



FERMTECH – USING THE POWER OF BIOLOGY TO SOLVE THE CLIMATE CRISIS

Oxford based business, Fermtech, are a start-up company who were formed in September 2022. Their aim is to help solve the environmental crisis by producing nutritious, sustainable, low-carbon, animal-free protein for use in foods to meet the ever-changing needs of our planet.

Biologist and founder of Fermtech, Andy Clayton, shares his journey with us. "I'm originally a biologist and became an entrepreneur early on in my career. I have set up a lot of businesses. But I have always been nagged by a few senses of doubt. Climate change is a big problem facing us all and it needs us all to stand up and take action. I'm fortunate in having an Oxford University education and scientific skills, I'm very proud of that, but I felt I hadn't used these enough. I wanted to apply biology to help find solutions to the challenge of climate change.

Food production for me is a key area of focus and how to produce food without the use of animal farming. Animal farming is a very harmful human activity, it accounts for the destruction of eco-systems and releases a lot of carbon and other greenhouse gases into our environment. More and more people are choosing non-animal foods because of it's negative impact. So, I looked at the production of high protein food, without using animals. This is the essence of Fermtech."

USING A CIRCULAR ECONOMY PRODUCTION SYSTEM TO CREATE ANIMAL-FREE PROTEIN

Andy elaborates on how their ambition to create animal-free protein became a reality. "There are already technologies in the pharma industries, that create protein using biotech. They can produce great products yes, but they struggle with costs. If you want to produce great food it has to taste good, be nutritional and be affordable. So, we spent last year working with leading researchers and academics asking the same question, 'How can we make it cheaper?'. And we found a way.

So, to explain in simple terms, we developed a circular economy production system using products such as spent grains from breweries and unwanted potatoes. We grow specially selected fungi on those substrates. They grow well and produce a lot of protein. We then extract the protein from that mix resulting in a pure, high functional and very nutritious protein that we can sell into companies producing plant-based products, such as vegan cheese."



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OXLEP BUSINESS HELP FERMTECH GROW

Andy tells us how OxLEP Business played a pivotal role in their business growth. "At the end of 2022 we had completed a lot of research and had some great ideas, but we didn't yet have anything tangible. We needed a bigger team, a final product and a laboratory. We really needed some external support and funding. A friend of mine recommended OxLEP Business and I was signposted to their Innovation Support for Business Programme (ISfB). It was a pivotal moment that let us fight another day and helped us become the business that we are today.

Andy continues, "We were awarded a Go-Create grant and used the money to hire in the external consultancy expertise we needed for the first stages of our development work and to open our first production site at a laboratory in Oxford. And since then, we have been able to move forward at great pace. We are now at the point where we have a viable product and are entering the sales stage of the project.

OxLEP have been great for us, they have been vital in providing us with support we needed at a key stage of our business. They are very personable and really care. The work they do in supporting businesses is very important and I think we are a success story, an example of a system that is working really well. We are very grateful for them and the support they have provided."

WINNERS OF THE 'MOST INNOVATIVE BUSINESS'

At OxLEP Business's end of programme celebration event, Fermtech won the award for 'Most Innovative Business'. Andy was delighted, "Winning the OxLEP award was a very welcome surprise. We were very happy, although a little shocked. It's a testament to the work we've been doing. A lot of what's so great about OxLEP Business is not just the money, but they help to give you a driving confidence that you need to succeed.

We have very big ambitions on what we want to achieve moving forward. We have a great product



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now, so the next stage is to demonstrate that we can produce at scale. We're growing the team. We're in negotiations with investors to set up our first pilot production plant next year. We've also attracted central government funding and private investment. We're very well positioned to be one of the key companies in the country that's going to drive this change towards the production of alternative proteins for a new generation of foods. Exciting times ahead."

FOR MORE INFORMATION ON FERMTECH
PLEASE VISIT: [FERMTECH.CO.UK](https://www.fermtech.co.uk)



Find out more about the support
available from OxLEP Business:

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