

LBHF Climate and Ecological Emergency Commission

Summary of Findings

This report was prepared by members of the LBHF resident-led Climate and Ecological Emergency Commission who dedicated their time on a voluntary basis to provide LBHF with support and guidance.

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Acknowledgements

Delivering technical solutions to achieving net zero emissions requires bold and challenging policy decisions, including levels of regulation and how action should be funded.

This report is the outcome of thorough discussion, agreement, disagreement and a diversity of thinking among the twelve commissioners. It does not represent a total consensus on each of the recommendations and illustrates the variation in views among residents.

The report is intended to recommend areas of action and this is where its focus lies. Commissioners nevertheless wished to acknowledge the positive action and direction taken by the council to date on this agenda. The recommendations also speak to wider economic, regulatory and social structures that require action at the national and societal level, as well as from the Council and borough.

The CEEC worked in partnership with a number of council officers during the preparation of this report and we would like to thank the following people who gave their time. We were very impressed by their level of commitment to the work of the Commission and the positive response we have received towards our ideas.

We are delighted that the LBHF Climate Change Unit has now been established and is gaining respect across all council departments. The CEEC will continue to support the Climate Change Unit to assist them in embedding a culture of change that is

focussed on reducing carbon emissions across the organisation and the Borough as a whole.

The following have given their time and provided CEEC with generous support in our work:

- Jim Cunningham
- Bram Kainth
- Robert Kyle
- Hinesh Mehta
- Cat Priddey
- Peter Smith

We would also like to thank the Leader of the Council, Cllr Stephen Cowan, and Cllr Wesley Harcourt for their support and for setting up this commission.

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Executive summary

Finding headline

The Council needs to define a positive vision and embed a culture of change to help us reach net zero by 2030, through strong and persistent leadership on Climate and Nature

The London Borough of Hammersmith & Fulham (LBHF) declared a Climate and Ecological Emergency in July 2019, aiming for the whole Borough to reach net zero-carbon emissions by the end of 2030.

The Leader of the Council is personally committed to strongly driving the agenda for change to meet the Borough's carbon net zero objectives and he has embedded this commitment in the Cabinet and Senior Leadership Team.

A cross-departmental Climate Change Unit has been set up within the Council to implement change, and the Unit is working on a Road Map to Net Zero. A commitment to responding to the Climate Emergency has become one of the Council's six core values.

"Rising to the Challenge of the Climate and Ecological Emergency." LBHF

The big picture

Tackling climate change will need changes in behaviour right across society and the economy – with a host of new incentives, laws, taxes, innovations, opportunities and above all robust communication about the changes that are needed.

Models which embrace the green economy as an alternative to pursuing economic growth as a measure of success and which recognise the importance of local employment, sustainable investment, fairness and equality, including measures of personal well-being, access to healthy food, good housing and education are being actively explored, and embraced across the country.

It is also very important that we increase the strength of 'carbon sinks' in the borough (including green spaces, gardens, parks, green roofs), and there is an urgent need to protect and restore nature, wildlife and biodiversity.

The unprecedented and on-going experience of managing the COVID-19 pandemic has shown how difficult it is to prioritise longer-term goals for Climate Change and Nature, over immediate and pressing problems which require urgent attention.

Notwithstanding political cycles, the Council must work out and test for robustness, how it urgently embeds Climate and Nature in its long-term strategy and financial planning. A recent [World Bank Report](#) makes it very clear that a continued focus on short- and medium-term targets would make achieving de-carbonization far more difficult.

The dilemma of National and Local Targets

The target date set of net zero by 2030 is an ambitious one and is ahead of national policy, which is geared to 2050.

But based on [IPCC analyses](#), if we are to avoid a temperature rise of more than 1.5 degrees above the pre-industrial average, then advanced nations will need to reduce our carbon emissions much more rapidly. The Council needs to consider what this means and examine the implications, costs and benefits for the Borough of “doing things early”.

Limitations to funding

Tackling climate change is likely to require a big shift in current and investment spending. Sources of funding, ie where investment capital will come from to fund improvements to reach net zero, is an enormous issue, which is well understood nationally and at a local level.

To meet the immensity of its funding challenges for the Borough, there is a critical need for the Council to creatively consider its options - to plan for the long term, and to analyse where investment capital can be sourced, including from the private sector, to fund necessary improvements.

The importance of a Strategy and Plan

It is vital that the Council has a clear plan and is able to measure and track timely progress on carbon emissions. The Climate Change Unit is developing a strategy to reach net zero through its Road Map which must set out what needs to be done and provide a means of measuring the carbon emissions of all its activities. This Road Map needs to become the “Tool of Change”.

The Council recognises that it is a significant contributor to carbon emissions in the Borough, but it is not the biggest part of the problem.

We know most of the problem of carbon emissions comes from the management of housing and commercial buildings, with transport being the third largest emitter. In addition, the amount we all consume, and what we waste, plays a significant part – we must consider the embodied carbon that is emitted in the manufacture and transportation of what we consume.

Reducing carbon emissions and decreasing one’s own environmental footprint, should not be seen as “giving things up”. [The Co-Benefits of changing the way we live](#) to a low-carbon lifestyle, are now well understood, celebrated, measured and documented (Grantham Institute, Imperial College), in terms of less inequality, more active lifestyles, improved health and well-being.

So how can the Council help map the road to Net Zero?

The Council’s first priority must be to communicate and engage with the public with a positive vision for what 2030 would be like if the ambition to reduce carbon emissions to net zero was achieved. It should help us to [Imagine 2030](#) by articulating the amazing quality of life that could be achieved in a well-balanced community that would result from a zero-carbon, ecologically rich society.

Secondly, the Council must develop much greater knowledge and better understanding about carbon emissions, the effects of global warming, and how we must adapt to the changes that are now inevitable. This knowledge must be built at a

local level and shared with the public to help and encourage us to change our behaviour.

The Council should lead an extensive training programme in carbon literacy, environmental management and the importance of biodiversity, and we should all take care to consider the carbon emissions associated with the choices we make.

Thirdly the Council needs to show Leadership and prepare a Road Map to Net Zero that demonstrates it has a way of measuring and reducing carbon emissions with a clear timeline for each area of activity across the whole Borough.

The Road Map must be agreed at Cabinet and given the authority required to ensure that all departments must consult with the Climate Change Unit to gain their support. Progress on the Road Map should be reported to Cabinet on a regular and frequent basis, along with up-to-date data on current carbon emissions.

The Leader has also committed to measuring the carbon impact of all the Council's policies and projects to give carbon reduction the same priority as financial management, legal probity and equality measures. This must be agreed at Cabinet and a report on the carbon impact of all policies, projects or activities must be included in all future cabinet papers.

CEEC would also recommend that the Council launch a series of "Demonstrator Projects" in key areas as examples of positive changes that can deliver zero-carbon ways of living.

These could range from retrofitting a Council Estate to create a zero-carbon living environment, to projects to reduce our dependency on private cars. The Council could also explore the development of a local circular economy with, for example, A Library of Things, Made in H&F, and other initiatives that eliminate waste.

Finally, the Council has committed to setting up a Community Map that will provide everyone with the opportunity to share information about the great things that are already happening in Hammersmith & Fulham.

Mapping Local Knowledge will allow us to share ideas and build on each other's experiences to give us all confidence to make the extraordinary changes that are urgently required to prevent the further destruction of our environment and to improve the habitat that we need to maintain for our very survival.

"Happily, the solutions exist. The only thing stopping us solving this problem is us."
Mike Berners-Lee, Author of There is No Planet B

Introduction

It is hard to reflect on the climate emergency whilst the coronavirus crisis is turning all our lives upside down. Hammersmith & Fulham's Resident-led Climate and Ecological Emergency Commission (CEEC) has none the less continued its work and has also been looking at how we can learn from the actions currently being taken to respond to the coronavirus emergency.

On 17th July 2019, the London Borough of Hammersmith & Fulham (LBHF) unanimously agreed with the Intergovernmental Panel on Climate Change (IPCC) that there is a Climate and Ecological Emergency. In passing the Climate and Ecological Emergency Motion, the Council set a target for the whole of the borough of Hammersmith & Fulham to reduce carbon emissions to net zero by 2030.

That was the easy bit. We now need to work out how this can be achieved in an effective and meaningful way that delivers positive long-term outcomes.

“The UK can and should act as a leader in the global response to climate change – UK emissions contributed to causing it, and its leadership can have an international impact.” UK Government, [Committee on Climate Change](#)

It has become increasingly understood by all political parties, all faith groups and all parts of our community that urgent action is now needed to protect ourselves from the worst impacts of climate change. This shared understanding gives me hope that the action needed might also bring our divided society together and be an amazingly positive experience.

The IPCC and the global scientific community are unequivocal that society needs to de-carbonise at an unprecedented scale and pace over the coming decade if we are to avert the worst effects of climate breakdown. In conjunction, we face a crisis in our natural environment, with a 60% loss of wildlife populations over the last 50 years.

The role of the CEEC is to challenge and support the Council in delivering its net zero ambition by 2030, and help to bring about the recovery of nature and wildlife across the Borough, acting as a role model to other London Boroughs.

I believe that a zero-carbon, ecologically rich society is something to look forward to. By articulating the amazing quality of life that could be achieved in a well-balanced community that would result from a zero-carbon, ecologically rich society, we can build an exciting and positive vision for the future.

By defining a clean, fresh and healthy environment in which people care about each other and where success is measured by high levels of well-being, everyone – council officers, councillors, residents and people working in or visiting the Borough – will be encouraged to change their behaviour and help each other to work towards a prosperous future for all.

During the Commission's work, we have worked with the newly founded Climate Change Unit, engaged with LBHF officers, led a public survey and hosted an Engagement Event at the Lyric Theatre that helped us to learn from local residents about which areas of work we should focus on.

We need to have an open and honest conversation about what LBHF can achieve and what needs to be done through regional and national policy initiatives. We need to be prepared to tell the truth and be brave enough to respond to the evidence with action that matches the existential threat that the climate and ecological emergency demands.

I hope that this report provides a useful starting point. There is a lot to do.

Paul Beaty-Pownall, CEEC Chair

Communication and engagement

The first priority must be to engage with everyone who lives, works in or visits Hammersmith & Fulham to provide much more open and honest information about the seriousness of the threat we face due to the scale of carbon emissions and severe loss of biodiversity. LBHF must prepare a robust communications plan that provides guidance on the actions we need to take, and promote a positive vision for how the future might look if we succeed in reducing our carbon emissions.

The communication strategy should recognise that this is an emergency and lessons should be learned from the communications used during the COVID-19 crisis.

By engaging with local residents and council officers LBHF will help define a positive vision of a zero-carbon and ecologically rich society. All residents of Hammersmith & Fulham have a part to play and we must work together in order to ensure that the changes in behaviour we seek are effective.

Public communication

Finding headline

We need to be better informed about the negative impact of our current carbon emission levels.

Summary of proposed actions

Define a positive vision of what it would be like to live in a zero-carbon society, to encourage changes in behaviour that reduce carbon emissions.

Communicate the importance of biodiversity and supporting activities that enable nature to thrive.

Prepare robust communication plan – tell the truth about the effects of climate change and provide information about positive behaviours.

This will include:

- the amount of carbon being emitted in the Borough
- the types of activities that cause carbon emissions
- types of positive behaviour that do not cause carbon emissions
- the policies that are being promoted to reduce carbon emissions
- actions that need to be taken to adapt to the effects of climate change
- promote the positive aspects (co-benefits) of action to reduce carbon emissions and enable nature to thrive

“Talk about the climate emergency with residents. Start a clear and unambiguous communications strategy that tells residents about the dangers that lie ahead and help us to change our behaviour so that we can prepare and improve our chances of living in a healthy borough in the years ahead.” Commonplace Consultation Oct 2020

Existing context

LBHF has a duty to protect people from harm and ensure that the environment in which we live is healthy and safe. The Council have a responsibility to communicate with the public in order to inform them about any activities that are being carried out that might cause harm to themselves or others.

Residents, visitors, council officers and people who come to work in Hammersmith & Fulham are not currently being informed about the amount of carbon that is being emitted as a result of our daily activities.

The negative impact of our emissions, and the scale of changes needed to make Hammersmith & Fulham a safer place to live, is not something which is widely acknowledged.

We believe that the Council has a duty to inform people of the risks associated with their activities and to encourage behaviours that radically reduce our carbon emissions.

Observations on the current situation

LBHF has a sophisticated communications system that includes access to the following tools:

- [LBHF website](#)
- Social media – [Facebook](#) and [Twitter](#)
- [Nextdoor](#)
- Street banners
- Commercial advertising hoardings

LBHF have demonstrated their ability to communicate with the public in response to the COVID-19 crisis. They established a clear method of communication using all the above tools to encourage rapid changes in behaviour to reduce the spread of the coronavirus.

