

CLIMATE CHANGE & SOCIAL CHANGE

How funders can act on both





This is just the beginning...

We want to do everything we can to help those in the philanthropic sector who wish to align their work with a just transition to a low-carbon society. If we can support you on that journey by sharing what we have learned, please do not hesitate to get in touch and we will make sure to share anything we can.

If there is anything you think we have missed in this report, please send us your suggestions and we will continue updating the digital copy over time.

If you have any questions or would like to find out more, please contact:
info@tenyearstime.com

Acknowledgements

We would like to thank the Esmée Fairbairn Foundation for supporting this work, the many partners who have contributed content and challenged early drafts, and those that have been working on these issues long before we have.

Lead authors: Elisabeth Whitebread, Pavlina Draganova, Eli Manderson Evans
Design and graphics: Emily Buchanan

Legal disclaimer

Ten Years’ Time is not a registered investment advisor and we cannot give legal, tax, or financial advice. This document has been produced for information purposes only and as such the views contained herein are not to be taken as advice or recommendation to buy or sell any investment or product or interest thereto. You should carry out your own independent research before making any investment decision.

Contents

Introduction.....5

Recommendations whatever your mission.....6

Climate change: An investor response.....11

Public health.....17

Communities in focus.....23

Young people.....29

Heritage.....35

Equality and social justice.....41

References.....46

Introduction

“Twenty-five years ago, people could be excused for not knowing much or doing much about climate change. Today we have no excuse.” —Archbishop Emeritus of Cape Town, Desmond Tutu

The independence and financial freedom that foundations have presents an incredible opportunity for our sector to take a leadership role in tackling the climate crisis. The environmental emergency poses a threat to the communities we exist to serve—but addressing it can provide many co-benefits that will not only protect against future harm, but also improve lives in the here and now.

Throughout this report, you will hear stories of the disproportionate impacts of climate change on the most vulnerable. You will read about Europe’s 2003 heatwave and the outsized impact it had on our elderly populations. You will see a contribution from the National Trust, laying out why “climate change is the greatest threat to the places that we care for.”

You will hear from President Obama’s former Science Envoy, warning that tropical diseases may return to the UK as a result of global warming. You will read the words of Nonhlanhla Makuyana of Decolonising Economics on why “environmental degradation isn’t a single issue, (but) intersects with many of the injustices that exist around the world.”

You will also hear from a number of Foundation CEOs on how and why they are responding to the climate emergency, as well as the linkages they see with their core work.

The history of philanthropy includes many stories to be proud of. From donors who have for decades supported marginalised

communities in the UK or abroad, to those who have shared their power with stakeholders through participatory grantmaking. From valuable contributions internationally, nationally and often very locally, to sports, arts and heritage, to those who backed the anti-Apartheid movement, the US Civil Rights movement, the development of the contraceptive pill, the eradication of smallpox, the suffragette movement and the campaign for the Living Wage.

Yet today, as humanity faces the existential threat of climate and environmental breakdown, the response from the philanthropic community has thus far been negligible. Foundations are not passive players in the climate crisis. As a sector, our endowments are disproportionately invested in the world’s most polluting industries. We have profited from harm to the planet and are still profiting from it.

But this does not have to be our legacy—there is still time to transform our sector and in doing so, lend our full support to the social, economic, infrastructural, political, and cultural transformations that need to occur over the next decade for our civilisation to thrive.

This will be philanthropy’s greatest ever challenge. But if we mobilise and put our hearts and minds to the task at hand, it could become our greatest contribution.

If you are reading this, the chances are that the outcome rests, in some small part, in your hands.



Recommendations whatever your mission



1 Build climate expertise and capacity

In terms of building your own capacity and knowledge about the climate crisis, the Environmental Funders Network and Global Green Grants may be a good place to start for signposting to a variety of inputs, events and sources. We would also recommend engaging on climate change with the communities you serve and the frontline workers within them to understand what they feel your response should be.

Some foundations may wish to consider bringing an expert trustee onto their board, or hiring a team member to lead the work to develop their own climate response.

There is also often a lack of capacity on climate-related issues among grantees. Financing roles for climate scientists, environmental education and capacity-building programmes for people working in areas pertaining to your mission would have enormous benefits in terms of ensuring that practitioners are up to date on the implications of the climate crisis for their work.

2 Fund work with climate co-benefits

As we hope you will see from this report and others, there are many areas that can provide dual benefits for your 'core' mission and the environment—from funding home insulation programmes that act against both fuel poverty and greenhouse gas emissions, to supporting platforms for under-represented youth voices in climate negotiations.

Speaking to your communities about this is key to understanding the changes they would like to make and the actions they are already taking in this space. Helping them access support or advice, helping them convene and mobilise, as well as funding the work they want to lead are all major opportunities for foundations.

3 Directly fund climate work

Whilst some funders may read this report and think about the intersections of climate change and their work, others may be interested in philanthropic funding that is climate focused.

Within the climate funders movement, there are a range of approaches foundations may want to align with. Some of the most common include:

- Funding climate advocacy and policy development to influence and inform governments and global leaders;
- Supporting citizen mobilisation activities, as well as the communication and infrastructure building that enable and facilitate such mobilisation;
- Investing in natural solutions, i.e. restoring or protecting forests, mangroves and wetlands which lock up carbon from the atmosphere;
- Investing in new technologies that can help reduce the amount of carbon emitted into the atmosphere;
- Investing in strategic litigation to hold governments and businesses to account and establish new environmental protections;
- Campaigning for economic system change and working to create an alternative system that is both more equal and environmentally regenerative.

Across each of these areas there is room for co-funding, venture philanthropy, participatory grant-making, effective altruism, systems change, system strengthening, activist organisations, big and small NGOs, leadership programmes, backbone organisations and more.

4 Increase the climate resilience of your assets

High-carbon economic growth, whether for commercial or charitable purposes, is no longer an inherently desirable outcome. If we fail to individually and collectively take the steps required to decarbonise the world economy over the next decade, it is highly likely that the public benefit of an increased endowment, made off the back of high-carbon investments, will be vastly outweighed by the negative impacts of environmental collapse.

Please see the next chapter, "Climate Change: An Investor Response" for more detail.

5

Invest in the people, ideas, geographies and organisations that are under-funded

The majority of the environmental sector is under-funded and, even within bigger charities, there is always more work to be done.

That being said, in our experience, there are disproportionately small amounts of funding going into grassroots groups, frontline environmental protection and those working on justice issues and new economic models. There are particularly small amounts going into groups led by people of colour, lived-experience leaders, Indigenous groups and marginalised groups.

This report focuses on the co-benefits of acting for environmental change—but it is also important to be conscious of the potential risks and downsides of environmental change if it comes at the expense of already marginalised populations. A successful, just and compassionate climate movement needs the input of leaders from a range of communities and backgrounds.

6

Embed climate-friendly values and actions

Foundations could look at helping the projects or organisations they fund to incorporate environmental consideration into their work and support them to use their voices on relevant environmental issues. Convening charities and providing templates for action or small grants for eco-improvements could make a huge difference in helping the entire charity sector respond to the climate crisis.

In particular, if grantees are seeking funding for capital projects, funders could consider offering support for climate change risk assessments to inform new developments as well as long-term strategic planning.

Closer to home and where appropriate, foundations may wish to make their own climate-friendly changes—such as reducing or eliminating flying on foundation business, removing meat from event menus, installing solar panels on their buildings, and taking part in neighbourhood/employer schemes connected to sustainability.

Every sector of UK society needs to have a plan for how to reach net zero no later than 2050 (the government’s legally binding target), and ideally much sooner. Funders could finance a project manager, plus overheads, to bring key stakeholders together with technical experts to develop a roadmap for net zero carbon emissions within their constituency, or combine resources to do this for their sector as a whole. The outcomes of this roadmap should include specific commitments from different actors, milestones with dates, and should be made publicly available.

