

# Climate Change and Ecology Policy and Accountability Committee

## Agenda

Tuesday 18 July 2023 at 7.00 pm

Room 9 (1st Floor)- 3 Shortlands, Hammersmith, W6 8DA

Watch the meeting live: [youtube.com/hammersmithandfulham](https://youtube.com/hammersmithandfulham)

### MEMBERSHIP

Administration	Opposition
Councillor Nicole Trehy (Chair) Councillor Ross Melton Councillor Laura Janes Councillor Stala Antoniadou	Councillor Jose Afonso

**CONTACT OFFICER:** Debbie Yau  
Committee Coordinator  
Corporate Resources  
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**Note:** This meeting is open to members of the public and the building has disabled access. If you would like to attend, please contact: [debbie.yau@lbhf.gov.uk](mailto:debbie.yau@lbhf.gov.uk).

Date Issued: 10 July 2023

# Climate Change and Ecology Policy and Accountability Committee Agenda

18 July 2023

<u>Item</u>		<u>Pages</u>
<b>1. APOLOGIES FOR ABSENCE</b>		
<b>2. DECLARATIONS OF INTEREST</b>		
	<p>If a Councillor has a disclosable pecuniary interest in a particular item, whether or not it is entered in the Authority's register of interests, or any other significant interest which they consider should be declared in the public interest, they should declare the existence and, unless it is a sensitive interest as defined in the Member Code of Conduct, the nature of the interest at the commencement of the consideration of that item or as soon as it becomes apparent.</p> <p>Where Members of the public are not allowed to be in attendance and speak, then the Councillor with a disclosable pecuniary interest should withdraw from the meeting whilst the matter is under consideration. Councillors who have declared other significant interests should also withdraw from the meeting if they consider their continued participation in the matter would not be reasonable in the circumstances and may give rise to a perception of a conflict of interest.</p> <p>Councillors are not obliged to withdraw from the meeting where a dispensation to that effect has been obtained from the Standards Committee.</p>	
<b>3. MINUTES</b>		4 - 8
	<p>To approve the minutes of the previous meeting on 28 March 2023 and note any outstanding actions.</p>	
<b>4. CLIMATE CHANGE SUPPLEMENTARY PLANNING DOCUMENT</b>		9 - 26
	<p>This report outlines new supplementary planning guides to help ensure new homes and development are more friendly to the environment. The new 'Supplementary Planning Document' offers guidance to developers, landowners, homeowners, planning officers and other interested parties when preparing and assessing planning applications.</p> <p>The new supplementary policies would apply to all new build homes, extensions and retrofitting of homes, non-domestic and mixed-use developments.</p>	

## **5. SOLAR ENERGY AND NET ZERO IN H&F**

27 - 58

The report gives a comprehensive overview of the Council's work on solar power and community energy, and the role it plays in delivering the Council's target of net zero greenhouse gas emissions in the borough by 2030.

## **6. DATES OF FUTURE MEETINGS**

To note the dates of future meetings:

- 21 November 2023
- 6 February 2024
- 23 April 2024

# Agenda Item 3

London Borough of Hammersmith & Fulham

## **Climate Change and Ecology Policy and Accountability Committee Minutes**



**Tuesday 28 March 2023**

### **PRESENT**

**Committee members:** Councillors Nicole Trehy (Chair), Ross Melton, Laura Janes, Stala Antoniadou and Jose Afonso

**Guest:** Dr Gary Fuller (UKRI Clean Air Champion, Environmental Research Group, Imperial College London)

**Officers:** Bram Kainth (Strategic Director of Environment), Geoff Cowart (Head of Communications), Mark Thomlinson (Climate Engagement and Behaviour Change Lead) and Debbie Yau (Committee Coordinator)

### **1. APOLOGIES FOR ABSENCE**

An apology for absence was received from Councillor Wesley Harcourt (Cabinet Member for Climate Change and Ecology).

### **2. DECLARATIONS OF INTEREST**

There were no declarations of interest.

### **3. MINUTES**

#### **RESOLVED**

The minutes of the meeting held on 31 January 2023 were agreed as an accurate record.

### **4. AIR QUALITY AND WOOD BURNING**

At the invitation of the Chair, Dr Gary Fuller ((UKRI Clean Air Champion, Environmental Research Group, Imperial College London) briefed members on wood burning and air pollution, including health impacts of air pollution in the UK, the use

of solid fuels on open fires to heat homes, the Kantar (2020) survey, impacts on indoor pollution, mapping new types of air pollution hotspots, transect walking winter 2022/23, use of open fires by Londoners, solutions: what's been tried and what's work, wood burning was not carbon neutral, reducing sources, and tackling air quality and climate change together.

Councillor Jose Afonso asked about the number of H&F households using wood burners and the source of fuel. Dr Fuller advised that only London-wide data was available.

In reply to Councillor Afonso's further question, Dr Fuller said that the introduction of ultra-low emissions zone (ULEZ) to Central London was highly successful and there was a reduction of nitrogen dioxide (NO<sub>2</sub>) from vehicles near roads by more than 40%. It was estimated that following the expansion of ULEZ across inner London, near road NO<sub>2</sub> would be reduced by just over 20%.

On Councillor Afonso's concern about the correlation of air pollution in H&F with asthma, Dr Fuller referred to international studies on asthmatic and air pollution which suggested that children were more susceptible to air pollution in the onset of asthma. He undertook to provide the report on research done by his colleague with data on asthma cases across the London boroughs.

Dr Fuller further noted an on-going in-depth study on the indoor and outdoor air pollution exposure of 100 selected homes in White City which aimed to recruit families with asthmatic children. At this juncture, Caroline Kelly, a member of the public, disagreed that there was a correlation between air pollution and asthma because of the level of emissions was ever changing. Dr Fuller pointed out that it was hard for the related study to detect early-stage asthma as people usually endured the day-to-day suffering until it was sufficiently bad to seek medical advice. Hence, the underlying chronic health data was often missing in the studies. The Chair considered it might be worthwhile to study the prevalence of asthma before and after the enactment of the Clean Air Act in 1956. She would also solicit the assistance of Councillor Ben Coleman, Chair of the Health and Wellbeing Board to identify suitable families for the exposure study.

Councillor Laura Janes asked about the enforcement of the Clean Air Act and the penalties, if any, imposed. Dr Fuller said as he understood, there were almost no fines for the last 10 years, except for a couple of cases taken up by Camden Council. He considered that effective policies might not necessarily involve enforcement which could be stressful and time-consuming. Communications and public engagement might be more effective and valuable and behavioural scientists played an important role in breaking down the barriers to changing people's behaviour. Responding to Councillor Stala Antoniadis' enquiry, Dr Fuller highlighted the behavioural change campaigns run by the Environment Canterbury Regional Council in New Zealand which had been successful in helping people to burn warmer, cheaper and smoke-free fire. Councillor Antoniadis urged schools to educate the younger generations so that they could bring home the message of smoke-free burning.

The Chair noted that according to the Kantar (2020) survey in 2018/2019 involving some 50k homes UK-wide, among the 8% homes using solid fuel for wood burning, 46% burnt for “traditional” or “aesthetic” reasons. She was concerned about the wording used in the survey questions. Dr Fuller remarked that the survey was conducted professionally via focus group, in-depth interviews, and telephone survey sampled weekly throughout the year.

Councillor Ross Melton referred to the recommendations under the slides on “Tackling air quality and climate change together” (p. 38 - 40) and considered that some of them were beyond the power of the Council requiring national input while some others might not be practicable. Dr Fuller explained that as a scientist, he had laid out the evidence for the stakeholders’ interpretations and actions. Councillors and officers might be in a better position to shape the way forward which, for instance, could be doing things under the existing policy and legal framework or raising awareness through education. In response to Councillor Melton’s question about enforcement in other areas, Dr Fuller stressed that it was more effective to start changing the narrative from “wood burning is carbon neutral”, “it is ok to burn wood providing it is dry” to “burning solid fuels on open fires are the most polluting way to heat your homes”. Echoing his view, the Chair considered it was also crucial to target the right people during engagement given 46% of homes were in social grades A and B.

