The

PUBLIC HEALTH CASE

for a



ABOUT THE REPORT

This report was written by the Medact Climate & Health Research Group.

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PERSPECTIVES ON THE PUBLIC HEALTH CASE FOR A GREEN NEW DEAL



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This report shines a much needed light on the impacts of the healthcare, inequality and climate crises we are experiencing. We know that a justice centred Green New Deal can transform society and our world for the better and we must all be the revolution we need to take us there. We are so excited to support this launch of the movement of Health for a Green New Deal!



- Hannah Martin and Fatima Ibrahim Co Executive Directors, Green New Deal UK



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Framing our environmental predicament as, in part, a public health crisis helps people understand the stakes--especially now, with the example of covid so prominent in our minds. This report does a real service.

- Bill McKibben Co-founder and Senior Advisor, 350.org

Photo by: Nancie Battaglia



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As healthcare practitioners we see daily that many of the causes of ill health are rooted in social and environmental conditions. Tackling the climate and ecological crisis in a way that leaves no-one behind is a huge opportunity to create a future which supports the health and wellbeing of all of us. The Green New Deal explains the policy steps needed to practically achieve this exciting and positive vision.'

- Dr Aarti Bansal GP, Founder of Greener Practice



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Policy makers can no longer point to a lack of evidence on the links between health and wealth, ill health and losses to the economy, and the influence of commercial determinants of health. A world driven by wealth and corporate profits has failed to respond adequately to a global pandemic, and the same applies many times over to the climate crisis. A solid evidence base drawn from public health, epidemiology, economics, and political science already exists on how to move forward and instead create a world focused on healthier lives and a healthier planet instead of corporate profits. A green new deal is the only option.

- Kamran Abbasi Executive Editor, BMJ



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Two major problems facing the global community are inequalities and the climate crisis. They are linked. The climate crisis, like most external threats, is likely to exaggerate inequalities in health and well-being. We must ensure that dealing with one of these threats does not make the other worse. My December 2020 report was entitled Build Back Fairer. Its thrust was that we should not be seeking to restore the status quo that pertained before the pandemic. Emerging from the pandemic must be taken as an opportunity to make the major social changes required to deal with the climate crisis and inequalities in health. The present report is an important contribution to the discussion that has to take place."

- Professor Sir Michael Marmot Director, Institute of Health Equity

FOREWORD

Preventive medicine ... is merely another way of saying health by collective action. - Aneurin Bevan In Place of Fear theare stand

The title of Nye Bevan's influential mid-century essay collection, In Place of Fear, sums up the principles underlying the foundation of the welfare state in the UK. Most often it is invoked with reference to the NHS's founding, but in his writing Bevan makes clear that the state's contribution to health and wellbeing goes well beyond this: "the victories won by preventive medicine are much the most important for mankind."

Bevan's choice of title evokes the "freedom from fear" pivotal to F. D. Roosevelt's famous "Four Freedoms" speech. The universal guarantee of these four freedoms – from fear, from want, of speech and of worship – was Roosevelt's parsing of the primary goal of the original 'New Deal'. This transformative programme helped lift the United States out of the Great Depression in the 1930s and represented a public health intervention of a scale rarely seen – despite never actually including healthcare reform. Instead, it sought to guarantee freedom from want and fear through employment, agricultural policy, social security and environmental conservation.

Today, we face many of the same issues but they are joined by new climate-related threats: extreme temperatures, food insecurity, forced migration, pandemics and water shortages. Moreover, the climate emergency stresses the injustices already inherent to our current global economic system. Despite consuming the least of our planet's finite

environmental resources, it is the poorest and most marginalised communities worldwide that are disproportionately affected by the direct and indirect health effects of climate change. Indeed, it is global north countries like the UK and USA which owe significant climate debts to the global south.

The Green New Deal is a call to transform our economy to secure freedom from fear of these intertwined health, economic and environmental injustices. In place of fear, we can create an economy based entirely on clean energy, where the perverse economic incentives supporting fossil fuel dependence, extractivism and over-production are replaced by financial policies that serve the needs of people and the planet. Such an economy would secure health by reversing land degradation and biodiversity loss, while future-proofing employment through green jobs.

The health sector has a key role to play in this transition and this briefing supports the Health for a Green New Deal campaign. Health workers have a unique voice in identifying the health benefits of this economic transformation. As major employers, consumers and landowners, health institutions can model the kinds of change needed across all our institutions. Given the present environmental and health emergency, and the vast health benefits of a decarbonised, sustainable economy, a Green New Deal – health by collective action – is preventive medicine.

Medact Climate & Health Research Group

April 2021

EXECUTIVE SUMMARY

Our economy is making us sick. The paradigms and commercial practices at the heart of the economy harm our physical and mental health, increase inequality and produce the emissions and pollution that are root causes of the climate crisis. This climate crisis – by increasing the intensity of extreme weather events, exacerbating food insecurity and altering patterns of infectious disease – represents the biggest public health threat to the world today. Marginalised groups who have contributed least to the problem are already bearing the brunt of the costs.

The Green New Deal provides a radical but realistic policy platform to tackle social and environmental injustice simultaneously. The Green New Deal UK campaign calls for rapid decarbonisation by 2030 while emphasising the need to transform the financial system to serve the needs of people and planet, enhance economic democracy and ensure a just transition that creates secure, well-paid, green jobs for workers. Given the inextricable links between our economy, our environment and our health, and the public health imperative to address upstream determinants of morbidity and mortality, a Green New Deal would also constitute a public health new deal.

Slobal justice is at the heart of the Green New Deal's vision for delivering systemic change. Countries in the global north cannot implement national Green New Deals through the continued exploitation of countries in the global south. They must instead repay the "climate debt" owed to the global south through climate reparations that take account of colonialism and industrialisation. A Green New Deal must also embrace anti-extractivism and migrant solidarity. While we 'think global' in this way, we can simultaneously 'act local', increasing pressure on national governments in the process. Approaches like community wealth building, fostering community ownership and progressive procurement by so-called 'anchor institutions' can contribute to ensuring that the economic transition necessary to halt the climate crisis also fosters social justice.

The public health case for a Green New Deal in the UK centres on five key policy demands:

1. DECARBONISING THE ENERGY SYSTEM

The problem:

Energy consumption is the primary source of carbon emissions and energy production remains overwhelmingly dependent on fossil fuels, which poses a range of threats to human health including via air pollution and climate change. Our current energy system is inequitable and unsustainable from social justice, environmental and public health perspectives.

The solution:

A Green New Deal demands a radical transition in our energy systems. Achieving zero carbon emissions by 2030 is both necessary and feasible; moreover, its costs would be easily outweighed by associated health savings. This transformation also provides an opportunity to democratise the energy economy that must be seized; in contrast to the highly centralised energy infrastructure of fossil fuel-based generation, renewable energy infrastructure is readily distributed and small-scale projects are economically viable. Meanwhile, the government must also end subsidies to fossil fuel industries and regulate their political influence.

2. GREEN JOBS FOR ALL

The problem:

Arguments in favour of carbon-intensive economic growth rely heavily on a single common denominator: jobs. With unemployment reaching new heights in the wake of the COVID-19 pandemic, schemes that create jobs may be enticing regardless of their carbon intensity, but there are strong public health as well as climate-related arguments for transforming the labour market instead. Even before the pandemic, both unemployment and poor quality, precarious or low paid work – more likely to be done by women, people of colour, working class people, disabled people and young people – were damaging the health of many UK workers.

The solution:

Climate justice, social justice and public health all call for a post-pandemic Green New Deal recovery that prioritises the health of people and planet by focusing on green jobs. The government must establish a national green jobs scheme that provides well-paid, secure work and helps those in high-carbon industries retrain as part of a just transition to a zero-carbon economy. Research shows that with adequate government investment, as many as 1.2 million green jobs could be created within a two-year period.

3. Healthy air

The problem:

Air pollution, intrinsically linked to the climate crisis, is the largest environmental risk to public health. Its impacts follow a strong social gradient and disproportionately affect marginalised groups. In addition to direct impacts on health such as evidence linking exposure to respiratory and cardiovascular disease, unhealthy air also exacts a heavy price in wider socioeconomic terms, including through health expenditure and lost work days.

