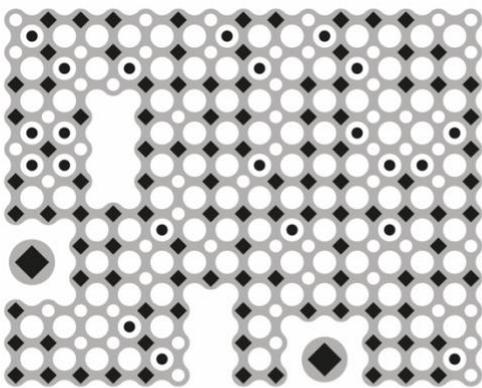


# The Sussex Humanities Lab Environmental Strategy



SUSSEX HUMANITIES LAB



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## Executive Summary

The UK has committed to achieving a net zero carbon economy by mid-century. We are the first G7 country to adopt this challenging but necessary target. Profound damage by climate change is no longer just part of an anticipated future: irreversible losses have already happened, and they are happening right now. Global average temperatures will continue to climb, as carbon in the atmosphere continues to increase.

However, to mitigate climate catastrophe there is still plenty that can be done, and choices to be made about how to do it. Getting to net zero by 2050 is going to require vastly increasing renewable energy production, altering our society to reduce energy consumption overall, changing how we get around and how we stay warm through the winter, creating new forests and other carbon-sequestering ecosystems, and implementing at scale experimental technology to start drawing carbon back down from the sky. The economic, social, and cultural implications of all this are broad and uncertain. Furthermore, beyond greenhouse gases and global heating, the environmental emergency also demands we confront large systemic issues such as transformed disease risks, habitat destruction and wildlife extinction, plastics and e-wastes, desertification and land degradation. It asks that we reject fatalism, and the deflection of responsibility for combating catastrophe onto the individual, whilst also celebrating small, local, individual actions.

The Sussex Humanities Lab (SHL) is a major research programme at the University of Sussex, running on a mix of internal and external funding to develop and deliver research projects and to cultivate a vibrant research environment within the university. Our core expertise is in Digital Humanities, together with the interdisciplinary study of technology, culture, and society. **Whilst we are not experts in environmental science, policy, or emergency, SHL is committed to showing appropriate leadership during our ongoing transition to environmental sustainability and resilience.** We recognise that this transition is having widespread implications for the social and economic contexts in which we operate, which will need to be adapted to in any case.

**The Sussex Humanities Lab Environmental Strategy has two purposes.** First, it is intended as **an evolving point of reference for all SHL members**, in formulating bids, planning activities, and operating in our working groups. Second, it is intended as **a call to action** that we hope will inspire our field, our partners, and our collaborators. Current and initial goals include:

- Exploring and mitigating the carbon intensity and ecological impact of our work in SHL.<sup>1</sup>
- Advocating for environmental impact to be clearly incorporated into how funders evaluate research proposals and award funding (with UKRI our priority).

<sup>1</sup> This document was written collaboratively on Google Docs. Google claims that its cloud services are carbon neutral ([cloud.google.com/sustainability](https://cloud.google.com/sustainability)), but from our research (see references and resources) we know to be skeptical of these claims, particularly if off-setting is involved. Fewer than 100 copies of this document were printed. The University of Sussex Print Unit does not currently publish estimated carbon costs for its services [sussex.ac.uk/sef/services/print](https://sussex.ac.uk/sef/services/print).



- Fostering conversation with other Digital Humanities (DH) groups, seeking to demonstrate (and where possible to quantify) the resource intensity of DH work, and to feed the reality of the ecological emergency into shared research agendas.
- Thinking critically about the materiality of the digital. This means exploring the role of the digital in transitioning to a low carbon society. It means challenging the association of the digital with the 'ethereal', energy neutral and infinitely replenishable.
- Resisting the 'siloing' of environmental perspectives, and instead threading them throughout our research. Our work is fantastically diverse, so this will mean very different things for different researchers. But environmental emergency leaves no field unaltered.
- Thinking critically and creatively about how we do academic work, and how we might do it. This means both conducting experiments and creating fora for sharing our experiences.
- Rejecting the notion of a trade-off between voluntary environmental responsibility and large-scale system change. Small-scale, 'everyday' interventions should go hand-in-hand with advocating for system change.



