



ECO-I NORTH WEST

LOOKING AT THINGS DIFFERENTLY





“Absolutely brilliant things have happened and will go on happening.” Mike Siddall, Eco-I NW



Photography: Ian Wood

CREATING SOMETHING TRULY AMAZING

Cumbria set itself the ambitious target of being carbon neutral by 2037, 13-years ahead of the 2050 government target with Eco-I NW playing a pivotal role in steering businesses towards a net zero future.

Mike Siddall, Eco-I NW's Cumbria lead

As we complete the three-year project, we pay tribute to the phenomenal 80 enterprises who have worked with our researchers on significant Co2e savings in a raft of industries with enthusiasm, passion and will to make a very real difference.

Partly financed by the European Regional Development Fund, the research and development partnership has seen six regional universities rolling out support and expertise on a scale never seen before.

We've worked across the county with diverse sectors, hospitality to retail, events to charities, as they transition towards a sustainable future. They believe in doing the right thing and it's been a privilege to help them on their journey.

From startups to flourishing operations, skilled researchers have guided with data, facts and knowledge, allowing decisions and actions based on evidence, rather than the push and pull of greenwashing.

Right choices have been made which help businesses financially, as well as the planet.

Absolutely brilliant things have happened and will go on happening.

Researchers came from University of Cumbria, as well as nationally, bringing an international twist from their native

countries, including India and Dubai. With wide-ranging skills and specialist subjects, experience was shared across many areas, including conservation, ecology, geography and architecture.

This has been a unique mission, delivering unparalleled levels of expertise to the heart of business, free of charge and with massively important outcomes.

Participants enjoyed the experience. They had ideas and determination to reduce their carbon footprint that we've translated into specific measures and results. It's win/win, science-led Co2e reductions, the ability to save money, and legitimacy to market genuine green credentials.

We've brought people together; confident networking links will continue way into the future. By doing things a bit differently, we can create something truly amazing.





‘INCREDIBLE’ OUTCOMES FOR GREEN FAMILY VENTURES

Eco warriors at nationally acclaimed Broadrayne Farm in Grasmere weren’t in for ‘greenwashing’ they wanted proper evaluations so they could stand out, while exciting and enthusing guests.

www.theyan.co.uk

The Yan
AT BROADRAYNE

The family-run enterprise, made up of The Yan boutique hotel and 36-cover bistro, a working farm, four self-catered cottages and two glamping cabins, puts environmental protection at the heart of everything.

“We knew we were green, but didn’t have any firm evidence,” explained Jess Manley. “We wanted to shout about what we were doing and be an exemplar. Thanks to fantastic Eco-I NW, we’ve had three separate projects and interns, giving us the ability to go forward and achieve our ambitions.”

Prompted by Covid, one key area was looking at the impact of preordering meals in the bistro to cut food waste, leading to massive saving – and staff commitment to do their bit.

Energy use on the farm also came under the spotlight in a further bid to cut Co2e and market products honestly. From biomass heating to

hydroelectricity, the carbon footprint was scrutinised and a live model developed so the exercise could continue way into the future.

“We don’t push green credentials down our customers’ throats, but do want them to see what we’re doing in an empathetic way, which is why the third mission to promote ourselves properly was important,” said Jess.

Translating the family’s low-carbon vision into a unique selling point is seeing new branding, interactive maps and information sharing. Visitors can read about the farm’s eco journey, from biomass to animal care and composting.

“None of this would have happened without Eco-I NW. We didn’t have the time, finances or expertise. What has been achieved is incredible and we can build on it going forward,” said Jess.



Protecting the environment, Broadrayne Farm, Grasmere, home to The Yan Bistro, Grasmere Glamping and four holiday cottages



**“We’re surrounded by natural beauty. It just takes one little thing at a time to help protect the longevity of the area we live in and love. Little steps make a massive difference to the future.”
Jess Manley, The Yan, Broadrayne**



Jess Manley preparing carefully sourced food at The Yan Bistro

Researcher – Oliver Fox

Originally from Sussex, Oliver is in his final year studying geography at University of Cumbria. He is looking for opportunities within the sectors of flood prevention and carbon accounting for the next step in his career.

Project

Grasmere's Broadrayne Farm is a family business encompassing a 36-cover bistro, (The Yan) a working farm, four cottages and two glamping cabins. Research looked at the impact of pre-ordered restaurant meals on food waste, while scrutinising the farm's energy systems ranging from biomass heating to hydroelectricity.



MILLION-DOLLAR QUESTION PROBE

Hefted to the landscape, Coniston Stonecraft has been creating unique handmade goods from locally quarried Lakeland slate for nearly half a century.

www.conistonstonecrafts.co.uk



In a story of craft and graft, skills gleaned from forebears reflect pride in every stone item produced, alongside a determination to keep the carbon footprint to an absolute minimum.

“Ecology and the environment are at the heart of everything we do and we are constantly looking to see how we can do more,” explained managing director Brendan Donnelly.

Operating on the flanks of Coniston Old Man, hydroelectric comes from the beck and there is no trace of Brazilian, Argentinian or Chinese slate, though their impact is something Brendan is keen to explore.

He turned to Eco-I NW to investigate, explaining: “Whenever I espouse the beauty of Lake District slate, someone always points to how expensive it is compared to cheaper imports. It’s a million-

dollar question and it grinds my gears.

“We shouldn’t be measuring expense in pounds and pence; we need to be looking at the price the world is paying. I want to know the environmental cost of transporting stone half way round the world so we can put real value on what comes out of our own quarries.”

Eco-I NW studies are set to provide data comparing local slate carbon footprints with imports, as well as helping the company accurately calculate its CO2e impact.

“I don’t know how important this is to customers, I guess some would like cheaper products, but we are determined to keep on doing the right thing. We want to be here in another 50-years, knowing we’ve done everything we can to protect our environment,” said Brendan.



Craftsmen showing their skills in fine local stone creations





“We are a small craft company that can tell you who made each piece and which quarry the stone came from. We believe working hard and doing the right thing will help keep us producing beautiful pieces for another half century.”

Brendan Donnelly, Coniston Stonecraft

A heritage to be proud of, from left George Watson, Liam Walker, Andy Barlow

Researcher – Jack Armstrong

Currently seeking to continue his education with a masters in geographical information systems, Jack’s BSc in physical geography was from Aberystwyth University.

Project

As well as helping Coniston Stonecraft calculate its CO₂e impact, the project will provide data comparing the carbon footprints of local slate with imports. This will allow the company to support the rationale of using UK slate above cheaper versions from abroad, which come at a higher cost to the environment.



MATERIAL MAGIC CASTS ITS SPELL

Humble hero seaweed has brought national acclaim for Anna Watkins and her 'material magic' in turning the marine plant into a leather substitute.

www.uncommon-alchemy.co.uk

UNCOMMON
ALCHEMY

Swatches show scope of colours and quality in seaweed leather



Clinching multiple young inventor and research and innovation awards for her work, the founder of Uncommon Alchemy says it's never been clearer that fashion needs to change its ways if we are going to have a sustainable future on planet earth.

