

A Green New Future: London's Recovery from Covid-19



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A Green New Future



Covid-19 has exposed how vulnerable London is to global crises. However, it has also revealed how London could be - with clean air, space for people to walk and cycle, and lower carbon emissions. Whilst lockdown has led to some short-term improvements in air quality and reductions in carbon emissions, air pollution has been rapidly increasing each time lockdown measures have loosened.¹ On top of this, one of the greatest risks London faces is the extreme weather caused by the climate emergency.² Tackling air pollution and carbon emissions would improve the health and resilience of our city as well as creating new, high-skilled jobs in construction, in retrofitting and in green technology. Up to 1.1 million workers could be at risk of unemployment as a result of the economic and social impact of Covid-19.³ The Government and the Mayor must take this opportunity to ensure a green and resilient future for London; a future fuelled by decent, zero-carbon jobs.

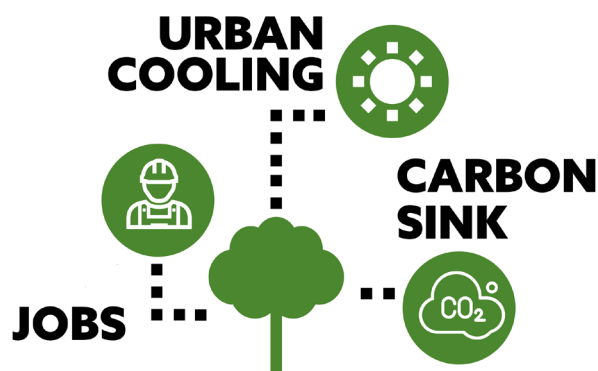
The Mayor has made good progress on decarbonising London over the last four years, working towards his target for London to be net zero-carbon by 2030 and zero-carbon by 2050. City Hall has retrofitted more than 15,000 homes, delivered the Ultra Low Emission Zone (ULEZ) to start cleaning London's air and begun electrifying TfL's bus fleet.⁴ This came after years of inaction by his predecessor, the current Prime Minister.

However, the scale of the climate emergency facing us means much more needs to be done. The Mayor has joined the C40 Cities Network Covid-19 Recovery Taskforce to move towards greener, fairer cities across the globe.⁵ Closer to home, London's Recovery Board is harnessing the power of the Mayor, local authorities, business leaders and civil society to promote a Green New Deal as a cornerstone of London's long-term recovery from Covid-19.⁶ Both of these will contribute to London's green recovery.

The Mayor has already committed £10 million to the Green New Deal Fund which is supporting growth and jobs in London's green economy. He has committed a further £20million to the Green New Deal over the next two years.⁷ Assembly Members will be looking to influence how these workstreams develop and what action needs to be taken to build back a greener city.

Recently, the Government announced it would be investing £12bn to support its 'Ten Point Plan for a Green Industrial Revolution', with programmes in areas including home insulation, electric vehicles and new low-carbon energy generation. When compared to far higher green stimulus packages in countries such as France €30bn (£25.7m) and Germany €41bn (£35.1m)⁸, it is widely accepted that this is nowhere near enough, with leading think tanks such as the Green Alliance stating that 'policy and spending has so far fallen short' of what is needed to put the country on course for rapid emission reductions.⁹

It would be far smarter economics for the Government to increase their green recovery package. There is increasing evidence that green investments have greater returns than those made in high-carbon industries. A study by Oxford University recently found that projects which cut greenhouse gas emissions and stimulate economic growth create more jobs and deliver higher returns on government spending in the short and long term than traditional stimulus programmes.¹⁰ For example, the Mayor's recent investment in the Green New Deal will create 1,000 jobs in skilled green industries at a cost of just £10,000 per job.¹¹ While the Government's promise 'Ten Point Plan for a Green Industrial Revolution' works out at a less impressive £48,000 investment per job created,¹² there is still a clear economic and environmental case for further investment.



All levels of government, national, regional and local, need to take action to tackle the climate emergency and create a green and resilient future for London. We have an opportunity to embed lower air pollution and carbon emissions while providing the economic stimulus London needs. Here are some areas which need to be prioritised as part of London's green recovery. They are far from the only areas where green investment is needed, but they have the greatest potential for job creation and Londoners' health and wellbeing.

Moving London's Bus Transport to Zero Tailpipe Emissions

London's transport system is a prime example of the twinned economic and environmental gains which can be achieved through intelligent public spending.

Transport for London has bought in innovative measures in relation to electric, hybrid and hydrogen vehicles to reduce the contribution to poor air made by London's buses. All 9,000 buses in TfL's fleet now meet the Euro VI standard as a minimum. This has reduced the proportion of NOx emissions in London from 15% to just 4%, as polluting diesel buses have been phased out and older buses have been retrofitted to meet ULEZ standards.¹³ But we can and must go further – the Low Emission Bus Zones must be replaced

with zero emission buses, across London.

