



Change Starts Now

Towards Carbon Neutral Bristol by 2030

A report by Bristol Green Party Councillors



January 2019

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¹ Front Cover Image: Dean Shim: www.pexels.com/photo/bristol-cloud-festival-hot-air-balloons-1440606

Introduction

On Tuesday 13th November Bristol City Councillors from across the political spectrum voted in favour of a Green motion² to declare a climate emergency and bring Bristol's CO2 emissions target forward by 20 years³. The motion pledges to make the city of Bristol carbon neutral⁴ by 2030 and comes on the back of the recent UN Intergovernmental Panel on Climate Change (IPCC) report⁵ which warned that humanity has 12 years to take emergency action in order to prevent global warming greater than 1.5°C. Above this, the risks to humanity of floods, droughts, extreme heat and poverty become much greater, impacting on hundreds of millions more people. The pledge to make the Bristol carbon neutral by 2030, takes into account both production and consumption emissions. This includes 'scopes' 1, 2 and 3 as defined by the internationally used Greenhouse Gas Protocol⁶.

Bristol's Green councillors are proud that Bristol City Council has responded to this emergency by setting the most ambitious climate change target of all the UK Core Cities. As the former European Green Capital with a wealth of expertise on climate change across the city and within our city council⁷, Bristol is well placed to lead the way. But the hard work starts now.

Accelerating our pace of change is no simple task, and we know that asking our council to take a lead during a time of cash-strapped, terrible austerity is a big challenge - but it's a challenge that we can and must rise to. We know that our council and our city have the collective determination, expertise and imagination to reach carbon neutrality by 2030, whilst also maintaining and strengthening our commitment to social justice and equality.

This report, compiled by Bristol's Green councillors, is intended to be part of the conversation on how Bristol can reach carbon neutrality by 2030. It refers to some of the impressive expertise across our city and some of the inspiring case studies of what is being done across the world. We want to both highlight the extensive expertise that already exists and to share some of our ideas, suggestions and thoughts for how we can accelerate our pace of change as a council and as a city. We look forward to discussing and developing this work with other parties, communities, experts, activists and residents across Bristol and wider afield.

²Green motion to declare a climate emergency:

https://www.bristolgreenparty.org.uk/library/FC_motion_13th_Nov_-_Climate_Emergency.pdf

³ Bringing forward Bristol's CO2 emissions target: <https://www.bristolgreenparty.org.uk/news/greens-declare-a-climate-emergency-and-bring-brisstols-co2-emissions-target-forwards-20-years>

⁴ 'Carbon neutral' is defined as 'no net release of CO2 into the atmosphere, either through zero emissions or offsetting': http://www.climateinstitute.org.au/verve/_resources/Carbon.pdf

⁵ IPCC report on 1.5C: <https://www.ipcc.ch/sr15>

⁶ Scope 1, 2 & 3 are outlined by the Carbon Trust:

<https://www.carbontrust.com/resources/faqs/services/scope-3-indirect-carbon-emissions>

⁷ Current council action on climate change: www.bristol.gov.uk/policies-plans-strategies/council-action-on-climate-change

Part one - What needs to be done

Energy generation and smart energy

Bristol is a leading player already in energy generation and smart energy. Between 2012 and 2016, Bristol delivered c£50m of low carbon investment, making the city well placed to accelerate progress towards meeting our target to be carbon neutral by 2030. In 2015, Bristol's [mini-Stern review](#)⁸ calculated that Bristol has an energy bill of £870 million a year, so there is a clear case for cost-effective interventions that can deliver economic, as well as environmental benefits to the city. Alongside energy efficiency and reduction in demand, further work on renewable energy generation, smart energy infrastructure, grid balancing and battery storage is crucial.

Bristol's 2018 [City Leap Prospectus](#)⁹ is an innovative approach which invites expressions of interest to help Bristol City Council and its partners fund and facilitate £1bn of low-carbon and smart energy investment in Bristol. The offers of help received were far greater than expected, and these are currently being analysed so that a plan for delivery can be developed. Green councillors feel that this could be an exciting opportunity and would like to encourage the administration to ensure that the energy department within the council is sufficiently resourced to make best use of the offers given and that back-bench councillors are given the opportunity to feed into the way forward.

