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**Future plans
taking shape**

Zero carbon communities

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EDITORIAL



Eileen Kinsman

Learning from and inspiring each other

Taking individual action on the climate and nature crisis is of course vital. But when we come together to act as a community we can achieve so much more. And when groups connect and combine, the impact is even bigger.

I'm so inspired by the communities in all parts of the UK showing that living in a safer, fairer and healthier way is possible. From solar panels on village halls to local food production, car sharing hubs to repair cafes, these pioneers are doing things differently and inspiring a wave of change.

And I'm proud of the part CAT plays in helping to spark, nurture and share these incredible initiatives. Through our graduate school, short courses and workshops, we are enabling a diverse range of people to make the most of their contribution to positive action. Together, we are part of a movement that is putting the future of humanity and the natural world first.

Our work to educate and equip changemakers in communities, workplaces and homes across the UK is only possible with you by our side. While the scientific predictions for climate breakdown and biodiversity loss continue to be bleak if action is not taken, by supporting CAT you are helping us continue to provide much needed positivity and hope. Thank you for being part of our community.

Eileen Kinsman, co-Chief Executive Officer

Thank you

Thank you so much to everyone who donated to our recent fundraising appeal. In total this has now raised an incredible £100,000, which has helped us to get through a very challenging period and continue sharing positive solutions to the climate and nature crisis.

Individual members and supporters are the lifeblood of CAT, and have been throughout our 50-year history – we simply wouldn't be here without you.

Thank you.

Graduate School latest



Students conduct habitat surveys as part of our Restoration Ecology module.

CAT Graduate School students have been busy studying a wide range of topics over the past few months, from social change to restoration ecology to low impact building materials. Our usual mix of academic content, inspiring guest lecturers and practitioners, hands-on practical work and field trips have all helped to bring learning to life.

In April, we were delighted to have Clore Leadership fellow Deanna Rodger run an online session for CAT students studying our module on Communicating Transformational Social Change. As part of the session, she shared her work and poetry and explored how creative practices can support sustainable causes.

During the Communicating Transformational Social Change module, students discussed windfarm planning with others studying our Sustainable Electricity module to support part of their assignment to develop a communications strategy. The Sustainable Electricity students later gave presentations to show how they used the knowledge and skills they learned.

The students also heard from Dr Kim Knowles and Aim King from the Film and Television Studies Department at Aberystwyth University about

'Communicating through Filmmaking' and explored how film and imagery can be used within communications strategies.

Bethan John, who is currently studying a PhD on 'Empowering climate action through participatory filmmaking' with CAT, Aberystwyth University and Cardiff University, also gave a lecture to students exploring how communication in social movements and campaigns can help create change.

While exploring our module in 'Restoration Ecology', CAT students had a field trip where they were shown around Bwlch Corog by Neil Groves, a habitats and species manager for Coetir Anian / Cambrian Wildwood, who talked them through the habitat management and restoration approaches used on the site, which is a mixture of moorland and ancient woodland.

Architecture and Green Building students were joined by experts from the Society for the Protection of Ancient Buildings (SPAB) for practical workshops producing lime in our lime kiln and for lectures looking at the role of lime in building conservation.

If you're thinking of studying at our Graduate School, come along to our next open day: <https://cat.org.uk/open-days>

Stay at CAT

While CAT is currently closed to walk-in visitors, we continue to welcome a wide range of groups – including schools, colleges and universities – as well as individuals who wish to book an overnight stay.

When we have availability between courses and events, individual rooms with bed and breakfast can be booked in WISE, our sustainable education and conference centre. If you are visiting with a larger group, you can also choose to stay in the CAT Eco Cabins, with the option of self-catering or pre-booking meals in our vegetarian café.

This is a great way to visit CAT, stay in beautiful and inspiring surroundings, and help to support our work.

To book your stay at CAT, visit <https://cat.org.uk/come-to-cat/stay>

Great Big Green Week

Between 8 and 16 June, people across the country will come together for the Great Big Green Week. There are many ways to get involved, on your own, with family and friends, your school, community or business. This year is all about swaps, whether that's items, skills, ideas or swapping to new approaches.

Together, we can show that people everywhere are already making swaps every day to help create a safer, greener, fairer future and it's time for politicians to step up and play their part.

Find out how you can get involved in your local area at: <https://greatbiggreenweek.com/get-involved>





New Sustainable Horticulture course



This summer, Aberystwyth University is launching a new and unique MSc course in Sustainable Horticulture, in collaboration with the National Botanical Garden of Wales and CAT.

The course is designed for work-based horticulture practitioners who wish to develop their skills and knowledge in scientific horticulture, innovation, conservation and sustainability. Students will benefit from Aberystwyth University's long tradition of

innovative plant science research, the National Botanic Garden's expertise in plant cultivation, propagation and conservation, and CAT's globally respected approach to sustainability.

Offered mainly through distance learning, the course can be completed in two to five years, with entry points in September, January and May.

CAT will deliver 20 credits of the core taught modules including Introduction to Sustainability and Adaptation, and Sustainability and Adaptation Concepts and Practice, and will offer Sustainable Horticulture students the opportunity to join us for optional modules including The Science of Sustainable Food Production, Food Production and Consumption, Restoration Ecology or Ecological Assessment.

Dr Adrian Watson, Head of School, says, "This is an exciting opportunity to work with Aberystwyth University again to strengthen CAT's education in the environmental and life sciences in Mid Wales. Together, we listened to participants in our free public webinars on sustainable horticulture who showed interest in further study in this area. We look forward to equipping tomorrow's horticulturalists to play their part in creating a more sustainable horticulture sector."

More information at: <https://ibersdl.org.uk/building-up-qualifications/msc-sustainable-horticulture/>

Britain Talks Climate

We were pleased to be a partner in the Britain Talks Climate research, with Graduate School lecturer Ruth Stevenson, who specialises in social practices and systems change, contributing to survey design for the Wales-specific research.

Britain Talks Climate was first launched in 2020. The research aims to help us better understand and engage with people's priorities, questions and concerns, so we can tell more compelling climate stories.

The 2024 research finds that people in Britain care about climate change and want to tackle it as a society. Specifically:

- Appetite for leadership on climate and nature is strong and enduring. There is no demographic or segment that opposes tackling climate change and protecting nature.
- Climate leadership offers a source of hope. People strongly believe it's the government's job to lead the way on climate. They feel hopeful about the prospect of government action and investment. Most are not convinced by the current government's track record, but believe there's still time to act.
- People don't want to be left alone to face and tackle climate change. People want to feel like they are part of a bigger change, not isolated individuals facing costs many worry they cannot afford. If change is (or feels) unfair, punitive or top-down, we have already seen that some will push back.