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## Sussex Humanities Lab

Who we are. The Sussex Humanities Lab (SHL) is one of the university's flagship research programmes, with resources drawn from across several schools as well as external funding. We exist to design and deliver major externally-funded research projects, and as an infrastructure to cultivate a rich research culture across the university and beyond. Our core expertise is in Digital Humanities, and more broadly in the interdisciplinary study of technology, culture, and society.

What we do. SHL seeks to be at the forefront of the most important trends not only in *what* we research, but in *how* we research. Right now, this means transforming our environmental impact. It also means showing others how we're doing it: developing, soliciting, and sharing expertise in how to manage and measure the transformation of academic research in DH and more widely. SHL recognises that, as we shift toward net zero, we will be operating in a rapidly evolving policy environment, one that must soon move beyond outdated metrics of success in order to more accurately and holistically cultivate the wellbeing of people and planet. We intend to be ahead of that curve!

Where we fit in. The University of Sussex has [declared a climate emergency](#). Achieving an environmentally sustainable society implies not only the refinement and adoption of new metrics of policy success, but also rapid and profound structural and cultural transformation across all sectors of every economy. So what will that mean for an organisation like SHL?

It doesn't just mean imposing bothersome new constraints here and there. It means educating ourselves, bringing expertise in, and sharing our expertise. It means including an environmental focus in everything we do. It means embedding environmental sustainability and resilience throughout all our activities, and drawing on our relevant expertise, our foresight and our collaborative ethos, to pioneer new ways of conducting academic work which are environmentally sustainable and resilient. Above all, it means approaching the environmental crisis not primarily as a source of constraints and prohibitions, but as a source of profoundly worthwhile questions and challenges; provocations can bring out the best in us as researchers, academics, and human beings.



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The unfolding Covid-19 crisis is revealing research and education infrastructure — as well as its entanglements with society and the natural world — in a new light. From the shock to university finances and strategic planning across the sector; to the rapid, experimental mass migration of teaching, research and other work into digital environments; to the apparently positive environmental impact due to drastic reduction in economic activity; to the growth of myriad new networks of mutual aid, collective action and advocacy; universities are entering a time to reflect on our fundamental values, and to ask profound questions about our priorities, our practices, and our partnerships throughout society. Within the coming period of resilience and rebuilding, we recognise that environmental sustainability and justice agenda is of paramount importance. We also recognise that research programmes and institutes throughout the sector are already taking many measures of their own. We don't expect to distinguish ourselves by the *fact* that we are addressing these issues: but we hope perhaps to distinguish ourselves by the imagination and rigor of our responses.

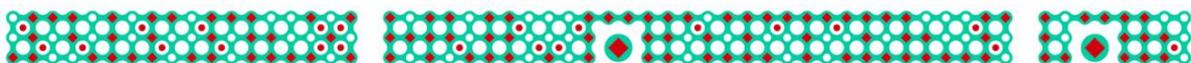


## SHL Research Projects

We propose to invest in developing research agendas at the intersection between the Digital Humanities and the environmental emergency (see 'Key areas of interest' below).

We also propose to embed environmental perspectives into the design of our research projects, and to regularise the use of environmental language in our funding bids. The actions we intend to take include:

- Using impact related sections to discuss **the impacts of running research in less energy intensive and more sustainable ways, and creating pathways to disseminate our developing best practice**. Where application processes do not make space for these discussions, we will make space.
- Using UKRI 'Justification of Resources' sections to **articulate the role DH can play in using all resources wisely**. We will **make intellectual choices about the technology we consume** by balancing financial cost against an audit of energy cost (e.g. choice of server provider based on low energy use or use of renewables), considering the labour conditions of production (e.g. using [TCO-certified](#) equipment), or taking account of the materials used in the production of equipment (e.g. drawing on existing shared resources, purchasing refurbished devices, avoiding equipment that is hard to refurbish or recycle — [no airpods!](#)). Where application processes do not make space for these discussions, we will make space.
- For any proposed project with a budget in excess of £50,000, we will **draft an environmental plan**. Although this is not currently required by UKRI, it will enable SHL to build our own capacity and expertise.
- We believe it to be plausible that UKRI will make such plans a formal requirement in the future. **We propose to actively advocate** that they do so sooner rather than later.
- We propose to think about travel as a resource that should be used with care, and to always consider **alternatives such as videoconferencing**.
- Where projects involve travel, we propose to **always investigate rail options**, and where possible to prefer rail to flights, even when rail is more expensive than flights in terms of its short term financial cost.
- Where we do fund international travel, we will **give preference to collaborations with partners from climate vulnerable nations**, nations in the Global South, and [Official Development Assistance recipients](#).
- We propose to **always treat Machine Learning as an 'expensive' activity**, and promote the exploration of measures and practices that can minimise the energy usage incurred by CPU time.