As the Eden-based business grows, so does demand for increasing quantities of seaweed. Anna was determined that her 'remarkable, renewable, regenerative material' should be sourced sustainably.

She turned to Eco-I NW for help with CO2e accounting and comparing the carbon footprint of her product with commonly used vegan leathers and animal hides.

"Research will be invaluable in business planning, raising funds and marketing, but more than anything it will mean we make the best environmental choices for our business," said Anna.

"The cost of doing this, particularly for startups, is high and hard to access, so we're very grateful for this incredible funded opportunity."

Anna was at university and cooking-up slimy seaweed concoctions in her flat when it registered there was more to the rubbery tangle than met the eye.

"I had some background in textile design and was really frustrated by the lack of sustainable options. In the search for biomaterials, I realised I was looking at a leather substitute."

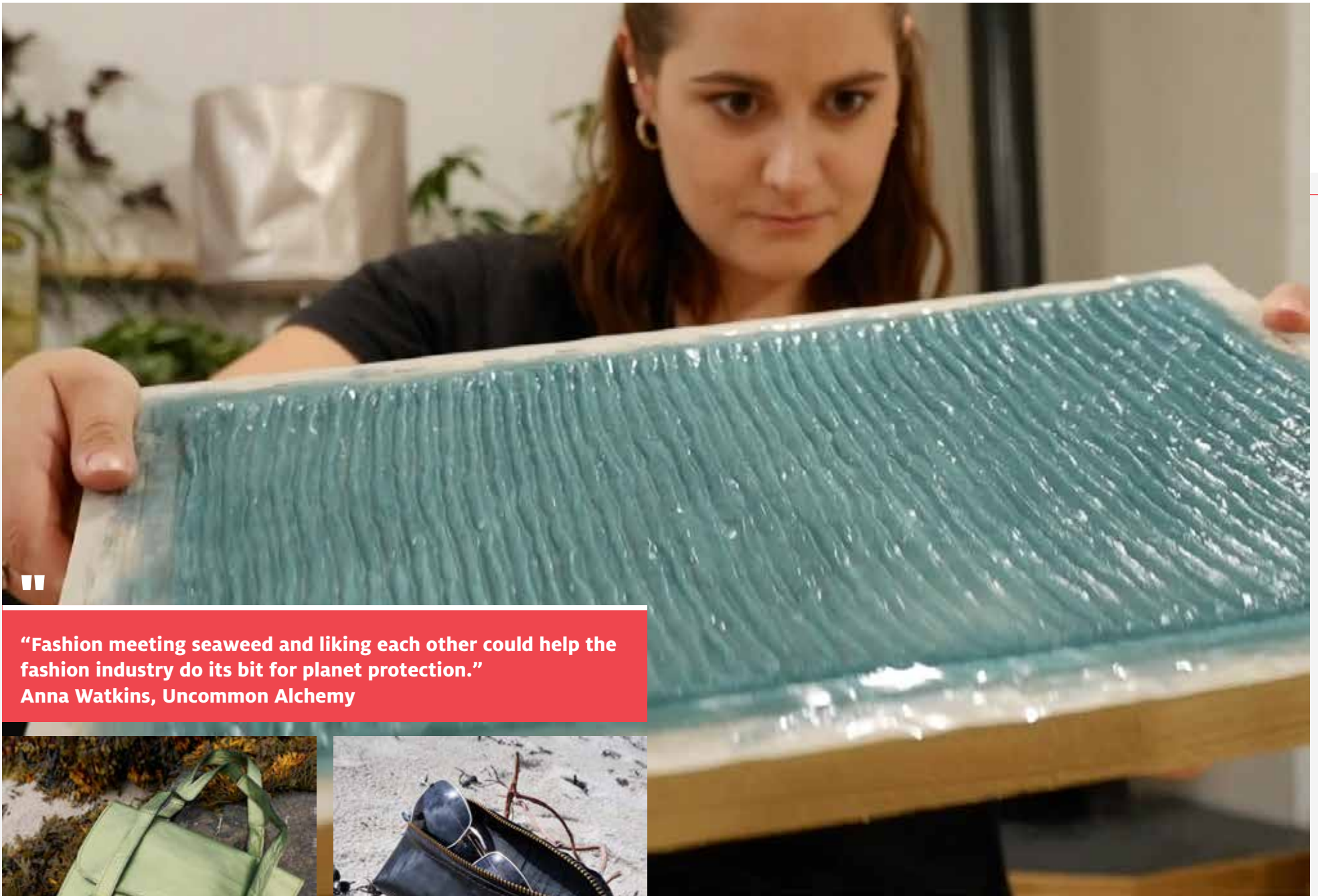
She uses a refined powdered derivative, often found in food and cosmetics, having developed a process to produce sheet material for distinctive fashion accessories.

"We work our magic to make something beautiful. Ok, it's science, but aren't the two the same thing?"



Vegan leathers come from petrochemical plastics and dwindling fossil fuel resources. They won't biodegrade.

Anna says: "The solution is seaweed – a humble hero!"



W

“Fashion meeting seaweed and liking each other could help the fashion industry do its bit for planet protection.”

Anna Watkins, Uncommon Alchemy



Anna Watkins works her magic turning seaweed into leather substitutes for a whole range of products, including many fashion accessories



HEATING PERUVIAN STYLE – WITH MARVELLOUS MANURE

Alpaca poo is an essential source of heating and cooking fuel in their native Peru, so why not north Cumbria?

www.alpacalyeverafter.co.uk



With a herd of around 200 at its new 155-acre Basecamp headquarters just off the A66 – and a monthly electricity bill of £12,000 – Alpacaly Ever After figured the 300 kilos of manure produced every day could be put to good use.

Turning to Eco-I NW to scope out the possibilities, director Emma Smalley said it would have been impossible to find the expertise and finances to investigate without the project.

“When we took over our site, which has a farm shop, café, small lake and endless possibilities, sustainability was top of the list,” she said.

Generating income as a tourist alpaca experience at four popular Cumbrian visitor destinations, the upside is creating wonderful free experiences for good causes, including charities, ex-service personnel and children in need.

From soldiers in rehabilitation trekking on the fells to a group of visiting Syrian refugees, the gentle, sociable, curious creatures make charismatic companions. The question is, can they also provide biofuel?

Eco-I NW is currently researching renewable energy options for the former turkey plant with alpaca poo featuring as an important component for heating.



**“Eco-I NW is fantastic, phenomenal and making such big differences to so many of us who would find it impossible to achieve ambitious environmental goals without their support.”
Emma Smalley, Alpacaly Ever After**

Emma explained: “We’ve got a big environmental vision across Basecamp and whether that’s biodiversity or buying local, it all plays into the overall determination to turn pipedreams into making the differences that really matter.

“Manure is something we have a lot of in Cumbria, so whatever we achieve here has the potential to help others. It’s the small businesses who often have the brilliant ideas and common-sense practical solutions for ongoing problems, like cutting carbon.”



Alpaca tourist experiences providing vital income for charities and good causes



Alpacally director Terry Barlow with his gentle animals on the Lake District's High Spy fells



Researcher – Laura Giles

With a PhD from Oxford University, Laura is experienced in conducting scientific research across a range of diverse fields. An avid gardener and outdoors enthusiast, she is passionate about innovative solutions that challenge the norm in our transition to a more sustainable future.