We would now like to see the Council making use of these tools and others to inform people living and working in the Borough about the climate and ecological crisis, and the need for changes in personal, public and corporate behaviour to reduce our carbon emissions.

What needs to change?

The public need to be better informed about the dangers associated with high levels of carbon in the atmosphere and the impact that their carbon emitting activities are having on themselves, other people and future generations.

LBHF must help people to change their behaviour both to reduce carbon emissions and to prepare for the consequences of a changing climate which are already occurring due to existing global heating. LBHF should help us to Imagine 2030 by articulating the amazing quality of life that could be achieved in a well-balanced community that would result from a zero-carbon, ecologically rich society.

A communication plan needs to be established that informs the public about:

- the amount of carbon being emitted in the Borough
- the types of activities that cause carbon emissions
- types of positive behaviour that do not cause carbon emissions
- the policies that are being promoted to reduce carbon emissions
- actions that need to be taken to adapt to the effects of climate change
- the positive aspects (co-benefits) of action to reduce carbon emissions and enable nature to thrive

The plan should illustrate the changes in behaviour that are anticipated and how these will support the strategy to move towards net zero carbon by 2030.

LBHF engagement

Finding headline

LBHF officers must become carbon literate.

Summary of proposed actions

- All council officers, staff, councillors and contractors need to be educated about the impact of carbon emissions locally: they need to become 'carbon literate'
- A training scheme should be developed to support all LBHF staff
- Current carbon emissions must be measured and publicised to establish a baseline, against which the success of future policies can be measured
- The Council should develop a Road Map to carbon zero, with annual reduction targets

Existing context

The Commission has worked alongside the LBHF Climate Change Unit to build a good working relationship with the staff of Hammersmith & Fulham. We have met with a wide range of LBHF officers, councillors and agencies to talk to them about the climate emergency and to get a better understanding of the actions that the Council are taking in response to the emergency declaration.

A Climate Change Unit has been set up that reaches across all council departments. The LBHF Climate Change Unit arranged a Staff Climate Summit in June 2020 which gave the Commission the opportunity to give a presentation and discuss the climate emergency with over 130 officers.

There appears to be near unanimous agreement that the situation is very serious, and that urgent action needs to be taken to reduce our carbon emissions and mitigate against the worst effects of climate change.

There are a number of emerging positive policy initiatives that are beginning to gain momentum, including for example:

- making better use of the Social Value Act
- more electric vehicle charging points
- walls that are designed to absorb carbon
- greater support for cycling and walking to reduce the need to travel by car

Individual officers frequently described how their individual ability to act and implement more radical policies are restricted by existing rules. Staff asked for more guidance from their managers to help them shift their focus. National regulations, budget constraints and legal frameworks limit their ability to make changes they feel are now needed.

There appears to be little existing knowledge amongst the staff about the true scale of the problem and the impact that very high levels of carbon in the atmosphere is having on the well-being of our community and our natural environment.

Observations on the current situation

The policy initiatives currently being proposed do not seem to reflect the scale of the problem. Several policy ideas are coming forward which might make a positive difference to carbon emissions, but they are not evaluated against the amount of carbon they will save, or measured against their impact on the central aim to achieve net zero carbon by 2030.

Nor is there any measure for the existing level of biodiversity that is now required to determine if we are actually protecting nature and improving our biodiversity.

Financial considerations and legal requirements (including health and safety laws) currently take priority over environmental benefits. Ideas such as guaranteeing that the new Town Hall will be built to zero-carbon standards are rejected on the grounds that they are unaffordable, and yet there is no measure for the amount of damage that is being done to the environment by continuing to emit carbon into the atmosphere or the co-benefits of this investment.

It is great to see that as individuals all the officers and councillors that we met are supportive of taking radical action to reduce our carbon emissions. But the organisation as a whole does not reflect this energy. There is therefore a need to capture this enthusiasm and embed a culture of change that places reducing carbon emissions at the same level of priority given to financial and legal values.

There is a growing recognition that responding to the climate and ecological emergency is a shared responsibility that needs action from all departments and should not be assigned to the department for the environment. It is encouraging that Stephen Cowan as the Leader of the Council has accepted the role of Cabinet Member for the Climate and Ecological Emergency, placing this at the centre of cabinet decision making across all cabinet responsibilities.

What needs to change?

Training and educating all council staff, councillors, leaders and agents about carbon emissions is essential. The scale of the problem and the impact it is having on the health and well-being of Hammersmith & Fulham residents needs to be understood and a comprehensive programme of training should be delivered across all departments. Staff need to be better informed so that they become '[Carbon Literate](#)' and learn to evaluate the carbon emissions that result from all activities.

The assessment of the existing carbon emissions and quality of our biodiversity needs to be measured to provide a base line against which the success of future

policies can be measured. Other evaluation tools should also be considered that measure social and environmental impacts of our policies and actions and further ideas on this can be found in the Leadership section.

A Road Map needs to be developed that demonstrates how the Council can reduce its carbon emissions over a period of 10 years, across all departments. The base line measure of carbon emissions and biodiversity should be used within the Road Map to demonstrated yearly targets for emissions reductions.

Staff need support from the Senior Leadership Team and Cabinet to give them more confidence to be able to take action to radically reduce carbon emissions. The constitution, vision and values need to be reviewed in order to provide staff with the tools required to deliver change.

Public engagement

Finding headline

CEEC is working with residents.

Existing context

The CEEC is made up of 12 local residents who have given their time voluntarily to help the Council consider the future of our environment from the perspective of people of live and work in the Borough. The Council believes in 'Doing things with residents, not to them'. This philosophy is there to enhance civic life by empowering residents to change their own neighbourhoods for the better.

As part of our work the Commission is listening to residents and engaging with the public to get a better understanding of how aware people in the Borough are about the Climate and Ecological Emergency and what can be done about it.

In February 2020, [we partnered with LBHF and Lyric Studios](#) to host an event at the Lyric Studios to engage with local residents and ask 'How the climate crisis affects me'. The event was used to build awareness of the nature of the emergency, and to start building an evidence base of residents' appetite for change.

The event also provided an opportunity for the Commission to gather ideas for actions that residents feel the Council and the Commission should be considering in their work towards achieving net zero-carbon emissions by 2030.

We have also partnered with a number of local groups to set up #Imagine2030, a platform through which we can all get together to imagine what Hammersmith & Fulham would be like if we were living in a society that emitted net zero carbon. The [Imagine 2030 website](#) started by providing links to a free showing of [the film 2040](#) and it will continue be built through dialogue with anyone who wants to take part and will be supported by social media of all kinds to reach out to as many people as possible.

We also called for evidence using Commonplace Tools to allow borough residents to submit answers to a series of questions to help the Commission understand what their main concerns are and where our priorities lie. The results of the survey,

currently being analysed and written up, will help the Commission to direct the Council towards those areas of work that are most important to local residents.

Observations on the current situation

The CEEC Engagement Event at the Lyric in February 2020 provided more than 100 ideas and proposals that we can use to support our work. A [full report on the outcomes of the CEEC Engagement event](#) shows the wide variety of concerns and how the climate emergency touches every part of our lives.

Using data from this event the Commission decided to structure our work across eight topic areas as it was clear that adapting to the effects of the climate emergency is not just an issue that belongs to the department for the environment alone.

In order to reduce our carbon emissions to zero we must examine how we have come to demand so much from our natural resources in order to produce the products that we consume, and then waste, without regard to the consequences of our actions.

People came forward with an extraordinarily wide range of ideas from setting up a locally managed mutual bank to ensure that investment in our local community stays within the community, to setting up a community compost facility at the end of every street.

Promoting walking and cycling to reduce dependency on cars, planting lots of trees, and making use of heat generated from the underground system to power our homes were a few of the other suggestions that would not only help reduce our carbon emissions, but also benefit the health and wellbeing of our community.

So far we have found that there is no shortage of ideas, and we must do much more to listen to residents, people who work in the Borough and visitors coming to enjoy just being here, to find out what needs to be done. But we have also found that not everyone is aware of the dangers that lie ahead with regard to the effects of global warming.

What needs to change?

Residents must be given greater opportunity to share ideas about how we can reduce our emissions and increase opportunities for nature to thrive. They must also be given more information about current carbon emissions and the impact this is having on our climate and on our health.

The local authority must start measuring the amount of carbon we emit from each of our activities and share this information so that people can be better informed and respond by taking actions that have the greatest benefits.

The CEEC believes #Imagine2030 gives us an amazing opportunity to provide people with information and some of the tools we all need to respond to the climate emergency. We will be seeking partnerships with LBHF, local BIDs (Business Improvement Districts), the LBHF Climate Alliance, Greenpeace, Extinction Rebellion, Friends of the Earth, Quakers and other groups that are committed to reducing our carbon emissions.

We would encourage LBHF to commit to establish a community map that shows what is happening across our Borough. We have already engaged with Mapping for Change which would provide a tool for local individuals and groups to add information about the good things that are already happening in the Borough and highlight areas that need attention.

We would recommend that LBHF appoint Mapping for Change or a similar community mapping tool to enable residents to take part in sharing information continuously so that we get a picture of what is happening in our community.

During the next phase of our work the CEEC would like to explore how residents can have a greater say in future policy making decisions. We will be considering new ideas such as setting up a Citizens Assembly so that recommendations can be made without being constrained by external interests and can provide long term solutions that go beyond political cycles.

We will also be working with LBHF to explore the potential to establish a local physical space where residents can support a Library of Things and/or a Think and Do space that would help anyone who wants to become more actively engaged in reducing our carbon emissions with opportunities for borrowing, sharing, re-using and repairing.

Education

Finding headline

Ensuring that our children and young people are at the heart of all H&F does in respect of addressing the climate emergency is vital: it is their future that will be most affected by decisions taken today.

Summary of proposed actions

- Our children must receive age-appropriate education about the climate and ecological crisis, embedded across the entire curriculum rather than added in as an extra, discrete subject
- Harness the influence and contribution of the youth sector; engage and consult with young people before making key decisions that will affect them. Inspired young people will be powerful advocates for change
- The Borough should plan for local apprenticeships and opportunities for school leavers to help expand the green economy and contribute to local sustainable development
- The Council needs to develop a fully worked up plan for retrofitting the school estate to achieve net zero by 2030

Existing context

The Borough currently has:

- 12 community primary schools
- 14 voluntary aided primary schools
- 13 primary academies and free schools
- 7 special needs schools
- 13 secondary schools (excludes private schools)

The Council has plans to set up a charity with the vision of:

- toward a zero-carbon community
- reduce what you can
- offset what you can't
- and three key themes: reduce, recycle, restore and offset

The Council aims to raise the profile of its Climate Change Education at a global level.

Examples include:

- delegation of headteachers participated at the “Dubai Climate Conference - “Climate defenders” (November 2019)
- invitation extended to Council Leader Stephen Cowan to [COP25](#) (Madrid November 2019)
- H&F schools to represent the UK education sector at rescheduled COP26 (tbc)
- H&F schools to represent the UK education sector at Dubai Expo 2021 (tbc)
- contribute papers to UNESCO Climate Conference 2021.

Miles Coverdale and Fulham Academy Trust each have two accredited ‘UN eduCCate Global’ teachers. Recently, all of the Borough’s primary schools were given a briefing by eduCCate Global and it is hoped that more will sign up. Up to £5,000 per school is available for signatory schools.

There is some good practice going on within the Borough; for example, the Fulham College Trust has developed a cluster and attracted some funding from the British Council to work with schools in Uganda and share approaches to conservation and climate education. However, much remains to be done to engage schools more widely across the Borough.

Observations on current situation

The Council is sending Climate Change Education Guide packs to all schools (November 2020). This is to be followed up by meetings with the schools to present the Guide and discuss ways they can integrate climate education within their curriculum planning.

[Urbanwise London](#) works with schools across West London, including in Hammersmith & Fulham where it is based, to provide education sessions based on the local area and linked with climate education and issues concerned with pollution and sustainability. One of their projects, the [Mudlarks Project](#), established in 2019, is being relaunched with a specific focus on the recovery of nature and the recovery of our school communities.

The Healthy Pupil Capital Fund (HPCF) offers approximately £4,000 per school to support them in adapting their learning environments to be eco-friendlier and commits schools to rolling out the Climate Change Accreditation programme.

Funding will enable schools to invest in capital assets to improve their infrastructures and schools’ practices around climate change action. The project is due to run from

September 2020 to May 2021 and participating schools will be asked to deliver local eco-projects focusing on five key areas.

A toolkit is currently being developed and further activities will take place once extra funding has been secured via the Net Zero Innovation Programme (funded by LGA and UCL). The [eduCCate Global programme](#), has been promoted amongst other options such as developing school gardens, buying a waste composter and recycling, developing Forest Schools and improving school grounds to promote outdoor learning. The Council will be co-ordinating a support group to monitor and share school activities.

