



LABOUR FOR A
**GREEN
NEW DEAL**



A GREEN JOBS REVOLUTION

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The hyper-financialised UK economy rests on the shoulders of poorly paid, precarious workers. Whilst this has long been understood by the labour movement, the COVID-19 pandemic has made this clear for all to see. It is underpaid nurses, care workers, delivery drivers and shop workers who have died in their thousands, often without [basic protections](#). In many ways, COVID-19 is a sign of things to come. A climate changed world is shaping up to be one in which the rich live in luxury while workers risk their lives. A capitalist system which protects intellectual property rights to COVID-19 vaccines over the lives of millions in the global south will surely do the same for novel green technologies. As we emerge from the pandemic, we have an opportunity to change course. We can build a new economy which eliminates inequality and puts a stop to dangerous climate change. If we don't, it will be the poor and vulnerable who suffer most from the preservation of business-as-usual.

Labour for a Green New Deal's motion to Labour Party Conference 2021 sets out a bold, transformative vision for the country that would see every aspect of our lives transformed for the better. A green jobs revolution as part of a socialist Green New Deal can address the looming unemployment crisis while meeting the great challenges of our generation. From electrifying public transport, to ensuring 'just adaptation' to climate change, to reforming public procurement, we are presenting a vision for the future. This is a future in which we live sustainably, work with dignity and put internationalist principles of solidarity and global justice at the heart of our society. There are no more pressing issues for our time than economic inequality and climate change. This motion ensures Labour is driving this debate, and offering clear, compelling and socialist solutions.

This report covers four key chapters: Green Jobs, Universal Basic Services, Finance and Internationalism, with each chapter containing, and explaining, a number of policy proposals. Green Jobs outlines a commitment to millions of good, green, unionised jobs, in which anti-trade union laws have been repealed and we have seen mass investment in retrofitting houses and green technology. Universal Basic Services recognises that changes in demographics, technologies and climate have affected what the state has the capacity and responsibility to offer. From a National Care Service, to free local bus travel, to universal broadband, we need services rooted in internationalism for the twenty first century. Finance, in recognising the failure of the private sector to prepare for climate change, proposes a Green National Investment

Bank. Finally, the Internationalism section covers a global, socialist, green new deal and reforming public procurement. From cancelling debt, to patent reform, to sustainable supply chains, we cannot solve climate change alone, and the global south cannot pay the price for the historic and continuing damages of the global north.



GREEN JOBS

- GREEN JOBS, JUST TRANSITION AND A GREEN NEW DEAL -
- REPEALING ANTI-TRADE UNION LAWS AND BUILDING WORKERS' POWER -
- RETROFITTING OUR HOMES -
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GREEN JOBS, JUST TRANSITION AND A GREEN NEW DEAL

Labour resolves to support a just transition away from polluting industries with a comprehensive re-training program and green job guarantee on union rates for affected workers.

A concern for environmental issues has - rightly – become a policy and campaigning priority for The Labour Party. However, there is nothing innately progressive about environmental policies nor any guarantee that they will have the outcome of ensuring social, economic, and environmental justice for workers. Environmental issues and policymaking around employment are inherently *political*, in that they produce winners and losers. On the one hand, if used to support the ‘business-as-usual’ priorities of the status-quo, environmental policies can be portrayed as out of touch with the requirements of workers and their communities: the jobs-versus-the-environment narrative puts climate issues in opposition to jobs and livelihoods. On the other hand, there is the potential to put into motion an ambitious industrial strategy that can fundamentally transform political and economic relations at all levels of the UK. This is why Labour needs to make sure that, unlike previous economic transformations in the UK, working communities are not left behind.

Out of [this tension](#), the call for a ‘just transition’ for those interested in pursuing social, environmental and climate justice have become impossible to ignore. A just transition is here taken to refer to a framework of social and economic interventions to protect workers' jobs and livelihoods during the shift to a low-carbon economy which should ensure a fast and fair transition to a more democratic and sustainable economy. Most importantly, a just transition entails more than just a more climate-resilient society - it presents an opportunity to make working-class lives better by transitioning out of [unequal relations at the workplace as well](#)

[as addressing injustice in local communities, rather than just out of fossil fuels](#). This is why this section advocates for a Just Transition policy program as a central pillar of any Green New Deal which focuses on creating thousands of unionised green jobs, improving employment relations and creating a democratically owned economy that works for the many, not the few.

Managed skills transfer from polluting to green industries through a comprehensive retraining program and transition support

The trade union movement has long advocated for an alignment between employment and environmental objectives to prevent an unjust transition to a low-carbon economy. This has become more pressing as the economic fallout from Covid-19 is mass unemployment - the NEF estimates that without further government action, between [1.5 and 3.1 million people may be unemployed by the end of 2021](#). A practical example for green job creation through investment is the [One Million Climate Jobs](#) report, written by trade unionists, environmental activists and experts associated with the Campaign against Climate Change. This landmark report made the transformational argument for the creation of one million climate jobs to cut Co2 emission by 80%. This has been recently confirmed by predictions produced by Transition Economics for the TUC, which [revealed](#) that with fast-tracked investment it would be possible to deliver 1.24 million jobs in the UK. The Labour Party has a responsibility to support campaigns like this by developing a jobs friendly rationale for climate change that can productively frame the employment/climate change relationship. Since [‘jobs losses are not an automatic consequence of climate policies, but the consequence of a lack of investment, social policies and anticipation’](#) the Labour Party should proactively plan and pressure for a legislative agenda to reject the false jobs versus environment dilemma.

The employment prospects associated with a Green New Deal can therefore be strengthened through a Just Transition framework. [Job creation is possible through both adaptation and mitigation policies](#), and transitional measures are required to ensure workers are assisted to adapt to changes in the labour process. This would not only ensure adequate protections and support are available for workers whose employment prospects are threatened by less-labour intensive replacement jobs, but also by reskilling the existing workforce to meet contemporary

challenges posed by the climate crisis. Despite the opportunities for green jobs in new and emerging sectors as well as existing industries, it has long been acknowledged that such [skills shortages are one major obstacle that constrains the transition to a greener economy](#). An essential plan of a Just Transition program is the transfer of labour through preparing workers for new occupations and changing the skills profile of existing workers. Addressing this 'low-carbon skills gap' can be achieved in a number of ways.

Comprehensive retraining: A significant and rapid development of emerging industries necessitates increasing the supply of relevant skills. For example, designing, constructing and maintaining a decarbonised built environment will require workers with skills suitable for major infrastructure projects. A socialist Green New Deal would see the wholesale overhaul and upgrade of much of the UK's infrastructure, from expanding and electrifying rail, to developing flood defences and resilient infrastructure to retrofitting our housing stock. Yet, the IPPR [has found](#) that a skills gap within construction industries has so far hampered attempts to fully realise the potential of decarbonisation and job creation: it finds a combination of a lack of collective action in the construction sector, an ageing workforce, and a lack of government investment and leadership in skills and employability present serious barriers to prevent the creation of a highly-skilled workforce suited to the challenges of the 21st century. A recent TUC report has argued that to address this an important part of any active industrial strategy will be an [integrated skills policy](#). This would consist of quality apprenticeships, lifelong learning opportunities for workers as part of the [National Skills Fund](#), a right to time off for education and training, and embedding [Education for Sustainable Development](#) to ensure that sustainability is central to the curriculum at all levels of education and that vocational courses contain green skills components. One notable success in this area of reskilling has been the trade union [Prospect](#), which was successful in migrating workers from fossil fuel to the renewable energy sector without loss of pay and by equipping workers with new skills.

Transition support: The shift to a low-carbon economy will involve structural changes to the labour market and content of jobs. Workers affected by this should not just have the option of retraining, but also have a say in how the transition happens. As representatives of all workers, the trade union movement has a role to play in negotiating wide-ranging and ambitious [transition agreements](#) with employers, to ensure a just and socialist transition to a greener

economy that protects and enhances both the material conditions, as well as the general wellbeing, of workers. This would require that the presence of trade unions within the workplace be strengthened as a priority, starting with the reforms to Trade Union laws highlighted in this document. Providing official recognition of trade unions where required, and providing additional support and legal standing of Green Reps would [strengthen employee engagement with climate change measures and also utilise the expertise of workers and the trade union movement](#), as the Welsh TUC has argued. With trade union involvement and collaboration with the private and third sector, an upskilling and retraining programme would ensure that workers currently employed in fossil fuel industries would continue to have access to decent paying, decent quality employment while also benefiting from the immaterial benefits of skill development.

Decent work for all: A just transition entails more than providing social protections and skills to workers. The ILO has stated that an [“essential aspect of \[just transition\] is that the new ‘green’ jobs themselves should be ‘decent’”](#). The quality of jobs is therefore an important consideration, and the state has a role to play in also ensuring that the principles of fair work are embedded within new employment opportunities and that support measures which promote equality. In Scotland, the [Fair Work Convention](#) encourages constructive dialogue between employers and unions so that productivity and innovation are met by increasing the power of each employee’s voice and ability to participate in the workplace. Furthermore, reports from the Just Transition Commission which argue for a ramping up of the policy, planning and investment have also been [welcomed by the STUC](#). In this way, a green transition plan which has immediate and tangible benefits for the whole of society is of practical benefit to social cohesion and securing wide support for a Green New Deal by ensuring no one is no left behind in the transition to a green economy. Similar to this, the Welsh devolved assembly has recently introduced [legislation](#) to strengthen and support social partnership, fair work and socially responsible public procurement. The TUC [recognises](#) that the ‘UK labour market is already marked by persistent inequalities’, and that efforts must be made to ensure that transition support tackles inequality across the labour market. If jobs in green industries are to compare well to those in ‘traditional’ sectors, government action should not only create the conditions for emergent industries to thrive but also ensure union participation and national policy strategies because, like with any other sector, [‘green jobs require careful stewardship from public authorities to ensure that workers are able to exercise their rights’](#).

A Green Jobs guarantee on union rates

As the full economic fallout of Covid-19 becomes apparent, it has become increasingly clear that jobs and livelihoods are at risk of disappearing without continued government support and further incentives to encourage much-needed investment into the UK economy. However, the threat of unemployment and falling incomes - disproportionately felt by working-class people - which come with this economic challenge is not new. The global pandemic has [exacerbated pre-existing vulnerabilities within the UK economy](#), with one recent [IFS report finding](#) that the UK's long-standing economic weakness is more extensive than other major economies, with low levels of growth and investment being compounded by a lack of policy direction from central and devolved layers of government. Alongside this, the UK is faced with the challenge of climate change. As the Labour Party's [Green Economic Recovery](#) report makes clear, the challenge presented by unemployment and low levels of growth is matched by the threat of climate instability. This is why Labour Party policy must continue to present a clear economic and political strategy to avoid the twin evils of catastrophic climate change and the misery of mass unemployment. It is in this context that we call for a **'Green Jobs Guarantee'** to stabilise the economy through a long-term and planned commitment to achieve full employment and therefore remove all involuntary unemployment. This is not a workfare model, where people are forced to return to work to receive benefits, but instead gives [everyone willing and able to work access to decent paying, decent quality and stable employment](#). Neither is it about creating ['bullshit jobs'](#) to keep people busy, but about delivering effective responses which satisfy the needs of communities that are at the sharp end of unemployment. This investment into the foundational economy would require a whole-economy approach to the climate crisis, a part of which would be a ['change in employment policies such that full employment again becomes the target of these policies'](#). The [TUC has already called for](#) a jobs guarantee scheme, funded by the national government and delivered at a regional and local level with the participation of unions and employers. Likewise, the [Social Market Foundation](#) has recommended the creation of a Jobs Guarantee Scheme to ensure the newly unemployed are not left inactive but are provided with decent jobs, with training and reskilling as a central element as part of a new social safety net for workers. This closely resembles Argentina's *Plan Jefes*, which ran between 2002 and 2007 and successfully demonstrated ['that public employment programs can have a transformative impact on persistent socioeconomic problems such as extreme poverty and](#)

[gender disparity](#)'. The One Million Climate Jobs campaign have similarly called for the creation of a [National Climate Service](#) which could guarantee an alternative and permanent replacement in emerging green industries for people who lose their jobs in a high carbon sector - a call supported by PSC who argue that this could be managed by a Ministry for Climate Jobs, Skills and Social Protection.

A key role of such a Ministry '[will be to ensure that everyone who loses a job in fossil fuels will get another one in the new zero energy economy](#)'. More recently, the Scottish Labour Party announced a [Jobs Recovery](#) plan which guarantees decent, well-paid work for the unemployed in the public, private or third sector. Research carried out by Greenpeace [suggests](#) that state investment creates further employment as well as securing the dignity and well-being of workers. To ensure that dignity at work is prioritised, the employment opportunities offered as part of a Green Jobs Guarantee should meet strict criteria, agreed upon with trade unions. These would include:

- All public sector & nationalised industries to pay the real living wage.
- Minimum wage being raised to Real Living Wage in the private sector.
- Protect & expand rights of workers to join unions, along with outlawing 'fire-and-hire' tactics.
- Ensuring new jobs are unionised and employed on union rates.
- Consulting with workers and unions over the expansion of remote working and for protection against employers cutting hours to reduce overall expenditure on wages.
- Consulting with stakeholders on the prospects for a [shorter working week at no loss of pay to help job guarantee](#).

Establish Transition Assemblies to level-up and regenerate communities through locality clauses and local content agreements

History shows that [workplace closures remain political decisions](#). This fact means that **Transition Assemblies** will be a crucial instrument for ensuring that the transition to a low-carbon future is powered by the people who have the most at stake and that they feel the

benefits first. Labour should establish regional Transition Assemblies, whose membership would be drawn from organisations, local employers, trade unions and local communities to help design a Just Transition roadmap. To ensure that workers will be at the forefront of their own transition dialogue, Transition Assemblies would identify and forecast which sectors and communities in a given region should be prioritised for Just Transition support and build a vital skills system that gives workers and businesses in affected areas what they need to succeed in a new low-carbon economy. Transition Assemblies could facilitate participatory planning in the workplace, design transition support packages more effectively and participate in the formulation of age-appropriate training, guarantees and compensations. This would ensure that, in the words of Scotland's Just Transition Commission, the transition to a low-carbon economy ['needs to be a national mission with social justice at its heart: something achieved BY the people of Scotland, not done TO the people of Scotland'](#).

Created by and managed by the workers facing job losses, Transition Assemblies would have at their disposal a number of policy instruments to ensure that working communities don't suffer similar economic catastrophes to the mining communities in the 1980s. **Locality clauses** attached to inward investment are one such policy instrument. Locality clauses keep the benefits of investment in local communities and regions by forcing employers to offer training and employment opportunities to local people in the first instance. This can ensure that communities are the first to benefit from local developments. These would help prevent communities which have already been let down by deindustrialisation from further avoidable decline. Indeed, this idea of locality clauses has been framed by others, such as Renewable UK, as *levelling-up*, in that ["Most of the jobs will be created in parts of the country which urgently need levelling up, including the north east of England, Yorkshire and The Humber, East Anglia and Scotland"](#). Spain's landmark Just Transition Agreement of 2018, made between trade unions and the Spanish government, has meant that Spanish regions most affected by the closure of mines and other carbon-intensive industries have been targeted with Fair Transition Contracts which have the ['the objective of creating and establishing employment in the medium and long term'](#). In practical terms, this has meant that the government and private sector ["proactively search for investors with projects that can be located in the affected areas, \[and takes\] into account the characteristics and particularities of each territory"](#).

In addition to locality clauses, another crucial policy to ensure communities and workers are safeguarded are **local content agreements**. These are deals and conditions which are imposed on businesses in return for subsidies for their economic activities. By compelling the private sector to utilize local and regional resources, support local job creation and prompt firms to localise their supply chains, local content agreements are compatible with forms of community wealth building, in so far as [they support local and regional economies by building a workforce that is skilled and building a competitive supplier base](#). Advantages of such agreements include the creation of local markets, a boost to local employment and the enablement of joint partnerships (between government and corporations). In a nutshell, this is an agreement in which local government is supported to take a larger stake in the provision of services and economic planning. [Research suggests](#) that local content agreements are frequently in renewable energy, either as a precondition for government subsidies or as an eligibility requirement for private firms to be awarded public tenders.

This would all ensure that jobs being created in the transition to a low-carbon economy benefit those in areas of the UK where the old carbon-intensive industries will be disappearing or transitioning, or new industries emerging. Without focusing upon local dimensions we run the risk of a socially unjust transition, as well as missing out on local expertise, knowledge and established community networks. And this is because a Just Transition is not just about the labour movement, but about local communities and, as such, will require heavy community involvement. In the short-term, this means that the Labour Party should be significantly involved in the COP26's Counter mobilisation, to ensure the voices of marginalised workers are present. On a longer-term scale, further consideration could be given to establishing a National Climate Service, alongside a Ministry for Climate Jobs, Skills and Social Protection for Just Transition.

REPEALING ANTI-TRADE UNION LAWS AND BUILDING WORKERS' POWER

Labour resolves to repeal all anti-Trade Union laws

The trade union movement in the UK has a long history of environmental activism. Whether it be pioneering health and safety legislation, the successful roll-out of Green Reps in the workplace, or support for workers occupations based upon arguments for socially and environmentally useful labour, as an organ of working-class power, the trade union movement is indispensable in the fight for a socialist Green New Deal which has economic, social and climate justice at its heart.

Repeal of Anti-Trade Union Laws

The Trade Union Act 2016 is a straightjacket on the trade union movement. The [Institute of Employment Rights \(IER\) have suggested](#) that the Act violates the International Labour Organisation (ILO) conventions, and has also raised concerns about its compatibility with the European Convention on Human Rights because of the threat it poses to freedom of association in the workplace. The 2016 Act has had a [‘devastating’ effect on unions’ ability to take lawful industrial action and make it very difficult to take officially sanctioned strike action as a means of challenging employers](#). The severe impact of these restrictions can be seen in the PCS Union’s pay strike ballot held in July 2018 which yielded overwhelming support (85.6% in favour) to strike over unfair pay but as turnout was 41.6% the strike was prohibited. Both the freedom of association in the workplace and the legitimate use of industrial action remain the most important tools of the trade union movement to challenge the asymmetrical power relationship in the workplace: traditionally strikes have been used to secure better pay and conditions for workers, but there are well-recorded examples of strike activity being used in pursuit of wider social justice issues. The Australian Builders Labourers Federation (BLF) employed highly

successful 'Green Bans' in the 1970s, where BLF labourers [refused to work on developments that would destroy green spaces in urban areas](#). However, the Trade Union Act 2016 act [includes](#) a 50% turnout requirement in strike ballots and an additional 40% support threshold for certain sectors; a requirement for striking workers to give their employer two weeks' notice before the strike begins, which allows the employer greater time to prepare to resist the strike; and a 6-9 month expiration on ballots which incentivises employers to draw out negotiations past the expiry date to avoid strike action.

Overall, it has become clear that the 2016 was designed to [significantly impede the ability of workers to organise at the workplace and take legitimate industrial action](#). The 2016 Act follows a [long record of the UK's stringent and draconian anti-trade union laws](#) going back at least to the Thatcher governments of the 1980s. Despite the protests of the trade union movement between 1997 and 2010, the Labour Party did not remove these draconian restrictions, which has led many to conclude that the UK continues to have the ['tightest regulations on strikes anywhere in the advanced industrial world'](#). This is despite the fact that industrial action rarely goes beyond temporary stoppages to express grievances or make demands, and is overwhelmingly used as a last resort due to the significant costs entailed with this form of action. Combined, anti-trade union laws have had the result of significantly safeguarding the power of the employer, whilst neutering unions' ability to represent their members. The Labour government in Wales immediately [moved to overturn parts of this Act](#) and repealing it in its entirety was an important pledge in [Labour's 2017 and 2019 manifestos](#). Labour must uphold this commitment by repealing all anti-trade union legislation as a matter of urgency. However, it will not be sufficient for the next Labour Government to simply repeal existing anti-trade union legislation. In addition to this, the next Labour government must go further by establishing a new and properly resourced government department, a Ministry for Labour and Employment Rights.

Establishing a Ministry for Labour and Employment Rights and a New Industrial Relations Bill

Workers in Britain are amongst the most insecure, underpaid and stressed in Europe, [with the average worker working longer hours than their European peers for a median wage of £24,000 -](#)

[25% earn £14,720 or less - and 2.9 million children in working families living in poverty.](#)

Moreover, the emergence of the [gig economy](#), [wage stagnation](#), and [increasing use of 'fire and fire'](#) are all directly connected to the multi-decade assault on the rights of workers and their unions. While it is true that there is no [quick fix to the UK's complex problems around work and employment](#), we agree that the next Labour government should take tangible steps towards rebalancing the employment relationship and improving the position of workers in the workplace. We support the IER's proposals for a new [Industrial Relations Act](#) which would guarantee the right of trade unions to easily organise, campaign and represent their members. In the first instance, a new Industrial Relations Act should include a commitment to the following principles:

- Increase the democratic responsiveness of unions by allowing union ballots to take place in the workplace and online as well as by post.
- Preventing any thresholds for either turnout or support to be applied by employers or government, recognising the autonomy of unions to determine their own policies and procedures, or requirements for unions to give notice to their employers of intention to strike.
- Preventing any expiration period being placed on successful strike ballots.
- Allowing unions the right to approach workers in their workplace and allowing workers to engage in education and recruitment activities organised by a union without obstruction from employers.
- Simplify the law around union recognition to ensure automatic trade union recognition at the workplace.
- Give union reps adequate time off for union duties, and ensure that all workplaces are encouraged to have Green Reps, and promote union learning initiatives.
- Ban union-busting, strengthen protection of trade union representatives against unfair dismissal and union members from intimidation, harassment, threats and blacklisting.
- Restate and support the right to take industrial action, including for political matters, while also enabling solidarity action so that workers can take industrial action against their employer in support of fellow union members employed by a different employer where a trade dispute exists.

We also back the IER's recommendation for this to be implemented and overseen by a new cabinet-level [Ministry of Labour and Employment Rights](#). This would be established with the task of enhancing workers' rights by enforcing the terms of the Industrial relations act and give workers a voice at the highest levels of government. At a minimum, its principal functions should include:

- Encouraging equal standing between trade unions, employers and the state by reintroducing planning agreements and sectoral collective bargaining.
- To ensure that all government contractors pay the living wage using procurement powers, and to introduce a statutory requirement for all employers to implement plans to close pay gaps and inequalities based on gender, race and disability.
- Review and enhance legislation on health (including mental health), safety, harassment, and equality to ensure it is fit for purpose.
- Consulting with devolved governments to identify areas of employment law that could be more effectively implemented at a devolved level, with a UK wide-floor to prevent any race to the bottom in terms of employment law and working conditions.
- Strengthening protections for whistle-blowers and rights against unfair dismissal for all workers, with extra protections for pregnant women, those going through the menopause and terminally ill workers.
- Give all workers full employment rights from day one on the job and increase protection against redundancy for people wherever they work.
- End bogus self-employment by creating a single status of 'worker' for everyone apart from those genuinely self-employed in business on their own account.
- Banning zero-hour contracts, strengthening the law around the gig-economy and banning unpaid internships.
- Reviewing family-friendly employment rights, including rights to respond to family emergencies.

Building Workers' Capacity: Industrial Democracy and Alternative Plans

These recommendations have so far been focused upon what the Labour Party could achieve when using the levers of state power to improve the legislative framework in which they operate. As the political wing of the trade union movement, the Labour Party also has a responsibility to facilitate the growth of trade unionism and increase the capacity and self-activity of workers. The next Labour government should work with the trade union movement to seriously investigate the prospects for alternative models of ownership, based upon the principles of industrial democracy to increase workers' voice in the management and control of the industries in which they are employed. There is a range of measures available to realise this.

New **codetermination legislation**, similar to that in place in countries such as Germany, could be produced in cooperation with employers and trade unions. Codetermination refers to the ['equal participation of shareholders and employees in a firm's decisions'](#), and would facilitate ongoing and substantive worker participation in matters such as remuneration, working hours and adaptation to new technologies. The Labour Party should also facilitate and further encourage uptake in models of employee ownership, [which one recent government publication found increased productivity and wellbeing](#). One novel example of this in action is the considerations of ['golden shares' in UK football clubs, something which could give fans' groups the power of veto over board decisions](#). This shows how this is feasible can be seen in Germany, where fans have a minimum 51% stake in a football clubs' shares. These models of ownership certainly have their limitations, but more ambitious models of worker ownership can significantly encroach upon the prerogatives of employers. Trade Unions for Energy Democracy (TUED) have called for a ['social power'](#) approach to address workers concerns whilst simultaneously advancing a deeper socio-economic transformation of the energy sector. Central to this is their call for democratic and public ownership of energy production, with workers and their trade unions at its centre. PCS has also called for public ownership models, consisting of a ['workers and public partnership'](#): this consists of meaningful worker participation in the management of companies, alongside public ownership and effective democratic control. Overall, these alternative ownership models seek to limit the prerogatives of capital and

arbitrary managerial power in the workplace, whilst providing popular control firms by including workers participation in the management of companies.

Finally, the Labour Party should further support workers and trade unions who, in the face of redundancy, have produced alternative corporate plans. The recent history of [Bifab](#) and [Vestas](#) show how workers' and trade union plans for alternative, socially- and environmentally-useful production are too often side-lined, and unions excluded from larger questions about economic priorities. Therefore, our economic strategy must a) be designed through participatory planning with workers and their unions, alongside the state and employers; and b) create mechanisms to ensure their continued participation in their workplace post-transition. This should actively encourage workers' and unions' participation in producing alternative corporate plans, planning agreements and, where feasible, worker-managed companies, exemplified by [The Lucas Plan](#).

RETROFITTING OUR HOMES

Labour resolves to retrofit all homes by 2030 with mandatory building standards

Housing is a key sector for reducing greenhouse gas emissions, for ensuring general health and well-being, and for improving quality of life. It is also something that will require state-driven action to change -- relying on individual behaviour, market forces or local government will be insufficient when recognising both the scale of the challenge and the speed at which change needs to happen. Currently, [existing homes are responsible for 20% of the UK's CO2 emissions and use 35% of its energy](#). Emissions arise in large part due to heating; as people use their boilers to heat their homes' they burn gas, which in turn releases CO2 into the atmosphere. Compounding this is the fact that UK housing is some of the [worst insulated housing in Europe](#). This leads to a range of health issues and embeds fuel poverty. As such, as part of reaching net-zero carbon emissions, the UK's housing stock will need to undergo significant upgrading, a process known as 'retrofitting'. As we emerge from the economic impact of the COVID-19 pandemic, a programme of mass, deep retrofitting would bring [over 500,000](#) new good, unionised, green jobs. It is essential work that could initially be targeted at economically deprived areas and would be valuable to both the environment and those living in the homes. The following key tenets of housing policy will be addressed in the paper:

- A 'whole-house' approach to emissions reduction
- Planning and regulation
- Finance
- Training and employment
- Benefits for the many

Whole-House Approach

Reaching net-zero will require us to drastically reduce the inefficiencies in heating our housing stock, primarily through what is known as a [mass deep retrofitting programme](#). Such a programme involves a range of measures to increase energy efficiency, to reduce energy use and heating costs. More specifically, mass deep retrofitting targets improving home insulation and installing carbon neutral heat pumps. Improving home insulation can include installing double glazing and improving wall and roof insulation to reduce the amount of heat lost from the building. This would improve the energy efficiency of the property, reducing heating bills and crucially provide the means to [eradicate fuel poverty in the UK](#), which figures suggest is currently rising. Estimates for household savings from retrofitting poorly insulated houses range from [£270](#) to as much as [£418](#) per year, which would go some way to addressing a systemic cause of poverty in the country. Similarly, poorly insulated housing has severe health implications: [Public Health England](#) has highlighted both the direct (increased incidence of heart attack, stroke and respiratory diseases) and indirect effects (mental health, reduced educational attainment) with cold and winter weather, while it has been reported that as many as [12,000 people die per year](#) as a result of health conditions connected to having a cold home. These consequences are borne out along social deprivation and health inequality lines, with [incidences of asthma](#) being 36% higher in the most deprived communities than the least in 2013.