## SHL Seminars, Workshops, Conference, and Other Events

Let's **programme expertise**. We propose to ensure that our programming includes speakers with specific environmental crisis related expertise.

Let's **meet virtually, etc.** SHL does tech pretty well, so let's work harder to do comms differently. Video conferencing still uses energy, but keynotes can still feel like keynotes when given from afar. Low carbon comms plans can be sites for innovation. Pandemic isolation measures have now mandated experiments in remote working all over the world. What can we learn from and carry forward from these experiments?

Let's seek to **involve more remote participants**, and think creatively about how they can contribute. Remote participation has its downsides — e.g. “cloud” services can work to make physical infrastructures appear invisible — so let's figure out how to mitigate those problems (see ‘Key areas of interest’ for more).

Let's **strike a balance between webinars or multi-site sprints and single-location meets**. There are opportunities here to fund work in low-resource communities and outside of over-invested hubs, i.e. cities in the Global North.

When hosting visitors from farther afield, let's **roll in other events and activities within the UK**. We will explore practical measures to support visitors in doing this, including building links with appropriate research centres at other UK universities.

Let's **think about how and what we eat**. We can cater all-vegan by default, with the option for attendees to request dairy or meat options. Or we could just gently tilt toward vegan and vegetarian options. Or we can aim for ‘low carbon catering,’ which will of course include a lot of vegan options, but also build in considerations such as food miles, etc. Eating is a curious mixture of the public and the intensely intimate, and the social and political dimensions of what and how people eat together are deep and complex. Where food and the environment are concerned, there are heightened risks of counterproductive resentment and rows. Let's make the changes that need to be made, but let's aim to do so with wisdom and empathy.

Let's **explore ways to reduce food waste**. Can we order food that will keep fresh for longer? Can we ask catering services to more precisely articulate what a portion will mean in reality? Can we order less overall without upsetting guests? Or even better, can we have and share the management of an SHL larder from which to top up if our catering runs out? Can we reduce the use of plastic in favour of e.g. soy wax wraps?



## SHL Web Presence and Communications

We propose that our public website(s) **include a prominent statement regarding its energy use**. This statement may need to flag up the difficulties of precisely quantifying such impacts.

We also propose to explore whether users might forgo instant results from web services — e.g. tolerate latency — if they are encouraged to recognise that this would result in reduced energy use.

In our Twitter and any other social media presences, we do tend to tread carefully around topics that might be perceived as politically partisan (see Tim Hitchcock’s excellent [Twitter guidelines](#) for the team). At the same time, the politics and ethics of environmental crisis in many respects transcend parliamentary politics. We should certainly **feel confident in using SHL’s small but growing social media reach to share scholarship, news articles, petitions, think pieces etc. which seek to hold our government and transnational agencies to account** in relation to the 2050 net zero pledge, or to other environmental pledges, and in relation to environmental policy more generally. Moreover, while a direct connection with DH or other SHL core expertise is helpful, we don’t need to police this too strictly: some tech or data angle should be sufficient.

We will continue to use services like [Box](#) so as to ensure that we keep minimal copies of SHL administrative documents and avoid the proliferation of documents via email, a key site of energy use among businesses and organisations (see The Shift Project, 2019).



*Listening Mirrors* [sro.sussex.ac.uk/id/eprint/80973/](https://sro.sussex.ac.uk/id/eprint/80973/)



## Guiding Principles

Environmental sustainability and resilience are part of ethics. These are not ‘nice to have’ optional extras. Just as we wouldn’t undertake unethical activities, we shouldn’t be undertaking activities that aren’t sustainable and resilient.

