

## CLIMATE CHANGE BOARD

### MINUTES OF MEETING HELD ON WEDNESDAY, 17 AUGUST 2022

#### Present:-

Councillor George Potter (in the Chair)  
Councillor Diana Jones  
Councillor Deborah Seabrook  
Councillor Paul Spooner  
Councillor Catherine Young  
Dawn Hudd, Joint Strategic Director (Place)  
Ben McCallen, Surrey County Council / Guildford Zero  
Nat Prodger, Climate Change Officer  
Marieke van der Reijden, Head of Asset Management (Climate Change Lead)  
Carrie Anderson, Senior DSO

#### Action By

#### 10. WELCOME AND INTRODUCTIONS

The Chairman of the Climate Change Board, Councillor Cait Taylor had sent apologies. Councillor George Potter chaired the meeting in her absence.

Councillor Potter welcomed all to the meeting and introductions were delivered around the table.

#### 11. APOLOGIES FOR ABSENCE

Apologies for absence were received from Councillor Cait Taylor (Chairman), Francesca Castelo (Economic Policy Officer), Emma McBriarty (Senior Communications Officer), Alistair Atkinson (Guildford Environmental Forum) and Professor Bob Nichols (UNIS).

#### 12. MINUTES OF THE PREVIOUS MEETING AND MATTERS ARISING

The minutes of the meeting held on 5 May 2022 were confirmed as a correct record. Matters arising were largely covered in Item 5 of the agenda. However, a question regarding addressing energy costs of the Spectrum Leisure Centre was raised as it had previously been left out of the energy emissions report due to its complexity.

It was explained that there had been a separate mandate constructed to examine the specific issues surrounding the refurbishment of Spectrum should the council choose to retain the building. Various surveys had been undertaken alongside a carbon emissions report and the results had recently been received. Officers were reviewing those surveys to compile a strategic

outline business case (SOBC) to inform and support future decision making. This information would sit alongside the Council's contractual arrangements with commercial partners when those arrangements were reviewed in due course. There would shortly be a meeting with Laser, who were the Council's utilities broker to discuss the impact of rising energy prices and to review usage, including Spectrum during the year. There had been a meeting with Waverley Borough Council to understand what learning had been acquired from the recent renovation of the Cranleigh Leisure Centre.

### **13. PLANNING POLICY ACTION ON CLIMATE CHANGE PRESENTATION**

The Board received a presentation on Planning Policy delivered by Dan Knowles, Policy Officer – Planning Policy.

The Board heard that nationally, there had been an improvement in emissions from housing stock, significantly since 2014. A new house built to 2014 standards would typically emit just over 3 tons of CO<sub>2</sub> annually (a typical house was considered to be a three-bedroomed house). Since 2014, the grid had decarbonised and emissions from electricity had reduced significantly. Building regulations had changed recently in June 2022 and presently emissions for electricity were calculated to have dropped by 55% since 2013. There also been a moderate improvement to energy efficiency standards to new buildings driven by regulations, resulting in a 31% carbon reduction in new homes and a 27% reduction in non-residential buildings. The 2022 regulations also introduced a new measure, that of primary energy use. All new heating systems must be low temperature i.e. a heat pump. There were new standards for overheating. These new requirements had overtaken the Council's current policies.

The Government had been promoting its standard for future homes which included 70-80% reduction in CO<sub>2</sub> emissions against 2013 standards; further improvements to fabric standards; no new gas boilers would be installed in new homes and gas boilers banned from sale by 2035 and the national grid decarbonised by 2035.

Locally, the Local Plan – Strategies and Sites 2015-2034 (Local Plan Part One) was begun in 2013 and adopted in 2019. The relevant climate change policies were D2 (climate change and sustainable design), D1 (place shaping) and P4 (flooding, flood risk and groundwater protection). Policy D2 was most relevant as it concerned climate change adaptation and energy (low/zero carbon energy; heat networks; new buildings and energy hierarchy). In the borough of Guildford since 2019, on average there had been a 20% carbon reduction via Policy D2.