The installation of heat pumps as a matter of urgency is required to replace the carbon-emitting gas boilers. Currently, the UK government plans to ban the installation of new gas boilers by the mid-2030s. However, with the average boiler [lasting between 10 and 15 years](#), this target presents a substantial delay in reducing carbon emissions and would fall short of keeping global warming to well below 1.5 degrees. Instead, a Green New Deal would prioritise the rapid replacement of existing gas boilers with [heat pumps](#), and implement a ban on gas boilers. Heat pumps work like refrigerators but in the opposite direction: they compress air to heat it rather than to cool it. Electricity is only required for the moving and compressing of the air, as opposed to actually *heating* the air. Heat pumps have been shown to be [far more efficient than gas boilers](#) and, if powered by electricity from renewable sources, they produce zero carbon emissions. They also involve only existing, well-known technology, unlike other suggested alternative sources of heating such as hydrogen. [The savings associated with heat pumps](#)

[means they can pay for themselves within 5 - 10 years](#). Crucially, as they are powered by electricity, they can provide a zero-carbon alternative to gas boilers. Operating alongside locally owned and operated solar panels, heat pumps offer a solution to the health, environmental and economic impacts of relying on gas boilers.

Homes come in all shapes and sizes, and the quality of their construction and condition varies markedly. Consequently, each property needs to be individually assessed as a whole in order to determine exactly what retrofit works are required or are most appropriate for that particular property. This [systematic and holistic approach to retrofitting](#) is what is meant by a 'whole-house approach', which has to be led by a qualified retrofit coordinator. In South Yorkshire, the [Scaling Up program provided by Better Homes Yorkshire](#) is one example of a partnership delivery model. More ambitious delivery models have been recommended by The New Economics Foundation, which has called for a [National Retrofit Taskforce](#) that will ensure that the vast majority of homes in the UK are retrofitted to a minimum standard of EPC level C by 2030.

Planning and regulation

Supporting the transition to a low-carbon housing stock needs to be a rigorous regulatory framework to ensure that home builders, landlords and housing associations are taking the appropriate steps. Each building in the UK receives a certificate based on its level of energy performance known as EPC (Energy Performance Certificate) A to G. As it stands, the UK government is largely following the Climate Change Committee's (CCC) preferred ['balanced net zero'](#) pathway to EPC level C by 2035. This is neither ambitious nor urgent enough in reducing emissions or for ensuring sufficient health, well-being and quality of life. For example, it involves insulating only half the total number of homes with solid walls leaving 3.4 million homes without sufficient insulation, and only 4.5 million homes retrofitted by 2035 out of a total of around 27 million, with only a 12% reduction in heat demand by 2050. Also worth noting is their acceptance that new sales of gas boilers to people's homes can continue until 2033. The CCC also admit to taking a 'top-down' approach to the devolved nations, which does ['not differentiate between the devolved administrations in terms of the regulatory levers applied'](#).

Since 1st April 2020, all rented homes in England and Wales are [required by law](#) to reach a minimum of grade E. The Scottish Government proposed [similar regulations](#) - however, this has been delayed due to Covid-19. Wales has its own [Welsh Quality Housing Standard](#) (WQHS) which commits social landlords to meet a range of housing criteria, including energy efficiency, adequate heating, fuel efficiency and insulation. Northern Ireland has no clear retrofit policy or targets, although a [recent report](#) has made several important recommendations. The Labour Party should commit to developing further regulatory frameworks across the UK, which can support the uptake of retrofitting whilst recognising that deep structural change is required for decarbonisation. This will mean different things to different nations - there will be no 'one-size fits all' solution. At a minimum, the Labour Party should set a target to increase the minimum energy efficiency target to EPC level C by 2030 to ensure [substantial cuts to carbon emissions and create thousands of well-paying jobs](#).

The housing market in the UK is also varied, with homeowners, private sector renters, people in social housing and property developers, and we should aim to a regulatory system that recognises these different roles and responsibilities. This requires that the Labour Party should also campaign to use all powers available at a devolved level to meet this goal, and also to tailor retrofitting policy to national circumstances. For example, a mass retrofitting programme could also be supported with a wider reform of housing regulation: the [NEF argue](#) for reforms to require homeowners to improve the energy efficiencies of their property when undergoing other development work and to ensure regulation around building material certification and enforcement is aligned with the net-zero targets undertaken for the sector. In Scotland, Labour for a Green New Deal activists have called for a [Warm Homes and Fuel Poverty Bill](#) to be introduced in the next Scottish Parliament session to not only ensure that all homes in Scotland have an energy efficiency rating of C or higher by 2030 but to also end fuel poverty. Crucially, the onus for these changes should not fall to those living in precarious, often expensive, accommodation. Instead, regulation should drive action on behalf of wealthy homeowners, private landlords and property developers.

With the correct ambition and planning across the UK, it seems reasonable to envisage [retrofitting nine million homes over a four year period with emissions savings of about 41MtCO₂](#). We also support [calls](#) for a significant increase in microgeneration, with rooftop PV being

expanded to over 3.8 million homes, leading to an overall energy savings of 15%. An important feature of any plan will be to continually scale it up using the full powers of central government and devolved nations: if we can meet a retrofitting peak of three million homes a year by 2023, and continue this then the vast majority of the UK's 28 million homes would be retrofitted by the end of 2030. Given that [10% of domestic heating boilers](#) are replaced each year, we imagine other low-carbon and energy-efficient sources of heat will also continue to be needed, such as solar thermal systems, biomass boilers and hydrogen boilers. Altogether, this should ensure that emissions savings will continue at around 19MtCO₂e a year after 2024 for housing alone, reaching zero emissions well before 2030 - even without taking account of the projected increase in rooftop solar. In contrast, the government's ten-point plan achieves a total of 71MtCO₂e reduction from all buildings by 2032, well short of the 87MtCO₂e required. This shows that mass retrofitting not only can make a huge contribution to reducing the UK's greenhouse gas emissions, but it is practically possible to reach this goal by 2029 given sufficient political will and funding.

Financing Retrofitting

As a rough guide, the CCC estimates that the average cost of retrofitting a home to EPC level C is less than £10,000, so the cost of retrofitting the vast majority of homes in the UK would be around £250 billion (£360 billion for all buildings). Current financing options are wholly inadequate, recognising neither the urgency nor scale of the change required. The UK government's [Green Homes Grant](#) voucher scheme offered £2 billion in 2020-21 and a further £320 million in 2021-22 to provide up to £10,000 each for 600,000 owner-occupiers and private landlords in England to install energy-efficiency measures and heat pumps. After only allocating £500 million of the proposed £2 billion to 300 Local Authorities in England the scheme was [embarrassingly scrapped](#) due to a failure to encourage take-up. In part, this is attributable to a failure for the government to prepare regulatory bodies and the construction industry meant the scheme was shortly cancelled. Many of these failures would have been prevented with an effective retrofit plan led by a qualified national task force and implemented by well-staffed area-based coordination. This blunder has lost us vital time in the race against climate change.

There is a range of funding options that should be further explored, with the ultimate goal being rapid rollout of retrofitting, support for low-income housing and cost minimisation. The Labour Party's [Warm Homes For All](#) remains the most appropriate funding mechanism. The policy proposal would see low-income homes receiving upgrades free of charge, with a portion of the savings on their bills going towards repaying the initial costs. Wealthier households would be offered free loans and landlords would be required through regulation to make the necessary upgrades. Financing retrofitting must ensure that costs are not regressively borne by those unable to afford changes and recognise that it is, in large part, a governmental failure that our housing stock is both so inefficient and expensive. As such, the responsibility should be on the government, not the private sector or individual consumption, to offer a solution. Public investment is necessary from the beginning to secure the training and apprenticeships required, and also to appoint the retrofit coordinators mainly at a local level and help in setting up the area-based retrofit teams. Public investment is of course also appropriate for retrofitting local authority and housing association housing. Critically, a public finance approach is also more cost-effective: the [NEF find](#) that the cost of a retrofit wholly from public finance is £9484, considerably cheaper than the £13,801 cost of financing a retrofit privately. Beyond that, for owner-occupiers and private landlords, a mix of public subsidy and loans should ensure that retrofitting is affordable and worthwhile for every household.

A variety of companies from all sectors can be involved in the retrofitting process itself, selected fairly by the owners of the homes concerned. However, one important actor will be local authorities and housing associations. Local government can have a direct and lasting impact on the move towards net neutrality by enshrining strict and ambitious standards on the design and build quality of all new social housing. Across the UK, including its constituent nations, Housing Associations are the primary provider of social housing. According to the National Housing Federation, they have a ['critical role'](#) to play in delivering net-zero carbon emissions. However, at present, [only one in ten Local Authorities, with whom Housing Associations are required to cooperate, have a plan to ensure carbon neutrality in their socially rented homes](#). Effective planning from Local Government bodies can be used to guide the wider housing market and provide greater efficiencies. Indeed, through effective planning, proactive engagement and persistence, Local Authorities can help [raise the standards of the private rented and owner-occupier segments of the market, in effect demonstrating the possibilities of creative design and](#)

[sustainability](#). We must therefore view Local Authority provisions as the centre, from which all other housing standards will orbit. Requiring Local Authorities to conform to tighter rules will only help the rest of the private market develop: local Authorities have a clear role to play in the provision of societal goods. Again, whilst there will be a higher cost in the initial development, this initial outlay can be absorbed in more secure tenancies through lowering the cost of heating and electricity for tenants. This ultimately affords disadvantaged communities greater financial security, increasing social welfare.

The Labour Party must explicitly argue that the Tory party are unable to recognise the change required, but also uninterested in the benefits this brings. By empowering local communities, we could see the creation of half a million good green jobs, tackling fuel poverty and reinvigorating local councils to build good, decent houses. This would fundamentally change the UK for the better and is a change the Government - with their entire funding amounting to less than 5% of the projected costs - are failing to achieve.

Benefits for the many

Training and employment

The huge skills gap in the UK's construction industry is well known and has been highlighted again most recently by [IPPR](#). Green, unionised jobs can provide a counter to the current UK employment market, which has seen huge increases in inequality alongside increasingly precarious employment rights and union status. An expansion of training capacity will be an essential precursor to achieving widespread rollout of a retrofit program. The [NEF argue](#) that 3-4 years are required to train up the retrofit supply chain to full capacity. This leads to just over 100,000 skilled retrofitters in the UK in the first year, rising to 336,500 by year three. With the addition of around 36,000 retrofit coordinators, this results in the total number of direct jobs created peaking at over 300,000 a year. Including indirect jobs, based on [ONS calculations](#), would net 500,000 good, unionized, green jobs. This is broadly consistent with IPPR's [figure](#) of 325,000 jobs by 2035 and with the [TUC's](#) suggestion of 500,000 additional jobs for building new housing as well as retrofitting existing housing. At the other end of the spectrum, the [WYCA have](#) calculated that a mass retrofitting programme to the highest standard of EPC A

accompanied by the abolition of fuel poverty, the installation of low-carbon heating and the provision of microgeneration, in the vast majority of UK homes, could require 800,000 jobs. In contrast, the lack of ambition in the Government's scheme is reflected in their projection of 50,000 jobs by 2030.

Fuel Poverty

Fuel poverty is measured [differently across the UK](#), although can generally be taken to refer to households who spend a high proportion of their household income on heating. [In England, 10% of households are fuel poor, 24% in Scotland, 12% in Wales and 18% in Northern Ireland.](#) This has been estimated to amount to between [2.4](#) and [3.5](#) million households, a shameful figure for the UK, and made more unpredictable given that the full effects of Covid-19 remain to be seen. Whole-house retrofitting brings clear benefits in tackling this, by reducing heating costs, particularly for those living in poorly insulated and expensive to heat homes. For upgrade to EPC level C, homes in bands F and G can save an average of at least £1,170 a year, or £490 a year in bands A-E, [according](#) to one recent government report. For their proposed four-year programme, [NEF](#) estimate savings of £276 on average per home for the energy efficiency measures alone, and £418 for all three types of measure (demand reduction, heat pump or other low carbon heat, and PV microgeneration).

Health and Wellbeing

It is also clear that a retrofit programme will achieve significant benefits in terms of improved health, comfort and air quality, which NEF estimate will be worth a total of over £100 billion by 2035. Health is a particularly pertinent one given how the impacts of poorly insulated houses are disproportionate borne out along class and ethnicity lines. The paper goes on to argue: 'Multiple studies show that the multiplier effect of home energy efficiency is significantly higher than other forms of investment such as road, rail or electricity generation infrastructure, with economic benefits likely to be felt in every community', And: 'It has been estimated that spending £10bn to improve all of the 'poor' housing in England would save the NHS £1.4bn per annum and would pay for itself in just over seven years – and then accrue further benefits'.

Overall, retrofitting our housing stock would go a long way in reducing our carbon emissions, 17% of which currently originate from the built environment. By empowering local government and tailoring housing policy to national need, retrofitting houses has a vital role to play in tackling climate change but also in delivering a jobs-first recovery, alleviating the scourge of fuel poverty and benefiting people's mental and physical health and wellbeing.

AGRICULTURAL TRANSITION

Labour resolves to support an Agricultural Transition

Agriculture currently accounts for [9% of UK domestic emissions](#) – 45.6 million tonnes CO2 equivalent (CO2e) in 2017. Huge changes to the sector will be required in order to meet the rapid decarbonisation required for climate justice, and a rigorous financial and policy framework will be required to ensure this transition happens in a just and fair way. A holistic agricultural policy will also tackle inequalities associated with the consumption and production of food, which sees many in the UK hungry. An [estimated 2.2 million people in Britain are severely food insecure](#), the highest levels of any country in Europe. [Foodbank use in the UK has skyrocketed since 2010](#). Meanwhile, a [fifth of English farms have disappeared in the past 10 years](#), particularly smaller farms, alongside increasing concentration of land ownership and [large-scale intensive farming, with associated declines in animal welfare](#). An agricultural transition executed properly would tackle both these issues, improving the quality of life of agriculture workers while building a more resilient and supportive food network.

Financing an Agricultural Transition

The existing post-Brexit proposals to move away from the European Union's Common Agricultural Policy towards a 'public money for public goods' approach to farming is a step in the right direction. However, it lacks the ambition to challenge the systemic and structural impediments which prevent changing our food system for the better. Financing this sort of agricultural transition is central to a Green New Deal. This agricultural transition needs to both improve British farming's environmental outcomes whilst simultaneously promoting the development of a more equitable UK agri-food chain characterised by high standards, less and better meat, more horticulture and resilient local food networks. A Green New Deal would build upon existing proposals to reward farmers for the provision of environmental services in a number of ways. Many of these proposals are inspired by the 2017 [People's Food Policy](#)

document produced and endorsed by a number of NGOs and charities, ranging from Unite to Compassion in World Farming.

Firstly, the existing budget for subsidies should be increased, with a greater proportion of funds being targeted at farms employing or transitioning towards organic, mixed or regenerative farming methods and whole-farm agro-ecological approaches. Farmers moving towards lower stocking densities and mixed grazing systems would see, for example, their lower profit margins offset by subsidies. This move to shift producers towards more ecologically sensitive agricultural methods would be supported by the establishment of an [Agroecology Development Bank](#) that would provide loans and, as far as possible, grants to farmers looking to transition towards more sustainable farming practices. Links must also be established between the provision of public funds and public health outcomes with, for example, increased funding for development of the domestically grown fruit, vegetables and pulses.

A socialist and fair agricultural transition must also focus on the power structures of the food system as well as the methods. As such, again in line with recommendations made by the [People's Food Policy](#), public investment should be focused on creating a more equitable food system that creates shorter, resilient food chains with more publicly owned or cooperative run elements. This would see, for example, funding provided for re-establishing the UK's [dwindling](#) number of local authority owned county farms. Investment should also be made to establish more regional level infrastructure, such as [community food hubs](#) and cooperatively run processing and logistics facilities which could articulate with the community wealth building approach to creating the local food networks set out below. Structural facets of the agriculture workforce also need addressing. Given the average age of farmers in the United Kingdom was [60](#) in 2016, efforts must be made to attract a new generation of farmers and the creation of more, smaller, agroecological farms. This could be done through financing more farming apprenticeships, providing loans and grants to new entrants and starter farms and the procurement of land for the establishment of county farms. Community supported agriculture and public urban agriculture projects should also be supported through grants to local authorities as alternative means of creating local food networks characterised by public ownership. Finally, [trade policy](#) must be addressed to ensure that UK farmers are not undercut on standards and that the environmental impacts of farming are not simply exported elsewhere.

Funding research and innovation is also central. Public money should support agricultural research and extension in the interest of farmers, not biotechnology and chemical corporations. As such, innovation and R&D funding should focus on building and refining the evidence base for agroecological methods and nature-friendly farming methods and the establishment of regional public extension agencies and accompanying peer-to-peer farmer learning networks. This is, not, however, entirely at the expense of also funding complementary advances in agricultural technologies. Advances in innovation through, for example, plant-based emissions suppressing [feedstuffs](#) or [robotics](#) must, however, produce public knowledge for public benefit, as well as promoting sustainable farming methods rather than facilitating intensification. Other publicly owned forms of innovation should be incentivised too, such as the establishment of food-sharing or direct-to-consumer online platforms or locally run processing co-operatives for plant-based proteins.

Finally, recognition is required that the Green New Deal must not work only for farmers, but also farm labourers. Many employees in the food and farming sector are on precarious contracts and work in difficult [conditions](#). Some are at risk of exploitation and [modern slavery](#). As part of the Green New Deal's agricultural transition, we propose the re-establishment of an Agricultural Wages Board to ensure greater bargaining powers for workers, legislation bolstering the rights and protections of the agricultural labour force and the guarantee of a Living Wage for workers.

This agricultural transition must make healthy, sustainably and equitably produced food available to all at fair prices. Almost [2 million](#) Britons used a food bank in 2020. A Green New Deal programme should see workers' wealth increase in comparison to capital and raise incomes for the average person. Yet, even though the proposed subsidy regime should ensure that farmers producing more sustainably should be recompensed for their efforts accordingly, reform and regulation of supply chains is required to ensure that monopoly forces like supermarkets don't continue to squeeze value out of producers and workers wherever possible. On the one hand, this involves establishing alternative local, public and direct-to-consumer supply chains. On the other hand, it requires a strengthened regulatory regime which gives bodies like the Groceries Code Adjudicator more authority to clamp down on monopolistic

practices, as well as progressive, targeted taxation aimed at corporate profits derived from the most environmentally damaging and highly processed foodstuffs.

Addressing the environmental, ecological, public health and economic ramifications of the way food is currently produced, imported and consumed in the UK is central to any proposals for a Green New Deal. As it stands, our current agriculture regime prioritises, to a great extent, the production of commodities rather than the production of nourishing and healthy food. And, although food in British supermarkets may be relatively [cheap](#) by Western European standards, the costs are borne elsewhere. This is represented, for example, in the way that many UK farmers [depend](#) on public money to be profitable, or in the [precarious](#) working conditions of migrant workers. The true cost of our food is also clear when we see that the [impact](#) of the agriculture sector on biodiversity loss and the extent of associated GHG emissions. Further, [almost half](#) of the food eaten in the UK is imported and this, too, is easily connected with deforestation, water shortages and greenhouse gas emissions around the world. Our current agricultural and food system only works for a select few international, monopolistic corporate interests, as [research](#) by Friends of the Earth International has shown. A Green New Deal must provide a financial platform to alter the structure and relationships which characterise the current food system and build an alternative model fit for the future based not on the extraction of profit, but on the connections between citizens, producers and the land.

What does an Agricultural Transition achieve?

The policies proposed above would have both environmental and social benefits. Environmentally, encouraging a move towards organic, regenerative and agroecological farming methods could help continue growing British food whilst simultaneously encouraging habitat restoration and natural recovery. [Research](#) is beginning to demonstrate that efforts to improve on-farm diversity, a central principle of agroecological farming, can help reduce the need for environmentally harmful inputs like pesticides whilst maintaining yields. In the UK, organisations like the Food, Farming and Countryside Commission are making the case for an [agroecological transition](#) in the coming years which would allow the return of biodiversity and reduced GHG emissions without further offshoring food production. A Green New Deal would also look to provide socio-economic benefits through efforts to reform and improve community land

ownership, the establishment of local authority owned farms, urban agricultural facilities and locally, democratically run community food hubs and processing facilities. These would help farmers, food producers and citizens take back control of the flows of food from the land into households on which society depends, creating resilient food networks across the United Kingdom that allow people to be less alienated from the food they eat and where it comes from wherever possible. This transition would create jobs for new farmers and smallholders, as well as in the establishment of new institutions that help feed people more sustainably and more healthily.

The history of agricultural subsidies shows that this an area which, as it stands, requires significant financial intervention from the state to function effectively. The post-Brexit subsidy regime as it currently stands amounts to the dispensation of around [£3.5 billion](#) of public money annually. A modest increase to this fund leveraged through strategic, progressive taxation at larger food chain actors such as supermarkets or chemical companies could, when combined with greater targeting and conditionalities help catalyse the transformation our agriculture requires. As discussed above this could be complemented by an Agroecology Development Bank offering cheap credit loans and, wherever possible, grants to help facilitate the infrastructural changes required for this agricultural transition.

Generally, there is a recognition that current agricultural policies serve only to worsen environmental harms and that drastic change is required to make our food systems more equitable and sustainable. In a European context, so far only [France](#) has sought an explicitly agroecological national food policy which looks to promote and financially support agroecological education, training and transitions whilst tackling issues like pesticide and antibiotic usage. The UK has an opportunity to take the principles even further and embed them at the heart of a combined, transformative food and agricultural strategy. In the [USA](#), the Biden presidency is making moves to link subsidy payments to agricultural outcomes like carbon sequestration.

Ensuring a just transition for pastoral communities

Cutting meat consumption, particularly red meat, is vital to reducing the impact of agriculture on the environment. If business-as-usual growth projections continue, the livestock sector could [account for 49%](#) of the world's allowable GHG budget by 2030 and 81% of the world's allowable GHG budget [by 2050](#) under the 1.5°C target. An internationalist Green New Deal must situate the limits of sustainable meat consumption amongst what is acceptable worldwide. For example, if every country in the world adopted the UK's 2011 average diet, [95% of global habitable land](#) area would be needed for agriculture – up from 50% of land currently used. Recognising this reality requires we transition to a ['less, better'](#) meat model of agriculture. This will necessitate policy that ensures those working to produce meat and animal-derived products in the UK are empowered to take new ways forward to develop livelihoods based on the growth of crops, for both food and potentially biofuels, and, where that is not economic, land management and ecological restoration.

UK pastoral communities find themselves in a precarious position. The large carbon emissions associated with the sector are unsustainable, particularly when considering that beef and sheep farming in the UK is between [10 and 100](#) times more carbon-intensive than their plant-based protein alternatives. Financially, pastoral communities are under strain, with upland farmers being upland farming being [dependent on subsidy](#) for survival. Poor profits in agriculture are leading to significant social and demographic issues, reliance on seasonal immigration and the average age of farmers being 60. The latter can be due to young people being unwilling to continue in the industry and older farmers being unable to retire (either because of multigenerational tenancies, perceived social pressures, because they did not earn enough to build a pension or a combination of the three). In addition, pastoral land ownership is nucleated, with the vast being leased, usually from wealthy landowners who can trace their ownership to a crown bequest, meaning farmers often lack significant non-depreciating assets. Pastoral communities' long term decline is playing out on a scale that requires significant intervention that protects jobs, improves employment standards and tackles environmental degradation.

For cropland currently dedicated to animal feed, incentives could be offered to convert these into County Farms for agroecological production of sustainable crops like pulses and

vegetables, with subsidies and public support to ensure good quality green jobs for farmers. Alongside good training programmes, these jobs could offer a route into employment for young people at a time when [only 13% of UK agricultural workers are under the age of 44](#).

A government-led transition could see pastoralists both growing crops for human consumption and potentially for use as biofuels and supporting them in the rewilding in return for a sustainable, long term income. A transition away from the production of cattle and sheep towards biofuel feedstocks could prevent the stranding of incumbent natural gas and liquid fuel assets. Pastoralism is an environmentally damaging industry which many rural communities depend on, a transition towards biofuels could secure livelihoods for those currently engaging in downstream activities that are likely to be stranded without these technologies, as well as creating new green jobs. This is a potentially contentious area of policy, but one that is worth exploring both the scope, scale and effect of applying this technology.

Protecting and Refining Regulatory Standards

The UK has some of the highest food, agriculture and labour [standards](#) in the world, many inherited from our time as an EU member. Policy in this sector should ensure that UK farming and food production retains high environmental, animal welfare, public health and labour standards post-Brexit.

Regulation of, in particular, factory farming can be used to drive up animal welfare standards and help the transition to less and better meat by rendering intensive animal agriculture less profitable. Equally, the move towards ensuring continued high welfare and high-quality domestic food production should be buttressed by legislation that ensures British food producers are not undercut on standards of any form as part of undemocratic trade deals post-Brexit.

Poor agricultural standards are consistently correlated with [poor nutritional outcomes](#) and more common contamination events. Ensuring standards remain high on imports and UK grown food ensures access to safe food for all. Agriculture is characterized by unusual working practices with most working very long hours with little time off as resident workers and large numbers of

seasonal, ad hoc or unsecured labourers. Maintaining and strengthening labour protections will prevent a race to the bottom and limit the precarity of work.

Halving Food Waste by 2030

In the UK [11.8 million tonnes](#) of food are wasted annually, around a quarter of food produced, but uneaten food requires the same amount of resource to produce as eaten food so reducing waste can have a significant impact on reducing emissions and leads to less land encumbered by food production and thus scope for that land to be returned to nature. Waste food costs £200-£400 [per household](#) in the UK (in wasted food they buy) and indirectly in losses absorbed in the value chain that are passed on to the consumer.

A Labour government should set binding national targets to reduce UK food waste by 50% from farm to fork by 2030, in line with [Sustainable Development Goal 12.3](#) – moving beyond limited voluntary agreements. Several key measures could be implemented to hit this goal:

- Introducing strong funding for food waste prevention and measurement (including on farms)
- Compulsory food waste reporting for large companies from farm to fork (including food left unharvested in the fields and livestock mortality rates).
- Extending the remit of the [Groceries Code Adjudicator](#) to protect indirect suppliers,
- Tailoring public procurement policies to flexibly absorb seasonal gluts
- Investigate utilising land for anaerobic digestion energy production.
- Intelligent monitoring of crops/foods in storage.
- Avoiding draconian legislation limiting (plastic) packaging which may increase food waste (leading to an overall increase in waste).
- [Reform the law](#) to allow more surplus food to be used as animal feed within a context of a tightly regulated system and a transition to less and better meat.
- Improved clarity around sell by, use by and best before dates.
- Encourage consumption of high yield crops and those with longer spoil times (ie oranges not berries),
- Stronger regulatory framework to limit bycatch/farming losses

- Prioritise systematically designing food waste and poverty [out of the system](#), rather than a rise in food charities.

The [Committee on Climate Change conservatively estimates](#) that reducing avoidable food waste by 50% by 2050 could result in up to [51 million tonnes](#) CO₂eq domestic emissions reduction and save up to [941,000 hectares of domestic land](#). The UK must also provide support for other countries to reduce their food waste. A Green New Deal could encourage massive public investment in storage and cool-chain infrastructure for small-scale farmers and information sharing on food loss reduction via farmer-to-farmer networks and prioritisation of local nutritional needs. Where farmers do export produce, a Green New Deal should promote fair trade, empower farmers through cooperatives and unions, and [regulate Unfair Trading Practices](#).

Developing Resilient Local Food Networks

As [Yorkshire and Humber Public Health Network](#) states, “The Covid-19 outbreak has shone a spotlight on widespread health inequalities in our society, as well as on the ways the food system is connected to these inequalities. The food system includes all aspects of our food - the way we produce and supply our food, the food environments we live in, and ultimately the food we access and eat. These overlapping and intertwined aspects of the food system have direct and indirect impacts on our health and wellbeing, including on levels of overweight and obesity”.

Localising our food production will not only reduce greenhouse gas emissions associated with food production and food miles, but will produce positive public health impacts and create vibrant local institutions. To do this, the [American Planning Association](#) argues that “urban and rural governments alike will need to build political will among decision-makers and the public. They also must shift the use of municipal resources and adopt policy and regulation changes that support and encourage local and regional food systems, including urban agriculture and community-supported agriculture and food business models”. With the appropriate, and just, allocation of public funding, local governments and city councils can build more resilient local food chains and infrastructure that are community-owned and run, as well as create good local markets for smaller/medium-sized producers.

[The food system is a recognised driver of health inequalities](#). Not only are many of our food production methods damaging to both the environment and human health, but our agriculture sector - operating on a [just-in-time supply chain](#) - is sensationally inefficient: producing around only 50% of the food we actually eat, and “leaving us at the mercies of the international markets”. Founder of the Centre for Food Policy, Tim Lang, also [argues](#) that “Food is the biggest driver of NHS spending as a result of obesity, diabetes and heart disease”. For all this and more, Labour should fight for re-localising our food production and address many of the underlying inequities in our food system. Doing so will [shift the balance of power](#) away from large multinational corporations and towards local communities and small food organizations.