We’ll do what is in our power, and we’ll offer our expertise and support to those in positions to make bigger changes. Among these stakeholders are the schools within the university, the university as a whole, project partners and collaborators, visitors, and external funding bodies.

We like small changes AND big ones, and we reject the idea that you can only have one or the other. Planting wildflowers, and other little acts that make positive change, don’t mean we are naive about the causes of the climate crisis, or have forgotten the need to push for system change. It’s 2020 and we are rejecting fatalism.

The temporal rhythms of academic life are not well suited to addressing environmental crisis. Big things usually take years. Meanwhile, many university staff feel so squeezed that every minute counts, and environmental considerations get kicked into the long grass. But this does not need simply to be accepted. It can and should be challenged.

We like momentum. Where a sustainability measure is credible, we don’t always need to quantify its impact precisely. We can go ahead and do it.

We really like momentum. Where a sustainability measure is credible, we don’t always need to develop the optimum version of that action. We can go ahead and do it.

However, measurement is powerful. All that said, with all SHL’s assembled expertise — expertise spanning hard data to the vicissitudes of the human heart! — we should be quite good at evaluating environmental policies in a granular way. This can be important not only to underpin robust and efficient decision-making, but also because measurement generates opportunities to motivate ourselves, and to shape our experience and our behaviour.

Disagreement is okay. We can become adept at the art of working together when there is little time and great uncertainty. Perhaps academics are not always the best people for letting things slide, leaving differing perspectives unresolved, sticking legitimate concerns on the back-burner for the sake of a provisional consensus, or for plotting a course through territory that is not yet well-mapped. Even so, if that’s what it takes, we can do all these things.

In many cases, if anyone can do it, we can. Especially in relation to digital technology, we are well-placed to evidence when a policy can make a difference, quantifying that difference where appropriate either as a one-off or on an ongoing basis, designing effective ways of implementing that policy, and *documenting and disseminating* the process, so others can reproduce it.



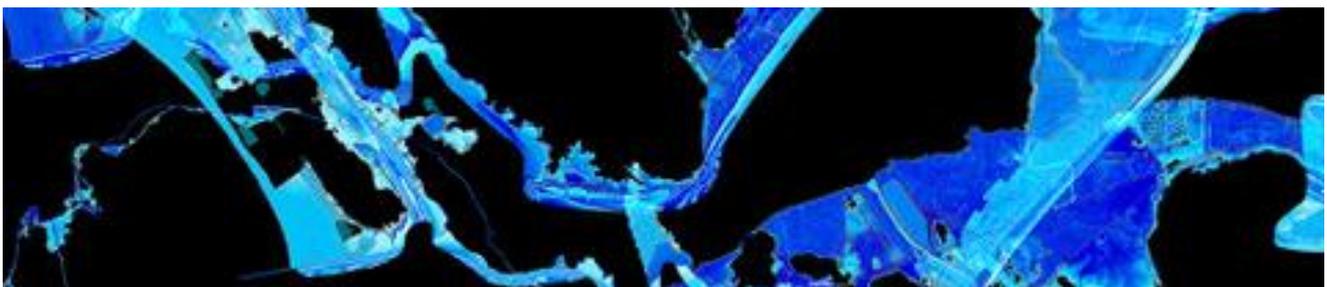
Furthermore, we recognise that well-intentioned sustainability measures can occasionally be counterproductive. We will stay alert to the risk of false economies. We recognise that off-setting may feel like an easy solution, but it is a complex and problematic tool that thus far has failed to live up to its promises. *Additionality* it is challenging to measure: how many of the actions that are sold as carbon offsets would *really* not have taken place anyway? The longevity of some climate offsetting projects has also often been questionable. Some offsetting projects have also had damaging and sometimes counterproductive second-order impacts on local communities. A recent study of off-setting in the European context concluded that “the CDM [Clean Development Mechanism] still has fundamental flaws in terms of overall environmental integrity. It is likely that the large majority of the projects registered and CERs issued under the CDM are not providing real, measurable and additional emission reductions” (Cames et al. 2016).