The Council supported the [Youth Climate Summit 2020](#) which ran from 9-13 November 2020, involving schools from across the UK in a virtual festival of themed discussions and activities focusing on protecting the planet and creating a more just and sustainable world.

[Ashden 'Less CO2' & 'Net Zero' programmes](#): Less CO2 is a programme helping schools reduce their carbon footprint and save money along the way. The Ashden campaigns have been included in the Climate Education Guide for all H&F primary schools, and there is an aspiration for a cluster to be formed.

[Salix Finance](#) provides Government funding to the public sector to improve energy efficiency, reduce carbon emissions and lower energy bills. A number of H&F schools have been identified as meeting the stringent criteria and a draft paper has been written to support governance to accelerate the programme.

The Council has no ring-fenced funding for climate education but is applying for grants and hopes to attract future S106 funding to help co-ordinate climate education.

What needs to change

It is vital to educate and enthuse young people about climate action, and prepare them for the green economy. We need to see the Council's laudable aims translate into more action on the ground.

Introduce small-scale gardens in schools to enable children to learn about preparing fresh food and eating seasonally.

School meals should include meat-free days. Engage with schools to ensure meals are delivered in accordance with the official Eatwell Guide and the majority of options on menus are healthy and plant-based. Children must be taught about how to maintain healthy eating and lower carbon diets throughout their lives.

Schools should provide education on low carbon lifestyles more generally.

School land, open space, play space and green areas must not be lost. Green school roofs or installation of solar PV should be considered (roofs should not be used as places to relocate play space).

Encourage partnerships across different schools (eg primary/secondary, state/independent) to facilitate the sharing of good practice.

Harness the influence and contribution of the youth sector. The Council should increase engagement with young people, listen to their views and consult them before making key decisions that will affect them. Inspired young people will feed the message back to their families and be powerful advocates for change.

Ensure safe access and local routes to all schools and colleges, fostering opportunities for children to walk or cycle to school independently from an early age.

Review air quality at all school sites and take appropriate action to reduce pollution (eg via traffic management, planting).

Work in partnership with teachers' organization's (eg trade unions), governors, parents and childminders to support climate and ecological initiatives in all borough nurseries, schools, colleges and other children's services.

Broaden the focus from schools: education runs from childminders and nurseries through to schools to colleges (all regulated by OFSTED). In addition, [developing apprenticeships and other opportunities](#) for school leavers to help expand the green economy would help to contribute to local sustainable development.

The Council's communications must be improved; we are told that messages on climate change initiatives are not getting through to young people - even the most engaged ones.

Ensure proper incentives for teachers to get [UN eduCCate Global accreditation](#), such as making it part of CPD.

The Council needs to accelerate work to retrofit the school estate to achieve net zero by 2030. It is encouraging that a number of H&F schools have been identified as meeting the Salix Funding criteria; a fully worked up plan to implement and fund this important work stream as soon as possible is vital.

Building Knowledge at a Local Level

By building knowledge at a local level LBHF will help support all the residents of Hammersmith & Fulham to act on the climate and ecological emergency. Knowledge will provide the tools to help both residents and the Council to understand the changes that are going to be needed to build a new zero-carbon society that is full of nature.

In order to explore the wide variety of activities that emit carbon across the borough, we have divided our report into eight knowledge topics. We have provided details of our findings and give an indication of the actions that we think H&F Council will need to take under the following headings:

- Built Infrastructure
- Transport
- Ecology
- Energy
- Waste
- Finance

- Food
- Health

Built Infrastructure

Finding headline

All new and existing buildings must be zero carbon by 2030.

Summary of proposed actions

- Update Local Plan to set a standard of zero carbon for all developments
- Lobby Government to ensure Building Regulations require zero-carbon standards
- Prioritise retention and re-use of existing buildings to protect their embodied carbon
- Make sure that the purpose of development improves the wealth of the community
- Use open land to enhance biodiversity and help us to adapt to climate change
- Set new design standards for adaptation to mitigate for the effects of climate change
- Invest in retrofitting and adapting all existing buildings to meet zero-carbon standards

“Free up planning restrictions to convert commercial to residential properties. Build more social homes. Covid has taught us poor and insufficient housing is a real problem. This is the priority.” Commonplace Consultation Oct 2020

Existing context

[The LBHF Local Plan](#) published February 2018 is aligned with LBHF’s [Industrial Strategy ‘Economic Growth for Everyone’](#) July 2017 and highlights the Council’s commitment to making Hammersmith & Fulham the greenest and most environmentally positive borough in the UK.

The Local Plan Policy CC1 requires all major developments to implement energy conservation measures. The Local Plan also makes reference to moving towards transport that has low/zero-carbon emissions and encourages the use of low and zero-carbon technologies.

The Local Plan makes reference to the [London Plan 2016](#) which sets out additional standards and directs LBHF to deliver 1031 additional dwellings per year every year to 2035. The London Plan 2016 also required that all residential buildings should be designed to zero-carbon standards from 2016 and that all non-domestic buildings should follow the Building Regulations.

LBHF is also obliged to comply with national construction standards as provided for in the UK Building Regulations. The current [Part L of the Building Regulations \(2013\)](#) provides guidance on the energy performance of buildings and details a Target Emission Rate (TER) that generally achieves a 6% reduction in emissions.

New Part L Building Regulations have been drafted by the government and are currently out for consultation and proposes a TER that would achieve a 31% reduction in operational carbon emissions.

According to the [Borough Profile 2018](#), there are approximately:

- 85,000 dwellings
- 60 schools
- two main hospitals
- three football stadiums
- one prison
- 12,000 businesses and a large variety of retail, leisure and entertainment venues

We have not identified any buildings that currently conform to zero-carbon standards (though the new [Quaker Meeting House](#) meets Passive House standards). LBHF actively encourages investment in our built infrastructure through both directly funded projects and through incentives that are established by partnerships, grants and regulations that invite investment in the borough.

Observations on the current situation

The LBHF Local Plan does not currently include a requirement for all new or existing buildings to reduce their emissions to zero. Developers and investors will use the standards set out in the Local Plan, London Plan, Building Regulations and supporting reports to assess the viability of their proposals and they will be unlikely to want to improve on these standards if this leads to additional costs that will make their development uncompetitive.

The carbon emissions generated by all new developments including the new civic campus and the developments promoted by the industrial strategy will be determined by the standards set out in the Building Regulations and Local Plan and they will therefore not be built to zero-carbon standards.

The embodied carbon used in the construction of these buildings will not have been taken into consideration. These buildings will still be in use by 2030 and in order for LBHF to reduce its carbon emissions to zero by then, they will need to be retrofitted almost immediately upon completion to improve their performance accordingly.

The proposed new Building Regulations 2020 currently under consultation are not sufficiently ambitious and will not support the LBHF target of net zero by 2030 as disclosed by the [London Energy Transformation Initiative \(LETI\)](#).

They do not require a reduction to zero emissions and rely heavily on the use of technology to provide carbon reduction solutions, without assessing the embodied carbon used in the production of these technologies. Furthermore, they will restrict LBHF's ability to independently impose higher standards on any future development within the Borough.

The current and draft regulations only focus on operational carbon and the value of the embodied carbon wasted in the demolition of existing buildings; construction of

new buildings and the manufacture and transportation of new technologies is not currently regulated. The [embodied carbon](#) associated with the manufacture and supply of materials and equipment can be as much as 50% of the total emissions of a building over its lifetime.

Other than responding to flood events, there is little mention in the policies and regulations of the need to adapt our built infrastructure to mitigate against the effects of climate change that are already inevitable.

Heatwaves now occur regularly and are predictable. Dwellings that do not have solar shading or natural cooling can cause serious health problems for their residents. The existing building stock is responsible for over 40% of the Borough's carbon emissions and may not continue to be fit for purpose as the effects of climate change impact on their ability to keep us safe from the impacts of over-heating, flooding, heavy rain and other extreme weather events.

What needs to change?

The Council's aspiration to be the greenest borough in the UK needs to be updated to reflect the Council's commitment to reducing its carbon emissions to zero by 2030 across the whole Borough, and to increasing our biodiversity.

The Council must lobby Government during the consultation period to improve on the proposed new Part L of the Building Regulations so that they allow LBHF to act on their commitment.

The Local Plan should be updated to require that all new and existing buildings are built or retrofitted to zero-carbon standards so that all buildings still in use in 2030 do not emit any further carbon. Guidance on how this can be achieved is provided by the [UK Green Building Council](#).

Open land should be valued for the opportunities that it might provide to support our need to adapt to the effects of climate change and enhance biodiversity. Opportunities to allow nature to flourish, mitigate rainwater runoff or generate local carbon-free energy supplies for example, should be prioritised before open land is offered for new development and built on.

Developers should be required to measure the carbon emissions created as a result of a proposed development, both during the construction process and as the future carbon that will be emitted by the building in use. Embodied carbon in all the materials and equipment used should also be accounted for, including the embodied carbon of any existing buildings demolished.

Priority should be given to retain and reuse existing buildings and structures rather than demolish and emit all the embodied carbon that was used in their construction. For example, existing redundant office space could be converted to residential or other uses to retain their embodied carbon instead of building new carbon intensive housing.

Establish a major investment programme to retrofit and adapt existing buildings to prepare them for climate change and to reduce their carbon emissions to zero. This

programme of investment would also create opportunities to train young people and create employment for local residents (see [2.6 Finance](#)).

The purpose of any development should be defined to make sure that it benefits the community, before any loss of open space or loss of embodied carbon is permitted. Developments should be profitable, but they should also improve the well-being and wealth of residents.

Any investments in the Borough that extract wealth from our community should be rejected. Funding for developments that are sourced from the proceeds of fossil fuel extraction and other systems that do damage to our ecosystems should not be supported.

Opportunities to deliver carbon positive solutions through our built infrastructure should be identified and developed. Built infrastructure may be able to provide support to other sectors that are not able to reach net zero without the need for offsetting. Carbon positive developments may provide some of the carbon offsetting that will need to be achieved within our borough in order to reach net zero.

All buildings, and in particular housing, should be designed or adapted to prepare for the effects of climate change without the need for carbon emitting technology. For example, housing should be designed with the potential for natural cross ventilation and solar shading to help cool dwellings during a heat wave.

Transport

Finding headline

Re-imagining transport in Hammersmith & Fulham.

Summary of proposed actions

Our vision is that residents and visitors to the Borough take pleasure in travelling by foot, bicycle and new generation public transport, along safe, healthy and green streets.

The few remaining vehicles are clean and zero carbon, and residents make sustainable choices for travelling beyond the Borough. We want to see the Council do the following:

- ensure that mitigation of, and adaptation to, climate change is a priority in all transport-related council policies and decisions
- deliver a clear and consistent communications strategy for explaining the relationship between vehicle use, air quality, health and well-being, and why local measures to reduce local and through traffic are urgent and essential
- commit to investment in infrastructure which prioritises people who are walking or cycling, and those using public, community and green modes of transport
- substantially reduce the amount of land devoted to private vehicles, driving and parking in order to create green and accessible outdoor public spaces throughout the Borough to be enjoyed by all residents. Space released in this way can then be used for recreation, growing and gardening, to make space for nature, to provide shade and to reduce flooding

- move rapidly to ensure the council and sub-contractor fleet is low or zero carbon, encourage active travel by council employees, and do everything possible to help local residents, businesses and institutions to do the same thing.

“It would be a terrible waste if people just put their bikes in the garage because they feel the roads have become unsafe again.” Commonplace Consultation Oct 2020

Existing context

Transport (excluding aviation) is a major source of carbon emissions in the Borough (around 20%), while also being the major cause of urban air pollution. CO2 emissions, particulate matter and noise all have a detrimental effect on local residents and visitors, as well as wildlife populations.

For decades now, street space has generally been allocated in favour of cars and other traffic, to the detriment of walking and cycling. This becomes especially problematic when social distancing measures have to be upheld.

It is estimated that 85% of all road traffic in the Borough is simply through traffic, with the remaining 15% split between destination traffic (eg deliveries, visitors) and resident-generated traffic.

CEEC have been working with the Council to look at best practice from around the world and support LBHF in discussions on project feasibility. We anticipate that the solutions will include the use of new technologies to manage capacity and control access in certain situations.

Observations on the current situation

If we are to avoid the worst effects of climate change and the loss of nature, we will need to rethink how people move around and through the Borough. Specifically, we should be looking forward to behaviours that significantly reduce the number of vehicle trips on our roads.

There is huge opportunity to achieve the co-benefits of traffic reduction with improvements in health and well-being, for example through better air quality and healthier, more active lifestyles. We understand that Hammersmith & Fulham are currently developing borough-wide plans to address these issues.

