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EDITORIAL



Eileen Kinsman

Building solutions to complex problems

While most of us are extremely concerned about the climate and nature crisis and what tomorrow may look like for future generations, many people are paralysed by the scale of the problems we face and the speed at which we need to fix them.

That's why CAT doesn't just talk about the crisis – we build solutions to tackle it. By giving people the knowledge, skills and tools to take practical action, we are helping them break the barriers to action and make change happen.

Once again, your magazine is full of stories of individuals and organisations making an impact – councils getting Carbon Literate so they can see what needs to change in their local area, CAT students starting out on more sustainable career paths, and families introducing young people to the wonder of the natural world and the importance of protecting it.

I hope this dose of positive news inspires you to continue taking action in your own way. Doing the right thing isn't always easy, but with everyone in the CAT community taking what practical steps they can, we can continue contributing towards a safer, healthier and fairer future.

Thank you for all that you do.

Eileen Kinsman, co-Chief Executive Officer

Celebrating CAT graduates



On 20 July more than 190 students graduated with degree certificates and awards from our Graduate School of the Environment. Together we celebrated another impressive graduating class leaving with the knowledge, skills and tools to act on the climate and nature emergencies. We held a hybrid ceremony with graduates and their guests joining us online and on-site – a wonderful opportunity for families, friends and staff to commend the graduates on their hard work.

We were delighted to be joined by Derek Walker, the Future Generations Commissioner of Wales. The work of the commission is very much aligned with CAT's values and mission to create changemakers. During his keynote speech, Derek explained the importance of the Well-being of Future Generations Act in protecting and promoting the needs of future generations. He highlighted how CAT's pioneering work in Wales and around the globe makes a lasting impact, especially through those who study with us.

The commissioner said, "This is such an important day for you as graduates, and it's a privilege to share it with you. CAT is such an amazing place and a real asset for Wales. It has been doing pioneering work on addressing the climate and biodiversity emergencies for decades and the experience you as graduates have had here is a really special and important one to your future, to ours in Wales, and globally."

The day ended with a buffet and a band, allowing the graduates to celebrate their achievements into the evening. A big congratulations from us all at CAT to those graduating from the Graduate School of the Environment this year and best of luck in your future endeavours!



Recent CAT Graduate Avni Patel and CAT trustee Andrew Pearman.



Thank you to our residential volunteers



Volunteers were at the heart of CAT when we were established over 50 years ago and continue to be an invaluable part of the CAT community. Over the last year we have been fortunate enough to host a group of residential volunteers who have contributed to the upkeep of our gardens and woodlands, assisted in the management of the site, and lent a helping hand in other ways.

As we look forward to welcoming our next group of residential volunteers, we would like to say a big THANK YOU to our most recent group and wish them the very best of luck as they set off on their next adventures!

We asked them to share their experiences of volunteering at CAT with us:

"I began volunteering at CAT a year ago as a garden volunteer. I've learnt all I hoped for and so much more. I am so grateful to the wonderfully skilled, kind and generous Estates team who have supported me in discovering the creativity, practicality and art

within growing and building alternatively." – Leila Drew

"CAT has been a beautiful place to volunteer, a place of slowing down and working with nature and plants in a symbiotic way. I know that the passion I have for changing our current food systems has only increased with my time here. I will continue in search of amazing community around the world... Being here has highlighted how important it is to work together." – Beth Garratt

"I was pretty new to gardening before coming here and I've learnt lots. The highlights for me have been to live in such an amazingly beautiful, peaceful place and to be so in touch with nature. I feel inspired to take this forward and to try and combine gardening and time in nature with my love of working with people struggling with their mental health." – Laura Lyons

"I've worked mainly in the woodland areas on site. I came to CAT hoping for exactly what I have been given in terms of work experience and I have found my time here has given me great evidence to include in applications going forward. I feel proud and pleased to have left some legacy in the infrastructure of CAT – in the revitalised coppice, the new sand filters, the post and rail fence in the garden, the hedge and willow weft boundary on the meadow path, the Coed Gwern paths, and so much more." – Emily Gent

"This last year at CAT has been a wonderful experience that has given me many new skills and experiences. From the winter woodlands work of coppicing, tree layering and felling to a summer filled with biodiversity surveys and site-based infrastructure projects, my time here has let me get involved in so many different aspects of land-based work. CAT has really opened my horizons and while I'll miss it, I can't wait to see where those horizons take me next!" – Lizzy Carron

"I came to CAT after finishing an architecture degree, looking for practical experience of spaces in and beyond buildings. I've learnt so much on projects like restoring the hazel coppice, upgrading the water systems, landscaping in the gardens, and retrofitting the barrel barn. But the highlights have been the moments in-between. It's been a privilege to live and work alongside such kind and generous people." – Euan Russell

If you are interested in volunteering at CAT visit cat.org.uk/volunteer or contact our Volunteering Manager, Holly Owen, at volunteering@cat.org.uk.

Green Skills Day

As part of Green Skills Day on 5 September we hosted two schools from within Powys to explore green skills, learn about career choices in Mid Wales and meet local businesses.

Students between 16 and 18 years old from Ysgol Bro Hyddgen in Machynlleth and Ysgol Uwchradd Llanidloes High School met with local employers Dulas, PYC Group, Hughes Architects and Professor Richard Lucas from the Living Wales research project. They had the opportunity to ask all sorts of questions about what local businesses do and the careers on offer. They left better informed about green career choices and inspired about their futures.

CAT staff also ran workshops showcasing a range of green skills, including green woodworking, building a house for the future, and wind power. The event was funded by the UK Government through the UK Shared Prosperity Fund.

To find out how schools can get involved in CAT's work, contact our Education team at education@cat.org.uk.