Learn more about the research and 2024 findings at: <https://climateoutreach.org/britain-talks-climate/2024-summary-recommendations>



Architecture students discuss climate action

Architecture and built environment students from universities across the UK and Ireland came together at CAT in March to discuss how the sector can respond to the climate and nature emergency.

Organised by the student branch of the Architects Climate Action Network (ACAN), the event saw more than 60 students from 27 universities, including CAT's own MArch Sustainable Architecture (Part 2) students, taking part in an inspiring programme of talks, tours, discussions and film screenings.

The weekend was centred on how architecture and built environment students can have a positive impact on climate action, and how architectural schools could be supported to provide more in-depth training in sustainable and regenerative approaches.

CAT Masters in Architecture Programme Leader, Dr Carl Meddings, who helped to organise the event, said, "With around 40% of UK carbon emissions coming from the construction, operation and maintenance of buildings, it is essential that architects and other built environment professionals have the skills, knowledge and networks to help address the climate and nature emergency. Here at CAT, one of the areas we specialise in is regenerative and sustainable approaches to architecture and green building, so we were delighted to welcome students from across the UK and Ireland to explore how we can work together to create change."

The 8 Principles of Low Energy Building

① Efficient Shape (form factor)

Energy consumption is significantly affected by the shape of the building; its form factor. Buildings with a high external surface area, which includes walls, floors and the roof, lose heat through these areas. If this is divided by the usable floor area to give a ratio we call this the form factor, the lower the form factor, the better. A lower form factor will also cost less to build or insulate as there is a smaller area needed, so a win win.

For a new house a form factor of less than 3 should be aimed for, a higher form factor can still achieve Passivhaus or EnerPHit but may need thicker insulation. A simple shape does not need to be boring, it can still be of high design quality through use of materials and good design.

In existing buildings it is often difficult to improve the shape, but a common area that can be improved with many Victorian houses that have a recessed front door, is moving your door to be flush with the front wall. This provides you with a slightly longer hall, and less wall area to be insulated, on a full Passivhaus this could save as much as 18% of your heating!

To find out your homes form factor or to learn more about our design principles, call and chat for free with one of our Passivhaus Designers.



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CAT graduate symposium 2024

At our Graduate Symposium this year, CAT graduates shared how they are taking action on environmental issues and developing and implementing ways of addressing the climate and nature emergency. Graduates, students and staff joined in person and online to watch the sessions and take part in workshops.

Speakers included CAT graduate Jeff Ive, Chief Technical Officer of Adaptavate,

an award-winning company developing and commercialising the carbon negative building materials of the future that was founded by fellow CAT graduate Tom Robinson. Jeff explained how the seeds of their successful business were sown at CAT and how they took their idea into the mainstream.

We enjoyed a lively session on Starting a Business or Social Enterprise led by a

panel of CAT graduates who have gone on to do this, including Jeff Ive (Adaptavate), Jon Calder (Wild Mosaic), Becky Lane (Furbnow), and Chris Woodfield (Aber Food Surplus).

Other speakers came from a range of industries and areas linked to sustainability and the environment.

Together, we discussed the future of the CAT graduate network and further ways graduates can get involved with CAT's work and future.



Students and graduates came together at CAT for an inspiring weekend of knowledge-sharing and network-building.

Teaching numeracy alongside green skills

With funding from the UK Government through the UK Shared Prosperity Fund, supported by Powys County Council, we are running a series of free numeracy courses for Powys residents. The courses explore applied numeracy through practical sessions covering green skills in building, energy and woodland. Over six weeks, participants will improve their confidence with numbers while learning key green skills that will benefit their careers and support action for sustainability.

<http://cat.org.uk/greener-maths>

CAT CONVERSATIONS



Clean Slate *interviews* Dr Frances Hill, Senior Lecturer and Programme Leader for CAT's MSc Sustainability in Energy Provision and Demand Management.

Please introduce yourself and your work at CAT.

I lecture on heat transfers in buildings, heating, cooling and ventilation, and lighting. I run practical

sessions on solar water heating, carbon calculators, and energy modelling. And I also teach study skills including data analysis.

What's been on your to-do list this week?

This week, I have supervised dissertation students in Rio, Manila, Berlin and Cardiff. I've worked with students interviewing Kenyan Maasai to learn more of their worldview relating to sustainability. And I've been marking assignments on subjects including Glasgow's circular economy, hemp growing in Ireland, and working with Welsh farmers towards tree-planting targets.

What interesting dissertation projects have students been working on?

I have a student at the moment looking at energy and carbon saving in deep retrofit projects. She's exploring whether the penalties of working on the low-hanging fruit first, rather than

doing things in the ideal order, are over-ridden by the benefits in energy saving.

Another student is working with a city council to develop a tool to help them prioritise which of their social housing portfolio to retrofit, given their limited resources.

It's not all UK-based – we had a student in Tanzania, for example, who looked at the impact of painting school roofs white to reduce overheating, a small intervention that could have a significant impact.

Those are just a few recent examples, and obviously I'm focused on the energy and buildings side of things. We also have students working on projects relating to ecology, behaviour change, food production, and more – with a really wide range of research topics.

How does a CAT MSc prepare a student for their career?

MScs are about skills, not just knowledge, so a lot of our workshops help students to develop their skills. CAT students come from a wide range of backgrounds, many of them changing careers or having had little previous academic experience but lots of relevant work experience. I help students develop numerical skills if needed, or those who come from less of an essay-focused background to develop their writing skills.

Dissertation supervision requires me to work in tandem with students, helping them find the best way to develop their skills and source the material they need. They'll often know more than I do about their topic by the end of the dissertation, but I'm there to help them through the process and to develop their research skills.

Save the date!
Join us for this year's CAT members' conference on 11-13 October.
Sign up for our newsletter to receive an email when bookings open – cat.org.uk/sign-up

Future plans taking shape



A large covered amphitheatre will create space for practical demonstrations, talks and events, allowing us to host more group visits and larger events.

A major project to create an innovative sustainable skills hub and inspiring new visitor experience at CAT is continuing to be developed. Plans include new and refurbished teaching and workshop spaces, exhibition spaces, additional on-site accommodation, an expanded café, nature trails, and an inspiring new visitor experience – allowing us to welcome many more visitors and learners to the Centre, and to re-open our doors to walk-in visitors.

Supporting sustainable skills for the future

The planned sustainable skills hub will allow CAT's postgraduate students, course participants and visiting school, college and university groups to gain hands-on experience in everything from retrofit and low impact building to energy, food and ecology.