Project

This project was a collaborative investigation into the feasibility of utilising waste products of dung and used bedding as a biofuel, to provide a source of heating in the buildings across the new site.



WORDSWORTH'S HOME ON ECO MISSION

The Rydal Mount home where Wordsworth penned some of his most celebrated works and worldwide fans pay homage has come under the CO₂e microscope.

www.rydalmount.co.uk



Curator Leo Finighan explained the famed poet was 'one of the most opinionated Cumbrians of all time' on how we should live with the landscape and would have had definitive views on climate change.

"I can't see he would be anything other than approving that we have been looking closely at our impact on the environment, if not somewhat despairing that we have to do this," said Leo.

Eco-I NW studied the popular visitor attraction in Rydal with a view to making it as sustainable as possible. A carbon model was produced for the bard's best loved home and focus for his romantic literature.

"We are a small business and our carbon footprint is minimal, but that's not the point," explained Leo. "Everyone has a responsibility to do what they can. Wherever possible, we have taken on board the suggestions and are very grateful.

"Covid saw an onslaught of disposable plates and cups, but we now serve all food and drink on proper crockery. A heritage property needs heat for preservation. However by simply opening windows we can ventilate, with no carbon cost whatsoever.

"We don't use central heating as much and manage our waste more efficiently. Switching to a local catering company, we benefit from its biodegradable and eco-friendly packaging.

"Although these are all small things, they add up to making a difference. There is very much more we would like to do, if we had the finances."

Leo said; "The project has been invaluable in bringing a very different mindset to a unique business."

Afternoon tea, Rydal Mount. Disposable plates and cups have been replaced with proper crockery in the café. Below Wordsworth's favourite family home



"Effectively, this was a funded survey that covered a huge base, something small businesses couldn't normally access. A great opportunity and a very positive experience."
Leo Finighan, Rydal Mount.



Researcher – Marius Tifachi

Born in Romania, Marius became a British citizen in 2021. He is studying for an MBA in tourism and hospitality at University of Cumbria. After 20-years in hospitality, his mission is to understand the trends and needs of the sector.

Project

A carbon model examined all aspects of visitor behaviour and travel. Channelling the spirit of Wordsworth's environmental work and beliefs, the project explored options for cutting emissions and encouraging people to arrive by public transport or electric vehicle.



LIBERAL SERVINGS OF CARBON CUTS FOR LAKES' DELI

A deli takeaway bursting at the seams with locally and ethically sourced foods and products has accelerated its great green deal thanks to Eco-I NW.

www.rattleghyll.com

RATTLE GHYLL
FINE FOOD & DELI

A concept conceived on a seven-day bush walk in the blue mountains of Australia and delivered in the heart of Ambleside has seen Claire and Alec McCarthy cater with conviction for community, visitors and outdoor enthusiasts.

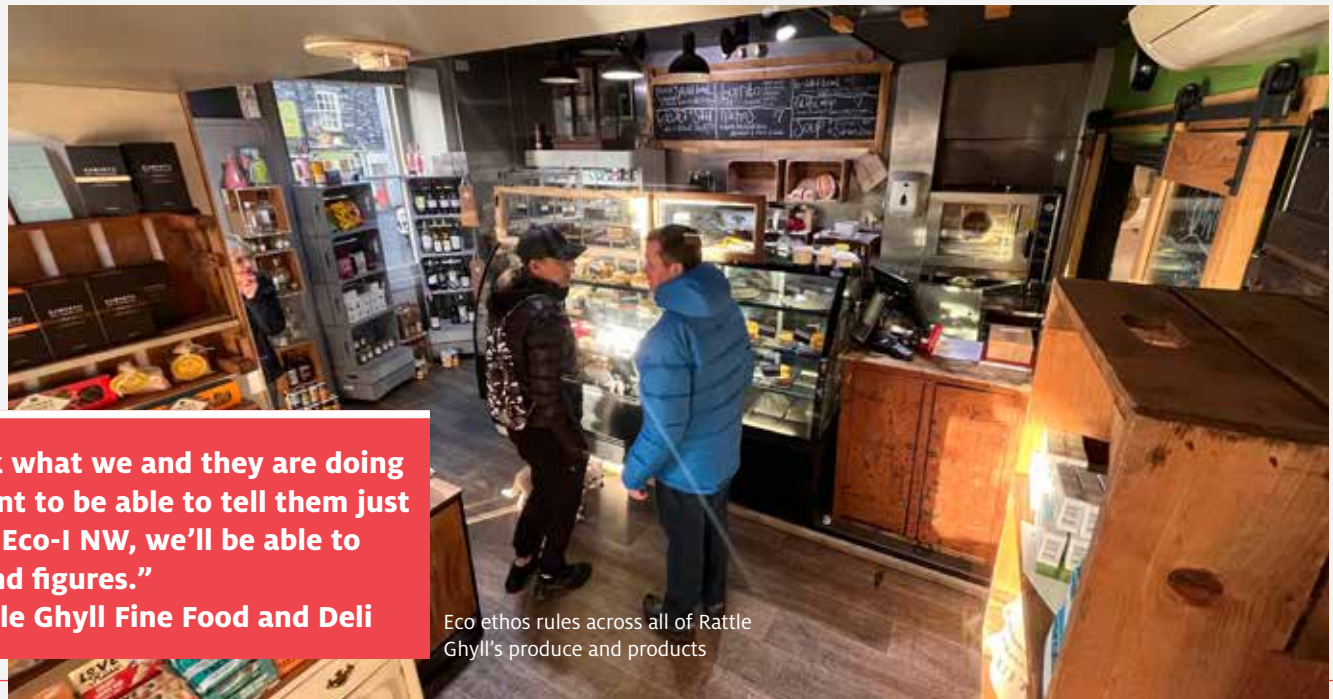
Rattle Ghyll Fine Food and Deli serves up liberal quantities of carbon reduction in its unyielding quest to cut plastic consumption and food waste. Customers pop along with containers to fill from a selection of edibles and cleaning products.

Claire explained: "We thought people might like to know about emission savings on our refills. For example, what difference does it make buying laundry liquid from a 20-litre container, rather than going to the shops once a week and picking up a small-quantity plastic pack?"

"We have a wide selection of goods available for refill, but wanted to start assessing the benefits by first looking at washing liquids and fabric conditioner. It would be great to continue the evaluation across all our products, including looking at supply chains.

"I have a background in environmental education, but this is way out of my league. To be able to turn to Eco-I NW for the expertise needed is massive. We'd like to understand Coze emissions associated with what we do and be able to share the information."

Importantly, findings will be shared with Rattle Ghyll's sustainable wholefood cooperative suppliers, Suma.



"Our customers think what we and they are doing is really good, we want to be able to tell them just how good. Thanks to Eco-I NW, we'll be able to give accurate facts and figures."

Claire McCarthy, Rattle Ghyll Fine Food and Deli

Eco ethos rules across all of Rattle Ghyll's produce and products



Claire and Alec McCarthy outside their Ambleside shop, where customers are urged to bring own containers for refills



Researcher – Laura Giles

A northern lass, Laura was awarded a PhD from Oxford University. Working as a gardener for many years, she loves exploring the history of gardens and growing her own food.

