



Driving prosperity and innovation through the bioeconomy

Supporting Bioeconomy Businesses from the Scarborough District



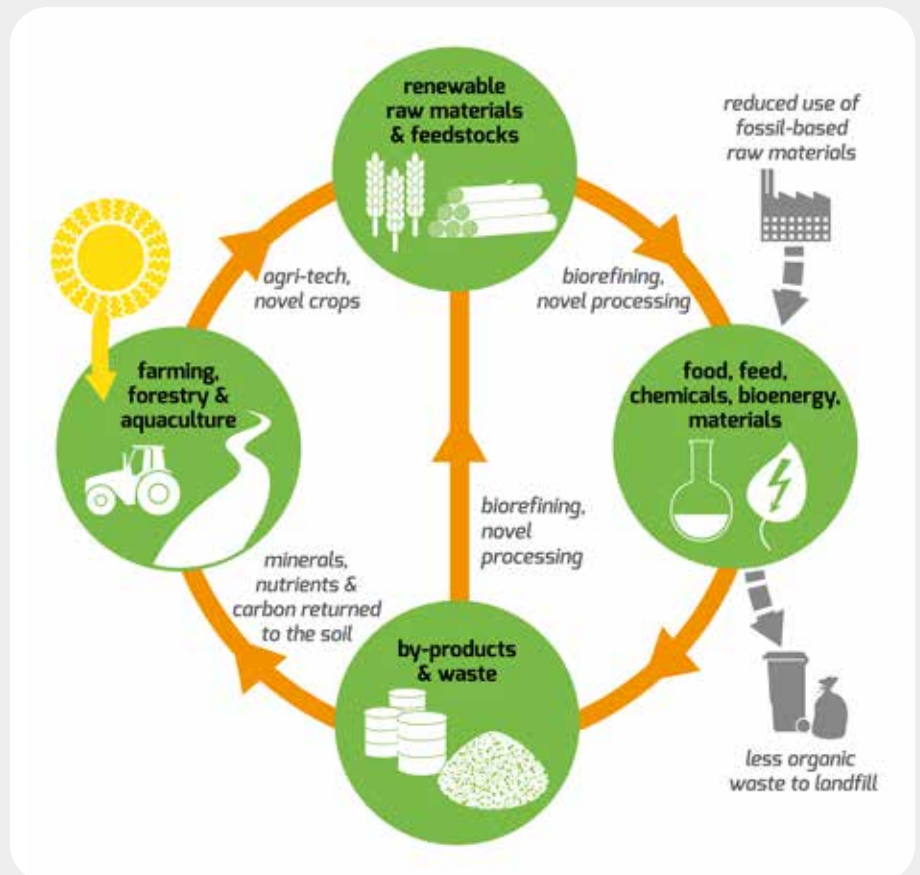
Introduction

This pilot programme helped 10 businesses from the Scarborough District develop their products and processes with support from bioeconomy experts at BioVale and the Biorenewables Development Centre (BDC) at the University of York. Each business received 2 days of bespoke support, plus a small grant. The programme was funded by Anglo American who had identified the bioeconomy as an area with great potential for growth and a key priority for their Social and Economic Development Plan.

This programme of activity is linked to the wider BioYorkshire initiative - an innovative public-private partnership including the University of York, Fera Science and Askham Bryan College and a range of private sector partners. It will transform the UK's bioeconomy through an 'end to end' programme going from world-class research through to translational facilities to study the application of this research, then a network of specialised business incubations, training and skills and entrepreneurial support to create and grow companies to commercially produce the industrial and consumer products from the research.

What is the bioeconomy?

The bioeconomy is the use of sustainable renewable biological resources, such as plants, animals and microbes, to produce food, energy and materials. These resources are sustainable and help us to reduce our reliance on fossil fuels.