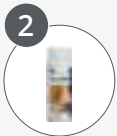


A best practice approach to insulating and draught proofing suspended timber floor

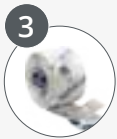
Suitable for installation after lifting floorboards



Pro Clima Solitex Plus
Reinforced windtight breathable membrane



Pro Clima Tescon Sprimer
Surface primer for airtight tapes



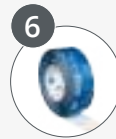
Pro Clima Contega Solido SL
Plasterable airtight masonry to membrane sealing tape



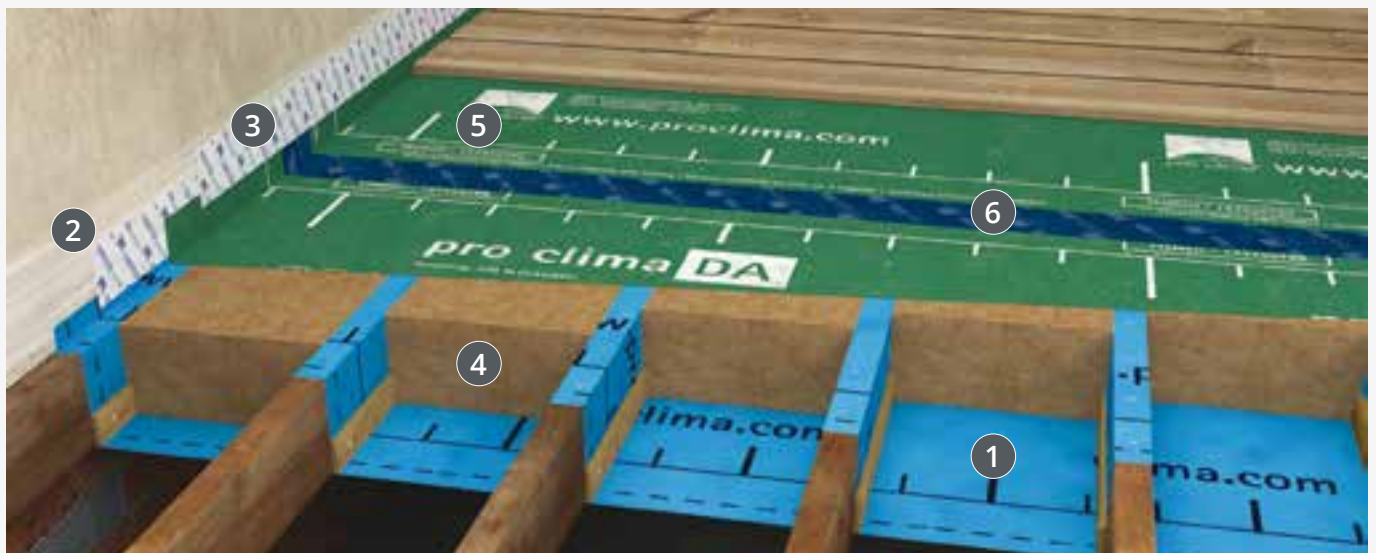
Thermo Hemp Combi Jute
Flexible insulation mat made from hemp and jute fibres



Pro Clima DA
Vapour control and airtight membrane



Pro Clima Tescon Vana
Multi-purpose airtight adhesive tape



Input into CAT's next five-year strategy

We are currently reviewing our next five-year strategy and would love your input. To meet the climate challenge head on, we all need to co-create the changes we want to see. Your voice is important to help direct our future work.

We have put together an online survey about our Strategic Framework. This is the part of our strategy that defines our vision, mission and values – our identity as an organisation.

Following this part of the process we will be setting our strategic priorities for the next five years and we will be providing ways for you to contribute to these too.

To take part in the survey visit cat.org.uk/cat-strategy-survey. Thank you for your input.

Welcoming new students to CAT

In September we welcomed more than 130 new students across our postgraduate courses as they embark on their transformative educational journeys at our Graduate School of the Environment. Over their studies, the students will be empowered to make a real difference in their chosen field, exploring a big-picture, integrated approach to sustainability and climate solutions.

The MSc and MRes students who joined us on site have been exploring their new and unique educational home, getting to know our buildings designed and built using sustainable techniques and materials, diverse forestry and ecology, and the gardens at the heart of the site.

Along with introductory lectures from our expert academic team on topics including green building, energy provision, adaptation, food systems, ecosystems, land use and behaviour change, students have also heard from inspiring guest lecturers. Professor Kevin Anderson joined us on-site to discuss the scope, scale and urgency of the climate

challenge we face, Susan Steed gave a lecture on transformation and economics, and Dr Haseeb Irfanullah in Bangladesh discussed nature-based solutions.

Wales Net Zero 2035 Challenge Group reports

Commissioned by the Welsh Government and Plaid Cymru, the Wales Net Zero 2035 Challenge Group published a series of reports on 16 September, with contributions on Energy by CAT's Zero Carbon Britain Knowledge and Outreach Coordinator, Paul Allen. These seven reports aim to renew and rapidly accelerate Wales's approach to achieving net zero by 2035, rather than 2050, in a just and nature-positive way.

The group's research into Education, Food, Energy, Buildings and Transport has explored brave and bold strategies to propel Wales towards a prosperous and resilient future. The reports highlight that to roll out solutions at the speed and scale required we must address the skills gap now and empower individuals, communities, local authorities and businesses across Wales to act. CAT is already leading the way providing people and groups with the knowledge, skills and tools needed to create a safer, healthier and fairer future for all.

The reports are free to download from <https://netzero2035.wales>.

New ZCB Innovation Lab Manager

We are pleased to welcome new Zero Carbon Britain Innovation Lab Manager Rachel Tuckett. Rachel brings a decade of experience in the Civil Service, including in senior leadership at the Department for Environment, Food and Rural Affairs (Defra) and as Head of Food Security and Resilience, scenario planning and implementing responses to Brexit and COVID-19.

Rachel is also a graduate of CAT's MSc in Sustainability and Behaviour Change. While studying at our Graduate School of

the Environment she developed her interest in wellbeing economics, systems thinking, transformative and cultural change, and the relational work of systems change. She is passionate about designing and facilitating participatory co-creative approaches to help organisations respond to social and environmental challenges.

Dr Ruth Stevenson, previously Senior Lecturer at the Graduate School, is taking on the role of Research Manager in the Innovation Lab team, with the support of Joel Rawson as Research Officer. They will continue the work of the Innovation Lab in bringing together multi-stakeholder groups to explore and experiment with new ways of doing things to make net zero happen. The team is now busy planning a range of labs with funding from The Moondance Foundation and Joseph Rowntree Foundation's Pathfinder Programme.

To find out more about the Zero Carbon Britain team or to get in touch, visit cat.org.uk/zcb.