Project

Rattle Ghyll wanted to understand the CO₂e emissions associated with its refill products, contrasting bulk sourced goods with items packaged in small quantities. A better understanding of the supply chain will allow the company to make alterations to sourcing goods with the intention of passing information on to customers so they can make more sustainable choices.



THE TALE OF PURE LAKES

Set to move to the village made famous by Beatrix Potter, natural skincare company Pure Lakes is determined to do right by its popular handmade products, the community and, very importantly, the environment.

www.purelakes.co.uk



Claire and Gareth McKeever were among the first customers of the business, established in Staveley in 2006, and bought it 10 years after its inception.

With a transfer to Far Sawrey in the pipeline, it was important to the company that sustainability was top of the agenda in an expansion including workshop, storage, offices and facilities for 14 staff.

Gareth explained Pure Lakes already had strong eco measures in place, like carefully selected carbon-sensitive supply chains, bottles made in Suffolk from a byproduct of sugar and refill options, but wanted to do more.

"We live in Sawrey and were keen to create well-paid jobs there, supporting the local economy and protecting services," he said.

"Vibrant communities should never be taken for granted, we have to work hard to make sure we keep, and enhance, what we've got."

Eco-I NW was approached to help show that business growth could be green and how carbon reduction across the new site would work.

From energy efficiency to construction materials, transport to supplies, the study will help from a practical perspective, as well as strengthening the key environmental messages crucial to the business.

"We care passionately about what we do. All our ingredients come from naturally derived and sustainable sources," added Gareth.

"Everything is packaged minimally and eco-sensitively. Our refills help businesses and private customers. Eco-I NW will take us further."





Founders of Pure Lakes Claire and Gareth McKeever. Claire busy making hard soaps

Researcher – Laura Giles

Laura achieved a PhD from Oxford University. When not counting carbon, she's usually found outdoors, walking with her dog, or standing on a shoreline hoping to spot elusive wading birds.

Project

The new premises are being developed inline with the company's core beliefs of minimum environmental impact and social responsibility. The project is contributing to this goal by investigating and quantifying the use of optimum sustainable materials in fitting out a workspace, resource acquisition for creating the products, energy efficiencies, transport and supply chains.

“Eco-I NW is tremendous! We are fellow travellers, working together to accomplish the same goals. It’s such a fantastic resource that shares our values.”
Gareth McKeever, Pure Lakes



NET ZERO GOALS INVOLVE ALL AGES, ALL ABILITIES

Since setting-up 30-years-ago, People First has helped thousands of young people with learning disabilities to find a voice and live their best lives.

www.wearepeoplefirst.co.uk



Most learners are transported to the Carlisle centre by taxi, where they are encouraged to be independent. Some are employed in the café they help run, preparing food, cooking, serving and gaining crucial experience along the way.

When the charity decided it would like to develop a training programme aimed at encouraging the 16 to 18-year-olds to use public transport, carbon-cutting benefits were an important part of the ambitious plan.

Eco-I NW researcher Hannah Herbert explained that around 30 young people were using the centre two or three times every week and that amounted to a lot of car journeys.

“The whole ethos of People First is based on boosting independence and life skills. Being able to access public transport is a pretty important part of that, with the potential to open up a whole new world of places to visit and activities.

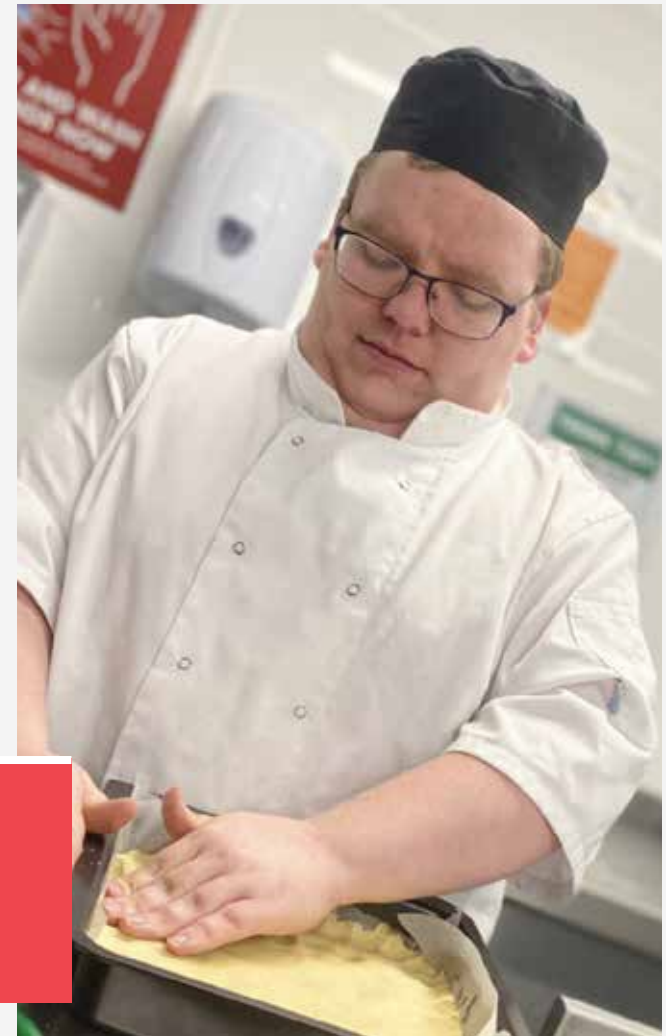
“Not relying on someone else to give you lift is incredibly empowering and gaining that confidence is an incredible leap. That, coupled with the reduction in carbon emissions, made this a great project to work on.

“There was also a bigger conversation to be had, the exclusion of people with learning disabilities from the whole environmental debate. The learners I worked with were interested, wanted to find out more and keen to reduce their environmental impact.”



“It is critical never to forget that moving towards net zero involves everyone, not just the people working in bold environmentalism. Working with People First, Eco-I NW showed how its reach could be brilliantly spread.”

Hannah Herbert, researcher





People First - learner Marcus develops his kitchen skills and tutor Faye delivers a class

Researcher – Hannah Herbert

Kendal-based Hannah achieved a BSc in English language and linguistics and an MSc in environment, culture and communication from University of Glasgow. Her goal is to work in environmental communication, inspiring young people while improving the reach of charities.

Project

Supporting a transition to net zero carbon, footprinting techniques were used to calculate the benefits of bus and coach travel over taxi use. Along with support on how to access public transport, the programme encouraged participants to make lower impact journeys and become more involved in the environmental debate.



NICE DIGESIBLE FOOD FACTS

Pledging to deliver world-class socially and environmentally responsible events, a South Lakes' company is determined make its food supply chain as sustainable as possible.

www.oureaevents.com



Serving up to 500 breakfasts, dinners and snacks a day, Ourea Events is conscious that meal provision is its second highest contributor to overall CO₂e emissions, after travel, and turned to Eco-I NW to investigate.