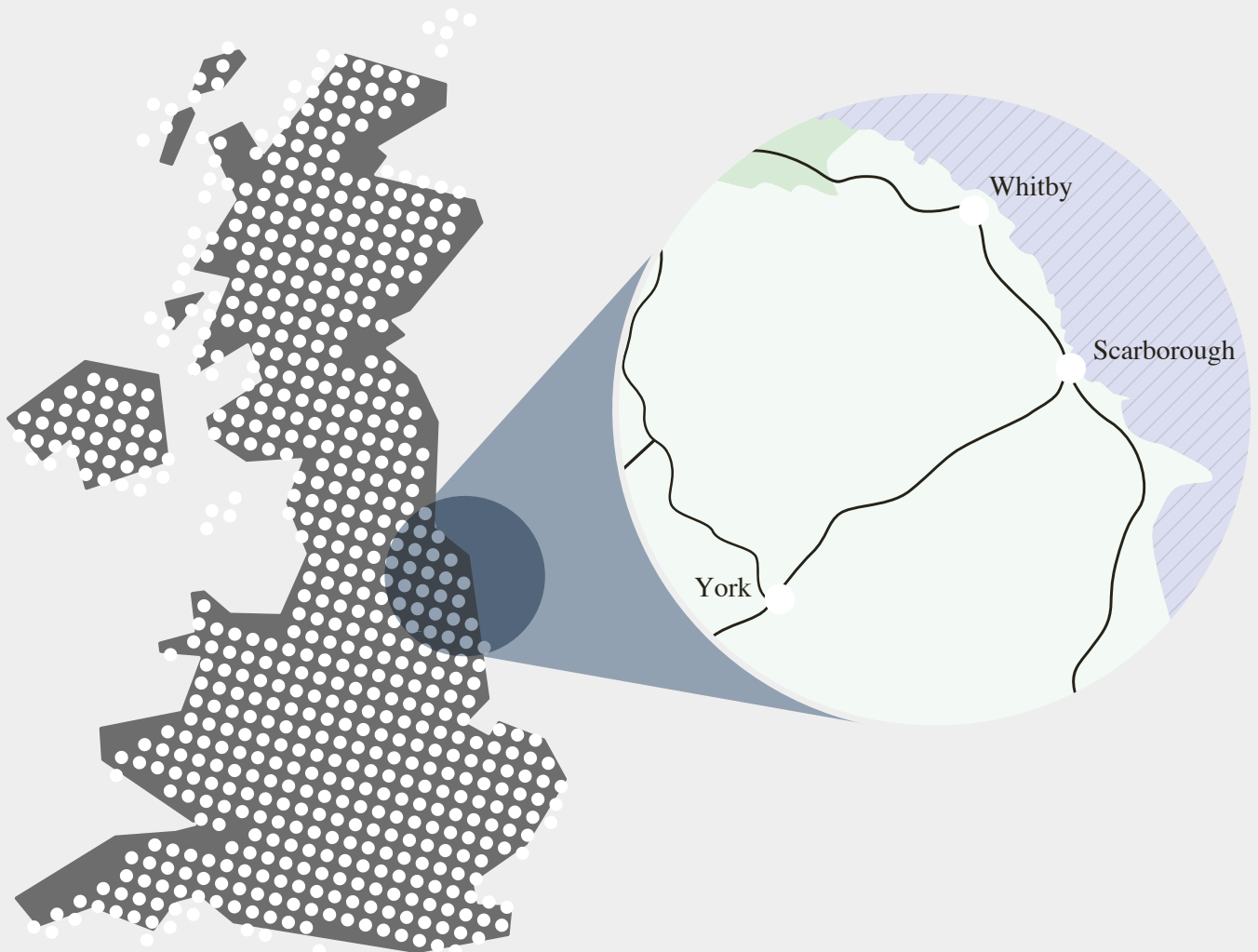
The bioeconomy

The pilot programme

The programme began with two workshops in Whitby, organised by the BioVale team to bring the businesses together to discuss the challenges they were facing and find out how we could support them, as well as how they could support one another. After learning more about the businesses, proposals were developed for each business outlining how the BioVale team could help them.



Second Whitby workshop



The businesses selected to take part in the pilot programme were:

Bayview Bees

Bayview Bees are a local supplier of delicious, raw honey which they sell online and to 35 shops. They also offer beekeeping courses. They were interested in exploring ways in which they could increase their revenue.

The BioVale team helped them enter 6 of their products into the Great Taste Awards which are due to be judged between March and June 2023. Time was also spent exploring the possibility of offering experience days and hive sponsorship opportunities and creating a flyer to gauge customer interest in this.