As a temporary response to COVID-19 and the need to maintain social distancing, some new cycle ways have been set up; these need to be improved, extended, made permanent and supported by a clear communications strategy to encourage active travel. However, the lack of funding (made worse by the pandemic's drastic impact on TfL budgets) is a major constraint currently.

The pandemic has also had the effect of flattening the rush-hour peaks, which helps in terms of congestion and air quality.

We understand that plans for a number of Low Traffic Neighbourhoods across the Borough are advancing, to include more locally based services which can be accessed by a short walk or cycle ride.

Further work is needed to understand whether neighbourhood-based schemes simply displace traffic to adjacent routes, and whether a more ambitious borough-wide or city-wide approach is therefore required. Early results however from a south Fulham / Wandsworth Bridge Road scheme are encouraging.

What needs to change?

A city that is designed first and foremost around the needs of pedestrians and cyclists is a quieter, cleaner and more liveable city, with a greatly reduced carbon footprint, fewer deaths resulting from urban air pollution, and the opportunity to encourage back larger populations of wildlife. Recent examples from [Barcelona](#), [Milan](#) and [Birmingham](#) show the levels of ambition that are currently possible.

We would like to see the Council commit to transport initiatives which will combat climate change, encourage the re-establishment and protection of nature, and improve residents' health and well-being.

One immediate and pressing example relates to the current closure of Hammersmith Bridge where LBHF has an important opportunity to signal a change in direction on transport infrastructure provision, consider how it could be repaired sustainably within 2030 net zero constraints, and most importantly re-imagine how the Bridge is used in the future.

Other practical initiatives include the following:

- communicate to residents the link between traffic reduction on our streets to climate change, ecology and air quality
- encourage a major shift to active travel by making cycling and walking easier, starting with a Council-led campaign to encourage residents and businesses to reduce vehicle usage
- ensure low-carbon and affordable public transport reaches all residents
- incentivise cleaner, shared-use vehicles
- disincentivise private vehicle use and ownership
- ensure highway infrastructure investment serves net zero objectives and increase allocation of space for walking, cycling and biodiversity
- further develop and evaluate Low Traffic Neighbourhoods, ensuring a phased approach that retains local resident support
- re-allocate space (including kerbside parking space) for active travel and nature (eg bike lanes and bike storage) and nature (encouraging biodiversity and creating carbon sinks) while also improving urban drainage and reducing flood risk
- to encourage the enhancement and promotion of nature with tree planting and community-managed green space
- scale up the use of camera-enabled traffic management systems and air quality monitors
- make EV charging points widely available and affordable (and integrate with energy management systems in homes / buildings)
- develop a network of freight hubs using cargo bikes for 'last mile' delivery

- invest in green streetscapes / parklets / sitting areas to relieve pressure on local parks and improve air quality
- reduce petrol and diesel car journeys to as close to zero as possible on all H&F controlled roads
- electrify the Council's vehicle fleet and encourage active travel wherever possible
- reduce the number of flights our residents and businesses take
- review the system of parking permits (including emissions-based parking schemes)
- engage with schools to encourage active travel plans and educational support
- encourage the development of a '20 minute Borough', where residents can access all the services they need within a twenty minute walk or cycle ride
- work with neighbouring boroughs to harmonise local schemes for the wider community, wherever possible (eg ensuring that cycle lanes don't just stop on borough boundaries)

Ecology

Finding headline

Our vision is that Hammersmith & Fulham will be visibly greener, and people of all ages will appreciate and understand the need to nurture all forms of life.

Summary of proposed actions

- All green areas in our borough will be managed to ensure that they contribute to minimising the impacts of climate change
- [Rooftop gardens help to reduce heat island impacts](#), as well as being valuable for greening, for bees and for food production, all commercial and public buildings with large flat roof areas will be reviewed for suitability for such gardens
- Parks and gardens have obvious potential for adaptation: creating water reservoirs will help with surface drainage during extreme rainfall, and preserve water for periods of high temperatures and water scarcity
- Every potentially green space will be used to support and encourage wildlife, creating green corridors and having more trees, green spaces and parklets. Reducing the amount of tarmac and paving helps to restore biodiversity, and we will see more birds and bats, bees, butterflies and other insects and invertebrates

“Support all our green spaces, encourage greening of tarmacked and other hard surfaces, never reduce open space in its own Council projects, such as school rebuilding, or allow others to do so.” Commonplace Consultation Oct 2020

Existing context

The impact of climate change is already apparent in our urban environment, with hotter summers and wetter winters becoming increasingly common. The natural environment provides one of the most important carbon sinks available to us and we must make the best use of the land we have to mitigate against the worst impacts of global warming.

Observations on the current situation

Several other Resident-led Commissions have worked on areas which overlap with the Climate and Ecological Emergency remit, particularly with regard to Ecology. The Biodiversity Commission (2018) and the Air Quality Commission (2016) made a number of recommendations, some of which have not yet been implemented, and should be. The Cycling and Walking Commission and the Parks Commission were both established in 2020 and it is likely that their recommendations will also cover relevant issues.

The introduction of Low Traffic Neighbourhoods is to be welcomed, and will provide opportunities for making our streets greener.

[Nature-based solutions](#) to the challenges of our changing climate are already being implemented locally. For example, sustainable drainage measures (SuDS) have been installed in some parks/streets in the Borough, for flood mitigation and to provide green havens where previously there was tarmac; these are welcome and we would like to see more of them.

We have many parks and green spaces in the Borough, as well as Wormwood Scrubs, which are great assets and must be protected.

What needs to change

Inspiration and education

Appointment of an inspiring ecology officer who also helps co-ordinate volunteers. Set up an ecology centre. Reinstate annual Greenfest. More signage in public spaces to increase awareness of biodiversity. Encouraging people of all ages to plant fruit trees and vegetables and to volunteer with planting in public spaces will help prevent nature deficit disorder.

Protect existing trees and green spaces

Avoid removing healthy mature trees as this releases carbon back into the atmosphere. Protect all existing parks and green spaces, allotments, cemeteries, community gardens and wilder spaces such as Wormwood Scrubs. Discourage building in private gardens.

Create more green spaces

Low traffic neighbourhoods will involve closing roads and removing tarmac to allow more green spaces. More SUDS and roads closed outside schools. Remove unnecessary tarmac, eg on Eel Brook Common. Identify more spaces for planting, like bus stops, tube stations and railway bridges. Encourage the creation of roof gardens; every new public building should have a low-maintenance green roof. Aim to double the number of street trees. Find suitable spaces and plant up to ten “tiny forests” within the next 5 years.

Gardens – grey to green

Increased awareness through a Council campaign will lead to more people greening their gardens and providing more habitats for wildlife, which will help to provide green corridors. Ban the use of Astroturf to replace grass in private gardens.

Role of park workers

Liaise with the Parks Commission and ensure the new contract in 2022 provides for training local young people to enable them to become knowledgeable park workers who understand biodiversity and are invested in the local area. Split the parks and open spaces contract into small local contracts or bring them in-house to help build wealth within our community by retaining the benefits of the investment in our Borough.

Planting for pollinators

Bearing in mind that bees and other pollinators are vital to our food supply, encourage more areas of long grass, nectar-rich flowers and fruit trees everywhere, including in school grounds, and housing estates, providing explanatory signage for the public. The Council should launch a campaign each Spring to encourage planting in gardens with bees and other pollinators in mind.

Plant native

Because our native insects and invertebrates are adapted to native species, this must be the guiding principle for planting trees, shrubs, hedges, and wildflowers; it should also be stressed when encouraging people to green gardens and support local wildlife and ecology.

Adaptation to climate change

Nature-based solutions to current and imminent challenges are needed, and need to be scaled up and joined up. More green spaces and SUDS will help to prevent flooding. In view of the increasing trend of hot dry summers, rainwater butts should be installed in parks and housing estates and assistance provided with installing them in private gardens. Encourage residents to take care of their local green spaces and trees when hot and dry. Roof gardens and many more trees will help to prevent the heat island effect.

Energy

Finding headline

Energy efficiency must be increased by powering-down demand, while simultaneously powering-up renewable generation to ensure all energy needs are met by renewable sources.

Summary of proposed actions

The council must mastermind an energy transition across the Borough:

- reduce energy waste through a borough-wide retrofit programme, eliminating leaky buildings
- ditch fossil fuels, switching to highly efficient heat pumps and solar thermal water heating
- develop highly efficient district heat schemes
- grow a skilled local retrofit workforce
- increase local renewable electricity generation, through rooftop solar PV

H&F's ambitious 2030 target is considerably earlier than the national timeline to 2050 - creativity, ingenuity and leadership will be required to work around and alongside this.

The majority of this will need to be accomplished using levers of influence rather than direct control:

- resident engagement and communication
- planning regulation
- business and Council tax relief for pro-environmental measures
- lobby government for increased ambition in national regulation and increased local control

"Fund and initiate mass retrofit/renovation of existing buildings to near zero carbon standards, starting with social housing and schools." Commonplace Consultation October 2020

Existing context

Residential and commercial energy use each account for approximately 40% of greenhouse gas emissions in LBHF (LEGGI). Data from BEIS shows that approximately 30% of these emissions from homes are from electricity consumption (eg lighting, appliances) and 70% from gas (predominantly heating and hot water).

For the commercial sector this is roughly reversed, with approximately 60% of emissions from electricity (lighting, telecoms & computing, air conditioning) and 40% from gas and oil (again predominantly heating).

In 2017 LBHF used 2,500 GWh equivalent of energy from the National Grid (950 GWh of electricity, 1500 GWh equivalent of Gas, BEIS).

Almost all of the electric energy used in LBHF is supplied by the National Grid - there are currently only about 200 active renewable generating sites in the Borough (all small-scale solar PV), with a combined total capacity of just 0.7MW (BEIS).

LBHF is a densely populated borough (population 185,000), home to a wide variety of businesses of all sizes. Housing is predominantly privately owned, privately rented or publicly owned. Commercial property is primarily office and retail space.

Observations on the current situation

Energy from the National Grid is not carbon-free, with just one third of National Grid Electricity generated from renewable sources. This is increasing as coal is phased out, but the grid is not expected to reach net zero grid until well after 2030 (BEIS, 2018). Technologies for generating renewable electricity locally are well established and cost-effective, but are currently hardly utilised in LBHF.

The timeframe for decarbonising National Grid Gas is even more uncertain, but is far less ambitious than LBHF's 2030 target for decarbonisation. National-level schemes to develop bio-gas and green hydrogen are embryonic, and unlikely to have any significant impact on local emissions in the required time frame.

Large amounts of energy are wasted heating poorly insulated buildings and running inefficient appliances. BEIS have shown that average fuel costs for heating the least efficient domestic properties are three times higher than costs for the most efficient properties.

Over half of buildings in LBHF have an EPC rating below C (BBC data), with only 42 properties currently rated at the highest grade A. This demonstrates that improving the energy efficiency of buildings across the Borough would hugely decrease total energy demand and therefore reduce emissions.

Wasting energy benefits no one in LBHF, but disproportionately disadvantages the fuel-poor. Reducing wasted energy reduces the cost to consumers, and therefore presents an unmissable opportunity to benefit everyone. Improved energy efficiency means improved energy resiliency across the borough, and simultaneously tackles fuel poverty and improves public health.

LBHF's strategies for energy supply systems, energy use and energy efficiency are laid out in the Local Plan. However, these local policies are generally determined by national regulations as set out by building regulations. For example, LBHF's Local Plan makes reference to minimising energy use, energy conservation and efficiency, but improvements to energy efficiency in private sector housing will be mainly through government legislation (2.27 LBHF Local Plan).

With a wide variety of domestic and commercial building types in the Borough many different technologies, methods and finance models will be required to enact the massive retrofit programme needed to reduce wasted energy and switch away from fossil fuel based heating. Buildings within the Council's direct control form a small proportion of the Boroughs' building stock, and so it must be recognised that the Council must use its influence to encourage others to make change.

The main tool at the Council's disposal is its role in the planning process. The majority of planning law is controlled nationally, and so achieving the 2030 target will require pushing against national legislation, which lags behind the ambition we have in H&F. Ingenuity and bravery will be needed to overcome such obstacles, as well a concerted effort to lobby for more ambitious supportive national legislation.

What needs to change?

It is clear that we cannot rely on the decarbonisation of nationally supplied energy to achieve our target in LBHF so significant local action will be required.

While local renewable electricity generation is vital to achieving the local net zero target, decarbonising heating presents the bigger, and perhaps more pressing, challenge, and in the end energy use will most effectively be decarbonised locally through a combination of increasing efficiency to reduce demand and increasing the use of renewable energy technologies.

Achieving the net zero target will require coordinated effort in all departments, and so it is important we highlight here the interdependence of energy policy in LBHF with planning policy and the Industrial Strategy.