The solution:

To address this public health emergency, a Green New Deal would focus to a considerable extent on transforming transport – the largest greenhouse gas emitting sector of the UK economy. Traffic reduction in urban areas is a clear priority, as is reducing reliance on privately-owned vehicles by increasing access to public transport. If these interventions are to simultaneously address social inequities, transport systems must be brought back into public ownership and greater passenger involvement in decision-making must be facilitated. The government must enshrine in law a commitment to limit air pollution to World Health Organisation standards and do more to encourage active travel such as walking and cycling.

4. QUALITY HOMES FOR ALL

The problem:

The housing system in the UK is broken and unsustainable in terms of social justice, climate justice and public health. Due in no small part to the financialisaton of the housing market, millions of households are on social housing waiting lists or struggling to meet unaffordable rents in the private sector. Not only do the poor living conditions and overcrowding associated with the housing crisis harm our health, our homes – some of the worst insulated in Europe and overwhelmingly not meeting energy efficiency targets – are also profoundly unfit to meet the challenge of climate change. This status quo in turn compounds fuel poverty and the health consequences of living in cold and damp conditions.

The solution:

A Green New Deal would address key climate, social justice and health impacts of the housing crisis simultaneously. A key priority must be a nationwide retrofitting scheme for existing housing stock which would create hundreds of thousands of new jobs and pay for itself in just over seven years. In the interests of social justice, policies such as rent controls, giving tenants greater rights and ensuring landlords keep homes to healthy, liveable standards are also needed. Any new homes must be sustainable and climate resilient: zero-carbon, energy and water efficient.

5. FOOD AND LAND JUSTICE

The problem:

Globally, agriculture is the biggest driver of land-use change and deforestation and food accounts for a quarter of global greenhouse gas emissions. Industrial agriculture also drives land grabs in the global south. Meanwhile, our food systems are not currently serving human health, with billions malnourished worldwide despite one third of food being thrown away and suboptimal diets responsible for millions of deaths each year. Farmland covers 70% of the UK yet we import more than half our food from abroad. Access to food and land are both patently unjust both in the UK and worldwide.

The solution:

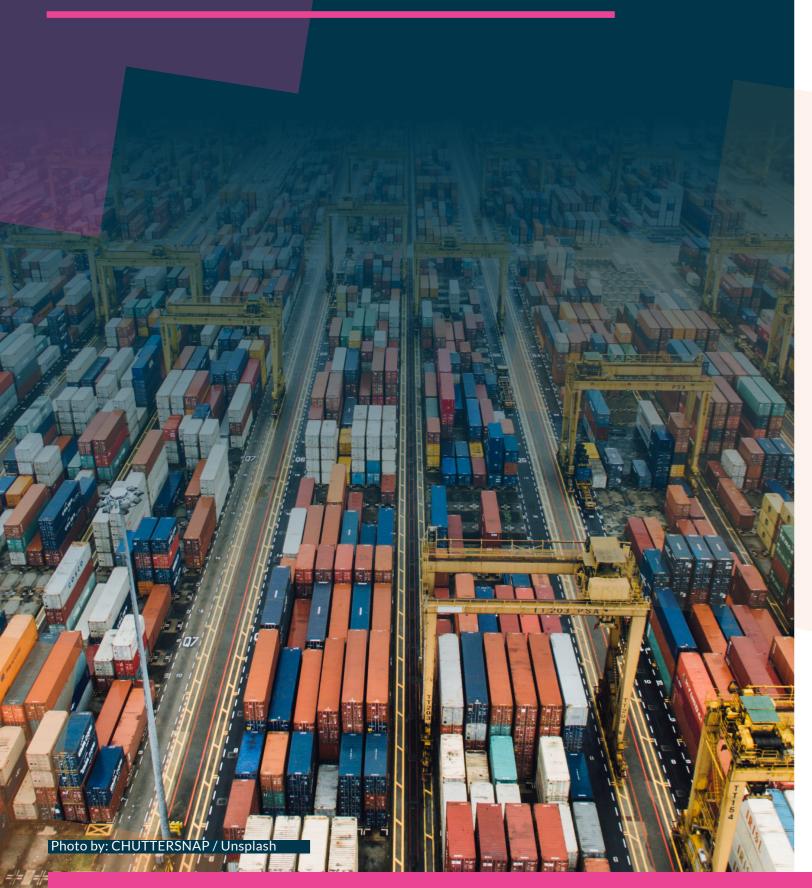
A Green New Deal requires shifting our relationship with land and agriculture to help restore biodiversity, reduce soil and water degradation, cut carbon emissions, and sustainably produce healthy food to meet human needs. For example, agricultural subsidy systems should support farming methods that preserve ecosystems and provide nutritious food. These changes could dramatically reduce agricultural greenhouse gas emissions, directly benefit our health and have long term economic benefits. A Green New Deal in the UK also means working for food and land justice at the local level through projects that take into account issues like racism, poverty and the prevalence of fast-food outlets in more deprived areas.

HEALTH FOR A GREEN NEW DEAL: TAKING ACTION

The health community has a key role to play in bringing about a transformative Green New Deal that prioritises the health and wellbeing of people and planet. Health workers and students can take action as individuals, or in their workplaces and other institutions, to help build the Health for a Green New Deal movement in a variety of ways:

- Set up a local Health for a Green New Deal hub to coordinate collective action and help build pressure for key policy changes at local and national levels.
- Lobby your authority to establish a local Green New Deal.
- Organise for your NHS trust to use its role as an anchor institution to take action.
- Pass a motion in your trade union in support of the Green New Deal.
- Advocate for your royal college to endorse the Green New Deal.

INTRODUCTION



Our economic practices are the root cause of the climate crisis, social inequality, and many major physical and mental health threats.

Indeed, the climate crisis represents the biggest public health threat to the world today.

We need to rapidly decarbonise our economy by 2030 in order to limit temperature rises to within 1.5°C. To do this, we need a transformative Green New Deal: a radical but realistic policy platform to tackle social, environmental injustice simultaneously. This report makes the public health case for a Green New Deal.

It argues that we urgently need local and national action, crucially informed by global justice and social justice principles. This means that Green New Deal solutions cannot entail the continued exploitation of the global south by countries in the global north, whose colonial and industrial histories call for 'climate reparations'. It means the transformation of the UK economy to serve the needs of people and planet must be a just transition that creates secure, well-paid green jobs for workers and enhances economic democracy through approaches like community wealth building.

Since systemic problems require systemic solutions, the report identifies the root causes of interconnected climate, social and health

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The Health for a Green New Deal campaign shows that the health sector can play a critical role in the wider movement to build unstoppable social pressure for the Green New Deal we need.

injustice, and outlines the case for five key policy demands: decarbonising the UK economy; creating green jobs for all; combating air pollution to ensure healthy air; providing quality homes for all; and delivering food and land justice.

The Health for a Green New Deal campaign shows that the health sector can play a critical role in the wider movement to build unstoppable social pressure for the Green New Deal we need. Those working in health are uniquely placed to draw attention to the health impacts of social and environmental injustice, and to explain how a Green New Deal can greatly benefit public health. Likewise, as major public bodies that sit at the heart of our communities, health institutions can model the kind of changes needed across society to ensure that our transition to a zero-carbon society supports the health and wellbeing of all.

OUR ECONOMY IS MAKING PEOPLE AND PLANET SICK

In the summer of 2020, as most of the world was emerging from the first wave of COVID-19, out-of-control forest fires raged from California to Siberia, spreading as far north as the Arctic circle. Underlying both phenomena was economic activity.



While it is commonplace to refer to the present era as the "anthropocene" highlighting the impact of human activity on the earth's climate and ecosystems, environmental historian Jason Moore suggests the term "capitalocene" instead.¹ This highlights the fact that the root cause of the climate crisis is emissions and pollution produced by private commercial interests. Indeed, just 100 companies were responsible for over 70% of all global emissions since 1988.²

The growth paradigm at the heart of the economy harms our physical and mental health directly. In the UK for example, even before the COVID-19 pandemic, the health of the general population had declined for the first time in 100 years³ and incidences of "deaths of despair" were becoming more frequent, ⁴⁻⁶ fuelled by a perfect storm of precarious, low-paid work and deep cuts to public services. Such economic policies, which make our society increasingly unequal and benefit only the very wealthiest, are widespread across the globe.

Less visible, but just as devastating, are the indirect health impacts of climate and environmental destruction wrought by economic activity. For example, extreme weather events, leading to catastrophes like forest fires, are not an aberration but part of a pattern: studies show them becoming more frequent and intense every year. Their consequences include heat-related mortalities, drownings, and respiratory and cardiovascular illnesses. 7-9 Similarly, the disruption of ecosystems affects the availability of certain foods by degrading the fertility of land, exacerbating the nutrition insecurity faced by over 800 million people worldwide because of vast wealth inequalities. 10

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Both the climate crisis and the public health crisis are unmistakably rooted in an economic system that exploits human and natural resources in pursuit of profit and exponential growth.