The Dream Exists in Machynlleth

In August Paul Allen delivered a Discussing Climate Justice workshop at Machynlleth's El Sueño Existe (The Dream Exists) festival, along with Anthony Slaughter, leader of the Wales Green Party.

The workshop opened with big-picture framing followed by an overview of the process to scale-up action. Breakout groups discussed actions they could take and then everyone re-assembled to share their ideas and explore how to take them forward together.

The aim of the festival was to share stories and songs from progressive democratic movements throughout the world, focusing this year on Bolivia and the struggles for climate justice in Latin America. The festival has been taking place in Machynlleth every two years since 2005 to celebrate the work of Chilean musician Victor Jara.

Summer Open Day

More than 380 visitors joined us for our Summer Open Day on 31 August. This free event was an opportunity for everyone to explore CAT, taking tours, getting hands-on in workshops, and learning about our exciting redevelopment plans.

The Open Day was a wonderful opportunity to meet new supporters and welcome old faces, including members of our local community, back to CAT. A big thank you to all who came along and shared such positive feedback.



Be part of something bigger



The Association for Environment Conscious Building (AECB) is an independent, not-for-profit organisation run for its members.

Our vision is to create a world in which everyone in the building industry contributes positively to human and planetary health. We work with our members to inspire, develop and share sustainable and environmentally responsible building practice.

Our Standards are a key pillar of the deployment of environmentally responsible building practices and the creation of sustainable low energy, low carbon buildings.



Membership

Be a part of the UK's largest sustainable building community, a vibrant network to feel part of through collaboration, research, and best practice.



AECB CarbonLite™

The AECB CarbonLite™ Training Centre offers cutting edge training for the buildings sector, plus expert written, well established courses in Retrofit and PHPP training.



Webinars

Bringing you a webinar programme ongoing throughout the year to gain knowledge and insight directly from the experts.



Software

Our online shop provides software packages such as the Passive House Planning Package, design PH, AECB PHribbon and the AECB Carbon Calculator.



Newsletter

Keep up to date with all the latest news in the sustainable building world with our free newsletter.



Knowledgebase

Established in 1989, the AECB works to increase awareness within the construction industry and has built up a vast library of technical articles and media resources.

For more information visit our website, and don't forget to follow us too!

www.aecb.net



A tribute to Roger White

In August we received the sad news of the passing of one of CAT's great pioneering characters, one-off thinker and friend of many, Roger White. **John Challen**, Head of CAT's Eco Centre, reflects on and honours Roger's contribution to CAT.

Roger first came to CAT in the 1970s. With his creative talent for engineering, he was able to create and contribute to a host of on-site experiments and projects. In CAT, Roger found a natural home for his unique abilities, love of innovation and infectious enthusiasm. He will be deeply missed and fondly remembered with a smile by all of us who had the pleasure of working with him.

In the years before he moved to Scotland, Roger was based on site at the old Llwngwern Quarry forge, which he restored to use (complete with a bed strategically sited in the rafters over the hearth!).

As well as carrying out forge and fabrication work for the site, Roger also built a portable furnace for casting iron and aluminium, a skill he first developed during his school days at Oundle School in Northamptonshire. At the time, CAT was delivering practical courses for Voluntary Service Overseas trainees and Roger taught basic blacksmithing and foundry work from the forge. Among his own projects was a design for a small wind turbine called the Aerotron. One of these found its way down to Antarctica with the Footsteps of Scott Expedition in 1985 while another wound up on Inaccessible Island off Tristan da Cunha!

For many, Roger is most remembered for his work on CAT's water-balanced cliff railway. He famously came to the rescue in 1992 when, within a day of the newly completed railway receiving its official sign off by the Railway Inspectorate, disaster struck when a brake housing cracked during a final test. Working overnight, Roger cast a replacement and had it fitted in time for the inspection to go ahead the following day!

He remained CAT's retained railway engineer right up until the end of last season's operation, ahead of the railway's planned refurbishment as part of the Cynefin Project. His in-depth knowledge of its control systems and foibles not only helped extend its working life, but with the assistance of Edward Rose it also meant in recent years its operation was smoother and more reliable than it had ever been.

Steam power was very close to Roger's heart and perhaps his greatest creation was his unique steam Land Rover!




Roger proudly standing next to his wood-fired steam Land Rover at Mellington Hall in 2022 (watch a video of the vehicle running at www.youtube.com/watch?v=_YCuC7v1rSI).



Roger showing the then Prince of Wales around the forge at CAT in 1982.

Before its rebirth, he'd used it to drag the steel joists for the CAT café up North Drive where he welded them together to make the pillar-free café space. The steam conversion took place over many years and for his 80th birthday in 2022 Roger travelled south with it

(on a trailer) from Scotland and ran it at the Steam Car Club's annual meeting in Montgomeryshire. Displayed on either side of it were cast plates proudly announcing it a 'Fossil-Free 4x4' because by now he had it running on sustainably sourced wood fuel. 

CAT Conversations: Fergus Paxton, CAT volunteer

CAT has a long history of offering residential and day volunteering opportunities that give people the chance to develop their skills and support our work. **Fergus Paxton** joined CAT's Marketing and Fundraising teams as a volunteer earlier this summer. We talked to him about his experience.



Q: Hi Fergus. Tell us a bit about yourself and why you chose to volunteer at CAT.

I'm currently a second-year International Relations and Politics student at Bath Spa University. I've always cared about the environment, attending climate protests and trying my best to practise a low-impact lifestyle and make green choices, so CAT has been an organisation that interested me. I grew up in the local area and since visiting CAT as a child I've always been curious about the work the organisation does.

I wanted to gain some skills and experience while doing something I cared about. CAT's reputation as a pioneering environmental organisation aligned with my core values and interests. Recently, my interest in the environment has grown with the increasingly damning reports frequently being published by scientists and researchers about the state of our planet. These have provided me with the motivation to try and make an

impact and address the climate and nature emergency in what I do next. Volunteering at CAT seemed like a good way to enter the environmental sector and begin my longer-term career ambitions.

Q: What kind of work have you been involved with during your volunteering?

While volunteering with the Marketing and Fundraising teams, I've been involved in everything from writing up recent graduate stories for the website and social media to supporting market research and competitor analysis for the Graduate School.