With a vegetarian/vegan policy since 2011, meat and fish-free menus for crew and participants provide nutritious options for athletes running 60 to 70-kilometres a day on extreme mountain challenges.

However, as director of the Old Hutton-based business, Lucy Scrase, explained there are improvements to the supply chain to be made by reducing emissions through better food sourcing.

"We already had a carbon accountant looking into the meals themselves, but nothing else. We wanted baseline carbon footprints for current menus and potential waste calculations for a typical event.

"Part of the process will be to understand the nutritional values of typical meals and relate this to ultra-runners' needs, as well as assessing the financial impact of green premium, low-carbon food."

Although Ourea's events take place across the UK, between 15 to 20 percent of participants are from overseas. A recent Scottish event saw competitors from 60 countries. Expedition challenges can run over six and eight days, with different overnight camps for food and camping.

Main meals are cooked in advance from raw ingredients and either freshly prepared on site, or frozen in advance.

Eco-I NW will be looking at the nutritional value of menus and providing Co₂e analysis to help keep runners informed about the food they eat at events.





“This is an invaluable lift on a sustainability journey, important for those taking part and the county as a whole. We will be able to learn and share some nice digestible information about our meals, their nutritional value and carbon footprint.”

Lucy Scrase, Ourea Events

Feeding hungry mouths with eco-inspired food. Competitors at the Dragons Back race in Wales. Picture No Limits Photography

Researcher – Roxanne Ralphson

A second-year zoology undergraduate at University of Cumbria, Roxanne is committed to making changes to reduce environmental damage and adapted her own diet as a result of her research.

Project

Feeding runners was both an important part of Ourea’s mission, and a big contributor to its carbon footprint. Making changes involved understanding the supply chain, calculating the emissions and financial implications of switching to vegetarian/vegan meals, and improving sourcing without compromising quality or nutrition.



BOXING UP A BIG PICTURE

Before Covid struck, Nicola Myers had a thriving business selling fruit and veg to hospitals across the Morecambe Bay Trust and Whitehaven, as well as being a familiar face at farmers' markets.

www.thefruitandvegboxcompany.co.uk



Almost overnight, the pandemic meant a rapid change of direction, but with necessity being the mother of invention, another successful venture emerged for the Silloth entrepreneur – the Fruit & Veg Box Co.

With a band of volunteers, she made sure carrots, potatoes, cauliflower, eggs, strawberries and other locally sourced produce was delivered to Cumbrian customers. After restrictions lifted, and her helpers returned to work, she carried on as a one-women venture, intent on keeping her carbon footprint to an absolute minimum.

“Working alone can be isolating and even though you can have well-intentioned ideas, it’s sometimes hard to see how you can implement them. Eco-I NW has helped me with the big picture,” Nicola explained.

“I now organise delivery days to specific places, which cuts down mileage. If someone wants an order in Whitehaven they have to wait until I’m in the area. Also, I start with the nearest delivery first, returning at the end of the shift with an empty van, again cutting down on fuel.”

Nicola’s original foray into fresh produce came from a frustration in quality and packaging at supermarkets. She figured there had to be a better way and turned her back on a career in equine education to find it.

She buys locally wherever possible; her cardboard boxes and paper bags are recyclable. Single-use plastic is as taboo as it can be.

“I buy big boxes of vine tomatoes, for instance, and bag them up.



**“I got sick of poor-quality fruit and veg with everything wrapped in plastic and thought there had to be a better way. I went to a local wholesaler and it all started from there. Eco-I NW has helped me get to another level.”
Nicola Myers, Fruit & Veg Box Company**

Obviously, it is harder for something like imported grapes which need to be kept fresh in plastic.

“One massive step for me would be to get an electric van. For now, it’s unaffordable, but definitely part of that big picture,” said Nicola.



Fruit & Veg Box Company ready to start its daily deliveries, nearest first to save fuel



Freshly prepared vegetable boxes ready for their eco journey

Researcher – Daniel Gutteridge

Keen to pursue a career combining his twin passions of writing and research, Daniel, from Birmingham, studied for an MA in outdoor and experiential learning at University of Cumbria.

Project

This project looked at reaching new environmentally conscious customers by transitioning to zero net carbon emissions. Research compared the footprint of the current business model with a switch to electric powered transport, using mapping software to reduce food miles.



REAL ACTION ON THE GROUND

Award-winning Elterwater Hostel in the heart of the Lake District has been welcoming guests since 1939 and can see up to 6,000 flock through its doors in an average year.

www.elterwaterhostel.co.uk



Proud of its Green Tourism gold standard, there can be no resting on laurels as boundaries are pushed to do more to trap carbon, and do it better, according to manager Nick Owen.

Hosting so many visitors, the establishment is determined to act where it can, without pushing its eco philosophies down visitors' throats. The challenges, says Nick, are becoming ever more real and the effects of climate change all too visible.

"We've seen the impacts of storms Demond and Arwen, along with other significant flood events, and have to keep working harder to evaluate our work in reducing the hostel's carbon footprint.

"A lot of our interventions have been passive. We recycle, control heating, keep our purchasing policies under review, but wanted a more dedicated look at waste management, with a view to

streamlining systems and lowering emissions."

Eco-I NW stepped in to carry out studies to find better processes, paving the way to cuts in CO₂e – and business overheads. Data can also be used to give visitors options for dealing with their rubbish.

"A lot of what we read can be contradictory, so it's great to have this help. It's been a very useful exercise and couldn't have come at a better time," Nick explains.

"It's been like having a knowledgeable friend, somebody who looks at what you're doing and giving an untainted, independent view."

Winner of the Great Outdoors Magazine readers' bronze award for best hostel or bunkhouse, the green campaign continues with Eco-I NW's recommended action plans being worked through.



**"We've seen the COP gatherings, heard what people stand up and say, but this is real action on the ground."
Nick Owen, Elterwater Hostel**



Streamlining waste systems and recycling are top the eco agenda at Elterwater Hostel

Pictures by Peter Savin



Researcher – Roxanne Ralphson

Currently studying zoology at University of Cumbria, Roxanne advocates making changes in our lives to reduce environmental damage. She is keen to help businesses lower their carbon footprint and discover more sustainable options.

Project

Eco-I NW helped the hostel move towards a carbon neutral future by auditing and comparing waste management. Assessing food, gardening and packaging waste led to informed options for disposal or recycling. Goals were to lower emissions, save overheads and offer guests carbon offsetting.



FASHION FIRST IN TRAILBLAZING VISION

Fashion is one of the world's biggest polluters after oil and Whitehaven clothing retailer Rebecca Lyall is determined to take a lead in vital UK emission saving action.

www.ecolure.co.uk



Environmental campaigner and Eco.Lure founder Rebecca Lyall on a mission to see textile waste recycled

A lifelong environmental campaigner, the owner of Eco.Lure says the current status quo, where textile waste is not recycled in Britain, cannot continue and turned to Eco-I NW for help in a pivotal fact-finding mission.

"Clothes are imported, used and then taken to third world countries," explains Rebecca. "A small percentage are recycled, most are sold or go to landfill. I want to see this senseless loop closed, with the UK's first sustainably powered textile recycling centre established in west Cumbria.