The climate crisis also interacts with patterns of infectious disease. As temperatures change and precipitation patterns shift, the reach of vectors such as mosquitoes is greatly expanded. In this way, we can think of diseases such as malaria and dengue fever as being "climate sensitive". 11,12 Meanwhile, several scholars have highlighted the links between commercially-driven destruction of natural habitats and the increased potential for new communicable diseases and pandemics like COVID-19. As deforestation – often for agribusiness or mining – forces wild animals into greater proximity with human population centres, "zoonotic overspill", in which a virus jumps from one species to another, becomes more likely. 13

Thus both the climate crisis and the public health crisis are unmistakably rooted in an economic system that exploits human and natural resources in pursuit of profit and exponential growth. It is the marginalised who suffer the most as a result of these intertwined crises – but they are sustainable for no one. The urgent need to reorient our economy to foster the health of people and planet underpins calls for a "Green New Deal".

THE GREEN NEW DEAL

Inspired by the Roosevelt-era 'New Deal' that helped lift the United States out of the Great Depression in the 1930s, the term 'Green New Deal' gained traction following the financial crisis in the late-2000s. In 2008, the UK-based Green New Deal Group and the New Economics Foundation published a report proposing a comprehensive economic recovery program that would tackle social and environmental injustice simultaneously. More recently, Green New Deal calls have become associated with progressive figures in the US such as Alexandria Ocasio Cortez, Bernie Sanders and the grassroots Sunrise Movement, in turn inspiring similar movements for a Green New Deal elsewhere in the world.



The 'Global Green New Deal' calls for a transformation that keeps temperature rises to within 1.5°C, rather than 2°C as the latter would see 61 million additional people experience severe drought as a result of a lack of access to water. 16

Different conceptualisations of the Green New Deal exist within different contexts, and vary in scope and ambition. For example, the Latin American 'Eco-Social Pact of the South' has a strong focus on debt cancellation, healthy economies, care networks and food sovereignty. The 'European Green Deal' places limited emphasis on global justice and aims to achieve zero emissions by 2050. By comparison, Green New Deal movements in the UK and the US are much more ambitious, calling for rapid decarbonisation by 2030.

'Just transition'

a framework to describe a socially just shift towards a sustainable economy and society in which workers rights and livelihoods are secured.

The Green New Deal UK campaign has five overarching aims, shown in the box. They emphasise the need for global justice, economic democracy and a 'just transition' to a decarbonised economy – one that is just because it creates secure, well-paid green jobs for workers currently employed in carbon-intensive industries. Research suggests support for such policies even in some surprising quarters: one study found that four out of five UK oil and gas industry workers would consider retraining.¹⁹

Five goals of Green New Deal UK²⁰

1. Decarbonise the UK:

End our dependence on dirty fuels and build an economy based on 100% clean energy.

2. Create secure jobs:

Create millions of new well-paying, secure and future-proof jobs, and retrain workers currently employed in carbon-intensive industries as part of a just transition.

3. Transform the economy:

Rewire the financial system to serve the needs of people and the planet, and so that our government is accountable to people, not corporations.

4. Protect and restore:

Protect and restore natural habitats, and guarantee universal access to clean air and water, green spaces and a healthy environment.

5. Promote global justice:

Take responsibility for and act on the UK's historic and ongoing role in exploiting communities and resources across the world.

THE GREEN NEW DEAL AND PUBLIC HEALTH

Communities around the world are already dealing with the effects of the climate crisis and emerging evidence suggests that emissions could be the cause of around 10 million air pollution-related deaths each year.²¹ In 2009, the first UCL-Lancet Commission on Climate Change and Health concluded that climate change is the biggest public health threat of the twenty-first century.²² In 2015, the commission argued that climate change is likely to undo any progress made on health at a global level.²³ It is communities least responsible for climate change that are already feeling the disproportionate impacts, which is why Michael Marmot argued in his 2020 report that we must bring the agendas of climate change and health equity together.³

Dr Abdul El-Sayed, epidemiologist and former health director in the US city of Detroit, was among the first prominent public health figures to support the Green New Deal. He argued that a public health approach calls for us to address the root causes and upstream determinants of health, including climate crisis and socioeconomic inequality, and noted that "by eliminating the local consequences of fossil fuel emissions, and lifting whole communities out of poverty, the Green New Deal will also be a Public Health New Deal".²⁴

Given the inextricable links between our economy, our environment and our health, an understanding of public health that does not recognise the need for far-reaching systemic change will be severely limited in its ability to effectively address many

of the key determinants of ill-health. Likewise, a Green New Deal minus the structural understanding of a public health lens would be severely limited in its scope for societal transformation. As certain failed government responses to COVID-19 have made clear, public health and the economy cannot be pitted against each other but must instead be addressed holistically.²⁵ This is why the Health for a Green New Deal campaign is so important to the wider movement.

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By eliminating the local consequences of fossil fuel emissions, and lifting whole communities out of poverty, the Green New Deal will also be a Public Health New Deal.

- Dr Abdul El-Sayed

Moreover, as Guppi Bola observes, initiatives to tackle health inequalities have "too often brushed over systems of power". 26 Vast disparities in both the impacts of climate crisis and health outcomes – perpetuated by forms of oppression based on race, class, gender, and other factors – remind us of the need for an intersectional approach at all times. To address public health at the global level, the Green New Deal must also be internationalist as the next section explains.

THINK GLOBAL, ACT LOCAL

Think Global Act Local Lobby your authority to establish a Affirm the need for climate reparalocal Green New Deal with a focus on tions that arise from the UKs legacy community wealth building and centering of colonialism and slavery local marginalised communities Organise for your NHS trust to use Make rich countries take on their "fair their role as an anchor institution to share" of emissions reductions, based take action to address local health on "the polluter pays" principle and environmental injustices. Ensure that green energy in the global Advocate for your royal college to endorse systemic solutions and a just North does not rely on the continued exploitation of countries in the transition that doesn't sacrifice the global south through extractivism wellbeing of people in the global South Pass a motion in your trade union in Support migrant justice and support of an internationalist Green uphold the principle of a "right New Deal that affirms solidarity with to move and a right to stay" migrants and the right to move

Centering Global Justice

Discussions about the potential for the Green New Deal to help tackle social injustice and the climate crisis have almost exclusively focused on policy making at the national level in wealthier nations of the global north. Consequently, Harpreet Kaur Paul and Dalia Gebrial caution that we risk creating a new era of "green colonialism". A Green New Deal that centres global justice must embrace climate reparations, anti-extractivism and migrant solidarity.

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The concept of climate reparations arises from the legacies of colonialism and slavery. It recognises that countries in the global north, as former colonial powers and current economic hegemonies, historically obtained and continue to build their wealth through exploiting the resources of the global south.²⁸ For instance, imperial Britain extracted the equivalent of £33 trillion from India during its colonial rule in appropriated resources,²⁹ which facilitated industrialisation in the UK. As a result, different countries bear differing levels of responsibility for climate change.³ The global north produced 92% of all excess global carbon dioxide emissions, for example, and as such owes a "climate debt" to the global south.³¹

Rich countries must therefore take on their 'fair share' of emissions reductions, based on the 'polluter pays' principle. For instance, according to the Climate Equity Reference Project, the UK must reduce its emissions by at least 200% by 2030 compared to 1990 levels – significantly more than current targets. 32 Global north countries like the UK also have "a historic duty to fund mitigation and adaptation efforts globally". 33 This is especially true because countries in the less-industrialised global south, despite being least responsible for the climate crisis, are disproportionately affected by its health impacts, with their adaptive capacity hindered by debt and trade agreements that are themselves legacies of colonialism. 33,34

Though a Green New Deal implemented in a country such as the UK might eliminate domestic reliance on fossil fuels, sourcing the materials to produce 'green tech', including renewable energy infrastructure, can itself lead to exploitation and environmental damage. Countries in the global

north cannot implement national Green New Deals through the continued exploitation of countries in the global south. Extractivism - the practice of extracting minerals and other resources from the earth on a mass-scale for profit - has consistently involved a "deadly mix of corporate profiteering and state backed repression". 35 The systematic violence of Shell and the Nigerian state against the Ogoni people is a well-known example, but it is not an isolated case.³⁵ To facilitate transnational corporations' pursuit of natural gas, the Cabo Delgado region of Mozambique - an area reeling from recent climatic shocks like Cyclone Kenneth and massive flooding - has also seen gross human rights abuses, including the displacement of over 550 families. 36 Yet extractivism has been resisted in the global south for centuries, including by indigenous communities, not least because of its health impacts. In 2010, the People's Conference on Climate and the Rights of Mother called for a "post-extractive transition" that holds polluting industries and states accountable and builds another kind of economy, with the health of communities and ecosystems at its heart.³⁷ It is these visions that must be at the heart of a Green New Deal.