We recognise that administrative goals, policies, and processes can take on a life of their own, particularly when they are associated with such large and profound issues. We will strike a pragmatic balance between boldness and caution in adopting new policies and practices. That is, we can more easily afford to be bold when the action we are taking can easily be reviewed, amended, and/or reversed.

We want to be realistic and compassionate about the psychology of environmental crisis. Global heating is notoriously hard to think about, intellectually and emotionally. We aren't planning to think about it all the time. That would quickly become boring, anxiety-inducing and/or heartbreaking. Part of the point of threading environmental perspectives throughout our activities is so that we *don't* have to think about it all the time: we want to create best practice that will do some of that work for us.

Environmentalism has always been articulated through specific social constellations, and therefore has been entangled in complex ways with e.g. race, class, nation, and other vectors of privilege and domination. We seek to be critically reflective about the concrete history of environmentalism, yet without allowing such critical reflection to undermine or delay the urgent actions we must take.

We are already a hub for interdisciplinary research within the university and beyond. We propose to build closer links with the [Sussex Sustainability Research Programme](#), with [SEF](#), and with other bodies with particular environment related expertise or responsibilities.



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## Key Areas of Research Interest

Sussex Humanities Lab is a research-intensive group, working to explore the cultural and societal implications of digital technologies, and to develop new digital tools and methods to apply in our research. Our core expertise is in the Digital Humanities and practice-led research. Alongside our Environment Strategy, we have developed a series of key areas of research interest that intend to guide our future research activities, funding applications, and doctoral supervision. We need collaborators to make this research happen. If you want to work with us, please get in touch at [shl@sussex.ac.uk](mailto:shl@sussex.ac.uk).

Covid-19 and digital technology. The events of the Covid-19 pandemic, and the social distancing and isolation measures put in place by many states around the world, have led to a mass adoption of digital tools and platforms across many areas of work and leisure. What can we learn from this unprecedented transformation of the politics and experience of space, presence, connectivity, and community? What issues are arising in relation to access, privacy, surveillance, and cybersecurity?

The materiality of digital media, including the perceived ethereality of the digital. Building data infrastructures requires energy. Moving data around requires energy. It can be tempting to propose digital alternatives to carbon-intensive activities, without considering the carbon impact of those digital alternatives. More generally, the digital is often culturally constructed as an endlessly plentiful plane of existence: abundant, light, infinitely malleable, where anything can be permanent if you want it to be, or anything can be reversed or erased without lasting consequences. When a media file fails to play, when a download freezes, we often experience this as a corruption or an interruption of the digital, rather than as a part of the digital itself. How can we become more attuned to the true materiality of the digital?



Climate futures in culture, policy, and science. How does the science-centric scenario-based thinking which informs climate policy at the national and intergovernmental scale — approaches such as Integrated Assessment Modelling and the IPCC's Shared Socio-economic pathways — relate to other climate futures, such as the way organisations envision their future role, and the eco-imaginaries of utopias, science fiction, and other art, literature, and media?

Carbon coloniality. Different nations and different groups are very differently placed with regard to the carbon they have used, currently use, and may or would like to use in the future. How are colonial and other histories reflected in these differences?

Critical resilience. Resilience doesn't just mean absorbing climate-related shocks and stresses: it also means using them as opportunities for renewal and transformation. How can we ensure that such transformations embed an orientation to social and environmental justice? How do we ensure that preparing for a future of increased climate hazards and risks doesn't entail entrenching and exacerbating social inequality?

A more nuanced understanding of offsetting. How should we think about offsetting? Offsetting has been historically implicated with the politics of delay and distraction, and comes with serious risks of greenwashing. It is tempting to reject offsetting altogether, and insist that the only acceptable response to climate crisis includes both reduction in emissions, and the use of negative emissions, with these activities being pursued independently without any dependencies. Yet this somewhat hardline stance may deny us useful ways of sharing information, generating incentive structures, and steering collective action.