Living locally during this time, I've been able to dedicate three or four days a week to CAT, so I've also been getting stuck in with office tasks, helping out with data entry for donations and memberships and updating online content. I've also been promoting CAT's work to the many different pre-booked groups who have been visiting over the last two months.

Q: What have you learnt during your experience? And how do you think it will help you in the future?

I've learnt a lot with the Marketing and Fundraising teams. I had no prior experience and few expectations of what it would be like. To begin with, I was naïve to the impact and importance of marketing and fundraising in CAT's mission, vision and values. I've gained a holistic understanding of the organisation and how the Marketing and Fundraising teams support so many of CAT's activities. I've also learnt a lot about other areas of CAT's work, including the Zero Carbon Britain Hub and Innovation Labs, as the teams work across the organisation.

Q: You've really been a great help to the teams over the last few months, Fergus. What have you enjoyed most?

During my time volunteering, I was able to attend a short course. I chose one of the MSc module teaching weeks, which was also offered as a short course

called Transformational International Energy Management. This allowed me to experience a totally different aspect of CAT's work, getting to join students on their learning journeys.


Being taught by guest lectures and learning from case studies alongside group work helped me to really understand the subject. I enjoyed the

week and found myself thinking more about the green energy transition and its implications for societies around the world.

Q: Finally, what do you plan to do next?

After this, I'll take some time off to prepare for my final year of university and my dissertation. In the longer term,

my volunteering here has had an impact on me more broadly and on what I might do after university. Not only will it boost my CV for future employment in similar environmental organisations and charities but being involved with CAT has made me realise what I'd like out of a future workplace – a friendly environment where you're working towards a just cause.

I would highly recommend volunteering at CAT – whether residential or on a day-to-day basis like me – both for developing skills for future employment and the experience of doing a variety of work for the organisation. It gives you a great chance to learn and be part of the CAT community, meeting new and interesting people along the way. 

Want to volunteer at CAT?

Alongside our residential six-month volunteer positions, we are currently welcoming regular day volunteers to support our Woodlands, Gardens and Fundraising teams. Take a look at the volunteering opportunities available at cat.org.uk/volunteer or contact Holly Owen, Volunteering Manager, at volunteering@cat.org.uk.



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WHY WE TEACH – communicating transformational social change

Next in our series looking at themes and topics explored by students on CAT Master's degrees, **Dr Cathy Cole** explores the role of communication in enabling the right responses to our changing world – what it means, why it matters, and some of the main teaching methods used on our courses.



Immersive experiences and embodied communications are part of students' learning at CAT.
A recent fieldtrip to Ynyslas demonstrated climate communication practice in a rapidly changing coastal landscape.

Cathy Cole

As a young girl growing up in Kent in the early 90s, I remember fondly the comforting burst of sweet juice as I popped the first ripe blackberries of the season into my mouth. Prowling along the hedgerows around our house, fingers stained purple and sticky, dodging the nettles and thorns, we reaped our harvest throughout September. On the first day of October, so my mother said, those fruits would be touched by a witch's fingers and dry up... and so they did. In recent years, I have picked blackberries with my own children in early August, and the witches have cast their spells over the crop well before the autumn winds have stirred.

As stories of our changing climate go, this is far from one of danger and fear. It is part of a bigger story of shifting seasonal events, but it also feels powerful to me because it is woven with deeply meaningful family memories. Connecting with climate change is not just about understanding the facts and the risks, it's about creating

meaning and connection. The aim of the Communicating Transformational Social Change module is to give students the tools to connect meaningfully with diverse audiences and transform information into stories and experiences that enable deep, long-term societal shifts.

Why is communication important for transformational social change?

Since the middle of the 20th Century, scientists studying our climate system have warned of the warming effects caused by human emissions of greenhouse gases into our atmosphere. The scientific evidence has become increasingly clear, demonstrating the severe dangers we face unless we take urgent action. It's hard to understand how we can ignore such an emergency, yet other priorities seem to take centre stage in global politics. Clearly, repeating the state of alarm, even with new information and renewed vigour, is not enough.

Scholars of science communication have homed in on this paradox. We're learning more and more about human psychology and how information is received and processed, and importantly how this differs between individuals, communities and cultures. Effectively communicating with people requires much more than 'telling' – it is just as much about listening. We need to understand our audience, which can only happen when genuine relationships are forged. To move beyond our echo chambers, we must first attempt to lower the social barriers that prevent people from engaging meaningfully in the first place. This is a vital precursor to transformational social change, and central to our teaching on this module at CAT.

What are the main teaching methods?

Through practical workshops, interactive seminars and lectures, we create space for students to develop and test communication strategies and skills;

to generate ideas through participatory discussion; and to learn about the academic field of science communication. In addition to the expertise of our academic staff within the Graduate School, we invite guest contributors from organisations at the cutting edge of climate communication. Our students have unique opportunities to meet and engage with professional communicators from a wide range of disciplines, embracing ecolinguistics, environmental storytelling, performing arts, filmmaking, podcasting, social movements, environmental leadership, community co-design, and more. We enjoy the breadth of skills and experience our students bring to the module. This creates a different atmosphere and focus each time.

At the heart of this module is the creative assignment students work on to produce a powerful communications piece. Past students have gifted us with immensely moving works, including Katharina Mayer's beautifully illustrated handbook for activists, *Hope*.

Katharina says, "If we want change, the first thing we need to do is believe that it is possible. The course showed me how stories can create a little space to move (and how to do it targeted), which helps us to believe in change. We can do so by storytelling, art, conversations about opportunities and choices. And we can make it bigger by sharing ideas, dreaming collectively, and joining ongoing projects or starting our own. All the courses at CAT showed me how much easier it is to 'make hope' in a supporting, engaging community."



Interactive workshops allow CAT students to explore ideas together.

How do students use this learning?