Noting from the Kantar (2020) survey that 27% of UK primary PM2.5 came from solid fuel which nearly doubled that from transport exhaust, Helen Dell (Climate Change Commissioner) sought information on the same comparison for London. Dr Fuller advised that for London, wood burning was still the most significant source of particle pollution even though it had more transport than other parts of the country. As the air people breathed in London mixed with those coming from other places, the proportion of polluted particles from wood burning in the air was thus lower, say, about 7% to 8%. That said, it remained an essential task to identify air pollution hotspots and prevent the neighbours using solid fuel for wood burning in winters.

## **5. CLIMATE CHANGE COMMUNICATIONS**

Mark Thomlinson (Climate Engagement and Behaviour Change Lead) briefed members on the Council’s role in “Climate Action Together”, including an overview of the emissions pattern in the borough, perceptions towards climate and trends on actions, enabling climate-friendly behaviours, inspiring community climate action and collaboration with business and alliance members through communicating, informing and listening to the under-represented voices.

The Chair was keen to note how to kick-start engagement in respect of wood burning, and whether data should be collected via a survey or through group analysis. Geoff Cowart (Head of Communications) explained that in fixing a problem with residents, it was first necessary to understand the problem through the scientific data and devise solutions to address it. Communications should then hit the target residents who were burning solid fuel at homes which were identifiable through the house styles and the air quality in the neighbourhoods. After obtaining the demographic profiles of the homeowners via the social platform *Next Door*, an

effective educational and informative campaign about the danger of using solid fuel for wood burning could be created for the target audience.

Geoff Cowart referred to the Global Action Plan undertaken by the Mayor of London which noted through *Next Door* that the age group of 55 to 64 was most responsive to the wood burning campaigns already run in other boroughs. While it was always useful to obtain more data from extra studies, the profiles represented by this age group could be used as a starting point for the campaign in H&F. He stressed the importance of the timing that the campaign should start around late summer/early autumn when people began considering the kind of fuel to buy.

Replying to Councillor Laura Janes' enquiry about linking with neighbouring boroughs in tackling wood burning, Dr Gary Fuller, while sharing the difficulties in changing people's behaviour, reiterated the need to change the narrative to "wood burning is not carbon neutral" and "it is not acceptable for your neighbours to equivalently moving six lorries up and down outside your home". Geoff Cowart remarked that as showed by the data, London had a problem associated with wood burning and the Mayor of London had started and led a campaign to reduce it. He highlighted that those campaigns advocated through social media network usually worked well. With reference to the implementation of the Clean Air Neighbourhoods trial schemes and the collection of scientific data along the journey, the campaign did bring about behavioural changes and tangible effects cumulative over time.

Mark Thomlinson responded that the question raised by Councillor Ross Melton about measurable metrics involved many departments and bodies within and outside the Council, including transport, education, and TfL. He advised that certain metrics would be available from the sustainability champions pilot such as the number of people recruited as volunteers and number of workshops held. On measurable impacts reflecting the policy outcome such as the Clean Air Neighbourhoods, it was necessary to analyse the traffic data which could be an arduous task. At the request of Councillor Melton, Mark agreed to provide metric data of the sustainability champions pilot after the meeting.

**ACTION: Mark Thomlinson**

Summing up, the Chair thanked Dr Fuller and officers for their presentations. The Committee looked forward to an action plan devised by the Communications Department to educate and inform residents against the use of solid fuel for wood burning.

**ACTION: Geoff Cowart and Mark Thomlinson**

## **6. DATES OF FUTURE MEETINGS**

The Committee noted the dates of future meetings:

- 18 July 2023
- 21 November 2023
- 6 February 2024
- 23 April 2024

Meeting started: 7.04 pm  
Meeting ended: 9.11 pm

Chair .....

Contact officer: Debbie Yau  
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**Report to:** Climate Change and Ecology Policy and Accountability Committee

**Date:** 18/07/2023

**Subject:** Climate Change Supplementary Planning Document

**Report author:** Hinesh Mehta, Head of Climate and Ecology

**Responsible Director:** Bram Kainth, Strategic Director of Environment

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### SUMMARY

This report outlines new supplementary planning guides to help ensure new homes and development are more friendly to the environment. The new 'Supplementary Planning Document' offers guidance to developers, landowners, homeowners, planning officers and other interested parties when preparing and assessing planning applications.

The new supplementary policies would apply to all new build homes, extensions and retrofitting of homes, non-domestic and mixed-use developments.

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### RECOMMENDATIONS

That the Climate Change and Ecology Policy and Accountability Committee:

1. Note and comment on the report.
2. Give feedback on the strategy, progress, and priorities.

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**Wards Affected:** All

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<b>Our Values</b>	<b>Summary of how this report aligns to the H&amp;F Values</b>
Building shared prosperity	By creating this new guidance, the council is supporting all new build homes, extensions, and retrofitting homes in the borough to be better suited for the variety of challenges caused by climate change.
Creating a compassionate council	The impacts of the climate emergency fall unequally on different groups. Actions to mitigate and adapt to climate change by providing guidance on

	planning developments to reduce this inequality and help residents manage the cost-of-living crisis, including initiatives to generate cheaper energy and tackle fuel poverty.
Doing things with local residents, not to them	Provides guidance to developers, landowners, homeowners, and planning officers on how to work together to create a borough with clean air, safe streets, green spaces for all and a strong local economy.
Being ruthlessly financially efficient	By changing the way buildings are being built, the way residents heat and power their homes, the council is able to bring co-benefits for system-wide cost savings, including preventative health and fuel poverty.
Taking pride in H&F	Brings residents and other interested parties together to take joint actions towards the borough's resilience to the environmental impacts of climate change.
Rising to the challenge of the climate and ecological emergency	Aims to make the construction of current and new buildings more sustainable whilst helping to build resilience against the effect of climate change such as poor air quality, flooding, and waste. It will enable residents and business owners to help achieve the borough climate targets.

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## Background Papers Used in Preparing This Report

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### DETAILED ANALYSIS

1. These new planning guides were prepared to help ensure new homes and developments are more friendly to the environment. It offers a guidance to developers, landowners, homeowners, planning officers and other interested parties when preparing and assessing planning applications.
2. These new supplementary policies would apply to all new build homes, extensions and retrofitting of homes, non-domestic and mixed-use developments.
3. It would create new guidance in H&F for sustainable design and construction, air quality, flooding, energy, ecology, waste, transport and travel.

4. By changing the way we build, heat and power our homes in the borough, we can create a borough with cleaner air, safe streets and green spaces for all as well as a strong local economy.
5. These new supplementary planning principles are designed to provide guidance to [H&F's Local Plan](#) whilst addressing [the climate and ecological emergency](#). They reflect the council's [vision for 2030](#), including our ambitious target to reach net zero carbon emissions in Hammersmith and Fulham by 2030.

## **LIST OF APPENDICES**

# Climate Change Supplementary Planning Document (SPD)



# Climate Change and Planning

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H&F uniquely threatened by rising temperatures - large portion of the borough lies within flood risk zones at risk from rising sea levels.

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Important that new development is designed to deal with changes in the climate such as heatwaves, drought and surface water/sewer flooding, reducing greenhouse gas emissions and reducing flood risk from the river.

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Planning policy must reflect the ambitions of the Council regarding climate change and net-zero.