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Countries in the global north cannot implement national Green New Deals through the continued exploitation of countries in the global south.

Finally, as Minnie Rahman of the Joint Council for the Welfare of Immigrants points out, "you can't have climate justice without migrant justice".³⁸ Last year, almost 25 million people across more than 140 countries were displaced from their home due to almost 1,900 disasters, including floods, storms and droughts,³⁹ the majority within global south countries that contribute less than 4% towards global greenhouse gas emissions.⁴⁰ It is estimated that up to 1 billion people could be displaced by climate change by 2050,⁴¹ both through extreme climate-related events and because the climate crisis exacerbates inequalities.⁴² A Green New Deal must therefore uphold the principle of 'a right to move and a right to stay' and is intrinsically linked to migrant solidarity movements against detention and deportation.

Pushing for Change Locally

With this global justice perspective integrated into our vision for a Green New Deal, we can act locally to push for change. While a truly transformative Green New Deal can only be fully implemented by a national government willing to go beyond empty rhetoric and commit to ambitious targets, local and regional actors can make changes now, and in the process build pressure on central government to take decisive action.⁴³ Moreover, focusing on the most affected people and areas in the climate crisis means not only highlighting communities in the global south bearing the brunt of climate change, but also communities in the UK and other global north countries persistently marginalised in debates about 'greening' the economy. Local action for a Green New Deal must always bear in mind, too, that the impacts of the climate crisis are gendered, and actively resist perpetuating hierarchies of race, class, sexuality and disability.44

The Five Key Principles of Community Wealth Building:

Plural ownership of the economy

Making financial power work for local places

Fair employment and just labour markets

Progressive procurement of goods & services

Socially productive use of land and property

One approach that can help ensure that the economic transition necessary to halt the climate crisis also fosters social justice is community wealth building. 45 As the box explains, the model - pioneered in the UK by Preston City Council⁴⁶ encourages use of local supply chains, fair wages and good working conditions to keep the benefits of investment within the local area, and more radical iterations involve collective community ownership. Community wealth building should be central to local Green New Deals, not least because local procurement also reduces carbon footprints. Grassroots pressure in the UK has led to hundreds of local authorities declaring a "climate emergency",46 but only a few have so far implemented significant changes using this model. Notable examples include Nottingham City Council⁴⁷ and North Ayrshire

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Council⁴⁸, both of which have set out plans to introduce Green New Deal inspired initiatives to invest in green jobs and infrastructure locally.

Like local authorities, NHS organisations are key "anchor institutions": large, public sector organisations with sizeable assets that can be used to support local community wealth building through procurement and spending power, called such because they are unlikely to relocate and are effectively "anchored" in their surrounding community. Bodies such as NHS trusts and Clinical Commissioning Groups have huge influence beyond hospital walls on their local economies and communities. The Health Foundation has discussed the way health bodies can serve as effective anchor insti-

tutions: it notes the examples of Sussex Community NHS Foundation Trust, which embedded sustainability criteria into its tendering process as part of its Care Without Carbon strategy to reduce emissions, and Epsom and St Helier University Hospitals NHS Trust, which improved public transport links to the hospital with a new "on-demand" bus service for both staff and the local community, in collaboration with the local authority.⁴⁹

Actions suggested at the end of this report outline the many ways the health community can act locally for a Green New Deal underpinned by global justice principles. The next section explains five key demands central to the national Green New Deal call in the UK.



HEALTH FOR A GREEN NEW DEAL: POLICY DEMANDS



In each section, we first explore the problem: the root causes of how and why our economic system is producing health, climate and social injustice in this policy area. Then we set out the solution: how a Green New Deal would transform the health of people and the planet.

We chiefly focus on the UK, for example in the sections on jobs and homes, but the same issues are often present elsewhere. Other demands, such as food and land justice, are explained in terms of their global geographical scope, but solutions remain predominantly focused on national and local level action as part of a transformative Green New Deal.

Policy	Problem	Solution
DECARBONISE ENERGY	Energy production is dependent on fossil fuels, which are damaging our health through air pollution and climate change.	Transition the UK's energy systems reaching zero carbon emissions by 2030 to save lives and democratise energy production in the process.
GREEN JOBS FOR ALL	'We need carbon-intensive growth for jobs' is a myth. Unemployment is high, and too much work is precarious and low-paid, which is damaging people's health.	Create a national green jobs scheme that provides decent work and helps the transition to a zero-carbon economy, creating 1.2 million green jobs in 2 years.
HEALTHY AIR	Air pollution is inextricable from the climate crisis, and it is the largest environmental risk to public health	Transform transport, massively increasing access to publicly owned, green mass transit and slashing carbon emissions.
QUALITY HOMES FOR ALL	Housing is unaffordable, poor-quality, and damaging health and the climate through overcrowding and inefficient heating.	Upgrade current housing and build more green homes to create jobs, improve health, reduce carbon emissions and guarantee everyone's right to housing.
FOOD AND LAND JUSTICE	Agriculture accounts for a quarter of global green-house gas emissions, while people do not have access to adequate food and land use.	Support farming methods that preserve ecosystems and provide nutritious food, cutting emissions and guaranteeing people's right to healthy and culturally appropriate food.

DECARBONISING THE ENERGY SYSTEM

The problem

Our current energy system is inequitable and unsustainable. From social justice, environmental and public health perspectives, change is urgently required.

The average UK citizen consumes energy at 2.5 times the level the planet can support,⁵² while around 770 million people worldwide still lack access to electricity⁵³ and 3 billion lack access to clean fuels for cooking.⁵⁴ On a domestic scale, poorer and racially minoritised communities are more likely to live within a three-mile radius of fossil fuel infrastructure,⁵⁵ though with the introduction of new developments such as hydraulic fracturing ('fracking') they have not been the recipients of associated economic benefits.⁵⁶

Energy consumption is the primary source of carbon emissions. As one review put it, "consumers, rather than people, cause climate change"57 specifically, the most affluent sectors of society; Oxfam's Extreme Carbon Inequality data shows that 1% of the global population is responsible for approximately half of global emissions.⁵⁸ (As we discuss in 'Quality homes for all' (pp. 31-32), many others experience fuel poverty.) Over a quarter of global carbon dioxide emissions come from electricity generation alone⁵⁹ and energy production remains overwhelmingly dependent on fossil fuels, with coal, oil and gas still providing over 80% of global total energy supply in 2018 – a fall of barely 5% since 1971. The UK government provides large subsidies to the fossil fuel industry through selective tax breaks - more than any other European nation, according to one recent European Commission report. 61 The North Sea oil and gas industry alone received £1.1 billion in subsidies from 2018-2020.

There is a complex relationship between human health and energy consumption: measures of wellbeing such as life expectancy and infant mortality initially rise rapidly with increasing levels of consumption, but soon plateau; 62 health costs, meanwhile, continue to rise, but their burden increasingly falls on already-marginalised communities and future generations rather than the consumer. 63

Even setting aside climate change, our dependence on fossil fuels unequivocally threatens human health: damage accrues throughout the life cycle of fossil fuel extraction, transport, refining and combustion. Coal and oil extraction are amongst the highest-risk occupations for their workforce - the 1% of the global workforce in the mining industry accounts for over 8% of all fatal occupational injuries. 64 Extraction also degrades local environmental support systems, contaminating food sources and water supplies;65 communities living in coal extraction regions experience higher rates of cardiopulmonary disease, hypertension and chronic kidney disease. 66 Oil extraction and transport poses the additional risk of catastrophic oil spills, with short- and long-term implications particularly for the mental health of affected communities, as well as the health and economic effects of local environmental degradation.⁶⁷ The health effects of fossil fuel combustion - most strikingly through air pollution, as 'Healthy air' (pp. 28-30) covers in more detail - add to the public health threat posed by fossil fuel dependence.

