DELEGATE PACK

NetDRIVE Autumn Gathering:

Galvanising collective action toward sustainable digital research infrastructure

4–6 November 2026

HOSTED AT

WATERSHED

1 Canons Road
Harbourside
Bristol
BS1 5TX

CO-ORGANISED AND DELIVERED BY

UWE Bristol University of the West of England

Digital Cultures Research Centre

NETDRIVE IS A PARTNERSHIP WITH

UNIVERSITY OF LEEDS

UNIVERSITY OF OXFORD

UKRI Science and Technology Facilities Council

National Centre for Atmospheric Science
NATURAL ENVIRONMENT RESEARCH COUNCIL

UKRI UK Research and Innovation

This Gathering was funded through the NetDRIVE Flexible Fund, which is supported by UKRI as part of the Digital Research Infrastructure programme (grant number UKRI910).

Table of Contents

Table of Contents ***2***

Key Information ***3***

Event Code of Conduct *3*

Recordings & Photography *3*

Catering on-site *3*

Venue ***4***

Find us on Google Maps. *4*

Getting here *4*

Accessibility *4*

Floorplan *5*

Agenda & Schedule ***6***

Day 1: Critical Connections *6*

Day 2: Coordinating Change & Moving Towards Impact *7*

Day 3: Reflections and Coordinated Actions *10*

NetDRIVE Community Projects ***11***

List of funded projects *11*

Dinner Venue ***12***

External Dining suggestions for Day 2 ..... ***12***

Additional Links ***12***

Credits & Acknowledgments ***13***

Showcasing Appendix ***14***

Posters *14*

Demonstrations *21*

Artist in Residence *24*

Key Information

Event Code of Conduct

We value the participation of everyone and want all participants to have an enjoyable and fulfilling experience. Accordingly, all participants are expected to show respect and courtesy to other participants and through all communication channels. All participants, speakers and organisers are required to conform to the following Code of Conduct. Organisers will enforce this code throughout our events.

NetDRIVE is determined to provide a harassment-free event for everyone. We do not tolerate harassment of event participants in any form.

- All communication should be appropriate for a professional audience including people of many different backgrounds
- Be kind to others. Do not insult or put down other attendees
- Behave professionally

Thank you for helping make our events welcoming and friendly for all.

Clarifications
Harassment includes offensive communication related to *gender, sexual orientation, disability, physical appearance, body size, race, religion, deliberate intimidation, stalking, following, harassing photography or recording, sustained disruption of talks or other events, inappropriate physical contact, and unwelcome sexual attention. Participants asked to stop any harassing behaviour are expected to comply immediately. If a participant engages in behaviour that violates this code of conduct, the organisers will take appropriate action, including warning the offender or expulsion from the event.

*Note: this includes not acknowledging how people prefer to refer to themselves, including use of pronouns. Attendees will have the opportunity to include their pronouns on a badge provided at reception.

Recordings & Photography

Please note that selected sessions will be recorded, including contributions from both online and in-person participants. NetDRIVE will use the recordings only to capture ideas and feedback that help improve the project and its impact. Nothing will be attributed to individuals in any reported outputs, and recordings will be stored securely under the University of Oxford's and UWE Bristol's data protection policies.

Additionally, photographer, Charley Williams, and filmmaker, Somina Fombo, have been commissioned to photograph selected sessions and make a short film respectively. This content will be used in marketing and communications about the event and in print by partners, funders and champions. If you have not completed a consent form for photography and filming prior to the event, please complete one at registration, and let us know if you would not like to be included in the photos and/or filming.

Catering on-site

All food provided at Watershed will be vegetarian, with vegan and gluten-free options available. Please be mindful that the special dietary requirement options may be limited, and therefore should be prioritised for those with dietary requirements.

Any issues?
For any issues in relation to any of the above, speak to Erinma Ochu or Amy Densley, or email *dcrc@uwe.ac.uk*.

Venue



Watershed, Undershed & Pervasive Media Studio

1 Canons Road
Harbourside
Bristol
BS1 5TX

Find us on Google Maps.

Getting here

Watershed is located on Bristol's historic harbourside in the city centre, with great transport links making it easy to get to. It is a 20 minute walk from Temple Meads Train Station. We encourage use of public transport where possible.

Bicycle / Scooter	There are plenty of Dott e-scooters or e-bikes available for hire and many parking locations across The Centre. If bringing your own bicycle/scooter, there are many cycle parking locations at the front and back of the building.
Bus	The nearest bus stops to Watershed are on 'The Centre', no more than a 2 minute walk away. You can plan your journey by bus at travelwest.info. Please note, if travelling from Temple Meads, the bus number 8 travels directly from Temple Meads to 'The Centre' stop.
Ferry	There is a ferry stop just along from Watershed with regular Bristol Ferry Boat services running from Temple Meads, Hotwells and around the city centre. Additional services from No7 Boats run at weekends and during school holidays.
Car	The closest car parks are Millennium Square Car Park and Trenchard Street NCP parking. There are two Blue Badge parking spaces to the rear of Watershed on Canons Road.

Accessibility

Watershed aims to be as welcoming, inclusive and accessible as possible for all our customers, audiences, staff and visitors. Watershed provides a visual walk through of the building to help feel familiar before visiting. Further information on their accessibility can be found here.
Accessibility guidance for each demonstration showcased at this event, can be found in the Showcasing Appendix.

COVID-19 / Flu

To help protect those who are more vulnerable this autumn, if you have COVID-19, flu, or cold-like symptoms, please stay at home. A limited supply of masks will be available at the entrance for those who need them. Mask wearing is welcomed.

Floorplan

Watershed Floor 1

When you arrive at Watershed, head up the stairs or in the lift to floor 1. Coming up the stairs or out of the lift, you will enter the floor 1 foyer. From here you can either go left to the cinema rooms, or right to the event spaces, pervasive media studio and café-bar.

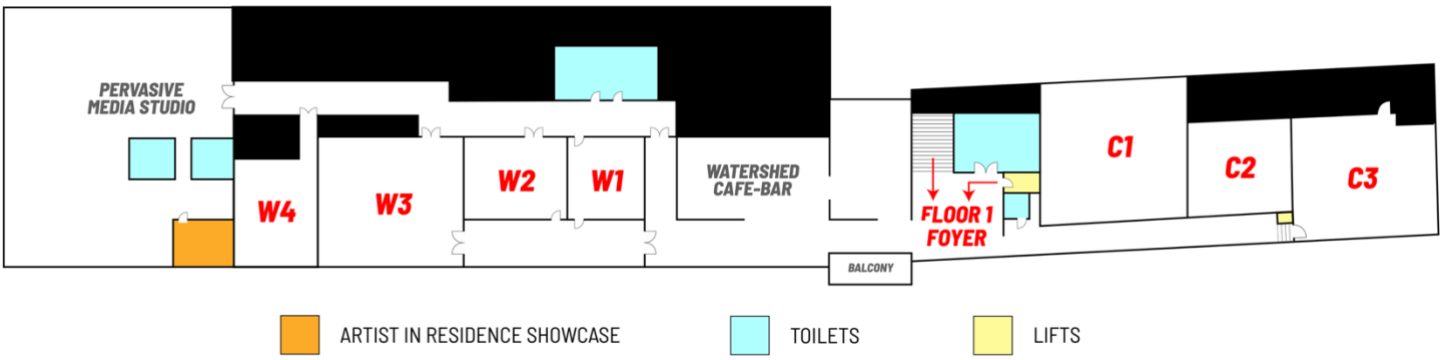
Please note:

- to access Cinema 3 (C3), there are a few steps or a lift.
- to access the artist in residence showcase, you will need to enter the pervasive media studio – this is a shared working space, so please respect those who may be working.