Whether it is Community Foundation Tyne & Wear and Northumberland leading a funding coalition around projects in the community that have both social and environmental impacts, the Children’s Investment Fund Foundation’s recent shift to make fighting climate change a major strategic priority, or City Bridge Trust’s ten year programme of funding eco-audits for charities looking to improve their environmental footprint—there are inspiring examples of traditional ‘social’ funders engaging in environmental change.

“

“Policy interventions can enable and accelerate positive change on a large scale. Arts Council England’s decision to introduce environmental requirements to its funding agreements has translated into significant environmental, financial, organisational and creative benefits, jump-starting a more sustainable cultural economy.”

—Francis Runacres, Director of Enterprise and Innovation, Arts Council England

“

“We looked into the question of working on climate change aspects within our core purpose. Our internal legal advice is that climate change is a threat to the things we hold precious, and so it is not working beyond our remit to be focusing some of our resources on this biggest of challenges.”

—Anonymous Manager, large UK-based charity



Climate change: An investor response

Disclaimer: We cannot give legal or financial advice so please do not take the below as such

Irrespective of whether or not a funder decides to use their grants to tackle the environmental emergency, there is another, arguably more important, issue if foundations are actively exacerbating and perpetuating climate change and inequality through their investments. Investing without regard to their mission undermines the public benefit that they exist to serve.

Furthermore, in today's market, incorporating environmental, social and governance (ESG) factors into an investment process is not returns detractive—rather, it can be returns additive. For example, Amundi, Europe's largest asset manager, found that ESG investments overperformed others from 2014–2017.¹ It is possible to get the best returns and do the right thing at the same time.

So, as wealth holders, what can foundations do? Here are some ideas:

1. Change your asset management

Option 1: Change your asset manager's behaviour

If you have a portfolio made up of fossil fuel companies that you do not feel ethically comfortable with, then your manager is failing you. Talk to them directly about this and try to change their behaviour by asking the following three questions over and over again until their answers improve:

- i. What are the projected global warming levels based on my current portfolio and what investment risk and human cost are associated with that level of warming?
- ii. What are the projected global warming levels based on their entire portfolio? Even if

you are part of an 'ESG' fund, if your manager is still investing in the world's worst polluters with the majority of their other clients, they may not understand or may not attach sufficient importance to the risks associated with investments in high-carbon industries. This means they may not be the right person to look after your money from either a returns or a reputational perspective.

- iii. What is their plan for companies invested in models that would lead to levels of warming not compliant with the Paris Agreement? Help explore the risk associated with these investments as well as the morality of them.

Ask for evidence that your managers' answers reflect their actual activity and decision-making. You could consider hiring a specialist to help inform these conversations.

Option 2: Find a new asset manager

If the above doesn't work, find a new manager! There are amazing ethical managers out there who can provide excellent returns without compromising your reputation, your mission, or the public benefit.

2. Take hold of your investments

If you are one of the many foundations that hold 'tracker funds', this means you are basically holding a little bit of each of the biggest companies in any given market. Major polluters have been very successful in the past and therefore make up a disproportionate number of the world's biggest companies. Move from pooled funds to direct holdings, so that you can take control of what you are investing in.

3. Manage your conflicts

Find out if you have investment committee members and trustees who are invested in fossil fuel companies or work for the companies that finance them. This is a conflict that has to be managed, otherwise it will be impossible to have transparent and effective conversations about divestment.

4. Become an activist investor

Engaging with companies can be a great way to influence change within them. It can also be an excuse for doing nothing. Truly activist investors use activist managers and hold the optimum number of shares required in order to effect change in a company (this may just

be one share or it may be a disproportionate amount of your portfolio). Foundations that pose as activists by holding the optimum number of shares to maximise their financial return, regardless of whether that company changes, are part of the problem.

5. Publish what you own

There are many charities that would not accept money from carbon-intensive industries. They do not realise that foundation funds often contain the profits of Shell, BP and Exxon investments. We have a duty to the constituencies that we serve not to put them in conflict with their own policies, and therefore should be transparent in our investments.

6. Move to good

Do not limit your sights to 'not doing as much bad'—think instead about the wealth of investments you could be making in green technologies, community enterprise and creating the new green jobs of the future. Aim for an investment portfolio that is actively regenerative and redistributive. It is possible to do so whilst generating good returns, and if your managers tell you it is not, please see point 1.

7. Cash out

If you cannot find a way to do the above or you decide that the nature of the challenges we face today are so great that existing in perpetuity seems of lower priority—then sell all of your investments, hold your cash in a green bank and spend it.



Case studies



Althelia Ecosphere+

Althelia Ecosphere+ helps companies and investors to finance natural climate solutions such as forest restoration, leading to positive financial and environmental returns. The largest portfolio of forest carbon projects in the world, Ecosphere+ has protected 2.2 million hectares of forest under threat of deforestation, avoided 33 million tonnes of carbon emissions, supported over 2,200 jobs and engaged with 100 Indigenous communities across South America, East Africa and Indonesia. Investors include the European Investment Bank, Credit Suisse and AXA.

WHEB Sustainability Fund

WHEB Sustainability is a multi award-winning fund that focuses on nine themes: five environmental (cleaner energy, environmental services, sustainable transport, resource efficiency, and water management) and four social (health, safety, education, and well-being). It is committed to the Net Zero Carbon 10 target, meaning that at least 10% of portfolio assets by value are invested in companies that are either already at net zero or that have realistic and credible strategies to achieve this by 2030.

TfL Green Bonds

With London's population expected to exceed 10 million by 2030, Transport for London (TfL) needs to increase its service capacity. The first TfL Green Bond was issued in April 2015 and was oversubscribed by 50%, with the £400m offering receiving orders for £600m. Proceeds from this bond will fund low carbon transport projects from TfL's business plan to 2021, including station and line upgrades on rail and underground, low-emission hybrid buses and cycling improvements.

Rainforest impact bonds

Development impact bonds (DIBs) are a new type of development finance allowing investors to provide upfront funding for development programmes and get remunerated by donors upon delivery of pre-agreed results.

The Rainforest Foundation UK, the Common Fund for Commodities, the Royal Tropical Institute and the Schmidt Family Foundation launched a DIB in 2015 to support Indigenous livelihoods and protect rainforests. The bond financed a range of activities to benefit Indigenous Asháninka families in the Peruvian Amazon, strengthening their livelihoods and enabling them to continue safeguarding their forest environment.

Bristol City Funds

City Funds is a £10m social investment collaboration between Bristol City Council and Big Society Capital. Starting in late 2019, City Funds will be deploying loan and equity capital to organisations using income-generating models to solve some of the most entrenched problems in Bristol. The fund will be focused on four impact areas: food poverty, economic inclusion, community initiatives, and environmental transformation—supporting Bristol to transition to a carbon-neutral, zero-waste city with improved green infrastructure and a restored natural environment.

Tribe Impact Capital

Tribe Impact Capital are a team of asset managers working exclusively with clients who want to be more thoughtful about the impact their money can make on our world, to ensure it is a better place for both present and future generations. Their goal is to deliver long-term positive impact in support of the UN Sustainable Development Goals. Tribe go beyond negative screening and ESG assessment to look at the real effects of each investment within a portfolio—focusing not just on how well managed the business is, but also on the outcome of its products and services.



Public health

Why should public health funders care about climate change?

Both the causes and consequences of climate change will have a profound impact on the health of our nation and the wider global community, affecting the ability of the state to maintain current levels of health and wellbeing in the UK. Incidences of flooding and extreme temperatures are increasingly common, adding pressures to an already strained public health system.

According to a recent European-wide study, Britain will be the most heavily affected region by floods in Europe, with an 11% increase in flooding every decade.² Dr. Peter Hotez, President Obama's Science Envoy, told us that further warming could lead to an increased prevalence in waterborne and tropical diseases in the UK—from cholera to malaria.