Plans include the deep retrofit and repurposing of two existing buildings to create practical teaching spaces, skills workshops, studio space, laboratories, and outdoor demonstration areas.

Meanwhile, a new outdoor 'forum' is planned for the centre of the site – a large covered amphitheatre space for practical demonstrations, talks, concerts and other events, allowing the Centre to host more group visits and larger conferences and events.

CAT Co-CEO, Eileen Kinsman said:

"We know that with the urgency of climate change and with the wider destruction of the natural world, we need to help more people and organisations to gain the skills,

knowledge, networks and confidence to take positive, practical action.

"Plans for adaptable, custom-built learning spaces, workshops and labs will allow us to cater for a wider range of groups and courses, and offer an enhanced learning experience."

Additional and refurbished accommodation and an expanded catering hub will also add to capacity for visiting groups, and allow CAT to run more residential courses and special events.

Inspiring, informing and enabling a new generation of visitors

A planned new visitor experience will bring more visitors to the centre and inspire many more people to think about what they can do in their workplaces, communities, and in their day-to-day lives to help tackle climate change and wider environmental and sustainability issues.

Plans include a new welcome hub, a refurbishment of our iconic cliff railway

(which is now over 30 years old), and a new introductory exhibition exploring environmental issues and solutions. Additional themed exhibition zones around the eco centre will cover topics such as our place in nature and the incredible diversity of life on earth; the future of the built environment, from city-scale to our own homes; food and growing; clean energy; and more.

Inspiring stories of people, communities and organisations across Wales and around the world will help to bring solutions to life, whilst hands-on activities, tours, art, live demonstrations, and outdoor spaces for learning-through-play will all help to create an immersive and unique visitor experience.

A regenerative approach

We aim to develop and showcase best-practice regenerative approaches in the delivery of the project, helping illustrate what's possible, and influencing other development projects.

Eileen Kinsman said:

"At the heart of our plans is a truly regenerative approach. We'll be prioritising refurbishment and re-use of existing spaces over new buildings, using low impact materials, minimising energy-in-use, maximising the use of renewable energy, and looking for more opportunities to support the site's rich biodiversity.

"As well as attracting many more learners and visitors to the Centre and to the local area, the plans are expected to see the creation of a number of new jobs and opportunities for local suppliers, benefiting the local community and the Mid Wales economy for many years to come."



A new welcome hub and introductory exhibition space forms part of an inspiring new visitor experience.

All images: Haworth Tomkins



Growing areas will support research and education in sustainable food production.

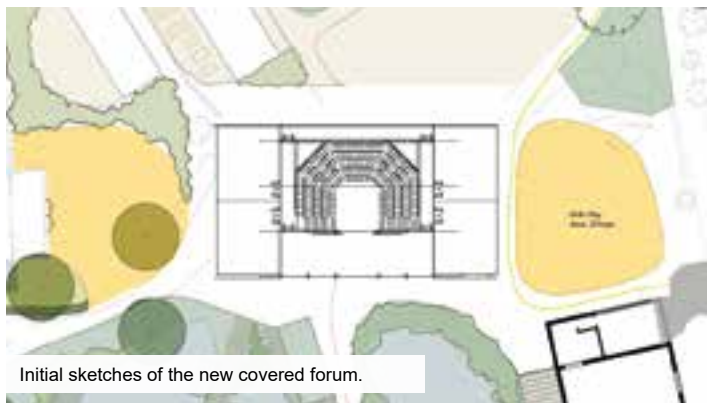
The Centre is currently open for pre-booked visits, including courses, events, groups and B&B, having temporarily closed to walk-in visitors in November at a challenging time for both the charity sector and visitor attractions. With the planned investment and renewal, the new visitor experience is expected to attract many more people, allowing us to re-open to walk-in visitors.



Plans prioritise refurbishment and re-purposing of existing buildings.

Timing of the project is funding-dependent, with the plans included in the initial projects being considered for investment within the Mid Wales Growth Deal portfolio, and with match-funding being sourced by CAT from a number of other sources, including charitable trusts and foundations and individual supporters. Development of plans to-date has been supported by the UK Community Renewal Fund, the UK Shared Prosperity Fund and a small number of individual donors, and CAT is currently exploring options for funding the further development of its plans.

Plans so far have been shaped by input from a wide range of CAT supporters, members, students, the local community and other key stakeholders. More details of the project plans will be shared in a series of in-person and online events later this year – we're very much looking forward to hearing your feedback and suggestions. [CS](#)



Initial sketches of the new covered forum.



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For more information please contact us at **members@cat.org.uk**

Communities rethinking how we live

Social enterprises offer communities the potential to solve the challenges they face themselves and live more sustainably. **Paul Allen** explores the rise in local ownership models and the many benefits they have.



The Mach Veg Box scheme provides fresh locally grown veg and supports the local economy.

In CAT's local town of Machynlleth, and across the UK, communities are taking action in the climate and nature crisis and empowering each other to eat, travel and consume in ways that have a more positive impact. Social enterprises can help reduce our reliance on fossil fuels, while supporting local economies and building community cohesion and resilience. By getting involved in and supporting these innovative projects, we can reclaim our power in the systems that deliver our everyday needs.

Food for the future

Local food growing and delivery schemes are bypassing the supermarkets and offering people a lower impact way to do their weekly shop. Having a closer relationship to how their food is grown and the growers who produce it helps people rebuild their connection to both nature and their community. Further



benefits can include a more resilient food supply, a stronger local economy, less use of plastic, and better health for both volunteers and customers.

Based in and around Machynlleth is Mach Veg Box, one such co-operative of food growers. Customers order the food they need online and boxes are filled up by volunteers and taken to collection points in the town. The project is a proven success, with people happy that what they spend goes directly to the growers, and the growers appreciating having a reliable local customer base.

Also making locally grown food more accessible to the community is Fresh and Local, a cooperative of vegetable

growers, bakers and craftspeople based in and around Machynlleth. The group has a stall on market day connecting local people directly with the growers and cutting carbon emissions and plastic packaging in the process.

Another part of Machynlleth's food revolution is Criw Compostio, focusing on feeding the soil with compost from local waste. This non-profit circular-economy collective is providing a hyper-local alternative to bought-in peat-free compost, which can travel huge distances. The volunteers gather all their ingredients from local timber and food businesses, helping them adhere to new waste management regulations and keeping invaluable nutrients in the Machynlleth square mile. The compost they produce is on a donate-as-you-feel basis for locals who want to grow their own nutritious food.

Sharing the journey to zero carbon

Transport is another aspect of daily life that communities can take more control of to reduce carbon emissions and rebuild local connections.