When we think of renewable energy, we often think first of solar and wind energy, and it is of course crucial that these are maximised to produce as much energy as possible for Bristol. Yet some of Bristol's most unique assets also lie in its deep hot rock geothermal and tidal geography. MEP Molly Scott Cato's [Power to Transform the South West report](#)¹⁰, points out that over 70% of the energy that could be generated in the West of England (which in this report includes Bristol, Bath, North East Somerset, North Somerset and South Gloucestershire) could come from sources such as tidal lagoons and air and ground source heat pumps. We need to make sure that these generation options continue to be fully developed too, in collaboration with our neighbours across the region.

House building, retrofitting and efficiency

The homes across our city have the potential to be mini renewable power stations - generating clean and green energy while keeping our residents warm and reducing their energy bills. Or they can be draughty, inefficient buildings that leak heat, eat up the precious energy we generate and provide a further financial burden on those struggling to pay their energy bills. [Bristol's City Leap prospectus](#) points out that the most cost effective way to reduce carbon emissions is through investment in energy efficiency. This must be scaled up across our city and include not just those houses that are easy to improve, but also our extensive Victorian housing stock.

Bristol City Council is one of the largest social landlords in the country with over 27,000 of our own council houses and a newly launched housing company with a new house building plan. We are therefore well placed to play a leading role in both retrofitting existing council housing and building

⁸ Bristol's mini-Stern report: www.bristol.ac.uk/cabot/media/documents/bristol-low-carbon-cities-report.pdf

⁹ Bristol's City Leap prospectus: www.energyservicebristol.co.uk/prospectus

¹⁰ Power to transform the South West report from office of Molly Scott Cato MEP www.mollymep.org.uk/wp-content/uploads/The-power-to-transform-the-South-West_FINAL1.pdf

new houses with renewable energy generation built in. Our new houses need to have exemplary energy efficiency standards, such as Passivhaus. Much work has already been done to retrofit much of our council housing, this now needs to be expanded to include all council houses and to incentivise retrofitting for house owners. Expanded support for private sector landlords to improve their properties is also essential, as well as tough sanctions for landlords who do not take action.

Bristol already has a requirement for new developments to provide 20% onsite renewable generation. Bristol's new Local Plan includes increasing the emission reduction target for new developments to 100% of total CO2 emissions, subject to viability. This 100% requirement must be robustly supported, and viability criteria must be looked at in detail to ensure loopholes are avoided. Both Bristol's [mini-Stern Report](#) and analysis done by [Can-do cities](#)¹¹ for Bristol highlight the carbon savings and cost effectiveness of investing in insulating our buildings and looking again at how we heat our homes. Rolling out heat networks across the city, grants for micro home energy generation and investing in battery storage and grid upgrades are all likely to be important priorities for the coming months and years.

Planning law only grants certain powers to local authorities, but alongside lobbying central government to give us more powers to effect change; we need to make sure we are fully using all the influence we do have. We would like to investigate further work to ensure developers demonstrate the real not merely designed energy performance of new builds, as there is reportedly a large performance gap between design and real life. We may also need to look at resourcing additional planning officers to negotiate with developers and ensure carbon commitments are implemented. The role of the city as a landowner or development partner are also areas for more influence.

Many of the cities involved in [C40 cities](#)¹², which is a network of cities across the world committed to addressing climate change, have introduced upgrading initiatives for existing buildings. For example, in New York owners of large buildings are required to periodically complete energy audits and retro-commissioning of equipment. We would like to see what further work could be done in Bristol to ensure landlords are delivering on energy efficiency and renewable energy generation on their properties.

Transport

In 2018 transport became the UK's most polluting sector, emitting over a quarter of all of our country's greenhouse gas emissions, and failing to curb emissions in recent years¹³. Bristol is one of the most congested cities in the UK and the snaking traffic jams across our city poison our air, delay our buses and discourage people from walking and cycling. Congestion also has a highly negative impact on our economy, due to the cost of time lost due to traffic delays¹⁴. We simply will not meet our 2030 target without tackling congestion and our addiction to the car, and we won't be able to address either without prioritising Bristol's public transport, walking and cycling infrastructure.