Health issues associated with air pollution—including heart disease, Alzheimer's, depression and respiratory issues—have soared in recent years. According to Public Health England, "poor air quality is the largest environmental risk to public health in the UK".³ This year, the Royal College of Physicians' special adviser on air quality stated that "the annual mortality burden in

the UK from exposure to outdoor air pollution is equivalent to around 40,000 deaths".⁴ Air pollution levels in London are currently at illegal levels in many locations. A set of new air pollution sensors placed across the capital, as part of the Greater London Authority-backed Breathe London project, detected illegal levels of nitrogen dioxide at 40% of the sites this year, disproportionately affecting low-income communities.⁵

9-year-old Ella Kissi-Debrah's death in 2013, a result of acute respiratory failure and asthma, is subject to a new inquest at the High Court to determine whether it was caused by the unlawful levels of pollution detected close to her home in Lewisham, London.⁶

"A set of new air pollution sensors placed across the capital detected illegal levels of nitrogen dioxide at 40% of the sites this year, disproportionately affecting low-income communities"

Meanwhile, new research has begun to explore the effects of climate degradation on mental health. Up to half of those who survive severe weather events, such as floods and hurricanes, experience negative mental health outcomes.⁷ This impact is most notable amongst young people.⁸ The 2019 Good Childhood Report by the Children's Society highlighted that 76% of young people are worried about the future of the environment—second only to their concerns about crime.⁹ The future of the environment and the worry

it provokes in young people dwarfed other issues such as information being shared online without their consent, homelessness, and Brexit.

It is not only the case that climate change is a threat to health, but also that the health sector is a contributor to climate change. In fact, its global climate footprint is equivalent to 4.4% of global net emissions. If the health sector were a country, it would be the fifth-largest emitter on the planet.¹⁰

“

“As an urban health foundation, we have not actively sought to get into funding climate change. However, it overlaps directly with our work to tackle health inequalities and so has increasingly become part of our thinking.

For example, in our work on childhood obesity, fewer cars on streets means more opportunities for children to run and play. Broken food systems are arguably a result of the same behaviours that are contributing to climate change. And in our work on air pollution, the health and environmental impacts are largely stemming from the same sources.

For us, health outcomes will remain our key reason for acting to improve air quality. But we see reducing greenhouse gas emissions as an important additional benefit.”

—Kieron Boyle, CEO, Guy's & St Thomas' Charity



Cycling solutions for all

By Tiffany Lam, Consultant, New Economics Foundation

Cycling has been rising on the urban policy agenda worldwide, as a strategy to address the climate emergency, mitigate public health crises and reclaim public space. But to increase cycling, racial disparities in city cycling must be addressed. Take London for instance—despite increased investments and growth in cycling, 85% of cyclists are white.

Diversity and inclusion must foreground cycling projects. Yet research, action and funding in this area are lacking. This is a call to action for funders to dedicate resources to build the evidence base, convene stakeholders and decision-makers, and drive action to support more inclusive cycling.

Cycling policy and advocacy largely focus on material infrastructure—more quality cycle lanes—which is necessary, but not sufficient. Too often, new cycling infrastructure serves and aims to attract affluent white populations for whom cycling is a lifestyle choice, while ignoring people for whom cycling is a necessity due to spatial isolation and socioeconomic deprivation. Material infrastructure alone will not de-stigmatise cycling and shift cultural norms and attitudes. Social infrastructure—targeted outreach, education and encouragement—is necessary to make diverse communities feel that cycling is for “people like us”.

Funders need to convene stakeholders and mobilise resources to enhance diversity and inclusion in city cycling. After all, this is not just about cycling. This is about democratising the right to safe, sustainable mobility. An effective response to the climate emergency depends on it.



“

“Savitri is a family charity—endowed by my parents in 2001. In 2018, we had a revelation as a family that although the work we were doing removing cataracts from the rural poor in Bihar was of great value, the moment had come to put our resources and energies into the environment.

We’ve seen first-hand the effect of climate change on the agricultural sector in India; from extreme droughts affecting farmers in Chhattisgarh, to serious flooding restricting travel between eye camps in Bihar. Increasingly, it is the poorest, most rural communities who are impacted the most.

We joined the Environmental Funders Network (EFN) and attended our first retreat which opened the doors to a world of information, resources and relationships that have informed our donations over the last 18 months. Most importantly we had the epiphany that it was an “all hands on deck” moment, that we have precious little time left and a woefully underfunded sector.”

—Devika Waney Mokhtarzadeh, Trustee, Savitri



“

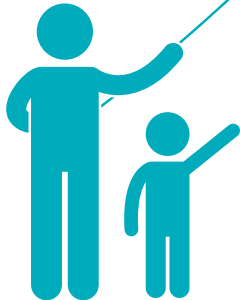
“When I was pregnant with my first child, the midwife told me I had high levels of carbon monoxide in my lungs. She said it was likely because I cycled in London. This opened my eyes to the invisible dangers of air pollution. If I smoke cigarettes when I’m pregnant I can just give up, but what can I do about the air I breathe being polluted by other people? When [my son] was born I realised how bad the air was because I spent hours walking around South London with him in his pushchair when he was often at the height of car and lorry exhausts. That’s when I decided I had to do something.”

—Celeste Hicks, Volunteer, Mums for Lungs



What could public health funders do?

- 1. Finance staff to coordinate cross-sectoral campaigns to combat air pollution, and fund the communities most affected to ensure their voices are heard in the charity sector, in the courts and by policy makers.
- 2. Declare climate change as a public health emergency and take that message into meetings with government and policy makers.
- 3. Invest in carbon-efficient public transport alternatives and fund organisations that are supporting better walking and cycling infrastructure.
- 4. Tell your investment managers that financing companies contributing to global emissions and particularly those negatively impacting urban air quality is not something you wish to continue doing.
- 5. Look into the co-benefits of investing in or granting to community transport, car-pooling or cycling infrastructure. This could also extend to investing in developing eco-efficient buildings, as building emissions are significant contributors to air pollution.
- 6. Provide grant funding to support the health sector globally to decarbonise, guided by ‘climate-smart’ principles aligned to Health Care Without Harm’s sustainable best practice when funding any health infrastructure and public health projects.¹¹



Communities in focus

Why should funders supporting marginalised or traditionally more vulnerable communities care about climate change?

Older people

By 2050, over 25% of the UK population will be aged 65 or older.¹² The evidence indicates that older people will be hit harder by the kind of extreme weather events made more likely due to climate change. The 2003 European heat wave resulted in the death of around 15,000 people in France,¹³ of which over 95% were elderly.¹⁴ At the time of Hurricane Katrina, just 15% of the population of New Orleans were over 60, yet they accounted for 70% of those who were killed.¹⁵

Older people experience increased vulnerability to climate change due to a range of factors,¹⁶ including:

- Reduced mobility (for example, thousands of older people were left stranded in blocks of flats after the lifts failed in New York City following Hurricane Sandy);
- Poor temperature regulation, which can be exacerbated by the use of medications (for example, to reduce blood pressure) and makes coping with extreme heat and cold more difficult;
- Social isolation, as older people often live alone and lack access to networks and resources that are vital in emergency situations;
- Impaired cognitive function, which can make it harder to figure out the best response to extreme weather events;
- Increased susceptibility to infectious diseases, which are predicted to increase in prevalence due to climate change.

Although there is evidence that older generations are less worried about climate change than younger generations, they are a critical ally in the response to climate change—evidence suggests that older people who are engaged in climate issues are highly likely to take further action as a result of their concern.¹⁷ Indeed, many older citizens are keen volunteers and would wish to take a more active role in the fight against climate change for the benefit of future generations, if opportunities to do so were more accessible to them.