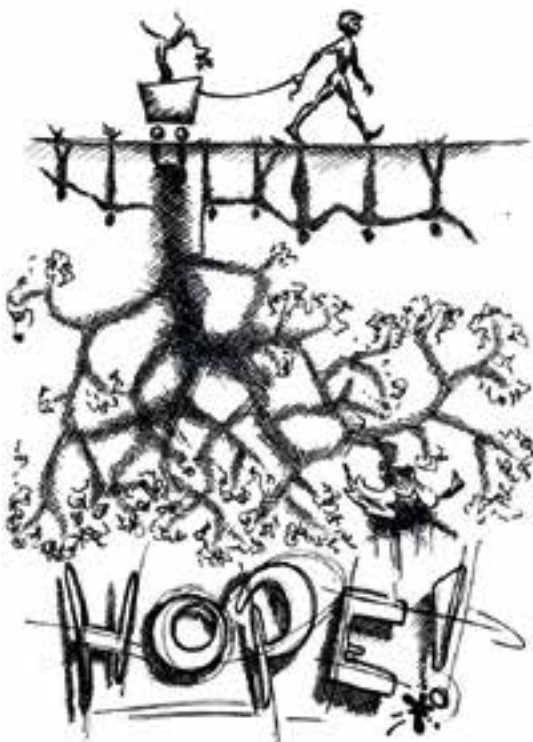
Our students go on to be changemakers in many different ways: embarking on new careers; launching their own businesses; empowering their local communities; and taking fresh skills back to their workplace. Employers across every sector recognise communication skills as vital, and we are immensely proud of our recent graduates and the positive difference they make to the world. Here are just a few examples...

- Ben Wilding has launched and is currently growing Sun Bear Biofuture, demonstrating real-world behaviour change through their development and communication of sustainable alternatives to products like palm oil.
- Rhiannon Munro has co-founded a community climate action group, Climate Action Torfaen, building networks and skills to respond to climate and environmental challenges that directly impact local residents and working with the council to enhance their impact.

- Rachel Tuckett is the new Innovation Lab Manager within CAT's Zero Carbon Britain Hub, following her dissertation and voluntary work that she contributed during her MSc in Sustainability and Behaviour Change. She will be leading the team to connect people across diverse sectors to identify effective climate solutions that overcome political, cultural, economic and psychological barriers.
- Jelena Krivosic is now studying for a PhD at the University of the West of England, researching how Natural History documentaries communicate climate and ecological justice, and focusing on how co-creation with filmmakers and audiences can diversify crisis stories and encourage engagement with behaviour and systems change. [CS](#)

About the author

Cathy is a senior lecturer within the Sustainability and Behaviour Change Programme and teaches across several modules offered by CAT's Graduate School of the Environment. She has a PhD and postdoctoral research experience in marine science and climate change, and professional expertise working as a climate science communicator for the Met Office and UK Government departments. More recently, she taught science communication at the University of Otago in New Zealand. She is now living in Mid Wales with her young family and enjoying being part of the CAT community where change feels possible... and is happening.



Hi, this is my hope.

Hope is not an unworldly rainbow-colored bubble for naïve dreamers. Hope is a necessity to find your place in the world, to become an active member of the global society, and to care for your own well-being as much as you care for others.

Hope is not a comfort concept for modern society suffering from the fear of facing the truth. Hope is a powerful instrument that allows us to hold all that is there – the beauty and the wonder, as well as the pain, the suffering, the grief.

Hope doesn't mean the safety of a glass of wine at sunset by the sea. Hope is made for the dark times: it is a fire that becomes visible when things are turning difficult, and it glows as long as we need it.

Hope is nothing you can buy or gain or achieve by working harder. There is a bubbling source of hope inside us, and it will nourish you as soon as you discover it.

Hope is not there to eliminate any evil. Hope is always there, as is hopelessness. What you see is what you focus on.

Hope is a decision.

Well. This is what hope means to me.

What does it mean to you?

LEARNING BY DOING

Programme Leader **Dr Carl Meddings** gives an insight into what final-year students on CAT's professionally accredited Masters in Sustainable Architecture (ARB Part 2) have been up to over the last few years.



Lime workshop with Stafford Holmes.

The M.Arch Sustainable Architecture course embodies CAT's mission to explore solutions to the climate and nature crises by pushing the boundaries of architectural design and sustainability.

Our students are on a quest to bring about change, to realise better ways of being in the world, and to work together to challenge the orthodoxy of the profession (and beyond). They are learning how to do architecture in a way that is respectful, inclusive, caring, nurturing and responsive to people, place and the planet.

Our ethos on the course is to explore the issues we need to engage with to develop humane, sustainable and responsible architecture. The projects below provide you with a snapshot of the journey the students have been on in recent years.

What is M.Arch?

CAT provides postgraduate-level education through the Graduate School of the Environment on a wide range of topics related to sustainability, including a Masters in Sustainable Architecture (ARB Part 2) for students training to be architects. This is the only rural-based and sustainability-focused architecture course in the UK.

We break the mould of traditional architectural education, putting several key themes at the heart of how we teach.

- We are a community of learners, with students, tutors and professors learning from each other.
- We provide an aesthetic education – materials, making and craft sit at the heart of what we do.
- We define sustainable architecture by doing architecture differently, acknowledging the impact of humanity on our planet and the need to act now.

Community consultation in Conwy and Llandudno Junction – October 2021

The first project students take on includes a thorough analysis of a place. This cohort conducted a community consultation exercise in Conwy and Llandudno Junction in North Wales. They carried out detailed group analytical studies into a wide range of factors that impact on life in the area. The findings of these studies were shared by the year group and helped to underpin detailed consultation exercises.

The students spent a full day in key locations in both towns exploring ways to engage local people of all ages to share their thoughts on the issues they face in their daily lives. Two consultation stalls

were set up at Llandudno Junction and Lancaster Square (in Conwy) railway stations to engage as many people as possible and understand the perspective of residents and visitors.

Scotland trip – September 2022


For their yearly field-study visit, the students travelled to Scotland. Based in Glasgow, they visited architectural projects and offices both in the city and further afield. The study trip is designed to form part of their professional studies in architecture, to help deepen their understanding of the profession, its wider context and complex history. All this helps broaden our students' horizons as they seek to explore possibilities and set the directions for their professional journeys.

Sustainable Materials Week – May 2023

Each year, Materials Week sees M.Arch students team up with students from CAT's MSc programmes to get their hands dirty in a series of workshops on natural materials. They learn from experts on construction techniques using earth, straw, hemp, lime and timber.