Registration:

There will be a desk for registration each day – please head straight there so we can get you checked in and provide you with your name badge:

- **Day 1** – 12:00-13:00, Waterside corridor (outside main door to W3)
- **Day 2** – 09:00-11:00, Floor 1 foyer
- **Day 3** – 09:00-11:00, Floor 1 foyer



Agenda & Schedule

Day 1: Critical Connections

Wednesday 4th November 2026 | In person at Watershed

TIME	SESSION	WHERE
12:00 – 13:00	**Registration & lunch**	W3
13:00 – 14:00	**Welcome to Bristol** Welcome and introductions to NetDRIVE as a project and to Watershed, our host on Bristol's harbourside. • **Professor Erinma Ochu**, NetDRIVE Storytelling Champion, UWE Bristol and Watershed's inaugural Researcher in Residence • **Clare Reddington**, CEO Watershed & Visiting Professor, UWE Bristol. • **Dr Martin Juckes**, NetDRIVE Principal Investigator, University of Oxford.   	W3
14:00 – 15:00	**Critical Connections and Possibilities** This session aims to support participants to move beyond disciplinary silos, towards creating critical connections to seed possibilities for mobilising change. Facilitated by Roseanna Dias, studio susegad.	W3
15:00 – 15:30	**Break** (Hot drinks available)	W3
15:30 – 17:00	**Working Group Formation** Facilitated by the **NetDRIVE team**, working groups will provide an independent view of strategic challenges faced by NetDRIVE and the community, building on the string base provided by NetDRIVE community projects. Three topics were defined in an initial call for members which attracted experts from a broad range of professional backgrounds. This expert group have prepared material to lead a discussion in this session. During the session we will revise and refine the specification, and welcome anyone who wishes to join the working groups. The revised specification will be used to advertise for further members after the meeting. • **Roadmap to Net Zero UKRI Digital Research Infrastructure** – Reviewing progress towards Net Zero, the clarity and usage of the roadmap, and identifying any significant gaps, in particular: does the emergence of Artificial Intelligence as an all-pervasive software infrastructure require updates to the roadmap. • **Future Priorities: beyond the current NetDRIVE award** – Building a community of change: the need for someone to step back and look at the health of the transition; the case for continuity and the case for new directions. • **Waste and supply: waste and supply chain transparency, sustainability, and management** – Taking responsibility for our global footprint: building an awareness of our global footprint to match our aspiration for impacting the common good.	W3
17:00 – 17:30	**Posters** A preview of the posters responding to the call. All posters and demonstrations will be showcased on Day 2. To see their full abstracts, head to Showcasing Appendix.	W3

TIME	SESSION	WHERE
18:30 – 20:30	**Dinner at The Stable on the Harbourside** If you registered for dinner on day 1, please join us at The Stable, next door to Watershed. Further details can be found under 'Dinner Venue'.	The Stable

Day 2: Coordinating Change & Moving Towards Impact

Thursday 5th November 2026 | Hybrid: in person at Watershed & online

Posters, demonstrations & interactive composition

From 10am – 5pm, demos and posters are exhibited in W3 – a list of Demos and Poster abstracts is available in the delegate pack below. As some participants may also be taking part in other sessions, we have created the dedicated slot* for viewing these projects.

The Digital Cultures Research Centre artist in residence, **Duncan Speakman**, will share a R&D project 'Cartophonics' in the Pervasive Media Studio meeting room between 2:45 – 5pm.

TIME	SESSION	WHERE
09:30 – 10:00	Tea & Coffee	W3
10:00 – 10:15	**Welcome** • **Professor Erinma Ochu**, NetDRIVE Storytelling Champion, UWE Bristol • **Dr Martin Juckes**, NetDRIVE Principal Investigator, University of Oxford • **Dr Tarek Virani**, Deputy Director of the Digital Cultures Research Centre and Associate Professor of Creative Industries, UWE Bristol   	C3
10:15 – 11:00	**Keynotes, followed by 15-minute Q&A**  **'Culture Change in Ten Minutes: Creating Space for Practice to Emerge'** by **Professor Neil Chue Hung**. • *Practices and norms are embedded in the way that research works. Trust, sharing, recognition - these are all built on the way that we choose to do things together. So, how can we change culture in research? In this talk, I'll draw on my experiences running the Institute of Research Software (previously the Software Sustainability Institute) to give you a set of practical tips and examples for building community, working in partnership, and shaping the future. Along the way, they'll also be time to discuss the challenges, as well as the successes, and how you go from a good idea to a lasting impact.* • *Neil is Director of the Institute of Research Software, the UK's national centre of expertise for research software, and Professor of Research Software Policy & Practice in EPCC at the University of Edinburgh.*	C3

TIME	SESSION	WHERE
	 **'Weaving place-based webs of change'** By **Professor Laura Fogg-Rogers**. • *Addressing the ecological and climate crisis requires interconnected community action. In this talk, Professor Laura Fogg Rogers will explore how local networks can drive systemic sustainability by weaving together education, policy, and community engagement. Crucially, she will highlight how building trust and strong human relationships forms the foundation for circular economy initiatives that last. Drawing on insights from social psychology and her training as a journalist, Laura demonstrates how place-based initiatives can catalyse hands-on technical change alongside social resilience and connectedness.* • *Laura is Professor for Sustainability Engagement in the School of Engineering and co-leads the Society theme in the Centre for Environment, Society, and Resilience. She is Programme Leader for the MSc in Sustainable Technology. Laura leads the South West Climate Ambassadors Hub, the Inspire Sustainability community and schools engagement project and MAKERS repair cafés for circular economy knowledge exchange.*	C3
11:00 – 12:00	**Coordinating Institutional and Social Change** Institutional and social change requires coordinated effort. Join panellists engaged in coordinating and navigating institutional and social change to address decarbonisation in a range of different ways. Panellists will share how they got started, key insights from research and practice, and the need for cultural and equitable approaches that expand beyond NetZero metrics alone to consider local and global socio-environmental perspectives. The session includes a 15-20 minute Q&A. Panel Chair: **Jo Lansdowne**, Director of Research, Watershed, Visiting Professor, UWE Bristol and UKRI Future Leaders Fellow • **David Redfern** – Head of IT and online, Watershed Environment Group • **Akshara Pulpa** – Co-Director, Wild and Generous, Watershed Environment Group • **Dr Aditya Ray**, Senior Lecturer, Geography and Environment, UWE Bristol • **Dr Marcia Taveres Smith**, Senior Research Associate, Sustainable Digital Research Infrastructure, Lancaster University. 	C3
12:00 – 13:00	**Buffet Lunch** (After collecting lunch, you are welcome to head to W3 and have an early viewing of posters during this hour).	W4