¹¹ Can-do Cities: www.candocities.org/sites/default/files/Bristol.pdf

¹² C40 Cities: www.c40.org

¹³ Transport most polluting sector, the Independent: www.independent.co.uk/environment/air-pollution-uk-transport-most-polluting-sector-greenhouse-gas-emissions-drop-carbon-dioxide-a8196866.html

¹⁴ Travelwest on the economic impact of traffic delays: www.travelwest.info/project/ee-178-more-evidence-as-to-the-importance-of-co-benefits-of-climate-change-mitigation

We believe Bristol can and must radically change how we do things and we can learn from other cities to help us get there. Manchester's inspiring [Made to Move](#)¹⁵ initiative aims to quadruple cycling and make walking the natural choice for as many short journeys as possible and is supported by a ring-fenced, 10 year, £1.5 billion infrastructure fund. This includes its [Beelines project](#)¹⁶ which is an ambitious programme of improvements to cycle and pedestrian infrastructure focussed on connecting neighbourhoods which had previously been cut off by intimidating busy roads. In Oslo the Labour/Green coalition has focussed on reclaiming the city centre for people and they are aiming to have [1.3 km² car-free by 2019](#)¹⁷. And closer to home London boroughs [have achieved success](#)¹⁸ using similar techniques on a smaller scale. Bristol's own Living Heart Campaign have long called for the dominance of motorised through traffic to be removed from the heart of the city. Their proposals need political and practical support to make our historic city centre a place for people not cars.

Transport is about how we get to work, how we take our children to school, the air we breathe and the streets we live in, but it must also go hand in hand with improving our health, wellbeing and social justice. Travelwest have recently publicised [the large amount of peer-reviewed literature](#)¹⁹ which demonstrates the benefits that climate mitigation in the transport sector can have by improving our air quality, reducing congestion and car accidents and encouraging active travel.

We must decrease car use across our city, and we will never do this without both radically improving our public transport and using the 'polluters pay' approach for car drivers. Urgent work is needed to investigate the options for a Bristol congestion charge, and we want the money raised to go straight into improving our public transport network and particularly ensuring that improvements are made in the most deprived parts of our city. It is the poorest who suffer most from the climate emergency including the economic impact uncertainty will bring, rising food prices and the air quality crisis. They should not have to bear the financial burden of fixing the problem as well. The Bristol Transport Plan needs to be used as an opportunity to demonstrate real change to the way transport and access are managed.

As much pressure as possible also needs to be put on Network Rail and train operators to open up stations faster and on central government to prioritise local rail infrastructure. Many [C40 cities](#) have successfully used the 'Financing Sustainable Cities Initiative' to gain funding for clean transportation and this and other funding opportunities for public transport improvements need to be fully explored by Bristol in conjunction with the West of England Combined Authority.

Electric vehicles are likely to have a role to play in Bristol's future, particularly for buses, car-share and taxis. Bristol has led the way in rolling out electric charging points and we now need to

¹⁵ Made to move project: www.tfgm.com/made-to-move

¹⁶ Beelines project:

<https://assets.ctfassets.net/nv7y93idf4jq/6J11U1IT8kAq2oCISoEGYy/ae9e07dd0974abcfdb3434cdf46ab5b/Beelines.pdf>

¹⁷ Oslo transport work: www.oslo.kommune.no/english/politics-and-administration/green-oslo/best-practices/car-free-city/#gref

¹⁸ London walking & cycling schemes: www.theguardian.com/environment/bike-blog/2018/jun/26/mini-holland-schemes-have-proved-their-worth-in-outer-london-boroughs

¹⁹ Travelwest www.travelwest.info/project/ee-178-more-evidence-as-to-the-importance-of-co-benefits-of-climate-change-mitigation

encourage those vehicles that need to be on our roads to shift to electric, as well as investigating how electric vehicles can support the rollout of renewables by storing energy as batteries for the grid.

We oppose the expansion of Bristol airport and do not feel this is compatible with our carbon targets as a city and wider region. Although the airport falls outside our administrative boundary, many of those flying from it live or work in Bristol and so the resulting emissions contribute to our total. Flying is by far the most polluting way of travelling and needs to be minimised as much as possible. 10% of the UK population make 60% of all flights and these tend to be those who are most well off. The majority of people who fly make one or two trips a year and the existing 8 million passenger journeys per year from the airport is easily enough capacity to support those who fly occasionally and the business needs of the city. Expanding Bristol Airport will therefore mainly drive increased flying by those from the highest income groups who already fly frequently. At present when the airport talks about becoming 'carbon-neutral' it is only taking about its own internal operations not the carbon emitted by the vastly increased number of planes that will operate due to its expansion plans.²⁰ We would like to encourage any of Bristol's politicians who currently support the expansion of Bristol airport to re-consider this position in light of the declared climate emergency.