The beauty of local food networks, in which locally owned and run organisations are responsible for the production of our food and its sustainability, is that they are feasible: they are already happening. The UK already has an excellent foundation for building an even stronger network of local food production. The list of local food network success stories from the UK include:

- [Slow Food Foundation](#);
- [Sustainable Food Cities](#);
- [FareShare](#);
- [Oxford: Cultivate](#);
- [London Food Link](#),
- Brighton’s [Seedy Sunday](#)

Ensuring a Just Transition for Fishing Communities

Fishing is causing massive devastation to our oceans but is a key part of the coastal economy. It is thus imperative there is a managed transition for these communities to utilise their skills in the roll-out of wind and tidal energy, production of algal feedstocks for use in plastic production and in marine conservation.

Overfishing has led to a precipitous decline in ocean flora and fauna, with fish stocks declining every year since 1903. Two thirds of UK fish stocks are overfished and stocks are now 3% of

what they were in 1900. A [reported](#) 40% of fish caught in UK waters is bycatch (although this may be higher as there is a disincentive to report) and over 20% of fish landed in the UK is not eaten. This includes a disproportionate number of high food chain predators, destabilising ecosystems.

Modern factory fishing techniques like trawling are particularly [damaging](#) to the sea bed, releasing carbon sinks and decimating habitats. Fish production is a major source of ocean plastic, with this being particularly dangerous to marine life as it is designed to trap them rather than just causing issues in bioaccumulation.

Fish farming has a number of significant environmental issues with eutrophication, antibiotic contamination and particularly animal welfare, with most farmed fish being fed on caught fish, this is thus not a sustainable solution to the issue of fish hunting. Scotland's salmon industry is particularly emblematic of this. According to [Feedback](#), 'The Scottish salmon industry currently uses an estimated 460,000 tonnes of wild-caught fish, such as herring, sprat, whiting and anchovy, in feed – roughly the same as the amount of seafood purchased by the entire adult population of the UK in one year'. Instead 'Job creation could be maximised through a transition from farmed salmon production to more sustainable shellfish production, such as rope-grown mussels – for every £1 million of industry value, the shellfish industry generates 23 jobs compared to only 2 jobs for the salmon industry.

Many coastal communities are dependent on fishing as a key revenue source. This is most acute in hard to access regions like the Highlands, Islands, Cornwall and Mid Wales. Fishing communities have seen a decline in fortunes for a long time (arguably a century) and this has not been adequately managed, targeted support is likely to lead to more effective outcomes. Any policy should also recognise the historic impact overfishing has already had on depleting fishing communities through reduced living standards and precarity. The difficult to police nature of the open seas leads to [labour issues](#) being rife in the fishing industry. Providing alternative revenue streams for coastal communities, utilising existing skills of seamanship, in different industries secures a sustainable future for those communities. A transition towards algal feedstock has the additional benefit of securing livelihoods for those currently engaging in downstream activities that are likely to be stranded without transition technologies.



UNIVERSAL BASIC SERVICES

- GREEN, LUXURY PUBLIC TRANSPORT -
 - A NATIONAL CARE SERVICE -
 - A JUST CLIMATE ADAPTATION -
 - A NATIONAL NATURE SERVICE -
 - UNIVERSAL FREE BROADBAND -

GREEN, LUXURY PUBLIC TRANSPORT

Labour resolves to support a transition to green public transport, investing in electrifying both the Bus and Rail network, free local bus transport, and integrating the transport network with a range of options

Public transport plays an integral role in the United Kingdom's transition towards a more sustainable future. A green transport transition will not only be key to preventing the hugely impactful environmental damages associated with the current forms of private transport but can also provide safe, reliable and affordable transport options. This is in stark contrast to the record of privatisation, which has decimated both the coverage and quality of the UK's bus and rail services. It follows that accessible public transport is also a political necessity. The scale of transition needed means that the Labour Party must take a holistic approach to transport policy, which advocates an integrated model of travel that covers all aspects of a journey. Doing so will create a society that is greener and fairer.

Producing [34% of emissions in 2019](#), transport remains the UK's largest sectoral source of carbon emissions. Transport presents a significant challenge for Green New Deal since it not only has considerable political purchase but also includes lifestyle to ensure that a transition is just for workers and service users. However, our recovery from the coronavirus pandemic presents a historic opportunity to catalyse this change, so long as that people are not allowed to default back into carbon-intensive private transport. This will take farsighted and bold government action, similar to the [ambitious steps](#) France has recently taken to end short-haul internal flights. This measure may not go far enough, but the level of commitment shows how much further the UK has to go on these complex issues.

This is problematised by the expensive disaster which has been the privatisation of the UK's [rail](#) and [bus](#) services. As a result of rail privatisation between 1994 and 1997, private train

companies are provided with public funds to run services for a certain period. Private companies operate to produce a profit for shareholders which may explain why the average price of a rail journey has [increased by 23.5% in real terms](#). To add insult to injury, many of these companies are [themselves state-owned and reinvest millions of pounds worth of money back into their own transport systems](#). Where bus services have been privatised in the UK, they have still required [significant investment of public money](#) whilst [fares have increased and routes not profitable have been cut](#). The everyday frustrations of using bus and rail transport is not unconnected to this. Meanwhile, we have seen a repeated prioritisation of investment into our motorways despite repeated successes of rail infrastructure projects. Road traffic has increased by 29% since 1990, resulting in vehicles contributing [20% of the UK's Greenhouse Gas Emissions \(GHG\) in 2017](#). Less obviously, private ownership of cars and expensive public transport has resulted in rural communities being [left behind](#), cut off from jobs and unable to access vital services. To facilitate a reduction in GHG emissions there needs to be a shift in transport usage away from roads to efficient public transport consisting of railways and electric buses. Vital in this transition is not only increasing public ownership of an integrated transport network but also the creation of long-term jobs and retraining opportunities for workers in the transport sector, including aviation, which would vastly expand the green unionised workforce.

Health concerns play a vital role in the discussion of green public transport with the deaths as a result of pollution on the rise. [The UK has double the legal levels of nitrogen dioxide and particulate matter, two particularly harmful kinds of pollution, than that recommended by WHO](#). The impacts of this on our health and quality of life are extreme and widespread. The WHO have found that more than [40 UK cities unsafe due to their high levels of pollution](#), and it has been reported that [between 28,000 and 36,000 people die as a result of air pollution every year in the UK](#). The estimated financial costs of health impacts of air pollution was likely to exceed estimates of £8-20 billion. Therefore, to rapidly reduce emissions and particle pollution, whilst improving health outcomes, a Green New Deal must facilitate a transition towards an integrated green public transport system. Those most affected by these pollution levels are the most disadvantaged members of our communities but also who seek to benefit the most from the expansion of public transport.

A holistic approach needs to be taken towards the UK's transport, moving away from a reliance on private road-based vehicles towards an efficient, safe and affordable nationalised network that works for the people. This will ensure that working-class communities will not be left behind in a shift to a low-carbon economy.

Expanding Public Transport

To ensure the UK's post-covid recovery tackles environmental and social justice issues effectively, the Labour Party must make the case for an expansion of our public transport network a priority. One first step to achieving rapid decarbonisation is the radical overhaul of surface transport in the UK. Due to the convenience of motorised transport and public policy decisions, road traffic in Great Britain [increased by 29% from 1990 to 2018, with cars and taxis far outnumbering that of buses and coaches](#): the ONS record that cars, vans and taxis accounted for [83% of all passenger distance in the UK, and also an increase in the number of licenced motor vehicles from 19m in 1980 to an all-time high of 35.5m in 2014](#). In this same period, and despite increased fuel efficiency of vehicles, greenhouse gas emissions from road transport [increased by 6% from 1990 to 2018](#). Therefore, Labour's Green New Deal must incorporate a range of approaches to facilitate transport alternatives by promoting integrated green public transport to rebalance the UK's reliance upon cars and taxis and simultaneously reduce Greenhouse Gas emissions.

Outside of London, the number of journeys taken by bus has decreased by [more than a third since 1985](#). A significant contribution to this decline will be the [expensive and poor service provided by privatised bus companies](#). This amounts to an attack on services that working-class people are most dependent upon. We see, for example, [approximately a third](#) of the poorest 10% of households do not have access to a car, and therefore rely on active and public transport. It also creates regional inequalities. In 2019, the government's planned transport spending showed that [London was set to receive almost 3 times more funding per person than the North of England](#). This underfunding is compounded by the fact that the North of England has some of the highest levels of poverty in the UK. Women and those from deprived areas are disproportionately reliant on the inadequate public transport network. We must look to address inequality at a regional and household level, through providing free, luxurious public transport.

Contributing to the widening economic inequality in the UK and the North-South divide, rural communities are all too often left behind and let down by Westminster policies. Free and green transport would challenge this by providing more accessible transport for rural communities while reducing emissions levels.

To help move a vast number of people from cars to public transport, where [2/3 of all commuting is done](#) by car, there will need to be a sizable expansion of transport provision. In rural areas, this would create better connectivity between towns and cities, therefore enabling further economic regeneration by reversing the exodus of young people from rural communities. In urban areas, to encourage behavioural change increased investment in bus lanes, bike share schemes, the restriction of car access in urban areas through car-free zones and increased parking fees, and the option of park-and-ride services would also have a positive economic and health benefit. These are ambitious but achievable goals: Estonia leads the way in providing either free or highly subsidised [free public transport](#) through mass investment and a long-term vision of an efficient and attractive public transport system. Estonia's capital, Tallinn, has had fare-free public transport since 2013, including the bus, tram, and rail networks. The success of this has led to a [roll-out of free bus travel across the country](#). This will have the most positive impact on low-income and unemployed residents, by increasing connectivity, widening job opportunities and cutting congestion and pollution.

Beyond tackling inequality and reducing emissions, expanding public transport would have further spillover benefits:

- Increased use of public transport and a reduction of car transport has important health benefits. The [BMJ found 'a 7.6% reduction in ischaemic heart disease plus reduced stroke, dementia, diabetes, depression, and cancers'](#) associated with land transport policies.
- The expansion of public transport networks would increase the provision of green unionised jobs across the UK.

Electrification of the Rail Network

To transition to a sustainable future, the electrification and expansion of public transport must take centre stage. It is therefore important that rail nationalisation become a priority for the UK government. The Labour Party must lead the way in advocating for a publicly owned and democratically managed rail service, which would challenge the dominant market-led approach.

The benefits of increased investment and efficiency of our rail network, as opposed to vehicle efficiency which has been the focus of previous government action, is that it will ensure a more efficient reduction of carbon emissions: [rail travel is over twice as carbon-efficient as travel by car](#). In addition, each tonne of freight transported by rail produces [76% less CO2 emissions than the equivalent HGV journey](#). Due to the volume of HGVs on our roads, a shift to freight trains could reduce the annual congestion cost by [£8 million per freight train](#). This switch in transportation would also have a significant reduction amount invested in improving and maintaining highways, of which the [government expenditure](#) for 2020-2021 was £4.16 billion. Thus investment and expansion of the network will facilitate a smooth transition away from HGVs to freight trains.

As a recent Labour Party [report found](#), United Kingdom's privatised and fragmented rail network has led to a more expensive network that fails to deliver a standard of service commensurate to its cost to passengers and the public, leaving customers with inefficient and ineffective services. The British rail network, when compared to European countries operates at a [40% less efficient rate](#). The privatisation of the rail network has resulted in a [tripling of annual government subsidies](#) between 1991/1992 when the service was last state-owned, and 2017/2018. The savings made through the nationalisation of the network would save the government enough money to fund an [18% cut in rail fares](#). If taken into public ownership, our rail services would benefit from proper, long-term investment with its customers in mind - not shareholders. This would generate a new, more affordable public transport system and the ability to properly invest in rail electrification. These updates to rail services that we are calling for are long overdue and integral to a just recovery.

Current targets around electrification are wholly inconsistent with a country serious about decarbonising and preventing the damage a climate-changed world would bring. For example, the [pledge](#) to remove diesel-powered trains from the national rail network by 2040 is woeful. [Technological advancements](#) - such as innovations with static frequency converter (SFC) - make this change more flexible than ever, whilst increasing efficiency. In Switzerland, a fully electric rail network operates at [affordable rates](#). The integration of solar power with the rail network has paved the way for innovative solutions to transport.

Rail nationalisation has been taken seriously in the devolved nations. The Labour administration in Wales recently took the Wales and Borders rail franchise into public ownership to [‘provide for longer-term financial stability...to secure plans for infrastructure improvements and deliver future improvements for passengers’](#). In [Scotland](#), past operators of the Scotrail franchise made consistent annual operating profits of £10-20 million. The vast majority of these profits were extracted from the rail network and distributed to shareholders. Furthermore, Scotrail is one of the most highly subsidised franchises in the UK. In 2015-16, Abellio Scotrail received £293 million in direct government funding, amounting to nearly 45.6% of its total income. The continuous profit from public subsidies are no longer justifiable and illustrates the need for this to be carried out across the UK. The SNP has belatedly conceded to pressure from the Scottish Labour Party and trade union movement to nationalise Scotrail, and plan to introduce free fares for under 19’s. In addition, the planned expansions to Scotland’s rail network could [generate as much as 17,000 green jobs](#). Given that Scotland is a country where over 30% of households do not have access to a car, a truly national and affordable rail network would give multitudes of citizens greater access to the swathes of Scottish social and economic life from which they are currently effectively excluded. This is a welcome step forward to making public transport more affordable, although it does not go far enough: Scotrail has been nationalised by the state as an [operator of last resort, in what has been described as a ‘holding operation’ until the private sector is ready to move back in](#). A long-term plan for public ownership throughout the UK would enable the expansion and electrification of the network and would connect previously disconnected communities whilst ensuring a more reliable and affordable network.

Free Local Bus Travel

Alongside the electrification of rail transport, Labour should also propose greater investment into local bus networks. Whereas the lead time on the infrastructure required to expand and electrify rail can be substantial, increasing the number of bus routes has a substantially lower time and cost to implement. A publicly-owned bus service ensures that they are run for the public good rather than private profit, therefore reversing the trend of private bus companies to ‘cherry-pick’ profitable routes. Nationalisation would go some way to ensure:

- A minimum level of service guarantee;
- That everyone has access to free local bus transport;
- Ensuring that the routes provided are those needed by local communities, run to times that suit them;
- Investment in service accessibility, for example for all disabled people and parents;
- Long-term technological investment, for example in electric or biowaste buses.

In 2018/19, the total [estimated operating revenue](#) for local bus services in England was £5.46 billion, with passenger fare receipts making up the largest proportion of operating revenue at £3.26 billion. The savings associated with free bus travel would likely fall to the poorest households as they are more likely to rely on public transport. Numerous options exist to finance free local bus transport: a transport payroll tax on all businesses employing more than a certain number of individuals could raise the necessary funds, or transferring funding from the [National Roads Fund](#) (worth £28.8 billion). Proposals for a land value tax, similar to those in the 2017 Labour Party Manifesto, could also [raise the operating revenue](#) by incentivising local regeneration and infrastructure investment. In 2018, bus transport in the UK accounted for [3 million metric tons](#) of carbon dioxide. Therefore the electrification of buses must also take priority if we are to maximise a reduction in GHGs.

There are numerous examples of campaigns and government action demonstrating the viability of free local bus travel, including:

- [Better Bus Manchester's](#) campaign has resulted in the promise of regaining the public ownership of bus services in Manchester, bringing the promise of more affordable fares, as well as evening and weekend services. The expansion of the Manchester bus service will result in a better service for the greater Manchester community, people working alternative hours will no longer be stranded by inadequate services. This should be seen as a precursor to a wider national movement.
- There is public support for the expansion of public transport shown with grassroots campaigns across the UK. The [Get Glasgow Moving](#) is a campaign set up by members of the community to help expand Greater Glasgow's economy, address inequality and social isolation, reduce toxic levels of air pollution, and tackle climate change, by campaigning for a fully integrated and accessible, publicly owned and accountable, public transport network for the Glasgow area.
- England and Wales should follow Scotland's example in making it possible for bus services to be taken into public ownership, but much more work in Scotland has to be done to encourage further take-up of this.
- As of March 2020, public transport in [Luxembourg](#) is free for residents, cross border workers, and tourists. Before the scheme, annual revenue from fares accounted for less than 10% of the [operating costs](#) of the network. To cover the cost of implementing the scheme, the government is [reviewing legislation](#) so that workers will no longer be able to deduct their travel expenses from their tax bill, which will hit higher taxpayers more than others. Through [Modu 2.0](#), their new mobility strategy, the government plans to invest in transport infrastructure to increase public transport patronage by 20% by 2025.

Integrating Public Transport

To ensure a smooth transition away from a reliance on private cars and aviation there must be the provision of green public transport alternatives. We have seen recent expansions of inner-city green zones, which have the potential to [benefit those most affected by increasing pollution levels](#). However, green zones must be supported with sufficient public transport options. We have seen this fall short in London where public transport costs have remained high whilst failing to meet the requirements of its residents. Currently, [two-thirds of all commuting](#) is by car,

this unsustainable practice is the only option for too many people. It is therefore vital that an integrated approach is taken towards public transport that can facilitate behavioural changes. We must incentivise alternative travel routes where possible; the emission of different transport methods are [displayed below](#) for a visual comparison.

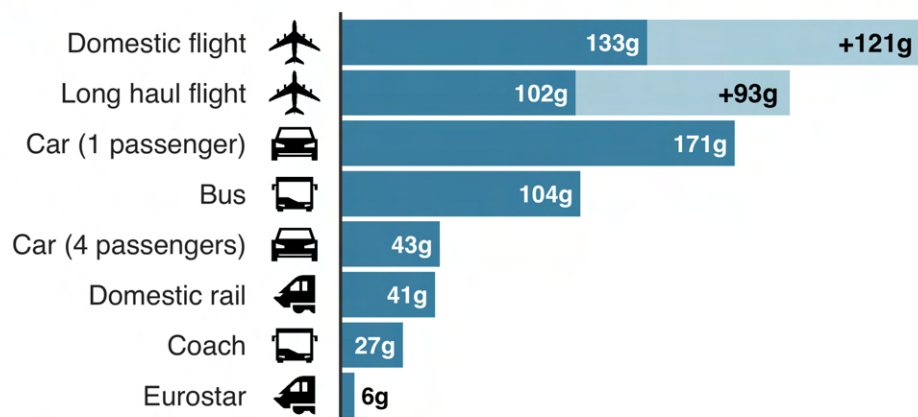
As shown, high speed, (formerly) publicly-owned rail has already established itself as the most sustainable mode of travel. [Eurostar is a case in point of misplaced priorities](#). With large scale investment and expansion planned for the aviation industry, our crown jewel of international, integrated green transport is being allowed to fail. The British government first sold their stake, then brushed aside calls for financial assistance during the pandemic-induced fall in demand, leaving a huge absence in alternative modes of sustainable cross-border travel and threatening thousands of jobs. To establish a broad network of viable, sustainable alternatives the state must begin to protect and reclaim our existing green transport infrastructure.

We also know that the ownership of private cars is incredibly inefficient. Cars take up a disproportionate amount of road space compared to other forms of transport. It has been estimated that in 2019, the direct and indirect costs of congestion in the UK [totalled more than £7.9 billion](#), an average of £1,317 per driver, with the average driver spending 115 hours in traffic jams. At a global level, London was the [eighth most congested city](#) in the world. Urban areas have become increasingly designed to facilitate and encourage car transportation, despite

Emissions from different modes of transport

Emissions per passenger per km travelled

■ CO2 emissions ■ Secondary effects from high altitude, non-CO2 emissions



Note: Car refers to average diesel car

Source: BEIS/Defra Greenhouse Gas Conversion Factors 2019

the widely known health and environmental impacts. As a result [road transport](#) accounted for 21% of the United Kingdom's domestic greenhouse gas emissions in 2017. Our efforts must therefore be directed to reduce the cost of congestion to the UK economy, and liberate individuals from the time they waste in congested traffic, by investing in green infrastructure to encourage the use of shared mobility options.

Mobility Hubs

When Estonia and Luxembourg attempted to change patterns of behaviour to more green alternatives they found that its success was dependent on its combination with other transport policies. Put simply, our vision for a green transport network is a holistic transport package, which provides a range of travel options including pedestrianised areas, park and ride options, cycle lanes and well-designed bus routes and extensive rail connectivity. A Green New Deal would see our transport options be centred around 'mobility hubs', spaces that are designed to reduce private car space and improve the surrounding public realm. Mobility hubs would ensure the success of an expanded public transport network by integrating a range of accessible services and providing people with a convenient range of sustainable modes of transport. Mobility hubs also have the benefit of acting as gateways to rural and remote areas which would benefit from shuttle services that could connect to small, isolated communities with other communities and larger towns and cities.

A key feature of mobility hubs must be an expansion of cycle lanes and public access to bike share schemes to ensure the public have access to active transport. To encourage an increase in cycling there must be the provision of infrastructure to support the transition. [Research has found that](#) the increase in pop-up bike lanes during the COVID-19 pandemic has resulted in large increases in cycling. One aim for the Labour Party should be to carry this forward post-pandemic, to build upon the recent growth of safer cycle lanes in urban areas. The success of expanding the [national cycle network](#) has demonstrated that the provision of services can incentivise behavioural change towards more active transport. Where private vehicle ownership remains a necessity we must ensure that they are zero carbon and used efficiently. This would require, for example, establishing a Car Share Fund to help local authorities set up such groups and establish fleets of low-carbon vehicles. This would ensure more people have access to cars without increasing the numbers of private vehicles on the road. Roll out of electric vehicles must

be done sustainably and fairly - it would be unacceptable for the UK's decarbonisation process to hinge on the exploitation of countries possessing rare earth metals which are required for the production of electric vehicles. There has been the success of private Car Share schemes in the UK - [Zipcar](#) has a network of over 3,000 cars where accessibility is on a membership basis. The company provides student discounts and operates bookings on an hourly basis.

There is a substantial body of evidence to draw upon to suggest that mobility hubs are viable, and work. Mobility Hubs are being trialled in Musselburgh, East Lothian, with [CoMoUK](#). Developed in conjunction with SEStran, this hub includes car club bays, bike-sharing facilities, public transport, wayfinding, and streetscape elements all under the new brand of multi-hub. Further mobility hubs are being developed by Plymouth city council, Transport for Greater Manchester, and Norfolk city council. The idea of '[20-Minute Neighbourhoods](#)' offer the promise of healthier communities, cleaner air, stronger local economies, and better resilience against climate change. These have been piloted in Paris and Melbourne, and are holistic plans to create complete, connected and compact places. In these examples, diverse and affordable homes, local jobs and local food production and distribution are connected with safe and accessible paths, streets and spaces, good green spaces in the right places and community health and wellbeing facilities to reducing the need for people to travel far whilst also boosting their mental and physical health.

In 2017, Ghent, Belgium, opened its new car-free centre and traffic circulation system, where traffic was banned in the centre, except for city centre residents and deliveries to shops and cafés. Car parking tariffs were adjusted so that the further away from the centre they are the cheaper they are, with free parking at park-and-rides on the edge of the city. Car club cars were installed at hubs in easy reach of residents, with any new building project of more than 10 residential units required to provide a minimum number of electric cars and bikes at an adjacent hub. By encouraging shared transport as part of an action plan for a car-free city centre, car journeys in Ghent have reduced from 55% to 27%, with 20% fewer cars in the centre, and consequently nearly 20% less pollution. In 2003, the City of Bremen, Germany, [launched their first mobility hubs](#), featuring carsharing, bike parking and transit. More recently, they have also developed a smaller type of mobility hub for narrow streets, which feature a small number of carshare cars. In 2020, there were 10 mobility hubs, complemented by 33 of the smaller hubs in

dense city neighbourhoods. These have succeeded in promoting more sustainable modes of transportation, with analysis from 2018 showing that each of the shared cars replaces 16 privately owned cars, accounting for around 5,000 fewer vehicles in Bremen. Building mobility hubs in easy reach of homes has been established as one main factor in the success of the scheme. The reduction in traffic in Bremen is higher than other German cities and is attributed in part to its policy of having other sustainable transport choices at the same hub.

A NATIONAL CARE SERVICE

Labour resolves to support the establishment of a National Care Service

1948 saw a Labour Government bring in the National Health Service, a revolutionary concept that has impacted the lives of countless since. However, over the past several decades, health issues in the UK have gradually changed as the population has aged. As a result, chronic health issues, as opposed to acute, now afflict the [lives of millions](#). This suffering particularly [impacts](#) lower socio-economic groups, who consequently find themselves with a lower quality of life. A failure to adequately prepare for these changes has resulted in structural weaknesses, whereby poorly run private care providers neglect the needs of the elderly and vulnerable. The care sector is in such an underfunded and unplanned state that there is currently a staff shortage of [100,000](#), which is projected to increase to [520,000](#) by 2035. A National Care Service, channelling the vision of 1948, would be a bold and progressive solution to the challenges that the UK faces, and would provide good, green, unionised jobs up and down the country.

The pandemic has highlighted numerous structural weaknesses within social care, which have increased the risk of infection and mortality for staff and service users. In the past, these structural weaknesses have been somewhat obscured by a reliance on unpaid care, which has partially compensated for major workforce recruitment and retention issues. This has social justice implications which are overwhelmingly gendered because the majority of care work is [undertaken by women](#). The social reproductive labour that is performed during social care is incredibly undervalued and doesn't reflect the importance of the service that it provides. To acknowledge this, a National Care Service would increase the Carer's Allowance to at least a living level, so that those who are providing care can do so without having to worry about their financial situation. To accompany this, a National Care Service would mandate a standard

employment contract for those working in the social care sector, which would include full sick pay, fully contracted hours paid at the real Living Wage, and a guarantee for all hours worked, including travel time and sleep-in shifts.

By creating a long-term workforce strategy that focuses both on recruitment and retention, and providing workers with the training and support they need, the social care sector would represent an attractive career choice. This can only happen if the social care sector is properly funded. A National Care Service would bring the social care sector back into public ownership and under democratic control. This would be free at the point of need, and therefore significantly reduce the pressure on unpaid carers, giving them the freedom to choose to provide care, instead of being compelled to provide care to compensate for a failing system. A National Care Service would engender a shift towards a focus on wellbeing within the social care sector, which would be based upon prevention and improving the resilience of service users in their communities. To enable this, a National Care Service would be integrated with the NHS and decentralised to give local authorities the freedom to provide care that is most appropriate to local conditions. Examples have been included, which highlight how these principles have been employed successfully both in the United Kingdom and worldwide.

Establishing a publicly owned National Care Service free at the point of need

In the United Kingdom, social care is [means-tested](#), with a needs assessment undertaken to understand the level of care required, and a financial assessment. This financial assessment for home-based care [considers](#) income and savings, and for care home fees this includes the value of owned property, unless a spouse or partner still resides there. The capital allowance is the [maximum amount](#) of capital a person can own, above which they have to pay for the total amount of their care. The capital allowance for care home fees differs between countries, and is £23,250 in [England](#) and [Northern Ireland](#), £28,750 in [Scotland](#), and £50,000 in [Wales](#).

In England alone, the care market consists of [18,500](#) employers providing care across nearly [40,000](#) establishments. About [97%](#) of home care is provided by independent providers, who are [poorly regulated](#), with no centralised record of the numbers of people who use these services.

The failures of this fragmented system have been highlighted by the pandemic, where the lack of central levers and standardised reporting has meant that it has been nearly impossible to deliver a coordinated response. A National Care Service would be properly regulated, with standardised data sharing systems, and under democratic control, improving resilience and allowing proper coordination between the different care providers.

Cuts associated with austerity have been especially pronounced for local authorities, with [£7.7 billion](#) taken out of social care budgets. Councils have consequently tightened eligibility thresholds, meaning that there is a substantial unmet need. There has been a [5% drop](#) in the number of people receiving publicly funded social care per year since 2010, totalling around [600,000](#), despite an ageing population with increasing needs. Consequently, [1.4 million](#) older people are going without the help they depend on to carry out essential everyday tasks. This lack of provision means that some of those who should be receiving care are instead being transferred to hospital, in turn [increasing](#) waiting times and costs to the NHS.

In addition to leading to reduced social care provision, austerity has forced care providers to try and meet needs at a reduced cost. Analysis by Laing Buisson found that the cost of an economically run care home was [between £623 and £726 per week per person](#). However, Care England identified that fee levels were [substantially lower](#) in many places, with 30 councils paying less than £500 per week per person, equivalent to just £2.97 per hour, which was associated with poorer care. Prior to the pandemic, the social care sector was in a precarious state. This was demonstrated by the [failure](#) to ensure that social care staff received appropriate PPE and testing during the start of the pandemic, especially considering the vulnerability of those they were caring for.