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Planning has a key role in preventing and mitigating climate change through place-shaping, reducing reliance on the private car, active travel, public transport, shared mobility, and efficient and sustainable building practices.

# Policy Background

Industrial  
Strategy 2017

H&F Climate and  
Ecology Strategy

Clean Air  
Strategy

London Plan  
2021

H&F Local Plan  
2018

National  
Planning Policy  
Framework 2021

# Key Aims of the Guidance

Implement

- Implement the Council's Vision for 2030.

Take steps

- Take steps towards ensuring that the borough is net zero-carbon by 2030.

Focus on

- Focus on existing stock and what residents and businesses can do to deliver carbon reductions and how we as a planning authority will help to deliver carbon reductions and adapt to climate change

Take action

- Take action on air quality issues, and encourage sustainable travel throughout the borough

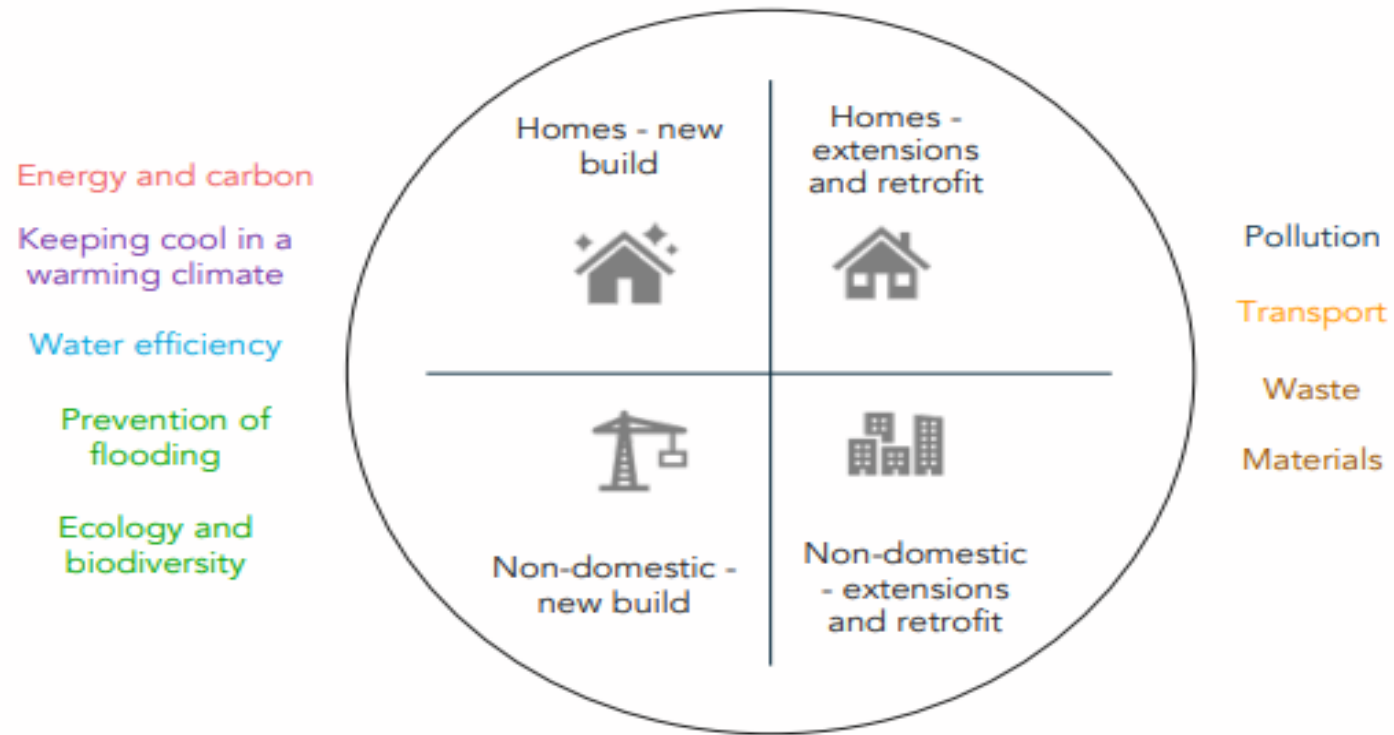
Improve

- Improve the environmental quality of open spaces.

Promote

- Promote biodiversity and biodiversity net gain.

# Structure of the Guidance

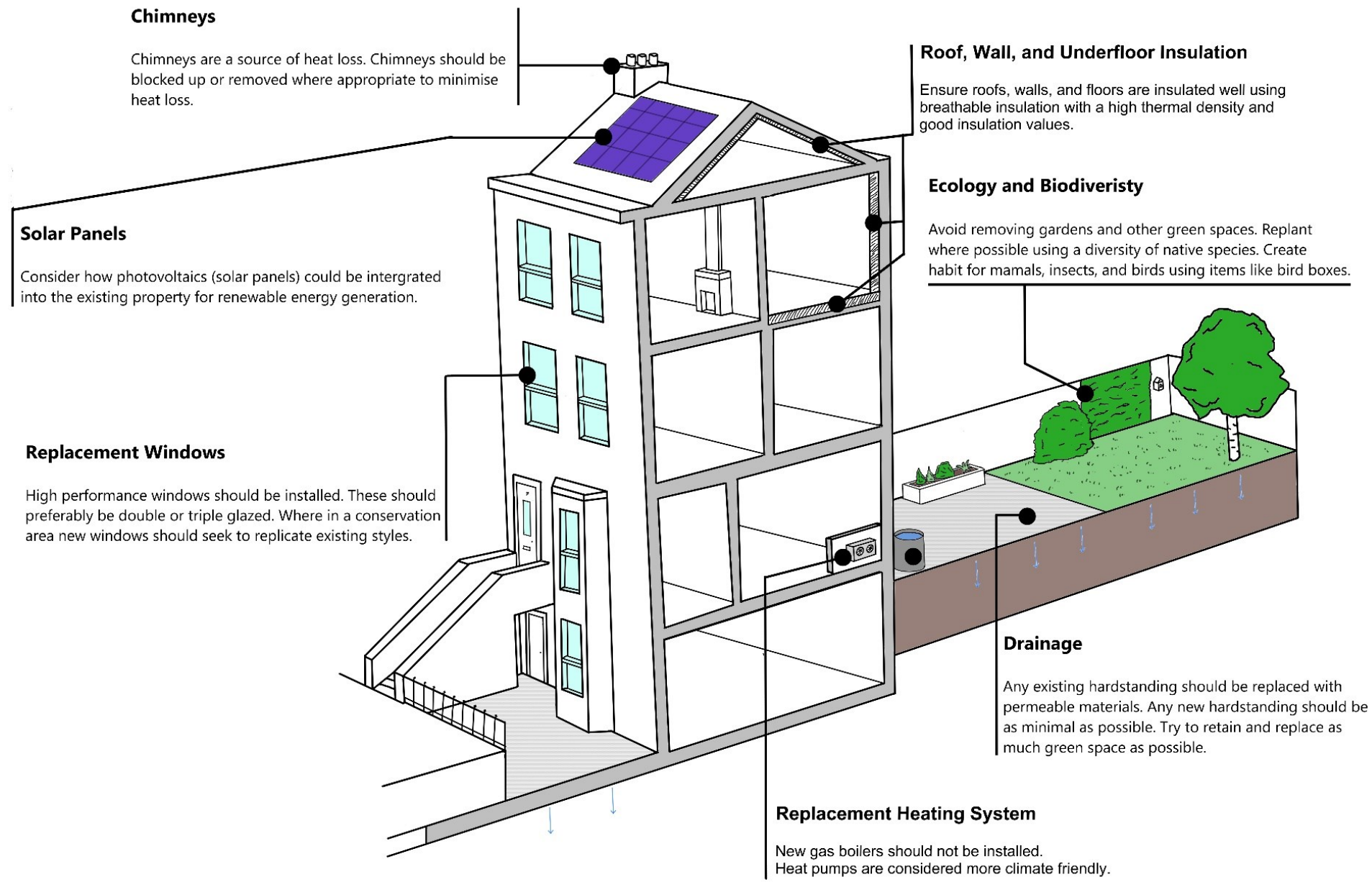


*This SPD covers all development types: new-built and retrofit, homes and non-domestic buildings. A broad range of climate change and sustainability issues are addressed.*