Bristol port is also a major emitter of carbon, both for its own industrial processes and through its role in hosting ships from around the world. We need to know how the port intends to play its part in reaching our 2030 target, including what role they can play in promoting better carbon standards for shipping and the role of wind and tidal energy in its future operations. We would like our council to work closely with Bristol's port and the neighbouring authority of North Somerset to drive this agenda forward.

Business and industry

Bristol is lucky to have some of the most innovative and exciting green businesses and social enterprises in the country. To reach our 2030 goal we will need all their specialist expertise and innovation and we will need to work with all businesses and partners across the city. Both Bristol's [mini-Stern report](#), and the research done by [Can-do Cities](#) include fascinating analysis of the most carbon effective and the most cost effective methods of reducing carbon in the commercial and industrial sector. This includes cooling in retail buildings, changes to lighting, boiler maintenance and insulation improvements. The available research needs to be analysed and used in a public awareness campaign to encourage businesses and partners across the city to play their part in reducing carbon emissions. Most energy and waste reduction will be good for companies too. Bristol's [Go Green](#)²¹ business initiative which supports businesses, charities and organisations of all sizes should be one way to accelerate change.

The [City Leap](#) has demonstrated a new approach to leveraging funding, while our city's [Engine Shed](#)²² is a leader in collaboration, start-ups and entrepreneurship. We need to build on these skills to accelerate our pace of change as a city, and help enable carbon reduction in our local businesses.

²⁰ Bristol Airport Carbon Targets Worthless Without Roadmap: www.bristolgreenparty.org.uk/news/bristol-airport-carbon-targets-worthless-without-roadmap-say-greens

²¹ Go Green business initiative www.gogreenbusiness.co.uk

²² Engine Shed: www.engine-shed.co.uk

In Manchester, for example, the [Greater Manchester Growth Company](#)²³ provides tailored help to small and medium sized businesses to boost their profitability while cutting carbon emissions and improving energy efficiency. Manchester is also developing its own Local Industrial Strategy with the ambition to boost its clean growth economy while cutting carbon emissions. In Bristol we would like to see what further could be done to incentivise, encourage and force change, including looking at the feasibility of loans, business rate flexibility and mandatory energy auditing.

Our food, waste and land use

We are what we eat, yet [with one in three](#) of 10-11 year olds in Bristol classed as overweight, making them more likely to suffer ill-health, be absent from school due to illness or require medical care²⁴, what and how we eat must change. Food systems contribute a third of global greenhouse gas emissions²⁵ and our reliance on meat and animal products not only puts a strain on our bodies, but also on our land use across the UK, contributing to our unsustainable reliance on imported food. The average British family throws away [£810 worth of food every year](#), and yet we still also have shocking food poverty across our city and whole areas lack access to affordable, healthy, fresh food. It is clear we cannot go on as we are.

In Bristol the [Bristol Food Network](#) does important work bringing together local businesses, organisations and communities to transform Bristol into a sustainable food city. Growing, preparing, and selling local food is part of the response to the climate emergency, but also has added social and economic benefits. Bristol is working towards becoming a [Gold Sustainable Food City](#)²⁶ focusing on gaining 'excellence' in both procurement and reducing waste - by 2030 Bristol should aim to be expanding this work to become a fully sustainable food city. Bristol is already working hard to reduce food waste, coming second only to Cardiff in food waste recycling rates. Bristol also has its own [council owned waste company](#)²⁷ which recently launched a successful campaign 'Slim my waste'²⁸ to focus on further increasing recycling waste. Further work must include not shying away from looking at changes to eating habits, learning from projects such as London's [TriFOCAL project](#)²⁹ which works with businesses, schools and communities to reduce avoidable food waste, encourage recycling of food waste and encourage sustainable diets.

The reports on [Zero Carbon Britain](#)³⁰ produced by the Centre for Alternative Technology emphasise that our approach to land-use is a key missing piece of the solution which is too often ignored or forgotten. WWF's recent report [Keeping it Cool: How the UK ends its contribution to climate change](#)³¹ also emphasises how crucial land-use change, changes in our agricultural sector, tree

²³ Greater Manchester Climate Change Plan:

www.manchesterclimate.com/sites/default/files/POFP%20Proposal%20to%20MCC%2016.10.2018_0.pdf

²⁴ Best Start in Life: Laying the foundations for healthier futures:

www.bristol.gov.uk/documents/20182/305531/Director+of+Public+Health+report+2017-18+Best+Start+in+Life+Laying+the+foundations+for+healthier+futures/f7f9209c-8c58-8791-9164-44aca4092872