Car share schemes enable people, especially those in more remote rural areas, to get around without needing to buy their own car that spends most of its life parked outside home or work. The community owns several cars that members can book and use to supplement walking, cycling and public transport. This means fewer cars, which are extremely carbon-intensive to produce and run. And apart from a membership fee, users of the schemes only pay for the journeys they make.

In 2006, when Machynlleth pioneered a car sharing scheme, it was one of only a handful of similar projects in the UK.



The TripTo electric car share scheme helps reduce transport emissions.



MachSpace provides knowledge, skills, equipment and space to make, mend and socialise.

Over the past two decades, the idea has grown in popularity, with schemes big and small nationwide. Machynlleth's car club is now part of the non-profit social enterprise TripTo, combining schemes in four towns to take advantage of economies of scale and provide more options for hiring electric vehicles. As the scheme is community owned, local people can contribute to decision making about the type and size of the vehicles and where the cars are located. Options for journey sharing are helping people save

Starting your own social enterprise

Setting up and running a new community project in your local area may seem daunting. But you don't have to start from scratch. Get in touch with projects or networks in other areas to understand how they were initiated, the community processes they use to operate, and the benefits they bring for the people who use them.

Considering and promoting the co-benefits of your scheme, for example, creating jobs and volunteering opportunities, improving health and wellbeing, enhancing biodiversity and building community relationships and resilience, can help you make a stronger case for action and get support from a wider range of people and organisations.

more money, reduce emissions further and build new relationships.

Repairing consumerism

In our consumer culture, so many of the things we buy soon break and end up being thrown away. But, with a little know-how, many things can be fixed.

Repair cafés are community-run spaces where people can bring broken items to be repaired by a volunteer with the knowledge and skills to do so. The people bringing in the items are encouraged to get involved as much as possible with the repair, taking ownership of their item, but sitting and watching with a cuppa is also an option. Clothes, appliances, crockery, furniture, bicycles and toys can all be fixed and saved from landfill. And, once again, the community is brought closer together.

Working in a similar way to car share schemes are makerspaces, reducing the need for all of us to own items we only use




Makerspaces allow people to borrow a wide range of tools and equipment.

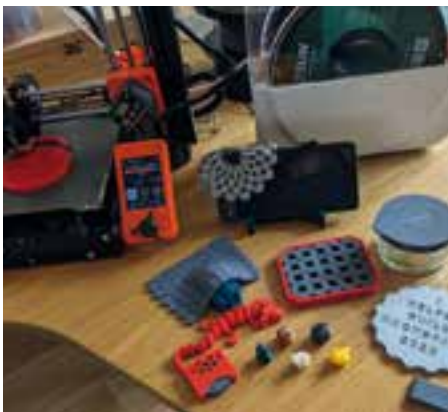
now and then. Machynlleth Makerspace is a hub for people who want to share knowledge, skills and equipment to make, mend and socialise. It's full of equipment such as 3D printers, sewing machines, drills, saws, soldering equipment, laser cutters and looms, for members to use in the community's own workshop. Members who don't have the funds or space to use large or expensive equipment can pool their resources into a shared workshop space. The Machynlleth group is part of the Hackspace Foundation, which helps people set up makerspaces/hackspace across the UK.

Tymhorau Dyfi is another social enterprise based in Machynlleth passionate about making and using materials more sustainably. The collective of growers and artisans offers local people a consciously curated selection of foods, flowers, garden tools and homeware – all grown, harvested and handmade by local craftspeople. Using materials that are grown sustainably using methods that support biodiversity and the local ecosystem encourages people to think about and adopt a way of living in harmony with the land and nature.

What next for your community?

If you're inspired by these examples of locally-led and community-owned initiatives in Machynlleth, why not set up something similar in your community?

A great place to start is our online course 'Zero Carbon Britain: Live Online – Scaling-up Community Action' on 19 June. Join us for a day of interactive learning and discussions focusing on the key question: what next for your community? Visit cat.org.uk/short-courses to find out more and book your place. 



3D printing at MachSpace.

Scaling up local action in the Dyfi Valley

For 26 years, Andy Rowland, based in Machynlleth, has run Ecodyfi, a not-for-profit development trust supporting and connecting sustainability-based community groups in the local area. **Catriona Toms** looks at some of the many achievements of this inspiring project and shares lessons for other areas with similar ambitions.



Andy, second from left, and members of the Dyfi Biosphere Partnership meeting with Welsh Government Minister Julie James in 2023.

At the heart of every community making change happen are people who get things done. In Machynlleth, for almost three decades, one such person has been Andy Rowland. In 1998, Andy helped to found Ecodyfi, a social enterprise with a vision of a thriving, healthy, caring, cohesive, bilingual and outward-looking community, widely recognised for living sustainably. Since then, the initiative has brought a diverse mix of people and organisations together to sustain the natural environment while increasing the resilience of the local economy and improving people's wellbeing.

An energetic start

Initially, Ecodyfi was a partnership between CAT, renewable energy company Dulas, Powys County Council and others who saw the potential it had to transform the local area. Setting out to make the local economy more sustainable, the original partners decided to start with the energy sector. Andy was employed as the project officer for the Community Renewable Energy Project, largely funded by the European Union, helping to develop community-based wind, solar and hydroelectric power projects.

He says, "From the start, the environment and the economy have been key areas to work with and mesh – where have you got the win-win situations that avoid them conflicting with each other? Community-based renewable energy is one of those, because obviously you've got the global benefits regarding climate change and clean energy, and local benefits of growing sustainable jobs in those businesses. And where local consumers can use the electricity or heat that's generated from green sources, that avoids their expenditure leaking straight out of the local economy to the big corporates and instead keeps it circulating within the local area."

Sustainable funding and governance

It was important to Andy and the original founders that Ecodyfi was developed in a grassroots community-led way. In 2002, a community consultation was held, asking what the organisation's remit should be and how people would like to contribute. It was decided that Ecodyfi would take on a broader community regeneration remit, covering areas including transport, waste and resource management, woodlands and tourism. The group became a community organisation whereby the membership

elected the board of directors at an annual general meeting, a system of governance that's been in place since.

While to begin with the project was funded through grants, as time went on this changed to more of a mixed economy, with Ecodyfi bidding for commercial contracts as well as applying for grants, often working alongside bigger NGOs to deliver broader Wales-wide projects at a local scale.

Andy describes the group as facilitators rather than builders, buying in expertise as and when it is needed. He says that his background at CAT helped provide useful knowledge and skills though, "I had experience in the field of community energy because I was previously employed at CAT. Although I wasn't an engineer, I nevertheless picked up a lot of information and then learned more on the job."