"The carbon footprint in fashion is intense with waste being a significant factor, both environmentally and financially. There is a pressing need to find better ways with nature integrated, human-friendly, holistic operations providing green jobs and futures.

"Whatever can be achieved here would serve as a model for the rest of the country."

In a study that aims to identify the potential CO₂e savings behind a trailblazing vision, Rebecca says Eco-I NW is providing the expertise she desperately needs to build a case, provide serious research and attract investment for eliminating textile waste.

"We all need to be working towards a green future, preserving our natural resources for future generations. When I started my business, I knew it had to be sustainable and everything we sell and do starts from that premise."

Rebecca's clothing tags are made with lavender seeds and designed to be planted, packaging is worm and compost friendly. There are rewards for customers returning old and unwanted Eco.Lure lines.

"Small actions do add up and if we are to live in harmony with the beautiful natural environment around us, we must act and act now."



Sustainability at the heart of Eco.Lure's fashions

Researcher – Jack Armstrong

Brought up in Stratford-upon-Avon, Jack recently moved to Silloth, in Cumbria, after completing a BSc in physical geography at Aberystwyth University. He plans to further study geographical information systems with a focus on environmental management and protection.

Project

Eco.Lure wanted to explore the feasibility of a textiles recycling centre in its hometown to help end clothes being sent abroad for recycling. The project identified the potential carbon savings of such a site, compared with export or disposal in landfill. Research gathered will support funding bids, sponsorship, and planning applications for this innovative way of eliminating textile waste.

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“I want to create green jobs for the area, neutralise our carbon footprint and be part of a process where we close a very harmful loop in the country’s fashion industry – by seeing all textile waste recycled here.”
Rebecca Lyall, Eco.Lure



IN-DEPTH PEAT PROBE FOR CARBON CAPTURE

Britain's biggest carbon store is peatland, capturing a massive 3.12 billion tonnes, but there is a crippling downside, it releases between 10 and 23 million back into the atmosphere.

www.dalefootcomposts.co.uk

**BARKER &
BLAND LTD**

Why? Because 90 percent of the country's peatland is in a bad state and urgently needs restoring, which is exactly what Barker & Bland, the parent body of Dalefoot Compost, has been doing for the past 25-years.

Step into the frame PhD research student Jack Brennand who, thanks to Eco-I NW and intensive studies, has come up with a UK first. He is using a medical 3D X-ray CT scanner to investigate the internal structure of peat and delve into its effectiveness in absorbing greenhouse gases.

Jack explained: "No-one else has looked into the subsurface

before to find out why plant layers are being pickled and unable to release carbon. This is key to understanding what's going on and a cornerstone for restoration, not only benefiting Cumbria, but the whole country.

"Bigger organisations working for government agencies use helicopters as part of repair measures. Small businesses like Dalefoot can't do that and I've been linking with engineers to create intelligent, innovative low-pressure ground machinery that protects the land while work is carried out.

"My aim is to make a difference in tackling the climate and biodiversity crisis. This is about informing practitioners and decision makers, ultimately capping up to 23 million tonnes of current emissions."

Barker & Bland's Professor Jane Barker said: "Working with Jack Brennand and the Institute of Science and Environment, University of Cumbria has added so much value to our operations and business. This robust investigation is introducing what we do, and where, to maximise carbon capture through restoration."



Barker & Bland team with sustainability and environmental impact Rural Business Award

**"I love Eco-I's drive in promoting a sustainable Cumbria, reducing carbon emissions for every single sector. It brings competitive advantage, informed change and great outreach opportunities."
Jack Brennand, PhD researcher for Dalefoot Compost**



Researcher – Jack Brennan

In his final year of a PhD at University of Cumbria, Jack aspires to a research career tackling some of the hard-hitting questions about our environment.

Project

Challenging the established and expensive methods of peatland restoration, the project adopted a novel approach to carbon busting. A medical 3D X-ray CT scanner investigated the internal structure of peat, delving into how it absorbs greenhouse gases. The aim was to discover why decaying plant layers are unable to release carbon, while creating innovative ground machinery designed to protect the land being worked.



VOWING TO BE GREEN AT FELL WEDDING VENUE

Nestled in Ambleside's hills, an ancient slate outbuilding has morphed from home to herd and flock to a wedding venue ready to say 'I do' to inspiring green thinking.

www.barninthefells.co.uk



Barn in the Fells is so special that when wedding consultant Annabel Chandler first set eyes on it, her response was 'blooming heck, it's brilliant!'

Part of Rydal Farm, tenanted by the Hodgson family for generations, the consensus was that sustainability and environmental protection had to be top of the list for the emerging enterprise.

"A lot of couples are very conscious they want to look after these truly amazing surroundings, but don't realise how that can work with a wedding venue. We've got the potential here to take serious steps in minimising our carbon footprint," said Annabel.

"This is a great big, beautiful, drafty old barn and we're figuring out the possibilities. Keeping it warm sustainably is one of our greatest challenges."

With no existing heating, Eco-1 NW is researching economic and practical options for innovative low-carbon systems, which could also be an alternative for Lake District events in general.

"Although in the early stages, infrared solutions are coming under review," explained Annabel. "Without this help, we wouldn't have known where to start and the support is fantastic."

"It's going to be a big marketing asset in the future. There are absolutely tons of barn venues around, so being different in our environmental approach and offer will set us apart."

Barn in the Fells is a farm diversification project. As Annabel says, blending agriculture, weddings and carbon cutting is not an easy exercise, but could be a marriage made in heaven.

Wedded to the landscape,
marriages where
environmental protection
matters

Amy B Photography





Researcher – Vaishnav Rajeendra

Indian born Vaishnav has a BSc in interior design from Amity University, Dubai and an MSc in climate resilience and environmental sustainability in architecture from the University of Liverpool. Currently based in Merseyside, he hopes to be at the forefront of taking sustainable ideas and measures to every corner of the world.

Project

Research focussed on the economical and practical implications of installing a low carbon temporary heating system into a large, draughty space. It included a feasibility study into sustainable options, calculating everything from emissions to running costs.



Wedding consultant Annabel Chandler

“It’s been hugely influential talking to people who have been there and done it. You just can’t come across these connections on your own so getting all this help is massive for us.”

Annabel Chandler, Barn in the Fells



AN ECO-HOUSE FOR YOU TO BUILD

Housing and labour shortages across Cumbria are the catalyst for a groundbreaking community interest project aimed at producing sustainable homes using eco-clever design, materials and build techniques.

www.digitalwoodoo.co.uk



Ulverston-based Digital Woodoo is playing a crucial part in introducing a construction method called WikiHouse, allowing people with no experience whatsoever to assemble their own energy-efficient buildings.

The simplicity of the system means that from homes to offices, staff accommodation to workshops, once the building has been designed and manufactured, it can be transported and erected quickly and easily.

Innovative design and manufacturing processes are used to produce building components from sustainable plywood, which are then assembled on site.

Project developers turned to Eco-I NW to help boost – and validate – their pledge of sustainable, low-emission structures through key supply chain audits and carbon accounting.