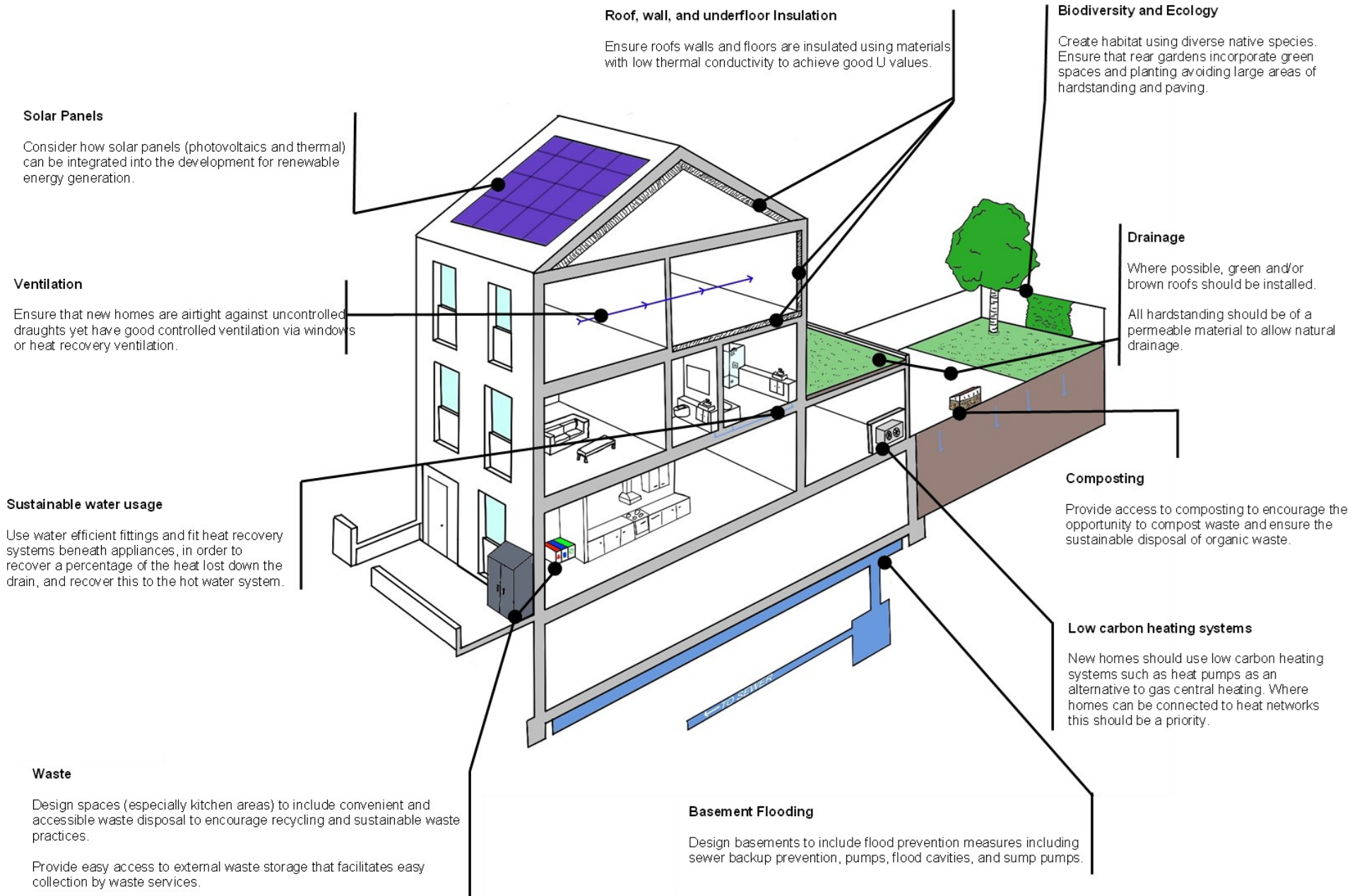


# Interactive Summaries - Retrofit

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# Interactive Summaries - New Homes



# Guidance

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Building Form

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Site and Orientation

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Ventilation and Overheating

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Renewable energy and Low Carbon Heating

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Embodied Carbon

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Water Efficiency

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Transport and Movement

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Air Quality

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Ecology, Biodiversity and Green Infrastructure

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Flooding and Sustainable Drainage

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Sustainable Waste Management

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Heritage and Conservation

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# Pushing the boundaries of Policy

## What you must do – Key Principles

- Bare minimum requirements for a development to acquire the basic level of climate resilience and must be incorporated into development in order to obtain planning permission.
- Mainly intended for developers and planning decision makers.

## What you can do – Key Principles

- Examples and signposting of good practice and steps that can be taken to minimise the impact of climate change on the built and natural environment.
- Intended for residents who would like to make their properties more climate friendly, and for developers who are looking to go above and beyond the requirements of the current Local Plan.

# Checklist

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- Easy-to-digest summary of what to include in planning applications.



## Energy Efficiency

- Have you maximised opportunities for natural solar gain and natural ventilation and minimised overheating risk through passive design and attention to building location, orientation and form?
- Have you designed the fabric of the building to be ultra-low in energy demand, achieving KPIs for space heating demand (kWh/m<sup>2</sup>/yr) and energy use intensity (kWh/m<sup>2</sup>/yr)?
- Have you assessed ventilation provision and overheating risks and included mitigation measures?
- Have you carried out a whole building baseline assessment to inform any retrofit programmes?

## Low Carbon Heating and Renewable Energy

- Have you provided an Energy Assessment with your major planning application demonstrating how renewable energy generation will contribute to meeting the London Plan requirement to be net zero carbon?
- Have you maximised opportunities to integrate low/zero carbon renewable energy generation, such as solar PV panels and Air Source Heat Pumps?

# Public consultation feedback

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- 7 week consultation ended on 8<sup>th</sup> June 2023
- 20 consultees responded
- 87 individual comments/representations

## **Consultees**

There was a broad range of consultees who responded to the consultation including 5 residents, Historic England, the Greater London Authority (GLA) and Campaign for Rural England.

## **Positive feedback**

On the whole comments were positive and welcomed the ambition to mitigate impacts on climate change and achieve net zero carbon emissions by 2030. However, each representation made suggestions of how the document could go further.

## **Issues raised**

One of the main issues raised by residents is the conflict in planning in Hammersmith and Fulham which exists between conservation and climate change.

The other main issues raised were specific to topic areas for example windows, front gardens, ventilation, air quality, biodiversity etc.

# Public consultation feedback

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## Issues raised

**Windows** – the new guidelines remain very limiting for houses in conservation areas with the emphasis on preservation of character in the face of the climate crisis. The council could provide more guidance on how to select new replacement windows so that you encourage people to buy the ones with higher energy efficiency ratings.

**Ventilation** - the guidance on ventilation needs to deal with communal areas as many are boiling hot in the summer and contribute to the overheating of flats.

**Signposting good practice** – the document could do more to guide householders who are making incremental improvements and need guidance on what they should be doing first, and signpost residents to reliable sources of information.