Supporting and delivering community projects

In the decades since, Ecodyfi has played an important role in providing advice, infrastructure, fundraising support and facilitation for a wide range of projects. It has helped sow the seeds and nurture the growth of initiatives that would have struggled to get started because



Dyfi Biosphere projects have helped to celebrate and connect people with the natural and cultural heritage of the area.

they didn't have bank accounts, official company or charity status, or offices. Often, Andy and the team have helped kick-start projects by bringing potential partners together and facilitating conversations and building consensus for a project to go forward. Many have gone on to be successful, self-sustaining stand-alone local ventures.

Larger projects where Ecodyfi has a delivery or management role are often done in collaboration with other not-for-profits. These have been as diverse as the Machynlleth Repair Café, helping the local community to save broken items from landfill; Tyfu Dyfi, growing the local agroecological food economy; Dolau Dyfi Meadows, supporting smallholders with grazing regimes that benefit wildflowers; and Trywydd Iach, an outdoor health project running activities in the natural environment and monitoring participants' wellbeing.



Andy receiving an Environment Champion Award last year from then First Minister Mark Drakeford.

A current focus is on the local food economy. While Machynlleth is home to very knowledgeable and skilled horticulturalists, many struggle to make a living or operate at scale. Ecodyfi is supporting them and growing their connections, not only with each other but also with cafes and retailers, including the bespoke weekly on-line shop called Bwyd Dyfi Hub.

An inspiring impact

Andy says it's difficult to judge the impact Ecodyfi has made, because the whole of society has changed so much in the last 26 years. But there are some things he's particularly proud of – the Dyfi Biosphere initiative (see box), the renewable energy projects that started it all and continue generating benefits today, the dedicated staff and volunteers who've been part of the journey, and the wellbeing programmes.

He credits all those working hard on sustainability throughout the community for the positive changes in the area, saying, "There are many other social entrepreneurs around, doing their own thing. We ought to be even more joined up about it than we are – it's not easy. It's doing it in ways that keep the individual spirit of the different projects going."

Ecodyfi sees its mission as an ongoing process. Andy adds, "From the beginning, we've wanted to involve everybody we could in moving this place in a more sustainable direction. It's a journey and it's long, but how can we get there as quickly as possible while taking as many people with us as possible?"

Lessons to share

Despite learning many lessons along the way, Andy believes it's difficult to advise other communities looking to follow in Ecodyfi's footsteps, as every area's situation is unique. But he does have valuable advice to share:

"The scale of the problems we face demands we quickly scale up our impact. The important thing is not to lose local ownership or relevance. Volunteer effort is invaluable but inevitably limited, so getting financial resources for professional roles is important. Think about the benefits to potential funders of what you're doing and try to manage tensions between different players with overlapping aspirations.

"It's a cliché but we all have our part

to play, don't we? It's important to offer people ways in which they can participate in the search for more sustainable ways of living, instead of telling them what to do, or even worse, lecturing them. Being a professional optimist helps."

At the end of April this year, after an incredible three decades, Andy stepped down from the role of Ecodyfi Managing Director. He leaves the organisation in the capable hands of the elected board and a small core team. But he's not walking away entirely – describing himself as 'semi-retired', he plans to stay on for a while longer to help put funding and structures in place that will see Ecodyfi, the Biosphere, and the incredible wealth of community-led initiatives in this special valley continue to flourish well into the future. Meanwhile, he's looking forward to having more time to spend enjoying the nature, people and places that he has served so well for so many years. [GS](#)

About the author

Catriona heads up CAT's communications and marketing team and is editor of Clean Slate. She has a Masters in Food Policy and is currently completing CAT's Sustainability and Adaptation MSc.

The Dyfi Biosphere

Ecodyfi was a founding partner of the Dyfi Biosphere. A Biosphere is a UNESCO (United Nations Educational Scientific and Cultural Organisation) designated area where people pilot new ways of benefitting nature and climate as well as their own futures through collaboration and more sustainable uses of resources.

These sites are nominated by national governments and must fulfil three aims:

- Conservation – protecting wildlife, habitats and the environment.
- Development – encouraging a sustainable economy and community.
- Education – supporting research, monitoring, and building global networks to share and learn.

While these aims are set by UNESCO, there is scope for local interpretation. The Dyfi Biosphere puts a big emphasis on cultural, especially Welsh language, heritage as well as natural heritage, encouraging local people to value and celebrate the place where they live.

It takes a village

Inspired by CAT's Zero Carbon Britain project, the village of Wedmore in Somerset has been exploring how to live more sustainably. **Paul Allen** revisits this community showing that practical climate and nature action starts at home.

Wedmore in Somerset may be known for its connections to King Alfred the Great but it has its sights set firmly on the future. This community of 3,000 people is working towards becoming a zero carbon village.

Green Wedmore was established in 2006 in response to the climate and nature emergency. It aims to explore, develop and implement initiatives to encourage and facilitate sustainable living in the village and surrounding areas.


Zero Carbon by 2030

In 2018, after hearing about CAT's Zero Carbon Britain project, members of Green Wedmore fundraised locally to produce a detailed zero carbon report for the village. I was delighted to attend the launch of the report a year later in the local church and hear about the plans the community had to rethink daily life to reduce its emissions.

Green Wedmore's zero carbon ambition is focused on six areas – energy, food, transport, wellbeing, housing, and carbon and nature – with a working group dedicated to each area and regular meetings to update on progress.

Small actions equal big change

Green Wedmore understands that when it comes to taking action in the climate and nature emergency, everyone needs to play their part. Even small changes, when made by many people and acted on every day, can make a substantial difference. By engaging people of all ages and joining up local groups, this inspiring community is sharing the challenges and the benefits of climate and nature action, and showing that a zero carbon future is possible.

If you would like to set up a similar initiative to Green Wedmore in your community, you'll find links to a wide range of useful resources and inspiring case studies in our Zero Carbon Britain Resource Hub: cat.org.uk/zcb-hub 

About the author

Paul is CAT's Zero Carbon Britain Knowledge and Outreach Coordinator. He has been involved with our research into zero carbon scenarios since the beginning, coordinating the development of research reports and liaising directly with government, industry, NGOs and the arts to share findings.



Shutterstock / Rachel Dickinson

Energy

Wedmore Solar Farm has been generating clean energy for the village since 2013, and many of the community buildings have solar panels, including the village hall and sports clubs. Green Wedmore has also negotiated discounts on domestic solar PV for residents.