²⁵ Keeping it Cool, WWF: www.wwf.org.uk/sites/default/files/2018-11/NetZeroReportART.pdf

²⁶ Sustainable Food Cities: www.sustainablefoodcities.org

²⁷ Bristol Waste Company: www.bristolwastecompany.co.uk

²⁸ Slim My Waste campaign: www.bristolwastecompany.co.uk/whats-happening/slim-my-waste-citywide

²⁹ TRiFOCAL resources: www.resources.trifocal.eu.com

³⁰ Zero Carbon Britain: www.zerocarbonbritain.org/en/zcb-publications

³¹ Keeping it Cool, WWF: www.wwf.org.uk/sites/default/files/2018-11/NetZeroReportART.pdf

planting and changes to our food habits are. We know from the [Committee on Climate Change](#)³² that flood risk management, water management and drainage are also going to become increasing issues across the UK. We need to make sure there is a focus on protecting and expanding our blue/green infrastructure, including how we introduce sustainable drainage into green spaces and ensuring high quality soils are retained for local food production, such as the blue finger land in Stapleton.

As with all cities, Bristol's reliance on land outside its borders, whether for food production, waste management or energy generation, is considerable as outlined by the report on [City Consumption – the new opportunity for climate action](#)³³ produced by the green alliance. This is something that we often forget. Addressing our true carbon footprint as a city must involve bringing these hidden impacts to the forefront including stimulating wider public debate on dietary changes and land use changes, including carbon sequestration, afforestation, biomass production and what the role of carbon capture and storage should be.

Bristol also boasts a network of organisation and businesses that re-use, repair and recycle a whole plethora of household items as part of the [Bristol reuse network](#)³⁴. The [Refill movement](#)³⁵, which makes it easier to refill your water bottle rather than buy a new plastic one, was started in Bristol. Most recently a petition started by a Green councillor [garnered support from across the city](#)³⁶ and within the Council to use all the local powers available to reduce single-use plastic waste.

Bristol's leading initiatives on food and waste reduction makes our city well placed to accelerate the pace of change now needed to make Bristol single-use plastic free as well as to address the often forgotten impact of our food, waste and land use.

Part two - The way we do it

Social justice, equality and the root of our problem

Knowing what to do is only one part of our journey as a city towards becoming carbon neutral by 2030. It is equally important to focus on the way in which we do it. [Zero Carbon Britain – Making it happen](#)³⁷ points out 'climate change is not the root problem but a symptom of our materialistic culture and growing disconnection from nature and from each other.' While Bristol cannot hope to reverse our global trends alone, we can be part of the solution. Many of our challenges are no longer technical, but economic, social and psychological and without addressing these we will struggle to see the progress that we so desperately need.

An essential part of reaching carbon neutrality as a city is ensuring our environmental priorities work alongside our commitments to social justice and equality. Extensive research such as that outlined in 'The Spirit Level' has shown that from life expectancy to mental illness, violence or illiteracy it is

³² Committee on Climate Change: www.theccc.org.uk/publications

³³ Consumption report green alliance www.green-alliance.org.uk/resources/City_consumption_the_new_opportunity_for_climate_action.pdf

³⁴ Bristol Reuse Network www.bristolreuse.com

³⁵ Refill Bristol: www.refill.org.uk

³⁶ Plastic petition: www.bristolgreenparty.org.uk/news/plastic-petition

³⁷ Zero Carbon Britain: www.zerocarbonbritain.org/images/pdfs/ZeroCarbonBritain-MakingItHappen.pdf

equality that is key to improving our wellbeing, and that societies with high inequality are bad for everyone, both rich and poor³⁸.