TIME	SESSION	WHERE
13:00 – 14:30	**NetDRIVE Community Projects – lightning talks** Chaired by **NetDRIVE team**, an opportunity to hear, discuss and connect up insights from 13 projects designed to progress change in four key areas: • Supply Chain Sustainability • Monitoring Usage and Impact • Training and User Behaviour • UK Compute Roadmap	C3
14:30 – 15:30	***Posters, demonstrations and interactive composition** **Erinma Ochu** will introduce this dedicated slot for showcasing posters, demonstrations and our artist in residence's work in progress, that respond to the Gathering's call. Between 14:30-14:50, some participants will have time to give a quick-fire introduction on themselves and their project. To read the abstracts for showcased posters and demonstrations head to the Showcasing Appendix. Within this, you can also find accessibility guidance for the demonstration projects.	W3
15:00 – 15:30	**Break** (Hot drinks available)	W3
15:30 – 16:15	**NetDRIVE Integration Clusters and Knowledge Translation** This interactive session, facilitated by the **NetDRIVE team** explores how NetDRIVE projects can work together through integration clusters to strengthen collaboration, translate emerging knowledge into actionable messages, and maximise their collective impact. Following brief introductions to the integration clusters and knowledge translation, participants will join cluster breakout discussions to identify: 1. What is the key message emerging from the cluster? 2. Who needs to know about it? 3. What is the call to action for these people? Each cluster will share a short summary of its discussions, highlighting opportunities to translate collective findings into meaningful action and wider impact. **Recommended reading:** Maalouf, A., Smith, G., Cutting, J., Juckes, M., & Sparrow, S. (2026). NetDRIVE Funded Community Projects. Zenodo. https://doi.org/10.5281/zenodo.21442677	W4
16:15 – 17:00	**Integration and Moving to Impact** This session will form part of the open proposal evaluation process for the NetDRIVE Community Project Integration and Knowledge Translation funding opportunity. Four teams have been invited to submit full proposals and will be presenting their project concepts. Comments and feedback will be gathered and shared with the review panel. Facilitated by the **NetDRIVE team**.	W4

Day 3: Reflections and Coordinated Actions

Friday 6th November 2026 | In person at Watershed

TIME	SESSION	WHERE
09:30 – 10:00	Tea & Coffee	W3
10:00 – 10:50	**Plenary – reflections from across the event** Facilitated by Roseanna Dias, studio susegad, this session aims to support participants to harvest the highlights and insights from across the gathering, surfacing shared themes, energy and connections.	W3
10:50 – 11:00	Comfort Break	W3
11:00 – 12:50	**NetDRIVE workplan presentation** NetDRIVE is half-way through its 39-month workplan. We have created a team of champions who are highly active and engaged in the community, funded a portfolio of projects, and hosted a series of community meetings. Are these actions facilitating and enabling the changes that we need? In the second half of the NetDRIVE workplan the focus shifts from initiating activities to knowledge translation and delivering impact. And there is Artificial Intelligence, leading in academia and software engineering to wonder where their career will be 12 months from now. Session facilitated by the NetDRIVE team. The session will include feedback from the group discussion, actions for the NetDRIVE team, and coordinated community actions. Actions should be timely and specific, taking into account available NetDRIVE resources. The session will also include a short comfort break.	W3
12:50 – 13:00	**Closing** Facilitated by the NetDRIVE team.	W3
13:00 – 14:00	Lunch	W3
14:00	**Departures**	

NetDRIVE Community Projects

List of funded projects

The following projects were awarded funding after successful applications (lead investigator and institution in brackets):

Round 1:

- Empowering Digital Researchers: A Series of Best Practice and Tools Guides (*Lorna Smith, EPCC*)
- ISPACE: Improving Sustainable Performance and Accelerated Computing Efficiency (*Adrian Jackson, EPCC*)
- NetDRIVE DRI User Summer School (*Alastair Basden, Durham University*)

Round 2:

- A community hackathon to enable green scheduling (*Dr Andrew Walker, University of Oxford*)
- Dash4Action: Facility Action Plans in Pursuit of a Sustainable UKRI DRI (*Alex Owen, QMUL*)
- Data sufficiency: A case study of soil data curation, storage, and usage at UKCEH (*Carolynne Lord, UKCEH*)
- Digital Emissions Integration for Climate Action Planning (DEICAP) - Modelling the Unseen: Integrating Digital Carbon into Real-World University Decisions (*Polly Eccleston, University of Bristol*)
- Measuring and Effectively Using Emissions Data Across DRI: A Dynamic Training Resource for Managers, Developers, Facilitators, Researchers and Users (*Jessica Huntley, STFC*)
- Pathways to Effective Carbon Reductions by Use of Green Scheduling (*Dr Michael K Bane, Manchester Metropolitan University*)
- REACT: Recommendations for Enhancing Adoption of Carbon-footprinting Tools (*Liz Ing-Simmons, King's College London*)
- SMART-DRI: Scenario Modelling and Assessment for Research Transition in Digital Research Infrastructure (*Zeynep Duygu Tekler, University of Oxford*)
- Sustainable Training Initiative for NetDRIVE (SusTraIN) (*Caterina Doglioni, University of Manchester*)
- Unified Multi-Facility Resources Monitoring Dashboard for Sustainable UK Digital Research Infrastructure (*Dr Loïc Lannelongue, University of Cambridge*)

Find out more about the NetDRIVE Funded Community Projects here.

Dinner Venue

For those who registered for dinner on Day 1, we will be heading to The Stable, Canon's Road, Harbourside, Bristol BS1 5UH (next door to Watershed – on the right) at 6:30PM. Find them on Google Maps.

External Dining suggestions for Day 2

Bristol has many restaurants - we are sharing four that offer sharing plates for groups of delegates to dine together.