The LBHF Local Plan talks about making use of low/zero-carbon technologies, but contains no suggestion that carbon emissions from energy use should be reduced to zero.

The Plan's 'Spatial Vision' sets a target of 2035 for new buildings to be 'energy and resource efficient' (page 28 of the Local Plan) and there is mention of decentralised energy networks throughout, but the Local Plan does not provide measurable targets in the reduction in carbon emissions from energy use. This plan will need to be updated to reflect the net zero target, and provide clarity to developers.

LBHF's current Industrial Strategy sets out a strategy to increase economic growth, but the net zero target means that such growth ambitions must now be carefully considered, and no longer be pursued at all costs. In fact, growth in some areas is incompatible with meaningful reductions to carbon emissions (see also pages from the Transport and Finance working groups for example).

Until all energy use is 100% renewable, we must strive to reduce our usage and as energy is vital for economic activity, growth at all costs is no longer a viable option – the benefits must always be weighed up against the net zero target.

[Improve efficiency/use less energy](#)

There are many types of building in H&F, and many approaches will need to be taken. The Council must indirectly encourage and facilitate investment in the retrofitting of improved energy efficiencies in residential and commercial buildings on an unprecedented scale.

It is encouraging to see a national energy efficiency retrofit support scheme rolled out in late 2020, and we hope to see the Council enthusiastically signpost residents towards this scheme as well as developing bespoke local approaches.

The first step the Council must take is to commission energy-efficiency surveys of their own properties, and to urgently start the required retrofit work to bring them up to a high efficiency standard. We would like to see all council-controlled buildings brought up to near net zero energy use in operation.

Cooling will become increasingly important as the climate warms (as we have seen during the recent heatwave in summer 2020). Insulation retrofit schemes must be designed to keep buildings cool in the summer as well as warm in the winter, removing the need for energy intensive air conditioning.

Areas with particularly high-density heat demand such as high-rise buildings, Charing Cross Hospital and large estates could utilise highly efficient District Heat Networks (DHN), and we expect to see demonstrator projects started as soon as possible, with borough-wide feasibility studies and a requirement for all new large developments to include or connect to a zero-carbon DHN.

For more details on energy efficiency, insulation and the retrofit schemes required please see [2.1 Built Infrastructure](#). The London Energy Transformation Initiative (LETI) also provides useful guidance on how to ensure that all buildings operate at net zero by 2030.

All energy must be zero carbon

Domestic and commercial tariffs for 100% renewable electricity are readily available at competitive rates, and the Council has set a good example by switching to such a tariff. We look forward to them following up on this lead by signposting and encouraging local residents and businesses to do the same.

Rooftop Solar PV is barely used in the Borough, and we would like to see the Council encourage and facilitate a massive expansion of this-well proven, cost-effective technology. Incorporating battery storage into solar PV installations ensures maximum local benefit is achieved. Support for a borough-wide survey of suitable sites as well as signposting for domestic customers and larger scale demonstrator projects on council-owned buildings would all provide significant support with good returns on investment.

Community-owned renewable energy schemes provide both a significant boost to local renewable generation and massive public engagement, while ensuring that financial benefits are kept local. Of particular interest is the possibility for such schemes to return investment to areas of high need, for instance in financing energy efficiency initiatives for those in fuel poverty. We would like to see the Council become a vocal supporter of such schemes, and would hope to see the development of the first local scheme as soon as possible.

Driving down the use of gas in the Borough will come from moving to more efficient methods of heating both buildings and water. Solar thermal water heating is an established technology already in some use locally, and we expect to see considerably more installed as quickly as possible.

[Heat pumps](#) are vastly more efficient than gas central heating, and can be coupled with a renewable electricity supply for zero-carbon heating. Heat pumps are still a relatively uncommon sight in LBHF, although common in other countries. Significant council encouragement will help take-up – we would like to see prominent, clear signposting for SMEs as well as homeowners and private landlords, as well as demonstrator projects with appropriate council property and social housing.

We have mentioned several specific technologies here, and while choices must be left to individuals and business commissioning private installations the Council can provide significant support to promising technologies in a number of important ways:

- undertaking and publishing local surveys and feasibility studies, highlighting suitable technologies for real locations and likely return on investment
- developing an easy to navigate online resource hub for private homeowners and landlords as well as local SMEs to highlight benefits of energy efficiency retrofits and potential financing models, signposting the likely impact and suitability of different technologies and interventions as well as local sources of knowledge and suppliers
- using the planning and landlord-licencing systems to encourage and enforce low-leakage, highly-efficient, low-carbon buildings

- leading by example, with high-profile demonstrator projects showing the co-benefits to local people and businesses and building the local demand for expertise and a skilled workforce

[Some specific technologies](#) we would like to see investigated for their local suitability (including potential impacts on local biodiversity) include:

- electricity generation with solar PV and small-scale wind (where appropriate for an urban environment)
- rooftop solar thermal water heating
- zero-carbon heating using Air Source Heat Pumps for smaller buildings and private homes and Ground Source Heat Pumps for larger buildings and major new developments
- District Heating Networks, supplied by low-carbon sources (innovative examples include using tube tunnels, sewers and parks as heat sources)

Waste and the circular economy

Finding headline

Prioritise and support the transition to a circular economy: reduce, reuse, recycle.

Summary of proposed actions

- Reduce: massive reduction in overall waste across the Borough
- Reuse: make material and product reuse and repair mainstream
- Recycle: adopt at least the [CCC target](#) of 70% domestic waste recycled by 2025

Council's levers of change and points of influence:

- using the Council's procurement processes to focus on waste, reuse and the circular economy at all levels of the Council's activity
- leading by demonstrating best practice
- initiating local award schemes to promote local examples of best practice
- explore points of contact and ways of influencing local businesses
- conduct a rigorous examination of existing regulations and smart use of enforcement to meet waste minimisation objectives
- engagement campaign to discourage excessive consumerism

"Provide a communal sealed compost container per street which is replaced every month." Commonplace Consultation Oct 2020

Existing context

Waste from Hammersmith & Fulham as well as three other Boroughs (Kensington & Chelsea, Lambeth, Wandsworth) arrives at Western Riverside Waste Authority (WRWA) plant (operated by Cory Riverside Energy).

WRMA receives 380,000 tonnes per annum of waste and recyclables from a population of approximately 986,000 people living in 407,000 households. In addition, WRWA receives 172,000 tonnes of local trade and commercial waste per annum.

Refuse waste (black bin bag waste) is incinerated at Cory's 'Energy from Waste' (EfW) facility at Belvedere, in the London Borough of Bexley. It is transported by river barge, saving approximately 100,000 heavy vehicle movements a year compared to road transport. The EfW plant is the second largest in the UK. It generates 80MW of power (6MW is used on site and the remaining 74MW is exported to the National Grid).

The leftover Incinerator Bottom Ash (IBA) produced at the EfW plant is taken back on Cory's barges to a processing facility at Tilbury Docks. [170,000 tonnes a year of IBA is processed](#) for recovering metals and other construction projects.

The WRWA processes 84,000 tonnes of mixed recycled waste through the constituent councils' 'sack and bank' schemes. Once sorted they are [transported to various facilities in the UK and abroad](#). The percentage of recycled waste has not materially increased. For example, 21.1% in 2013/14 of waste was recycled and reached 22.2% by 2018/19. Over the same period, the volume of total waste only decreased by about 3%.

Food waste is not collected currently, but a pilot scheme is now underway.

Garden waste can be dropped off at the WRWA facility. It is then transported to a number of composting facilities within or just outside the London area.

Observations on the current situation

H&F ranked the 6th best council in the country in 2018/19 for the lowest volume of annual collected waste per person at 253.7kg, but was close to the bottom of the league for the percentage (23.8%) of household waste sent for reuse, recycling or composting.

The most effective way to reduce emissions from waste will be to reduce the amount of waste generated. Yet there currently appear to be no policies to encourage or incentivise people to reduce the waste they generate.

On the contrary, advertising encourages people to buy more new products and we are told by national and local governments that it is important to go shopping to support the retail sector and grow the economy. Products are wrapped in over-sized packaging to make them appear attractive. Food is given use-by dates that discourage people from storing food.

While the EfW facility is a modern plant it is not entirely accurate to say it generates 'green electricity'. Even the cleanest incinerator releases greenhouse gases and dangerous particulates into the air.

This is significantly preferable, however, to waste going to landfill. The waste management sector accounted for 5% of [UK greenhouse gas emissions in 2018](#), with methane being the most prominent gas (92% of those emissions), and the vast majority is down to landfill sites. The [capacity of landfills](#) accepting London's waste is moreover expected to run out by 2026.

The best alternative would be to reduce, reuse and recycle our waste as consumers and producers, transitioning towards a circular economy.

WRWA are currently in the process of procuring a carbon metric expert to devise a SMART carbon measurement for their operation, and to see how much greenhouse gases are produced by the constituent Councils of the WRWA. This will include plotting progress made over the last ten years. This is a positive step that will allow the Council to measure its progress.

Increasing the levels of recycling is essential but a number of structural challenges exist in the Borough. Collecting mixed recycling in clear sacks results in 14% contamination, however, separated recycling collection can be difficult to achieve efficiently. LBHF is densely populated (6th highest in the country) with 73% of residents living in flats.

Collection vehicles would take longer on narrow roads to collect individual kerbside waste. London, and Hammersmith & Fulham specifically, also have a sizeable mobile population and diverse housing types and cultures (14.5% of LBHF households contain no-one who calls English their first language), which makes it difficult to educate residents about what can and cannot be recycled.

An important support in the transition to a circular economy is to standardise waste collection across the constituent Boroughs that send waste to WRWA and across London (and maybe the country). This can both save money and reduce waste by standardising the messaging on recycling.

The Council have taken a step towards this by extending their procurement contract with Serco for waste collection by a year, to coincide with the end of Kensington & Chelsea's waste contract to allow for possible future joint procurement.

LBHF has started a pilot to collect food waste from 6,000 properties in late 2020, with plans to include the remaining kerbside properties by mid-2021 and estates by late 2021. Composting food waste is essential to achieving the transition to a circular economy and reducing our waste and emissions. 30% of the contents of black bin bags is food waste which is a significant contributor to greenhouse gas emissions.

The Council is in the early stages of procuring a contract for a Green Fleet of refuse collection vehicles. This is a positive step which the Commission supports.

It is encouraging to see a focus on repair and reuse of unwanted items through the WRWA facility. A Rework workshop exists on site where repaired and refurbished items, such as white goods, are resold. Rework in turn provides training and jobs for local people. WRWA also works with experts in reuse such as London Community Resource Network (LCRN), an umbrella body representing London charities that collect and redistribute reusable items for resale.

The reuse projects help with changing residents' behaviour by providing a tangible system that will prolong the life of goods and help residents see the potential value in things they would usually throw away. This makes up however a vanishingly small percentage of the overall waste collected, and is not widely publicised. In our experience few residents know much if anything about this scheme.

The Council should be promoting and advertising these initiatives to residents. For example, currently the council encourages residents to book a reuse collection

service for items in good condition, rather than booking a Council Waste collection service for disposal. It also directs residents to various charities and initiatives, like the British Heart Foundation or Salvation Army, to send items good quality recyclable waste.

Overall, however, the Council does not have any policies or a communications strategy to promote and encourage these and other initiatives to increase the amount we recycle, for example share and repair cafes, or a [Library of Things](#) initiative such as the one in West Norwood.

What emerges therefore are various individual but disjointed efforts. The Council should work on coordinating these initiatives into an integrated policy and communications strategy to achieve the transition to a circular economy.

What needs to change?

By 2030 we will need to have moved away from the linear system of extract-consume-dispose we are so used to in 2020 in favour of a truly circular economy. Hammersmith & Fulham has a responsibility to ensure a just transition where those most affected by this change and by the coronavirus pandemic can find employment in the transition to a circular economy.

The sharing economy will be mainstream, and the majority of our possessions will be reusable either by ourselves or, after simple local redistribution, by others. Raw materials will hold their value, so those items which are not reused will be efficiently collected for recycling. This can also create an industry for reused materials and a circular economy business. By encouraging producers to use recycled materials a business incentive is created to recycle more.

There is an opportunity to create a community spirit by connecting people together to make the most of consumer goods not often used, like for example the [OLIO sharing app](#). We want to see the Council promote the greater use of share and repair cafes and a Library of Things, in effect, an extension of the farmers' market concept. As part of creating a community hub the Council could celebrate those individuals who are particularly active in promoting waste reduction and recycling.

By 2030 we expect waste to have been significantly reduced in Hammersmith & Fulham – recycling will be increased, with valuable raw materials reclaimed for new manufacturing, and economic value and embodied carbon reclaimed through composting.

WRWA could recycle more if it had greater resources. But what is essential to achieving a circular economy is to move away from single use items, for example single use plastic packaging. The Council needs to encourage this among producers. We need to incinerate less and recycle more.

