walks, and live training events – simply by putting on a VR headset

The investment will be used to accelerate the company's growth in EMEA and to fund the expansion into the North American market as the company leads the way in the new Virtual Reality as a Service (VRaaS) corporate training space.

Keyzy raises £3M to unlock homeownership for key workers and first-time buyers

Keyzy, the real estate fintech providing a rent-to-own solution to aspiring homeowners, has raised £3M in a seed funding round. Axeleo Capital and Outward VC co-led the funding round.

U.K. property prices have risen three times faster than incomes during the last nine years, making it harder to save the 10-20% deposit mortgage lenders typically require. Keyzy was founded in late 2021 to unlock homeownership for those with insufficient savings, by offering a unique finance model which shelters customers from rent and property price inflation. Keyzy gives successful applicants a budget to find a home that suits their needs. It acquires the home chosen by the customer and leases it to them at a fixed rent for three to seven years. Keyzy customers are able to establish a credit history to facilitate a future mortgage application while up to 25% of their rent is converted to lower the locked in buy-back price of the property. Customers have the right to buy the home at the original total cost minus the converted rent that has accumulated.

The proceeds will accelerate its purchases of homes and the development of its technology platform, enabling more of its target group of key workers and

young professionals to join the property ladder for the first time.

Emperia raises £8.1M to unlock new frontier for virtual retail

Immersive virtual retail pioneer Emperia has raised a \$10M Series A round to hasten the capabilities of its virtual retail platform and bring “metaverse e-commerce” to new international markets and retail sectors. The round was led by Base10 Partners and joined by investors including Daphni.

Launched in 2019, Emperia’s platform aims to power the creation of immersive virtual experiences for brands across multiple retail sectors. The platform marries the reach and accessibility of e-commerce with the impact of in-person retail, giving companies the tech and visual infrastructure to build and manage powerful virtual stores. These virtual spaces enhance omnichannel retail strategies by creating new digital touchpoints that drive engagement and increase sales. The platform has driven increased conversion rates for its brand partners by an average of 73% (vs. regular e-commerce websites) since its inception in 2019, with an average ROI of 750%.

Emperia will use this fresh funding to grow its team, supercharge its virtual store SaaS platform and deepen the capabilities of the data suite that powers it; accelerating Emperia’s global market presence and consolidating its position as the future of immersive, experiential retail and entertainment. Emperia also plans to utilise virtual store customer data to provide retailers with even better tools with which to personalise the customer experience.

Onto raises £100M credit facility to accelerate the shift to electric mobility

Electric car subscription service Onto raises a new credit funding line of £100M from global investment group CDPQ and independent asset manager Pollen Street, boosting its mission to accelerate electric car adoption and provide a flexible alternative to the traditional car ownership model.

The £100M asset-backed facility will enable Onto to continue expanding its UK fleet with the latest electric car models. Onto’s monthly subscription model is all-inclusive of insurance, breakdown cover and free public charging. It empowers subscribers with flexibility – no deposit, no long-term commitment and the option to swap cars or stop the subscription every month.

Rob Jolly, Onto CEO & Co-Founder, said: “We’re grateful for the support of Pollen Street and CDPQ – it will turbocharge our UK growth plans and consolidate our position as the leading electric car subscription service. This is a pivotal moment for the adoption of electric cars and at Onto we want to make them more accessible and affordable to people who want to make environmentally-conscious choices. The opportunity to provide an alternative to car ownership has also never been more desirable – our subscribers benefit from the convenience, flexibility and choice that come with a monthly subscription model.”

#HR

Gemba

£14.5M

Parkway Venture Capital

#BIOTECH

Neophore

£6M

CRT Pioneer Fund, Claris Ventures, 2Invest, 3B Future Health Fund & Astellas Venture Management

#FINTECH

Beurzbyte

£2.2M

Angels

#GREENTECH

upcycled plant power

£500K

Elbow Beach Capital

#DEEPTech

GoodVision

£2.37M

Lead Ventures, Credo Ventures & Sofia Angels Ventures

#REGTECH

GSS

£36.4M

AlixPartners, The Cynosure Group & MUFG

#MEDTECH

Waire

£2M

Eos Advisory & Scottish Enterprise

#PROPTECH

Keyzy

£3M

Axeleo Capital, Outward VC, Seed X, Global Founders Capital & ActivumSG Ventures

#GREENTECH

Unwasted

£1.5M

Elbow Beach Capital

#DATA

Slingshot Simulations

£3M

Northern Gritstone, Mercia & the Northern Powerhouse Investment Fund

#AGRITECH

Entocycle

£4.4M

Climentum Capital, Lowercarbon Capital, Teampact Ventures, ACE & Company & Angels

#RETAILTECH

Emperia

£8.12M

Base10 Partners, Daphni, Sony Innovation Fund, Background Capital, Stanford Capital Partners, Concept Ventures & Angels

#FOOD

Dash Water

£9M

Beringea

#FASHIONTECH

Cudoni

£7.5M

EBay, The Daily Mail Group Ventures & Others

#MOBILITY

Onto

£100M

CDPQ & Pollen Street

In other International investment news

Twinco Capital raises \$12M to expand supply chain finance platform

Twinco Capital, the first global supply chain finance solution that covers the production cycle from purchase order to final invoice payment, has closed a \$12M equity and debt round. The investment was led by Quona Capital, and included participation from Working Capital, as well as existing investors Mundi Ventures and Finch Capital. Zubi Capital provided the venture debt portion.

Twinco Capital is on a mission to reduce the world's estimated \$1.7T trade finance gap, which disproportionately affects small and medium-sized companies in emerging countries and hinders their ability to access business opportunities and grow. Through its solution, the company engages with large corporations—mostly in the retail and apparel sectors—and offers funding to their suppliers worldwide, advancing up to 60% of the purchase order value upfront and paying the remainder upon delivery. The process is designed to be a fully transparent, no-hassle experience that provides the suppliers with funding for its purchase orders within 48 hours.

The funds will be used to accelerate the company's expansion within the major sourcing countries and strengthen its technology and data capabilities, in particular in relation to ESG.