- **Root Bristol** – a veg-led sharing menu: https://www.rootbristol.co.uk
- **Gambas** - Spanish Tapas: https://gambasbristol.co.uk/
- **Cargo Cantina** - Mexican Taco bar: https://cargocantina.co.uk
- **Ragu** - Italian sharing plates: https://www.wappingwharf.co.uk/eat-drink-shop/ragù-restaurant-bristol-ltd

Additional Links

- **NetDRIVE Website:** https://uknetdrive.org
- **NetDRIVE resources:** https://uknetdrive.org/resources
- **Grant reference:** https://gtr.ukri.org/projects?ref=UKRI910
- **Net-Zero Digital Research Infrastructure Vision and Expertise: Open Workplan:** 10.5281/zenodo.14626647
- **DRI programme:** https://www.ukri.org/what-we-do/browse-our-areas-of-investment-and-support/digital-research-infrastructure-programme/
- **Draft document on lessons from NetDRIVE coordination:** discussion document (pdf).

Credits & Acknowledgments

This Gathering was funded through the NetDRIVE Flexible Fund, which is supported by UKRI as part of the Digital Research Infrastructure programme (grant number UKRI910). Additional support was provided by the Digital Cultures Research Centre (UWE Bristol) for the Artist in Residence and the wider event programme.

DCRC team, UWE Bristol

Erinma Ochu (Curator/ NetDRIVE Storytelling champion), Amy Densley (Research Coordinator & Event Producer), Nick Triggs (Senior Research manager), Daniyal Rizvi (Student Assistant), Ivana Erhimu (Student Assistant), Irene Hidalgo Ruano (Student Assistant)

NetDRIVE team, University of Oxford

Martin Juckes (Curator/ Co-PI), Joel Cutting (Research Coordinator), Graeme Smith (Communications, Events and Administration Officer), Sarah Sparrow (Co-PI), Amani Maalouf (Senior Researcher & Integration Lead)

NetDRIVE Champions

- Loïc Lannelongue, Senior Research Associate (Assistant Research Professor), University of Cambridge
- Michael Rudyard, Michael Rudgyard Consultancy
- Alex Owen, Senior Physicist Programmer, Queen Mary University of London
- Liz Ing-Simmons, Senior Research Software Engineer, King's College London (Early Career Champion)
- Kirsty Pringle, Project Manager, University of Edinburgh, EPCC
- Andy Turner, Principal Architect, University of Edinburgh EPCC
- Lorna Smith, Programme Manager, University of Edinburgh EPCC
- Jessica Huntley, Mathematical Research Software Engineer, STFC
- Erinma Ochu, Professor, Collective Futures and Transdisciplinary practice, UWE Bristol

Watershed events team

Brendan Tarr – Events Coordinator

Creative industry support

- Eirian Soar (Technical Producer) – Portfolio
- Dr Furaha Asani (Evaluator) - https://www.furahaasani.com
- Roseanna Dias, studio susegad (Facilitator) – https://www.studiosusegad.com
- Somina Fombo (Filmmaker) – https://www.menafombo.com
- Charley Williams (Photographer) - https://www.charley-williams.com

Showcasing Appendix

Posters

> Posters present research, projects, emerging ideas, case studies, methods, tools, or concepts relevant to sustainable computing and net-zero digital research infrastructure. The dedicated slot for viewing posters and demonstrations will take place on Day 2 between 2:30 – 3:30 pm in Waterside 3 (W3) room. A prize will be awarded for the best poster.

NetDRIVE EMIT - a NetDRIVE community project

TEAM Sarah Harrahan, Andrew Smith and Zara Findlay (STFC Hartree Centre – UKRI); Jessica Huntley and David McDonagh (STFC Scientific Computing Department – UKRI)

The NetDRIVE EMIT (Emissions Measurement and Interpretation Training) project aims to provide targeted, practical information to embed best practice for the measurement and effective use of carbon emissions data across different job roles in scientific computing. This will be achieved by consolidating existing resources that are spread over multiple networks and forums and developing a series of training modules explaining the current state of emissions monitoring for developers, managers, facilitators, and users. A dynamic resource will also be provided, that the community can continue to update. We are building on current work within STFC's Scientific Computing Department, where projects have focused on monitoring carbon emissions in different contexts, and we have engaged with the wider community to gather additional information and feedback.

In July 2026 we held a NetDRIVE EMIT workshop online and at STFC sites, which STFC staff and members of the wider research community attended. We presented an overview of the project, general discussion, and held focussed breakout discussions on what training/resources would be most useful for the community, in terms of both the training content and format.

Following the conclusions of the workshop, we are now working on four outputs from this project:

1. A report on existing emissions measurement projects, existing training and resources, and the outcomes of the NetDRIVE EMIT workshop.
2. A training module aimed at project managers.
3. A training module exploring the roles and responsibilities in emissions monitoring and measurement.
4. A webpage of case studies of examples of where emissions monitoring/measurement has been implemented.

Exploring Carbon-Aware Job Scheduling for JASMIN's LOTUS cluster

TEAM James Ravindran, Jessica Huntley and David McDonagh (STFC)

JASMIN is the UK's supercomputer and data analysis facility aimed at environmental science projects, providing critical digital research infrastructure (DRI) that includes the large Slurm cluster called LOTUS. A core recommendation of the UK DRI Net Zero Roadmap (Juckes et al., 2023) is the deployment of green scheduling to shift workloads toward periods of low grid carbon intensity. While the UK Carbon Intensity API enables client-side tools such as CATS and GUILT, neither tool takes into account a large number of jobs waiting on a Slurm queue from the perspective of the cluster itself.

Using a large historical database of around 64 million jobs over a period of 21 months, this project aims to determine if a carbon-aware scheduling algorithm incorporated into LOTUS would have led to a reduction in its carbon footprint. We simulate a virtual cluster matching the specifications of LOTUS with the proposed replacement algorithm and quantify potential emissions savings alongside impacts on job throughput and turnaround time. By evaluating this dataset at scale, this study advances the roadmap's focus on green software engineering and emissions tracking, providing empirical evidence to accelerate automated green scheduling across national DRI facilities.

SCOPE: The Paths to Net Zero Sustainable Carbon Output Policy Evaluator

TEAM Thomas Croucher, Jessica Huntley and David McDonagh (STFC Scientific Computing Department – UKRI)

To effectively reduce carbon emissions to a sustainable level, organisations need to understand the sources of these emissions and the different steps that could be taken to mitigate them. Energy and carbon accounting are now increasingly common, however this data and any recommendations are often spread across meter readings, site records, surveys, and consultancy reports. Here we present SCOPE: a visualisation tool to unify carbon emissions monitoring and policy actions under a single interface. SCOPE enables stakeholders in organisations to view their spread of carbon emissions at multiple levels of granularity and see the estimated impact of combining different policy recommendations for reduction. In so doing, this provides a tool to assess different paths to reach Net Zero, assessing the relative impact of implementing, for example, user behaviour changes, such as green scheduling and reduced air travel, against building improvements or porting large computing pipelines to the GPU. As a case study we demonstrate SCOPE for the STFC Scientific Computing Department, highlighting several recent recommendations and showing how the tool enables policy makers to make informed decisions to maximise carbon reduction.