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A Green New Deal demands a radical transition in our systems of energy production and consumption, to create just and healthy access to energy for all while stopping damaging overproduction, minimising waste and ensuring rapid decarbonisation of our energy economy.

The solution

A Green New Deal demands a radical transition in our systems of energy production and consumption, to create just and healthy access to energy for all, while stopping damaging overproduction, minimising waste and ensuring rapid decarbonisation of our energy economy.

Numerous modelling studies have demonstrated the feasibility of achieving zero-carbon energy systems within the UK. 68,69 A transition to a zero-carbon energy economy must be achieved by 2030 - not 2050 - in order to limit the worst effects of climate change. Expansions in wind (especially offshore), solar (residential and solar plant-based) and to a lesser extent tidal power could replace fossil-fuel powered energy generation, using domestic and industrial battery storage within smart grids, combined with the natural batteries in hydroelectric power, to match supply with demand. Capital costs of new infrastructure would be more than outweighed by long-term reductions in energy unit prices and associated health savings: according to one model, such decarbonisation could prevent nearly 14,000 air pollution-related deaths annually in the UK.69

Accelerating this transition as part of a Green New Deal requires ending the vast subsidisation of polluting industries that masks their true economic and social costs. Without subsidies, and with the social costs and health-related externalities of fossil fuels incorporated, the supposed economic arguments in favour of continued fossil fuel dependence would melt away. That these policies and arguments persist is in part due to the ongoing political influence of the fossil fuel industry; this influence should be limited

and regulated with an approach similar to that taken to the tobacco industry, excluding it from political presence in energy policy negotiations.⁷⁰

The transition to renewable energy must be rooted in global justice. As 'Think global, act local' (pp. 17-20) explained, the UK owes a climate debt to the global south. Therefore, the UK must help to fund the costs of new infrastructure enabling countries in the global south to decarbonise their economies at a rate proportional to their own responsibility for emissions. Additionally, a Green New Deal provides an opportunity to restructure and democratise the energy economy and the principles of community wealth building, which would bring significant social benefits, must be central.

In contrast to the highly centralised energy infrastructure of fossil fuel-based generation, renewable energy infrastructure is readily distributed and small-scale projects are economically viable. Renewable energy cooperatives and other forms of community ownership are associated with increased acceptance of infrastructure, greater economic benefits for the host communities and increased community cohesion.⁷¹ The expansion of renewable energy infrastructure could also bring new work opportunities to post-industrial communities - the Institute for Public Policy Research estimates that a renewable energy economy could bring 46,000 jobs to the north of England by 2030.72 The next section expands on how decarbonising the UK energy economy in a Green New Deal would not only have social, environmental and public health benefits, but could also deliver new green jobs.

GREEN JOBS FOR ALL

The problem

Despite failing to meet even fairly modest emission reduction targets, the UK government is currently supporting new high-carbon infrastructure that would greatly undermine the fight against climate change. Whether it's a new deep-coal mine in Cumbria, a new gas-fired power station in Yorkshire or plans to expand any one of the UK's 40 airports, the arguments in favour of carbon-intensive economic growth rely heavily on a single common denominator: jobs.

In the wake of COVID-19, the rate of unemployment in the UK is expected to reach at least 7.5%, equating to over 2.6 million people out of work. Given this, schemes that create jobs may be enticing regardless of their carbon intensity.⁷⁴ However, as the costs of the climate crisis become clearer, concerns around an emissions-heavy recovery have galvanised calls for a green jobs-led pandemic recovery instead.

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The arguments in favour of carbon-intensive economic growth rely heavily on a single common denominator: jobs.

The need for this just transition is underlined by public health rationale: even before the pandemic, many people were suffering negative health impacts due to the state of the UK labour market. Studies have shown that unemployment consistently leads people to rate their own health as poorer, exhibiting higher rates of unhealthy coping mechanisms such

as smoking and excessive alcohol consumption.⁷⁵ Epidemiological studies have highlighted increased mortality rates, linked to both physical and mental health, among people experiencing long-term unemployment; rates of conditions such as cardiovascular disease and severe depression, sometimes resulting in suicide, are higher.⁷⁶ Beyond the direct impacts of unemployment, the family of an out-of-work parent or carer may also be adversely affected. Children growing up in a household with one or more unemployed parents are reportedly twice as likely to struggle in the education system and even become unemployed themselves, leading to a cycle of poor health.⁷⁷

Yet to portray unemployment as the sole problem at the intersection of work and health would be misleading: the quality of available work is also hugely important. While the cost of living has risen, wages have stagnated, and the rise of the 'gig economy' has led to more people working in precarious circumstances and without adequate protections such as sick pay. Precarity in work is associated with higher rates of cardiovascular disease and psychological stress, while longitudinal studies indicate that poor quality work may even be worse for health outcomes than unemployment.

A survey of precarious workers by the GMB trade union found that 61% had worked when unwell for fear of losing income.⁸⁰ Realities like this highlight the unsustainability of the current UK jobs landscape from a public health perspective as well as a climate perspective (not to mention for workers themselves), since many people were unable to self-isolate during COVID-19.

The solution

'Climate versus jobs' narratives pose a false dichotomy. Creating more carbon-intensive jobs only jeopardises the UK's responsibility to eliminate emissions and offers no real long-term security. Instead, a post-pandemic Green New Deal recovery that prioritises the health of people and planet must focus on green jobs. The government must establish a national green jobs scheme which provides well-paid, secure work and helps those in high-carbon industries retrain as part of a just transition to a zero-carbon economy.

Research by the trade union federation TUC indicates that, with adequate government investment, as many as 1.24 million green jobs could be created within a two-year period, mostly in tech infrastructure and construction.81 The New Economics Foundation highlights that this number could be "topped up" with additional jobs in education, health and care, sectors which are inherently low-carbon and comparatively easy to make zero-carbon.82 By focusing on the training and recruitment of new nurses, midwives and health visitors in particular, a national green jobs scheme could help resolve the reported shortage of around 84,000 staff in the NHS.83 Green New Deal UK estimate that a project on this scale could be achieved with

government spending totalling £68 billion, 84 which falls well within the £100 billion the government has already committed to investment in new infrastructure. Moreover, agro-ecology, rewilding, land restoration and reforestation present further opportunities for job creation.

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The government must establish a national green jobs scheme which provides well-paid, secure work and helps those in high-carbon industries retrain as part of a just transition to a zero-carbon economy.

Women, people of colour, working class people, disabled people and young people are far more likely to be working insecure, low-paid jobs, or unemployed. These inequalities were starkly exposed during COVID-19, and hugely influenced health outcomes, but they are longstanding and deeply ingrained. Climate justice, social justice and public health all require a Green New Deal restructuring of the post-pandemic economy to create secure green jobs which foster the health of people and planet alike.

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HEALTHY AIR

The problem

Air pollution is a public health emergency, both globally and in the UK. It disproportionately affects marginalised groups and is intrinsically linked to the climate crisis, since the major sources of air pollution are also sources of greenhouse gas emissions.85

Outdoor air pollution is mainly derived from energy and manufacturing industries, and from transport; indeed, the transport sector is now the largest emitting sector of the UK economy, accounting for 28% of greenhouse gas emissions. Emerging evidence suggests that indoor air pollution – which is compounded by factors such as poor quality housing, ventilation and building location – could be even more harmful than the equivalent outdoors.

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Exposure to toxic air is highest amongst communities living in deprived areas.

The effects of air pollution follow a strong social gradient. Exposure to toxic air is highest amongst communities living in deprived areas with the lowest rates of energy consumption (who are therefore contributing least to the problem, while people in affluent areas tend to own more vehicles and drive further). B7-89 In London, more than 80% of schools experiencing air pollution levels that consistently exceed legal limits are found in deprived areas. In line with the "weathering hypothesis", there is also strong evidence that – as a consequence of socio-economic disadvantage, caused by structural racism – people of colour tend to live in environ-

ments in which they are disproportionately exposed to unhealthy air that damages their health. 91-93

For, as well as destroying the climate, emissions that pollute the air have profound direct effects on human health. Worldwide, air pollution is the largest environmental risk to public health, causing 7 million premature deaths annually. 4 In the UK, around 40,000 deaths per year are attributable to poor air quality. 95 Specifically, particulate matter (PM), mainly derived from fuel combustion within industry or car engines, is strongly associated with air pollution-related mortality. 96 Public Health England predicts that by 2035, over 1 million new cases of preventable disease will be attributable to PM 2.5, the majority from coronary heart disease, diabetes and chronic obstructive pulmonary disease. There is a substantial body of evidence linking exposure to air pollution with respiratory and cardiovascular disease, as well as mental health disorders such as anxiety and depression in adults, and prematurity, low birth weight and neurodevelopmental delay in children. 95,98-101

Unhealthy air also exacts a heavy price in wider socioeconomic terms, including through health expenditure and lost work days. Indeed, the social costs of unhealthy air in London alone have been estimated at €11.4 billion (£9.7 billion) – worse than any other European city, according to calculations produced by the European Public Health Alliance – with Greater Manchester's total just estimated at over €2 billion (£1.7 billion). Meanwhile, the Royal College of Physicians has estimated the combined health and social care costs of air pollution-related illness and premature mortality across the UK at more than £20 billion per year. 95

The solution

Through policies that tackle the root causes of air pollution, a Green New Deal will help mitigate the climate impacts of emissions and bring about a future where everyone breathes healthy air. Its focus will be on zero-carbon, public transport and active transport, interventions that must simultaneously address social inequities.