Reaching our climate target should be part of our wider moves to make our city more equal and a better place to live. Addressing our dangerous air pollution, our food and energy poverty, our failing transport systems and our draughty houses goes hand in hand with decreasing our carbon footprint. We don't want to shy away from the fact that our addiction to consumerism has to be addressed, but an alternative vision should also include streets which are safe and centres of the community, shorter working weeks with less commuting and more flexible working from home and better diets with more access to local, healthy food for all. As the [C40 cities summary for urban policymakers](#) makes clear "There are sizable co-benefits from emission reductions, including higher productivity and job creation, better health and life expectancy for citizens, improved air quality, more walkable and liveable cities, and lower vulnerability and greater resilience to extreme events."³⁹

Participation and behavioural change

Becoming carbon neutral by 2030 is essential, but it is also ambitious. It means as a city we have to change how we live, work, travel and eat. We simply won't be able to stop our contribution to climate change unless we work out how to make these changes together. This means working through a truly participatory process to create a plan for our city. While the input from experts is key, this needs to be much more than just developing a plan and then consulting on it. There are a lot of barriers to behavioural change that we need to understand if they are to be removed and we need to have these conversations with communities, faith groups, employees, unions and many others. Implementing our 2030 target also needs to be a central part of the One City Plan work taking place across the city. We need to make sure we work towards a 'just transition' for those whose jobs and livelihoods are going to change – new employment is going to emerge, but all those with skills and businesses need to be supported to make the changes into the emerging sectors for everyone to thrive and gain from the new economy.

It is also vital that the actions that are needed to achieve the target emerge from the grassroots of local groups rather than being imposed 'from the top'; although of course expert guidance will be needed. Already a number of local groups have been considering what they can do as a neighbourhood or ward. For example, Bristol's BS3 recently held a well-attended public meeting to consider this question.

The [summary for urban policymakers](#) on what a reduction of 1.5 degrees C means for cities points out that governance and legal frameworks are crucial to reaching our goal. Climate education, increased public awareness and accelerated behaviour change are all needed, and local action and participatory processes are most effective when aligned with sustainable development, people's values and supported by regional and national government⁴⁰.

³⁸ Richard Wilkinson & Kate Pickett, *The Spirit Level*, (Penguin Books: 2010)

³⁹ Summary for urban policy makers p17: www.c40.org/researches/summary-for-urban-policymakers-what-the-ipcc-special-report-on-global-warming-of-1-5-c-means-for-cities

⁴⁰ Summary for urban policy makers: www.c40.org/researches/summary-for-urban-policymakers-what-the-ipcc-special-report-on-global-warming-of-1-5-c-means-for-cities

The role of Bristol City Council

To reach our carbon neutral by 2030 target we need involvement from the whole city, but our city council has an important role to play in leading, coordinating, facilitating and enabling this work. Our Council needs to make sure that we have done everything within our own powers to reach our 2030 goal. This includes our work to make the council carbon neutral and through our procurement, housing stock and maximising our influence on the private rental sector and through planning policy. In addition, the Council also needs to show leadership by collaborating with local businesses, stakeholders and communities to help coordinate the wider work from our city and to make sure that all the existing expertise is well coordinated and fully used.

Bristol City Council's work towards our 2030 goal needs to include a process for gathering together the existing plans, ideas, research and expertise that exist. We also need a process for working with local communities and stakeholders to develop a plan for how we move forward as a city. The cross-party working group is an important part of this work, but must be adequately supported with administrative and expert advice from within the council. We are all aware of the devastating impact of austerity on local government, but without the administrative and expert support of the council it simply will not be possible to deliver. A successful implementation plan does not only need visionaries, politicians and local communities it also needs council officers, experts and administrators.

We will also need additional funding to succeed in reaching our 2030 goal, so we need to make sure our finance team is resourced and enabled to do innovative work to leverage additional funding from grants, governments and organisations to help support this work. The finance department could also have an important role in climate budgeting. For example in Oslo, one of the C40 cities, the climate budget process is managed by the finance department and run simultaneously with the annual financial budgeting process. The governance systems that have been put in place mean that the city council can only approve spending plans which have a realistic chance of delivering greenhouse gas reduction outcomes, consistent with the goals of the climate strategy. Thus climate goals are given primacy in the financial budgeting process.

We also need the whole of our council to be on board with our carbon neutral target and take a lead in ensuring each department is part of the solution. This is not just an issue for officers working on renewable energy or environmental issues, it is about all our officers and departments – those working on housing, on procurement, on transport, on social care or on waste. We need to start by ensuring that our 2030 target is incorporated across the whole of the organisation. As a starting point we would like to see training for all employees on what this means for our organisation. We also want to see a mandatory section included in every Bristol City Council report (in a similar way to the equality impact assessment), which outlines how each proposal will help the organisation meet its 2030 carbon neutral target.

If we expect Bristol's residents and businesses to make changes to how they work, then the council must lead by example. This means implementing appropriate measures to reduce carbon emissions throughout all our work and throughout our supply chains. We must use our social value toolkit in all our procurement and contracting to prioritise contractors who reduce carbon emissions and we must make sure our house building, waste and transport services and other sectors are leaders in their field.