In the context of the Community Meeting Objectives, SCOPE is designed to address Objectives 1 and 2 (Create the conditions for galvanising the NetDRIVE community toward collective action, Identify barriers that limit coordinated change across institutions and sectors). This is achieved through providing a unified interface to demonstrate the impact of combined carbon mitigation recommendations. For Objective 1, this acts as an evidence base to encourage individual actions when seen in a wider, collective context. For Objective 2, it further coordinates institutional changes by highlighting different routes to Net Zero, providing pressure enact these changes when the benefits are clearly demonstrated.

En avant , what is to come? The eco-bricoleur damns a maker practice that is not circular!

TEAM Benedict R. Gaster (University of West of England)

Jane Alison [1] writes in her exposition of the craft of writing, that W G Sebald “wrote in a sort of bricolage, ... things that are found around the farmyard, old photographs and bits of recollection that slowly made their way into his meandering brand of fiction”. Strauss’s concept of bricolage, formulated in La pensée sauvage (The Savage Mind) in 1962 [2], resonates beyond the craft of writing, as designers and makers engage with the unfolding environmental crisis as a form of resistance, challenging neoliberal, capitalist agendas, rejecting making as simply a form of output (or making a product), the bricoleur comes into focus as a 'jack of all trades'.

This work builds on previous work, that described a slow 'circular maker practice' [3], positioning a practice of the slow-working maker focused on sustainability and the environment. The perspective of viewing technology through an approach that embraces slowness and constraints, requiring adaptability and improvisation, creates a lens to feel and adopt a method of making that draws towards Walter Benjamin's “… ragpicker, who is obliged to come to a halt every few moments to gather up the [rubbish] he encounters” [4]. As we developed slow-working making, over time, it enabled us to consider how our practice can integrate sustainability and reuse; blurring it with Benjamin's ragpicker through bricolage, making the case that such an approach promotes qualities that are in tune with the tangible and material practices of degrowth. We argue that a maker must become a eco-bricoleur, sensitive towards the unstable physical world, continually resisting newness, in favour of process over product! In doing so they contribute towards developing a design practice that is both strong and rich in cultural material grounding.

[1] Jane Alison. 2019. Meander, spiral, explode: design and pattern in narrative. Catapult, New York.
[2] Claude Lévi-Strauss. 1990. La pensée sauvage. Plon, Paris
[3] Benedict Gaster, Nathan Renney, and Jasmine Butt. 2025. Looping slowly: Diffraction through the lens of nostalgia. In NIME’25.
[4]Walter Benjamin, Michael William Jennings, and Walter Benjamin. 2006. The writer of modern life: essays on Charles Baudelaire. Belknap Press of Harvard Univ. Press, Cambridge, Mass

REACT: Recommendations for Enhancing Adoption of Carbon-footprinting Tools

TEAM Liz Ing-Simmons (King's College London); Yee Van Fan (University of Oxford); Irufan Ahmed (Imperial College London); Sudha Ahuja and Dimitrios Toroz (Queen Mary University of London); Jiahong Zhao (University of Southampton)

Monitoring and reporting the carbon emissions of computational research is an important step on the roadmap towards net zero DRI. This monitoring helps understand DRI usage patterns, highlight inefficiencies, and raise awareness among users, and will be necessary for comprehensive sustainability reporting to funders. However, it is hard to quantify the carbon emissions of DRI use, particularly the impact of the production and disposal of specialised computing hardware. While some DRI facilities have implemented custom tools to allow users to estimate the carbon emissions of their work, these tools are not widely adopted and these impacts are therefore largely hidden from users.

To understand what tools exist, the methodology they use, and to provide recommendations for tools that are suitable for different computational research contexts, we have carried out a survey of researchers, RSEs, and DRI operators. Based on this survey, we have created a catalogue of existing tools. Ongoing work will integrate technical assessments of these tools with the survey results to provide feature and user experience recommendations for tool developers. Future work will assess how Scope 3 emission estimates can be incorporated into these tools. Our overall aim is to promote the adoption of these tools and give DRI users the data needed to better understand the impact of their work.

In this poster, we will present preliminary results from the initial survey and tool assessments. We will invite feedback from attendees about their interest in and experiences with these tools, with the aim of starting a discussion about the motivations and barriers to using such tools.

We Have the Hardware: A Permacomputing-Inspired Second-Life Pathway for Research Infrastructure

TEAM Kern Tallett (University of Glasgow)

Research depends on a large stock of digital equipment, from servers and laptops to network equipment and lab instruments. Much of it is retired while it still works, because the manufacturer has stopped providing software updates and security fixes. Cluster nodes (the servers that make up research computing clusters) leave service when their warranty ends, laptops when they cannot install the latest operating system, and lab instruments when the computers that control them are no longer supported. Keeping this equipment in use for longer is one of the simplest ways to cut the carbon cost of research.

This poster proposes the Second-Life Pathway, a process institutions can follow when equipment reaches the end of its software support. It is inspired by permacomputing, which favours using and maintaining the technology we already have, and embraces slow hardware, which values care and long use over constant replacement. Equipment is checked against four options in order: re-software, replacing the manufacturer's software with community-maintained versions; reconnect, linking older devices to modern computers with small, low-power adapters; repurpose, moving equipment to less demanding jobs such as teaching or testing; and redistribute, passing it to other groups or institutions. Responsible recycling is considered as a last resort.

The pathway draws on community software projects that keep devices updated after manufacturers discontinue support, and follows circular economy principles of reuse, repair and refurbishment.

Because the barriers are mainly organisational, it includes two suggested changes for institutions: buying equipment with a stated support period and open technical documentation, and an IT security process that lets older devices be used safely. The poster sets out the pathway and a pilot plan, and invites the NetDRIVE community to develop it into shared practice

Optimising the hybrid cooling system at the Advanced Computing Facility

TEAM Lorna Smith (EPCC, The University of Edinburgh), Harry Rhodes, Thian Iskandar, Zoe Payne, Paul Clark and Adrian Jackson

The ACF operates a hybrid cooling system, cooling systems such as ARCHER2 and Cirrus. This system has three operational modes: full free cooling, where the water loop is fully cooled by the outside weather through dry air cooling towers (DACs); hybrid cooling, where some of the water is cooled by free cooling and some cooled by conventional mechanical chillers; and full mechanical cooling, when mechanical chillers are used entirely, active when the outdoor temperature is too high to provide any free cooling benefit. EPCC is committed to being a grid-friendly partner, with efforts focused on optimising the cooling system to maximise the scientific and societal return on every unit of energy consumed. During the summer two interns, funded by NetDRIVE Dash4action and CONTINENTS, investigated improvements to the operation of the cooling setup.