The increased marketisation of the care sector (a byproduct of austerity) is also having a significant impact on the sector by reducing the resilience and sustainability of care providers. Constant changes in ownership are a characteristic of this sector, which creates uncertainty for service users and staff. In 2019, [three-quarters](#) of councils reported that providers in their area had ceased trading, many because of uncertain funding streams and bad financial management. When private care homes are in danger of financial collapse the quality of the care that they provide is [substantially reduced](#), and there is the risk that if they cease trading

then service users will have to obtain care elsewhere. This has serious consequences, especially for the NHS, where between 2010 and 2017 the number of people with social care needs who were stuck in hospital beds [rose 72%](#), costing [around £820 million a year](#). Furthermore, [one-in-five](#) care facilities received the lowest quality ratings from the Care Quality Commission, and complaints have [trebled](#) since 2010. A publicly owned and democratically controlled National Care Service would place people before profit, giving care providers certainty over their funding streams to plan for future needs, and protect service users from the uncertainty that is characteristic of the marketised sector.

Whilst [70%](#) of care homes in England are small businesses, around [30%](#) are owned by overseas investors who view them as assets for extracting large amounts of money for investors. This means that accountability to shareholders is greater than to those who use the services. [Many](#) operators use complex company structures to hide profits in tax havens and accumulate large amounts of debt to minimise tax receipts and maximise profit extraction for shareholders. As a result, for these operators, as much as [29%](#) of the weekly fees paid to these private providers by local authorities go to their private investors. In 2011, the care home chain [Southern Cross](#), which looked after 30,000 residents, ceased trading, due to high rental payments and large amounts of debt. Many of its homes were bought by [Four Seasons Healthcare](#), another large provider, housing 14,000 residents, which then ceased trading, again due to large amounts of debt. This corporate mismanagement causes serious distress to [thousands](#) of residents and their loved ones and could be avoided by a properly functioning and funded National Care Service.

Although the [Care Act 2014](#) gave the Care Quality Commission the responsibility of financial oversight of care homes, it did not give them the power to act if it thought that an operator was going to go bankrupt. The rights of private investors to extract profit from the care home sector is given priority over the rights of the care home residents. A publicly-owned National Care Service would increase accountability to local authorities and would ensure that services are delivered in the public interest and not to generate profit for private investors. This would increase the stability of the sector and avoid the distress to residents that come with the instability of private ownership.

Finally the importance of a properly funded national care service will only grow over the coming decades, between 2020 and 2035, the population aged over 65 is projected to [increase from 10.5 million to 14.1 million](#), increasing the number of people with complex needs, which poses a serious challenge to the current social care system. A National Care Service would produce equivalent levels of equity and access to that of the NHS, ensuring that social care is a universally available service, where all who need it can access it free of charge.

National Care Service in the economy

Key to a National Care Service is the reframing of social care not as a burden, but as an important economic sector that is central to rebuilding local economies. For [every one pound](#) that is spent on public sector care provision, [£1.94](#) in value is added to the local economy. However this shrinks to [£1.32](#) when spent in the private sector due to the requirements of shareholders. A National Care Service would additionally reorientate the service towards the needs of a person, eliminating the exclusion of those who fall outside of the narrow eligibility criteria or are unable to pay. The human costs to cuts in health and social care have been large, linked to [120,000](#) excess deaths in England alone, especially those who fall outside of the public social care system and those with complex needs, such as dementia.

Austerity has had a profound impact on unpaid carers, with [2.6 million](#) people having quit their jobs to care for a family member between 2017 and 2018, an [increase of 12%](#) on 2013. A National Care Service that is free at the point of need would take the pressure off unpaid carers and would have the capacity to provide social care to anyone who needs it, independent of their financial situation or complexity of needs. Free home-based personal care has been [available](#) in Scotland for adults aged over 65 years since 2002. Since 2019, this has been [extended](#) to adults of any age, no matter their condition, capital, or income, who are assessed by their local authority as needing this service. Since 2002, through increasing the availability of social care, there has been a [significant increase](#) in the rate that people are transferred back into the community from hospital, helping to ease pressure on the NHS. Additionally, this has [reduced](#) the rate that people are admitted to care homes by ensuring that they can access care in their homes, reducing the amount spent on social care for older people.

In 2018, private social care operators provided services for [fewer than a quarter](#) of all elderly people getting home help in Sweden. The structure of this system reflects a long history of public funding and ownership, together with the growing importance of local self-government, giving regions the autonomy and ability to structure their social care operations in line with local conditions. This social care system is based on collective principles, where need and not the ability to pay drives the provision of social care. Social care is [largely financed](#) through taxation, and because of this public financing, it is accountable to the public.

In 1994, Germany [introduced](#) mandatory long-term care insurance (LTCI). This is a [universal scheme](#) where employees, employers, and retired people all contribute, with unemployed people being covered by the contributions of others. Initially, this system depended on the level of physical care dependency that a person had, but in 2008 this was [extended](#) to provide coverage for people with cognitive impairments. Benefits can be claimed from this scheme by people of all ages, and although there are eligibility thresholds, there is no means-testing and no account taken of individual circumstances. Currently, people contribute [2.5%](#) of their wages, with levels of benefits [ranging from £283 to £1,784](#), depending on the level of dependency that a person has. Shortfalls in costs are then made up by either private funds or social assistance.

An integrated, community-based and personalised illness prevention model

Since the 1970s, health and social care in [Northern Ireland](#) has been fully integrated, but this is not the case for the rest of the United Kingdom. The failure of this segregated system has been [highlighted](#) by the pandemic, where a lack of coordination and resource inequality led to patients being transferred from hospitals to care homes without first being tested. The current acute intervention model in healthcare that focuses on treating disease places a large amount of pressure on the NHS, and with an ageing population that has an increasing incidence of chronic disease, this is only going to [continue](#) under the current segregated system.

A shift towards an integrated system would [enable](#) continuous and more coordinated care, shifting services away from expensive acute hospitals and towards prevention in the community. Integrated care would provide a [better](#) service, by centring the needs of the patient, whilst maintaining their independence through reducing the rate of institutionalisation. This integration must be accompanied by a shift towards an ecosystem of community-based providers, which [evidence](#) shows provide the highest quality personalised care. Past reforms have [suffered](#) from being highly centralised and top-down. Therefore, this integration must be accompanied by decentralisation, which would involve moving decision making away from large central bodies and towards service users so that the formation and implementation of health and social care policy is relevant to local conditions. Proper integration of the National Care Service with the NHS will allow for both systems to better withstand future health crises while at the same time decentralising power towards communities.

The social care system should be realigned towards the concept of [wellbeing](#), which encompasses not only physical and mental health, but the ability to be an active citizen, to pursue employment, and to be a family member. Traditional services that focus on acute intervention often overlook or relegate these issues, failing to understand that isolation [reduces](#) resilience by separating people from their social support networks. Not only does a focus on prevention improve the wellbeing of social care recipients, but it could also [reduce](#) the demand for acute medical services. Moving towards prevention, early intervention and engaging people with their communities was [identified](#) in 2019/20 as an important area for savings in health and social care. In addition to improving wellbeing at the level of the service users, a focus on engaging people at a more human level has been shown to [increase staff retention rate](#). This focus on prevention would [allow](#) interventions to be tailored to local demographics, understanding the needs of communities. A National Care Service would be future-oriented, responding to current needs and aiming to leave people and their communities stronger through focusing on wellbeing and prevention.

[Historically](#), social care was focused on enabling people to experience inclusion in their community. This reflects a [focus](#) on the social determinants of health, which include the social, economic, environmental, and cultural factors. However, contemporary social care tends to be delivered in a way that leaves people [more](#) isolated and disconnected from their sometimes-

fragile social networks. This is especially the case because resources [often](#) flow to programmes which separate people from their local context, leading to solutions that fail to address the root causes of disconnection from society.

Social care workers find themselves operating within tightly prescribed bounds, and therefore use [only a fraction](#) of the creative and human skills that they possess. Evidence suggests that when social care workers focus on the assets that a community has, rather than their deficits, the capacity of the community to address its own needs [increases](#). Furthermore, the recipients of social care often [appreciate](#) the autonomy that it provides, and the lasting impact that strengthening networks and systems has in contrast to discrete one-off interventions. A National Care Service would recognise the creative and human nature of social care work, by allowing social care workers and recipients to co-produce solutions that enable people to utilise their strengths in improving their wellbeing.

In 2017, Leeds was one of nine local authorities that changed the way that it carried out social care by [focusing](#) on community-led initiatives. The [aim](#) was to respond better to the aspirations that people had, instead of fitting them into existing services. The work is [supported](#) by the social inclusion charity National Development Team for Inclusion, which published an one-year evaluation in participating areas. Results include [quicker](#) help for those seeking support, [improved](#) staff morale, and in one area they found that for [every £1](#) spent, there was a return of [£2.20](#) due to smaller waiting lists and fewer assessments. The council has [replaced](#) a 27-page self-assessment form used at the contact centre with a two-sided conversation record to allow discussion to focus on what support people need rather than using rigid eligibility requirements. The old system aimed to see people within [28 days](#), whereas in this new system the average wait time is [11 days](#).

Since 2012, Shropshire has [pursued](#) a strengths-based approach to social care through a social enterprise called People 2 People. This model [focuses](#) on supporting and enabling people to build their resilience through maximising relationships and wellbeing. Premature interventions can diminish natural support structures in communities, [increasing](#) the risk of isolation and superficially providing solutions that do not empower people. This system has led to [significant reductions](#) in the spending on adult social care, whilst [increasing](#) the number of people who

have been supported. The [majority](#) of people have their issues resolved through skilled conversations at the first point of contact, and the [remaining](#) people are invited to an appointment to discuss a tailored set of arrangements, which maximise peer support and community activities. The final result is that only [3%](#) of people who enquire about state help receive a classical statutory social care service.

Calderdale Council co-produced a social care framework with social workers which [focuses](#) on maximising independence, whilst safeguarding vulnerable people through utilising preventative services. Using this framework, they wanted to [improve](#) their homecare offer to citizens. To achieve this, they engaged [800 people](#) to understand what they wanted from a homecare service. Following these discussions, a new service was offered, allowing a [more diverse](#) range of services to be chosen. The number of people choosing a council managed one-size-fits-all service [decreased](#), and the number of people choosing an individual service fund [increased](#), allowing people to identify innovative ways of achieving wellbeing using a strengths-based approach. Although there was an increase in the price paid for home-based care, there were reductions in the admissions to residential care, equating to a [£1 million net saving](#) a year across the two services.

Developing a comprehensive workforce plan, including a standard employment contract paying the real Living Wage

Poor employment practices are widespread throughout the social care sector, which has been highlighted by the pandemic. Some employers have [refused](#) to pay sick pay to staff who were self-isolating due to suspected or even confirmed COVID-19. In Wales, the government has [introduced](#) a sick pay enhancement scheme, where all social care workers who have had to isolate due to COVID-19 will be eligible for Statutory Sick Pay. In Scotland, the government has [introduced](#) a 3.3% pay increase for social care staff and a provision to enable private providers to pay staff Statutory Sick Pay if employees are off work with an illness.

[Around a quarter](#) of social care workers are recorded as being employed on zero-hours contracts, which is highest amongst domiciliary care workers at 56%. This is [much higher](#) than in the economy as a whole (2.5%). In addition to the insecure financial position that this places social care workers, those who were on zero-hours contracts were [more likely](#) to leave their jobs (33.2% turnover rate) than those who were not (26.7%). These insecure contracts are exacerbating the problem of staff retention in a sector that already suffers from [high](#) turnover rates and major staff shortages. Because the NHS and social care employers employ staff from the same pool, the NHS can have a larger pull on workers, offering better pay and terms and conditions than social care, which worsens problems for the social care sector. A National Care Service would mandate standardised employment practices, which would include full sick pay, fully contracted hours, and a guarantee for all hours worked, including travel time and sleep-in shifts.

Insecure employment contracts are not the only problem facing social care workers. Official labour market surveys have found that [approximately half](#) of all frontline workers are paid less than the real Living Wage. Further estimates suggest that [up to 160,000](#) social care workers are being paid below their legal entitlement, which is largely due to employers refusing to pay employees for travel time in homecare and sleep-in shifts in care homes. In 2016, the Scottish Government announced a commitment to ensure that all social care workers were to be paid the real Living Wage, but some are still [consistently](#) paid below this level. In 2020, they [announced](#) that social support workers would now be paid the real Living Wage for all hours worked, including sleep-in shifts. Between 2017 and 2019, in England, Wales, and Northern Ireland, [the majority](#) of frontline social care staff were paid below the real Living Wage. The private sector is even worse, where [two-thirds](#) are paid below the real Living Wage. In England, the figure is an appalling [90%](#). Although the efforts of social care workers have been recognised in [Wales](#), [Northern Ireland](#), and [Scotland](#) through the payment of a £500 bonus, this isn't a solution to the low pay that is prevalent throughout the sector. A National care Service would end poverty pay, with all social care workers being paid at least the real Living Wage for all of the hours that they work, including travel time and sleep-in shifts.

In 2019, there was a workforce of [approximately 900,000](#), with workforce shortages of [around 122,000](#) and an [estimated 1,100](#) people leaving their jobs every day. The turnover rate was

even higher for those with less than one year of experience of the job at [41.1%](#). Projections estimate that without a concerted effort to radically reform the social care sector, this figure could [double by 2030](#). This need for radical change is highlighted by the fact that if the social care workforce grows proportionally with the population aged over 65, then an [increase in 520,000](#) social care workers would be required to fill the resulting shortages by 2035.

A realistic long-term strategy must counter this recruitment and retention crisis, by rewarding the crucial work that social care workers undertake with an attractive career. This must centre around dispelling the misconception that care work is unskilled and recognise the considerable technical and interpersonal skills that it requires. Building upon the Care Certificate, specialised mandatory training should be introduced, that is flexible enough to recognise the varied skills that are required in the social care sector, whilst giving social care workers space for professional development and career progression. This would create consistency across the social care sector and boost the prestige of care work. Evidence suggests that care workers who receive regular training and those with qualifications are [less likely](#) to leave their roles and provide a higher quality of service. A National Care Service would develop a long-term workforce strategy that understands the issues that the social care sector faces, focusing on pay, working conditions, training, and professional development. Such a strategy would create greater parity between the NHS and the social care sector.

Creating a long-term workforce plan has radical social and economic justice implications. The social care workforce is predominantly female, in England, 82% of workers identify as female. Furthermore, around [21%](#) of social care workers identify as BAME, with [12%](#) identifying as Black, compared to 3% of the UK population. Additionally, this workforce includes many who have their own caring responsibilities, [one-third](#) are parents and [one-in-seven](#) are single parents. Therefore, increasing the pay of all social care workers to at least the real Living Wage, whilst creating stability through the use of standard contracts instead of zero-hours contracts would help create a more equal society, where the gender, race, and class aspects of social care work are acknowledged and valued.

This must include remuneration for all of the hours worked, including travel and sleep-in shifts, to reflect the less visible aspects of social reproductive labour, and to reverse historic failures in

quantifying the true value of this work. Around [7% and 9%](#) of care workers are of an EU or non-EU nationality respectively. However, new punitive points-based immigration proposals will prevent many migrant workers from being recruited and will have a damaging effect on a sector that already struggles to recruit workers. Therefore, this workforce strategy must be coupled with an open immigration system that understands migration as climate justice.

In 2016, Midlothian Council in Scotland [became](#) an accredited real Living wage employer. This enabled them to [narrow](#) the gender pay gap and resulted in a [decrease](#) in the reliance of employees on working overtime to make ends meet. Additionally, it has [allowed](#) staff to participate in lifelong learning opportunities, leading to additional career opportunities. Indirect effects include [increased support](#) for local businesses and [stimulation](#) of the local economy because many of the frontline employees who have benefited from the changes are from the local area. These fair working practices are embedded into award criteria for council contracts, ensuring that the real Living Wage is paid in the whole supply chain.

Despite being one of the poorest boroughs in the country, in 2013, Islington [stipulated](#) that all homecare contract bidders had to pay the London living wage, joining all of their direct employees and 98% of those employed under their contracts. This was to try and eliminate poverty wages in the area in an effort to ameliorate the cost of living crisis. Simultaneously, they [increased](#) personal budget allowances to allow service users to pay the London living wage to homecare staff they employ directly, at a time when their budget had been severely cut by the government. In December of the same year, they [signed](#) Unison's ethical care charter, becoming the first council to ban poverty wages and zero-hours contracts for homecare staff, whilst ensuring that they only brought homecare from providers that give workers appropriate time and training.

In 2021, Hull City Council [announced](#) that they are banning zero-hours contracts in the homecare service that they commission. Originally commissioning was based on a series of defined tasks delivered in a specific period of time, whereas now it will be based upon block payments for planned activity, which will enable care workers to take the time that they need when caring for vulnerable people. Furthermore, they have [signed](#) Unison's ethical care charter, requiring companies to pay at least the real Living Wage, Statutory Sick Pay, and cover travel

costs. The city-wide approach to commissioning will be ended, and new contracts will be awarded on a geographical basis so that providers can focus small teams of community care workers on local areas. It is [claimed](#) that this will reduce travel time and will enable carers to build up their local knowledge so that more effective relationships are fostered with those who require care. Additionally, the council is [planning](#) on setting up a care academy to offer training and development and is in talks with the University of Hull and Hull College over developing a low-cost qualification for homecare workers, designed as part of a career path into the health and social care sector.

Increasing the Carer's Allowance to a liveable level and removing discriminatory inclusion criteria

Before COVID-19, there were up to [8.8 million](#) unpaid carers across the UK, and since the start of the pandemic, this has increased to [13.3 million](#) people. This means that the number of unpaid carers has [more than doubled](#) since the 2011 Census when there were 6.5 million. This can partly be attributed to cuts to social care, which have stretched services to breaking point, leading to tightened eligibility thresholds, and leaving families and friends to provide essential care. When analysing each devolved nation in isolation, there are a [further 196,000](#) unpaid carers in Wales, [98,000](#) in Northern Ireland, and [390,000](#) in Scotland because of the pandemic. In addition to increasing the number of unpaid carers, the pandemic has increased the amount of work that these people are undertaking, with [70%](#) of unpaid carers saying they are providing more care.

In the United Kingdom, unpaid carers are eligible for Carer's Allowance of [£67.25 a week](#) if they care for someone who receives certain benefits and requires more than 35 hours of care a week. This payment is the same whether the person cares for a single person or multiple people and represents at most remuneration of less than £2 an hour. There are incredibly restrictive conditions placed on eligibility for this payment. Those who receive Carer's Allowance are [not able](#) to be in full-time education, cannot be studying more than 21 hours a week, and must not be subject to immigration control. Furthermore, a person's earnings must be [less than £128 a week](#), after expenses, or if they are claiming a pension, then this must be [less than £67.50 a](#)

[week](#), for them to be able to claim Carer's Allowance. These restrictions mean that many who require support are excluded, and those who receive Carer's Allowance do not receive a payment that reflects the nature of the work that they do. A National Care Service would increase Carer's Allowance to a liveable level, accompanied by more inclusive conditions on eligibility. This would enable those who need financial support to obtain it, and it would end the discrimination against people based on their immigration status.

Because the social reproductive labour associated with unpaid care occurs outside of the formal economy, the work is incredibly undervalued, and therefore isn't appropriately remunerated. It is estimated that the work of unpaid carers should be valued at [£132 billion per year](#). However, because of the lack of support that unpaid carers receive, in 2019, [39%](#) said that they were struggling to make ends meet, and this [increased to 53%](#) when considering only those who were receiving Carer's Allowance. Furthermore, these financial stresses create uncertainty for those who are providing care; in 2019, [53%](#) of unpaid carers said that they were unable to save for their retirement, and this [increased to 75%](#) when considering only those who were receiving Carer's Allowance. Additionally, unpaid carers are [twice as likely](#) to have used a foodbank during the pandemic than non-carers. There are clear links between poverty, ill-health, and resilience, and consequently it is essential that there is an increase in Carer's Allowance to a liveable level so that those who provide unpaid care are able to do so without having to worry about how it will affect their financial situation.

Across the board, the creation of a National Care Service would have significant ramifications for social and economic justice, which would also be the case for improving the conditions of unpaid carers. Not only are [57%](#) of unpaid carers women, but a longitudinal study between 1991 and 2018 also showed that [half of women](#) provided unpaid care by the time they were 46, whereas, [for men](#) this occurred by the time they were 57. Furthermore, the more care that a person provides, the more likely it is that they are a woman, with women comprising [63%](#) of those who provide unpaid care of more than 50 hours per week. Unpaid care is often associated with decreased participation in paid work, and therefore reduced lifetime earnings, and because of the disproportionate amount of unpaid care that women undertake, this has gender equality implications. Data from the 2011 Census indicated that a [smaller proportion](#) of the BAME population provided care than the White British population. However, analysis by the University

of Leeds has in the past suggested that when this data is adjusted to account for the age distributions of different demographics, BAME adults are [more likely](#) to provide unpaid care. In addition, those who work in jobs described as 'semi-routine and routine' undertake [40%](#) of unpaid care work that totals more than 50 hours a week, whereas those who work in jobs described as 'management and professional' undertake [30%](#). The [opposite is true](#) when considering unpaid care that is less than 10 hours a week. Therefore, increasing the level of Carer's Allowance to a liveable level would help to create a more equal society, where the gender, race, and class aspects of social reproductive labour outside of the formal economy are acknowledged and valued.

In Ireland, to receive Carer's Allowance, a person's weekly earnings must be [less than €332.50](#) (approximately £285), which is more generous than in the United Kingdom. Those who are aged under 66 receive a weekly Carer's Allowance of [€219 a week](#) (approximately £188), whereas those who are aged over 66 receive [€257 a week](#) (approximately £218). Furthermore, in contrast to the United Kingdom where those who provide unpaid care to more than one person do not receive a higher Carer's Allowance, those who provide unpaid care to more than one person in Ireland are entitled to an [additional 50%](#) of the maximum rate of Carer's Allowance.

In Denmark, [every resident](#) is entitled to personal and practical assistance if they cannot perform basic activities independently, regardless of their ability to pay. However, those who wish to provide care to close relatives with a disability or serious illness, can become [employed](#) by the local authority within which their relative lives to provide this care. Like in the United Kingdom, the need for care must be equivalent to [full-time work](#), where the alternative would be accommodation outside of the home. The person providing the care can do so for [up to 6 months](#), which can be extended by 3 months upon submission of a new application. In 2020, those who provided care under this scheme were eligible for a monthly salary of [DKK 23,573](#) (approximately £2,739), substantially higher in the United Kingdom where the equivalent monthly payment is £269.

In 2018, Scotland [introduced](#) a Carer's Allowance Supplement to meet the Scottish Government's Commitment to increase Carer's Allowance to the level of Jobseeker's Allowance.

This is received in [two payments](#), £231.40 in June and £231.40 in December. These payments have improved the incomes of [over 90,000](#) Scottish carers, by uplifting Carer's Allowance by 13%, costing a total of over £37 million.

A JUST CLIMATE ADAPTATION

Labour resolves to support a just climate adaptation, investing in fire and rescue services, flood defences, and resilient infrastructure

While mitigation is at the forefront of green conversations and policies, Labour must begin to prepare to adapt to a world radically altered by climate change. A failure to prepare for these changes will see an acceleration of existing inequalities, as those with capital shield themselves from the dangers of climate change and those without capital are left defenceless. The health, social and economic implications of a climate-changed world are extreme, with many of these implications already baked in by our ever-increasing carbon emissions. And so, a failure to protect those most vulnerable to these changes would be both a governmental and a moral failure, as well as putting greater strain on a social contract that continues to be tested by the great financial crisis and the austerity that ensued.

A Just Adaptation policy offers an opportunity for the Labour Party. It is a new area of policy that the Labour Party could define, offering an unparalleled chance for the party to present its vision for society and politics; a vision in which communities are supported, infrastructure is invested in, and the issues of the future are tackled head-on. It is also an opportunity - through inclusive and ongoing dialogue - to create green, unionised and socially useful jobs in the UK's communities and regions which have suffered from systemic divestment and loss of employment since the 1980s.

This document outlines four key sub-policies which would be central to a Just Adaptation; (1) Heatwave and Infrastructure Adaptation; (2) Nationalisation of the UK Water Supply; (3) Additional Funding for Fire Services; (4) Flood and Coastal Adaptation, and (5); Healthcare.

Heatwave and Infrastructure Adaptation

Adapting our Cities for a Climate Changed World

The UK is a densely populated nation, with over [80% of people](#) living in urban areas and nearly half of the population (as of 2014) living in a city. [The ONS](#) expects these numbers to grow, as the UK becomes a denser, more urbanised country. Cities are vital for the jobs, culture, education and transport they provide. However, radical changes to the makeup of our cities -- how we get around, our green spaces, and how we generate our electricity -- are required if we are to both reduce our emissions and adapt to a climate-changed world.

[The CCC](#) identifies that the principal ways that UK cities will be affected by climate change is through overheating, flooding and digital infrastructure. With regard to overheating, cities often have their own microclimates which fall along socio-economic lines; an analysis of American cities found that poor neighbourhoods can be up to [ten degrees hotter](#) than wealthy ones. According to a study from the CMCC Foundation, not only are extreme high-temperature events the main cause of weather-related mortality, but the heat island effect means that there are [higher temperatures in urban spaces than in vegetated areas](#). Furthermore, the CMCC's research shows that not all districts of a city are equally vulnerable to heatwaves, and an understanding of this should be central to any heatwave-related policy. The paper discusses how "social disadvantage can further intensify the exposure to the heat risk", whilst "mortality associated with heatwaves is higher where there are high levels of crime and low social cohesion" ([CMCC Foundation](#)).

The impact of climate change on urban areas also falls along gendered lines; with the [mortality rate](#) from heat waves being higher for women than men, [those who live alone are more at risk than those who live in shared housing](#). The UK is heading on a trajectory of increased urbanisation, and increased global warming, that without correction will see increased deaths in those at risk. The [CCC](#) reports that "around 2,000 heat-related deaths occur each year in the UK, and this is projected to increase to 7,000 by 2050 as average temperatures rise with climate change". [Friends of the Earth](#) find that about one in five of the population of England loses out on the benefits of quality local green spaces, with heavy links between socioeconomic deprivation and a lack of green space. These impacts are felt particularly severely in the BAME

community, with approximately 40% of BAME residents living in green-deprived areas, twice the number for whites. Our cities, as a matter of urgency, must be adapted. In Fig. 1, the work of the London Green Spaces Commission (LGSC) highlights crucial data for the establishment of more, high-quality green spaces in and around the capital. Labour should facilitate such an approach to be used across all UK's cities, coordinating with the LGSC and other regional organisations to identify ways in which we can maximise the potential for greening our urban landscapes.

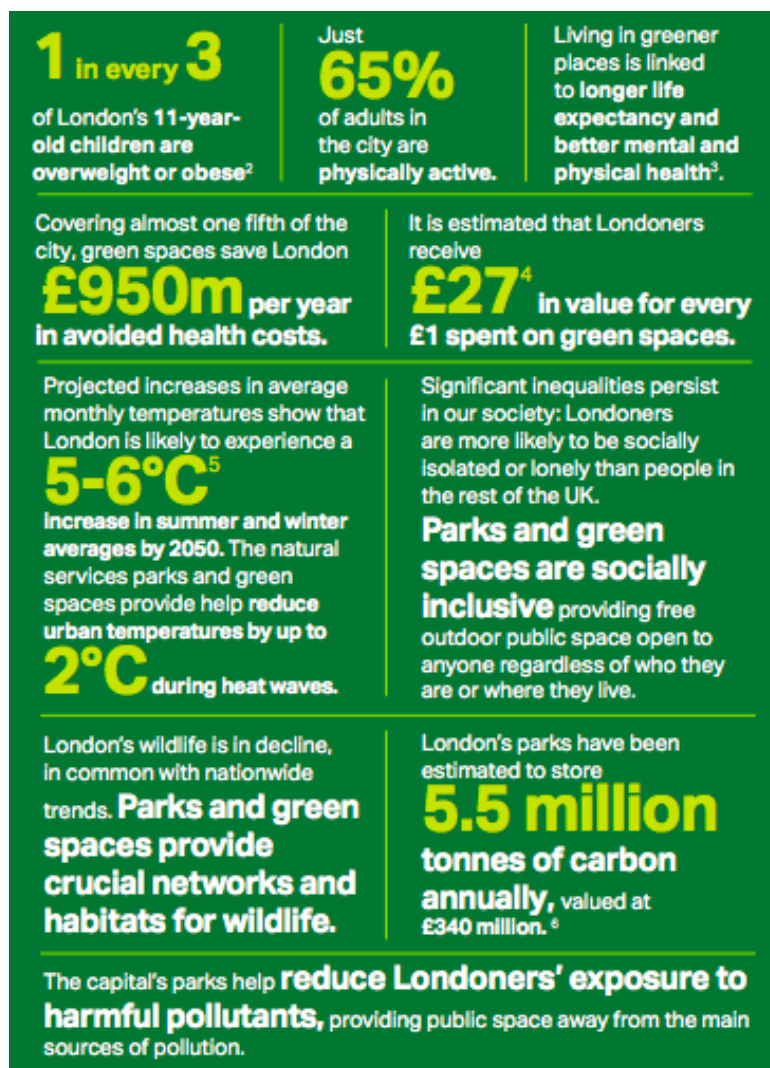


Fig. 1: [London Green Spaces Commission Report, 2020](#).