Traffic reduction in urban areas is a clear Green New Deal priority. London's low emission zone has led to dramatic reductions in children living in areas exceeding EU limits for nitrogen dioxide and such schemes must be rolled out more widely. Similarly, road closure schemes, like congestion charges, have also been successful in reducing traffic and should be actively fostered. These measures need to be implemented in ways which address inequities and are owned by the communities most impacted. The diesel vehicle phase-out schemes recently pledged by the UK government must be realised and accompanied by a nationwide scrappage scheme. 106

Meanwhile, strategies to reduce road emissions should not conceptualise electric vehicles as a silver bullet. Whilst they reduce nitrogen dioxide emissions, they still increase demand for mineral extraction from the global south, which harms the health of communities on the frontline of mining industries, as 'Think global, act local' (pp. 17-20) explained. ¹⁰⁷ Instead, we must reduce reliance on privately-owned vehicles and increase public transport access – particularly for marginalised communities, in the interests of social justice.

Increasing publicly owned zero-carbon public transport is key to a Green New Deal that reduces

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Public transport should also be truly public: democratising decision-making to allow passengers to be directly involved in shaping policy and designing the services they use, as well as ensuring it is free at the point of use, would help tackle the built-in inequities in how we currently move.

air pollution, improves public health and reduces inequality. Bringing buses back into public ownership in cities like Reading has enabled money to be recycled into the community, improving services and the local environment. 108 Renationalising UK railways could save up to £1 billion. 109 Public transport should also be truly public: democratising decision-making to allow passengers to be directly involved in shaping policy and designing the services they use, as well as ensuring it is free at the point of use, would help tackle the built-in inequities in how we currently move. In addition, studies show that increasing the number of journeys taken by foot and by bicycle leads to significant annual all-cause mortality risk reduction. ¹¹⁰ An increase in active travel to levels similar to Denmark's has been modelled to save the NHS £17 billion over 20 years by reducing heart disease, type-2 diabetes, cancer and cerebrovascular disease. 111

While there is irony in the fact that the World Health Organisation – despite knowing that there are no safe levels of air pollution¹¹² – has set out acceptable limits, the UK government must at the very least enshrine a commitment to meet these standards into law. It is estimated that over 3 million working days could be gained per year in the UK if these air pollution targets were consistently reached, as well as contributing £1.6 billion to the economy.¹¹³ In

accordance with the climate debt owed, the UK must also provide funding for schemes which support countries in the global south to reduce their air pollution at rates proportionate to their own emissions responsibility. In sum, a Green New Deal that tackles outdoor air pollution directly will bring significant health, climate and economic benefits. Addressing indoor air pollution will require housing improvements, which the next section explores in more depth. 86,114

Case Study: the work of the Ella Roberta Foundation

Since working class communities, disproportionately including people of colour, are amongst those most affected by air pollution, their leadership is vital. Organisations led by people of colour, including Choked Up, Clean Air for Southall and Hayes, and the Ella Roberta Foundation are leading the way in highlighting environmental racism and the health injustices of air pollution.

The Ella Roberta Foundation is named after Ella Adoo-Kissi-Debrah, from Lewisham in South London, who died of an asthma attack in 2013, aged nine. Her family lived just off the busy South Circular Road, in an area with unlawfully high levels of air pollution. A coroner's inquest in 2020 delivered the unprecedented verdict that air pollution "made a material contribution" to her death, and noted that there had been "a failure to reduce the levels of nitrogen dioxide".

This outcome – brought about thanks to a seven-year struggle by Ella's mum, Rosamund, who has campaigned for Justice for Ella and for healthy air for all – increases the pressure on government to prioritise policies addressing the air pollution public health emergency. Rosamund said: "This was about my daughter… but it's also about other children". 115

QUALITY HOMES FOR ALL

The problem

The housing system in the UK is broken and unsustainable - in terms of social justice, climate justice and public health. Currently, 1.6 million households (3.8 million people) are in need of social rented housing and 1.2 million households are on waiting lists. 116 Around 45% of social tenants and about a third of people in privately rented housing live in poverty, in which disproportionate housing costs play a significant role. 117 Meanwhile, social housing stock continues to shrink and social rents have risen faster than inflation, deepening inequality in the housing sector. Unaffordable housing has also led to more segregated communities as low-income communities are priced out of "desirable" neighbourhoods.

Yet recent studies show there are around five times more empty homes in the country than households in need of housing. At the heart of this paradox is the "financialisation" of the housing market, which allows private investors to buy and use houses for profit rather than as homes. Though 1.6 million new homes were built in England between 2005 and 2015, it was predominantly landlords who benefitted. 119

The housing crisis harms our health. The dearth of affordable housing has led to increases in overcrowding in low income homes, putting households at risk of respiratory conditions such as tuberculosis and COVID-19, as well as gastric conditions and other communicable diseases. Research has shown that those living in crowded households are also more likely to suffer psychological distress. 120

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UK homes are some of the most poorly insulated in Western Europe and since around two thirds do not meet energy efficiency targets, energy use in homes accounts for 14% of domestic emissions.

As highlighted by the British Medical Association, poor living conditions also have a profound effect on development during childhood, leading to long-term problems with physical and mental health.¹²¹

Our homes are also profoundly unfit to meet the challenge of climate change. UK homes are some of the most poorly insulated in Western Europe¹²² and since around two thirds do not meet energy efficiency targets, 123 energy use in homes accounts for 14% of domestic emissions. 124 Together with rising energy prices, inadequate energy efficiency in turn compounds fuel poverty, leaving many on low incomes unable to adequately heat their homes. In winter 2018, more than 17,000 people died preventable deaths as the result of cold housing. 125 Damp can also exacerbate mental health problems and cause cardiovascular and respiratory disease, with children twice as likely to experience the latter if they live in a cold home. 121 Meanwhile, 4.5 million homes overheat, even in cool summers, and 1.8 million people live in significant flood-risk areas. Thus inequality, climate and health justice are intertwined with the housing system.

The solution

A 2019 report by the Climate Change Committee argued that "technology and knowledge to create high quality, low-carbon and resilient homes exists, but current policies and standards are failing to drive either the scale or the pace of change needed" and called for urgent change. 124 A Green New Deal would address key environmental, social justice and health impacts of the housing crisis simultaneously.

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Given that fewer cold homes would reduce excess winter deaths, saving the NHS money ... a retrofitting rollout would pay for itself in just over seven years.