We want the Council to use their points of contact with local businesses through, for example, food hygiene inspections and premises licensing, to influence a shift towards more sustainable business practices. The Council should also review and seek out regulatory levers to enforce a shift towards lower carbon and waste

reduction by local businesses through interpretation and use of current legislation, as well as the possibility of new local legislation.

The Council needs to prioritise and support this transition to a circular economy. To achieve this, it needs to communicate an effective strategy to encourage and promote greater recycling opportunities among residents and businesses to reduce waste. It needs to coordinate the various initiatives in the Borough to raise the profile of reducing, reusing and recycling.

An essential part of this strategy is to embed circular thinking at all levels of the Council. The Council's industrial strategy needs to integrate the transition to a circular economy as one of its main priorities. In practical terms this could be through a Council procurement strategy document to promote reuse as part of the other Council's key documents or alongside them. The Council could also hire a Reuse officer to encourage reuse in the Borough, set up business initiatives and so on. Council waste contracts should include the commitment to setting up and promoting reuse initiatives.

Remember – recycling is not a solution for over-consumption.

Tackling climate change needs action right across the waste collection and disposal business to encourage reductions in consumption. We would encourage the Council to talk to the collection and disposal companies to actively engage in the Council's net zero 2030 target and help them work towards it.

They need to be encouraged to recognise they have a responsibility to encourage waste reduction, reuse and recycling and act as a strong partner in community engagement, for example, advertising on collection vehicles, participation in community hubs and pop-up stores across the Borough.

To achieve net zero emissions by 2030 the Council needs to set itself a target of recycling rates it should meet. At a minimum it should aim for the national target of 70% recycling by 2030 (as recommended by the CCC in their 2019 report to Parliament). This equates to a tripling of the current recycling rate in LBHF and a Borough wide collection of food waste.

Advertising has an enormous influence over residents' consumption habits, and we would like to see the Council acknowledge this and support a move away from extractive consumerism by banning adverts for at least fossil fuel companies, the most polluting vehicles (such as diesel SUVs) and air travel from billboards it controls. We recognise that the Council has no control over many advertising sites in the Borough, but some fall under its direct control and it has considerable influence over some others, via Transport for London.

Finance

Finding headline

There is unavoidable tension between consumption and finite resources. The Holy Grail is a perfect circular economy where product lives are extended, more recycled materials used, and we all learn to consume less as part of a low carbon lifestyle.

Summary of proposed actions

The Council's levers of change:

- long term financial planning is required to support the Council's plan to reach net zero by 2030
- reset and rewrite the Industrial Strategy to encapsulate the green economy/green recovery and broader measures of growth: well-being financial, co-benefits, sustainable growth, employ and buy local
- gear financial instruments (in the Council's control) to environmental/net zero objectives, for example business rates and parking charges
- maximise the power the Council has in its procurement to go beyond the requirements of the Social Value Act and develop a net zero based procurement strategy

"Rethink the business model of a local authority as a largest corporate in the borough with over 180,000 stakeholders and 17,000 structural assets and use this strength to become the gateway for London to become greener by setting high standards for all movement in and out of the borough." Commonplace Consultation October 2020

Existing context

Hammersmith & Fulham's current economic policy is driven by its [Industrial strategy](#) document, which places huge emphasis on 'growth', yet barely mentions the environment: the word 'growth' appears in the document 42 times, whereas there is only one reference to the environment and green space. It should be noted that LBHF has the third lowest Council Tax in the country.

Levels of economic activity are closely correlated with emissions. Opinions are divided about the extent to which economic growth without any negative impact on the environment (decoupling) might be possible.

Decoupling is said to be relative when the growth rate of the environmentally relevant variable is positive, but less than the growth rate of the economic variable. In an ideal world, we would achieve absolute decoupling (when the environmentally relevant variable is stable or decreasing while the economic driving force is growing).

Observations on the current situation

In order to meet the Council's 2030 net zero target, huge investment will be required, new sources of funding will be required.

The benefits of investment in green solutions deliver over longer timescales than current financial models usually accept.

Alternative measures of economic wellbeing, such as [The Wellbeing Economy Alliance](#), or the [Doughnut Economics Model](#) aim to create an economy that delivers for people and the planet. This is a more holistic way of evaluating the success of an economy whereas GDP only captures a single issue.

Even David Attenborough now asserts that 'extractive capitalism' is unsustainable; the planet has limited resources and humanity must learn to live within those boundaries. This will require us all to rethink our attitudes to consumption.

The Council has huge power via its procurement contracts. There is currently an overwhelming focus on near-term cost when awarding contracts and the purpose of this investment is not fully understood.

It is vital to take a long-term view and appreciate that investing now to save later will almost always pay off longer term.

Public land and assets are often sold off to raise funds in the short term, which is an irreversible event that undervalues the benefits the land or asset can provide to the community in the long term.

There is a huge opportunity - post COVID-19 - to re-localise supply chains, which would keep more wealth in the Borough and result in better local economic resilience.

Hammersmith and Fulham BIDs state that ensuring Hammersmith & Fulham 'is a cleaner, greener place to work, live and visit is of the utmost importance to the BID'. The BID has some excellent initiatives, such as Parcels not Pollution and Made in H&F, but they are not well publicised or utilised.

The Council has put out some messaging about buying local, but the environmental benefit to supporting local suppliers is not made explicit.

There is scope to raise council tax given the current low level.

What needs to change?

The Council needs to regard the environment as equally important as finance, legal and justice measures in its strategic decision making. All proposed policies, projects and activities must provide an assessment of the carbon emitted as a result of the proposal and demonstrate how this carbon can be eliminated.

Notwithstanding political cycles, the Council must take a long-term view when addressing the climate emergency in its finance planning, budgeting and expenditure plans: as The World Bank notes in a recent report, a continued focus on short- and medium-term targets would make achieving decarbonisation far more difficult.

The Council should adopt a "whole-of-economy" approach to decarbonisation which is broader than GDP measures and includes measures of wellbeing in the community and planetary boundaries. Look at The Wellbeing Economy Alliance or the Doughnut Economics Action Lab.

The Council's Industrial Strategy document needs to be re-written with environmental concerns at its heart - as well as a broader understanding of economic success.

The Council must identify and implement a programme of substantial 'green/sustainable growth' investment: for example, retrofitting existing housing stock

would provide significant returns through lower heating costs, local employment and training, and reduced impact on the environment.

Take fully into account the Co-Benefits of a low carbon economy (such as long-term financial returns, improvements in public health, reduced NHS costs, growth in the low-carbon jobs market, reduction in poverty and inequality, closer knit community). See the work of the [Grantham Institute on Co-Benefits](#).

The Council's messaging needs to become clearer and stronger on the climate emergency and how people can play their part: for example, providing more information to enable consumers to live low carbon lifestyles.

Find a way of celebrating businesses that are demonstrating environmental best practice - perhaps develop a local ranking or star system.

The Council should consider what opportunities it has to place controls and restrictions on the advertising of environmentally damaging products, label them clearly as such, and set advertising standards to prevent the promotion of carbon intensive products.

Champion and coordinate a repair and reuse culture to move away from wasteful consumption patterns. An example of innovative good practice that we have come across is a fashion app based in East London which enables people to sign up and borrow clothes from others who live locally: a creative example of a way of harnessing media and technology to change consumer behaviour and reduce the purchase of new clothes.

There needs to be a focus on [Community Wealth Building](#) to ensure more local consumption of goods and services: smaller, local firms generally offer more value to the local community. Money needs to be made more 'circular' by offering more local employment opportunities and improving the well-being of residents so that wealth does not leak out of the local area.

The Council must ensure it makes the most of its procurement policies. Local/greener schemes must take priority. Fiscal savings and economic flow-through need to be factored into the picture when evaluating total procurement cost.

It is vital to see the 'true cost' of goods and services, factoring in negative externalities and remembering that it will become more expensive when organisations are obliged to pay penalties for their own waste. Bottom line: sometimes 'greener' options cost more upfront, but are far more cost effective in the long-term.

LBHF Pension Fund should continue to divest from all fossil fuel companies and transition into a proactive strategy based on sustainability and impact investing.

Finding smart and environmentally targeted methods of raising funds through charging for Council services – for example emissions based parking charges, monitoring and imposing charges for idling vehicles, flexing business rates according to environmental and ecological credentials of businesses, introducing a 'green rating' element to annual licensing inspections (like hygiene ratings).

LBHF should be prominent in lobbying for changes outside local control at a national level – for example on built-in obsolescence, and supporting the CEE Bill.

Create and publish a ‘green audit’ of all Council services to give weight to environmental and sustainability impacts – alongside crude cost and value for money, to track improvements and success in moving towards its zero-carbon target.

Alternative sources of finance should be found by, for example, engaging local residents to invest in projects that enhance sustainability, environmental quality, green technology etc. [Abundance](#) helped Warrington Borough Council do this over the summer. The project gains the dual benefits of raising funds from the community to implement it, and fosters wider engagement and awareness on environmental issues amongst local residents.

Food

Finding headline

Healthy diets are good for people and the planet.

Summary of proposed actions

Our vision is that all residents have access to delicious, affordable and healthy food that reflects the vibrant diversity of the borough, supports local farmers, producers and retailers, reduces waste and promotes better diets. It must be produced, supplied, distributed and prepared in ways which help to reduce carbon emissions locally, nationally and internationally.

- The Council, in consultation and collaboration with private and public sector providers, community organisations and residents must develop and implement a sustainable borough-wide food policy
- The Council must support local food production and markets, encourage retailers to provide seasonal produce, and implement policies which reduce food miles
- Public procurement and community initiatives, should promote a substantial reduction in the consumption of meat and 'fast food', ensuring everyone living in the borough has access to cooking facilities and healthy foods
- All public and commercial establishments in the Borough should be ‘breast feeding friendly’
- Food waste and packaging should be minimised, and all residents and businesses should have easy access to food waste collection and composting

“Create a food forest in a public green space run for and by the homeless, with support from the community. With the chance to sell their surplus and of course access to a kitchen for them to cook. It’s not housing but at least it’s a common Space for them to give them some stability and security in their lives.” Commonplace Consultation October 2020

Existing context

Food is central to healthy lives and to achieving zero carbon. Because of its multiple dimensions including production, distribution, consumption and waste, there is a need for a borough-wide food strategy that brings together all stakeholders: Council

and other public services, community and commercial ventures, supplying food of all kinds; and not least the consumer – everyone living in, working in and visiting the Borough.

Observations on the current situation

The existing food supply chain has huge negative impacts on the climate and environment, relies on industrial agriculture that is killing our soils, destroying carbon sinks and habitats all over the world, and generates huge amounts of waste.

Increased reliance on cheap, processed and animal-based food affects people's health and fosters child obesity and diabetes; it also makes people more vulnerable to a whole range of illnesses including COVID-19. Large-scale adoption of a mainly plant-based diet would make a significant contribution to reducing carbon emissions.

Public procurement of food (for example in schools, hospitals, care homes, prisons) can play a major role in promoting plant-based diets. Community gardens and other existing initiatives can help to ensure that financial constraints do not force people to make unhealthy dietary choices.

Lockdown has forced many of us to revisit our cooking skills, and community kitchens can promote healthier diets while showcasing the fantastic diversity of culinary cultures in the borough. [H&F Foodbank](#) is the busiest in London (2018 data), and during lockdown received increased support from the Council and the local community, moved to a home-delivery model, and substantially increased its reach.

How we feed our children has a life-long impact on their health and habits. Breast milk is the most environmentally friendly food for babies, with no waste, and a zero water and carbon footprint. [Six months of breast feeding saves an estimated 95-154kg co2 per baby.](#)

Powdered formula milk requires water heated to 70c, an energy equivalent of charging 200 million smartphones annually, and results in enormous amounts of metal and paper packaging waste. There are many reasons why individual women might choose not to breast feed, but lack of opportunity, privacy or support should never be a factor.

What needs to change?

Changing diets requires attention to affordability, cultural and personal preferences and the influence of marketing, especially for younger consumers. Supporting changes to healthier diets that are also good for the planet entails multi-pronged initiatives that include information and education as well as creating an enabling environment that supports better choices.

The Council should develop and implement a borough-wide food policy in consultation and collaboration with:

- private sector operators (eg wholesale suppliers, distributors, supermarkets, independent shops, farmers markets, market traders and their associations, restaurants, cafes, pubs, fast food and takeaway outlets)

- community organisations (eg food banks, community kitchens, allotment holders)
- the public sector (eg hospitals, schools, prison, care homes)

The policy should be based around the following key dimensions:

Food production and distribution

Support local production by preserving and expanding allotments; actively encourage rooftop and urban gardening in commercial and, where possible, residential and public buildings.