**Biodiversity and birds** - include vital "species features" such as swift bricks, bat boxes, and hedgehog highways as an integral part of the biodiversity policy, and consider existing populations of fauna, especially those which are dependent on buildings to nest and roost.

# Public consultation feedback

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## Issues raised

**Key principles** – query about whether the LETI and the Passiv Haus targets are a guide or an obligation. Is a net zero energy balance on site compulsory, or a stretch ambition to aim for?

**Trees and hedgerows** – more emphasis on Trees and hedgerows in the SPD to help mitigate the impacts of climate change, delivering natural cooling in urban heat islands through transpiration as well as providing shelter and shade, and contributing to sustainable urban drainage systems.

**Air quality** – suggest that it is best to avoid stove burners which are a significant contributor to poor quality because of the high level of particulate pollution, even with approved fuels.

**Front gardens** - we think the document needs to be much more specific about the undesirability of all types of hard surfacing for parking, and to advocate matrix paving (plastic grids or concrete blocks) just for the parking surfaces, so that the soil surface is exposed between the gaps, plants can grow and drainage occur naturally.



# Delivery Timeline and Next Steps



Final amended draft and representations schedule with officer comments to be produced by end of July 2023.



Political Cabinet - 4<sup>th</sup> September 2023  
Cabinet - 16<sup>th</sup> October 2023



Adoption middle of October 2023.

# Q&A



**Report to:** Climate Change and Ecology Policy and Accountability Committee

**Date:** 18/07/2023

**Subject:** Solar energy and net zero in H&F

**Report of:** Councillor Wesley Harcourt, Cabinet Member for the Environment

**Report author:** Hinesh Mehta, Head of Climate and Ecology

**Responsible Director:** Bram Kainth, Strategic Director of Environment

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### SUMMARY

The attached slide deck gives a comprehensive overview of the council's work on solar power and community energy, and the role it plays in delivering the council's target of net zero greenhouse gas emissions in the borough by 2030.

About 80% of the borough's emissions come from energy used in buildings, and most of this is due to heating buildings with gas boilers. While our most urgent priority should therefore be to retrofit buildings and decarbonise heat, solar energy should also be a priority as it is relatively simple to install, cost-effective, and a visible indicator of decarbonisation – and therefore has the possibility to galvanise the population and motivate further action. However, roof space in H&F is not sufficient to provide all the Council or borough's electricity requirements.

A short part of the report covers a national first, relating to ongoing work to develop policy around "re-use". Re-use is needed when solar panels are replaced with newer units before their end-of-life, a practice at risk of becoming commonplace as the decade progresses.

Solar energy can be financed in various ways, including from capital budgets, repayable loans, and community finance. This report focusses on H&F's partnership with Repowering London to establish the borough's first community energy group, Hammersmith & Fulham Community Energy (HFCE), which enables residents to become involved in solar schemes across the borough.

These community energy schemes stretch beyond reducing carbon emissions, with examples from elsewhere in England showing they can tackle fuel poverty, generate wider interest in climate action, and build resilience by strengthening the sense of community among residents.

As well as responding to a global crisis, tackling the climate emergency in H&F will bring benefits for residents and the borough that deliver on the council's other values and objectives. These include a thriving green economy; a clean public realm

## LONDON BOROUGH OF HAMMERSMITH & FULHAM

bringing improved health and wellbeing; a revival of biodiversity; and a locus for shared community involvement.

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### RECOMMENDATIONS

That the Climate Change and Ecology Policy and Accountability Committee:

1. Note and comment on progress on the report.
  2. Give feedback on the strategy, progress, and priorities.
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**Wards Affected:** All

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<b>Our Values</b>	<b>Summary of how this report aligns to the H&amp;F Values</b>
Building shared prosperity	The council is supporting local businesses and residents to invest in solar PV to mutually benefit from the profit whilst helping to decarbonise the borough.
Creating a compassionate council	The impacts of the climate emergency fall unequally on different groups. Actions to mitigate and adapt to climate change by decarbonising our buildings aim to reduce this inequality and help residents manage the cost-of-living crisis, including initiatives to generate clean energy and tackle fuel poverty.
Doing things with local residents, not to them	HFCE will provide a continuous programme of events and engagement with groups and locations around the borough. The aim of community energy is to develop a community-owned project, to drive action on climate change, create stronger community ties across the borough and share the proceeds of clean energy.
Being ruthlessly financially efficient	H&F has won various external grants, including for housing retrofit, corporate building retrofit, and local energy planning. Capital planning for carbon reduction is maximising opportunities for energy efficiency and maintenance cost savings as well as revenue generation from solar energy. Actions also aim to bring co-benefits for system-wide cost savings, including preventative health

## LONDON BOROUGH OF HAMMERSMITH & FULHAM

	and fuel poverty.
Taking pride in H&F	This community energy group will not only provide an ethical investment for the community but will also help people to connect with their community and take joint action towards energy resilience and sovereignty amid an energy crisis. It will also bring climate action and education to the community.
Rising to the challenge of the climate and ecological emergency	HFCE and the overall encouragement of solar energy installations will contribute positively to achieving Climate Change targets by reducing carbon emissions.

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### Background Papers Used in Preparing This Report

None.

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### DETAILED ANALYSIS

1. The slide deck presents an overview of the council's progress and current stance on solar PV and community energy.
2. The council is working hard to decarbonise its own estate by 2030, and to use its local powers and influence to support the borough to achieve the same.
3. The council has made important first steps towards decarbonising its operations. Most significantly this includes the retrofit of the civic campus, initiating the development of retrofit strategies for its corporate and council housing-built assets (which together represent 95% of its emissions, excluding procurement), and transitioning 15% of its fleets to electric vehicles.
4. To maintain this carbon reduction towards 2030, the council will accelerate its programme of retrofitting its assets. Four initial pipeline projects plus the flagship retrofit of the civic campus are underway in corporate properties, and five hybrid heat pump systems are due to be installed in council housing blocks by late 2022. Significant obstacles are being managed, including costs, eligibility for external funding, competing operational requirements for buildings and fleet, and capacity of the market to deliver projects.
5. Loft insulation, heating controls and draught proofing are the most cost-effective ways to make our buildings more energy efficient. However, solar energy pays back in under 10 years at current energy prices and is easily achievable on H&F building stock. There are two main types of solar energy.

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6. Solar Photovoltaics (PV) produce electricity and are often paired with battery storage. Panels vary in types and quality but are improving all the time.
7. Solar thermal panels are less common and can only produce heat. However, they are smaller and cheaper and therefore better than solar PV in some applications.
8. Hammersmith and Fulham is part of the GLA Solar Together joint buying programme which has led to over 100 installations on houses and small businesses in the borough. However, there are currently supplier issues, and the scheme is on hold.
9. The council is working together with retrofit contractors from the GLA REFIT framework to conduct solar surveys on our corporate buildings and schools. In total £800k of opportunities have been identified in the first 17 buildings and schools surveyed, 21 more to come in the near-term pipeline.
10. Hammersmith and Fulham Council has secured funding from the London Community Energy Fund to deliver solar on five potential sites across the borough. It has worked together with Repowering London to establish Hammersmith and Fulham Community Energy group.
11. Community energy projects have a distinct advantage in promoting awareness about fuel poverty and effective strategies to combat it. It has the power to alleviate two of the main factors causing fuel poverty – household energy requirements and fuel prices. Predating the current ongoing energy crisis, in Hammersmith & Fulham, 9.5% of households were in fuel poverty under the government definition – this compares to 13.2% nationally, and 11.5% across London<sup>1</sup>. With their strong local ties, community energy projects possess the unique ability to influence behaviour change and encourage the adoption of energy-efficient measures within households. As a result, they are well-positioned to provide educational initiatives and actively address the issue of fuel poverty.
12. Repowering London currently has eight established Community Energy co-operatives across London involving more than 650 investors and 60 local volunteers and directors reaching hundreds of children and young adults each year. They also offer training, mentoring and work experience opportunities that empower the residents of London to become active and engaged citizens. Thus, they are helping to build both an energy and a social infrastructure.