“At the time of Hurricane Katrina, just 15% of the population of New Orleans were over 60, yet they accounted for 70% of those who were killed”



“

“There are many older environmental activists, like us, who have been aware of and deeply concerned by the idea of climate and ecological collapse since the early 1970s but have never been able to achieve much in the way of policy change. From all the evidence available, we are accelerating towards catastrophe as if humanity is collectively on a suicide mission. As part of the Extinction Rebellion we deliberately chose a course of action on Waterloo Bridge on 16 April [2019] which led to our arrest. As retirees with pensions we feel we should act on behalf of the school children and younger adults who feel as strongly as we do but cannot afford to be arrested and acquire police records.”

—Mark & Rosie Haworth-Booth, 75 & 73, North Devon



“

“I was born in Amity Hall, St James Parish, Jamaica on the 28th of August 1930 and arrived in Middleton, Manchester in July 1961. On arriving in Middleton I saw chimneys on top of houses and factories producing dark clouds of black coal. I didn't know what they were, but my brother who was already living in England explained that “yuh use dem to keep yuh warm”. I was shocked. In Jamaica I never saw pollution like this.

I lie awake at night feeling overwhelmed about the state of the world and my own survival on a pension that I can barely live off. It is so hard to know that climate change is going on and that you can't do anything about it. With my reliance on my pension I don't have any space to even help. Do you know how many times I have paid my bills and have nothing left? I haven't heard of ways to help stop climate change that don't need me to have money or a good education.

Whilst I wasn't educated, I grew up knowing not to be wasteful. Things are different in England, people don't like to reuse things. In Jamaica, you would use things again and again until you couldn't use them anymore. People say that this is recycling but for us this is life and is what we have always done to survive.

Because of my age and ill-health, I feel like I can't do much to help but I ask the next generation to do what they can to stop climate change so my grandchildren and their children can live a good life. I hope they are able to help stop climate change whilst still making a good living. I came here so they could all have a better life.”

—Glenford Manderson, 89, Manchester



Disabled people

Urgency must not justify discrimination

By Becca Bunce, human rights activist

Disabled people tend to be an afterthought in the climate movement. The specific vulnerability of disabled people to extreme weather is often overlooked in adaptation policy. The links between disability and additional climate vulnerabilities, such as social isolation and precarious housing, are also not properly acknowledged or accounted for.

What is even less discussed is that these ‘vulnerabilities’ are neither innate nor inevitable—rather, they are a direct consequence of those with power-making decisions about how we structure our societies.

The plastic straw ban has demonstrated how environmental policy can create vulnerability. Currently there is no suitable, sterile alternative to the plastic straw to meet all disabled people's needs. The ban is creating barriers to basic human needs—food and water. Lack of access to plastic straws risks those who need them breathing in fluid or injuring themselves with unsuitable alternatives.

For disabled climate activists, there is further risk of harm. In 2018, Lancashire Police admitted to passing on details and video footage of disabled anti-fracking protesters to the Department of Work and Pensions (DWP). This led to DWP reviewing disability benefit entitlement for some protestors. If the climate movement is to be an inclusive force for change, it must be non-negotiable to ensure that disabled people can safely engage with it.

Urgent action is required on climate change. However, urgency must not justify discrimination. ‘Urgency’ is being used by some as an excuse to argue outcome matters more than process. Yet ignoring process for the benefit of outcome is what caused the climate crisis in the first place. Environmental destruction has been justified in exchange for advancing technology and economic growth.

This crisis requires us to be more sustainable. This includes our activism.

For actions to be sustainable they need to be inclusive. Otherwise, we risk creating systems that do not function for everyone or actively discriminate. It is urgent that we change how foundations take action; that we notice who is in the room when decisions are made and challenge power dynamics playing out. Sustainable, inclusive decision-making today is critical to ensure that ‘urgency’ doesn't justify creating unsustainable, exclusionary futures.

Housing and homelessness

Last year, Shelter reported that 320,000 people in the UK are now homeless—equating to one in every 200 Britons.¹⁸ This figure is rising year on year. Though the majority of homeless people in the UK are still managing to find a roof over their heads through temporary accommodation such as hostels and bed and breakfasts, the rise in homelessness over the last few years is putting

increasing strain on already overstretched ‘emergency’ services. Today, there are an estimated 4,750 people sleeping on our streets on any given night.¹⁹

Rough sleepers and those in overcrowded, temporary and insecure hostel accommodation are on the frontline of climate change as the frequency and severity of extreme weather events increases.



Emergency provisions are not adequate

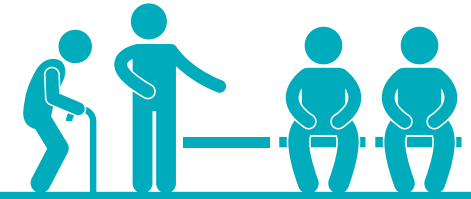
By Darren Murinas, Chief Executive of Expert Citizens

There is no legal obligation at the national level to provide emergency housing for rough sleepers during extreme weather events—a protocol known as SWEP (Severe Weather Emergency Provision). Though most councils across the country do offer some form of SWEP provision, the protections offered vary widely from council to council, and most SWEP protocols are limited to extreme cold weather, usually defined as a temperature below 0 degrees lasting for more than 3 days.

If temperatures only dip below 0 for one day, or if the temperature is above 0 but coupled with severe rain and winds, SWEP may not be triggered—even though severe wind and rain can actually be even more dangerous and life-threatening for rough sleepers. Similarly, local SWEP provisions generally don’t cover extreme heat—even though having to be outside all day and night during a heatwave is also dangerous, and can lead to heatstroke and severe sunburn. Rough sleepers experiencing heat stroke may also not be able to get medical assistance easily, as their lack of fixed address is frequently a barrier in allowing them to register with a GP practice.

Extreme weather events put rough sleepers in real danger and we are currently not well equipped as a society to protect those who need our help.

Foundations should employ their financial and convening power to push forward solutions that have been tried and tested and are known to have the biggest transformative impact for rough sleepers and those in precarious housing situations. We know that ‘Housing First’ policies are effective, yet we have not gone beyond the pilot stage in implementing these programmes nationwide. Additionally, foundations could push for changes in the law to improve SWEP provisions at the national and local level—though this can be challenging for councils who have experienced a decade of funding cuts and are struggling to provide basic services to their residents.



What could funders supporting marginalised or traditionally more vulnerable communities do?

1. Fund access to, and improvement of, the emergency provision services available in your area to cope with the adverse effects of extreme weather events. Whatever defences we are able to put up, extreme weather events such as floods, storms and heatwaves will always constitute a risk to local communities, and especially for vulnerable and marginalised people within those communities.
2. If you believe in investing in the agency of marginalised community groups such as the elderly, homeless people and disabled people, then supporting those groups to engage in the climate movement and ensuring their voices are heard in national climate policy-making is critical in securing their rights and building their power.
3. Invest in the provision of accessible finance for socially marginalised groups. Adapting to a changing climate requires investment at the national, regional, local and individual level, and those traditionally excluded from mainstream financial products and services will find it most difficult to adapt.
4. Fund community cohesion projects. These will bring co-benefits for social isolation as well as climate resilience—strong local communities are key to both fighting and adapting to climate change.
5. If you are a foundation committed to supporting the rights of marginalised groups, consider whether your investment portfolios reflect that mission. Carbon-intensive companies are turning a profit by making the world a more dangerous, precarious place for all of us, but for marginalised groups in particular.
6. Support the deployment of green infrastructure to prepare our communities to cope with the increased prevalence of all forms of extreme weather events. Floodplain restoration, wetland restoration, permeable pavements, green roofs and streets, and the restoration of urban tree canopies, all provide increased defences against extreme weather conditions (and have already proven very successful against flooding in parts of the UK),²⁰ all the while improving living conditions for local communities. Investing in natural carbon sinks, such as peatlands and forests, is also a direct investment in the prevention of future homelessness.