The Mayor has introduced 400 electric buses and launched London's first ever fully electric bus routes.¹⁴ Electric buses have the potential to reduce tailpipe emissions to zero and help the UK meet its carbon reduction targets. Some routes are more suitable for hydrogen buses, which are also zero tailpipe emission vehicles. Alongside the environmental benefits, changing to hydrogen or electrifying all of TfL's 9,000 buses would create 600 highly skilled manufacturing jobs throughout the UK.¹⁵ Moreover every £1 invested translates into a £2 investment into bus manufacturing across the UK.¹⁶ For example, the hydrogen buses which TfL has recently purchased are made in Northern Ireland¹⁷ and so this investment plays a role in unlocking the potential of the hydrogen industry by

providing investment, jobs and growth. Investing in a greener London brings benefits to the whole nation; if the Government is serious about levelling up, rather than levelling down, it is investments such as these that bring environmental and economic benefits across the country.

The environmental and economic case for building upon the progress already made by the Mayor in modernising and cleaning London's buses and routes is overwhelming. However, a loss of income from Covid-19 risks robbing TfL from having the resource needed to invest in these projects. The Mayor and TfL are seeking a long-term investment from the Government to unlock these benefits. Doing so would help London and the UK move towards a greener, more modern, zero tailpipe emission, public transport network.

Case Study: Northumberland Bus Garage: vehicle-to-grid

Northumberland Park bus garage currently operates as a trial site for generating electricity from parked buses.

Energy from the batteries of parked electric buses is put back into the grid when demand is high and the buses are recharged when demand is low. This helps makes the energy network more efficient by smoothing out peaks and troughs in electricity demand.

SSE Enterprise, The Mayor of London, Transport for London, the University of Leeds and Go-Ahead London are all jointly collaborating on this Vehicle to Grid (V2G) project which has the potential to create a world- leading business model for cleaner, electric transport.

Retrofitting London's Homes

Nationally, a staggering 71 per cent of homes do not meet EPC standard 'C',¹⁸ which is considered the minimum necessary to enable us to meet the Government's target to be net zero-carbon by 2050, let alone the Mayor's target for 2030. A quarter of London's homes that have been given an EPC since 2009 have the worst energy ratings of E, F or G.¹⁹

London's aging housing stock must be brought up to scratch. Domestic gas and electricity currently make up nearly half of carbon emissions generated within London – and as London's transport improves, this becomes an ever larger percentage. On top of this, 12 per cent of Londoners live in fuel poverty.²⁰ Our desire as a City to tackle the climate emergency and poverty mean we must act.

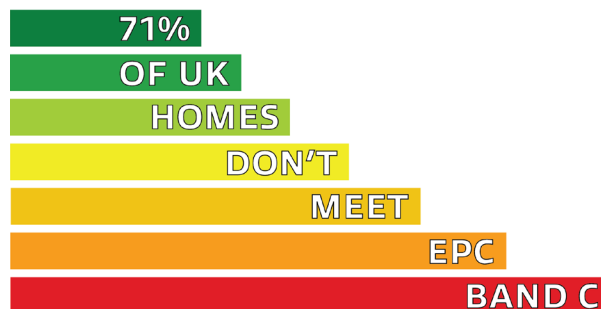
Bringing all UK homes up to at least the bottom of EPC Band C, or as near as possible,

would create over 200,000 jobs; more if we were to bring homes up to even higher energy efficiency standards.²¹ Doing so would require wide-ranging improvements to homes, such as insulation of walls, roof insulation and all windows to at least double glazing. The good news is that technology is rapidly improving, making it cheaper and easier to install in homes.

City Hall has taken action to bring together housing providers and suppliers to deliver deep, whole-house retrofits. For example, the Retrofit Accelerator programme will have started on 1,600 whole-house retrofits in Greater London by 2022 and will aim to save over 4,000 tonnes of CO₂ a year.²² These deep retrofits go further than stand alone energy efficiency measures such as loft insulation or replacements windows and instead seek to take a holistic approach to the property by making multiple improvements in areas such as wall, windows, floors, roofs, heating systems and installing new renewable energy systems such as heat pumps and solar panels in order to achieve deeper levels of carbon savings. The Mayor's retrofitting schemes frequently save Londoners around £150-£300 on their bills each year, a vital saving for households in fuel poverty.²³ However, the capital required for these investments is extensive and expensive. That is why we need the power and resource of central Government to carry out retrofitting programmes which can reach an even greater number of Londoners.