Working with experts across Bristol and learning from elsewhere

The more we look the more we have been overwhelmed by the expertise, research, offers of help and enthusiasm for Bristol's 2030 target from across our city and elsewhere. This document only begins to touch on some of the available knowledge and research which already exists. There are so many experts across Bristol and innovative and exciting examples of action from around the world which we can use and adapt.

As well as having an important role in reviewing and coordinating the existing expertise, we would also like to ensure that Bristol City Council is part of the many national and global organisations that exist and work on climate change issues. Some of these, such as the Global Parliament of Mayors, Bristol already plays an important role in, but others such as the C40 cities would be worth further investigation. Following the successful carbon neutral motion, Green councillors have also received offers of help from around the country and around the world. We would like to feed these into the developing work within the Council so they can help develop and resource a plan for reaching our 2030 goal.

Working with our neighbours

Carbon emissions clearly do not recognise administrative boundaries, so solutions need to be considered on a regional as well as a local scale. The West of England Combined Authority (WECA), which Bristol and several of its neighbouring authorities are part of will be a vital partner for this work, especially given their focus on housing, transport, skills training and job creation. Bristol needs to push for carbon neutrality work to be a central part of WECA's role, which should include combining resources for complimentary work as well as full transparency on what needs to be done. We would also like a better understanding of what opportunities for additional funding WECA can help provide and leverage with government to aid us in reaching our 2030 target.

The local authority of North Somerset is Bristol's other neighbouring authority which we need to work closely with. This is particularly the case given that Bristol airport is entirely and Bristol Port is partially situated within their boundaries. As mentioned previously, transportation is a major carbon emitter which needs urgent action.

Lobbying central government

There is clearly a lot that Bristol can do to take meaningful action towards meeting our 2030 target, but so much more could be done if central government priorities were changed and additional powers and funding were allocated. Extra powers that would help Bristol to meet its 2030 target could include stronger planning control powers, the ability to create a council-owned bus company, and more control over local taxation to name just a few. There are also many ways in which national government could support local work towards carbon neutrality with changes at a national level, such as creating a carbon tax, supporting research and funding of renewable energy and ending austerity so that local authorities are not shackled while trying to implement the momentous change needed.

Decades of pathetic inaction has showed us that we can't hang about and wait for our government to take the needed action on climate change – the stakes are just too high. It is also unbelievable frustrating at a local level to have so many of our most innovative ideas and exciting projects thwarted by the central government policy framework. Therefore our action at a local level also

needs to go hand in hand with lobbying for changes in policy within central government. Urgent work is needed if the UK is to meet its existing climate commitments, let alone the escalation of action that will be needed to respond to the latest IPCC predictions. Our government must start enabling and resourcing cities as well as removing the barriers in their way if we are to reach our national climate commitments, and cities have an important role to play in reminding our Government of its commitments.

WWF's report [Keeping It Cool: how the UK can end its contribution to climate change](#) makes clear that the economic costs of tackling climate change are far smaller than the costs of failing to do so, and there are huge benefits to adapting now. Reducing the UK's net emissions to zero as quickly as possible should therefore be seen as an opportunity for the UK to become a global leader on tackling climate change, developing knowledge and technology for which there is a market around the world. We must continue to lobby government to see this and to support the work of cities like Bristol in leading the way. The adoption of 'Local Contributions' as part of the EU Committee of the Regions' input into achieving targets shows the growing recognition that action on a local level is important and must be supported by the UK government.

What next?

Full Council's vote on 13th November 2018 declared a climate emergency and committed to bring Bristol's CO2 emissions target forward by 20 years. But the hard work starts now if we are to work out how to do this, create a participatory and workable plan and work with stakeholders across the city to deliver. This document is intended to provide some initial thoughts from the Green councillor group to start some of the conversations needed and to feed into the process of developing an implementation plan for the city.

First of all the **climate emergency and the new 2030 target** needs to be formally declared by Bristol's Mayor following the Green motion voted through Full Council in November 2018. The Mayor should also call on Westminster to provide the powers and resources to make reaching the target possible in line with the motion.