Young people

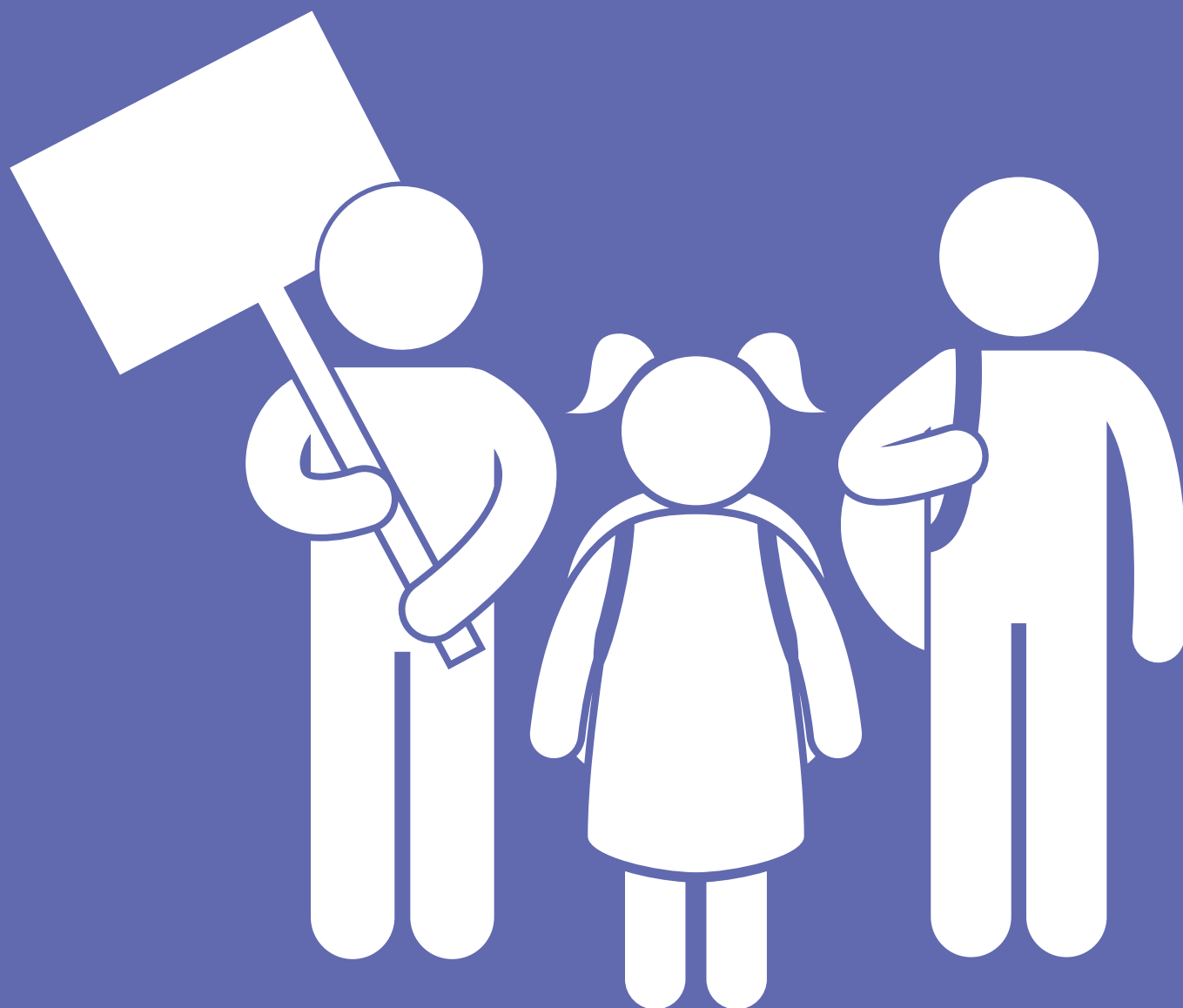
Why should youth funders care about climate change?

Many young people in the UK are starting adult life with the odds already stacked against them. According to the Children's Society, there are more than 4 million children in the UK experiencing poverty, equating to almost a third of all children.²¹ Climate change adds another significant layer of doubt to the futures of young people in the UK. The extreme weather events and food shortages that will be caused by climate change will affect disadvantaged communities—and their young people—the most.

A person born in 2019 will be 31 by 2050—by this date, the world will likely be experiencing extreme sea-level events, previously expected to occur once per century, on a yearly basis.²² However, society and policy makers are reluctant to platform the voices of young people as stakeholders in the future. Youth climate action has done much to wake the world up to the realities of climate change yet in 2018, the group organising the climate strikes in the UK had a budget of just a few thousand pounds. Funders spoke a lot about them but failed to actively support them.

Without actively planning for or developing a strategy which takes into consideration how climate change will affect youth, the sector is effectively ignoring the real-life trajectories of huge swathes of young people. This risks substantially weakening the impact of any other grant-making work trusts might undertake, and feeds a narrative of intergenerational injustice in which adults are not taking responsibility for the crisis awaiting our younger generations.

“In 2018, the group organising the climate strikes in the UK had a budget of just a few thousand pounds. Funders spoke a lot about them but failed to actively support them”





The Youth Climate Movement

By Jake Woodier, campaigner and organiser, UK Student Climate Network

Young people have a rich history of engaging with and embracing progressive causes to create societal change. Often driving campaigns and movements to move faster and push for more radical demands, youth participation injects a novel and specific type of energy not found elsewhere. When young people move into and lead in the way we've witnessed with the youth climate movement over the previous year, the entire political landscape shifts in a dramatic way that opens opportunities and drastically changes what is thought to be possible.

In February 2019, the UK was rocked by the unprecedented emergence of a widespread and diverse youth climate justice movement that has made momentous achievements in the public and political sphere. The climate crisis has been catapulted to unseen heights of public concern; youth activists convened the first cross-party climate roundtable talks since the Climate Change Act 2008; they have achieved the first parliamentary debate on the subject in over 2 years and parliament has declared a climate emergency. Furthermore, the youth strike movement has pushed forward the case for a transformative Green New Deal and created the political space for this ambitious solution to the climate crisis to exist and proliferate within social and political spaces.

The aforementioned achievements were made possible by an extensive, passionate and energetic grassroots movement. Supported by just one official full-time staff member, an unofficial NGO staff secondment and with little resource, this movement is demonstrable of what is achievable. However, the scale and ambition of change required to tackle the climate crisis requires a wholesale shift in the way in which the funding sector operates. There's an urgent need for trusts and foundations to operate with speed to resource movements. Furthermore, recognising the current application process, reporting requirements and administration associated with grant giving and receiving is far too burdensome and impractical for grassroots movements dedicated to creating change.

“

“As a funder that is exclusively concerned with the next generation, we feel this is not an issue we can ignore. It is particularly notable that children and young people are showing some of the boldest and most visible leadership for change. We are committed to supporting positive transitions to adulthood, and enabling young people to engage and lead on a vital issue in their future feels a critical part of this. Making a small grant to the UK Students Climate Network to boost their organising infrastructure was an amazing opportunity for us to support young people to lead the change they want to see in the world. We are now keen to learn more about how we can enable more young people to be heard where it matters, and to help them work alongside experts and decision makers to improve how decisions are made, with relation to climate and the environment and beyond.”

—Jo Wells, Director, Blagrave Trust

“Adults are treating climate change like it's not important—it's a crisis and we need to do something about it!”

—Ted, 9, Woodcraft Folk Pioneer

“We wish we could go on strike, but parents say no because school is more important.”

—Jakub, 11, Woodcraft Folk Pioneer

“The news didn't cover the Amazon fires. It was burning for 3 weeks before we heard about it!”

—Chaya, 11, Woodcraft Folk Pioneer

“It's so inspiring to see the younger generations making a stand, but also deeply concerning that it's got this far without those in power listening! Woodcraft Folk gives young people a voice.”