A key priority must be a nationwide retrofitting scheme for existing housing stock, including new heating systems, improved insulation and rooftop solar panels. The New Economics Foundation (NEF) has calculated that with a total government investment of £34.7 billion over the course of the current parliament, a National Retrofit Taskforce would be able to deliver "whole-house retrofits" for approximately 8.7 million homes around the UK. 126 Taking into account both direct and indirect job creation, such a scheme would help create over 220,000 new jobs per year, help save a cumulative 40.9 metric tons of carbon dioxide by its final year, and would on average save each retrofitted home £418 on annual energy bills. Given that fewer cold homes would reduce excess winter deaths, saving

the NHS money, NEF estimated that a retrofitting rollout would pay for itself in just over seven years. 126

Though politicians and civil society organisations from across the political spectrum have made the case for large scale house-building programmes as a solution to the housing crisis, the problem, as we have seen, is affordability and access rather than lack of supply. Introducing rent controls that significantly reduce the cost of housing and take account of local incomes, as well as giving tenants greater rights vis-a-vis landlords, for example by removing "no fault" evictions, would do more to address the problem. Proper monitoring of property conditions would help ensure landlords keep homes to healthy, liveable standards. In line with the principles of community wealth building, more should also be done to support community-led housing schemes. These include housing co-operatives in which tenants control and manage their own homes and other forms of co-housing projects, the increasingly recognised health and wellbeing benefits of which have been estimated at £1,575 per household per year. 127

Where new housing units are built as part of a Green New Deal – for example by local government, to provide homes for those on waiting lists – the houses must be sustainable and climate resilient: zero-carbon, energy and water efficient. (As 'Healthy air' (pp. 28-30) noted, proper ventilation is also vital to improve indoor air quality.) In this way, housing policy as part of a Green New Deal will help reduce housing inequality, improve health outcomes, create new jobs and help eliminate emissions linked to housing. 124

FOOD AND LAND JUSTICE

The problem

Our health depends on the health of the natural world. Yet our present patterns of economic activity and consumption are rapidly degrading planetary life support systems. 128,129 Modern agricultural practices, fuelling unsustainable levels of land conversion, drive biodiversity loss and climate change, while our food systems remain deeply unjust and fail to serve our health.

Globally, agriculture is the biggest driver of land-use change and deforestation. As such, it is the main factor causing ecosystem degradation. The majority of agricultural land is used for rearing livestock, a process responsible for 60% of biodiversity loss, and, in total, food accounts for 26% of global greenhouse gas emissions. Is and the process responsible for 60% of global greenhouse gas emissions.

As well as taking a toll on climate and biodiversity, industrial agriculture is also troubling from the perspective of global social justice. Between 2008 and 2016, the major force behind "land grabs" (acquisition of large areas of land in less-industrialised nations by foreign investors) were agricultural corporations, frequently seeking to exploit for cash-crop monocultures such as palm oil. 132 Resultant financial pressures have contributed to a situation where around 50% of those experiencing hunger globally are actually small-scale farmers. 133

Nor are our current agriculture and food systems currently serving human health. More than 2.3 billion people around the world are malnourished and nearly 150 million children are stunted by hunger. Despite this, a third of the food we produce is thrown away. Industrialised agriculture has emphasised

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Against the backdrop of austerity, food poverty is on the rise in the UK, with 1.9 million people accessing food banks between April 2019 and March 2020.

specialisation and monoculture production, overproducing certain foods (such as red meat and cereals for processing) and underproducing others. This shapes the food we eat. The latest Global Burden of Disease report attributed 11 million deaths to suboptimal diet in 2017, in particular due to high sodium intake, and poor access to fruits and whole grains. Relatedly, as noted at the start of this report, the emergence of new zoonotic diseases, each with pandemic potential posing a grave threat to human health, is made more likely as habitat destruction for agriculture continues. The start of the s

Many of these global issues are immediately relevant to the UK. Farmland covers 70% of the UK yet we import more than half our food from abroad. 138,139 Intensive agricultural practices cause soil degradation, contributing to climate change as carbon leeches from the soil. In the UK, this process costs the economy up to £1.4 billion a year. 140 In addition, to keep land productive, farmers are forced to use chemical fertilisers that emit air pollution and greenhouse gases, and pollute water systems. 130 The result is that the UK is one of the most nature-depleted countries in the world and 41% of species are currently in decline. 141

Land use and ownership, and access to food in the UK are also patently unjust. Against the backdrop of austerity, food poverty is on the rise, with 1.9 million people accessing food banks between April 2019 and March 2020, a 18% rise compared to the previous year, 142 which has only worsened further since the COVID-19 pandemic. Meanwhile, just 1% of the population owns 50% of land in England. 143 Planning deregulation has allowed for a massive surge in development on UK green belt land, yet less than a third of licensed projects provide affordable homes for those on low incomes. 144 Factors such as gender, disability and race also influence access to land; for example, racially minoritised communities are 60% less likely to have access to green space and natural environments than their white counterparts. 145

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A Green New Deal requires a shift in our relationship with land and agriculture to help restore biodiversity, reduce soil and water degradation, cut carbon emissions, and sustainably produce healthy food to meet human needs.

The solution

A Green New Deal requires a shift in our relationship with land and agriculture to help restore biodiversity, reduce soil and water degradation, cut carbon emissions, and sustainably produce healthy food to meet human needs. 133, 146

Policy changes at global, national, and local levels can support a shift from industrial to diversified, "agroecological" agriculture. ^{133,146} As part of a Green New Deal, agricultural subsidy systems would support farming methods that preserve ecosystems and provide nutritious food. For example, according to the "four per 1000" initiative, increasing the carbon reserves of soil by just 0.4% a year through sustainable farming practices would halt the annual increase in carbon dioxide emissions. ¹⁴⁷ The global roll out of sustainable farming is also predicted to add \$75.6 trillion (£54.7 trillion) to the global economy each year. ¹⁴⁸

These changes could have direct benefits for human health. The EAT-Lancet Commission's "planetary diet" – which could avert over 10 million deaths per year by lowering rates of strokes, heart disease and diabetes – could be achieved while reducing meat production and food waste. 130, 131 There are also further strong economic arguments for change. Notably, the cost of protecting wildlife and forests, which would reduce the risks of another pandemic such as COVID-19, have been estimated at just 2% of the costs already accrued from the pandemic. 149

In line with the climate debt the UK owes to the global south, as outlined in 'Think global, act local' (pp. 17-20), we should reinstate slashed funding for international development assistance that could help smallholder farmers around the world in the face of land grabs. The UK should also push for a relaxed intellectual property regime and advocate for international knowledge sharing to enable affordable technology transfer at the global level. 151

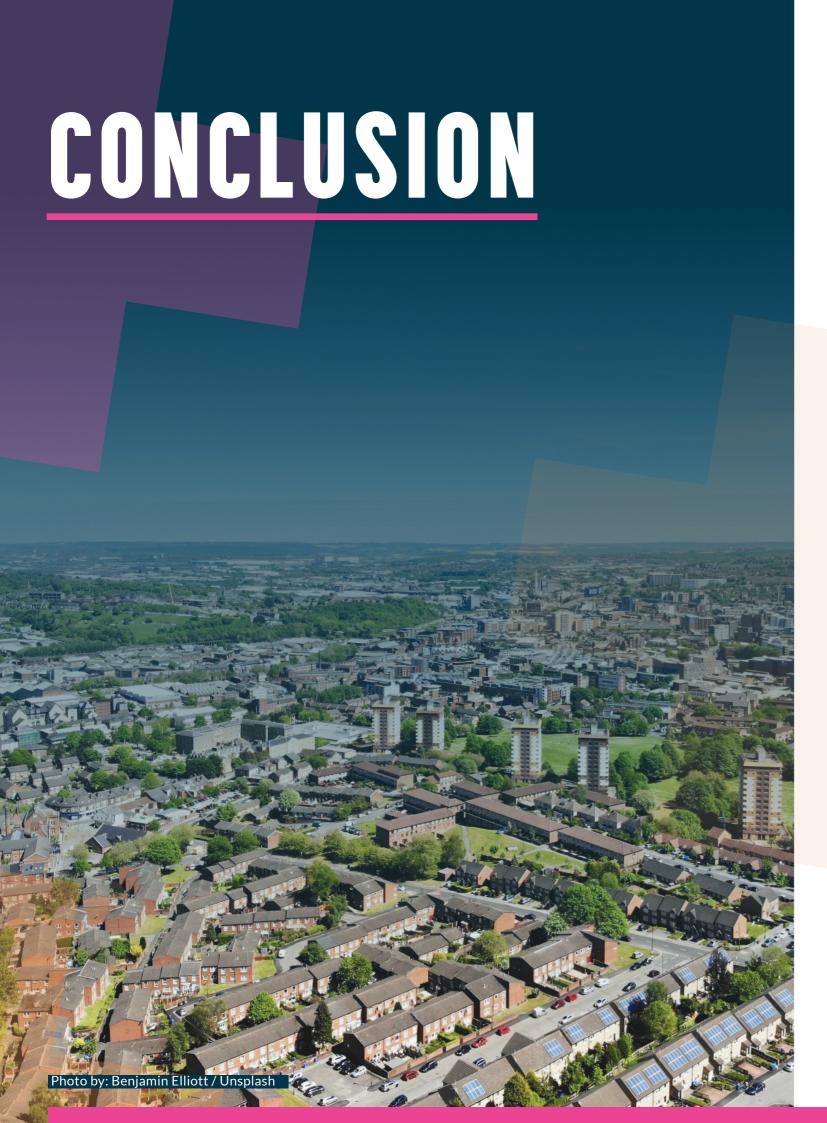
Within the UK, a Green New Deal should entail a rapid and radical transformation of our food systems, changing both how food is produced and what we eat. The Food, Farming and Countryside Commission estimates that a UK farming economy that eliminated synthetic fertilisers and pesticides, increased crop biodiversity and emphasised grassland-reared native ruminants (over intensively-reared meat and dairy livestock) could reduce agricultural greenhouse gas emissions by 38% by 2050 (and offset a further 60%) while increasing land available for biodiversity renewal. 146 Encouraging low-carbon farming practices instead – such as "controlled-release" fertilisers – would improve livestock health and slurry acidification. 152