The group is on hand to advise locals on energy efficiency measures they can take, greener energy suppliers, and sources of financial support for people living in fuel poverty or looking to make home improvements.



Food

Supported by the parish council, Green Wedmore has published the *Close to Home Cookbook*, promoting local food producers, food shops, pubs and restaurants and encouraging the use of local vegetable gardens, hedgerows and allotments. The intention is to inspire people to think about how their food is grown, where it comes from and how it is packaged, and make more sustainable choices.



Housing

Green Wedmore offers local people advice and support with new builds and refurbishing and retrofitting existing buildings. With a wealth of knowledge and experience in construction and housing, the group is helping people to make their homes more energy efficient, cheaper to maintain and run, and healthier and more comfortable to live in.



Wellbeing

The wellbeing group is concerned with changes that can improve people's physical and mental health and happiness. These areas overlap all of the other focus areas, with action towards a zero carbon village having many co-benefits beyond a reduction in carbon emissions. More affordable energy bills, more comfortable homes, healthier diets, more active travel, more interaction with natural spaces like the local woods, and a better sense of community all make people feel good.



Transport

As transport is responsible for a big proportion of the village's carbon emissions, the group is providing advice on greener options for getting around, including walking, cycling and public transport. Residents are signposted to local services including e-bike hire and bicycle repairs.



Carbon and nature

For decades, the natural environment and wildlife within it have been in decline in Wedmore, Somerset and across the UK. Green Wedmore knows that to reach a zero carbon future, it must preserve the carbon safely locked up in peat, soils, woodlands and pasture and absorb more through peat restoration, tree planting and improving soil health. Protecting and enhancing local ecosystems also improves biodiversity and is good for pollinators, birds and small mammals.

Green Wedmore's carbon and nature group has two aims: to measure the carbon sequestration amount for the parish and work towards increasing it to help achieve its zero carbon targets; and to restore nature locally.

Last year, the group organised the Wilder Wedmore three-day festival of nature, featuring talks, workshops and stands all about nature in Wedmore and what local people can do to nurture it.



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ZERO CARBON SHROPSHIRE

A whole county on the journey to zero carbon

Inspired by CAT's research, Zero Carbon Shropshire has created a plan for the county to reach zero carbon by 2030. **Amanda Smith** looks at how communities, enterprises, councils and NGOs are working together towards this ambitious goal.



Shutterstock / Alan Dunnett

Zero Carbon Shropshire is a not-for-profit organisation set up in August 2020 to bring together stakeholders across the county with the shared goal of net zero carbon by 2030.

To hit this target, a 10% per annum reduction from the county's 2019 carbon footprint is needed. This is a big challenge – one that will require organisations and individuals to transform the way they live and work. But if it succeeds, the project will see Shropshire lead the way in sustainability and inspire other counties to follow.

How it started

Back in 2019, CAT's Paul Allen gave a presentation on our Zero Carbon Britain project to people and organisations from in and around Shrewsbury. This talk inspired those in attendance to form Shropshire Climate Action Partnership (SCAP), an action group of around 100 people including representatives from local councils, businesses and charities. All gave their time as volunteers to work on SCAP's first project, Zero Carbon Shropshire.

The following year, a steering committee was set up with the short-term goal to develop and publish a zero carbon plan by the end of 2020. The committee used CAT's Zero Carbon Britain scenario as a starting point, and CAT and others provided additional support and training. Working groups were formed that focused on areas such as consumption and resources, transport, land and biodiversity, energy and buildings.

A transformative plan

Zero Carbon Shropshire published its zero carbon plan on 31 December 2020. The plan recognises that the technologies and solutions needed to achieve net zero carbon Shropshire by 2030 are all available and affordable, and it highlights the potential co-benefits of the transition to zero carbon for the people of Shropshire.

The group estimates that about 80% of the emissions reductions needed are within the power of Shropshire's producers and consumers, with the rest dependent on national government action. Its annual targets include 20,000 homes insulated and switched from oil or gas heating to heat pumps, investment of £200m in renewables, 500 acres of solar farms, 2,000 electric vehicle charging points, and 8,000 acres of habitats restored.


Plans into action

Since the publication of the plan, the team behind Zero Carbon Shropshire have been hard at work making changes informed by the four principles of Global Climate Justice, Restoring Nature, Adaption and Resilience, and Sustainable Shropshire. It is now part of a co-ordinated and collaborative response, working with other groups and organisations across the county to accelerate action to achieve net zero in Shropshire and to engage local communities to help make that happen.

Actions taken or currently underway across the county include:

- Key events bringing together sustainability-focused groups from across the county to explore ways of working together to accelerate change.
- Scaling up community-owned energy schemes.
- Carbon Literacy programmes and other training and resources to support businesses and organisations.
- Shropshire Love Nature Festival, a month-long festival to involve, inform and enthuse Shropshire residents and visitors about biodiversity and to highlight the current nature crisis.
- Carbon Watchers, bringing people together to find out what their personal or household footprint is and to share ideas and tips to reduce it.
- Local Food Connect, which aims to increase demand for and access to locally sourced seasonal food, providing opportunities for farmers to sell directly to local consumers.
- Renewable Energy Mapping, the creation of online maps showing the siting possibilities and major physical and geographic constraints for local renewables.

Through an innovation lab, CAT worked with the Zero Carbon Shropshire Enterprise Group and a sample of local businesses to understand the barriers local stakeholders face in addressing the climate emergency. Through this process, we have explored the co-benefits of taking action and explored ways for Zero Carbon Shropshire to engage businesses across the county in delivering on their climate action plan.

To find out more about Zero Carbon Shropshire's plan and activities, and how you can take similar action in your local area, visit <https://zerocarbonshopshire.org> or contact CAT at zcb@cat.org.uk to discuss the bespoke training and support available to you. 

About the author

Amanda is CAT's Head of Learning – she has overseen the development of our Zero Carbon Britain training programmes, short courses and schools education work.

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Collaboration is key to scaling up climate and nature action at the community level. Across the UK, local networks are bringing people and groups together to share their knowledge, skills and resources and learn from each other's experiences. By working together across a range of issues, they are accelerating progress towards zero carbon and biodiversity restoration. Here are some inspiring examples happening right now.

Civic Square

For the past two years, CAT has been working with Birmingham-based community organisation Civic Square, which is exploring and sharing how the climate transition of our homes and streets can be owned by the people who live there.