—Susan, Woodcraft Folk Volunteer





What could youth funders do?

1. Support and empower young people to be as politically active and organised as possible. Recognise that young people around the world are leading change on this issue—seek them out and send them unrestricted funding as soon as possible.
2. Fund work to convene and connect youth groups and youth activists globally to build their joint power.
3. Support the voices of young people in the climate action, policy, and intergovernmental space by paying for transport costs to climate events and conferences they may have previously been excluded from. They should have a seat at every table and at present they do not.
4. Provide information on all your investments transparently to every grantee, so that no young person or youth group unwittingly accepts a grant from an organisation whose investment policies they oppose as destructive to their futures.
5. Move your investments into industries that bring the promise of well-paid, secure green jobs in the future—the ‘just transition’ to a low carbon society presents a wealth of high-quality employment opportunities for today’s youth.
6. Spend down. A child born today is facing the possibility of an inhospitable planet by the time they reach middle age if our current emissions trajectory is maintained. Under these circumstances, it may be time to rethink the idea of legacy.



Heritage

The chapter was written in partnership with Julie's Bicycle, an international non-profit leading cultural action on climate change

Why should heritage funders care about climate change?

In 2014, the International Union for the Conservation of Nature declared climate change to be the most serious potential threat to natural World Heritage sites worldwide.²³

Sea-level rise and the increase in extreme weather events is already putting assets under strain, and these impacts are set to worsen over the coming decades. A 2011 English Heritage study found that 60% of its coastal properties were at risk of flooding, and 48% at risk of erosion.²⁴ Further impacts include insect infestation, fungal growth and changes to soil chemistry that erode archaeological sites.²⁵ Coastal erosion has already taken a chunk of “one of the finest coastal heritage sites in North Wales”, the prehistoric fort of Dinas Dinlle.²⁶

In 2017, Hurricane Maria devastated Puerto Rico—killing around 3,000 people. Further to the devastation on human life, there were huge losses to Puerto Rican culture. The Museum of Puerto Rican Art's sculpture garden lost 90% of its collection, and many significant institutions were damaged.²⁷

Furthermore, intangible cultural heritage—traditional techniques, rituals, and cultural memory—is at risk due to climate-change-induced relocation and degradation of communities, buildings and landscapes. The heritage sector is however in a prime position of significant influence to respond to these threats through:

- **Conservation management:**

Restoration of traditional landscapes such as peatland, wetlands, and ancient woodlands can lock up carbon from the atmosphere. Furthermore, sensitive retrofitting of historic buildings for energy efficiency and the repair of older properties prevents loss of embodied energy, landfill from demolition, and the high carbon impacts of replacement development.

- **Education and outreach:**

Cultural heritage can be a source of creativity and inspiration for action. Evidence of past adaptation to change is important not only for explaining and communicating the changes and challenges we face, but also in adapting to them.

- **Knowledge and research:**

Indigenous communities have unique and valuable local knowledge, traditions and cultural practices that can contribute to effective management strategies in the face of rapid environmental change.

**“Climate change is the greatest threat to the places that we care for.”
—The National Trust**





Volunteers will feel the impacts

By Megan Tanner, General Manager, Ham House Portfolio, National Trust

As the manager of a heritage site it is clear to me that climate change is impacting on numerous aspects involving the care of our spaces, our visitors and our staff and volunteers. I am increasingly concerned that our sector does not consistently factor in climate change when considering long-term plans around our business, our people and our conservation.

The physical impact is already seen in numerous ways. Ham House is a 17th century Thames-side villa and historic garden, and flooding appears to be more unpredictable and happening more often. Pests and diseases are more prevalent and have a far more serious impact. We are also facing increasingly difficult curatorial decisions as we need to acknowledge that planting that may have existed for centuries may not be able to thrive in the future.

My biggest concern though is for our visitors and my teams on the ground.

There are areas in the house where there is little air flow and temperatures quickly reach in excess of 30 degrees. My volunteer base is majority elderly and retired individuals who are passionately dedicated to supporting Ham House. I have a duty of care towards them as well as visitors and staff. During the summer of 2019 when temperatures exceeded 38 degrees, I took the decision to close the property. Cattle are not legally transported over 30 degrees, yet I had 80 year-old individuals standing in rooms that were almost 40 degrees.

The heritage sector relies on volunteers who spend a great deal of time in buildings not designed for the kinds of extremes of temperatures we are already experiencing. As we face increased closures due to high winds, snow and heat, I question our current resilience to protect our people, our business and our heritage assets.



“Cloudesley is an Islington-based charitable trust which makes health grants and funds the maintenance of local churches. To mark its 500th anniversary, Cloudesley wanted to acknowledge its legacy and also look to the future. In partnership with others, Cloudesley developed a Sustainable Church Buildings Project which offered eligible churches an environmental audit, grant funding to take forward recommendations, and associated learning events with technical specialists. We recruited a Project Manager to provide additional resource and use her knowledge and passion for tackling climate change to support the churches. The combination of environmental audits, dedicated funding streams, technical expertise, education and convening resulted in a successful environmental programme from which all the eligible churches benefitted.”

—Melanie Griffiths, Director, Cloudesley



HERITAGE DECLARES
Climate & Ecological Emergency

Heritage Declares a Climate and Ecological Emergency

By Heritage Declares

Heritage Declares was set up in the summer of 2019 by a group of heritage professionals who have come together to press for bold action on the climate emergency. It is motivated by the strong belief that the heritage sector should recognise the emergency, use its unique leverage to raise public awareness, and act proactively to develop appropriate climate mitigation and adaptation responses, rather than having them imposed onto it by others.

We have written a Climate and Ecological Emergency Declaration, in line with those produced by other sectors, and would urge trusts and foundations that give to heritage projects to sign it, and ask their grantees to sign up to it as well.

Heritage Declares believes in the intrinsic sustainability and adaptability of the historic environment and is determined to communicate this both within the sector and to a broader audience. Capitalising on the embodied carbon of existing buildings is just one of the ways in which the historic environment can play its part in reducing emissions. The wider heritage sector—including tourism, archaeology and intangible heritage—has a role to play through direct action, raising awareness and influencing others.

What could heritage funders do?

1. Support heritage sites to maximise their potential as carbon sinks by funding them to restore their natural heritage assets (such as peatland and forests) that help remove carbon from the atmosphere.
2. Create funding streams to support heritage properties in mitigating environmental damage through investing in low-carbon technologies and practices, such as the installation of solar panels or insulation.
3. Provide financial support and influence to help heritage managers make the case for necessary adaptations to the regulators—conditions for listed buildings may need to be changed to help avoid and adapt to climate change.
4. Fund the protection and preservation of those communities that live balanced lives alongside nature.
5. Ask your investment managers whether your portfolio supports sustainable enterprise in communities living in and around rainforests and other critical natural environments, or rather, the exploitation of those environments. Consider divesting from the latter and investing in the former.



Equality and social justice

Why should social justice funders care about climate change?