In 2023 workshop sessions included:

- Strawbale construction with John Butler and Joe Duirwyn
- Rammed earth and cob with Maria Sanchez and Dieter Brandstätter
- Lime with Stafford Holmes and Lynn Mathias
- Timber milling and structural analysis with Ivor Davies, Tim Coleridge and

- Julian Russell
- Fibre and binders (including hemp lime) with Pat Borer and Gwyn Stacey 

About the author

Carl is the Programme Leader for CAT's MArch: Sustainable Architecture course. He is an architect and educator with

a passion for educating architects in a rapidly changing cultural and professional environment. He has taught at all levels from first-year undergraduate to final year master's and beyond. Carl is an active RIBA member serving on Validation Boards, the New Courses Group and the Membership Eligibility Assessment Panel.

Final design projects 2023-24

The final design project provides students with the opportunity to develop a design concept relating to a subject and/or location that resonates with them. These projects follow the same stages as real-life architectural projects, giving students invaluable experience of the different aspects of design.



Giada Gonzalez - Highgate Ecology Centre

Urban green spaces, small or large, play a significant role in enabling human interactions with nature while providing habitats for wildlife. Human-to-nature relationships are crucial for healthy development, as well as physical and mental wellbeing. The Highgate Ecology Centre aims to provide a coexistence space, where tools to increase biodiversity in densely populated areas can be researched, taught and experienced. Additionally, the centre acts as a catalyst for change, empowering its users with the knowledge and tools to make a positive impact.

Jemma Ho - Wood Culture Wales

To grow our planet and people resiliently together requires inclusive, holistic and regenerative actions. Wood Culture Wales aims to better sustain and develop the use of homegrown timber to address the climate and nature emergencies regeneratively. It is a public centre that provides experimental spaces from seed to mill to product. It acts to catalyse various activities across the production of timber that will reduce our reliance on imports, boost skills, promote economic growth, and develop a truly sustainable future for Welsh timber production.



Felicity Davies - Mental Health Recovery Centre

The number of people experiencing mental health conditions is growing and recovery can be a difficult journey. Merging a need for supportive mental health spaces with more active spaces for various arts and trades, the site helps people to participate in activities that go beyond oneself. The proposal seeks to engage the local community and wider public. In this way, it is hoped the stigma surrounding mental health can be broken.



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Zero Carbon Britain: £7.99 now reduced to £5.00

Our 2019 report builds on the groundwork laid by earlier Zero Carbon Britain projects, incorporating the very latest developments in science and technology, to show that we can create a zero carbon Britain using only proven technology.

Colder days and darker evenings are an invitation to fill our kitchens with the warming aromas of spices and roasting nuts; for bubbling hotpots and dumplings, and clouds of icing sugar and orange zest. Let's embrace winter by bringing a little magic to our plates and share in the glow of a growing global food movement.

Winter vegetable cobbler and cumin scones

Vegetable cobbler Ingredients:

- 1 tbsp olive oil
- 1 onion
- 2 garlic cloves
- 2 tbsp tomato paste
- spices: 1 tbsp cumin seeds; 1 tbsp fennel seeds; 2 tbsp ground paprika; pinch of chilli flakes
- 1 vegetable stock cube
- 1 carrot
- 1 sweet potato
- 2 400g tins of chopped tomatoes
- 1 tin of butter beans

Method:

- In an oven-proof pot, heat the oil and gently cook the finely chopped onion for 5 min until translucent. Add the finely chopped garlic and cook for 2 more min. Add the tomato paste and spices and cook for 2 min until fragrant.
- Pour in the tomatoes with the vegetable stock cube, the beans (with the water from the tin), the diced carrot and sweet potato, and a grind of salt and pepper. Allow to simmer for 30 minutes to enhance the flavours, stirring every so often, and add any further seasoning to taste.
- Meanwhile, heat the oven to 180°C and prepare the scone mix: In a large bowl, mix the flours with the salt and cumin seeds, then chop the plant butter into small pieces and rub in with your fingertips until the mixture resembles fine breadcrumbs. Carefully add a small amount of cold water, just enough to bring the dough together into a ball. Roll out onto a floured surface into a circle about 2cm thick. Cut into 6 wedges.
- Place the scone wedges on top of the vegetable cobbler and put the whole pot in the oven for 30 min. Scatter with fresh herbs (parsley/thyme/oregano) to finish.



Cumin scones

Ingredients:

- 125g self-raising flour
- 50g wholemeal flour
- 85g plant butter
- 1/2 tsp salt
- 1 tbsp cumin seeds

November is World Vegan Month, followed by Veganuary as the new year dawns. According to YouGov surveys, the number of people pledging to follow a vegan diet in January has soared from tens of thousands in 2015 to a remarkable 25 million in 2024!

Here are a few recipes for you to try as part of a joyful, wholesome, planet-friendly diet.

Spiced apple flapjacks

Ingredients:

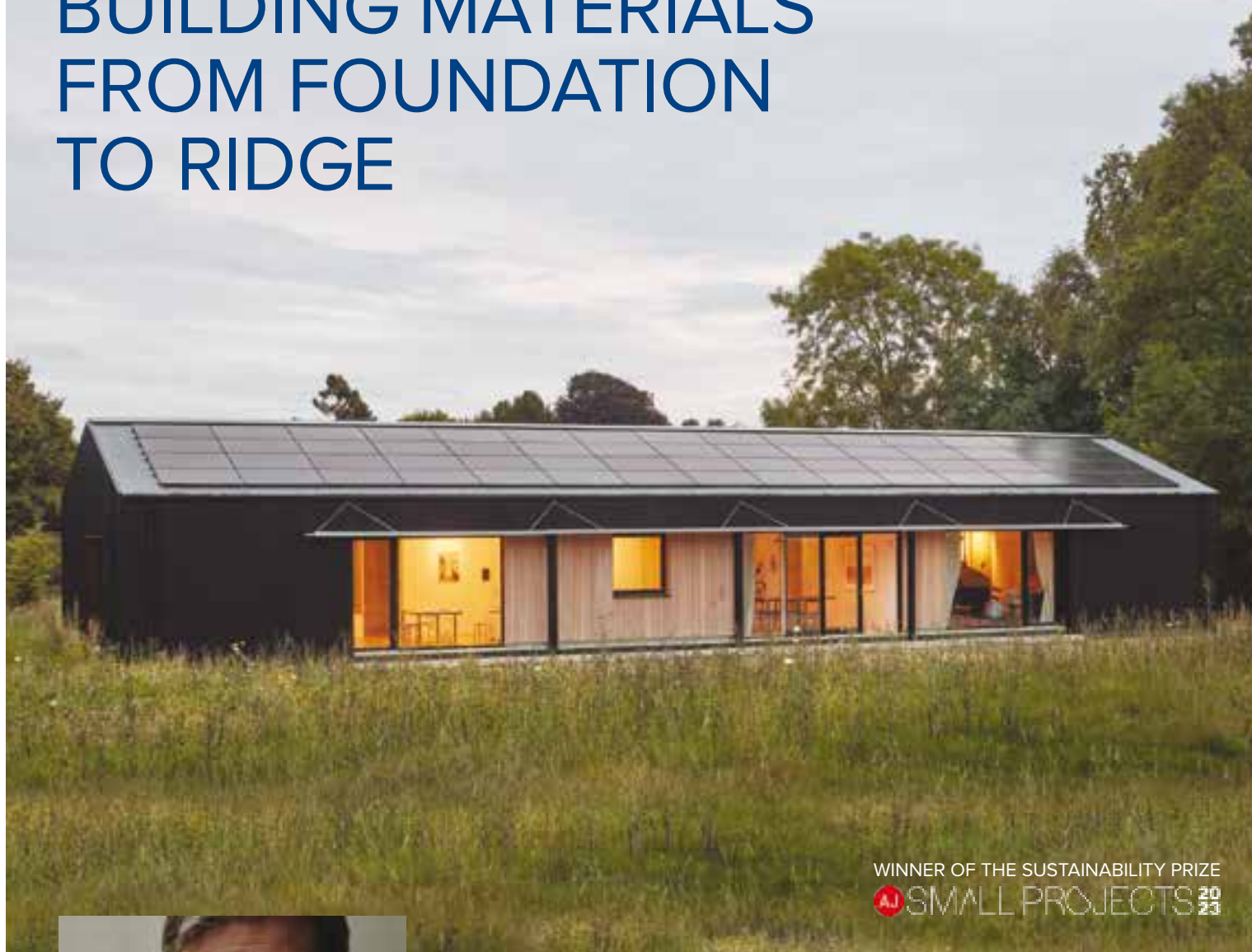
- 350g rolled oats
- 175g plant butter
- 150g dark brown sugar
- 100g golden syrup
- 2 apples (Bramleys are best)
- 1 tsp mixed spice
- 2 tbsp caster sugar
- 1/2 tsp salt

Method:

- Peel, core and chop the apples into a saucepan with a little bit of water. Add the caster sugar and mixed spice. Cover and simmer until nicely stewed and fluffy (about 5 min).
- In a separate large pan, melt the plant butter, dark brown sugar and golden syrup together, and then stir in the oats and salt.
- Line a 20cm baking tin with greaseproof paper and spoon half the oat mixture into the tin, pressing down with the back of the spoon. Then spoon the spiced apple mixture on top in an even layer. Pop the remaining oat mixture on top and cook at 180°C for about 30 min, until golden brown. (continues over) ►



SUSTAINABLE BUILDING MATERIALS FROM FOUNDATION TO RIDGE



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Charlie Luxton

Principal, Charlie Luxton Design

Black Barn Studios by
Charlie Luxton Design
Winner of Architects' Journal
Sustainability Prize 2023



Tofu masala curry



Ingredients:

- 2 tbsp olive oil
- 1 onion
- 2 garlic cloves
- small chunk of root ginger
- spices: 3 cloves; 2 tsp paprika; 1 tsp ground coriander; 1 tsp garam masala; 1 tsp ground cardamom; 1/2 tsp chilli flakes (optional)
- 400g tin of tomatoes
- handful of cashews
- 2 carrots
- 300g firm tofu
- sesame and poppy seeds (optional)

Method:

- Wrap the block of tofu in a clean tea towel and press it to remove excess moisture.
- Meanwhile, make the sauce: Add the olive oil to a large pan and cook the diced onion on a medium heat for a few min until translucent. Add the finely chopped garlic and ginger and cook for a further 2 min. Add all the spices and cook for 1 min to release their fragrance, then add the tomatoes, cashews, chopped carrot and 250ml water. Stir and let it bubble for 15 min, stirring frequently, then blend to a smooth sauce in a blender or food processor.
- Chop the tofu into bitesize pieces and add to the sauce. Season with salt to taste, then serve with rice, and scatter with sesame/poppy seeds.

These recipes are shared by CAT staff member, Dr Cathy Cole, who has a plant-based recipe blog, Kitchen 1.5. Cathy established this blog in response to the UNFCCC's target of limiting global warming to 1.5°C above pre-industrial levels, as agreed in Paris in 2015. Diets that are rich in meat and dairy have a high carbon footprint (as well as many other serious environmental impacts), and this recipe blog aims to demonstrate that plant-based food can be delicious, satisfying and fun, as well as a healthy choice for people and our planet. For more recipes go to www.kitchenonepointfive.com.

CAT stories

To tackle the climate and nature crisis, people need the skills, knowledge and tools to take action across the world for a better future. Meet a current CAT student using their learning to make positive change happen.

Rachel Embury



Rachel is currently a student on CAT's MSc in Sustainability and Adaptation course. Alongside her studies, she works for an environmental charity in the Brecon Beacons that works in collaboration with landowners to improve biodiversity, build ecological resilience and increase levels of tree planting.

Rachel's passion for the environment was grounded before she began her studies, after leading a horticultural therapeutic project that involved helping people grow plants and learn about the outdoors. Having visited CAT in the past, a chance conversation with a CAT student drew her to come on an open day. She had never considered doing an MSc before, but she was impressed by the diversity of students from different backgrounds and subjects, the amount of support available, and the flexibility of the modules which allowed for part-time study.

Upon application, she was awarded with the Ethel and Gwynne Morgan Trust bursary which is offered to students who aim to apply their skills and knowledge in combatting the climate and nature crisis in Wales. This is enabling her to study and work simultaneously throughout the MSc. Studying at CAT has already given Rachel knowledge to support her in her work and has helped her realise the importance of the work she now does and the wider impact regeneration has on the ecosystem.