The final part of this project involved developing a QR code to use on product packaging to improve the customer experience.

Bayview Bees was also eligible to access one of the BDC's European Regional Development Fund (ERDF)-funded projects, which gave them access to two further days of consultancy support. This involved a review of their honeycomb packaging and the design of a cardboard sleeve which created a more premium feel for the product. Advice was also provided on propolis collection, increasing the yield from the hives and other markets for Bayview Bees' products which could include the hospitality and corporate events industries. If Bayview Bees decide to collect propolis from the hives, Nature's Laboratory, another business in the programme, expressed an interest in potentially purchasing this to use in their products.

The small grant was used to enter the Great Taste Awards and to pay for a video and motion graphic designer to create some footage of the hives and take some photographs of the products. This footage and images will be used on the website and also link to the QR code providing a more interactive customer experience.



Bayview Bees' products

“Working with Alice and the team at BioVale has been a pleasure. The ideas and designs which they have brought to the table will be used to push my business forward in these turbulent times. As a small business owner it’s often hard to lift your head up to see what is going on because there is always so much to do, it’s been great to have a team behind you that can do some of the looking for you.”

David Hanson, Owner, Bayview Bees.

Whitby Sea Salt

Whitby Sea Salt sells a variety of coarse sea salt products. They were using a cardboard outer tube wrapped in two layers of paper. Due to the hydrophilic nature of the salt, they needed to explore alternative packaging options and replace the paper inner layer to protect the product from moisture and maintain its shelf life. The majority of other companies selling sea salt rely on plastic packaging to keep their products free from moisture but Whitby Sea Salt wanted a more sustainable option. A report was created with information about different types of plastics. This included bio-based and biodegradable plastics and other new innovative materials such as packaging made from seaweed. The report also included a review of which reusable packaging solutions would be suitable for sea salt and information on compliance with the Green Claims Code with regards to potential biodegradable and recyclable packaging. The project also included the creation of a set of social media recommendations with the aim of generating increased awareness and wider reach online with both new and existing followers.

“Thank you to the BioVale team, it’s been an absolute pleasure. The help, advice, encouragement and expertise have been excellent and certainly of great value moving forward. The grant money from Anglo American has allowed us to develop an exciting new product much earlier and more efficiently and it’s very much appreciated.”

Darren Archibald, Owner, Whitby Sea Salt.

Whitby Sea Salt’s grant money was spent on packaging for a new addition to their salt and vinegar range that they are developing in collaboration with another business in the programme, Fortune’s Kippers.

Whitby Brewery

Whitby Brewery wanted to explore ways they could add value to the spent brewer’s grain left over from their brewing process.

For their project, a desk-based research study provided them with information on small-scale anaerobic digestion. This is the process by which microorganisms break down biodegradable material without the presence of oxygen to produce biogas. This can then be used as a source of renewable energy. Examples of products that could be created using their spent brewer’s grain were also provided as well as introductions to other companies already using anaerobic digestion to share their knowledge and experience. BioVale will provide ongoing networking opportunities to Whitby Brewery through their Anaerobic Digestion Special Interest Group.

The brewery used their grant money to buy a commercial cardboard shredding machine which will turn used packaging into shock resistant packing material, reducing their reliance on packaging pellets which are not only a cost to the business but a difficult material to dispose of by the end user.

Whitby Distillery

Whitby Distillery use fruit and botanicals in the distilling process to flavour their products. They wanted to explore the potential value in the spent botanicals which they were sending to landfill.

Whitby Distillery were eligible to access two additional BDC ERDF-funded projects, which gave them access to an extra 4 days of BDC staff time. BDC Technologists carried out a biomethane potential trial to provide data on the quality and quantity of biogas that could be produced from the spent botanicals to see if it could be suitable for anaerobic digestion. It was found that the solid botanical waste performed best, although levels of methane produced were relatively low. Technologists also dried the botanical waste to see whether it had the potential to be used to create a potpourri product or a sustainable packaging material, and found that it would be suitable for these applications.

Juniper berries were also dried and milled to explore the potential to use these as an exfoliant within the cosmetic and skincare sectors.