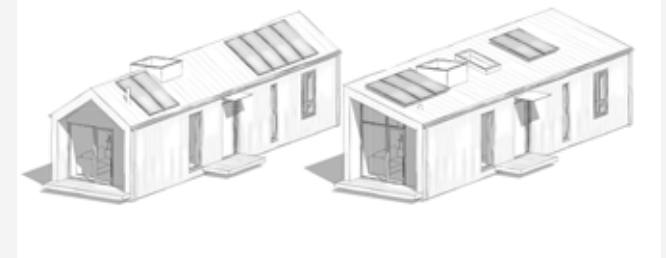
Director Nicola MacPhail explained with the first pilot scheme in the pipeline, this evaluation was invaluable, giving credence to the whole ethos of green practice and production.

“We see how local communities and economies could be helped by the type of buildings we can produce, which would be placed sympathetically in the landscape,” she said.

“It’s an ambitious project, but we are committed to providing economic and social benefits alongside our environmental commitment.”

Affordable housing and staff shortages across the county are interconnected, especially in tourism and hospitality, with some businesses forced into closure, says Nicola.

“Even if workers could be found, there’s often nowhere for them to live. We could potentially provide carbon neutral homes near to work places, cutting down on travel, emissions and costs.”





Clever designs and technology for buildings aimed at providing energy efficient homes, offices, staff accommodation and more

Researcher – Poojapriam Ravi

Born in India and raised in the UAE, Poojapriam graduated with an MSc in climate resilience and environmental sustainability in architecture from the University of Liverpool. Her goal is to own a successful waste sustainability business.

Project

The partnership measured the sustainability and carbon emissions of the WikiHouse compared with standard new build houses, researching the supply chain options for sustainable materials. An innovation audit will help guide business expansion.

“Eco-I NW is giving us a better understanding of the carbon footprint and environmental impact of our business. Crucial skills, knowledge and data means we can make informed design decisions and provide vital evidence to back up our eco-credentials.” Nicola MacPhail, Digital Woodoo



CAR FREE DAY IN ULLSWATER SETS A SCENE

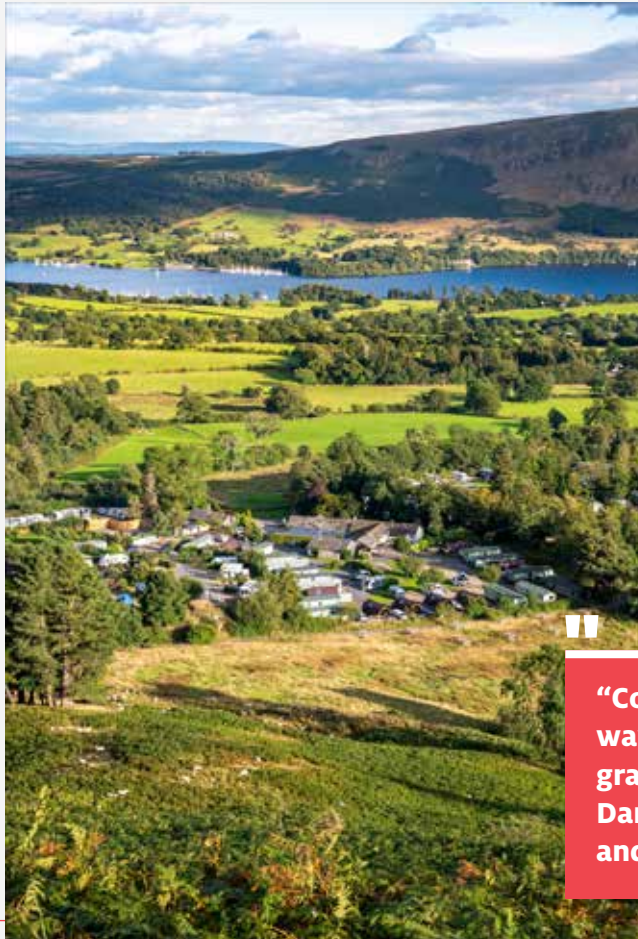
Cars on all UK roads are set to double in number by 2050, spelling gridlock and disaster for the Ullswater valley, according to the managing director of acclaimed holiday park, The Quiet Site.

www.thequietsite.co.uk



Daniel Holder has been at the forefront of setting-up SITU (Sustainable Integrated Transport for Ullswater) in a bid to explore and implement options, ranging from public transport to car sharing.

Eco-I NW is identifying the most heavily used routes, taking in key visitor destinations, to help cut journey miles and CO2e. There is even



a bold plan to make the A592 between Watermillock and Aira Force car free for day.

“If we’re going to avoid gridlock, we need transport that is both sustainable and integrated,” said Daniel.

“Eco-I NW is giving us a benchmark to assess current carbon use in the valley and come up with completely independent ideas about how to control car use. We absolutely would not have been capable of doing this without their support.”

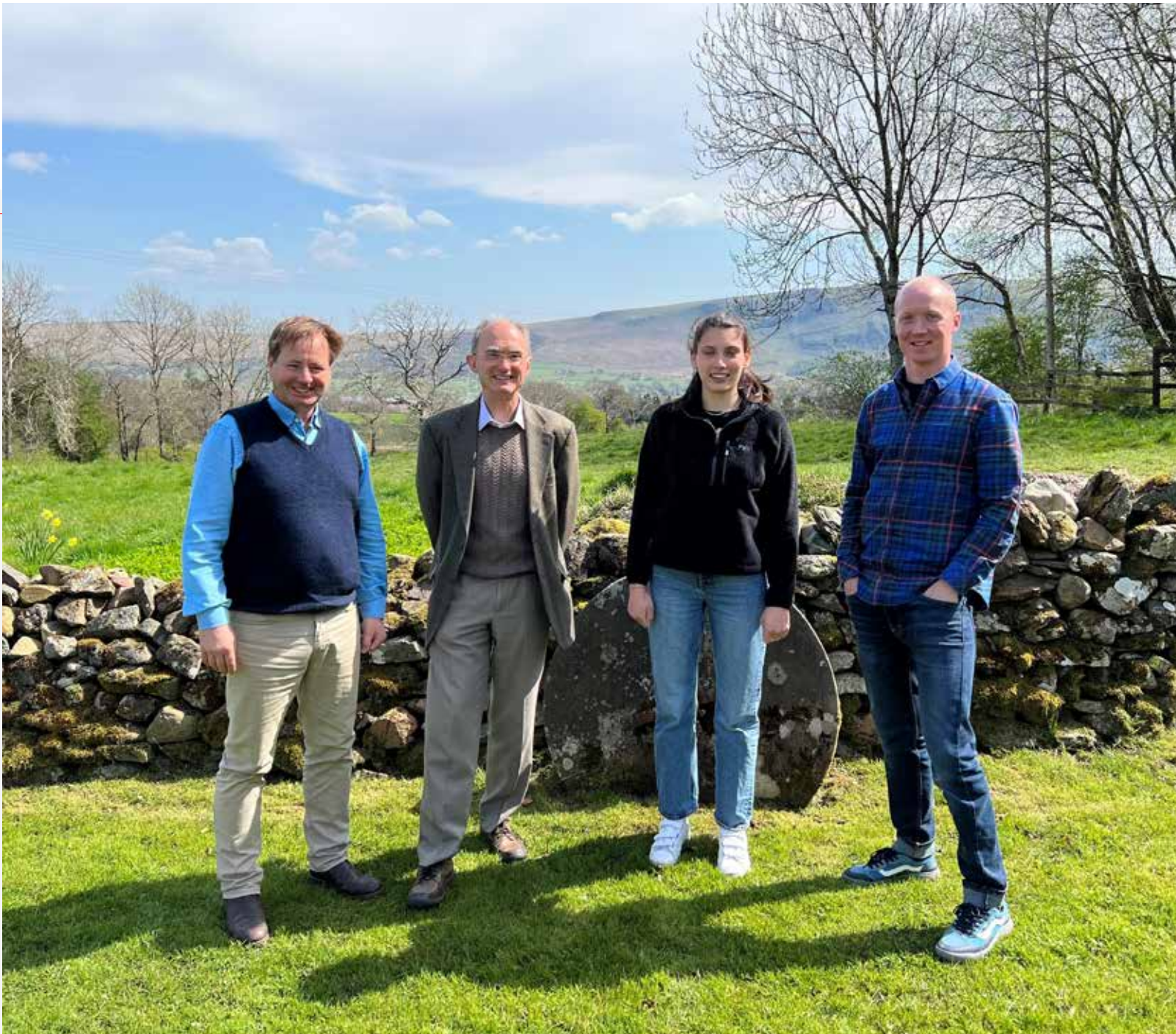
Between now and 2037, SITU’s mission is to see more visitors arriving by train at Penrith and low-cost, effective e-travel to the valley.