Urban Greening Service

As part of a Just Adaptation program, the Labour Party should develop an ‘Urban Greening Service (UGS)’ to ensure our urban spaces remain healthy and safe for residents as climate change continues to alter our cities. The remit of this service would be to increase the number of green spaces; create cooler urban microclimates through tasks such as planting trees in cities; repurposing hot spots such as unused car parks; covering city roofs with solar panels or gardens ([as is happening in France](#)); building public showers and more shaded places in summer hotspots, and installing a network of public water fountains (such as the [Wallace Fountains model](#) in Paris). The UGS’ work should prioritise poorer, and more densely populated, areas of our cities, and the jobs created should fall under the remit of the public sector, with a tight contractual framework which is inclusive of locality employment clauses.

The CCC states to “increase resilience to climate change as well as provide many co-benefits to health and biodiversity, the UK’s urban greenspace needs to increase”. This would reverse the decline many cities have seen. For example, in London, despite having 3000 green spaces (constituting almost [18% of the city](#)), the total area of urban greenspace declined by 7% between 2001 and 2011 and has remained fairly static since then. Similarly, over the past 10 years, the [funding](#) for public green spaces has fallen by 30%, whilst the population has increased by over 10%.

Communities

A change to the way our cities are constituted and designed is essential, as is the recognition that heatwaves are becoming [more frequent and intense](#) and the health risks that accompany this. A UGS would also address inequalities in access to green spaces. As the [West of England Nature Partnership](#) finds, ‘access to high-quality green space is not equally driven, with disadvantaged communities having significantly less access, not only to their own gardens or other outside space but also to green space within 300 metres of their home’. The benefits of an expansion in green spaces would thus be progressive, with [particular benefits](#) falling to minorities who are marginalised from public spaces and migrants and refugees, for whom green spaces can curate a sense of belonging. With accommodation for low-income communities

rarely fitted with air-conditioning, we cannot let those without access to their own private green spaces suffer the consequences of overheating in their own homes.

Environment

Designing our cities in a way that increases the accessibility of green spaces also has a number of environmental benefits. [Forest Research](#) finds that urban spaces can cut their carbon emissions by increasing the number of trees planted. When planted near buildings, trees have the benefit of creating microclimates which, due to their stabler environment, reduces the demand for heating, air conditioning and their associated emissions. An expanse of green spaces would also see an increase in paths and cycleways, which can lead to a significant shift from cars to more sustainable means of transport.

Implementation

The task of greening our cities is a job creation engine which will save lives and forge new connections between citizens and revitalised, repurposed, and cooler urban spaces. Immediate job creation would appear in land management, gardening and landscaping as Labour adapts our urban spaces for the 21st century; improving people's quality of life and tackling the climate crisis. Further economic benefits include jobs growth associated with hospitality, events and sporting associations in these new public spaces.

The UGS would operate across all UK cities and could work alongside bodies such as the [London Green Spaces Commission](#) (LGSC) and the [National Federation of Parks and Green Spaces](#). The LGSC have already undergone key work in exploring how green spaces can tackle the climate and ecological crises we face, and their Green Space Investment Fund should be considered as a key vehicle for funding change in this area.

Ensuring this process happens at a devolved and local level will be key to ensuring the knowledge local government has of the needs and specificities of the local geography, demographics and communities is respected and met. The CCC [writes](#) that: "*The devolution of powers to major city regions and elected mayors, combined with new working partnerships between local authorities, mean cities can take more of a lead in reducing their emissions and improving their resilience to climate change impacts*". Yet years of austerity has left local

budgets decimated, leaving local authorities only able to respond to short term issues such as flood risk management, which has resulted in climate change being de-prioritised in the land-use planning system.

The UK, undergoing increasing urbanisation, must adapt its cities for the climate crisis. Failing to do so will exacerbate existing health inequalities, and create an environment where the wealthy have luxurious green spaces, cleaner air and cooler temperatures whilst the rest of society bear the brunt of the crisis. An Urban Greening Service, directed towards creating more environmentally and ecologically prosperous cities, would address this whilst driving job creation in green and socially-useful jobs.

A Publicly Owned Water Supply

Ensuring a reliable and affordable water system will be essential to both a Just Adaptation and the wider Green New Deal agenda - from building the materials needed to electrify our energy supply to creating a sustainable, fair agricultural system, carbon neutrality depends on water. Water will also be essential to survival in a climate-changed world. As summer heatwaves become longer and more intense, increasing strain will be put on our water supply. In some areas of the UK there is a risk of water demand [exceeding supply](#) by 2030. And so, whilst the wealthy will retain access to quality water, increasing water bills will continue to disproportionately affect low-income communities.

Yet as things stand our water service is woefully underprepared for the strain of climate change. The current monopolistic service is run by private, for-profit businesses, at a huge cost to the taxpayer. Estimates suggest that [nationalising](#) the English water supply would save £2.5bn a year, or £113 per household. Private, separate run water companies have also led to huge inefficiencies in how we store water. As it stands, the privately run water system results in [3 billion litres of water leakage a day](#), or [10% of total demand](#), an unacceptable failure of the market in conserving water and service provision. As a result, a Green New Deal would see the English Water Supply nationalised.

Adapting Our Water Supply

Water shortages present a vital threat to both public use, but also within our agricultural, energy and industrial sectors. UK [water projections](#) suggest that water deficits in public usage will be widespread by the 2050s, across all of the UK and severe by the 2080s. The impact of water shortages is likely to vary, owing to both demographic and ecological differences. The northwest, for example, relies more heavily on groundwater as is, as a result, more impacted by changing weather patterns.

Nationalising water would put us in a position to address and resolve the issue of potential water shortages through investing in the necessary water preservation measures in a way that private companies, operating within shareholder restrictions and profit limitations, cannot. A nationalised water supply could adapt our infrastructure to reduce leakages and expand how we preserve and store water.

Underpinning the idea that we need a publicly owned water supply to adapt to climate change is the belief that water is a public good and should be available to all. One implementation of this principle would be the creation and maintenance of a new and improved network of public water fountains, similar to [those found in Paris](#). As urban spaces around the country face blistering heatwaves, public drinking water must be available for all.

A publicly owned water supply would also recognise the interconnectedness between the Green New Deal agenda. Given the economic, ecological and demographic variation across the country, disconnected for-profit services are unable to provide the holistic range of provisions necessary. For example, cooperation and coordination between water-scarce areas and water-poor areas will be essential and requires an integrated, state-led approach. Only a Labour government, that recognises the scale of the challenge that faces us, can address this challenge head-on.

Mismanagement of sewage

A publicly owned water supply would also end the negligence private companies currently show towards treating sewage. Last year alone, private water companies [emptied untreated human](#)

[sewage into](#) river and coastal waters over 400,000 times, an increase of 37% since 2019. Over the course of 2020, storm overflow pipes were in use for over three million hours pouring untreated waste into the ecosystem. This mismanagement of waste is ecologically harmful and represents an absolute dereliction of duty on behalf of private companies to protect our ecological health. The [European Court of Justice has ruled that untreated human waste](#) should be discharged in exceptional circumstances, such as extremely heavy rainfall. Nationalising the water supply would create real accountability in ensuring our ecological system is not being polluted and allow Labour to commit to protecting the integrity of our water supply.

A Fire Service for a Climate Changed World

As droughts, wildfires and floods have increased in frequency across the UK the fire service's central funding has faced severe austerity cuts. Austerity has seen over 10,000 fire service jobs and dozens of [stations lost](#), highlighting the extent to which the government is failing to prepare and protect us. This reduction in funding comes at a time when fire services are required more than ever; in 2017 the London Fire Brigade attended [6526 flood-related incidents](#). As a result of increased demand and excruciating cuts, crews are stretched thin and are less able to protect the communities they serve. According to the [Fire Brigades Union](#): "Since 2011, fire and rescue services in the UK have had 11,500 firefighters cut from their staff, and since 2013 have seen real-terms spending on their service slashed by 38%". The [2018 Saddleworth Moor fires](#), in which brigades had to be deployed from across the country to fight the fire, highlights the threat we now face, and the growing pressure the fire service is under.

Furthermore, in England the fire services do not have a statutory duty to respond to floods, even though fire and rescue crews are often first responders to flooding incidents. Introducing a [statutory duty](#) would allow fire services to access more central funding, training, and protective equipment. This will increase the capacity of the fire service to deal with an increased amount of incidents from higher rates of heatwaves and floods. In order to be able to better respond to increasing wildfire and flood risks, local and national governments should work with fire services to formulate contact databases of those most vulnerable and who may need priority evacuation.

Fire and flood adaptation should be embedded into how we manage the land too. Councils and local authorities have the power to shape the countryside to protect communities from natural disasters brought about by climate change. For example, activities that dry out landscapes such as [burning moorland for grouse shooting](#), that benefit a privileged few at the expense of the wider public, should be more tightly regulated or banned. The [damage](#) caused by the Saddleworth Moor fires should not become a feature of life in the UK.

Flood and Coastal Adaptation to Adapt to Sea Level Rise

In November 2019, a month's worth of rain fell in 24 hours in South Yorkshire. 1,500 houses were flooded, affecting countless other lives. By November 2020, a year after the initial flooding, many victims had [yet to be rehoused](#) or had their initial houses repaired. As flooding becomes increasingly likely - the IPCC 2014 [summary report](#) predicts the UK will see up to 10% more rainfall by 2100 - that these events, and the fallout they cause, will become more likely. And both the past events and future forecasts tell us that the scale of the impact will be huge.

Research from the [Climate Change Committee](#) found that “at present an estimated 1.8 million people are living in areas of the UK at significant risk of river, surface water or coastal flooding... (and) the population living in such areas is projected to rise”. Whether it's influencing where we build houses, the flood infrastructure we need to develop, or the insurance and financial support the state provides, ensuring that communities across the country are protected from flooding must be a priority: we cannot continue with the Conservatives' failure to rehouse.

This is why the immediate priority should be an infrastructure programme of repairing and upgrading current artificial flood defences and preemptively building new defences in high-risk areas. Investment in this first line of defence would provide security for the nearly [two million people](#) at risk of flooding. It would also generate good, green, unionised jobs in towns and communities across the country. No single body is responsible for flood defences in the UK, meaning action is essential at the local, devolved and national level.

A particularly vulnerable sector to disruption from flooding is the ICT and digital sectors. As the major flooding events in Leeds and York in 2015 demonstrated, the damage that can be done to

digital infrastructure is severe when things go wrong. [Estimates](#) made at the time put the scale of the costs at over £5b. Despite this, there is no national plan from industry or government to [address climate change risks in the digital or ICT sectors](#). Recognising the [scale of the threat](#) facing flood-prone and coastal communities requires the state to take action. The 2014 [IPCC](#) report suggests that under high emission scenarios - our current trajectory - the costs of flooding will increase 15 fold. [Another study](#) projects insurance payouts for flood damage will increase by 8% for 2 degrees warming and 16% for 4 degrees -- the warming the IPCC puts us on track for if emissions remain on their current trajectory. An immediate step would be to underwrite insurance and relocation assistance for communities and businesses affected by sea level rise, coastal erosion and new high-risk flood zones.

The government must also offer support, and where necessary take action, at the household level. The [CCC](#) identified that the number of households that could benefit from property-level flood resilience (such as flood gates and airbrick covers), is expected to increase from around 150,000 to 220,000 by 2040. And yet the government's five-year investment plan only includes proposals to protect just 500 per year – meaning the number of vulnerable properties is increasing five times faster than measures are being fitted. Similarly, we should not be building new housing on floodplains.

The [CCC](#) also found that a [Sustainable Urban Drainage Systems](#) (SuDS) should form a key part of our flood defence systems. SuDSs use either permeable material or living plant matter as urban surfaces to dampen flood surges and can include things such as absorbent pavements, green roofs and ponds. Increasing the number of SuDS would be a key step in addressing the sewer networks' [insufficient capacity](#) "to cope with the heavier rainfall that climate change is expected to bring, and new building developments are adding to this risk by increasing the flow of water into the sewerage system". However, a recent study by CIWEM found little confidence that high-quality SuDS are being built in the majority of new developments.

In response to this lack of planning, Labour would embed flooding risk into new housing and public infrastructure. Along with this, there is a need for more porous materials for new developments (such as for pavements and roads). We also need more natural flood defences, such as wider vegetative buffers near waterways. These could be built or where already existing

expanded as part of reforming land use and creating skilled jobs. Projects such as [Treesponsibility](#) in Calderdale, West Yorkshire, are a good example of how local councils can empower residents to establish natural flood defences.

Sea Level Rise

The UK Government has already reported that a Sea Level Rise (SLR) of around 70 cm (could) imply “[estimated annual damages of £1.3–1.5 billion in the 2080s under current adaptation](#)”. Financially, we should be investing in flood and sea level rise infrastructure as a matter of urgency. As it stands, 30% of England and Wales live within 10km of the coast, alongside [£130bn of infrastructure](#) being at risk due to sea level rise and coastal erosion. Defences for SLR can include hard engineering solutions, where structures such as sea walls can be built to prevent the encroachment of water, or ‘managed realignment’, where changes in the shoreline are managed. One particular initiative pioneered by the Local Authority to tackle SLR is the [Southsea Coastal Scheme](#). The scheme aims to reduce the threat of flooding to around 10,000 homes and 700 businesses.

Healthcare

Adapting to climate change will require us to assess which key state functions will be impacted, and where this impact will most harshly be felt. At the core of the nation’s wellbeing and functioning is our health, and subsequently our healthcare provisions. From heatwaves to newly spread diseases to pollution induced illness, ensuring we have a publicly funded and owned healthcare system will be vital in ensuring the vulnerable do not bear the brunt of the climate change costs.

Adapting our healthcare services will require greater provisions for heatwave induced illness and a recognition that heatwaves have the severest impact on the elderly. Last summer an estimated [2,556 deaths](#) were caused by the summer heatwave, the highest since 2003, when an [estimated 44,000](#) people died across Europe due to the heat. By 2050, this is [expected](#) to reach 7000. The UK’s 2019 heatwave was made ‘[about 100 times](#)’ more likely due to climate change. Many of the adaptations to prepare for heatwaves have been outlined in the Urban

Greening Service proposal, yet we must ensure our healthcare system is properly funded as a last line of defence.

A changing climate, and our associated actions, will affect the diseases we suffer from. Exploitative agriculture practices and poor food safety standards are exposing humans to new animal diseases, known as zoonotic diseases. These practices make future pandemics, and the threats to health, security and stability they bring about, [even more likely](#). Deforestation, for example, is predicted to [drive](#) the emergence of novel coronaviruses. A changing climate will also lead to changing tropical diseases. The UK, for example, previously had indigenous malaria, which is [predicted to return to the UK](#) in the event of further warming. Finally, it is already widely understood that air pollution in the UK has a devastating impact. Conditions varying from dementia to infertility to cardiovascular to asthma can all be [linked to air pollution](#). Estimates for air pollution linked fatalities put the figure at 40,000, higher than the deaths linked to tobacco smoking.

The multitude of health implications of climate change serves to reinforce the need to tackle this crisis. Yet we are already suffering from many of these changes; heatwaves kill thousands, countless more suffer from poor air quality, and we have all spent the last year locked down due to a zoonotic pandemic. Ensuring the NHS is properly funded, publicly owned and prepared for these changing needs must be a priority for future healthcare planning.

A NATIONAL NATURE SERVICE

Labour resolves to support a National Nature Service, 10 New National Parks and Strategic Rewilding

National Nature Service

Following work in this area by charity [Wildlife and Countryside Link](#), which was supported in the Labour Party's 2020 [Green Economic Recovery](#) document, we are calling for the establishment of a National Nature Service (NNS). The NNS would create thousands of good jobs for people who need them most in the communities where they are most required. These would be well-paid, unionised, public sector jobs. These roles will offer participants a significant personal development dimension, providing opportunities for people to develop the skills that will be vital in building a green economy fit for the 21st century. Job opportunities would be targeted at young people, people in insecure work and those facing the risk of long-term unemployment. Furthermore, projects would be targeted at areas where investment in conservation, access to green space and natural infrastructure are particularly required.

The NNS would be established, overseen and funded by central government as a non-departmental public body, with its administration and execution carried out by regional delivery arms. This central administrative unit and the regional delivery bodies would work alongside other government departments such as the Defra, DfE, the Environment Agency and Natural England (and their devolved counterparts) as well as local authorities. Further, NNS employees could work alongside colleagues from existing conservation and environmental organisations. Wildlife and Countryside Link have already established that there are [330 existing projects](#) which NNS participants could help deliver from Cornwall to Northumberland in coalition with a broad range of non-governmental partner organisations. The sort of environmental projects that NNS participants could participate include but aren't limited to:

- Afforestation programmes oriented towards tree planting targets
- Restoration and rewetting of peatlands and coastal areas
- Establishment of wildlife conservation projects and ecological survey work
- Flood defence and prevention initiatives
- Development and restoration of urban green spaces and wildlife corridors, or the establishment of sites for community agriculture or community orchards
- Working with farmers to help develop agroecological and agro-forestry projects, restore hedgerows and other similar agri-environmental work
- Work in conjunction with any other locally targeted conservation work or community led land ownership schemes and projects (see below)

Labour for a Green New Deal are calling for existing proposals to establish the NNS to be made even more ambitious. We also underline the need for these projects to have socialist principles at their heart. Whereas Wildlife and Countryside Link assert their proposals could create 15,000 12-month (or 24-month part-time) job placements until 2025 with potential for its continuation as social enterprise thereafter with the potential for public-private partnerships. We believe, however, that the NNS should become a publicly owned, funded and managed scheme on a permanent basis (although not at the same scale as would be required in its foundational years). Average full-time placements should last two years rather than one to offer greater stability and opportunity for specialisation for participants. Furthermore, opportunities should be available to fund more flexible and longer-term part-time opportunities in the scheme over a longer period where individuals may be unable to commit to full-time or 0.5 FTE part-time work. This is in line with the principle that the environment and the land are a shared asset, the management and conservation of which should be managed by the public for the public. The NNS makes good on this principle, not only broadening access to improved and revitalised green spaces where it's most needed, but also ensuring equality of opportunity for people looking for good jobs in nature conservation and similar industries.

The Need for an NNS

Over the course of the last two hundred years, Britain's natural environments and native wildlife has been increasingly [degraded](#). In recent years, the State of Nature partnership of

conservation and research organisations has produced a series of reports that have illustrated this decline. Their [2019 report](#) suggested that the 696 terrestrial and freshwater species in the United Kingdom have, on average, decreased in abundance by 13% since 1976. This is largely attributable to centuries of habitat loss. Restoration projects championed and staffed by the NNS could help us begin to turn the tide on the dire situation facing the species with which we share the British Isles.

As well as contributing to the ecological emergency land use and land management also contribute to the climate emergency. [Governmental statistics](#) published in early 2021 suggest that, as a result of long term denigration and despoilment of peatlands land use in the United Kingdom over recent decades has been, in reality, a net source rather than a net sink of CO₂ emissions.

In an urban context, local authorities squeezed by crippling Tory austerity have struggled to maintain and improve the provision of green space for people to share and enjoy. [Research](#) has also shown that economic and racial inequalities still impede people's access to urban green spaces.

Further, the NNS would help tackle unemployment. [Research](#) by the LSE and the University of Exeter suggested that as of October 2020, young workers were twice as likely to have become unemployed as a result of the pandemic, with more than 10% of people aged between 16 and 25 having lost their job in the first 6 months of the pandemic. Other [research by the TUC](#) has shown the way the unemployment created by the pandemic has highlighted the structural racism of British society, with people from ethnic minorities twice as likely as white people to be unemployed in the last quarter of 2020.

A National Nature Service would help solve one problem by solving another with positive multiplier effects for local economies and local ecologies across the country. Economically, the NNS would create well-paid, unionised green jobs for the people who need them most in the areas where such jobs are most required. It will help train people for the ecological green jobs that we need to transition towards a restorative economy rather than an extractive economy, giving them the skills, confidence and networks required to help build flourishing local

communities of people intent on improving Britain's natural and green spaces. These jobs and the training associated with them would help tackle regional inequalities, help create other jobs within the nature sector and lead to the development of more resilient local economies with a skilled, public sector workforce able to continue addressing centuries of habitat degradation in the United Kingdom decades into the future. Improved natural infrastructure could also have positive knock-on effects through, for example, increased revenue from [tourism](#) and the [public health benefits](#) of better access to natural and green space.

Ecologically, there would also be significant benefits resulting from the National Nature Services efforts. Work on afforestation or peatland restoration projects would help sequester carbon dioxide. Work developing and improving flood protection could be part of efforts to ensure a just adaptation to climate change and minimise future costs and damage from flooding as extreme weather events become more likely. Work on urban green spaces could ensure that those in poorer areas can benefit from parks and woodlands just as those in richer areas already do. All the while efforts to restore habitats and establish space for wildlife should help biodiversity of all kinds of species bounce back in the years to come.

The NNS as formulated here prioritises funds and opportunities to those who need them most. Opportunities to become an NNS employee should be targeted at young people, communities under-represented in the conservation and heritage sectors and people looking for jobs at risk of long-term unemployment. Further funding for projects could be prioritised in areas where there are fewer employment opportunities for younger people, such as coastal towns or rural areas. Funding would also be ringfenced for the establishment and restoration of green spaces in urban areas. These principles would ensure that those least able to find a well-paid job in the nature and conservation sector are given the opportunity to forge careers in this burgeoning sector of the economy and that those communities facing both economic issues and restricted access to nature through degraded or privatised local landscapes can benefit most from this programme. As mentioned above, the publicly owned and run nature of these projects would enshrine the fact that the natural landscape is for the people and must be maintained by the people.

Wildlife and Countryside Link [estimate](#) that the establishment of the NNS would create around 15,000 jobs – 10,000 being trainees or scheme participants and 5,000 being permanent administrative or training roles. They suggest this would cost around £741 million in the first year, including the costs for the 330 projects highlighted for NNS trainees. This would represent the starting point for the NNS. Public investment could be sourced from various pots, including the educational budget, the welfare budget, the environmental budget and, through, for example diverting funds currently oriented towards recruiting children under the age of 18 into the armed forces and their training. Wildlife and Countryside Link [demonstrate](#) the knock-on benefits in terms of the impact training and employment can have on local communities and economies, the health benefits of improved access to Green Space and the ecosystems services which NNS projects would provide, in terms of, for example, reducing flood risk or adapting to rising sea levels. The NNS could clearly be, in the long run, a net gain in terms of investment. Fundamentally, the NNS would address existing and urgent environmental challenges whilst creating employment and training opportunities across the country.

Although historical links with the original Green New Deal's Nature Conservation Corps are obvious, Australia's more recent '[Green Army](#)' programme is a more contemporary touchstone. The project, which ran until 2018, involved 11,000 17–24-year-olds on over 1,000 environmental projects across the country. Participants were paid; however, wages were below the minimum wage. Nevertheless, this was a project financed and executed by a right-wing government. As such the potential for a socialist NNS to go further as part of a GND is clear.

Strategic Rewilding

The idea of rewilding, in its various forms, has grown in popularity in recent years. Animal species are being reintroduced to the British Isles centuries after their extirpation as resident species. Voices critical of agricultural intensification, overgrazing and the management of upland landscapes as grouse moors are growing in prominence. However, 'rewilding' is a contested concept and means different things to different people. On the one hand, it has been a long time since any parts of the United Kingdom, and particularly England, were 'wild'. On the other hand, the principles of easing the intensity of land use practices such as farming and forestry in certain

areas is vital for giving British wildlife a chance to bounce back from decades and centuries of habitat suppression. As part of our conference motion, then, we are looking to put some of these tenets to work in conjunction with the democratic and socialist principles at the heart of the Green New Deal. For these proposals, we use the term 'strategic rewilding'.

Our vision of strategic rewilding is premised on three central ideas. Firstly, it is rooted in an acknowledgement that, as far as the United Kingdom is concerned, 'rewilding' is a useful if loose term that defines a set of ideas and principles, rather than a doctrine. Rewilding is about creating space for natural processes to develop without human intervention. Yet any attempts at such forms of ecological restoration must acknowledge that, in the United Kingdom at least, we are starting from a skewed baseline. Rewilding projects will require human participation and management. As such, this management should be undertaken by people and organisations working in the public interest as part of the green economy we must build to face the challenges of the 21st century. This would see the role of central and local authorities growing in this domain, with public servants working in tandem with scientists, conservationists, charities, volunteers and land managers to create a socially just yet ambitious programme of re-introduction pilot projects, landscape level ecological restoration schemes and well-funded ecological research and extension.

Secondly, any rewilding projects must be democratic and empowering, with regional and local governance and decision-making structures. They should create dynamic rural landscapes that allow both people and animals to thrive. They must acknowledge that although farmers make up a small percentage of the rural population, the cultural significance and land-use impact of farming remains incredibly significant to rural communities. Buy-in and participation must be sought from rural communities through democratic initiatives, environmental job creation programmes and options for community land purchasing power and publicly led ecological restoration initiatives. Although increased domestic tourism can be seen as an advantage of rewilding projects, rural communities cannot be expected to support initiatives which are oriented entirely into making their local areas and economies (in some cases even further) dependent on the wealth and contribution of incoming tourists for six months of the year. Furthermore, rewilding large swathes of land cannot come at the expense of importing an even greater amount of our food from around the world through the sparing of potentially productive

agricultural land that could be re-oriented towards resilient, localised agro-ecological food chains.

Finally, debates around rewilding and land use concern, at their heart, issues around land ownership and land justice. Rewilding success stories such as the [Knepp](#) Estate in Sussex and the [Glenfeshie](#) Estate in the Scottish Highlands are instances of a renewed attention to ecological land management principles. Knepp, in particular, is rightly lauded for the extent to which its management has renewed local biodiversity. Yet these are initiatives launched and managed according to the whims of large private landowners. Our strategic, socialist approach to rewilding is underwritten by an appreciation that the land is an asset shared by not just citizens of the United Kingdom, but the myriad other forms of life with which we share these islands. As such, we propose that our strategic rewilding programme must include ways of bringing rewilding projects and land in the process of restoration into more equitable and democratic control. On a larger scale this could involve land nationalisations, reform of national park governance, policy measures such as targeted taxation that would both ensure large landowners like the Royal Family and the Church of England are making efforts to contribute to tackling the twin climate and nature emergency and create the conditions for larger estates to be broken up. Management of existing government landholdings such as those owned by the Ministry of Defence would also be reoriented towards rewilding principles, and local authorities would be encouraged and trained to do the same. On a smaller scale, the principles of strategic rewilding marry well with policies that would facilitate [community land ownership schemes](#), including in urban areas, and an agri-environmental policy that would ensure farmers are remunerated for the environmental services they provide as part of a transition towards a more agro-ecological food system.

Tackling the biodiversity crisis

As set out above, the United Kingdom faces a biodiversity crisis. As is made clear by the call for the reintroduction of certain species, many of Britain's native species have been extirpated over the course of centuries of persecution, agricultural expansion, forestry and other land management practices. According to the [Biodiversity Intactness Index](#) put together by researchers at the Natural History Museum in London, the United Kingdom has lost essentially half (49.7%) of its native biodiversity. This is bad for our native fauna. [According](#) to the Mammal

Society, 25% of native mammal species in the United Kingdom are threatened with extinction. In the last 13 years alone hedgehog populations have declined by over 46% and red squirrels have lost over 60% of their remaining habitat range in England and Wales. As for birds, 1 in 4 species are also red listed as threatened [according to the RSPB](#), with cuckoo numbers down by over three quarters since the 1980s and even familiar species like starlings under threat. Recognition of the threat to pollinators such as bees is also growing, but [research](#) from 2019 shows that a third of wild bee and hoverfly populations in the UK are in decline. Furthermore, as mentioned above, the loss of the habitats in which these animals thrive is also contributing to the release of CO₂ into the atmosphere. Finally, too many people in the UK are unable to access and enjoy the benefits of spending time in the countryside and engaging with woodlands, heathlands, wetlands and hills.