Investigation of a set of ARCHER2 Cooling Distribution Unit (CDU) setpoints found these to be limiting the cooling performance. Investigation suggested these could be changed without additional risk to the service and the setpoints across all 6 CDUs were slowly changed. Coupled with this, maintenance cleaning of the towers was carried out. Increasing return temperatures, together with tower cleaning, improved free-cooling performance by ≈13% and decreasing computer cooling (CC) pump power by ≈30%.

Since late May, 2026 has been one of the hottest summers on record. During periods of very hot weather, dynamic load scaling is implemented based on real-time weather conditions (including temperature, cloud, wind, humidity). This dynamic approach has successfully reduced the ARCHER2 compute capacity lost to hot weather to under 1.9% compared to an estimated 7.5% that would have occurred using a simple on/off approach, representing approximately a 75% improvement.

Sisyphean Technoculture in the Age of Monsters: Reflections on Intrinsink and Intrapology

TEAM Zoyander Street (Arizona State University, Sheffield Theatres)

This project was, by some measures, was a failure. In 2024 I managed to raise a sizeable amount of money from Arts Council England, Innovate UK, and the Creative Catalyst Challenge Fund to develop a series of online interactive theatre performances, and a unique piece of open-source software that allows the audience to alter a dynamic script live as it is being performed. The Creative Catalyst Challenge Fund specifically focused on sustainability, and allowed us to commission research into the carbon impact of our software and how it might change if we were to adopt more open standards and de-Google our video streaming tools. We commissioned original works from 10 artists, as well as creating our own series of queer sci-fi performances aimed at the growing community of people who have limited access to in-person arts venues due to chronic illness.

Despite achieving many things that I'm proud of, I was left heartbroken by the difficulty reaching audiences. Our final performance was a hybrid in-person and online show in London that was selected for a festival of sci-fi theatre; only four people attended, one of whom stormed off as soon as trans rights were mentioned. Superficially, we were able to report positive audience engagement numbers to Arts Council England, but ticket sales across the project were a fraction of what I had predicted based on test performances in 2023. I've observed other artists in this space experiencing similar challenges.

I will argue that fostering sustainable technocultures requires collective effort through horizontal communication strategies. To foster a more sustainable internet, we must also address the hierarchical, profit-driven, individualistic cultures that have subverted its democratic potential, and build distribution networks that can cut through the noise.

Sustainable Digital Research Infrastructures across borders: synergies between the ENSURE and NetDRIVE projects

TEAM Caterina Doglioni, Michael Sparks (University of Manchester); Alastair Dewhurst, Greg Corbett, Thomas Dack and Deniza Chekrygina (STFC – UKRI); Emanuele Simili, Samuel Cadellin Skipsey and David Britton (University of Glasgow)

ENSURE (ENvironmentally SUstainable digital services and practices for REsearch infrastructures) is a Horizon Europe project that addresses the rapidly growing environmental footprint of data-intensive research infrastructures. As scientific facilities generate, process and store increasing volumes of data, ENSURE aims to make environmental sustainability a measurable and manageable part of digital research infrastructure operations through the 4M cycle: Measure, Model, Monitor and Moderate. The project brings together major European research infrastructures, technology providers and sustainability experts to develop open tools, datasets and methodologies that support climate-neutral digital science while retaining scientific excellence.

ENSURE will deliver a comprehensive suite of technologies, including environmental metrics, accounting infrastructures, reference datasets, digital twins, reporting tools, certification frameworks and sustainability-aware workload management systems. These components will enable research infrastructures to track energy, carbon and water impacts, model future scenarios, monitor operations in real time, and optimise resource allocation through environmentally aware scheduling. A major UK contribution, led by the Rutherford Appleton Lab / the Science and Technology Facilities Council with inputs from the University of Manchester and the University of Glasgow, is the development of monitoring and accounting capabilities that combine metrics from both job execution and data-centre operations, creating a common evidence base for sustainability decisions.

The project is closely aligned with major European scientific communities, including particle physics, astronomy, photon science and life sciences, and validates its technologies through leading infrastructures. ENSURE will also create lasting frameworks for reporting, certification, training and operational change across the research infrastructure landscape.

A key strength of ENSURE is its planned connection with national activities such as NetDRIVE from the get-go (this was discussed at the ENSURE Kick-off meeting on 22/09/2026). The two initiatives share common interests in carbon accounting and metrics, green scheduling, optimisation and efficiency, training and capability building, and institutional change. This collaboration will create opportunities to exchange methodologies, datasets, use cases, technical solutions and training materials across UK and European communities, avoid duplication of effort, and maximise long-term impact.

At the NetDRIVE meeting, we aim to understand how a collaboration between ENSURE and NetDRIVE can strengthen international collaboration and accelerate the adoption of sustainable digital practices across research infrastructures with significant UK and European participation and we aim to discuss with the participants during the poster session and coffee breaks how to do so.

There are multiple areas of collaborations that we foresee that are relevant for the NetZero roadmap - we highlight one that is ongoing right now and that we would like to work on together. ENSURE is compiling a list of metrics and KPIs that will be measured by research infrastructures in Europe and in the UK, using ISO standards and certifications and consistent exposure of methodologies. Community projects on dashboards and green scheduling can be input to this list and receive ideas as those metrics and datasets are relevant in green scheduling simulations; the roadmap topics involved are: cap and share / green scheduler, co-development of standards for metrics and reporting.

The NetDRIVE DRI Summer School

TEAM Alastair Basden (Durham University); Lorna Smith (Edinburgh University); Fatima Chami (Science and Technology Facilities Council – STFC)

This poster presents the NetDRIVE Summer schools, funded by NetDRIVE. It describes the first school held in Durham in June 2026, the agenda, sessions, feedback from participants and the outcomes, and also presents the plans for the second school to be held in Edinburgh in June 2027, plus plans for continuing beyond the end of the project.

The poster will describe the immediate benefits to net-zero, and also explore the carbon cost of the first summer school, plus anticipated carbon cost of the second. Efforts made to keep the schools as low carbon as possible will be described. Activities unique to the summer schools will be explained, along with plans for ongoing engagement.

Adaptive Tokenization for Computationally Sustainable Wearable Sensor Foundation Models

TEAM Furong Duan (Ulster University)

Wearable sensor foundation models offer opportunities for general-purpose human activity understanding, health monitoring, and intelligent ubiquitous computing. However, processing continuous, high-frequency, and multimodal sensor data introduces substantial computational demands, particularly when long sensor sequences are represented using uniformly allocated tokens. As foundation models scale, the resulting computational and memory costs raise concerns about their accessibility and scalability. This research investigates adaptive tokenization as a computationally efficient representation strategy for wearable sensor foundation models. Conventional tokenization typically partitions sensor signals into fixed length segments and assigns a uniform number of tokens, regardless of variations in their temporal dynamics and information content. Such uniform allocation may introduce unnecessary computational overhead in relatively redundant regions while providing insufficient representational capacity for complex activity patterns. To address this limitation, we investigate content-adaptive token allocation, in which token budgets are dynamically distributed across sensor segments according to their representational requirements. By reducing unnecessary token processing, adaptive tokenization has the potential to lower computational workloads, memory requirements, and associated energy consumption during foundation model training and inference. This research contributes to the development of resource efficient wearable intelligence and supports the broader objectives of sustainable digital research infrastructure by exploring how more efficient data representations can reduce the computational demands of increasingly large-scale AI systems.