An implementation plan for how the Council will respond to the climate emergency is due to be reported back to Full Council by Bristol's Mayor by May 2019 as outlined in the motion. This should build on the extensive [action and plans](#)⁴¹ already undertaken within the council on climate change. Immediate work on this implementation plan is therefore needed, including but not limited to:

- **Embedding the 2030 goal across Bristol City Council** including staff training, inclusion of a section on reaching our 2030 goal within all reports and a clear plan for how to ensure that staff from all departments are involved in helping the council reach its goal.
- A structure **for gathering and analysing the existing research and expertise** that already exists and a plan to develop strategic priorities for decarbonising.

⁴¹ Current council action on climate change: www.bristol.gov.uk/policies-plans-strategies/council-action-on-climate-change

- A strategy for developing the **detailed and technical plans** that each department will need to play their part.
- An outline for how the **cross-party working group** will work and be organised, and how it will feed into the process.
- A **stakeholder programme** to work with communities, businesses, experts and other stakeholders from across the city to coordinate joint work.
- A plan for how to **work with WECA and North Somerset** to implement joint decarbonisation work and leverage additional funding.
- A strategy to enable and resource the **Council's finance team** to work on a fundraising and financing plan and look at the option of carbon budgeting.
- A **public awareness and communications campaign** to engage communities, neighbourhoods and the media.
- Developing a system for **monitoring and evaluating** progress.
- A process for ensuring Bristol is part of all relevant **national and international city networks** working and sharing best practice on decarbonisation.

This list includes some of the work that will be needed in the next few months, but of course there will be much more work needed to refine our pathway and implement change beyond that. There is a lot to be done, and we are proud that Bristol will be leading the way. We believe it is possible to end our contribution to climate change by 2030, whilst also making our city healthier, happier and more equal. This change must start now.

Useful resources

The following are a few of the resources that have been particularly useful when undertaking this initial piece of work. A fuller list is also available in the footnotes. There are many, many more resources that we have not had the capacity to look at yet. This list may provide a useful starting point for further work in developing an implementation plan for meeting Bristol's 2030 target.

Key resources on climate change

IPCC report on Global Warming of 1.5°C outlines the need to keep global warming below 1.5 degrees Celsius: www.ipcc.ch/sr15

Summary for Urban Policymakers sets out the implications of keeping below 1.5 degrees Celsius for urban policymakers: www.c40.org/researches/summary-for-urban-policymakers-what-the-ipcc-special-report-on-global-warming-of-1-5-c-means-for-cities

Keeping it Cool by WWF examines how the UK can end its contribution to climate change: www.wwf.org.uk/sites/default/files/2018-11/NetZeroReportART.pdf

Zero Carbon Britain have a whole host of resources on becoming carbon neutral:
www.zerocarbonbritain.org/en/zcb-publications

The Committee on Climate Change has a large number of useful reports:
www.theccc.org.uk/publications

Work in Bristol

Bristol City Council has been working on climate change and energy issues for many years and has a wealth of knowledge, plans and action to be built on: www.bristol.gov.uk/policies-plans-strategies/council-action-on-climate-change

Bristol's mini-Stern report sets out the most effective and efficient way to decarbonise Bristol, including financial implications: <http://bristol.ac.uk/cabot/media/documents/bristol-low-carbon-cities-report.pdf>

The City Leap Prospectus invites expressions of interest to help Bristol City Council and its partners fund and facilitate £1bn of low-carbon and smart energy investment in Bristol.
www.energyservicebristol.co.uk/prospectus

Power to transform the South West is a report produced by the office of Molly Scott Cato MEP on how to meet the regions energy needs using renewable energy: www.mollymep.org.uk/wp-content/uploads/The-power-to-transform-the-South-West_FINAL1.pdf

Pioneering Bristol-based projects already working towards reducing the cities emissions are too numerous to list here, but many are referred to throughout this document.

Learning from Others

Can-do Cities is a network of cities and communities across the UK working together to take more control of their future and share ideas for how to adapt to key challenges:
www.candocities.org/sites/default/files/Bristol.pdf

C40 cities is a network of cities across the world committed to addressing climate change around the world with exciting examples of action being taken: www.c40.org

The Green Alliance has a new report looking at city consumption and the new opportunity for climate action: www.green-alliance.org.uk/resources/City_consumption_the_new_opportunity_for_climate_action.pdf

Cities across Britain are working on their own carbon neutral plans, and there are inspiring examples of action they are taking such as the work by Greater Manchester to become Carbon neutral which includes their [plan for implementation](#) and in particular some inspiring transport projects such as [Made to Move](#) and [Beelines](#).