Strategic rewilding presents significant benefits for both British wildlife and both urban and rural communities. Habitat restoration and an approach to ecological restoration inspired by rewilding's faith in natural processes could see biodiversity of both the UK's flora and fauna bounce back, as has been shown in places like [Knepp](#), [Glen Affric](#) in Scotland and [Wild Ennerdale](#) in Cumbria. Further, ambitious reintroduction projects of [storks](#) and [white-tailed eagles](#) are showing early signs of success, with greater numbers of [beavers](#) likely to be reintroduced in the future. But for these high-profile schemes to work, efforts to restore native habitats across the UK's varied geography must continue.

But beyond improvements to biodiversity, strategic rewilding can have several positive multiplier effects. Re-establishment of certain habitats such as coastal wetlands and salt marsh or upland woodlands could, as well as providing habitats for a variety of species, help mitigate coastal and urban [flooding](#) respectively. Further, suitably funded restoration of wetlands, peatlands and forest could sequester 47 million tonnes of CO₂/year according to [research](#) by Rewilding UK.

Strategic rewilding would also present potential benefits to people, their communities and rural economies across the UK too. Tourism is often highlighted as the biggest economic gain to rural communities of rewilding, with, for example, the reintroduction of white-tailed eagles on the Isle of Mull being associated with an annual increase in tourist revenue of [£5 million](#). However, although this may be an economic benefit in some respects, if rewilding projects are a success

these gains will be distributed more evenly and, as discussed above, rural communities should be supported in creating resilient, local community wealth that does not rely on tourist income. This can come, instead, through the financing and creation of jobs in conservation through schemes like the National Nature Service, sustainable forestry and afforestation work and support for nature-friendly farming, all of which articulate with the aims of a strategic rewilding programme. Such a programme would also help to put land back in public hands would help make this a reality, be it through public projects as a result of land nationalisation, community land purchase and local, democratically led ecological restoration initiatives or policies oriented towards distributing land more evenly to smaller farmers and new entrants to food production and land management. The facilitation of such enhanced land access and a rewilding-informed approach to conservation would also have [public health benefits](#) for the increasing number of people able to access public nature reserves and rewilded urban green space.

The approach to rewilding sketched out above is 'strategic' in that it acknowledges the social, economic and environmental justice questions provoked by rewilding from a democratic and socialist perspective. It acknowledges that rewilding should not simply mean sparing and leaving large swathes of land, which could result in outsourced food production, inaccessible land for public access and recreation and would create no or few jobs in conservation. It acknowledges that in the UK context, rewilding will benefit both Britain's native flora and fauna and its people by linking efforts to bring back certain habitats with policies designed to foster local empowerment and democracy, create jobs and tackle Britain's entrenched inequality of land ownership and land access. Farmers and land managers will be taken along, where desired, with the strategic rewilding programmes via training, reskilling and other networks to ensure that rural communities do not feel they are being cleared from the land. The strategic rewilding programme can be linked to efforts to develop community land purchase rights and community land ownership in urban and rural geographies alike. Further, through socialist-inspired land nationalisation programmes, more rewilded land could be made accessible to the public than ever before.

Rewilding in the UK

The growing recognition and movement around rewilding suggest that it's an idea whose time has come. Already research and conservation charitable organisations are rewilding and

reintroducing across the United Kingdom. Existing projects to reintroduce extirpated animals look likely to be supplemented with projects to reintroduce [bison](#) and [wildcats](#). The RSPB and the Wildlife Trusts are engaging in ambitious rewilding-inspired landscape focused schemes from the [Essex Coast](#) to the [Cambrian Mountains](#). With the mobilisation of greater public resources, this movement could do even more good and create even more jobs.

However, as discussed above, this paradigmatic shift in approaching conservation requires institutional and policy change. On the one hand, publicly supported, financed and managed strategic rewilding projects would require the consent and participation of local communities. This would require efforts to consult and recruit local communities to work with and on conservation projects, including, specifically, as part of the National Nature Service and its associated regional governance structure. Training and financing could be provided to existing farmers and land managers keen to transition towards a rewilding-style approach to less intensive grazing systems such as silvopasture which could then articulate with landscape level rewilding programmes.

Communities would also be empowered, as part of the schemes discussed below, to take control and ownership of local land, through legislation and finance for community land purchase and trusts, including those that look to rewild urban and rural land alike. A Green New Deal should encompass policies that break the hold that [1%](#) of the population of England has on 50% of the land, and open up land ownership to citizens and communities looking to rewild or farm agro-ecologically. Also, where necessary and viable, GND investment should be made available to take land into public hands for a range of purposes. This would be assisted with taxation policies oriented towards making land ownership more democratic in the long run, as set out in the 2019 [Land for the Many](#) report commissioned by the Labour Party.

10 New National Parks

The United Kingdom's 15 National Parks cover almost 10% of the country's total land area. When combined with Areas of Natural Beauty (AONBs) in England, Wales and Northern Ireland and the National Scenic Areas (NSAs) of Scotland, this network of protected landscapes

encompasses even more space. Given their existing status, funding and place in the national imagination, these areas should be the landscapes at the forefront of reversing the ecological loss that has taken place in the British Isles in recent centuries. They should combine this mission, wherever possible, with their role in promoting access to green space and the natural environment to people from every walk of life. Yet the current system is neither doing enough to help address the climate and nature emergency, nor to expand and promote access and understanding of rural areas to Britain's urban population.

At the heart of Labour for a Green New Deal's plan to ensure our protected landscapes are both helping to restore the UK's biodiversity and more equitable spaces than ever is a call for the establishment of 10 new National Parks. This idea was initially forwarded in Labour's 2019 [Plan for Nature](#). We see the process to select the 10 new national parks as having the potential for a more participatory national process aimed to invigorate further engagement with and education about our National Parks. As such, the process would see one existing protected landscape (current AONBS or NSAs) from 9 UK regions become a National Park, as well as the creation of the UK's first National Park aimed explicitly at the protection of marine habitats. This process would ensure an even geographical spread of new National Parks and could be harnessed as a broader campaign to raise awareness and engagement with the UK's national parks.

Solely creating new National Parks does not, however, go far enough to address the issues presented by the climate and ecological crises and unequal access to green space. In line with the policies set out in Labour's 2019 [A Plan for Nature](#) environmental manifesto, this would be accompanied by a 50% increase in the funding for new and existing National Park authorities and the financing of a programme to create natural corridors out from National Parks into surrounding farmland, rural areas and between National Parks and AONBs. These natural corridors, allowing freer movement of wildlife between habitats, would be articulated with an ambitious plan to improve pedestrian and bicycle access into and around National Parks. Further, building on the recommendations of the Landscapes Review, a Green New Deal should ensure and promote equality of access to our preserved landscapes, through the financing of green transport links such as electric buses, greater outreach and educational programmes for schools and those communities for whom National Parks feel least welcoming or accessible.

Finally, the governance of all protected landscapes would be reviewed. This would involve greater recognition and synergies between National Parks Authorities and promotion of collaboration with other departments, government agencies and local authorities, programmes and reform to make the management of National Parks more democratic and the establishment in legislation of the basis for stronger management plans that acknowledge the severity of the climate and nature crises and the role National Parks must play in addressing these issues. All of these efforts would, of course, connect well with the National Nature Service and efforts to fund strategic rewilding set out above.

How new National Parks would impact the UK

The country's National Parks could be doing more to meet the environmental challenges of the 21st century and improve accessibility to the UK's green spaces. [Research](#) from Friends of the Earth in 2020 showed that some of England's National Parks have less tree cover than major cities and that, alarmingly, peatlands and bogs in National Parks were found to be in a worse condition than those not within National Parks. As regards accessibility and equitable public access to National Parks, the 2019 [Landscapes Review](#) asserted that the current system is not doing enough to make National Parks a space for all, noting that they continue to predominantly serve white, middle-class patrons. Our National Parks can feel like exclusive spaces to newcomers and, with ever diminishing affordable and low-carbon public transport infrastructure, are difficult to access without ownership of a private car. This is, of course, part of a broader story of over a decade of crippling, politically motivated Tory austerity. Between 2011 and 2016, funding to National Parks was slashed by a [quarter](#). This must be restored to ensure the success and biodiversity of the UK's protected landscapes in the future.

As with other pillars of Labour's Green New Deal proposals our plans for National Parks offer both ecological and socio-economic benefits. Environmentally, buttressing the financing and ambition of our National Parks could allow for major improvements to biodiversity and carbon sequestration. The establishment of external nature corridors, greater funding for conservation work and ecological observation and an expansion in the scope of the UK's National Parks should help ensure threatened species across the country's diverse habitats are given a chance to bounce back.

The UK's National Parks should be able to drive sustainable domestic tourism. But these policies must also primarily benefit those living in or near National Parks. Through increased funding, and in combination with the proposals for a National Nature Service, new, well-paid green jobs would be created to ensure these proposals make good on their ecological aims whilst providing young people in rural communities with the jobs and training we need to begin building a restorative and ecological economy. Similarly, through the improvement of access schemes and green public transport infrastructure, underserved communities across the United Kingdom could benefit from the physical and mental health [benefits](#) that spending more time outside provides.

These plans align with the broader socialist goals of the Green New Deal in a number of ways. At their heart is a reaffirmation of the original spirit of the post-war legislative establishment of the first National Parks: a belief in the need to ensure that our national landscapes are managed and conserved ecologically in the public interest, funded progressively through taxation and that their benefits are accessible to everyone. Our environmental heritage must be understood as a shared, public responsibility. The proposal to create 10 new National Parks would ensure that their regional distribution and funding is evenly spread across the United Kingdom (given participation of devolved administrations). Further, in combination with our plans for strategic rewilding, the National Nature Service, and the installation of more democratic governance principles to National Parks, we would look to ensure that rural communities have a say in these improvements and that the conservation jobs of the future are provided for those who need them most. Our proposals also look to tackle the inequality and inaccessibility of accessing green spaces and, particularly National Parks, through better green public transport, pedestrianised and cycle-friendly access corridors to national parks and the financing of outreach and access schemes for underserved communities.

Community Ecological Restoration

[Ecological restoration](#) is *'the process of assisting the recovery of an ecosystem that has been degraded, damaged or destroyed'*. Despite grass-roots restoration projects being common throughout the world, taking the form of (for example) riparian tree planting, wetland restoration,

invasive species removal and native species introductions restoration ecology was not formally recognised as a [scientific discipline](#) until the 1990s. As such, research into this area has grouped ecological restoration activities into [three concepts](#):

- Natural capital: Renewable and nonrenewable resources that occur independently of human action or fabrication;
- Emerging ecosystems: Those that develop after social, economic, and cultural conditions change, thereby changing the environment that new biotic assemblages colonize and persist for decades, with positive or negative social, economic, and environmental consequences, and;
- Social-ecological systems: Complex adaptive systems combining social, economic, and ecological factors with the managers as integral parts of the system.

Alongside empowered community projects, this policy overlaps with our proposal for an Urban Greening Services (UGS), which would work to ensure that our urban spaces remain healthy and safe for residents as climate change continues to alter our cities. The remit of this service would be to increase the number of green spaces; create cooler urban microclimates through tasks such as planting trees in cities; repurposing hot spots such as unused car parks; covering the city's roofs with solar panels or gardens (as is happening in France); building public showers and more shaded places in summer hotspots, and installing a network of public water fountains (such as the Wallace Fountains model in Paris).

If ecosystems are not restored, not only will climate targets not be hit, but the injustices associated with a changed climate will only intensify. This is why ecological restoration has a growing role in policy aimed at reversing the widespread effects of environmental degradation. It includes activities to assist the [recovery of ecosystem](#) structure and function, and the associated provision of goods and services. As projects of continuous improvement ecological restoration shouldn't be viewed as discrete projects but an ongoing process.

Ecological Restoration Solutions (UK) present a [list of varied case studies](#) of their restoration work. Case studies include:

- Restoration of ancient woodland following construction of a second runway at Manchester Airport;
- Utilising Composted Green Waste to Create Healthy Soils on Reclaimed Brownfield Land;
- Restoration of ancient woodland following construction of a second runway at Manchester Airport, and;
- Restoration and Biodiversity enhancement of Warrington's New Cut Cana.

The Scottish government has moved ahead of the rest of the United Kingdom, having legislated for a [Community Right to Buy, established a Scottish Land Commission and a Scottish Land Fund](#) and by providing guidance and support for the broadening of community land ownership. Furthermore, as discussed in our [Just Adaptation Policy](#), there are projects such as [Treesponsibility](#) in Calderdale, West Yorkshire, are a good example of how local councils can empower residents to establish natural flood defences.

UNIVERSAL FREE BROADBAND

Labour resolves to support universal free broadband for the people of the UK, investing in fibre-optic infrastructure, increased public access to the internet, inducing mental health benefits, and a guarantee to protect the digital rights of its citizens

The coronavirus crisis has highlighted the necessity for a vast expansion of the UK's broadband infrastructure. A Green New Deal which seeks to radically transform the state of society requires that, like with the creation of the NHS in the 20th century, the internet is brought into and delivered as a public good, allowing the further development of the digital era. In the 21st century, broadband should be viewed as infrastructure, much as we view water and electricity as essential to living. To restructure power dynamics between regions, any green transition must allow the same level playing fields when it comes to the internet - for economic, health and social reasons – considering current levels of imbalance between broadband coverage of city and rural regions.

A Universal Free Broadband Policy is vital to re-address the jobs imbalance currently present throughout the UK. By increasing the speed of broadband, everyone in the UK will have equal access to jobs, allowing citizens to work from home, without having to incur much higher costs by moving to city regions or travelling long distances. This policy will revolutionise the work-life balance, through giving everyone the freedom to work in whichever way they see fit, while further ensuring that children or other household residents will not be impeded by the scale of internet speed which could affect their daily use. This in turn will help drive a new green ability to provide jobs everywhere, while intertwining a jobs guarantee for everyone in the old repair

sector. Regional inequality will be improved through the availability of jobs, including a scheme to solve digital inequality between regions, while a newfound level of internet access will herald a new era of privacy rights through the creation of a New Charter for Digital Rights. Everyone in society needs to be bought into the 21st century and the wonders the digital age provides, not just a select few.

This document outlines five key sub policies focal for Universal Free Broadband; (1) Publicly-owned, Full Fibre-broadband; (2) Increased Remote Job Access and Digital Inclusion; (3) New Charter for Digital Rights.

Publicly owned, full fibre-broadband

The Coronavirus pandemic has revealed how deep the need for greater broadband capacity is, building on the vision outlined in the 2019 Labour Manifesto. The policy is multifaceted in aims, seeking to address deep structural issues in the UK pertaining to broadband. Digital deprivation in the UK means that only [51%](#) of households earning between £6000-10000 had home internet access whilst 99% of families with an income over £40,001 had access. This situation ensures that working from home is not a feasible option for people on lower incomes, but also, as shown during the pandemic, the lack of availability to the internet also impedes the ability of school children to complete and participate in schooling – which should be standard practice.

Aside from the obvious inequality in how money determines the ability to access broadband, in the 21st century, the mere obstacle to internet access itself should be considered a plight. The clear case for publicly-owned broadband is evident in price rises witnessed by two of the largest providers, BT and EE. As of 31st of March 2021, their [annual price raise for this year will be 4.5%, 3.9% above the rate of inflation as judged by the Consumer Price Index](#) (CPI). This approach details the marketized failings of private-ran companies providing broadband within the sector, where [just a year prior BT had committed themselves to raise prices in line with the CPI rate of inflation](#). Combine this with the most recent budget announcement, which set out a [public sector pay freeze](#) (in essence a stealth tax if wages do not rise with inflation) and the picture becomes clear: Broadband fees continue to rise faster than real term wages and general cost of living.

Rural areas and their lack of broadband coverage and speed in comparison to those in urban spaces [confirms the need for publicly owned, free broadband](#). A [2019 government report](#) into the regional differences in broadband showed 7% of premises within Rural areas were unable to access a decent broadband service, worsening the more rural an area where in *rural hamlet and isolated dwelling in sparse settings* this figure sharply rises to 35%. In comparison, only 1% of urban areas suffer from this very issue. On top of this, the average download speed (Mbit/s) of rural areas is 34, comparatively lower than the 53 in urban dwellings. This stark disparity highlights the negligent state of UK broadband coverage; the lack of profitability to network providers in developing and upgrading the current broadband capability to rural areas has fuelled this inequality.

Furthermore, this modern inequality is not isolated in conception within the rural/urban divide, but also within cities themselves. When judging by the current [government's own standards of what is and isn't an acceptable level of broadband speed](#) (10 Mbit/s), even cities fail in metrics set. Broadband inequality is not just something to be worried about in Rural areas. A nationwide fix of full-range coverage public broadband is necessary to combat this contemporary failing. How can it be expected that inner-city businesses are able to conduct their business in a timely and cost-efficient manner when some of the worst broadband deprivation resides in these areas?

The attempt to wholesale fix this problem has resulted in the further stimulation of Tory dogma; privatisation. Contracts have been handed out to investors such as Virgin Media, Infracapital (partnered with Gigaclear and TalkTalk) and CityFibre (partnered with Vodafone), but similar problems still arise due to the nature of these contracts. The profit-driven nature of capitalist financialisation means investments could occur as a “CBD (Central Business District) effect”, which is where development becomes clustered around town centres, potentially limiting the number of residents who can benefit. Moreover, left to the limits of private firms, [surveillance capitalism](#) will further drive the profit motive of telecommunications organisations, focused on generating behavioural data for the same firms which in turn will be used to drive their performance and profit; a publicly-owned alternative is the best option to ensure privacy is maintained.

A nationwide upgrade to full-fibre broadband brings with it an inherent upgrade of technology. The wires used to provide the broadband coverage are much longer-lasting and developed, meaning they are less dependent upon infrastructure servicemen. It has been [reported](#) that within areas of existing fibre broadband, there has been a drop in fixing demand by 50%. While sturdier and more reliable wiring used is a clear positive for citizens in which broadband coverage reaches, this would negatively benefit anyone involved in the trade side of delivering this public good. Hence, there should be a commitment to ensure all old sector workers in broadband infrastructure and broadband retail services guaranteeing them a job, with the same or better terms, in the new and improved British broadband — ensuring no one is left behind, with retraining where necessary.

It is painfully evident that the UK is well behind where it should be in terms of full fibre coverage. In South Korea and Japan, full fibre coverage is at 98%+, whereas the UK is a measly 20%. Taking Boris Johnson at his word, the government aims to ensure the “[the best](#)” superfast network in Europe, but yet again, the UK lags in 8th position. With [government plans](#) revealing that it will take up to 20 years to get to a situation to complete their current broadband ambitions, on 75% coverage due to market diktat, the economic and social case for a publicly owned full fibre broadband has never been more obvious. Not only will consumers be hit with the costs, but regional inequality will still further.

[Commonwealth](#) detail how a government monopoly over deploying broadband coverage will incur lower costing and faster completion of universal broadband coverage, where an actual government report also confirmed that nationwide full-fibre via “enhanced competition” would be [significantly slower and more expensive than a state monopoly provider, with a CapEx cost of £32.2 billion compared to £20.3 billion](#). Openreach, seeing as it already provides a [substantial amount of current network coverage](#), is the most feasible to be become publicly owned, as well as other broadband-relevant parts of [BT](#), including BT Technology (which oversees backhaul network), BT Enterprise (which retails broadband to business) and BT Consumer (which retails broadband to individuals). This will lead to the establishment of a new entity – British Broadband – involving 2 arms: British Digital Infrastructure (BDI), tasked with public network roll-out, and British Broadband Service (BBS), which will deliver free broadband. Coverage will first be rolled out to severely unconnected areas, including technologically archaic rural settlements and some

inner-city areas, then spreading to towns and smaller centres, until completing the built infrastructure in areas already well provided by super/ultrafast broadband coverage. With the potential to boost the economy by [£59 billion by 2025](#), while providing both businesses and homeworkers the ability to conduct work at vastly quicker speeds, as well as reducing overall costs to bills, the public ownership and roll out of full fibre broadband will help bring Britain into the 21st Century, and is a vital component of the proposed Universal Free Broadband service.

Increased Remote Job Access and Digital Inclusion

The effects of Covid-19 have been to engender a change in working culture. No longer is there an imperative to have to travel to the office to complete work that can be completed in the same manner at home. In [April 2020, 46.6% of people in employment did some work from home](#) (WFH). Since then, a [September 2020 YouGov poll](#) indicated the effects of the pandemic on changing the work-life culture due to interactions with WFH with people falling into three camps: A) Never WFH; B) WFH all of the time; C) WFH some of the time. Within this, only 4 in ten (39%) say they don't want to WFH when the pandemic is done. What is evident is that the pandemic has brought upon a rapid societal change, which can now be used to consolidate worker freedom by providing Universal Free Broadband.

On top of this, with hundreds of thousands of people more likely to benefit from a free of use public broadband service, the economic and social benefits of WFH can help bridge the regional divide. Regional inequality has for years meant that a [brain drain](#) effect towards cities has occurred, as well as North to South movement, causing disjointed growth. The ability to take on whatever job possible from within your home remit offers a way to bridge this divide. Within this divide itself further exists a "[digital work skills](#)" divide. Good Things Foundation states:

"57% of the workforce in London, East England and South East England have these (digital) essential skills, in comparison to 42% in the North East, North West, Yorkshire and the Humber; and 44% in the East Midlands and West Midlands."

Universal Free Broadband and the service it provides must include a levelling up capacity. The markedly lower level of non-Southerners ability to successfully use digital tools demands investment in the workforce and further boost to the post-pandemic economy. Not only will this

help save emissions by cutting down the necessity to travel far distances to offices, but citizens would also save money on travel costs on top of ensuring there is no longer a necessity to, for example, move to bigger cities for work. The [CEBR's](#) research indicates:

“Over 270000 people could as a result choose to move away from London and other major cities into suburban and rural areas. Over 93,000 more people could choose to work in rural communities compared to the present day”

WFH offers communities a new lease of life by the fact that digitally based work can be done anywhere, allowing money to flow into non-cities by workers living in and being able to spend their money in these areas. Moreover, workers would be granted a much larger say and ability to choose from where they work; helping to positively change workforce culture. This would include mental health benefits from having increased leisure time from time saved commuting. Studies elsewhere show [49%](#) of people reported their mental health improving from WFH, and while some declined, it boils back down to this point of choice: the British public deserve the right to choose how they work, of which Universal Free Broadband is integral.

The CEBR has predicted that 25% of the workforce could be WFH by 2025, which in turn will lead to the stimulation of 1.2 million new jobs. This in turn would lead to a 5.6% growth of the 'Flat White Economy' (various digital based sectors), over the period 2019-2025, from £240 billion to £430 billion, making it comfortably [Britain's biggest economic sector](#). Evidently, coming out of a post-covid world, Universal Free Broadband will greatly help aid the economic recovery. Moreover, it should be noted that these are conservative estimates, with the potential for an even greater scope of economic stimulation to occur, depending on: the scale of broadband coverage by 2025, the levels to which people choose to WFH and how companies choose to restructure their workforce to potentially include an even greater number of WFH jobs available nationwide.

Digital inclusion further offers a radically different technologically competent version of the future. [76%](#) of people stated that their jobs and prospects were improved as a result of digital inclusion schemes in communities provided for by the Good Things Foundation. This can further establish and stimulate the role local areas have in reproducing the conditions necessary for digital inclusion, where less-skilled inhabitants can explore the internet at a community centre,

carers' café or job club, library, food bank or homeless hostel. This ability to intertwine localised solutions to create greater digital competence will be vital to any Universal Free Broadband; the greater the skill level of the workforce in using digital technology, the more jobs can be facilitated. This will further lead to a development of public infrastructure services, in the sense of, as mentioned, libraries or community centres, meaning no discrimination to the level of access of full fibre broadband that a Universal Free Broadband service would provide for the entire populace, not just those rich enough to have a digital device. Labour will invest in digital inclusion, working in tandem to create a new digital inclusion programme. A commission into how best to set this up, working with charities already involved like Good Stuff Foundation, will ensure to level up the country's digital skills.

With an increased shift in culture, as well as research produced into WFH building upon the already current stream, the feasibility of WFH has been shown. Benefits felt, both socially and economically, will spread throughout the UK considering how successful the shift has already been in its 'pilot', covid-19 induced-lockdown stage. Combined with an increased focus on providing digital proficiency, as has been shown to work thanks to charitable work by organisations such as Good things Foundation, high-speed, fully-covered fibre broadband will further ignite this trend, and allow everyone throughout the UK to attain equality in their ability to WFH and develop digital skills, breaking down the digital divide.

Digital Rights Charter

With the increased ability to interact with the internet and increased volume of traffic from citizens that Universal Free Broadband would produce, we must go further in guaranteeing digital rights and privacy. As previously mentioned, surveillance capitalism is impacting our fundamental ability to use the internet without mass conglomerates, most of the time masked from view, scooping up mass amounts of our data. The facilitators of this range from 'Big Tech' to the government. It is for this reason, to stop a clear encroachment of our digital privacy, that a new Digital Rights Charter must be introduced alongside Universal Free Broadband.

The power of Big Tech requires protection against. A seminal [report](#) by Amnesty International paints a clear picture of how the very business models of corporations such as Facebook and Google rely on processing vast amounts of our data, to be sold on to advertisers and

governments. The manner in which governments can extract the data from which they receive acts as a shield to the fact that governments are accessing this data in such large quantities. What would be previously intolerable to state citizens, were governments to directly be able to see your every online interaction, has been bypassed in the way that states can use big tech as their facilitators for mass surveillance. More so the report states:

“The opportunity to access such data has created a powerful disincentive for governments to regulate corporate surveillance”.

In essence, the power that states can wield by accessing the data that Big Tech generates serves to negatively affect the way states treat individuals' rights to privacy, and how that right to privacy should be protected. This phenomenon is eloquently displayed by the effects of Cambridge Analytica, and how the resultant effects made the targeted campaigning during the Brexit referendum for the “Yes” to Brexit campaign, possible. Where 87 million people's Facebook profiles were harvested to allow the conditions for never-seen-before level of micro-targeting, including political disinformation, the rights of citizens must be protected in the future. The Conservative party's [use of disinformation](#) in the 2019 General Election highlights the necessity to guarantee the rights of every citizen alongside an independently regulated, with [legally enforceable accountability mechanisms](#) such as a Digital Rights Charter. Algorithmic injustices must be challenged by empowering individuals and collectives against such technologies.

The equality and access to jobs that Universal Free Broadband brings must be enshrined in the Digital Rights Charter. In a society in which Universal Credit relies on ones' ability to access the internet, failing to guarantee this access is an unacceptable status-quo. This should include additional support services, via telephone and face-to-face advice, as well as the development of public internet-providing services (e.g. libraries)

[Public consultation](#) is vital on this issue, as, as of yet, there is no consensus on where the line can be drawn for both Big Tech and governance use of digital surveillance or targeted campaigning for what is hate speech or what should be censored. What is more so, as could be feared, the conception of “British Broadcasting ” as a monopoly service would theoretically have the potential to allow the government a backdoor into the data of its userbase. It is for this

reason, to uphold the integrity of every private UK actor, that the New Charter for Digital Rights is set up and implemented by an independent body; guaranteeing the privacy of citizens, but having done so through consensus on what should be regulated by Big Tech. Universal Free Broadband is a deserved right for all in the digital age, but this must never inhibit our freedom of expression, right to privacy, or access to the internet.

The logo features the text 'LABOUR FOR A GREEN NEW DEAL' in a circular arrangement around a central rose icon.

LABOUR FOR A
GREEN
NEW DEAL

FINANCE

- A GREEN, PUBLIC INVESTMENT BANK -
- MASS INVESTMENT IN GREEN TECHNOLOGIES -



A GREEN, PUBLIC INVESTMENT BANK

Labour resolves to create well-financed green public investment banks in every region of the UK

A Green New Deal would see seismic change across the whole of the UK, creating mass investment in green technologies, a jobs revolution in low carbon sectors and transitions in agricultural and ecological sectors. This change is the only socially, morally and economically appropriate one in the recognition of the damage a climate-changed world would bring. From retrofitting homes to transitioning our agricultural system, to investment in green technologies, a Green New Deal would tackle the climate crisis and create economic justice in areas of the UK that have been left behind for decades. A green, publicly owned, National Investment Bank will be a key engine of this change, providing the investment and support for businesses and consumers that the private sector has, for the past several decades, failed to do.