Pedestrian and cycle routes would be established, cars left at hubs with connecting sustainable transport, including smaller vehicles and more frequent services.

The group’s vision aims to benefit residents, businesses and visitors, who, according to Daniel, are becoming more receptive to green measures with every passing year.

“A number of organisations share a similar vision. We have to, as it’s all beginning to feel a bit like a scene in the Life of Brian at the Colosseum; ‘Who are you, the People’s Front of Judea?’ he said.

**“Completely new and independent ideas to find ways of going forward are emerging. We are very grateful for this critical help for our valley.”
Daniel Holder, managing director of The Quiet Site and founder member of SITU**



From left, Daniel Holder, The Quiet Site, Michael Firth, chairman SITU, researcher India Roberts and Mike Siddall, Eco-I NW

Researcher – India Roberts

Londoner India received a first-class BSc in geography and an MSc in carbon management from Edinburgh University. She would like to combine her interest in sustainability with the quantitative side of research and data analysis.

Project

The project estimated current emissions, considering low-carbon alternatives and making recommendations for Ullswater's transport system going forward. Sustainable ideas include the expansion of the Hopper Bus, the introduction of electric bikes for exploring and improved access to visitor information.



BUILDING SURPLUS IN INNOVATIVE REBUILD MISSION

Construction companies ordering surplus supplies to avoid running out of materials have the perfect antidote to 'skipping' significant quantities of leftovers, thanks to The Rebuild Site CIC.

www.rebuildsite.co.uk



The innovative Carlisle-based initiative takes the spares, anything from taps to timber, bricks to blocks, kitchen tops to door handles and either resells through its shop, at a reduced cost, or donates to community projects.

Born by a frustration of site operators down-cycling, or sending excesses to landfill, the group got together to help stem waste and set-up compelling new reuse channels. Taking on a former 1940's MOD building as a base, by practicing what it preached, the office was kitted-out for just £38.

One of three directors, Maisie Hunt, explained the shop had become popular with the building trade, DIY enthusiasts and gardeners, not to mention the 26 different community groups they have already supported by supplying materials for free.

"It's really important for us to be able to share a CO2e literacy. Most people are wanting to know how to cut carbon and we aim to provide information about savings made by buying from us."

Maisie said the team was delighted with Eco-I NW's support. A programme to assess economic and environmental data, will be shared with customers, showing how much carbon would have been produced had the products ended up in a skip.

Currently, construction materials going to landfill without being recycled amounts to 56-million tonnes of waste annually. A 'circular economy model' is being designed by Rebuild to encourage reuse. It will also reveal which items offer the most carbon savings - and the least.



**"This help has been vital in developing our carbon literacy and introduced us to networks where we can share learning with other similar interests. None of this could have happened without ECO-I NW."
Maisie Hunt, The Rebuild Site CIC**



The Rebuild Site's Carlisle base in a former MOD building, where the office was kitted-out for just £38



From left Gary Murray, co-founder, Maisie Hunt, projects director, Emma Porter, co-founder

Researcher – Michelle Griffiths

Born in 'windy' Walney, near Barrow-in-Furness, Michelle grew up in Oman. Returning to the UK, she achieved an MSc with distinction in conservation management from Edge Hill University, Lancashire. She loves wildlife and spending time in the outdoors climbing, running or simply rambling around.

Project

The project audited the economic and environmental costs of materials stocked by the site. It looked at circular business model solutions to help aid expansion and innovation. A database of materials will inform future customers of the carbon savings of each product.



SCOOP A PERFECT FUSION OF FROZEN FLAVOURS

Record-setting adventurer Fiona Quinn faced her fear of the sea by paddleboarding 800-miles, the length of Britain, and describes herself as an expert in shifting mindset and building self-belief.

www.rebelgelato.com



By throwing herself into difficult and uncertain projects, Fiona's sense of possibility developed, so when the swashbuckling challenger fancied a deliciously cool ice cream and nothing vegan particularly appealed, she developed her own.

Loads of research, followed by hours of trial and error in her Kendal kitchen, led to a perfect fusing of frozen flavours - and the introduction of Rebel Gelato.

Soon to increase the current offer of 10 yummy choices to 15, there is not a vanilla in sight. Selling from a distinctive handcart, Fiona drives to Lakes' festivals and weddings, popping up in a variety of locations, and without fail finds fans.

"I'm plant-based, but never shout about it, and it's the same with my

gelato," explains Fiona, a published author and motivational speaker.

"Because I'm not in your face about it, I get asked for vegan options. People are blown-away by the taste, many have absolutely no idea they're buying something that's 100 percent plant-based and amazed when they find out.

"It's great to be told Rebel Gelato is fantastic, but there's much more to it for me. A really important part of my thinking was being as sustainable as possible and attempting to become carbon neutral in the first year.

"For a startup with limited funding, that was easier said than done and without Eco-I NW just about impossible. The support has been phenomenal and meeting like-minded people really helpful."



Popping up at Lakes' events, Rebel Gelato never fails to find fans

**"It's been absolutely fantastic. Eco-I NW has been just brilliant in helping track my carbon footprint, assessing the differences between vegan and dairy ice cream, looking at how things could be done differently - and better."
Fiona Quinn, Rebel Gelato**



Adventurer Fiona Quinn with her gelato successes

Researcher – Laura Giles

With a love of the natural world, in particular the uplands, Laura enjoys walking and running in all weathers with her dog Rosie. She has a PhD from Oxford University.

Project

Supporting Rebel Gelato from inception to manufacture and sales, the project has tracked its carbon footprint, assessing the differences between vegan and dairy ice cream, and looking at how things could be done differently.



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