Reduce emissions from local food distribution by encouraging the use of small electric vans, cargo bikes, and other sustainable low-emission transport modes.

Encourage supermarkets and local independent retailers to provide seasonal produce, sourced as locally as possible and embodying fewer food miles.

Protect and encourage local markets and stall holders, including Shepherds Bush and North End Road Markets and other weekly and/or seasonal farmers markets.

Food provision and consumption

Use public procurement to support a substantial reduction in the consumption of meat and ultra-processed foods.

Encourage and facilitate growing of fruit and vegetables, and food preparation and cooking, in local schools and other educational and community settings.

Support local community initiatives, including food banks, communal kitchens and other projects that pre-date or have emerged in response to COVID-19, through information, communication and shared learning.

Ensure that everyone living in hostels and temporary accommodation in the Borough has access to adequate food storage and cooking facilities.

While acknowledging that non-chain outlets are an important employer, and that fast food is sometimes seen as the most convenient and affordable food for low-income residents, the Borough must address the overwhelming availability of fast-food outlets locally, supporting those providing healthier meals and minimising packaging and other waste.

Breastfeeding

Educate and support the community to increase breastfeeding rates using voluntary peer support projects, welcome schemes in local private and public establishments, and liaising with local NHS initiatives.

Encourage and monitor compliance with the International Code of Marketing of Breastmilk Substitutes adopted by the UK Government, thus helping to eliminate misleading aggressive formula marketing.

Encourage all employers to provide suitable on-site arrangements for breastfeeding, pumping and storage of breastmilk, and safe facilities for the preparation of breastmilk substitutes.

Food waste

Reduce food waste from retailers by supporting local initiatives ensuring that still-safe healthy food approaching its sell-by/use-by date reaches those who need it.

Educate and inform residents on the best ways to reduce household food waste.

Establish and promote initiatives throughout the Borough, including on council and private estates, and for residents in houses of multi-occupancy, to compost and recycle inedible food waste.

Support and encourage the reduction of plastic wrapping and other non-recyclable materials in food packaging.

Health

Finding headline

Investing in high quality health and care services which contribute to green recovery and are resilient to the impacts of climate change is essential to the well-being of all LBHF residents.

Summary of proposed actions

- A green recovery plan to help to build climate resilience into our local health and social care services
- Engage public health expertise in all areas of Council policy

Existing context

Everywhere in the world, including right here in our own Borough, health outcomes are strongly associated with levels of deprivation and inequality of resources and opportunities.

People living with chronic conditions or disabilities, as well as the very young and the very old, those living in cramped or unsuitable housing or who are financially or socially insecure, are the most vulnerable to both the immediate and longer-term impacts of climate change ([London Assembly Environment Committee, 2020](#)).

Health is intimately related to all the other areas of life explored in this report. From making it easy for women to breastfeed their babies, to enabling children to cycle or walk to school, and breathe clean air; from ensuring homes, schools, hospitals and workplaces are safe, cool in summer and warm in winter, to nurturing our green and wild places; from reducing the carbon emitted by cars and heating systems, to safeguarding our water supplies.

All these require a committed and engaged Council, a strong local public health focus, a thriving local green economy and recovery, and the enthusiastic involvement of local residents, workers and businesses.

Observations on the current situation

The Lancet's [Countdown Report on Health and Climate Change \(2019\)](#) contrasted two pathways – one that continues with the business-as-usual response and one that limits the global average temperature rise to “well below 2°C”.

With the business-as-usual response it predicted that “climate change [will impact] human health from infancy and adolescence to adulthood and old age,” and warned of impacts ranging from increasing food insecurity, disease transmission, air pollution and extreme weather events, to the “difficult to quantify [downstream risks] such as migration, poverty exacerbation, violent conflict, and mental illness, affect[ing] people of all ages and all nationalities.”

More positively, the “alternate pathway could result in cleaner air, safer cities, and more nutritious food, coupled with renewed investment in health systems and vital infrastructure. This ... would transform the health of a child born today for the better, right the way through their life.”

In the UK, summers are rapidly becoming hotter and drier, and winters warmer and wetter. Key health-related findings from a [Review of Climate Change Risks in London \(April 2019\)](#), reporting to the London Assembly, included the following:

- two thirds of London flats could experience overheating (temp over 28°C) by 2030s
- for every 1°C increase over 20°C ambulance call outs increase by 1 per cent
- in the most vulnerable districts in London, the odds of dying from cardiorespiratory causes increased by more than 10 percent for every 1°C increase in temperature, compared with virtually no effect in the most resilient districts

It is widely acknowledged that the climate crisis and associated loss of wildlife habitats, bringing animals and humans into ever closer proximity with each other, makes it increasingly likely that new diseases will develop with the potential for pandemic spread in our super-connected world ([Guardian 2020](#)).

COVID-19 has dominated our lives over the last year. Our local and national health and care services are a precious resource, with dedicated staff. This crisis has shown how dependent we are on these services, but also how fragile and under-resourced they are.

The commercialisation and fragmentation of our health systems, our dependence on international supply chains for food, pharmaceuticals and medical equipment, the twin threats of antibiotic resistance and newly emerging pandemic diseases, all present substantial challenges.

A strong, forward-looking public health service is absolutely fundamental in the context of forward planning for climate change, making progress toward a low carbon society, controlling the spread of infectious diseases, and adapting health and care services.

Summary of proposed actions

Commission members were reluctant to impose further demands over the past months on local public health and other health and social care professionals, officers and staff, all of whom have been on the front line of the borough’s COVID-19 response. Consequently, we have not yet engaged actively with them about longer-

term policies relating to the climate and ecological emergency, although we very much want to do this in the next year.

We are sure that the local experience of managing the COVID-19 emergency has been invaluable, and we cannot overstate the importance of supporting a green recovery to build resilience into our health and care services for the future.

Leadership

LBHF must embed a culture of action against carbon emissions within the Cabinet and Senior Leadership Team that is enforced across all council activities. They must provide a vision and build a new governance framework against which LBHF can determine if future policies will support our communities transition to a zero-carbon and ecologically rich society.

Leadership in H&F

Finding headline

Embed a culture of urgent action across the organisation.

Summary of proposed actions

Provide a vision – that helps us change to a zero-carbon society

By articulating the amazing quality of life that could be achieved by living in a zero-carbon, ecologically rich society, we can build an exciting and positive vision for the future that encourages positive changes in behaviour.

Measure our carbon emissions – and make a plan for how to reduce them

The measurement of carbon emissions of any project, policy or action, must become just as important as the assessment of financial viability, legality and equality.

Build knowledge at a local level – so that we understand what needs to be done

Training, education and research is urgently needed to improve our carbon literacy and our understanding of the impact that our decisions have on our environment.

Communicate this knowledge and tell the truth about the dangers that lie ahead

Sharing this knowledge with staff, public and visitors in an open and honest way is needed to encourage the changes in behaviour that are now required.

Build wealth within our community – so that investment benefits local people

Direct the investment that is now needed towards our own community so that everyone is provided with the support they need to enjoy living in a zero-carbon society using [Community Wealth Building principles](#).

Define a new framework for success – ‘improved well-being for everyone’

Establish a new framework to measure success that ensures all decisions are both ecologically safe and socially just using tools such as the [Doughnut Economic Action Lab](#).

Regenerate our natural environment – so that nature’s true value can be understood

From now on, our land must be used to help regenerate nature and enhance biodiversity as a priority. The total area of our green spaces should be increased by 50% over the next 10 years.

Lead by example – demonstrate what needs to be done by doing it, so that others can follow

Establish a series of demonstrator projects that show by example how we can reduce our carbon emissions to zero and learn to live in a zero-carbon society.

“Encourage people to maintain 'local lives' - maintaining community spirit amongst neighbours, supporting local shops/cafes when working from home, using their local parks, working from home more.” Commonplace Consultation October 2020

Existing context

We have found that LBHF show consistent support for robust action to reduce our carbon emissions and enhance biodiversity. The leader of the Council has demonstrated his personal commitment by confirming his central role in driving an agenda for change. This has been communicated to the Cabinet, and the Senior Leadership Team are going out of their way to respond accordingly.

LBHF are determined to become the greenest borough in the country and since declaring a Climate and Ecological Emergency we are pleased to see that the [H&F Vision](#) now includes ‘Rising to the Challenge of the Climate and Ecological Emergency’ as its sixth priority.

The Climate Change Unit has been established and shows that LBHF understands that responding to the climate emergency requires actions across all departments and is not the responsibility of a single directorate within the department for the environment.

Observations on the current situation

The actions that are now required for LBHF to become the greenest borough in the country and to respond to the climate and ecological emergency represent a significant change in the way we currently do things. A number of suggested solutions have never been done before and will require a pioneering spirit of experimentation and invention before we get them right.

The implementation of new policies and projects are currently controlled by the rules set out in the constitution, which have been established to ensure consistency and fairness in decision making. The constitution also establishes a strong culture that prioritises value for money over social and environmental benefits. The Social Value Act (SVA) has recently been adopted by LBHF that allows 10% of any contract to be evaluated on SVA principles, but this is still a very small proportion of the overall investment.

[The Industrial Strategy](#) calls for Economic Growth for Everyone and takes a social value approach to procurement to create opportunities for local firms. Care needs to be taken to ensure that the investment delivers on its local ambition and provides benefits to local people without damaging the environment.

The Climate Change Unit provides the structure by which action can be agreed across all departments in a co-ordinated strategy, but this must be given senior leadership level authority and the leader of the Climate Change Unit must sit at the

top table with the other directors, in order to ensure that carbon reduction is given the same level of priority as financial, legal and principles of equality.

What needs to change?

LBHF needs to define a strong, positive vision for what Hammersmith & Fulham would be like if we succeeded in our ambition to reduce our emissions to zero by 2030 and made space for nature to thrive.

For the scale and pace of change now required to be acceptable, a robust communications plan must be prepared that shares this vision with confidence and tells the truth about the dangers that lie ahead, whilst supporting residents with ideas and solutions that encourages positive changes in behaviour.

A period of training, research and gathering of knowledge is needed to make best use of a growing body of ideas that is emerging across the country. And this knowledge should be shared through an effective engagement strategy that helps everyone to understand why change is necessary.

We must learn how to measure our carbon emissions and understand the impact the choices we make have on our environment. The success of any policy, project or action should then be measured against its ability to reduce carbon emissions to zero within a planned timeframe.

A new framework for defining success should be established using tools such as Kate Rayworth's Doughnut Economics Action Lab taking into account a wider range of parameters than just economic growth, to define if policies, projects and actions are actually improving the well-being of our communities.

We should aim to reduce the extraction of wealth, by making wealth more generative and environmentally nourishing, where our communities are put first and people are provided with opportunity, dignity and respect to help them to make positive choices. New procurement rules should be designed to ensure that funding is used to train and employ local young people wherever possible, and that the core purpose of any investment or project is being carried out to improve our well-being.

The value of our ecological systems must be better understood. Open space is now in very short supply and we must increase the total area of green open space by at least 50% over the next 10 years, in order to allow nature to regenerate. Trees, plants, insects and wildlife are essential for our well-being and our very survival. For example, a strategic approach that reduces the area of land used by roads and parking and increases land for plants and green space can begin to address the balance between hard surface and biodiversity.

To demonstrate their commitment to reducing our carbon emissions and regenerating nature LBHF should immediately invest in a series of demonstrator projects that would test ideas and lead by showing what a zero-carbon society might look like.

Demonstrator Projects might include:

Zero-Carbon Living

Look at a council owned estate, for example the White City Estate and provide systems and services that enable the residents to live a zero-carbon lifestyle. For example; retro fit existing housing stock, identify local energy source, establish district heating system, enhanced biodiversity, provide free public transport, provide easy access to social support, good food supplies, support for health services all within 15 minutes of their front door.

Zero-Carbon Working

Identify a commercial environment and demonstrate how it could be built or refurbished to provide zero-carbon working environment. For Example, the Civic Campus offices could be used as an example that measures the embodied carbon in all new build elements, provides support and systems for 15 minute walk or cycle to work, zero-carbon energy source, super-fast broadband connection to home working environments etc.

Community Map that Builds Local Knowledge

Build a map of the local communities' environmental success stories. Set up an on-line community map that allows everyone to contribute with their own examples of all the good things that are already going on and links to ideas and solutions that help everyone to change their behaviour.

Zero-Carbon Commerce – Library of Things

Provide a space for the community to build a library of things or a place where stuff can be shared or repaired to demonstrate how our desire for shopping can be accommodated by providing a place where we can re-use and repair, rather than buy new things that soon get thrown away.

Community mapping

By developing a mapping tool that captures both the good things and bad things across LBHF, we can gain knowledge directly from our community and engage with the residents of Hammersmith & Fulham.

By providing residents with easy access to knowledge through a mapping tool, residents will be empowered to change behaviour and strengthen the well-being of our community.