This policy report will outline how a Green New Deal would reorient areas of the financial sector to create lasting and sustainable change through funding a national investment strategy and providing the capital needed to support our green transformation.

Why a publicly owned National Investment Bank?

The City of London is one of the largest financial hubs in the world. Despite this, the UK suffers from [chronic under-investment](#) in its citizens, infrastructure and public services. Meanwhile, the risks private financial institutions take have public impacts when they go wrong, as witnessed in 2008, when under-regulated banks plunged the economy, and the globe, into a recession. The [overall structure of the financial system](#) shapes the everyday lives of people in the UK, whether it's through massively overinflated house prices or the underfunding of green projects, cooperatives, and community interest companies.

Even after the financial crisis, the banking sector in the UK is [notably commercialised](#). Private financial institutions operate purely driven by the profit incentive, meaning that projects can receive funding irrespective of their impact on workers, the environment or their local community. Whilst the private sector is becoming more vocal about the scale of the crisis, commercial banks continue to [pour billions into fossil fuel projects](#). And although large institutions have been forced to take on greater safeguards in fear of another financial crisis, it has not fixed the fundamental problem that lending to financial speculation and inflated asset classes, such as housing, is highly lucrative. Meanwhile, deindustrialised communities have been left without the lifeline they need - both in terms of finance for projects and businesses, and access to [banking services themselves](#).

Private finance has failed to prepare the UK for the future. A public alternative has the capacity to create huge change. Harnessing a Green New Deal, and the power of public banking, to ensure that future change tackles the environmental and economic injustices this country faces will be of paramount importance.

The Bank's Mandate

[Public development banks](#) have precedent as a policy tool to support public policy and provide targeted, low-cost investment. Recently, governments in major economies such as China and Germany have begun using their countries' public development banks to tackle some of the 21st century's most pressing challenges.

A newly established bank in the UK would have the capacity to work alongside the government to promote a national industrial strategy by ensuring industries and areas central to a GND receive the support they need. The bank's mandate would focus not just on reducing carbon emissions, but also set meaningful and binding targets on what's required to get to there. A detailed understanding of what tackling the environmental and ecological crises looks like, and how we get there, would drive the bank's mission.

The UK government currently has two financial institutions focused on investment; the newly unveiled Infrastructure Bank, and the British Business Bank. [The Infrastructure Bank](#), operated as an independent institution but on the Treasury's balance sheet, aims to tackle climate change

and support regional economic growth. Yet the Tories' initiative fails on both counts, with the [Office for Budget Responsibility](#) finding the bank's £1.5bn annual investment would not lead to economic growth, and [Ed Miliband arguing](#) its mandate isn't strict enough to ensure it only makes investments that are compatible with a low-carbon, resilient economy. Furthermore, Conservative governments have a bad track record when it comes to building stable, impactful public financial institutions. Their last attempt, the Green Investment Bank established in 2012, was [privatised five years later](#).

The British Business Bank (BBB), established in 2014 under the Coalition government, aims to provide capital and expertise to small and medium enterprises (SMEs). The BBB has [two key shortcomings](#). Firstly, the bank's mandate is narrower in focus than comparable state-funded public banks, focusing solely on correcting market failures in supplying finance for small businesses. Secondly, the Bank's funding of £200m per annum is insufficient relative to the size of the UK economy. In comparison, the German [KfW](#) lends £70bn annually.

By rolling these institutions into one, and creating a collective mandate for implementing a Green New Deal, we would be in a position to tackle the climate crisis whilst maintaining and developing the expertise and organisational infrastructure that exists within the civil service. On a national level, it would see the department for Business Energy and Industrial Strategy (BEIS) outlining strategic goals. Where BEIS goals align with the Bank's mandate, financial support would be provided. Labour's 2019 manifesto proposed the establishment of a £250bn ['Green Transformation Fund'](#), which, through recognition of the challenge climate change poses us, committed the necessary resources to tackle the climate crisis.

The NIB's mandate would be drawn from this rationale and the recognition that whilst an existential threat the climate crisis, if handled properly, presents an opportunity to create a more fair and prosperous society.

Regionality

The Green National Investment Bank (GNIB) would be responsible for supporting and advising regional banks. Whether it's the necessary revitalisation and investment of deindustrialised towns, harnessing the concentration of renewable energy found off the island's coastal line, or

the low-carbon green service jobs that will be central to the pandemic recovery, the UK's economic and environmental landscape is complex and diverse. Regional banks would be tasked with understanding, and capitalising on, these diversities to ensure the people and projects that need it are receiving funding. This would align it with other successful examples of national banks. India's National Bank for Agriculture and Rural Development ([NABARD](#)), for example, has had success in developing India's rural economy through providing expertise and finance.

Regional branches of the National Investment Bank would draw on local organisations and experience in shaping their investment agenda. Specifically, this can be achieved in cooperation with Regional Transition Assemblies, as part of the localised aspect of a Green New Deal industrial strategy. Regional Transition Assemblies draw from local employers, trade unions, organisations and the local community and would play a key role in ensuring local participation and accountability shaped the bank's actions.

A national organization with regional branches would also provide the level of financial and technical knowledge required to manage and deliver transition projects which is often lacking in local government. In-house sector experts, specialising on the range of changes required across the economy, would be able to provide initial consultancy and advice that would typically be inaccessible for firms or projects competing for private investment. From new energy storage technology solutions, to complicated infrastructure projects, to small scale community led initiatives, a NIB would have the capacity to coordinate and scale these changes at a level which the private market has not been able to offer.

The paper will outline three services a NIB would provide to support a Green Jobs revolution; infrastructure loans, innovation loans, and business loans. All three are essential parts of the transition.

Infrastructure Loans

The infrastructure division of the GNIB would carry out two functions in financing a green new deal. Firstly, it would provide financing for infrastructure projects. Secondly, it would provide both financing and technical assistance for local authority initiatives.

The infrastructure arm of a GNIB would support private infrastructure projects with a number of available financing tools, offering companies debt (lending money), equity investing (where the state purchases some ownership of the company) and guarantees (where the state acts as a 'guarantor' for another party's loan). A public bank taking a leading role in financing and directing UK infrastructure would tackle a three decade long period of [underinvestment](#) in the UK's infrastructure. The infrastructure division could focus on providing concessional (i.e. below market-rate) finance to projects that offer a direct return on investment as well as a breadth of external, social benefits. In particular, it would target projects which might otherwise struggle to attract finance, owing to perceived risks while they are still in the construction phase or unconventional structures. These projects could include funding for housing associations, the construction of infrastructure such as hospitals or adaptation measures like flood defences, and privately run networks, such as transport links throughout the UK or new energy like hydrogen supply infrastructure.

These kinds of infrastructure loans used to be provided by the European Investment Bank (EIB). The EIB's removal of funding for infrastructure projects has [implications](#) for offshore energy turbines, Crossrail and development of our housing, school and hospital infrastructure. A new public investment bank is vital to fill this gap in funding and provide loans for infrastructure developments organised by large firms, local authorities, nationalised utilities, and housing associations.

Local Authority Loans

One of the means through which a national and regional green investment bank would support a green transition can be offering local authorities, and public banks, access to capital at a local authority lending rate. As it stands, Local Authorities cannot borrow for day to day spending but they can for investment and infrastructure. They currently borrow from the Public Works Loan

Board at gilt rates plus 80 basis points. Offering local authorities access to more affordable, central government backed loans, alongside in-house expertise from the GNIB, can act as the catalyst for locally-driven change, providing financing for energy projects, locally-based cooperatives and housing projects. For example, local authorities might be able to coordinate a plan for retrofitting buildings across their area, drawing on skills offered by coops and private firms, and bundling the overall programme into a single product financed by the GNIB - which otherwise would never attract large-scale finance from commercial institutions. The locally-driven change will be vital to ensuring a more just, environmentally sustainable society, and a GNIB can provide local authorities with access to the resources and expertise needed to realise these changes.

Innovation loans

What do innovation loans do?

Another key function of the GNIB would be providing capital to high risk, high reward innovative programmes that currently have difficulty accessing capital. When research institutions and businesses uncover new technologies a major obstacle to achieving scale or ironing out problems can be access to resources. In return for financial support, the state can take part ownership, or 'equity', of these companies, reversing the prevailing neoliberal trend of privatising profits but socialising losses. Furthermore, state involvement would prevent price gouging or technology hoarding of vital decarbonisation technology, potentially a vital feature in ensuring an internationalist green new deal.

Private finance, focused on short term profits and projects, is less interested in longer-term investments that carry inherent risk but could lead - and in a climate context, are necessary for - to improved long-term public welfare. The state is financially sovereign and thus able to tolerate higher levels of risk and think on a longer-term time frame, to provide the 'patient capital' that innovation needs to flourish. Furthermore, when private investors finance a successful technology, their incentive is to limit access or charge monopoly prices for as long as they hold the patent. They are also unmoved by second-order problems created by the mass roll-out of new products, such as resource scarcity and conflict linked to battery technology. We cannot

afford for the technologies needed to counter the climate crisis to be withheld, exploited, or compromised by further issues of social or environmental justice - this will cause the transition to fail.

As economist Mariana Mazzucato argues in her book [‘The Entrepreneurial State: debunking public vs. private sector myths’](#), orthodox economics falls short in its limiting of the role of the state to fixing ‘market failures’. It was government funding for the internet, GPS, touch screen displays and voice activated technology that underpin smartphones. Similarly, initial government investment in biotech and nanotech have been central to these sectors’ development. Government investment also leads to further ‘cross pollination’ in research and development. [NASA’s](#) digital image processing, originally developed as part of the Apollo Lunar Landing Programme, is now integral to medical technologies such as CAT and MRI scans.

Why are they needed

Despite these well-understood benefits the UK suffers from chronic underfunding in R&D relative to its peers (Fig 1). Private finance has proved reluctant to invest in long time projects with uncertain rewards, instead waiting until there are more certain outcomes. The case of graphene, the wonder material developed by Manchester University, makes this clear. Graphene, the thinnest material known to man, has applications as widespread as phone screens, batteries, drug delivery, and retinas. Yet, despite its potentially revolutionary properties, the private sector within the UK has been unprepared to invest in its commercial development until it is closer to market. The result has been a complete failure of the UK to explore the potentials of the material discovered here. Using [patents](#) as a proxy for research focus, we see that South Korea’s top patenter, Samsung, has nearly 500 patents. This compares to the UK’s top institution, Manchester University, having 12.

A GNIB, operating alongside a focused industrial strategy and within a revised patent framework, would be in the position to support this research from the outset. It could take a longer timeframe approach and recognise that technological development will be vital in tackling ‘hard to reach’ emitting sectors, such as steel and concrete manufacturing. Innovation, as has been outlined in the section on investing in green technologies, has a key role to play in our transition to low carbon economy and overcoming the environmental crises.

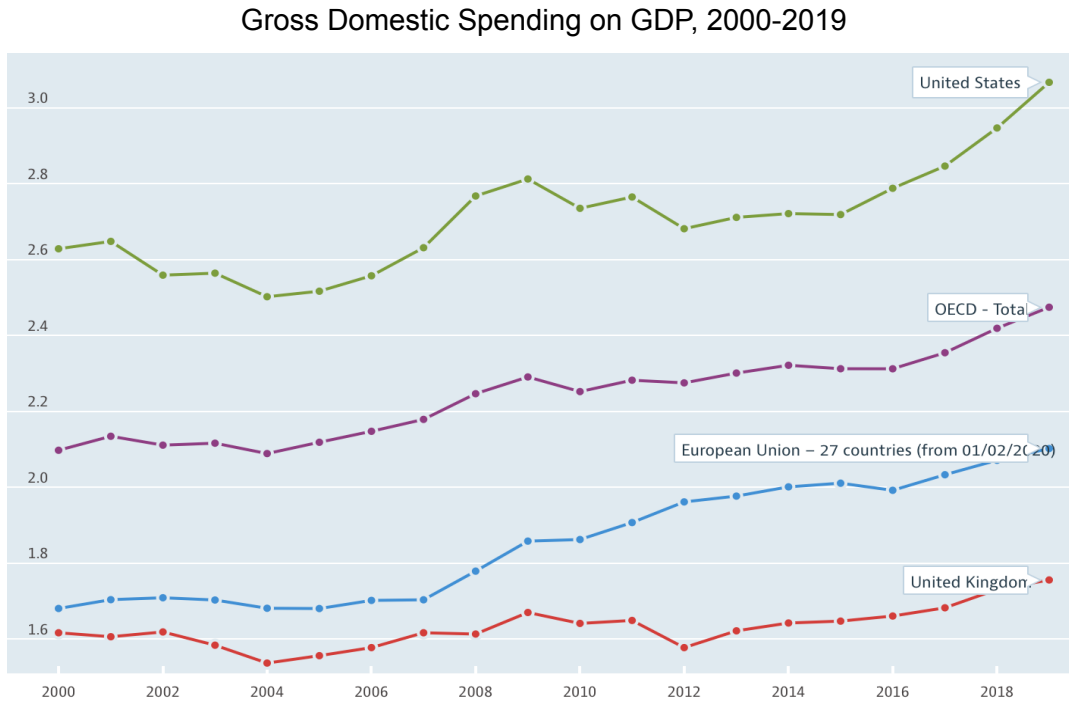


Figure 1. Source: OECD

How would they work?

The innovation arm of the NIB would work with all parts of the innovation ecosystem - such as [UK Research & Innovation](#), our world-leading universities, the [Catapult Network](#), [NESTA](#) and innovative firms - to identify opportunities for making strategic public investments across the innovation chain. Working hand in hand with these pioneering institutions, public innovation loans would both help drive a green transition and ensure that investment was happening for, and on behalf of, the public good. Conditions on the use of patents or products developed with support from the NIB would include forcing firms to make new methods open source for public authorities to use. High-tech companies which receive public loans could be required to meet certain standards for workers rights, helping to make the tech sector more inclusive and egalitarian.

Business Loans

A third division of the GNIB would be focused on business loans, assisting companies to achieve their transition to net-zero and enact the Labour Party's wider industrial strategy.

Delivering on the bank's mandate, focused not just on transitioning to net zero emissions but also targeting the sustainability of key sectors such as infrastructure, manufacturing and agriculture will require large scale change within the private sector. GNIB can help facilitate this change by supporting businesses that need help in undergoing this change – for example, by providing loans for retrofitting commercial properties, transitioning away from fossil fuel-based transport, or adapting agricultural practices to reduce their environmental and ecological practices. Aspects of a Green New Deal will be impacted by business; from an agricultural transition to developing green technologies, to construction materials for the energy transition, the private sector has a role to play in achieving net-zero. Whilst government policy and regulation will undoubtedly be the driving force for this change, equipping businesses that align with the strategic goals and values of a Labour government with the means to adapt to these changes will be instrumental in a GND's implementation.

Loan criteria

In order to ensure that this area of the bank aligns with the broader aims of the bank and the wider GND, criteria of *what* businesses and business activities would be eligible for financial support should be clear. The bank is not there to support or bail out failing businesses unless part of a wider Green New Deal or Just Transition strategy. Eligibility should be tied to the bank's mandate, and a broad understanding of what constitutes a 'green job'. This should also target businesses that otherwise may not receive private financial support – either because of the size of the company (small and medium-sized enterprises, which are [essential to regional development](#)) or because the need for capital is based on climate change adaptation which cannot easily be monetised. Cooperatives, particularly, should be supported as part of the bank's targeted business support. Cooperatives are businesses owned and controlled by their members and tend to be [more productive](#) and more likely to [survive their first five years](#) than

their counterparts. Cooperatives have an important role to play in fostering healthy changes to the nature of work in the UK, and in creating an economic model that empowers and rewards workers whilst protecting the planet. As a result, they should be a key target area for the GNIB.

MASS INVESTMENT IN GREEN TECHNOLOGIES

Labour resolves to support mass investment in green technologies

Green technology sits at the forefront of climate change mitigation and will be pivotal in moving away from fossil fuel produced energy and minimising our environmental impact. Despite the often futuristic proposals of green technologists, many of the tools we need to fight climate change already exist. Key examples of this include building insulation and public transport, which are covered extensively within Labour for a Green New Deal's policy report. Instead, this policy justification focuses on the technologies we will need to meet our increased energy demand as we undergo decarbonisation. Often, investment is required for early-stage technologies but which will be vital to a decarbonised future (such as producing steel with) and those sectors where no viable zero-carbon alternatives (such as cement production).

The first section of this justification looks at the problem of supplying enough electricity to meet the UK's total energy demand through renewable energy. Assuming that the vast majority, if not all, energy will come from renewably generated electricity¹, then the total amount of electricity available will need to be increased significantly. While significant attention has been given to the need to decarbonise the electricity grid ([evidenced by the recent US commitment](#)), the need to

¹ While funding should be allocated and CCS options explored, it is highly unlikely that CCS will be deployable at scale to significantly offset the UK's emissions in the next 30 years (Allwood et al., 2019). Similarly, while green hydrogen is a (physically) viable green alternative, the electricity required to produce it makes it a very inefficient use of renewable energy and therefore (given the expected shortage of renewable energy) unlikely to be a significant source of energy in the next 30 years.

expand the capacity of the grid is chronically under discussed. This also raises other challenges, particularly around increased grid infrastructure, and opportunity, such as decentralised electricity production in people's homes.

The second section looks at areas that are currently struggling to decarbonise (such as steel production and freight transport) and areas where no viable low carbon alternative currently exists. While the exact policy responses vary between the two groups of sectors, they are grouped by the need for significant government intervention, direction and action. Where sectors have avenues to decarbonisation but face barriers (whether financial, technical or otherwise) the government should work to remove these either through direction setting, procurement contracts or other support. Where current technology doesn't exist the government needs to shift to a '[mission economy](#)' to provide sufficient incentives, direction and financial support to find and implement solutions for these sectors.

Finally, the advancement of, and investment in, green technology needs to be situated alongside a programme of reducing the materials and energy consumed in the UK. [Allwood and Cullen](#) have shown how the UK chronically over-consumes the amount of materials required to meet its current levels of consumption. Substantially greater efficiencies could also be made while not impacting our quality of life. This section does not go into detail on the type of process and consumption efficiencies that should occur under a Green New Deal (such as the retrofitting of houses) but any new green technology should be understood to occur alongside a process of significantly improving the energy and material efficiency of the UK.

Mass investment in renewable energy, including grid infrastructure and decentralised energy capacity

As shown in the 2019 [Absolute Zero](#) report, the expansion of the UK's renewable sector at its current rate will not be sufficient to meet our energy demand by 2050. This highlights that the current renewable investment is insufficient to deploy renewables at the required rate. The percentage of renewable energy in the UK electricity grid is [celebrated as a great success](#). However, such accolades rarely take into consideration the need to massively expand the

amount of electricity we need to supply to decarbonise other sectors (such as allowing us to power our cars and heat our homes from electricity).

It also tells us that we need to rapidly reduce our total demand for energy, demonstrating the importance of transitioning to more efficient forms of living, such as massive insulation of homes and buildings and shifting from private to public (and active) transport as much as possible.

In 2018 just [18% of the energy consumed in the UK was from electricity](#), the rest of the energy consumption was from the direct consumption of fossil fuels (such as petrol in cars or industry burning oil for heat). Of this 18% of electricity-based energy, [just over half](#) of this was from non-emitting sources (including nuclear and hydro). This demonstrates why the deployment of renewable energy is required not just to decarbonise electricity production but as a precursor and essential element of decarbonising the entirety of the UK economy.

Rapid deployment of renewable energy

If we are to significantly increase electricity capacity then we need to rethink how we build and deploy renewable generating infrastructure such as solar panels and wind farms. It will also require research and investment in more novel times of renewably generated energy. We will cover each of these in turn.

A Green New Deal's expansion of renewable energy capacity will primarily take the form of large scale solar and wind farms, particularly where electricity seeks to replace conventional fossil fuel use in industry. Industrial hubs that are located near the coast (such as Newcastle, Middlesbrough and Edinburgh) should also seek to utilise increased use of offshore wind. Novel examples of renewable deployment that should be explored include [Riding Sunbeams](#), an organisation that seeks to directly link up renewable generation sources to electrified rail networks. As the rest of the UK rail network is electrified and construction work takes place, a GND should install solar panels alongside this newly electrified track to provide a direct source of renewable energy to the trains. [A similar example](#) in South Korea uses solar panels as a roof for a bike lane alongside a highway. The key is to rethink where renewable infrastructure is appropriate and expand its remit beyond farms and houses.

Finally, an expansion of the UK's renewable energy generation should take a more active approach in repurposing sites for renewable energy generation. Domestic and private aviation is not compatible with a net-zero future, and as such regional and private airfields could be repurposed as wind farms. An expansion of renewable energy should also explore novel ways of generating and storing renewable energy, for example, [vertical wind turbines](#). Miniature vertical turbines can harness the power of passing objects such as people and vehicles to generate electricity, although on a much smaller scale. While important, researching novel forms of renewable energy harvesting should not replace the rapid deployment of currently available renewable technology.

Supporting people through decentralised energy production

A mass retrofitting of the UK housing stock should also seek to install solar panels at zero or low cost on every house. Targeting low-income households would be especially beneficial as it would reduce household expenditures and bring people out of fuel poverty (alongside reducing heating costs through retrofits and heat pumps). Beyond increasing the amount of household electricity generated on rooftops, a Green New Deal should also support community and democratic ownership over the local electricity production. When new wind and solar farms are proposed by the government, priority should be given to local ownership or community ownership models.

More broadly a decentralised approach to energy production needs to be adopted as a core part of a Green New Deal. This includes smaller forms of energy production and, where possible, bringing generation closer to the point of consumption, as is done in the example of linking solar panels to electrified rail systems. But more importantly, a decentralised energy system would allow individuals and household access to cheaper energy and greater control over their use.

Supporting our grid infrastructure for a zero-carbon future

A decentralised and renewable energy system needs significant investment to sustain it and make it fit for a decarbonised future. Four key issues need to be addressed:

1. Grid expansion to transmit energy over long distances (wind turbines are typically located far away from the end-user).
2. Grid improvements to account for a greater amount of energy in the grid.
3. Ensuring that local grid networks can accommodate solar PV integration which typically has a much higher voltage than found in local grids.
4. Improving the flexibility of the grid to account for an intermittent and uncertain production capacity.

Solutions to these four problems need to be done at scale. In particular, the first three challenges can be resolved by significant investment in the grid. This includes building long-distance transmission lines from areas where energy is produced (such as hills that make good sites for wind turbines) to towns and cities and increasing the grid capacity to account for additional supply and demand.

Fossil fuel-based electricity infrastructure is primarily uni-directional and is not particularly well designed for decentralised electricity production. When energy supply exceeds demand in a local system it can cause [damage to the utility grid](#). The chances of this occurring increase when there is more localised solar power, however investment in local grids can stop this happening by ensuring that the excess supply has somewhere to go. Investment in the grid to accommodate for the two-way transmission of electricity (stemming from the large amount of decentralised energy installed as part of a GND) brings several benefits, such as decreased transmission and distribution losses and increased resilience.

The fourth challenge is potentially the most difficult, requiring us to match demand to a supply that is largely beyond human control (i.e., the weather). Partial solutions to the challenge include demand reduction (such as insulation), battery storage, providing more intelligent uses of electricity (for example charging cars when there is excess supply) and [Electricity Demand Reduction](#) schemes. The reverse element of this (partially resolved through mass decentralised energy) is that a Green New Deal must work to ensure that vulnerable and poor communities do not suffer blackouts when supply is low due to energy hoarding or prioritised access.

Government investment in decarbonisation

One of the most challenging areas for a Green New Deal is how to decarbonise sectors that currently don't have any viable alternative (at scale) to emissions-intensive production processes. This includes sectors that have production emissions (i.e., the very act of producing a material releases CO₂) such as cement, and sectors where alternatives may exist but there are significant financial, technical or political barriers to mass deployment, such as the transportation of goods or the production of steel.

A Green New Deal should not seek to proscribe technical solutions to decarbonise industry, particularly where specific solutions do not currently exist, although examples of potential technical solutions are given. However, in several sectors, potentially viable pathways to net-zero emissions exist and are not pursued due to government inaction. This section starts by setting out how the government should support research and development into sectors where decarbonisation is currently impossible, before looking at how government investment can break down barriers currently preventing decarbonisation such as with steel production. Finally, the section concludes by setting out some broad principles for the governing of new technology and how it can be best utilised and shared to support a global effort to decarbonise.

Box 1: Exploring new ways of storing energy

There are a large number of research institutes and companies seeking new ways of storing energy and electricity without relying on lithium-ion batteries, due to the large requirement for lithium and other rare earth minerals (globally) and the finite amount of them. While none of these are currently at the scale of current battery technology they offer examples of the type of research that needs to be pursued to complement current battery development.

[One example](#) is the use of small scale hydropower that can replicate traditional hydropower on smaller hills using denser liquid and pump this fluid uphill at times of excessive supply. It is worth caveating this with the fact that Dinorwig, the UK largest hydropower station only has a storage capacity of 9.1 GWh, suggesting that even a mass rollout of these alternatives is unlikely to meet our storage demand.

[The second area of research](#) is harvesting kinetic energy in disused mine shafts through the winching of weights up shafts at times of high renewable energy supply and lowering them to generate electricity when supply is short. While potentially viable, there are only a small number of locations suitable and therefore unlikely to provide a scalable alternative to lithium-ion batteries.

While both these examples have their limitations, they are good examples of the type of research that needs to be conducted to meet the UK's energy demand, in particular its [intermittency problem](#), as well as recognizing that a number of different, solutions, ideas and research streams will be required to meet the UK's decarbonisation requirement.

Creating the conditions to find the green technologies of tomorrow

As set out previously, a Green New Deal should not seek to prescribe the exact future innovation that will allow sectors to decarbonise². Instead, a GND should facilitate the conditions where funding and research is directed to the areas required and ensure that research is conducted in the interest of the public good rather than purely for private profit. Where innovation and new technology does arise in the private sector the government should use the powers set out below to share and accelerate the deployment of this technology.

There are three crucial elements required to create the conditions for developing new technology to allow us to decarbonise. Firstly, the government should be clearer in setting the pace of decarbonisation. This needs to include concrete targets for the interim and final decarbonisation of sectors. The UK government is already behind the Climate Change Committee who currently recommends [targets and policies are set for other sectors](#) in the same way that the phase-out of combustion cars were.

Secondly, the state and the researchers involved should not be hampered by financial constraints, this includes requirements for projects to be 'cost effective' by traditional standards. A GND needs to rethink how the benefits from current projects are calculated, currently using the Government's Green Book, which places outsized weight on productivity and GNP (which favors London) and little weight on environmental benefits, reducing inequality or wider technology spillovers.

Finally, the government should seek to create markets for low carbon technology and processes. In the same way that a guaranteed purchaser provided pharmaceutical companies with the financial incentive to research and develop a COVID19 vaccine, setting up procurement contracts and requirements for low carbon materials would incentive additional activity in this area. For example, by requiring all state-backed projects to use zero-carbon steel by 2030, steel producers could begin to decarbonise while ensuring that there is a market for their new product (particularly if the cost is higher at the outset).

² However it should be clear about the practicalities of specific future technologies, and the constraints of particular technologies - such as green hydrogen. Similarly the outsized funding CCS for over the last 20-30 years suggests that it should not be seen as a cure-all solution for GHG mitigation. This does not mean that we should not fund research into these areas but that the material practicalities of each technology needs to be each technology when planning for decarbonisation.

Box 2: Multiple pathways to decarbonising the construction industry

It is estimated that about [40% of global emissions](#) come from the construction and use of buildings. The construction sector therefore has a key role to play in global decarbonisation efforts. This includes reducing the emissions involved in the construction sector and ensuring that buildings are built to sufficient standard that minimal heating and cooling are required.

The construction of buildings themselves is one of the more challenging areas to decarbonise due to the vast amount of raw materials consumed. Bringing construction inline with net-zero will likely require a multi-pronged approach where the total demand for materials is reduced (either through better reuse of buildings or stop over-using resources), the substitution of currently used materials, for example replacing concrete and steel with sustainably sourced timber where possible, and finding alternative production processes for where the current material is required. The goal of multiple decarbonisation efforts is to reduce the total demand for the emitting substance such that if/when a new/alternative process of the product is discovered, its need is reduced and therefore can replace the remainder of the materials used quickly.

Deploying green technology

When new technology is proven to be viable the state needs to take an active role in facilitating its rollout. This includes working with companies to increase production where relevant, provide infrastructure, particularly where changes might be disruptive, and working with companies to introduce new technology, particularly where it may not be financially viable or where businesses have a long investment cycle.