Whitby Distillery spent their grant money on the design and production of an animation showcasing the artisan gin-making process and their sustainability credentials to inform customers about their products and processes. This will be used on their website and as part of their interactive distillery tour.



Whitby Distillery animation – Production still

Eartha Underwear

Eartha manufactures ethically-made underwear using sustainable fabrics. Their products are manufactured locally and come in sizes XXS to XXL for size inclusivity. Their existing website traffic comes from their social media posts and they were interested in increasing their google rankings and number of direct visits to their website.

The project included the creation of a short Search Engine Optimisation (SEO) plan with recommendations that could be easily implemented by Eartha. In addition to this a short video was developed, showcasing their sustainable and local manufacturing processes. The film illustrates the ethos behind Eartha's products, how they support their local community and those who work and live in the area and showcases the benefits of shopping locally. The video will be used on Eartha's website but also on social media and at events and exhibitions.

Eartha's grant money was spent on a variety of things including fabric for their products and costs for exhibiting at the Living North Expo, where they hope to meet new contacts and potential customers. Since working with us, Emily, who owns Eartha has been named as a finalist in the North East, Yorkshire and the Humber StartUp Awards.



LinkedIn post highlighting achievements

“Having a group of like-minded individuals like this is invaluable to building future collaborations for my business.”

Emily Turner, Owner, Eartha Underwear.



Eartha video – Production still

Fortune's Kippers

Fortune's Kippers is a family business established in Whitby in 1872, they sell smoked kippers direct from their smokehouse, a stone's throw from Whitby Abbey.

The project looked at improving the company's branding and led to the creation of a new logo. They then developed a range of merchandise featuring the logo which included new branded work wear for staff and a stamp to personalise paper bags.

BioVale also looked at ways to add value to their waste streams and provided advice on creating, hosting and designing a new website. They also provided support with applying to the Great Taste Awards.

Fortune's Kippers spent their grant money on purchasing branded merchandise, sustainable packaging and equipment to help them run their business more efficiently.



FORTUNE'S
WHITBY CURED KIPPERS
EST 1872

“The BioVale team have assisted us to bring the business forward with advertisements and branding and have been able to recommend reusable materials to reduce our plastic packaging. They have been really helpful and always on hand to offer advice and help with any queries we have had.”

Bethany Brown, Owner, Fortune's Kippers.

FORTUNE'S



WHITBY CURED KIPPERS

EST 1872



Brand identity modernised for products and signage

Raincliffe Woods Community Enterprise

Raincliffe Woods is the largest community-managed woodland in the UK and is located just outside of Scarborough. It is a social enterprise that offers training, education and mentoring. BioVale supported them by undertaking research and preparing a report for their proposed eco-loop biochar project. This project aims to use brash and diseased wood to create a biochar product and generate a new income stream. Raincliffe Woods plan to progress the project as a separate social enterprise and are currently seeking funding to develop this further.

Their grant money was spent on the design and production of infographics based on a heritage interpretation of the geological, archaeological, historical, current and future use of the woodland. This will be used on their website to promote their work and attract more visitors to the site.



Track, Raincliffe Woods
by Christopher Hall - <https://creativecommons.org/licenses/by-sa/2.0/deed.en>



Plastic fishing net waste used for new products

Journey Blue

Journey Blue is a retail business which sells products for outdoors, travel and adventure enthusiasts. They collect and recycle plastic fishing nets to be turned into pelletised plastic by a company who then sells the recycled material to sportswear manufacturing companies. The other half of the business is an online retail shop which sells sustainably sourced goods made from ocean plastics. The ambition of the company is to have the waste they collect turned into a product of their own, to sell in their shop.

Journey Blue was provided with 2 days of business training and coaching and a personalised business strategy report. This contained recommendations focused on bringing the two strands of their business together to work better as a whole. This included suggestions such as providing activity for corporate away days and developing a forum on their website. The report also highlighted funding opportunities and new products which could benefit Journey Blue. BioVale also shared details of a number of useful contacts that may be able to assist them as they continue to develop their business.

Journey Blue spent their grant money on stock for their online marketplace and credit towards their Google AdSense campaign to improve their advertising of the shop and net recycling scheme.