## LIST OF APPENDICES

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<sup>1</sup> Government sub-regional fuel poverty statistics - [Sub-regional fuel poverty 2022 - GOV.UK](https://www.gov.uk/government/statistics/sub-regional-fuel-poverty-2022) ([www.gov.uk](https://www.gov.uk))

# Policy & Accountability Committee

18 July 2023

# Solar energy and net zero in H&F

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Tim Pryce, Clean Energy Lead  
July 2023



*Image credit: Brian Thresh*



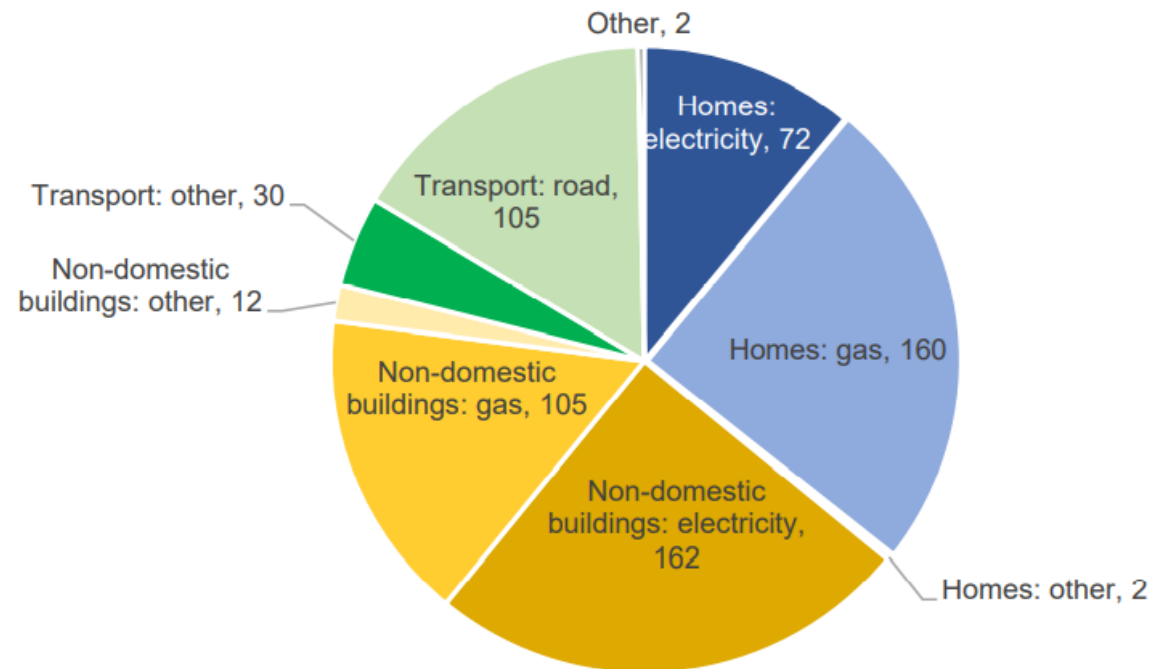
# Most emissions come from energy

About 80% of the borough's emissions comes from energy used in buildings. 90% of this is outside our direct control

Most businesses and households are on standard grid electricity tariffs

Most buildings are heated by gas boilers

H&F borough production-based emissions, 2018  
(kilotonnes CO<sub>2</sub>e)