A GND should place government involvement at the heart of deploying and scaling technologies to decarbonise as fast as possible. This is also the case where current decarbonisation technology already exists but is not being deployed fast enough. Governments driving the deployment of such technologies would generate wider benefits, principally through economies of scale in production.

The revolutionary nature of the GND means that the state cannot shy away from innovative infrastructure building. Two potential examples of this are the electrification of rail lines and the use of pantographs (powering HGVs through overhead wiring) on motorways. The electrification of rail lines has stalled in the last 20 years and must be the key plank of any GND, given the vitality of a well functioning publicly-owned transport system. The second example is an example of how the movement of goods could be electrified, [currently being trialled in Europe](#), without reliance on excessively large batteries. As with the electrification of rail lines, the use of overhead power lines would be a relatively low tech means of providing renewably sourced electricity to HGVs³.

While the government is currently waiting on battery or hydrogen technology to be viable for HGVs a perfectly viable option for carbon-neutral freight transport is available, the main barrier is the government investment in the pantograph network. Such infrastructure projects would also generate good, unionised green jobs across the country. This example is not a prescriptive measure of what a GND should look like for freight transport but offers one example of how decarbonisation is held back by the governments' lack of willingness to invest in infrastructure.

Better targets and timelines will go some way to ensuring that businesses and industries take into account decarbonisation in their investment consideration. However, there will still be situations where decarbonisation is not financially viable (particularly if these decisions are happening today and likely to be in place for several decades; such as with capital expenditure in factories etc). This is particularly important in industries that may have a role to play in decarbonisation/development projects (such as steel) or where a business employs a large number of workers and can offshore the business to avoid decarbonisation. In these situations, the government's Green National Investment Bank would provide investment, advice and direction in ensuring decarbonisation occurs as fast as possible.

³ The case of road freight is an example where greater government infrastructure investment could overcome significantly more challenging barriers to other solutions. The current focus for freight decarbonisation is on scaling battery technology which has a number of problems including sourcing sufficient rare earth minerals and the weight to power ratio of large batteries. By contrast, the UK first introduced an electric trolleybus service in 1912. Moreover, both approaches would require haulage companies to buy new vehicles, and HGVs powered by overhead cables would likely be much cheaper. This [report](#) provides an indicative cost of a overhead powered HGV, whereas this [news article](#) provides an indicative cost of proposed Tesla truck which is yet to enter the market. .

Box 3 Supporting the transition to green steel

[50% of Europe's steel mills](#) use electric powered furnaces. Despite this, [steel production accounts for 15% of the UK's emissions](#) and struggles to decarbonise. This is due to a combination of factors including the high cost of purchasing new furnaces, long investment timelines and the competition of cheap steel from abroad. The high cost and competition necessitate government support and direct investment. If UK steel production is to continue the government could also support through the procurement for green steel. If the government was prepared to pay a premium (in the short term) for green steel, then factories could work to mitigate their emissions, knowing that there is a market waiting for their final product.

As Common-Wealth have set out in their report [A Test of Mettle](#), ensuring a strong, decarbonised steel sector also has several other benefits. In addition to a large number of jobs it brings with it, steel will also be critical to the UK's broader effort to decarbonise, through the production of wind turbines, the track for expanded rail infrastructure and the continued production of (zero-emission lifecycle) electric vehicles.

Governing and sharing green technology

Beyond the investment and physical development of new technology, a Green New Deal should set out how any new technology will be governed and shared so that the benefits will be deployed in the public interest. As we have seen in recent history, the development of scientific or technical breakthroughs can often be accompanied with exclusionary high prices that make mass deployment impossible, even when the development has been government-funded. The price gouging often deployed in the pharmaceuticals sectors offers a [lesson of how not to proceed](#). Learning from this, three main elements should be built into any development of new technology to ensure that individuals and companies continue to focus on R&D whilst maximising the benefits.

The first element is to ensure that affordable pricing requirements are attached to any government funding. In addition to an equity stake in new enterprises seeking government support, any contract should require that the state has a role in the deployment and pricing of

new technology to ensure that price does not impede deployment. Where a mass deployment is required and a company does not have the adequate capacity to deploy a technology, this may also include licensing the technology to other companies to increase roll-out.

Secondly, the UK government should reverse its historic trend of outsourcing work to consultancies and other third parties. State capacity will be central to creating a fairer economic system and tackling the environmental crisis. As such the government and civil service need to ensure that it retains sufficient skills, knowledge and expertise so that it can understand, manage and regulate any new technology that comes to market.

The hollowing out of expertise in the civil service in favour of consultancies means that the state has less oversight of the work conducted and often leads to significant inefficiencies, as demonstrated by the difference in rollout between the outsourced test and trace system and the NHS run vaccination programme. This is particularly important in the case of green technology because significant state apparatus will be required to ensure that it is rolled out at the scale required to meet the climate crisis. As attempts to [regulate social media](#) in the US have shown, without in-house expertise the state often fails to sufficiently understand and regulate new technology.

Conclusion

Governing green technology also requires an explicitly internationalist focus. The UK cannot hoard an outsized portion of the materials required to decarbonise (particularly rare earth minerals) leaving insufficient resources for other states to decarbonise and develop (where required), as has historically been the case. Similarly, the UK cannot continue to offshore its emissions, whilst claiming emission reduction. There is no benefit to decarbonising the UK if globally we are not acting collectively. As a result, the UK government must be prepared to distribute, or license, the production of novel green technologies globally. As is the case with COVID-19 vaccines, the invention of decarbonisation technologies would necessitate global sharing to tackle a collective problem.

Perhaps the single greatest contribution the UK could make to fighting global warming could be to develop novel technologies that it shares with the world, inverting centuries of colonial

exploitation and extraction. While the UK's investment in green technology alone cannot reverse the centuries of injustice inflicted by the UK and the west, through proper investment, distribution and deployment of technology it can play a small role in supporting global development and decarbonisation.

For this to happen the UK must completely re-imagine its approach to research and innovation, and how to deploy the tools of the state to bring about this change. As Mariana Mazzucato says [‘it's not about picking winners, it's about picking the willing’](#). This involves setting ambitious targets for decarbonisation and supporting partners, both public and private to bring about this end goal. The government must also take a more proactive role in supporting the foundations and infrastructure needed to decarbonise. This involves both improving the performance and suitability of current infrastructure, such as the electricity grid and proactively developing infrastructure so that new technologies can follow, such as pantographs on motorways.



INTERNATIONALISM

- PUBLIC PROCUREMENT UNDER A GREEN NEW DEAL -
- A GLOBAL SOCIALIST GREEN NEW DEAL -

PUBLIC PROCUREMENT UNDER A GREEN NEW DEAL

Labour resolves to use public procurement to promote decarbonisation, environmental protections, and international justice in global supply chains

Annually, huge sums of money, or economic demand, are directed by the state in the form of public procurement. In 2018, public procurement amounted to [\\$13 trillion](#) globally. The EU spends around 14% of GDP (around [€2 trillion per year](#)) on the purchase of services, works and supplies. The [UK spends some £290 billion](#) on public procurement every year. Strategic public procurement is, therefore, a powerful way to address social, environmental and economic challenges. Green Public Procurement can be used to shape conditions in both the public and private sectors.

By expanding the public sector, a Green New Deal will create even more opportunities for the state to promote decarbonisation and justice in global supply chains using public procurement powers. Procurement means finding and paying for goods and services, usually on behalf of an institution. The public sector can use its considerable demand and buying power to attach certain conditions to those goods and services it procures, rather than prioritising cheapness alone. Taking a justice-oriented approach to public procurement is part of a broader reimagining of the role of the state as a driver of zero-carbon supply chains embedded with workers' rights and broader environmental protection. As well as promoting decarbonisation, this approach can [build wealth within communities](#) as local zero-carbon alternatives are chosen as suppliers instead of hyper-exploitative multinational corporations.

While a Green New Deal can expand the public sector at home, delivering a green jobs revolution domestically, this increased state capacity can be the bedrock of an internationalist approach which marries together global justice and local economic transformation.

Decarbonisation

Public investment in infrastructure, innovation and services is central to the Green New Deal. As well as driving rapid decarbonisation, investment in green affordable housing, integrated public transport systems, renewable energy, manufacturing and social services will allow local and national governments to influence global supply chains. From extraction to manufacturing to transportation, supply chains can produce [5.5 times more emissions](#) than a company's direct operations. The need to decarbonise supply chains is becoming increasingly recognised.

Key policy

- Target local and national government spending power towards local zero-carbon suppliers;
- Give environmental factors a formal weighting in procurement decisions;
- Implement strong prequalification criteria in tenders, to ensure that suppliers who bid for contracts measure value chain emissions in the contracting and monitoring stage;
- Divest from the largest polluters in the supply chain.

At local and national levels, procurement processes and decision making will likely take place within [anchor institutions](#). These include local authorities, NHS trusts, universities, trade unions, large local businesses, public companies, the combined activities of the community and voluntary sector and housing associations. These institutions can create local supply chains that reduce the carbon footprint of goods and services. They can achieve this by including [life-cycle costing in value](#) for money assessments in tender opportunities and including the costs of externalities such as CO₂. In addition to decarbonisation, anchor institutions can also make sure that public money is spent in a way that favours suppliers with collective ownership models and/or a recognised Trade Union.

There are several examples of these models being applied. Newcastle City Council has developed [a framework](#) that assesses the environmental and public health benefits of any potential infrastructure development as a priority. In Ohio USA, the City of Columbus jointly procured 200 electric vehicles on behalf of local anchor institutions and has developed a universal term contract for future vehicle procurement for usage by all public sector institutions. The Welsh Government's [Better Jobs Closer to Home scheme](#), which has seen four new enterprises funded by public investments, and then supported through a direct pipeline to public sector contracts. The city of Tshwane in South Africa launched [Tshwane vision 2055](#) emphasizing local procurement, support for small and medium enterprises (SMEs) and ethical procurement that reduces emissions and economically empowers the black community.

Through sustainable community wealth building initiatives, governments at all levels can ensure local and more democratic forms of ownership are prioritised, benefiting the local economy while reducing emissions. This can be achieved by imposing stringent criteria calculating the life-cycle, public health and emissions costs in all value for money assessments, thereby prioritising shorter supply chains with much lower carbon footprints.

Environmental Protections

Carbon emissions are not the only negative environmental impact embedded into global supply chains. Strategic public procurement gives us the opportunity to tackle deforestation as a key source of biodiversity loss, Indigenous rights abuses, and loss of carbon sinks.

Public procurement should shape aggregate demand by adding conditions which aim to eliminate deforestation from agricultural commodity chains, through the purchase of wood and wood products from legally harvested and sustainably managed forests. This would involve mandating the codification of [Life cycle costing](#) (LCC) methodology [uniformly at all levels of policy and contract making](#). LCC, with regard to the EU [Circular Economy Action Plan](#), will become an automatic point of reference for the government. As stated by the EC [Green Public Procurement](#) explainer, "LCC makes good sense regardless of a public authority's environmental objectives. By applying LCC public purchasers take into account the costs of resource use,

maintenance and disposal which are not reflected in the purchase price. Often this will lead to 'win-win' situations whereby a greener product, work or service is also cheaper overall. The main potential for savings over the life-cycle of a good, work or service are: Savings on use of energy, water and fuel; Savings on maintenance and replacement; Savings on disposal costs”.

A Green New Deal could target deforestation in procurement supply chains by expanding the scope of Section 198 of [The Town and Country Planning Act](#) (TCPA) (1990) and valuing trees in accordance with a universally agreed upon Tree Appraisal system. Section 198 of TCPA establishes trees as an Amenity and creates the power for local planning authorities to protect trees by legal order; subsequent sections create a legal framework for enforcement at Crown Court, including a potentially unlimited fine for serious offences. A Tree appraisal system can be designed to assist local authorities in achieving an appropriate level of compensation where publicly owned trees are damaged or removed by government contractors without consent and to provide a basis for managing public trees as assets rather than liabilities. The distinction of [public trees being viewed as assets](#) rather than liabilities is an important aspect of maintaining and enhancing the ecosystem services that trees provide in an urban setting. Amenity trees are any that are not grown or managed for their value as a timber or other crop and that provide other benefits or values. These include the “regulating ecosystem services” of cooling local air temperatures, intercepting rainfall and reducing air and water pollution and the socio-cultural ecosystem benefits of helping to make cities safer, more diverse and attractive, and wealthier to name a few.

There are examples of governments using their procurement to enshrine environmental protections. All timber and wood-derived products are purchased from independently verifiable legal & sustainable sources in [Durham Council](#). [The European Commission](#) includes a number of environmental requirements in its calls for tender for supply of furniture, which address the entire life-cycle.

The Bulgarian Ministry of the Environment and Water chose to specify [100% recycled fibre](#) when ordering paper for use in its office, without increasing its price. Environmental Ombudsmen Austria has environmental ombudsman offices located in each of its 9 landers or states with the duty to represent the interests of nature conservation and the environmental

laws. They have all the usual powers and have proved effective in resolving disputes. They are also authorised to bring complaints before Austria's courts.

International Justice

As the market for green technology expands there is a risk that the patterns of colonialism and unjust extraction are reproduced in the name of green technology or 'climate action'. The [OECD's Global Resources Outlook](#) to 2060 estimates that resource extraction will increase from 79 to 167 billion tonnes. The rapid increase in mining and mineral extraction is concerning from a human rights perspective. [Of the 2,865 cases of socio-environmental conflict](#) documented by the Environmental Justice Atlas, 587 are linked to mining of mineral ores and building materials extraction. Despite the egregious social and environmental impacts of mineral extraction, both governments and mining giants have argued that these are the necessary costs of a rapid transition to renewable energy technologies. Lithium and cobalt are key components of the batteries, solar panels and wind turbines necessary for decarbonisation, but this greenwashing obscures much of the industry's activity. Renewable energy is currently [not the primary driver](#) of demand for any given critical metal. Construction, aviation, nuclear technology, electronics and the arms industry are among the diverse, [range of critical metal end uses](#). However, there is no way to ignore the fact that green technologies have the potential to contribute to a new system of extraction that reproduces the extractive harms of the fossil fuel industry.

Key policy

Public procurement processes must include criteria that:

- Prioritise suppliers who deliver workers' rights both in the UK and globally - this includes not only the right to a living wage, safe working conditions and paid care leave, but also freedom of association.
- Recognise communities' rights to free prior and informed consent, [including the right to say no to new mining projects](#). Public institutions must ensure that binding mechanisms are in place to ensure the right of communities to determine the future of their territories.

- Ensure manufacturers have a responsibility for the entire life cycle of their products – particularly products involving metals – and especially for the [take-back, recycling and final disposal of them](#).

In order to make the Green New Deal truly justice oriented we must expand the [boundaries of the 'just transition'](#) to include workers across the world. The collapse of the Rana Plaza Garment factory in Bangladesh in 2013 demonstrated the fatal impact one of our global supply chains had on workers. In the process of producing clothes for [Primark and Mango](#) in the UK, [1,100 workers lost their lives and many more were injured](#). In 2019 Dell, Microsoft and Tesla were named in a legal case over the [death of children working in cobalt mines](#) in their supply chain. These horrific cases are just a couple examples of the way that many of the true costs of capitalism have been outsourced beyond our borders. Using stringent public procurement criteria can provide one way of embedding the dignity and value of workers throughout supply chains.

Global supply chains - particularly those based on resource extraction - also have significant impacts on local communities. Indigenous communities are responsible for the care of 80% of the world's remaining forest biodiversity and it is often legal battles over their land rights that act as the final barrier to destructive extraction projects. Indigenous communities are also at the frontlines of the climate crisis. 'Green' projects, from carbon offsetting to extracting rare earth metals, have been implicated in allegations of [displacing indigenous peoples, land grabbing, evictions, and violently policing](#) in the name of conservation or climate action. Chilean community leader Marcela Mella warned that the plans of mining giant Anglo-American to extract [400,000 tonnes of copper per year for the next 40](#) years from Chile's Andean glaciers, could lead to the destruction of vital ecosystems which also supplies water to the 6 million people living in Chile's capital, Santiago. Respecting the necessary rights of indigenous peoples and honouring the reparations they deserve goes well beyond the scope of public procurement. However, public money particularly when being used to fund a green new deal can be directed exclusively to suppliers who recognise the rights of indigenous communities.

In addition to reducing the impacts of extraction on workers and communities, we must also decrease our use of raw materials. Working towards a [circular economy and society](#) that moves

beyond capitalism means ensuring metal recycling, urban mining and life-cycle considerations are central to a companies' supply chain. We should look to the EU as an example here which has an extremely high end-of-life metals recovery rate in the construction and building industry with over [95% of metals recovered](#). In the same way that there are critical limits on fossil fuel extraction, the supply of rare earth minerals needed for the renewable energy transition is limited. Public procurement processes should be used to promote circularity in supply chains as a means of promoting global justice.

Legal mechanisms

Central to these ambitions must be abandoning the [lowest-price criterion](#) for the award of the contract and the exclusive use of the most economically advantageous tender with safeguards to ensure that environmental protection requirements are fulfilled. The culture of using public procurement for justice can be introduced using national [Green Public Procurement minimum targets](#), i.e., a certain percentage of public procurement to be green, with a phase-in provision requiring 100% by 2030.

[Paris Agreement goals](#), [A/HRC/41/39 Climate change and poverty](#), [IPCC](#) and [IPBES](#) Report recommendations should become binding contractual obligations for The Crown Commercial Service (CCS). The CCS must have a new commercial vehicle and approach to create a local and international "Legal Services Network" inclusive of environmental law [pro-bono legal services](#) and [Public Services Ombudsman](#) from which the public sector can procure legal services. The recommendations must constitute an essential criteria for the selection of judges in the Judiciary and granting of licences to public and private institutions to teach or practice law.

The CCS' focus would expand to include:

- Training & Education contracts for students, public officials and general public in [Environmental law clinics \(ELCs\)](#) in accordance with the [international environmental law principles](#) under [planetary boundaries](#) with the primary objective of making them enforceable "hard law".

- Setting up an [Environmental Legal Assistance Fund](#) that permits non profit public interest groups to apply for public grants to enhance access to environmental justice in sustainable resource procurement cases and [corporate conflict of interest cases](#);
- Creating the [Parliamentary Commissioner for the Environment](#) which carries out investigations and reviews of the effectiveness of government processes for managing the environment

A [specialised Environmental Court](#) should be established, equal to a High Court with civil, criminal and administrative law powers combined, dealing with a potentially broad range of environmental law disputes regarding:

- [Environmental impact assessment](#) and the environmental management system for Green Public Procurement,
- ensuring legal [accountability of government and other public agencies](#) in [environmental law post-Brexit](#),
- Extending appeal rights to the Supreme Court to [members of the public or NGOs](#) to appeal against environmental regulatory decisions but only on the grounds of procedural or substantive illegality (reflecting the grounds under Aarhus Convention) rather than a full merits appeal.
- Recognising that to many, the most important cost reform element in promoting access to environmental justice and protecting human rights, and as such ensuring greater access to environmental justice through financial aid.

The UK could look towards New Zealand Parliamentary Commissioner for the Environment (PCE), as an example of an independent, very active environmental ombudsman. The body has the power to investigate government environmental efforts and environmental problems, compel the production of information whether it is public or not, summon people under oath, report and advise the House of Representatives and recommend changes in the laws. Like all ombudsman offices (except briefly Hungary's), the PCE can reach conclusions and make recommendations but does not have enforcement power. New Zealand's Environmental Court also adheres to the principles of the Aarhus Convention in that all hearings are held in public, except where there is clear reason to do otherwise. The Court is given the power to 'waive, reduce, or postpone the

payment to the court of any fee prescribed by regulations made under [the] Act,' as well as the ability to hear matters jointly to reduce fees. The Environmental Court is praised for its significant adoption of Rio Principles and especially its focus on the core principle of environmental sustainability.

A GLOBAL SOCIALIST GREEN NEW DEAL

Labour resolves to support a global socialist Green New Deal, cancelling debt and freely sharing technology and resources internationally

Cancelling Debt

The levels of debt currently experienced by countries in the Global South are a direct consequence of policies emanating from the Global North. In many cases, loans grow faster than the rate of payment, meaning that countries can pay the same loan multiple times but still owe a debt. Since 1980, [\\$4.2 trillion](#) have been paid in interest, far overshadowing aid received. The introduction of [Structural Adjustment Programmes](#) in the 1990s have directly produced the debt crisis by providing loans to countries in the Global South conditional on policies of privatisation, liberalisation of capital markets, market-based pricing and higher rates, and trade liberalisation.

High levels of indebtedness means that many countries in the Global South are [disproportionately disadvantaged](#) when it comes to responding to the impacts of climate change and transitioning domestic economies. Where funds could be directed towards strategies of climate change mitigation and adaptation, they are instead mandated to pay interest payments on debt. As well as decarbonising and meeting basic needs domestically, the UK has a responsibility due to its role in creating and maintaining global indebtedness to support those countries made most vulnerable to climate impacts. Both finance and political power mobilised as part of a Green New Deal should be directed at alleviating debt internationally.

Key Policy

Cancel debt repayments for low-income countries

- Reform trade policies to ensure that scenarios which caused past debt crises do not cause another post-cancellation.
- End condition-based loans

The UK should cancel debt repayments for low-income countries and use its political influence to encourage other creditor nations to do the same. Debt cancellation should not be conditional on certain policies, giving the debtor nation autonomy over how to deploy their resources.

By relieving low-income countries of their repayment obligations, they would have more freedom to spend public funds on health services, welfare, infrastructure, and climate mitigation and adaptation without entering into further cycles of debt.

Climate finance

The UK is historically responsible for disproportionate levels of emissions as well as imposing on large parts of the world the economic system which produces and reproduces the climate crisis. The Green New Deal is an opportunity for the UK to invest in a green jobs revolution domestically while also mobilising finance and political power to support global climate justice. The impact of the historic and contemporary injustices of colonialism are incalculable. However, the UK should contribute to reparations for those injustices through transfers of finance and resources to support energy transitions and climate adaptation internationally.

The Commonwealth Development Corporation (CDC) is the UK's development finance institute, owned by DFID and has fundamental flaws meaning that its investments in the Global South do [not have a significant development impact](#). In some cases, the impact is negative. The Green New Deal provides an opportunity to reform the CDC so that it can support low-income countries to manage a just transition.

Key Policy

- Increase government spending on climate justice from £17 billion to at least £42 billion per year, or at least 2% of GDP.
- Reform the CDC to ensure it can support developing countries to manage a just transition.

A number of actions should be taken as an urgent priority. The Government should publish a new five-year commitment to international climate finance, in line with the UK's commitments under the UNFCCC to provide predictable and reliable climate finance. A new strategic fund should be created to ensure UK climate finance is spent on genuinely transformational measures. Government should increase ambition on UK international climate finance by establishing new and additional sources of public finance needed, and limit finance from official development assistance (ODA) to no more than 10% of the aid budget. The UK's current commitment to 50% of its climate finance for adaptation to climate change impacts in poor and vulnerable countries should be retained.

All UK Export Finance (UKEF) currently directed to fossil fuels should be immediately phased out. All UKEF projects must be aligned with the Paris Agreement. The UK's international influence should be used to lobby for a change in OECD-wide rules on export finance so that all projects must be Paris-aligned. All UK aid should be nature-positive, supporting more integrated interventions that improve people's lives and enhance the natural environment.

Spending should increase, in line with the UK's global fair share, to support global efforts to protect and restore nature. These funds must be genuinely new and additional sources of public finance and must under no circumstances come from existing ring-fenced finance for the aid budget. Harmful investments that destroy nature and contribute to climate change should end, including in fossil fuels, deforestation, conversion and exploitation of carbon- and nature-rich ecosystems.

Reforming the CDC

The CDC needs a new, legally-binding mandate (for which its board can be held legally accountable) which commits it to reducing poverty, closing global inequalities, doing no harm to the climate and facilitating a just, green transition as its driving objectives. The CDC should drop the ‘fund of funds’ model. The CDC should not make any investments through private equity funds. There is no evidence that these investments are helpful in reducing poverty and inequality.

Reformation of the CDC should open up the range of actors that CDC can fund, including looking at funding of state-owned enterprises, mutuals and cooperatives. Provision of good quality public infrastructure, from education and healthcare to renewable energy and transport networks, is vital for poverty reduction, reducing inequalities and developing environmental sustainability. CDC should also support the development of “public-commons partnerships” which would enable common, public ownership and democratic control of renewables industries, energy systems and infrastructure.

Furthermore, reforms should improve development impacts and monitoring, transparency and oversight, and abolish unhelpful incentives for senior staff to maximise returns. All new and existing investments by CDC should be publicly disclosed alongside a rationale for how the investment will reduce poverty and inequality, improve the realisation of human rights, facilitate a just transition to renewable energy or create good, green jobs.

Finally, the CDC should stop promoting public-private partnerships, particularly in healthcare and education. While there may be gaps in basic service provision in many developing countries, promoting private competition to fledgling public services is no way to improve the quality of those public services in the long term.

Trade

[“Trade can...\[exacerbate\] emissions and \[escalate\] environmental and climate damage, trade and investment rules \[can\] prevent or enable climate action, and climate change can impact a territory's capacity to trade.”](#)

By transforming the UK's trade policies we can ensure that the Green New Deal does not just occur within one country's borders. The economic mobilisation can be used to foster international cooperation to address the global climate crisis.

The UK must support trade and investment agreements which end the pattern of neocolonialism through trade deals imposing punitive or restrictive conditions on the Global South. Trade should be consistent with ambitious, equitable climate action and include enforceable labour and human rights protections. It should facilitate the global transfer of clean technology and other climate change solutions. The UK should use its international influence to increase the voice, vote and power of low-income countries across international institutions.

Key policy

- Support enforceable standards in trade and investment agreements that protect the climate, labour rights and other human rights. This includes ensuring any 'green trade' measures have [a development and redistributive mechanism and ending fossil fuel financing](#).
- Support the abolition of the investor-state dispute settlement as a mechanism for resolving disputes
- Trade and investment agreements must be transparently negotiated and preceded by climate change and human rights impact assessments.

Trade and investment agreements have been used to undermine climate action by enabling companies to sue national governments for measures taken to support climate goals, such as the [phase out of coal in the Netherlands](#) by the [Investor-State Dispute Settlement \(ISDS\)](#) mechanism. ISDS has been used by companies against low-income countries which have

introduced regulations to protect public interests like health and the environment. This pattern has been [reproduced during the COVID-19 pandemic](#) with corporations threatening to sue countries in the global south over their covid measures.

Several disputes have been initiated in the WTO in recent years to [challenge government support to domestic renewable energy programmes](#). Trade agreements have prohibited the use of local labour, products or sub-contractors, including a dispute in the WTO in which the US government [successfully challenged](#) the Indian government's use of locally-produced solar panels. They have also broken down non-tariff barriers to [increase the privatisation of public services](#) and to prevent the use of progressive public procurement schemes.

Sharing Green Technology

Decarbonising globally will require substantial change in many developing countries. The UK can assist in this by sharing green technology. As outlined in the chapter on mass investment in green technology, in particularly hard to decarbonise sectors - such as cement and steel - novel green technologies will have a substantial role to play. Further innovations could include renewable energy technologies, energy storage and batteries, electric vehicles, manufacturing, heating, and beyond. Where the state invests and facilitates green tech innovation, global sharing of technology must be a requirement. Where technologies are developed that will be pivotal to decarbonisation - such as if there were to be a zero carbon cement development - the UK government must take unilateral action to prevent technology hoarding or price gouging. We cannot allow technologies developed as part of a Green New Deal to be monopolised by wealthy nations, leaving low-income countries for dead.

Far-reaching intellectual property provisions are currently undermining the transfer and sharing of valuable technology and knowledge. The UK is one of only six countries which together account for almost [80% of all patent](#) applications in clean energy technologies. This same pattern has been repeated in the development of the COVID-19 vaccines. [The US, the UK and some members of the European Union](#) have rejected calls from South Africa and India to suspend the WTO's agreement on Trade-Related Aspects of Intellectual Property Rights. The

suspension of these intellectual property rights would facilitate the transfer of science and technology to low-income countries and vastly increase the distribution of the vaccine.

Key policy

- Support low-income countries to mitigate and adapt to climate change with free transfers of green technology, as well as reforming intellectual property rights regimes.
- Transfer certain IP rights, remove IP restrictions on certain critical innovations completely, and overhaul the pro-corporate, pro-enclosure IP rules and systems that predominate in international free trade agreements and institutions.
- Promote public ownership and control of IP and research and design with an emphasis on boosting workers rights particularly in the green technology sector. This would also involve [removing IP rights and protections from companies that abuse workers](#).

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