Civic Square is doing this through three interconnected projects:

- Neighbourhood Doughnut – focused on downscaling the Doughnut Economics framework to the neighbourhood scale. This involves finding ways for communities to flourish without continuing to exceed our ecological ceiling.
- Neighbourhood Transitions – demonstrations of carbon, energy and ecological built-environment transitions. CAT joined Civic Square in delivering its Neighbourhood Trade School, to exchange local knowledge and improve access to the skills we need to transform our homes, streets and neighbourhoods. We also hosted the Wales leg of its Retrofit Reimagined festival, an inspiring series of events bringing people together to explore neighbourhood and community-led retrofit.
- Neighbourhood Public Square – co-building and democratising access to the spaces, tools and resources for the climate transition, held in common for the neighbourhood.
<https://civicsquare.cc>

Herefordshire Green Network

Herefordshire Green Network is a hub for sharing resources and knowledge to address the climate and ecological crisis. Its ambition is to support people in Herefordshire to take climate action and develop an ecologically rich zero carbon future for the county.

The network has been active for more than 10 years. It is made up of local individuals, community groups, environmental organisations, and town and parish councils. The network plays an important role by sharing information about and promoting the activities of its

members in areas including transport, community hubs, food poverty, energy efficiency, and community engagement.

CAT's Zero Carbon Britain team contributed to the network's Great Collaboration project, bringing together communities on their path to a low carbon and sustainable future. From 2020 to the end of 2023, the project was busy producing the Great Collaboration Toolkit, a useful resource now being used by local networks across the UK.

<https://hgnetwork.org>

Cumbria Action for Sustainability

Cumbria Action for Sustainability (CAfS) promotes and facilitates low-carbon living and its benefits, inspiring and supporting individuals, communities and organisations across the county to decarbonise their lives and businesses.

The group has been running for over two decades and is now a charity with more than 40 staff. For many years, CAT's Paul Allen has been a regular speaker at CAfS events, sharing our latest Zero Carbon Britain research and being inspired by the group's many and varied activities.

CAfS projects include:

- Retrofit Advice Service, providing advice and resources for people who want to adapt their homes to lessen their impact on the planet.
- Community Renewable Energy, supporting local councils and action groups to bring renewable energy to their community with advice, consultancy and grant funding.
- Going Green Together, which supports voluntary, community and social enterprise organisations and communities to take climate and nature action.
- Greener Schools Project, with the joint aim of helping schools reduce their carbon footprint and empowering students to learn about sustainability.
- Zero Carbon Cumbria, bringing together local people and organisations to reduce Cumbria's carbon emissions to net zero by 2037.
<https://cafs.org.uk>

Zero Carbon Dorset

Inspired by CAT's Zero Carbon Britain reports, volunteers in Dorset have produced their own zero carbon report for the county, exploring how Dorset could get to net zero.

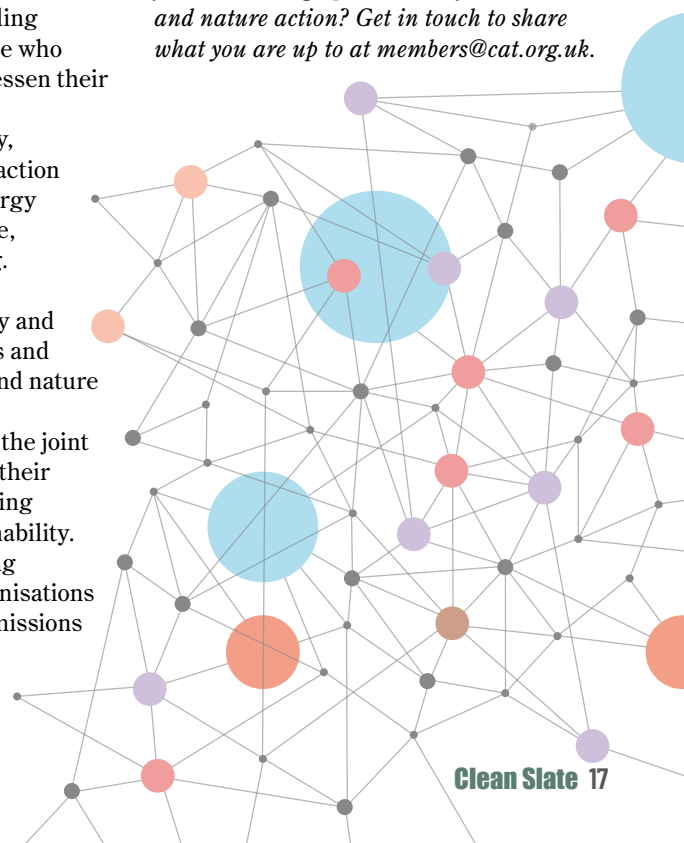
The Zero Carbon Dorset report, published in 2021, focuses on 10 areas or 'dynamics' that need to change (for example, power up, travel better, improve land use). It assesses these areas against a set of qualitative measures set out in five categories to get a clearer picture of the current situation and what needs to change.

Compiled by the volunteers, with input from the public, academics and sustainability professionals, the report highlights the issues, potential solutions and more than 120 local stories of positive steps already taking place across the county.