Creating an Agroecology Development Bank and the establishment of farmer-led learning networks could also form part of a Green New Deal, ¹⁵³ as could support for smaller agro-ecologically sustainable farms through credit and improved land access, ¹⁵⁴

and municipally-owned and publicly or cooperatively run food hubs. 155 The UK as a whole could follow Scotland's example of land reform policies that facilitate community land trusts to bring land back into public hands as part of a Green New Deal. 156

A Green New Deal also means working for food and land justice at the local level, and the wider context of what people eat and why - issues like poverty, access and the prevalence of fast-food outlets in more deprived areas - must be taken into account. Projects like Granville Community Kitchen, based in Kilburn, north London, are key examples. It has been organising since 2014 as a community food hub, "co-creating a local response" to address "deprivation, disenfranchisement and fragmentation of the local community" whilst also advocating for structural change in our food systems. 157 NHS trusts can look to bring catering services back in house, ending outsourcing, and ensure the millions fed by health services each day receive locally-sourced plant-based meals. 158, 159 Meanwhile, the Land In Our Name project works to "foster a relationship with the land that exists beyond the dynamics of extraction" and highlight how land rights relate to "intersections of race, gender and class" and legacies of colonialism. 160

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The challenges stacked against us are significant. But since the underlying causes of the climate crisis, inequality and health injustices are overwhelmingly rooted in the same place – our economic system – we can envision a strategy for change that addresses all three simultaneously. The Green New Deal represents such a strategy.

The public health case for a Green New Deal is overwhelming, not least because a Green New Deal will in itself constitute a new deal for public health. The policy platform set out in this report is radical but also realistic; moreover, it is necessary to save lives. We urgently need to implement a transformative Green New Deal and decarbonise our economy by 2030 in order to limit global temperature rises to within 1.5°C. As this report has noted, an estimated 61 million additional people will die if we allow temperatures to rise to 2°C.16

A Green New Deal in the UK must not be achieved at the expense of continued exploitation of countries in the global south. Instead, taking account of its history of colonialism that fed industrialisation – and its concomitant disproportionate contribution to global emissions – the UK must pay its fair share of "climate reparations".

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We know what we need; the exciting and urgent challenge now is making it happen.

This report has set out the five key policy areas the UK must urgently address to begin paying its climate debt. Global, national and local actions are needed now because the impacts of the climate crisis are already having devastating effects, especially on the most deprived and marginalised groups, in the UK and around the world. Economic democracy, social justice and measures to mitigate vast intra- and inter-state inequalities must also be at the heart of the Green New Deal.

The transformation of our economy and a just transition that serves the needs of people and planet are long overdue. We know what we need; the exciting and urgent challenge now is making it happen. The rewards of a Green New Deal – secure and well-paid green jobs, food and land justice, healthy air, decent homes and a zero-carbon society supporting the health and wellbeing of all – are ours for the taking.

HEALTH FOR A GREEN NEW DEAL: TAKING ACTION

To bring about an ambitious and transformative Green New Deal, we need to build unstoppable social pressure for change. As we have set out in this report, the health community has a key role to play in this movement.



Those working in health are uniquely placed to draw attention to the health impacts of social and environmental injustice, and to explain how a Green New Deal can greatly benefit public health. Likewise, as major public bodies that sit at the heart of our communities, health institutions can model the kind of changes needed across society to ensure that our transition to a zero-carbon society supports the health and wellbeing of all.

Below, we set out some actions that health workers and students can take, either as individuals or collectively, in the workplace or within other institutions, to help build the Health for a Green New Deal movement.

This is not intended to be an exhaustive list of actions. Please see our forthcoming Health for a Green New Deal campaign guide for more information on joining the movement and taking action.



AS AN INDIVIDUAL HEALTH WORKER/STUDENT, YOU CAN

Organise around local and national issues

In this report we have highlighted a number of issues, including but not limited to air pollution, transport, housing, inequitable access to food and land, jobs and new fossil fuel energy projects. On both a local and national level, there are lots of opportunities to support campaigns working on these issues. Health workers and students can make a big contribution to these campaigns by bringing the 'health voice' to them.

The Better Buses for Greater Manchester campaign is one example of a campaign targeting a local authority - the campaign has successfully managed to convince Manchester City Council to bring buses back into public ownership to ensure greater accessibility and better quality. On a national level, campaigns such as 'Green Jobs For All' coordinated by Green New Deal UK have helped put the issue of government funding for green job creation on the agenda in parliament.

You can also get involved campaigning on these issues as part of Health for a Green New Deal!

Join Health for a Green New Deal and set up a local hub

The changes we're calling for can only be brought about through collective action. By getting involved in Health for a Green New Deal, you can join like-minded health workers and students taking action for transformative change.

At the core of the Health for a Green New Deal plan is local organising to grow the movement and build grassroots support for transformative change. On a local level, Health for a Green New Deal hubs help coordinate action on key issues (such as those mentioned in the previous section) and build pressure on politicians and other decision makers to support the Green New Deal.

Call on Directors of Public health to speak out

As an individual or as part of your local Health for a Green New Deal hub, contact your local Director of Public Health and lobby them to advocate for local Green New Deal policies. You can also lobby your local Director of Public Health to use their voice within the Association of Directors of Public Health to advocate for a Green New Deal nationally.



WORKING OR STUDYING IN YOUR NHS TRUST, YOU CAN

Make use of teaching sessions

Teaching sessions can be a great place to discuss the root causes of health inequities and climate injustice. Run a grand round on the public health case for the Green New Deal to inspire others to take action!

Organise and get your trust to take action

As anchor institutions – large public bodies with considerable spending power that can be used to support the communities in which they are grounded – NHS trusts have power to influence decision making both directly and indirectly. Organising within your trust and persuading it to either change its own practices or speak out on local/national policies can be a great way of effecting change.

Some examples of NHS trusts acting as anchor institutions, as highlighted in a report by the Health Foundation, 49 include:

- Sussex Community NHS Foundation Trust

 embedded sustainability criteria into its
 tendering process as part of its Care without
 Carbon strategy to reduce emissions.
- Epsom and St Helier University Hospitals NHS Trust – improved public transport links to the hospital with a new on-demand bus service for both staff and the local community, in collaboration with the local authority.



AS A MEMBER OF YOUR TRADE UNION YOU CAN

Pass a motion in support of the Green New Deal

Bring a motion to your union branch calling on the union to endorse the Green New Deal.

Show solidarity with workers across industries and struggles

Think about the ways in which your union branch can support workers both in the health sector and in other industries currently fighting poor working conditions and pay – highlighting the need for investment as part of a just transition.



AS A MEMBER OF YOUR ROYAL COLLEGE, YOU CAN

Get your college to endorse the Green New Deal

Work with colleagues to make the case to your college that the Green New Deal could greatly benefit those working within your profession. Many colleges have already either divested from fossil fuels or declared a climate and ecological emergency. As a next step, the college could either endorse the Green New Deal or a specific policy, such as a 'green jobs guarantee.

Lobby for climate justice education

Ask your college to include education on the root causes of climate change, inequities in impact, and systemic approaches to climate mitigation and adaptation in training curricula and as a mandatory part of Continuing Professional Development accreditation.

Include just transition in the remit of a national committee

Ask your college to include planning for a just transition in the remit of a national committee already addressing sustainability and climate change – or to establish a new committee if one doesn't currently exist. Planning for a just transition could include the role your profession could play as part of one, or assessing the potential impact on your area of expertise.

For example, as we have highlighted in section 'Green jobs for all' (pp. 26-27), current staffing gaps in the NHS should ideally be addressed as part of a national green jobs scheme. Royal colleges and other bodies representing particular professions within the NHS are well placed to inform policy making regarding job creation in their field.

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