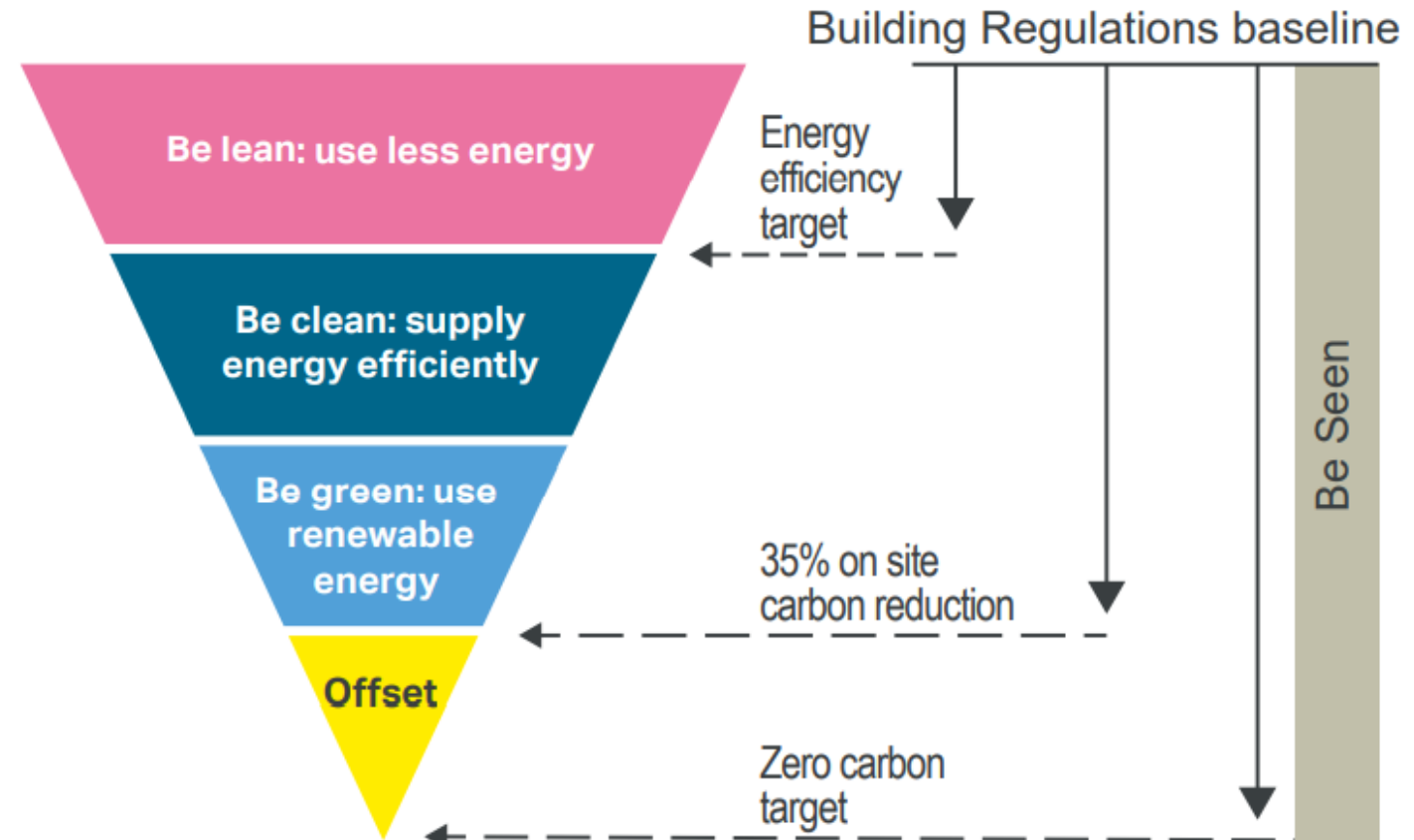


Source. HF Climate Strategy. Specifics TBC

# Net zero energy roadmap

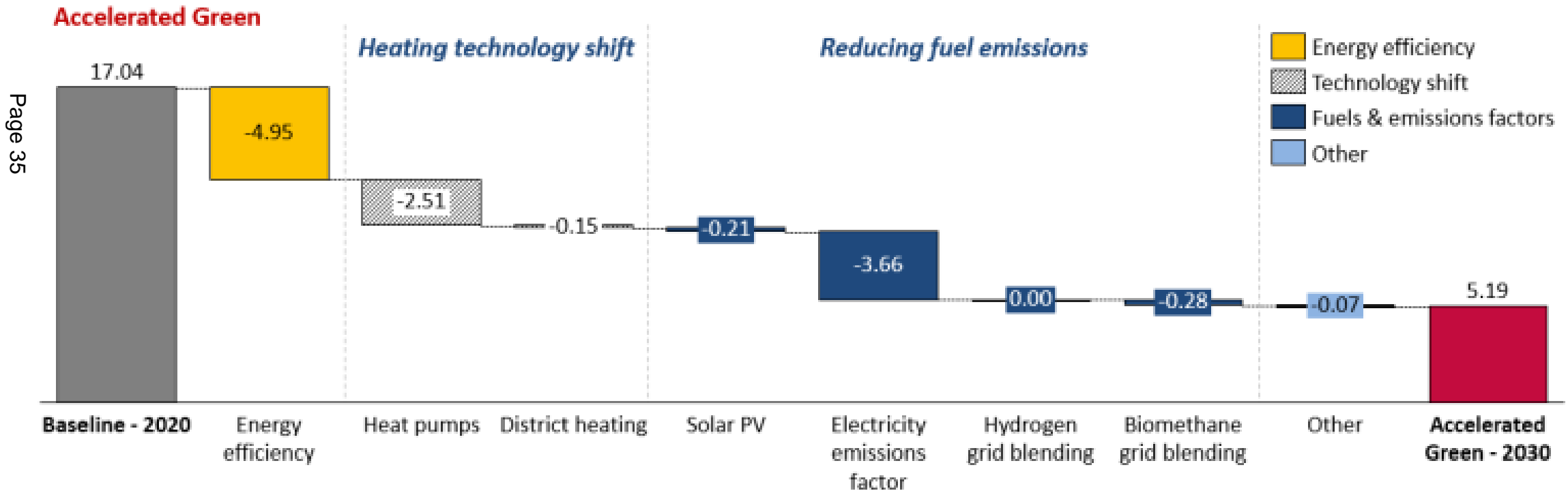
**Implement** on H&F assets.  
**Catalyse and influence** for wider borough.

- Retrofit of buildings – advice, grants, planning support
- Building-integrated renewables – households and businesses
- Deployment of heat pumps and heat networks
- Smart grid, EVs, energy storage
- Encourage residents to move to PPA backed renewable electricity tariffs (though fuel poverty)!



Source: Greater London Authority

# Energy efficiency and heat are the biggest wins for net zero buildings



Source [nz2030\\_element\\_energy.pdf \(london.gov.uk\)](#)

# Solar Photovoltaics (PV)

- Produce electricity - this is what people usually mean by 'solar energy'
- Different types available
- Consider roof size, angle, strength, exposure, maintenance
- Best for households that can self-consume electricity
  - heat pumps, EV, smart plugs, battery storage, hot water
- Cost £6k to £12k



# Solar thermal

- ONLY produces heat
- Cheaper in general ~£5k
- Needs hot water tank with solar heating coil
- Again, different types of solar thermal panel!



# Solar projects and policies in H&F



Image credit: Urban Partnership Group

# Actions to grow solar energy within H&F

- Community energy projects:
  - GLA Community Energy Fund solar projects on Rosaline Hall and Edward Woods CC
  - Hammersmith and Fulham Community Energy to deliver solar on (initially) three schools, a fitness centre, a church – won LCEF grants to help with this.
- Solar Together London joint buying programme has led to over 100 installations in H&F – but scheme currently troubled



# Solar on housing, corporate assets and schools

Solar surveys included in procurement of Asset+ retrofit contractor from the GLA REFIT framework – led by Economy

- £800k of opportunities identified on first 17 buildings and schools surveyed, 21 more in the near term pipeline
- Possible solar canopy over Bagleys Lane
- Finance via one or more of capital budget, MEEF, municipal bond issue, community energy.

Social housing retrofit strategy considering solar energy but potential limited as currently no mechanism to sell electricity to residents

- ~£29m of solar PV opportunities identified across H&F social housing





We are currently offering residents **free pre-planning advice** for retrofit measures and solar PV

Most domestic properties do not require planning permission



# **In development:** Solar re-use and recycling

# The context

- Solar farms are a business
  - PV modules are getting cheap
  - They last >25 years, degrading slowly
  - Five years ago: 18% efficiency
  - Today: 23% efficiency
- 000s of modules replaced early



# The prompt

- Post-Grenfell fire risk assessment
- 900 panels had to go
- We found out they were scheduled for disposal.



# What we did:

**We rescued and rehomed these  
900 solar panels.**

- Ground-breaking step in sustainability
- Huge carbon emissions savings (63 tonnes)
- Laying the groundwork for a nationally important second-hand market

**Challenges:** no local re-use possible  
swimming against the current

# Next steps

- Celebrate: many of these have been shipped, with carbon offset, to support humanitarian efforts in Ukraine and will be setup at a hospital
  - Provision for recycling at end-of-life also included
- Develop a policy for new solar installations so that these include a plan for rehoming.

## **Credits / collaborators:**

ReSolar (Matt Burnell)(Etta Dale); Energize Ukraine; Embassy of Canada

# Community Energy

# H&F Community Energy

## Supported by Repowering London





# Repowering London

Repowering London specialises in creating local energy projects. We work with communities to plan, build and fund their low carbon future. We believe that putting people at the heart of the energy system is key for addressing the climate emergency, building resilient communities, promoting technological innovation and creating a fair energy future.



## 1 Strategic vision

## 2 Strategic mission

## 3 Strategic goals

### Creating local energy

**To create resilient, empowered communities across London with greater control and ownership of their energy generation and usage**

<b>Decarbonise buildings</b> Reduce demand and generate decentralised renewable energy	<b>Local leadership</b> Promote local leadership through mentoring and community ownership	<b>Training &amp; employment</b> Provide training and employment opportunities for local people	<b>Reduce fuel poverty</b> Tackle fuel poverty through energy efficiency measures, advice and support, advocacy and trails	<b>Social investment</b> Provide opportunities for local and socially responsible investment
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## H&F 2030: CLIMATE AND ECOLOGY STRATEGY



### **Addressing Challenge 1. Homes, building and energy**

- Supplying local, efficient renewable energy (installing solar PV)
- Cost efficient access to renewable energy (sites receive a discount from their standard rate)
- Support all residents to live comfortably and affordably (community engagement focus on e.g. Warm & Well Workshops, Energy Saving Tips Workshops etc.)
- Working towards supplying cost efficient local energy to local people for local benefit (pioneering London Energy Local model)

# H&F Community Energy

Delivering H&F2030 - wider benefits



**Enabling through** engagement, education and influence; finance and decision-making; green economy

- **Amplify community action** through low cost enabling decisions and actions e.g., unused roof space leased to H&FCE for peppercorn; dissemination and support
- **Championing under-represented voices** core Repowering mission with award winning model of community engagement (Community Leads)
- **Build collective knowledge** capacity building and empowerment key to our model
- **Create conditions for change** proactive facilitation at H&F => created enabling environment for H&FCE to establish and LCEF success
- **Attract funding** via Community Share offers, freeing up council capital whilst still decarbonising
- **Bring green economy jobs and skills to residents** through volunteer capacity building and youth training (potentially integrated with installations)
- **Support low-carbon pioneers** Community Energy pioneering model of transformation. Repowering London involved in innovation across the sector.