The embodiment of academic research and collaboration. Why do we still meet face-to-face, and what changes when we do? Videotelephony has existed for well over a century: so why has the physical summit been such a tenacious element of academic research? When academics go to conferences (to take just one example), they do far more than deliver and listen to papers. They stand around awkwardly with paper plates of samosas and grapes. They read each other's body language. They go to restaurants and bars. They go on wholesome walks. They drink wine and snog each other. They harass and assault each other. They commit crimes. They don't just make contacts: they make impressions, they make promises, they make mistakes, they make jokes, they make friends, and they make fools of themselves. How might activities that appear adjacent to the 'real' activity of research actually shape the production of knowledge, and shape the capabilities, desires, and identities of those who produce it? And what is the relationship between this activity and the changing landscape of technology?

Negative emissions. In science policy circles, negative emissions are an enormous part of the conversation around addressing the climate emergency, yet this doesn't — [until very recently](#) — appear to have yet filtered into popular consciousness in a large way. There is an opportunity for successful science communication, and a risk of allowing a phase of unscientific optimism that we cannot afford. How do we ensure the rising profile of negative emissions (and other geoengineering such as solar radiation management) isn't embraced as proof of a 'techno-fix'? Similarly, there are significant risks around negative emissions technology enabling greenwashing practices that we likewise cannot afford. What does it mean for a technology company to set a carbon negative pledge? Do targets of this nature create incentives for increasing resource intensity in adjacent areas of the tech economy? How do we evaluate the claim that certain activities are connected in such a way that they collectively constitute 'net zero'? What are the epistemological and ethical implications of allowing markets, or market-like mechanisms, to match up emissions with negative emissions?

Agonistic climate action. Because climate change is a global problem which affects everybody, it is also the context for large political and ideological struggles. How do climate futures based on degrowth interact with climate futures based on private sector innovation in negative emissions technology? How do internationalist climate futures interact with nationalist climate futures? How do climate futures assuming redistributive design leading to greater political and economic equality interact with climate futures assuming a permanent state of emergency legitimating the rolling back of political and civil rights? We cannot (and we don't want to) get 'outside' of these political confrontations altogether, but we can at least reflect on how we are situated within them. 'Agonistic' is another word for 'competitive' or 'conflictual.' Agonistic climate action perspective cautions that no plan of action is credible if it presupposes or requires unlikely agreements or reconciliations between politically opposed forces, even when such agreements would be in all parties' best interests, and/or are well-supported by the best available evidence and reasoning.

*Whilst published documents create fixity, research agendas don't stand still. SHL will keep updating these areas of interest as our collaborations develop. For more information, get in touch.*



## Appendix 1: In Praise of Smaller Actions

When it's a drop in the ocean, why even bother?

Smaller actions can build credibility. It is difficult to advocate for system change when you are not doing what you can on a smaller scale.

A caution: occasionally smaller actions can also *reduce* credibility: we always need to be clear about our commitment to deeper system change. We never want to convey the impression that we believe system change is unnecessary. The possibility of addressing environmental crisis merely through many small voluntarist activities that “all add up!” is now long gone ... if indeed it was ever a tenable possibility. However ...

Smaller actions can give solace.

Smaller actions can demonstrate and cultivate a practical willingness to make changes in our everyday lives. Because the bigger changes of net zero will demand many such changes, it is important that we explore what such changes feel like, and the ripple effects they may have. It is important that we cultivate narratives, skills, and ways of thinking around these changes, so we know what to embrace, what to resist, and what to re-imagine. When done creatively and reflectively, those smaller actions can even be a kind of practice-led research into climate sustainability and climate resilience. They can be ‘cognitive’: they are a way of finding things out, and a form of knowledge in themselves.

Smaller actions can be a form of hope that is actively engaged with the world, as opposed to a form of ‘hope’ that is really just burying one’s head in the sand.

Right now in 2020, there has been precious little scientific modelling done around *how* we get to net zero by 2050. And at the moment, most of the modelling that has been done includes a substantial role for expert elicitation: in other words, a systematic survey of people expected to have predictive expertise ... a kind of highly educated guess. So can we really get there? Let’s hope so! If so, how? The UK has made a commitment, but the strategy is as yet very unclear. Smaller actions can constitute a societally-led exploration of policy options. Everybody taking whatever small actions they can, while also continually highlighting how the impacts of climate change are distributed across society, *and* advocating for deeper system change: that’s what a true societally-led transition to net zero looks like. All those smaller actions *do* sometimes add up, and occasionally they may allow policy options to emerge that would otherwise not be possible.