Enabling Organisational Change Through Ground-Up Initiatives: A Case Study from the STFC Scientific Computing Department

TEAM Jessica Huntley and David McDonagh (STFC)

Transforming digital research infrastructure (DRI) to align with UK Net Zero targets requires significant action from organisations in this space. Although high level strategies and recommendations exist, it is not always obvious how to translate these into concrete results. Here we present a case study from the Science and Technology Facilities Council's Scientific Computing Department (SCD). This department consists of over 200 staff supporting tens of thousands of researchers, and is spread over significant cloud and high-performance computing infrastructure, as well as a diverse ecosystem of software across computational biology, materials science, engineering, and mathematics. We will show how we developed the sustainability strategy for SCD across themes of emissions monitoring, user education, best practice, setting sustainability standards, and providing long-term support to sustainability work. We discuss the successes and difficulties in establishing this strategy, and how this could serve as a template for other departments and facilities.

This work supports several core themes of NetDRIVE's DRI roadmap, including user-level emissions measurement (Actions 8, 14 and 21), user engagement (Action 13), behaviour change (Action 9), skills development (Action 18), and adoption of sustainability standards. The SCD Energy Efficiency Team provides a practical implementation model for translating UKRI and NetDRIVE strategic recommendations into departmental action.

Student Digital Leaders as Enablers of Sustainable Digital Transformation: Building Human Capacity for Responsible Digital Practice at UWE Bristol

TEAM Bilal Abdulkadir Muhammed (University of the West of England)

Digital transformation in higher education is often associated with technological innovation and infrastructure development. However, sustainable transformation also depends on human capability, organisational culture, collaboration, and responsible digital practices. This conceptual proposal explores the potential role of Student Digital Leaders in supporting digital capability development, peer learning, and responsible technology use within higher education.

The proposed framework outlines a pathway linking digital capability, student digital leadership, institutional collaboration, and responsible digital practice to the potential longer-term contribution of sustainable digital transformation. Drawing on principles of peer support, capacity building, and student–staff partnership, it considers how students might contribute to institutional digital transformation beyond their traditional role as technology users.

The work remains at the conceptual stage. No participant recruitment, pilot implementation, or evaluation has been conducted, and no empirical outcomes are claimed. The poster aims to stimulate discussion, invite feedback, and establish a foundation for future research and potential pilot testing.

Green Research Software Engineering on the Baskerville National Compute Resource

TEAM Matthew Barton, Christine Stawitz, Alex Lyttle and Tom Neep (Advanced Research Computing, University of Birmingham)

The Baskerville National Compute Resource (NCR) is one of five UKRI-funded compute centres. These centres will provide high-performance computing resources to researchers across the UK, and the project funding supports hardware, software, and personnel costs. The system will be available for pilot users starting in October 2026, with broader access to the wider U.K. community beginning in April 2027. The equivalent of 2 full-time staff have been set aside for “green” research software engineering (RSE) work supporting Baskerville NCR. As the “green” RSEs, we are planning and designing systems to track and visualise the environmental impact of this new system, developing training and guidance for users to make their codes more efficient, and learning from other institutions to improve the sustainability of high-performance compute. As a national system, Baskerville NCR will reduce barriers by making these tools accessible and providing user support across academic institutions. Therefore, we have the potential to influence researchers across the UK to transition to more sustainable compute use, give them the tools to track their environment impact when using our HPC system, and provide one-to-one support to reduce the compute and memory footprint of their research. We intend to share our materials, successes, and failures openly and transparently with others in the sustainable high-performance compute space and track our progress using concrete metrics. We hope that Baskerville NCR embeds sustainable practices into onboarding and compute tasks from its beginning in support of the sustainable digital transformation towards net-zero DRI.

Demonstrations

> Demos are interactive or practice-based contributions that showcase tools, methods, prototypes, dashboards, applications, experimental approaches, or more speculative, playful or immersive experiences for advancing sustainable computing. The dedicated slot for viewing posters and demos will take place on Day 2 between 2:30 – 3:30 pm in Waterside 3 (W3) room. A prize will be awarded for the best demo.

Undershed - A Space for Immersion: Spaces for Immersion to Come

TEAM George Lovesmith (UWE Bristol). Full credit to all at collaborating partner, Watershed.

ACCESS Undershed accessibility can be found here. The film is captioned.

Undershed is a new kind of gallery "dedicated to the best immersive and interactive artwork from Bristol and around the world." You are invited to join architect George Lovesmith for a tour of Watershed's Undershed Gallery and to hear about the processes of regenerative co-production that brought this space of digital exhibition into being.

An ecological imperative was integral to the values-led design approach at Undershed. Curator Amy Rose's initial brief cautioned: "An exhibition space that uses recently possible technologies will trigger complex associations …[&] beg questions about the relationship between energy use and the cost of living and climate crisis..."

Undershed was conceived to:

- Foster Togetherness – Until now there hasn't been a purpose-built space in Bristol to show or test creative tech artwork. Undershed gives creatives a platform and enables local audiences to reflect on and be inspired by internationally excellent experiences.
- Be Wildly Regenerative – Following a two-year collaboration - Undershed became the first built legacy of Watershed's 'Wild and Generous' vision - with a built character that welcomes and with material choices (straw, clay, lime, timber) that juxtapose the tech, signalling rootedness and change.

Buildings account for a third of our environmental footprint, material consumption, energy consumption and greenhouse gas emissions (UN 2022, EEA 2026). Legislation regulating construction lags behind emerging necessity (LETI 2020) – Yet such policy will shape the buildings housing digital research infrastructure. DRI in existing buildings will likely require bespoke retrofit decarbonisation to meet Scope 1 Targets.

DRI Facility Action Plans and Procurement Policy must consciously engage to ensure regenerative potential can be unlocked because we cannot rely on regulations and typical procurement routes.

Reviewing the roadmap, there is a massive opportunity to raise an ambition of Regenerative by Design (rather than Sustainable by Design, DRI Roadmap item 22). Such an approach is holistic – acknowledging all impacts and systems, not to sustain current levels of consumption, but strategising alternatives to eliminate destructive and degenerative patterns and instead nurture a flourishing future.

The Roadmap rightly addresses Behaviour Change and User Engagement. Integral to the Undershed endeavour were creative methods for coming together (events, games, storytelling, play, imagination…) bringing designers, users and researchers into partnership to establishing shared understandings and demystify the challenges.