Climate inequality mirrors, replicates and exacerbates wealth inequality. While the poorest half of the world's population are responsible for only 10% of global carbon emissions, the richest 10% of the world produce nearly half of all emissions.²⁸

This disparity cannot be attributed only to the differences between developed and developing countries' emissions. An individual living in France, in the third decile of income earners, is estimated to produce around 6.5 tonnes of carbon annually, a figure close to the global average. In contrast, a person belonging to the top 1% of the wealthiest individuals in the United States produces, on average, over 318 tonnes of carbon annually.²⁹

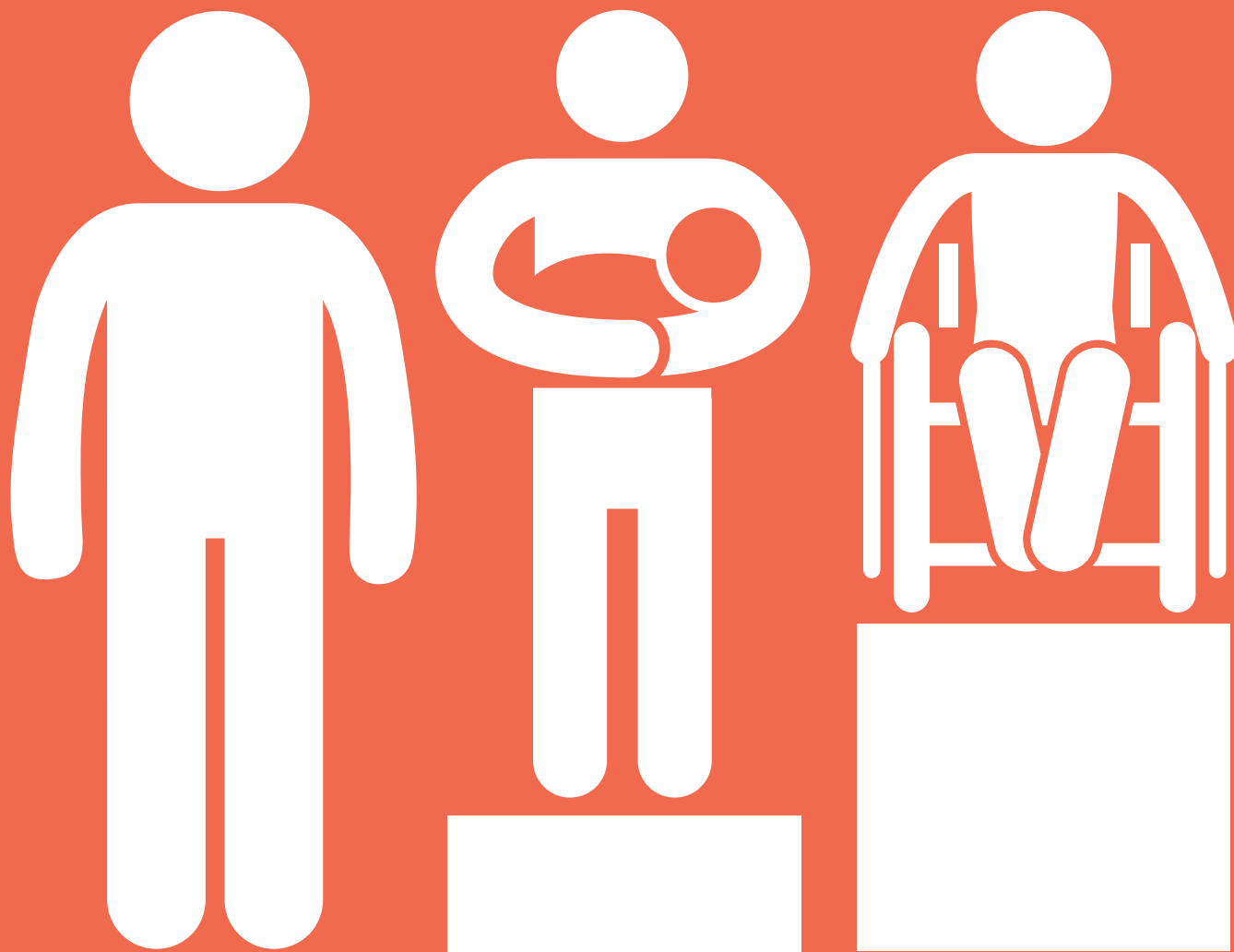
Climate inequality exists both across countries—in that less developed nations are at greatest risk, yet have emitted the fewest greenhouse gases—and also within countries, in that the poorest in each society will face the worst adverse impacts of climate change while having contributed the least to the problem.³⁰

In the UK, the richest 10% of individuals produce at least five times the consumption-based emissions of the bottom 50%.³¹

Today, the wealthiest 1% of adults worldwide owns almost half of the world's wealth—while the bottom 50% of adults collectively own less than 1% of total wealth.³² In the UK, the wealthiest 1% of individuals own nearly a quarter of the country's wealth, while the bottom 50% own less than 5%.³³

Economic inequality is not just a social justice issue—it is also harming the environment. In affluent countries with the greatest levels of economic inequality, such as the USA, Canada and Britain, both the richest 10% and the bottom half of the population pollute more than their counterparts in more equitable affluent countries, such as South Korea, Japan, France and Germany.³⁴ On average, more unequal affluent countries tend to produce more waste, consume more meat, waste more water, and emit more carbon dioxide than their more equitable affluent counterparts.³⁵

“On average, more unequal affluent countries tend to produce more waste, consume more meat, waste more water, and emit more carbon dioxide than their more equitable affluent counterparts”





Why 'climate justice'?

By Nonhlanhla Makuyana, Co-Director of Decolonising Economics

Environmental degradation isn't a single issue, it's a problem that intersects with many of the injustices that exist in the world. For years, climate organisers have treated climate breakdown as an issue that exists separate from the structural oppression of marginalised people. In doing so, campaigns have ignored the historic, underlying and well-crafted systems at play—systems designed to uphold the subjugation of black and brown bodies.

When we contextualise climate breakdown, we are taken back to histories of colonialism and empire. Moments in history, defined by the hungry and violent search for resources, land, labour and lives. Moments in history defined by growth at all costs, growth at the expense of black and brown bodies. These moments defined by the intentional silencing and removal of the stories and knowledge of Indigenous populations, pushed aside to make way for profit at all costs. When we contextualise climate breakdown, we understand that this is not a single moment in history but the continuation of the legacies of colonialism.

This is where climate justice is important in the fight to stop climate breakdown. Climate justice organising highlights the historic marginalisation of people of the global south in favour of infinite growth. It emphasises what we stand to lose unless we challenge white supremacy at its core by standing in genuine solidarity with those who face the brunt of the climate breakdown yet contribute the least to it. More importantly, climate justice asks you to critically reflect and act on the ways that you benefit from these systems and your role in the continuation of the violence faced by marginalised people.



"In the face of a once-in-a-planet threat, Lankelly Chase is scoping a major commitment to tackling climate change. We are convinced that many of the systems creating multiple disadvantages are also those fuelling the climate catastrophe. And it is becoming increasingly clear that without urgent and radical change, the social problems we face will soon be of a wholly different order of magnitude. Arguably, the climate obligations on a foundation such as ours are pretty compelling given that our endowment has grown (in part) thanks to investments in carbon intensive industries, and given that those with our degree of freedom to act should be using that freedom."

—Julian Corner, CEO, Lankelly Chase



Supporting the just transition to a low-carbon economy

By Mathew Lawrence, Director of Common Wealth

The climate crisis and the distribution of its effects are laced through and driven by wider inequalities in the global economy. High levels of natural resource consumption, driven by wealthier nations and individuals, are dangerously outstripping the capacity of the Earth to regenerate itself, using materials and producing carbon faster than they can be regenerated or absorbed. In other words, wealth inequality drives unequal patterns of consumption that are at the heart of climate breakdown.

The choice then is clear: we must rapidly and equitably transform the institutions, infrastructure, and ways of life of the carbon age in little more than a decade, or face deepening climate apartheid.

This will require a step-change in investment decision-making, including:

- A rapid and smooth exit from carbon-based assets
- A step-change in investment in renewables
- The financing of green infrastructure including 'greened' housing, transport, and energy systems
- Support for a new pattern of land use and agriculture
- Support for alternative, democratic, and place-based forms of enterprise

As funders, this requires a two-fold approach, supporting systemic interventions that can both reduce inequality and drive decarbonisation:

- Expanding public affluence in place of private and unequal levels of consumption, including housing, transport, energy, and leisure
- New research into a 21st century commons to scale democratic stewardship of shared assets over extractive economics
- New models of ownership and governance of the company to make them purposeful and sustainable institutions
- The scaling of democratic and community-owned forms of decarbonised infrastructures and institutions

What could social justice funders do?

