



Carbon Cell raises £1.2M to scale production of innovative low-carbon foam material

London (May 2025) — Carbon Cell, a London-based materials startup, has raised a £1.2M pre-seed round to scale its novel, plastic-free foam made from biochar and natural polymers. The round was led by Green Angel Ventures and Counteract, with participation from HERmesa, RCA Design and Innovation S/EIS Fund, and One Planet Capital.

Carbon Cell provides an alternative to polymer-based foams, with a patent pending, plastic-free foam. In combination with natural polymers, Carbon Cell transforms biochar into a foam material that has a low or negative carbon footprint, and that can be used to replace conventional plastic foams in a variety of sectors, from packaging to insulation.

In 2024 alone, over 10 million tonnes of expanded polystyrene were produced, enough material to cover the continent of Europe 50 mm thick. Carbon Cell's material replaces plastic foams such as expanded polystyrene, expanded polypropylene, and PUR/PIR, a collective market worth over \$109BN.

Biochar is created by processing waste biomass (typically agricultural co-products or material) in a low oxygen environment. Instead of burning these byproducts — emitting CO₂ — or leaving them to decompose — emitting methane — biochar fixes carbon into a form that remains stable for hundreds of years, reducing global greenhouse gas production.

This funding will support Carbon Cell's scale up from batch processing to continuous production, and a series of manufacturing trials to validate the material's use as a drop-in replacement for plastics. Carbon Cell is also working with early customers to deliver several thousand units of product for testing, evaluation, and trial.

This funding round builds on existing grant finance provided by Innovate UK, SHIFT London, and Village Capital's Green Tech EU, as well as early investment from Carbon13 and Queen Mary Social Venture Fund. Carbon Cell has also been supported by Imperial's Undaunted, London Social Ventures, GLA Better Futures Program, Creative Destruction Lab, Plus X Innovation CRLX, EIT Food Accelerator, and Third Derivative, and was the BBIA's Startup of the Year 2024 and a nominee for Earthshot 2025.

"Traditional foams have dominated for too long at the expense of our environment. At Carbon Cell, we're rethinking materials from the ground up, creating a carbon-negative foam that performs today and protects tomorrow," said **Liz Lee, founder and CEO of Carbon Cell**. "This investment will help us take the next big step in scaling production and bringing Carbon Cell to market."

"Carbon Cell shows what's possible when we rethink everyday materials. Their biochar foam replaces fossil-based packaging with a biodegradable alternative that cuts plastic waste, reduces emissions, and even stores carbon in the process," said **Cam Ross, CEO of Green Angel Ventures**.

"As an investor specialised in carbon removal, we love what Carbon Cell is doing with biochar. Creating new, planet-friendly materials in packaging and insulation is an exciting new sector with attractive growth prospects. Their deep technical approach and understanding of the functional benefits of biogenic materials have really impressed us. We're excited to be helping the Carbon Cell team on the next phase of their product development and commercialisation journey," said **Richard Barker, Partner at Counteract**.

Carbon Cell was founded in 2023 by Ori Blich, Eden Harrison, Elizabeth Lee, and Juan Ignacio Rion, graduates from Imperial College London and the Royal College of Art.

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For more information about Carbon Cell, visit their website at www.carboncell.co

About Carbon Cell

Carbon Cell is a materials company dedicated to providing a sustainable alternative to traditional polymer-based foams, with a patent pending, plastic-free material made from carbon-negative biochar and natural binders.

About the founders

Carbon Cell was founded by a team of engineers, designers, and strategists with a passion for solving tricky sustainability problems with concrete, pragmatic, yet audacious ideas. The team met in 2021 while enrolled in the prestigious Innovation Design Engineering course at Imperial College London and the Royal College of Art. With diverse prior careers spanning behaviour change and brand strategy, large scale mechanical engineering projects, and product design, they developed Carbon Cell as part of research into low-carbon materials, motivated by a deep desire to challenge the status quo and develop more regenerative, circular options for industry.

About Green Angel Ventures

Green Angel Ventures provides unique specialist early stage climate investment. Unlike any other investor in the UK, Green Angel Ventures' investment selection is based on a company's ability to reduce carbon emissions, or remove carbon from the atmosphere. Our portfolio has grown to 45+ companies, the impact of which has been the reduction of 265,000 tonnes of carbon-equivalent emissions to date.

About Counteract

Counteract is a carbon removal focused fund investing in early-stage technologies with the potential to capture and store greenhouse gases at global scale. The company gives engineer and scientist entrepreneurs the financial and strategic support they need to turn fresh ideas into self-sustaining businesses.

Contact

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