# Repowering London - what is unique about us?

We put people at the heart of the energy system



## Empower Communities

Through mentoring, volunteering, training, work experience and knowledge sharing.

## Enabler

We act as an enabler / facilitator giving communities and local people the tools they need to build zero carbon future

## Diversity

We work with diverse communities including BAME, young, female and disadvantaged, hardly reached people across London.

## Inclusive and Fair

Our work and approaches ensure that everyone can participate and benefit from a zero-carbon future including the most vulnerable

## Innovation

We are leading energy innovation through our local supply trials, adoption of new technology and social innovation.

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# Repowering London - our impact

London's community energy development body, founded in 2011  
Repowering has established 8 energy coops across London



**707 kWp**

Total installed capacity



**650 investors**

Local community investors



**779 tonnes**

Carbon emissions avoided



**£768,661 capital**

Capital finance raised



**£206,750 fund**

Community Fund ringfenced



**149 young people**

Trained/paid work experience

## 2022 highlights:

- **37 kWp** of rooftop solar capacity installed in the City of London's first community energy project
- Ran/participated in **74 community activities**
- Reached **5,100+ people** on community energy topics
- Supported **60+ co-operative volunteers and directors** across 8 co-operatives
- Delivered **723 hours of paid training for 28 young people** on our Youth Training Programme - participants reported increased confidence and ability to influence decisions in their community
- Developed **public toolkit for whole building retrofit** in partnership with GLA and Future Climate
- Won the **Community Engagement and Inclusion award**, Community Energy England Awards 2022

# Project Governance

Repowering acts as an enabler - development body

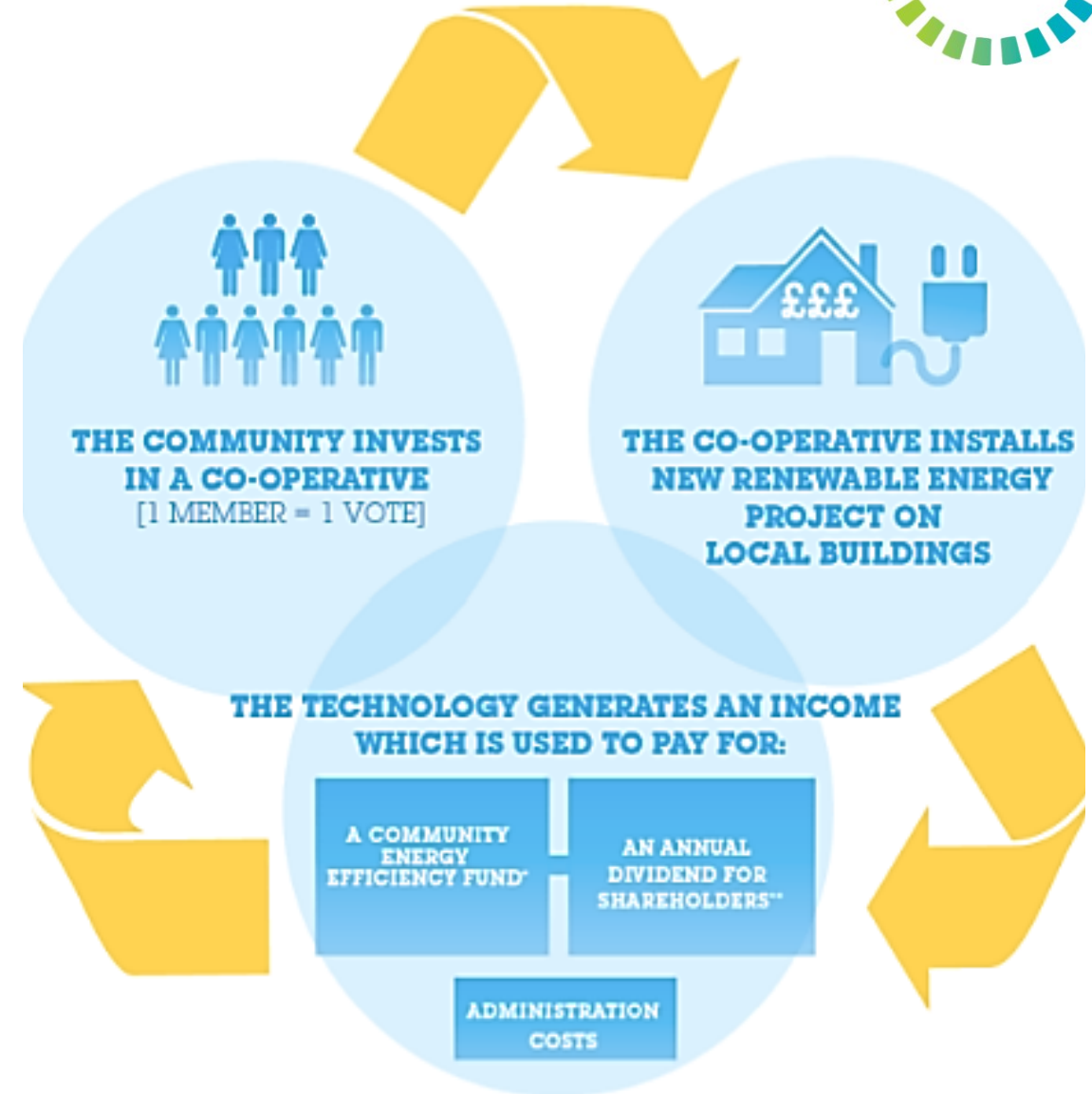


Each project is housed in an independent

## Community Benefit Society

### Core principles

- **Community** ownership, control and benefit
- **Democratic** - one member one vote
- **Inclusive** - local residents can join with a nominal £1 membership fee.
- **Community shares** - offer local green investment



# People powered decarbonisation

Creating local energy in two forms



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# H&F Community Energy

So far...



Community energy is coming to  
Hammersmith and Fulham!

Be part of creating

the FIRST

energy co-operative

in Hammersmith and Fulham

[hfcommunityenergy@gmail.com](mailto:hfcommunityenergy@gmail.com)

## Community Engagement

- Mentoring H&FCE resident group
- Registered co-op
- *Climate Connects* sign-ups (mailing list ~50)
- Climate Café webinar
- Community Events led by volunteer directors

## Feasibility

- Won GLA funding for 5 sites (technical & social feasibility)



# H&F Community Energy

LCEF Funding



In partnership with **H&FCE** and supported by H&C Council, Repowering London have secured the Mayor of London's "**London Community Energy Fund**" for feasibility studies for **5** sites.

Repowering London **feasibility studies include**: in-depth solar capacity analysis; on site electricity usage analysis; structural survey; planning application and permission; a range of community engagement activities, ideally in partnership with H&F Council. At the end of the study, Repowering London deliver a report to the sites, Council and the GLA. There is no obligation to install solar panels at this point.

**For the project to proceed**, final approvals required are:

- 20-year rooftop lease (peppercorn rent for use of the roof)
- 20-year Power Purchase Agreement agreed (to purchase generated electricity)

Repowering London have a social impact funded financial vehicle (**Repowering Communities**) which enables us to install as soon as the above agreements are in place.

# Appendix - Case Study

## North Kensington Community Energy



- Partnership project between Repowering London and the Royal Borough of Kensington and Chelsea Council
- Community benefit society registered in 2018
- 224kWp of solar PV installed, saving 46t CO2 per annum
- Goal to install 1MW of solar PV across the borough
- 46 young people trained for the green economy
- Winner of Community Renewable Energy Project Award 2019 and Climate Coalition's Inspirational Community Project Award in 2020
- Employs a Community Lead dedicated to movement building and community cohesion in the borough
- Held two "Greener Living Days" bringing together local sustainability initiatives
- Currently developing London's first purpose made community energy project to reduce energy bills of residents in social housing