1. Fund re-distributive mechanisms and policies known to simultaneously redistribute wealth in favour of the worst-off and reduce greenhouse gas emissions:
 - a) At the international level, clean technology transfer from developed to developing countries boosts developing countries' economies while allowing them to 'skip' the destructive high-carbon stage of development richer countries have already undergone.
 - b) At the national level, this would include measures such as tackling fuel poverty by improving home insulation, which would simultaneously reduce the 'poverty premium' of higher energy bills for poorer households, whilst also cutting greenhouse gas emissions.
2. Fund research into novel policies and mechanisms that serve a dual redistributive-decarbonising purpose, and support advocacy to lift such policies to the top of the political agenda.
3. Fund research into and implementation of place-based approaches to the just transition—there is currently very sparse analysis into what a just transition will entail in different parts of the country. What would a just transition look like in Swindon, where the car manufacturing industry currently employs many local workers? What would it look like in Port Talbot, where it is presently steelworks that ensure the livelihood of the community? These questions are still to be answered, and smaller community foundations have a key role to play in helping map-out the just transition to a low-carbon economy at this vital, localised scale.
4. Screen new green investments for those that are extracting resources from the Global South and bringing profits to Western investors—focus on those companies where value is made and kept locally.
5. Recruit advisors, consultants, team members and trustees who are from, and can help foundations understand, the communities disproportionately affected or exploited by environmental destruction or by exclusionary climate adaptation and mitigation policies.



References

1. Amundi Asset Management, 2019, *ESG screening positively impacts portfolio performance, new research from Amundi finds*: www.int.media.amundi.com/news/esg-screening-positively-impacts-portfolio-performance-new-research-from-amundi-finds-f2c6-b6afb.html
2. Günter Blösch et al., 2019, *Changing climate both increases and decreases European river floods*, *Nature*, pp. 108-111
3. Public Health England, 2018, *Health matters: air pollution*: www.gov.uk/government/publications/health-matters-air-pollution/health-matters-air-pollution
4. Professor Stephen Holgate, 2019, *The harm caused by air pollution is huge, we need to act now*, The Royal College of Physicians: www.rcplondon.ac.uk/news/harm-caused-air-pollution-huge-we-need-act-now
5. Thomas Barrett, 2019, *40% of Breathe London sensors detecting illegal levels of NO2*, Air Quality News: <http://www.airqualitynews.com/2019/07/24/40-of-breathe-london-sensors-detecting-illegal-levels-of-no2/>
6. Ella Kissi-Debrah, 2019, *New inquest into girl's 'pollution' death*, BBC News: www.bbc.co.uk/news/uk-england-london-48132490
7. Lawrence A Palinkas and Marleen Wong, 2020, *Global climate change and mental health*, *Current Opinion in Psychology*, Volume 32, Pp. 12-1
8. Jim Leffman, 2019, *Air pollution is making children feel suicidal*, The London Economic: www.thelondoneconomic.com/news/air-pollution-is-making-children-feel-suicidal/25/09/
9. The Children's Society, 2019, *The Children's Society's household survey, Wave 18, 10 to 17 year olds*, Great Britain
10. Health Care Without Harm and Arup, 2019, *Health Care's Climate Footprint, How the Health Sector Contributes to the Global Climate Crisis and Opportunities for Action*, Climate-smart health care series, Green Paper No. 1, p. 4
11. Health Care Without Harm, 2019, *Mission and Goals*: www.noharm-europe.org/content/europe/mission-and-goals
12. Office for National Statistics, 2019, Overview of the UK population, p. 12
13. Public Health England, 2019, *Heatwave plan for England, Protecting health and reducing harm from severe heat and heatwaves*, p.6
14. Gary Haq, SEI, 2016, *Win-win' strategies to help older people face climate change*, Stockholm Environment Institute: www.sei.org/perspectives/older-people-climate-change/
15. Paula Span, 2012, *Old, Frail and in Harm's Way*, The New York Times: www.newoldage.blogs.nytimes.com/2012/11/05/old-frail-and-in-harms-way/
16. David Filiberto et al., 2009, *Older People and Climate Change: Vulnerability and Health Effects*, Winter 2009-2010 edition, Generations
17. Matthew Ballew et al., 2019, *Do younger generations care more about global warming?* Yale Program on Climate Change Communication: www.climatecommunication.yale.edu/publications/do-younger-generations-care-more-about-global-warming/
18. Shelter, 2018, *320,000 people in Britain are now homeless, as numbers keep rising*: www.england.shelter.org.uk/media/press_releases/articles/320,000_people_in_britain_are_now_homeless,_as_numbers_keep_rising
19. Shelter, *Our Strategy*: www.england.shelter.org.uk/what_we_do/our_strategy
20. Geoffrey Lean, 2016, *UK flooding: How a Yorkshire town worked with nature to stay dry*, The Independent: www.independent.co.uk/news/uk/home-news/uk-flooding-how-a-yorkshire-flood-blackspot-worked-with-nature-to-stay-dry-a6794286.html
21. The Children's Society, *What is child poverty?* www.childrenssociety.org.uk/what-we-do/our-work/ending-child-poverty/what-is-child-poverty
22. IPCC, 2019, *Special Report on the Ocean and Cryosphere in a Changing Climate (SROCC)*, 51st Session of the IPCC
23. Osipova, E. Et al., 2014, *IUCN World Heritage Outlook 2014: A Conservation Assessment of all Natural World Heritage Sites*
24. Hunt, A, 2011, *English Heritage Coastal Estate Risk Management*. Research Department Report Series, no 68-2011
25. Historic England, *What Are the Effects of Climate Change on the Historic Environment?* www.historicengland.org.uk/research/current/threats/heritage-climate-change-environment/what-effects/
26. Royal Commission on the Ancient and Historical Monuments of Wales, *CHERISH starts exciting new study of the Dinas Dinlle Coastal Fort in Gwynedd*: www.rcahmw.gov.uk/cherish-starts-exciting-new-study-of-the-dinas-dinlle-coastal-fort-in-gwynedd/
27. Caroline Haskins, 2019, *Climate Change Could Erase Human History, These Archivists Are Trying to Save It*, Vice: www.vice.com/en_us/article/j5yg3g/climate-change-could-erase-human-history-these-archivists-are-trying-to-save-it
28. Oxfam International, 2015, *World's richest 10% produce half of carbon emissions while poorest 3.5 billion account for just a tenth*: www.oxfam.org/en/pressroom/pressreleases/2015-12-02/worlds-richest-10-produce-half-carbon-emissions-while-poorest-35
29. Lucas Chancel et al., 2015, *Carbon and inequality: from Kyoto to Paris Trends in the global inequality of carbon emissions (1998-2013) & prospects for an equitable adaptation fund*
30. S. Nazrul Islam and John Winkel, 2017, *Climate Change and Social Inequality*, DESA Working Paper No. 152, United Nations Department of Economic and Social Affairs
31. Oxfam Media Briefing, 2015, *Extreme Carbon Inequality, Why the Paris climate deal must put the poorest, lowest emitting and most vulnerable people first*, p.1: www.cdn.oxfam.org/s3fs-public/file_attachments/mb-extreme-carbon-inequality-021215-en.pdf
32. Credit Suisse, 2018, *The world and its wealth, The Global Wealth Report*: www.credit-suisse.com/about-us/en/reports-research/global-wealth-report.html
33. Rupert Neate, 2017, *Richest 1% own half the world's wealth, study finds*, The Guardian: www.theguardian.com/inequality/2017/nov/14/worlds-richest-wealth-credit-suisse
34. Danny Dorling, 2017, *Is inequality bad for the environment?* The Guardian: www.theguardian.com/inequality/2017/jul/04/is-inequality-bad-for-the-environment
35. Ibid.