Community Mapping in H&F

Finding headline

Consolidate currently fragmented knowledge of risks and assets within the Borough into maps that include community initiatives and perceptions and form the basis for co-produced actions.

Summary of proposed actions

There is a wealth of knowledge on existing and future local climate and ecological risks and of local assets that can help mitigate and adapt to such risks. This knowledge is essential to formulate ground-breaking policies and to secure widespread public support, but to achieve this, two actions are needed:

- first, consolidate existing knowledge and show what the Council is already doing; and
- second, through participatory mapping connect with existing local initiatives and engage residents, especially youth and minorities, in deciding on priorities for co-produced actions (whereby the Council provides an enabling environment and support to community-led activities)

Council Interdependencies: all departments - the maps are a key tool to foster cross-departmental collaboration.

Carbon reduction and biodiversity: maps and participatory mapping exercises will help identify priorities for action (eg identification of green spaces to support biodiversity, food production, floods and heat island reduction; cycling and walking routes; waste collection systems), their location within the borough and existing initiatives that can be engaged in co-production of solutions.

Envisioning a better world: a borough that recognizes and values the knowledge of all residents in achieving just transitions to net zero carbon and where policies and initiatives are developed through bottom-up processes that involve wide consultations and collaboration.

Observations on the current situation

The climate/environmental crisis affects everyone and everything. But its impacts are highly diverse across the Borough's space and for different groups of residents. Understanding this diversity is important to inform actions that help mitigate risks and reduce carbon emissions.

Let's take flooding, for example, one of the key impacts of climate and environmental change. We tend to think of areas along the river as the most exposed to flooding and it is true that there is a high risk there; however, flooding is just as likely to come from concentrated rainfall or 'rain bombs' (when the amount of rain usually falling over a period of months just falls within a few days or even hours).

This is happening more and more frequently and affects locations far from the river but with surface drainage that is inadequate to absorb such vast amounts of water, including few green spaces. And let's look at heat waves, another key impact of climate and environmental change.

While this, at least apparently, should be spread more evenly across the Borough that is not the case. Due to the heat island effect, heavily built-up areas are always much hotter compared to parts of the borough with more green spaces and wider roads.

This spatial diversity in exposure to risks is reflected in residents' ability to cope with them. Access to a private garden (or a public green space close to home) can help reduce temperatures and absorb floods more rapidly and with less damage while benefiting both physical and mental health – as seen with the COVID-19 lockdown(s).

Even having access to enough financial resources to buy electric fans can make a difference. Pinpointing the locations where risks are higher and where residents are more likely to be vulnerable to their impacts is of great help to guide effective interventions. The current call by local governments and city mayors for more granular local data during the COVID-19 crisis reflects this.

Opportunities are also spatially located, although often difficult to identify unless we can tap on local knowledge; for example, vacant plots that can be used for micro-forests or community food gardens. The social benefits of specific places can also be difficult to pick up by external eyes: locations that seem almost abandoned can be important places for exchanges and meetings for local residents (the Amsterdam Circular Strategy recommends creating an inventory of such places to avoid unwittingly destroying them). The critical issue is thus how to make this knowledge visible.

Participatory GIS (geographic information system) mapping represents local people's spatial knowledge, highlighting the physical and social dimensions of risks, assets and opportunities. The kind of maps we need should be shared, accessible and aiming to encourage networking and communications whilst showing existing local initiatives (including those by the Council). Creating and managing them can support skills creation, for example involving universities and innovative small-scale businesses in training young school leavers.

COVID-19 has shown how important community organisations are to respond to crises – but also, in less dramatic times, to ensure residents' wellbeing and represent those who have less voice in influencing policy, who in most cases are the same groups more vulnerable to the impacts of the climate and environmental crisis.

Community organisations have a wealth of local knowledge – physical and social – that should be the foundation of participatory mapping whilst ensuring that this is not a one-off but an ongoing activity that combines knowledge creation and local engagement.

What needs to change?

Rather than being a one-off activity, mapping should be a long-term process combining knowledge creation and engagement around the climate and environmental emergency. It can also be a useful tool to bring together different parts of the Council as well as different communities within the borough. Hence an emphasis on capacity building, both:

- a) within the council (what maps exist, who makes them, what are they used for/what data is there, how can they be expanded to become a more open platform collecting existing and new knowledge, as well as tracking change and monitoring action), and
- b) among communities, especially the least represented/with less voice.

a) can probably use more traditional approaches to GIS mapping, while b) can be a series of participatory mapping exercises where focus areas and topics are determined by the communities themselves and are likely to include both 'facts' and perceptions.

When undertaking mapping with communities, it is probably best to start with a pilot involving community champions and other grassroots organisations within the Borough. Outputs from these exercises can be either standalone maps or (preferably) sub-folders or layers of the borough-wide map.

Management of the information collected on the maps is an important issue and essential for monitoring progress towards net zero and the action plan. Preferably this should be shared between the Council and communities. How to do this should be explored later.

We are delighted that [LBHF have committed to establishing a community map](#), making use of the Commonplace platform and we would encourage everyone to participate.

Biographies

Sian Alexander

Sian is Executive Director of the Lyric Hammersmith and has previously worked as a senior management consultant in the arts working with organisations such as the Nuffield in Southampton, Creative Industry Finance, Tricycle Theatre and the World Stages Consortium among others.

From 2012 to 2014 she was Executive Director of the Bush Theatre and prior to that was Associate Director of Julie's Bicycle from 2010 to 2013 and Head of Theatre in London at Arts Council England for 10 years until 2010.

She is Chair of Trustees for Frantic Assembly as well as being on the Boards of Julie's Bicycle, the Gate Theatre and London Theatre Consortium and was previously on the advisory board of non-zero one. Sian became a Clore Fellow in 2006 and in 2019 she was appointed Chair of Hammersmith & Fulham's Women's Equality Commission.

Artin Amjady

Artin is a local resident born and raised in the Borough. He is in education doing his PhD on political theory at King's College London. Artin is passionate about the climate crisis and doing something practical to see changes in our community and society to achieve a sustainable, green future we would all like to live in.

Paul Beaty-Pownall (Chair)

Paul has lived in Fulham for 30 years and has enjoyed the benefits of living close to the west end, whilst enjoying the open spaces and views that come with living on the edge of the city and near the River Thames. A father of 3 children who are growing up fast and will soon be faced with the challenges of finding work in a post COVID-19 economy.

Paul is an architect and director of a Putney based firm, where he is also author of a number of design guides that look at the future of railway station design and how stations should be designed to serve their local community. Paul believes that a zero-carbon future is something to look forward to and that it is now time for us all to

work together to design a community that measures success through high levels of well-being for everyone.

It has become increasingly understood by all parts of our society that urgent action is now needed to protect ourselves from the worst impacts of climate change. This shared understanding gives Paul hope that the action needed might also bring our divided society together and be a truly positive experience.

Morag Carmichael

Morag has been interested in nature and involved with Friends of the Earth and Greenpeace for many years and has been co-ordinating the local Friends of the Earth group for about 5 years.

She chaired the Hammersmith & Fulham Biodiversity Commission in 2017 and has had hands-on experience with Trees for Life in Scotland and local volunteer groups working to enhance the environment for wildlife to thrive. Ever since seeing the film Age of Stupid back in 2009 she has been highly motivated to act on the climate crisis and she is a member of the local Extinction Rebellion group.

Helen Dell

Helen has worked for over 25 years in infrastructure development. Her career started as transport and environmental economist working on project feasibility in the UK and overseas, and then she moved to public sector infrastructure procurement at HM Treasury's Treasury Taskforce (TTF) and Partnerships UK (PUK).

Over what was a ten-year period of working in central government, her roles covered the development and procurement of projects and programmes for the public sector, in transport, flood defence, waste management delivery, the health sector and commercial initiatives in science and technology.

Since 2008 Helen has focused on family life, whilst working part time for a period as a Non-Executive Director with a firm of architects and urban designers. More recently Helen has undertaken a number of volunteer roles in the local community and is a committee member of her local residents' association.

Stephen Farrant

Stephen is a responsible business consultant, non-executive director and strategic advisor. Through his own sustainability consultancy, he helps organisations (from sectors including travel, renewables, retail and not-for-profits) to re-think and re-purpose their strategy for the 2020s.

With some 15 years of experience enabling businesses to work on climate, sustainability and innovation, he started his career in the early 1990s at British Airways. Most recently he was Director of Sustainability and Innovation at Business in the Community (one of the Prince of Wales' leading charities) where among other things he established the Circular Economy Taskforce, the Purpose Toolkit, the Responsible Business Tracker, and BITC's work on responsible innovation in the digital age.

From 2009-2015, he led the International Tourism Partnership (recently re-branded as the Sustainable Hospitality Alliance), on whose Board he now serves.

Eleanor Harrington

Eleanor is Co-Director of Bubble & Squeak as well as being the Community Involvement Officer at Old Oak Community Centre in East Acton. Bubble & Squeak is the kids run social enterprise tackling food waste.

Since 2017 it has been running its pay-as-you-feel surplus food stall, after school clubs and community events, led by an inspirational group of local children who use nutritious surplus food to bring together the local community. Eleanor has an interest in building the wealth of energy, knowledge and ideas that exist in our communities to bring about grassroots change and to grow community-led ideas.

Yvonne Insh

Yvonne has been resident in Fulham since 1977. She is a mother of three, grandmother of eight and a great-grandmother of two. She is a registered nurse and registered midwife and is now retired from the NHS after 47 years' service. She is International Board Certified Lactation Consultant UK IBLCE country coordinator.

Yvonne's last posting was as a senior midwife, supervisor of midwives and infant feeding coordinator at Chelsea and Westminster NHS Trust. Since retirement in 2010 she has hosted a local voluntary breastfeeding support group.

She has been dedicated to the promotion and protection of breastfeeding and safe use and marketing of breast milk substitutes through work with local and national organisations such as Westminster/K&C/H&F infant feeding operational group, Lactation Consultants of Great Britain, and Unicef Baby Friendly Initiative UK and WHO.

Scarlett Knowles

Scarlett lives in Hammersmith and is in Year 12 at Latymer Upper School. She is the Youth Mayor of Hammersmith & Fulham and has prioritised the environment in her manifesto for the year. Young people are seriously invested in committing to improving the climate crisis.

She wants to help change the education system to teach children about the climate crisis and the solutions that will help implement positive change. Scarlett is passionate that now is the time for change to help benefit future generations as decisions that are made now will impact the generations after.

Holly Larrett

Holly spent over twenty years in the City providing investment advice on Japanese equities to institutional investors, latterly focusing on ethical and sustainable investment in Asia. In 2016 Holly achieved an MSc in Corporate Governance and Business Ethics from the University of London, Birkbeck College, and has a practical understanding of how sustainability and business ethics relate to commercial success and the wider role of corporate, public and charitable sectors. Holly is a skilled linguist with fluent Japanese.

Holly currently holds non-executive positions across the arts, education and the criminal justice sectors. Currently Trustee at Rambert School, sits on Management Committee of Camden Primary Pupil Referral Unit, and is an Independent Monitoring Board Member at HMP Wandsworth. She has lived in Hammersmith & Fulham for 16 years and has two teenage children.

Cecilia Tacoli

Cecilia has lived in Shepherds Bush for 30 years. She has worked in international development since the mid-1980s and for the past 25 years at the International Institute for Environment and Development, an independent policy research organisation.

Her main work focus and personal interest is bringing the voices of marginalised and vulnerable people to the table where decisions are made, through a combination of participatory approaches and tools, and advocacy with local and national governments and international agencies.

Cecilia has researched the interface between urban and rural areas, people and enterprises, the changing nature of urban poverty, and emerging food insecurity in cities of the Global South in the context of climate change. She has served as contributing author to the IPCC Fifth Assessment Report.

Pat Tookey

Pat worked at University College London's Institute of Child Health as an epidemiologist and public health researcher, and has over 30 years' experience in teaching, surveillance and research. Her main focus was on women and children's health, particularly infections in pregnancy and childhood, antenatal screening and immunisation.

She has lived in Shepherds Bush for 45 years, brought both her children up here, and has been active locally in various capacities including as a school governor. She is a Fellow of the Faculty of Public Health, a life-long cyclist, and has been involved in Hammersmith & Fulham's local Extinction Rebellion Group since it was established early in 2019.

Will Reynolds

Will holds an engineering Masters degree, and now works in the arts as a theatre set and lighting designer. He has lived in Hammersmith & Fulham for 14 years, where he founded and runs Metta Theatre, an internationally renowned touring theatre charity. He has two children at primary school in the Borough.

Will is Carbon Literacy Project trained and, as an Arts Council England Creative Climate Leader is working with major UK theatres to help green the theatrical touring sector through the Accelerator Programme.

Thank you