Smaller actions can go viral.

As testing grounds for larger actions whose parameters are not yet known, smaller actions can help to build climate resilience, to be ready to adapt flexibly for what the future throws at us.





Smaller actions are opportunities for pre-emptive regulatory alignment. That's what being ahead of the curve means. By the time we're told to start doing something, we'll have already been doing it for ages. SHL: Smug Humanities Lab.

Smaller actions can be symbolic. They can change the way we think and talk about larger actions. They can be opportunities to reflect inwardly and to communicate outwardly on where we are in this transformation.

Smaller actions are prefigurative. To misquote Alaisdar Gray: Work as though you lived in the early days of a sustainable ecology.

Smaller actions are opportunities for innovation, experiment, and imagination.



## Appendix 2: Background: Environmental Emergency

We are digital humanists: we are not experts on environmental science, policy, or emergency. But we believe that as digital humanists it behooves us to educate ourselves and to act. Our work can contribute to global heating and ecological destruction, and it can contribute to mitigation and resilience. This is our estimation of the emergency we face. We welcome qualifications, criticisms, and suggested revisions.

The world has started to burn. There have been some interesting debates about the usefulness about this apocalyptic idiom: does it really help to convert the urgency of our situation into practical action? But setting aside the complex emotional implications of mentioning it, the world *has actually* started to burn: the effects of global heating are already being felt around the world through heatwaves, wildfires, drought and famine, as well as wildlife extinction, rising sea levels, ocean acidification, and extreme weather events such as storms and flooding. Enormous economic damage, human displacement, and deaths attributable to climate change are no longer mere forecasts: they are daily news. These are tragedies, not omens.

It could already be too late. To meet the commitment of the Paris Agreement to maintain global heating “well below” 2 degrees, total global carbon dioxide emissions post-2010 must be kept below 1,200 gigatons. More recently consensus has swung behind a 1.5 degree target, which is also consistent with the wording of the Paris Agreement. The IPCC has determined that by achieving net zero greenhouse gas emissions by mid-century, we have a good chance of limiting global heating to 1.5 degrees. Crudely speaking, this would imply an average 15% reduction in global greenhouse gas emissions every year from 2020-2050. Nobody is planning to follow a straight linear path to get to net zero, but clearly our collective behaviour 2020-2025 will have profound implications for the future of the planet, and what kind of life it can sustain.