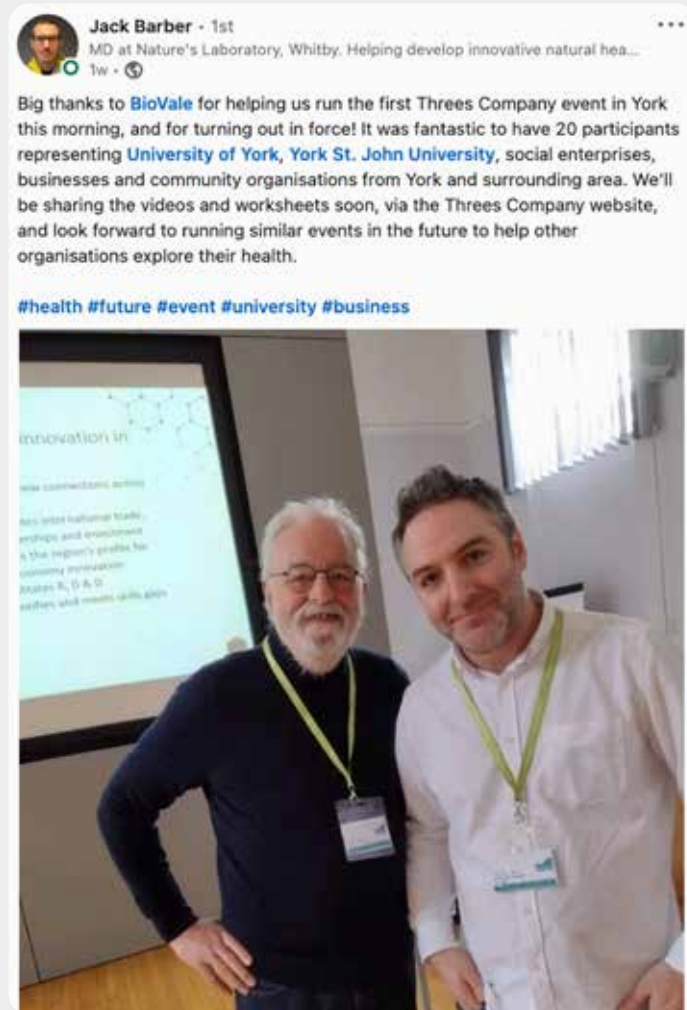
Nature's Laboratory

Nature's Laboratory is a developer of sustainable and effective natural medicines including plant-based and bee-derived medicines and skin care products.

Their project focussed on the design, promotion and hosting of an event called 'Fit for the Future? Is your organisation coping with today's economic, social and cultural challenges?'. This provided an opportunity for Nature's Lab to showcase their initiative, Three's Company, which looks at auditing an organisation's economic, social and cultural health with the aim of improving resilience to today's challenges.



Fit for the Future event



LinkedIn post-event communications

Their grant money supported the event which was held in York on the 28 February and 22 people attended. Attendees included students, academics and representatives from SMEs, not-for-profit organisations and large companies and feedback from the event was excellent. They are looking to continue promoting Three's Company and run more events to engage more organisations.

Yoghurt Delights

Yoghurt Delights is a frozen yoghurt business run from a farm on the edge of the North Yorkshire Moors National Park.

This project involved researching possible farm diversification opportunities that would also align with guidance provided by DEFRA on the new sustainable farming initiative. BioVale researched two areas of opportunity including growing industrial hemp as a carbon sequestration land tool whilst simultaneously creating hemp fibre for an established local hemp supply chain and peatland and peat bog restoration.

As growing hemp in the UK is highly regulated, a site visit to the farm and discussions with a local hemp buyer proved that the land would be

unsuitable due to its proximity to the North York Moors National Park.

The second area of research undertaken for this project involved desk-based research to provide information about conservation and enhancement of the peat bog and surrounding ancient trees. The intention was that the grant money would be used to pay for a survey and provide a report on restoration and natural capital; however time constraints meant that this was not possible. The grant money was therefore used to buy compostable and recyclable catering supplies.



Peat bog and surrounding ancient trees



bioyorkshire.co.uk



uk.angloamerican.com



biovale.org



biorenewables.org



york.ac.uk