She says: "I feel incredibly lucky to be doing a job I love with a wonderful team. Growing things is always a challenge but there is never a dull moment and so much still to learn. I have the opportunity to do something positive every day. Studying for an MSc gives me the breadth of knowledge I need to put my day job into context and a supportive student and graduate community to share ideas with. CAT is such a unique place to study, and it supports so many changemakers in Wales and beyond. It has helped me to appreciate the benefits of living here and why we need to protect what we have left."

If you would like to share your CAT story, email members@cat.org.uk to tell us how CAT has influenced your work, volunteering or daily life, and what the community means to you.

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Empowering councils to take climate action

As we reach the milestone of engaging more than 250 UK councils in Carbon Literacy and Carbon Awareness training, **Amanda Smith**, CAT's Head of Learning and Education, reflects on the journey so far and the impact we are making together.

In response to the growing call for climate action, spurred on by passionate young voices and increasing public pressure, more than 570 UK councils have declared a climate emergency. This means 95% of us now live in areas where local councils have publicly committed to make addressing climate change a top priority.

But declaring an emergency is just the first step. For many councils, the challenge lies in translating these declarations into concrete action plans. With limited resources and no clear roadmap, councils often find themselves with big aspirations but are unsure how to achieve them.

This is where CAT's Zero Carbon Britain team comes in. For years, we've been delivering training on climate solutions, supporting individuals and organisations to take meaningful steps toward sustainability. When councils began declaring climate emergencies, we saw an opportunity to extend our support, helping them to develop action plans that would address the specific needs of their communities.

We've now worked with local government associations and councils at all levels, including county and borough councils, unitary and combined authorities, and town and parish councils. We have created bespoke training packages for elected members, senior leadership and officers. And we have held eight Carbon Literacy courses tailored for specific councils or groups of councils.

In addition to this training, we have provided in-depth consultancy for local

authorities facing the complex challenges posed by the climate and nature emergencies. Our recent Staffordshire Councils Innovation Lab brought together elected members, CEOs and officers from 10 councils across Staffordshire. This collaborative initiative identified key barriers to achieving net zero and co-designed solutions, focusing on those with the most potential for impact. The findings from this groundbreaking work are outlined in our latest report *Taking action together on the climate emergency*.


To date, we've engaged more than 250 councils, including 78 borough councils. The journey doesn't stop here – our calendar is filled with upcoming courses and more councils are set to receive bespoke training.

Our impact extends beyond councils too. Alongside our Carbon Literacy work, CAT is providing tailored training and consultancy to a wide range of organisations, both nationally and internationally. From public bodies and educational institutions to businesses, faith groups and community



organisations, we are driving meaningful climate action. We have partnered with the British Retail Consortium, the NHS, and national churches, among others.

We are also excited to offer a fully funded series of Carbon Literacy courses for Powys residents and local organisations as part of the UK Government's Shared Prosperity Funding.

If you would like to find out more about our Zero Carbon Britain training courses and events visit cat.org.uk/zcb-training-events. 

About the author

Amanda Smith is CAT's Head of Learning – she has overseen the development of our Zero Carbon Britain training programmes, short courses and schools education work. She has over 20 years' experience in teaching, school leadership, adult training and organisational improvement.



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LEGACY — 'To be a good ancestor'



Dr Rhiannon Turner

While the scale of the climate and nature crises can at times feel overwhelming, each of us can make a meaningful difference, leaving the planet a little better than we found it. One powerful way to do this is by leaving a gift in your will.

Dr Rhiannon Turner first visited CAT as a young child in the 1980s. This positive experience stayed with her throughout her career and she was delighted to become a trustee in 2022. Rhiannon shares her feelings about gifts in wills and the impact of this special type of giving.

“As I approach my 50s, I find myself thinking more about the mark I am leaving on the world. One of my core values now is ‘be a good ancestor’ – to

leave this remarkable biosphere we call home in as good a condition as I can, within the time that remains.

“Identifying this value contributed to my career change a few years ago, and to becoming a trustee at CAT. It has influenced how I spend my money and significantly increased how much I give away compared with how much I spend on myself. For me, the urgency of so many of the issues facing our world today encourages me to give as much as I can, as soon as I can.

“As a trustee, I’m keenly aware of how difficult it can be for charities to deal with the uncertainty of future income. When so many of us are feeling the effects of an ongoing cost-of-living crisis, donations across the sector have

dropped. Research in 2023 revealed that six in ten people in the UK have cancelled or cut their charitable giving because they are struggling to look after themselves and their loved ones. But ways to support causes we care about without putting more strain on our current finances are available.

“Personally, I know I need to make sure I can look after myself through the uncertainties of older age. This means I’m likely to approach the end of my life with at least some money and property still in my possession. What then?


“Leaving a gift in my will is one important next step I’m considering. I believe legacy giving is the best way for me to give back, while ensuring I and my loved ones have enough to live life well.

“I’ve recently learnt there can be tax-related financial benefits to leaving a charitable donation in your will. It can result in being able to pass on more value to loved ones, not less. For me, it’s a no-brainer. Of course, everyone should get proper legal advice to make sure it’s the right choice for them.

“As a trustee of CAT, I can’t emphasise strongly enough how important gifts in wills are. The generosity of the CAT community, both during their lives and beyond, is one of many remarkable things about this organisation. CAT receives legacy gifts of all sizes, and these add up to something deeply impactful. A legacy gift of as little as 1% of your estate can help the team to plan with a long view into the years and decades ahead, considering how CAT can best contribute to the essential transition to a zero carbon future.

“In the coming months I will be revisiting my will and my financial planning to live my value of being a good ancestor now and beyond my time. If you’re interested in joining me, please contact the friendly CAT team.”

In 1973, CAT’s pioneering founders started the work that has been carried forward by generations of supporters, volunteers and staff. If you would like to help future generations continue their vision with a gift in your will, email Freya at legacies@cat.org.uk or call 01654 523015.

We’re here to answer any questions you have and help guide you through the process. Anything you can give will help ensure the future of CAT and our work towards a safer, healthier and fairer world. Thank you. 

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