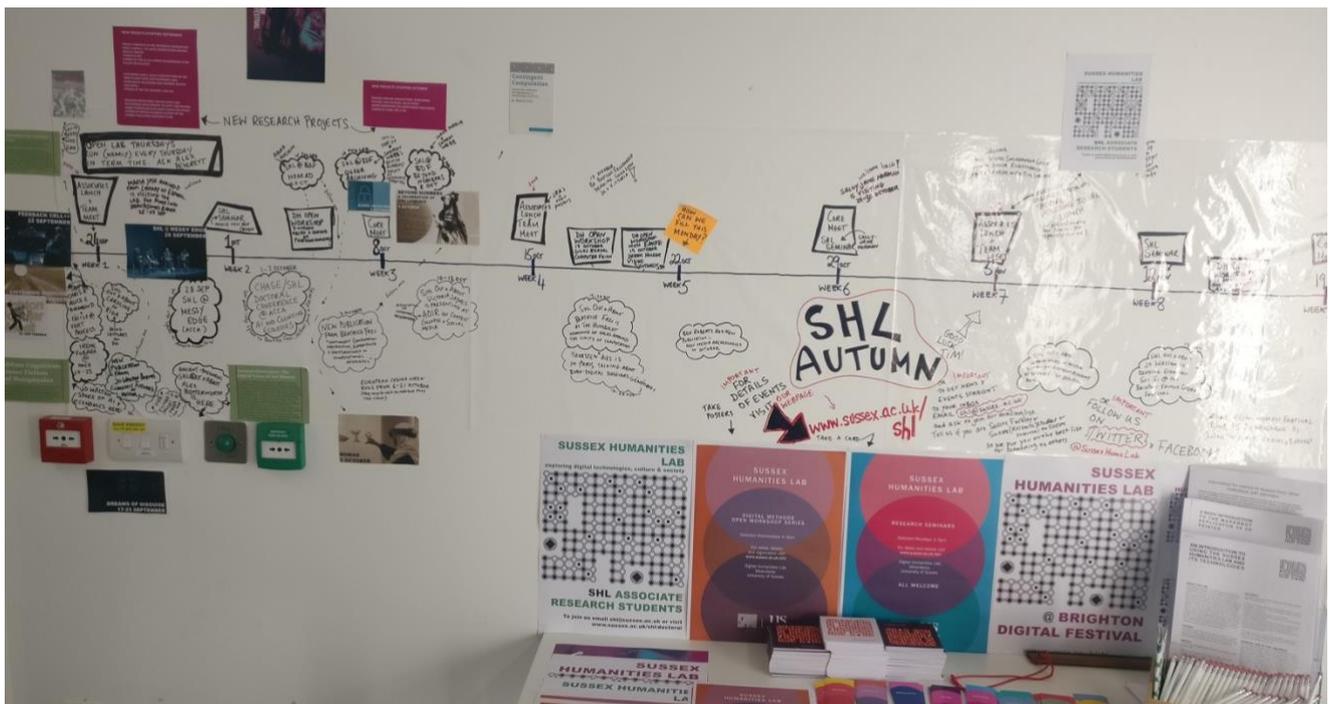
Things are going to change. As Margaret Atwood puts it: “This isn't climate change – it's everything change.” Achieving net zero will require switching the electricity we already use to renewable sources, and also switching transport and heating systems to electricity and/or hydrogen. It's estimated we will need to generate anywhere from three to ten times more electricity by 2050 than we currently do. This is going to require considerable infrastructural transformation. Construction is one huge source of carbon emissions, so the net zero target will have far-reaching implications for our built environment as well. Agriculture is another big part of the story: land currently used for grazing will likely have to give way to forests and other carbon sinks such as biofuel crops. Many different negative emissions technologies (e.g. Bioenergy Crops with Carbon Capture and Storage) are being explored, but none have been implemented at scale, and their wider socio-economic implications are highly uncertain. So even when you consider the process of getting to net zero alone, *without* factoring in climactic agencies like extreme weather events, sea level rises, increased and transformed disease risks and risks to food security, or the wider geopolitical ramifications, it's pretty clear: things are going to change.



Not everybody is on the same page. From our perspective, it feels like — even setting to one side the perilously influential peanut gallery of pseudo-scientific climate change denialists — there is quite a bit of variety and fragmentation in the ways that environmental emergency is expressed across different disciplines and contexts, e.g. IPCC policy documents versus scholarship within ecocriticism and other fields of the environmental humanities. Intellectual diversity is important, and perhaps it's not an entirely bad thing that we're not speaking *exactly* the same language on environmental emergency. But if building robust sustainability and resilience requires multi- and interdisciplinary research and practical collaboration, then there may be some significant challenges around mutual comprehensibility and co-ordinated action.

And that's not all. The significance of carbon emissions and global heating cannot be overstated, but they're still not the full story of the unfolding environmental emergency. This emergency encompasses many interconnected factors, including global heating; transformed disease risks; rising sea levels; deforestation, desertification, and land degradation; plastics, e-wastes and other dangerous pollutants; wildlife extinction due to habitat fragmentation and destruction.

This is about climate justice, but this isn't politics-as-usual. The environmental emergency has social and political dimensions, most visibly expressed in energy resource conflict; militarisation and intense politicisation of borders; collapse of subsistence ecologies; and the movements of climate refugees. At the same time, in some respects the environmental emergency transcends ordinary politics. Here in the UK, the Conservative Government, the Labour Opposition, and all major parties represented in Parliament, despite the significant differences in their environmental policies, are all committed to transitioning to a carbon neutral or carbon negative economy by 2050 at the latest, and other actions to address the dangers to human and more-than-human life on our planet.



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- Useful resources (e.g. greening events): [https://juliesbicycle.com/category/resource\\_hub/](https://juliesbicycle.com/category/resource_hub/)





Environmental strategies shouldn't stand still. This is a line in the sand. This document will evolve as our work evolves.

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