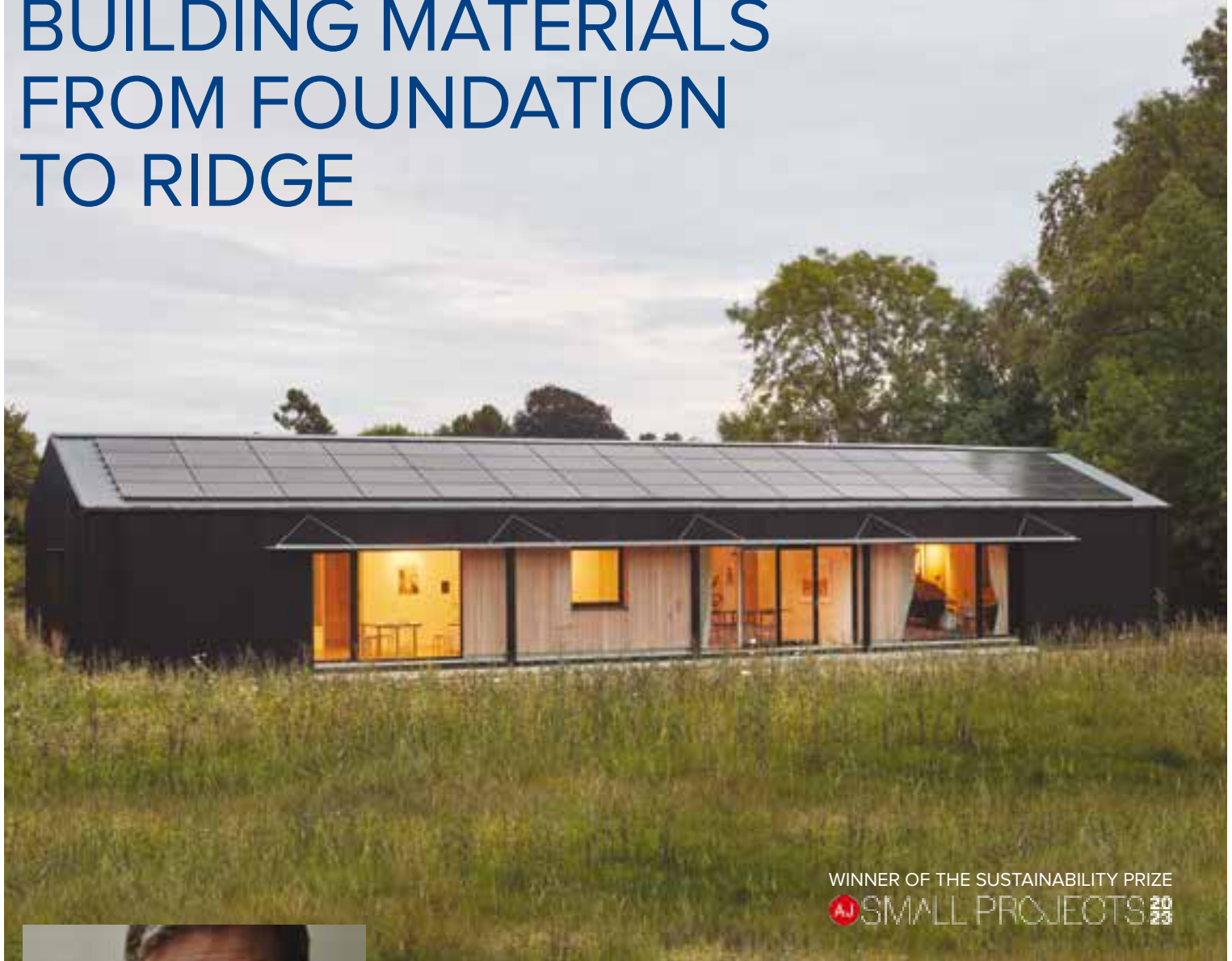
Following the publication of the report, the project continues to explore ways to raise awareness and inspire action, including the publication of annual reviews of progress.

www.dorset2030.com 

Are you involved in local networks where you are, joining up community-level climate and nature action? Get in touch to share what you are up to at members@cat.org.uk.



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Around the globe, a community of changemakers is putting the knowledge, skills and networks they have gained at CAT into positive action on the climate and nature crisis. This time, we share CAT graduate **Edward Macdonald's** story.



Edward Macdonald studied Sustainability and Ecology at CAT from 2018 to 2021. Previously, he read Philosophy at Cambridge, before working in healthcare and international development, where he became interested in grassroots rural initiatives.

Edward realised that technical knowledge and skills would be required to play a meaningful role in supporting climate resilience, ecological health and food sovereignty at the community level. Having enjoyed WWOOFing and a permaculture design course, he came to CAT to train in organic horticulture as a residential volunteer in the gardens. Inspired by our short courses in Renewable Energy, he then embarked on the MSc, alongside a part-time job as a biology teacher.

The combination of practical demonstration of innovative green technologies and flexible learning for the theoretical components of the course appealed to Edward. He says:

“When I visited on the student open day and for the Small Is Beautiful festival, I felt inspired by those who shared their knowledge and experience, in particular, the down-to-earth manner of the lead academics. I wanted to study somewhere different to a university campus, and CAT’s setting within Eryri National Park and the UNESCO Dyfi Biosphere stood out.”

Edward’s studies at CAT furnished him with a broad knowledge of renewable energy, transport, town planning and life cycle analysis for materials. Modules in Ecology and Agriculture enabled him to investigate techniques and methods at the heart of agroecology.

He also learned practical skills through volunteering in the estates department for six months. Guided by CAT gardeners Roger McLennan and Petra Weinmann, he developed an understanding of how to nurture and grow crops, including making high-quality compost, planning crop rotations and responding appropriately to weather patterns.

Since graduating, Edward has launched his career as an organic grower, progressing quickly to be a head grower at Five Acre Community Farm near Coventry. He facilitates groups of volunteers and supports them in learning how to grow food organically, as well as caring for the ‘ecological infrastructure’ (coppicing, laying hedges and sowing herbal leys). He would like to focus on linking up with other growers who are interested in trialling new agroecological techniques in a semi-formal ‘field lab’ style. He has already started carrying out ecological auditing of the farm as part of a project in partnership with the Landworkers’ Alliance and the Agroecology Research Collaboration.

Summing up his experience, Edward says: “Volunteering and studying at CAT provided a dynamic springboard for my career as an agroecological grower. I would encourage the Graduate School to continue supporting students to ‘learn by doing’ in their chosen areas and across the board, as much as possible. Together, each in our own ways, we can catalyse the changes that our broken civilisation so desperately needs!”

Do you have a CAT story to share? Please get in touch at members@cat.org.uk – we’d love to hear from you.

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LEGACY – The gift of renewal



As the gardens and woodlands around CAT come alive with green growth and birdsong, spring feels in full bloom. This is the season that offers us a sense of regeneration and connectedness. It's good to remember that we can draw on the natural world for resilience and reasons to be hopeful, particularly when the world is facing many challenges.


The CAT community is a growing and thriving ecosystem of people working together and depending on each other. It includes our supporters and members, our volunteers, graduates and staff, who all share a deep respect for the natural world, and a pragmatic approach to protecting it, for nature and humanity. We are part of this ecosystem and, within it, we can make a difference.

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future. There are many personal reasons to leave a gift in your Will, and throughout our 50th year we enjoyed sharing the stories of our supporters who have decided to support us in this special way.

When you pledge a gift to CAT, you don't need to tell us, although if you do it helps us plan for the future. You can take comfort in knowing your wishes will be carried out by our team – people who understand and share your values. It's also important to us that we sensitively support those who act as executors and administrators of an estate, to help them honour the wishes of their loved one.

If you have any questions, or just want to talk things through, you can contact our Legacies Fundraising Manager, Freya, by emailing legacies@cat.org.uk or calling 01654 523015.

If you have already decided to leave a gift in your Will to CAT, thank you so much. Your legacy will be the gift of a safer, healthier and fairer future in which nature thrives, for generations to come. 

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- 3) Contact your solicitor or a trusted Will writing service, such as The Law Society or The Institute of Professional Will Writers. Ask any questions you have.
- 4) Give your solicitor or Will writing service the details of any charities you would like to leave something to. Include the amount you'd like to give.

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