We can re-frame challenges as transdisciplinary and creative, because the current processes aren't working and have insufficient urgency. Addressing the climate emergency isn't only about technical solutions, it's also about collective exploration and welcoming people on board.

We welcome enquiries to collaborate – to harness the potential for data evidence gathering and to inform procurement approaches.

From e-waste to extended reality: ReXR as material resistance

TEAM Dr Emily Godden (Anglia Ruskin University, StoryLab)

ACCESS This experience may not be suitable to those who are pregnant or who have a pace maker.

While extended reality (XR) technologies are increasingly deployed to promote environmental literacy, the ecological footprint of the digital infrastructure powering these environments is frequently overlooked. As Sy Taffel (2019) argues, the metaphor of an immaterial "cloud" is highly misleading; digital media remains deeply entangled with physical hardware, high energy demands, and rigid planetary limits.

The rising integration of Artificial Intelligence (AI) within spatial computing further exacerbates this crisis. Expanding AI data centres demand vast quantities of rare earth minerals and water, accelerating the potential for severe resource deficits. In the UK alone, escalating infrastructural demands contribute to a projected water shortfall of nearly 5 billion litres per day by 2050. Globally, the energy consumption used by AI has doubled in just four years. This raises a critical paradox: what use are virtual environments if the tools used to render them destroys our physical habitats?

Addressing the NetDRIVE objective to share emerging research practices for sustainable computing, this research introduces Recycled Extended Reality (ReXR) as an innovative sustainable methodological intervention. Re, means recycled and XR, extended reality. This research recycles XR e-waste to offer an alternative to ecological extraction. Using lost technologies to tell lost stories. Drawing on Jussi Parikka's (2015) geology of media, which reminds us that all digital systems are fundamentally built on mineral extraction and deep time, ReXR functions as a form of active, material resistance. By purposefully engaging with salvaged digital assets and what Jennifer Gabrys (2011) terms "digital rubbish," this framework enables creators to hack and tinker their way out of the planned obsolescence engineered into the mainstream XR sector.

By reanimating discarded devices, ReXR provides a scalable, low-carbon pathway for immersive storytelling, proving that we can galvanise collective action toward a net-zero digital research infrastructure without sacrificing innovation.

Air Quality Stripes Knitting: A Low-Tech, Collective Visualisation of Air Quality

TEAM Kirsty Pringle (EPCC), Lucy Norris and Kathleen Glass

Air Quality Stripes Knitting is a participatory creative demonstration that explores how environmental data can be communicated, experienced and discussed without relying on computationally intensive visualisation systems. Inspired by climate stripes and data-driven craft practices, the project translates historical air-quality measurements into knitted colour bands, creating a tactile record of changing atmospheric conditions.

Each stripe represents a year of air-quality data, with colour variation corresponding to changes in pollution levels. The resulting textile is simultaneously a data visualisation, a material artefact and an invitation to collective conversation about the environmental conditions in which we live.

The demonstration shows what happens when environmental data is moved from dashboards and computational interfaces into a slow, embodied and materially modest form. Visitors can examine the knitted data, learn how the data-to-stripe translation works, and contribute to the making of a shared textile. The activity therefore makes visible both environmental change and the resources involved in representing it.

The project connects with NetDRIVE's interest in sustainable digital research infrastructure by offering a deliberately low-computational alternative to conventional data-intensive environmental communication. Rather than treating digital computation as the default solution to every environmental problem, it explores when data can be interpreted, shared and collectively understood through simpler, repairable and reusable materials.

Pentland Island – The Climate and Compute Game

TEAM Lorna Smith (EPCC, The University of Edinburgh) and Darren White (EPCC, The University of Edinburgh)

ACCESS The game includes small blinking lights. In the current version, information is presented visually.

The UK's national supercomputers are ultimately funded by the taxpayer. It is therefore important to engage with the public to explain the benefits and challenges of operating such systems. This is particularly important for young people, who will need to live with the consequences of funding decisions made today. This engagement is best achieved using a variety of activities, every young person is different and will engage in different ways. Computer games are one such activity, providing a fun and interactive way to introduce these benefits and challenges.

Supercomputers are designed to help address current societal challenges, for example in health, climate and security. Their production and operation can however have a negative impact on the planet, with legitimate concerns around the use of electricity, emission production, water consumption and noise pollution. Facilities such as EPCC's Advanced Computing Facility are designed to minimise these negative impacts on the planet, while providing the best resources to solve current global challenges.

This demo presents the Pentland Island game, a game designed to highlight how supercomputers can be used to help regenerate the environment, balanced against the environmental cost of running them and the financial cost of improving the sustainability of the facilities that house them.

Players manage a small island which is a mix of greenfield (e.g. woodland) and brownfield sites, which has been damaged by human activity. The island has its own supercomputer. Scientists queue simulations to run on a player's supercomputer - players earn money by running these simulations. Meanwhile, the island becomes more uninhabitable due to climate change, partly caused by the supercomputer, turning from woodland to bare ground.

Players can use the income they generate to directly regenerating the island. They can also purchase wind turbines, solar panels and cooling fans to reduce the impact of the supercomputer.

The DIMPACT project - 7 years in

TEAM Daniel Schien, Paul Shabajee, Chris Preist (University of Bristol) and Alex Foster, Imogen Crane, Will Picket (SLR)

We showcase the DIMPACT project - an digital media sector forum to advance sustainability. Initiated in 2019, it provides a carbon assessment tool, a community of learning and a forum for knowledge exchange. We reflect on 7 years of academia-private sector collaboration, its wider impact and next steps.

Artist in Residence

> The Digital Cultures Research Centre has invested in an artist in residence to develop their creative making practice through research and development in conversation with the NetDRIVE project and the ethos of the Gathering. Dr Duncan Speakman took up this opportunity in July 2026 and presents this R&D at the Gathering.

Cartaphonics

TEAM Duncan Speakman

This piece is part of continued research into how sound might help us imagine possible futures by drawing on its material and tangible qualities in moments of collective listening. In this early stage prototype I am creating an experience that explore the relationships between printed maps and spatial sound, where the hard edges of cartographic borders and zones meet fluid and amorphous layers of the sonic. This interactive prototype presents maps of geographic locations alongside plans and layouts for proposed computing infrastructure such as data centres and mobile network nodes. The printed maps are linked to sounds within a multichannel audio system, as participants position and move the multiple maps they simultaneously locate the associated sounds in 3D space. The sounds themselves are a combination of field recordings from the mapped sites and sonic renderings of the electromagnetic fields produced by the proposed computing and power system installations. They are not all direct representations or documentations, but are often processed to draw on the ambiguity of sound to scaffold our imagination and emotional responses. As we ask what is making that sound, we engage in the construction of an imagined world through the different possibilities of the source. And in listening together we bring multiple interpretations to the possible futures that physically materialise in the room.