The Government's £3bn Green Homes Grant scheme had the right intentions, but as with much of the Government's Green measures such as the Green Deal, it is failing to deliver for Londoners. Greater London accounts for just 10% of vouchers issued under the Green Homes Grant, despite making up 15% of households in England.²⁴ Moreover, this is not as a result of success in the rest of the country; at the current rate it would take the Government over ten years to hit its 600,000 target for grants issued across the country.²⁵

Energy Efficiency: the case for retrofitting



Worse still, rather than fix the problems with the scheme the Government has extended the application date until March 2022 but at the same time, reduced national funding for home improvements from £1.5bn to £320m.²⁶ The massive benefits of job creation, energy reductions and savings on household bills makes this investment worthwhile, but we need the Government to be bold to get this action underway. Scaling down funding is a backwards step.

Improving London's Resilience

As London faces increasingly extreme weather as a result of the climate emergency, we will need to become more resilient in order to protect public health. Over 200 Londoners died as a result of the heatwaves in summer 2019,²⁷ and there are around 2,000 excess winter deaths each year.²⁸ London also faces a high risk of flooding, due to the increasing frequency of intense rainfall.²⁹

We must take measures to help make London more resilient to extreme weather. In the first instance, developing water efficient homes can reduce the amount of water a household uses. Measures such as the installation of water efficient showerheads and dual flush toilets can result in significant savings in water and energy bills while also creating skilled jobs.³⁰ As such, the Government should listen to the calls made by Waterwise and consider expanding the Green Homes Grant scheme to include funding for schemes which promote water efficiency.³¹

As well as measures aimed at water use reduction, the impact of our city's landscape needs to be considered. For instance, green space enables water to drain slowly through permeable ground, reducing surface water flood risk, and helping to mitigate the 'urban heat island' effect and keep London cool. The urban heat island effect means that the centre of London can be up to 10°C warmer than surrounding countryside. However, gardens in London are disappearing fast. London is losing gardens at the rate of an area two and a half times the size of Hyde Park every year.³²

Lockdowns have emphasised the mental and physical health benefits of accessing green, open spaces. The environmental and health benefit of green space is clearer than ever. My report on behalf of the London Assembly's Housing Committee demonstrated the ways in which the Mayor could embed biodiversity into new developments in London.³³ I welcome that one of the recommendations in this report has been adopted by the Mayor and that there is a biodiversity net gain requirement in the New London Plan.³⁴ This policy is a huge step forward for wildlife in London and will help achieve a greener city. The Mayor's decision to develop an urban greening factor will also mean that Londoners living in new housing developments will benefit from wildlife on their doorstep.³⁵



We need to construct new homes that are zero-carbon, flood resilient and maintain a comfortable temperature for all inhabitants no matter the weather.

In addition to retrofitting existing housing stock to the highest energy efficiency standards, we need to construct new homes that are zero-carbon, flood resilient and maintain a comfortable temperature for all inhabitants no matter the weather. Central Government has made a number of worrying moves in the past decade such as the abolition of the Code for Sustainable Homes and the abandoning of the zero-carbon homes pledge – which if retained and implemented would have saved new homeowners hundreds of pounds in bills.³⁶ The Mayor's new London Plan does contain stringent requirements for developers to build homes to the highest standards and for major developments to hit zero-carbon targets.³⁷ But we need to see far stronger incentives and requirements for this at a national level as part of a huge investment in building social housing to tackle the housing crisis.

Case Study: What can biodiverse development achieve?

Ladywell Fields, a public park running between Catford and Ladywell, has won plaudits for the regeneration work which has transformed a previously under-used green space into a biodiverse park used by local residents.

The £2m project took place between 2009 and 2011 introduced new footpaths to the park, developed meadow areas with wildflowers and added meanders to the river in order to increase and decrease its flow during heavy rainfall without causing flooding.

The regeneration has led to a near 100% increase in the number of species in the park, has reduced the risk of flooding and ultimately led to a doubling in visitor numbers to the park.

Conclusion

Covid-19 and increasing awareness of the seriousness of the climate crisis, should focus minds on the need to mitigate and adapt to the risks presented by the climate emergency. We must act to reduce our carbon emissions and ensure we are resilient to increasingly extreme weather. Carbon emissions and air pollution have fallen dramatically during lockdown, but without urgent, ambitious action, they will skyrocket once again. London cannot afford this.

Concerted action to tackle these risks would ensure Londoners maintain the benefits of cleaner air and can deliver on the Mayor's ambition for London to be net zero carbon by 2030. The initiatives set out in this report are a few examples that could be springboards for projects as part of the Mayor's Green New Deal. These initiatives will also create new, high skilled jobs for Londoners in construction, retrofitting and green technologies.

The health and economic case for a green new future have never been stronger. London can emerge from Covid-19 a greener, better city and Londoners will benefit from the jobs created to make the change.

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