The energy hierarchy had been applied in Guildford.

Developments had been benchmarked against one another to understand what was achievable. It was anticipated that for dwellings a 10% carbon reduction was achievable against the 2013 standard on fabric alone. It had been more challenging to achieve a benchmark for apartments and non-dwellings, but the policy had been applied and developers were pushed to improve energy efficiencies.

The key issues for the borough would be high temperatures, increased rainfall and drought. Another ambition of D2 was to ensure developments were adaptive to these issues.

The Climate Change, Sustainable Design and Construction SPD was adopted in 2020 which set out clearly to developers what was required of them in terms of D2 and how carbon emissions should be calculated. It also provided guidance on good sustainable design. This document had a positive impact on the quality of submitted applications.

The Local Plan (Development Management Policies) Part two, was currently with the Secretary of State for examination. Within it there were four new policies that directly affected climate change: Policy D12 (Sustainable and low impact development); Policy D13 (Climate change adaptation); Policy D14 (Carbon emissions from buildings); Policy D15 (Renewable and low carbon energy generation and storage). And two peripheral policies that impacted less directly, which were biodiversity and transport. A 20% net gain in biodiversity in new developments was sought.

As well as developing policy, it was explained that the team provided support to Development Management. For example, reading energy statements and Site Waste Management Plans were often long and technical documents and it was important to make them to be properly understood and made accessible to decision makers. It was sometimes required for the team to undertake direct negotiation with developers to encourage them to improve energy and emissions plans. The team were also involved in appeals and keeping policies up to date.

The Climate Change Board discussed the following matters arising from the presentation:

1. With regard to wind turbines, it was noted that there was a national moratorium on construction, unless the turbines were included in a plan. However, any Local Plan process would be put through an examination process to compare its compliance with national policy. Therefore, it would be unlikely that a proposal for wind turbines would be acceptable. A survey had been undertaken in 2015 to look for renewable sites but the borough was constrained due to the vicinity of international airports and protected landscapes, alongside political

considerations.

2. With regard to planning permission prior to the introduction of new building standard regulations. It was noted that if building control documents were submitted prior to the introduction of the new regulations the applicant would have a year to commence works under the previous regulations. If not commenced then new building control documents would need to be submitted and those documents would need to be in compliance with the new regulations. It was noted that large developments were unlikely to either have commenced and certainly not concluded within a year and consequently the new regulations would apply to at least some of the site. Very large developments may be constructed to varying standards as new regulations were introduced over time. An explanatory note would be circulated with the minutes.
3. It was acknowledged that the siting orientation of a building to either maximise exposure to solar for energy purposes and then alternatively providing shading during hot weather was problematic. No approach was mandated by the council and the decisions were up to the developer, but there were a number of options to consider. The angle of the eaves, deciduous tree planting and most effectively installing external shutters.
4. The new policy currently at examination didn't mandate specific measures in regard to wildfire prevention, but developers building in areas at risk should demonstrate that it had been considered. Areas at risk were around the Thames Basin Heath and dry grass in the south of the borough. Anyone wishing to install a fire break could be subject to planning permission in residential areas. Planning permission covered construction, change of use and engineering works.
5. Subject to resources, there was a plan for a Green and Blue SPD in due course. A related key piece of work was the Local Nature Recovery Strategy (LNRS) which was a statutory requirement to be produced by Surrey County Council (SCC). The LNRS would inform the Green and Blue SPD.
6. It was noted that SCC had a buildings adaptation officer who was a specialist and local to Guildford. Ben would send Nat contact details.
7. The CCB should renew links with UNIS and it was hoped that Professor Nichol would be able to attend the next meeting.
8. An energy statement was required by the council when a planning application for a building came in. In the town centre the council asked for a TM59 which would assess and address overheating where the build was a block. For individual dwellings a Standard Assessment Procedure (SAP) was

Dan Knowles /  
Carrie Anderson

requested. This was the methodology used to assess and compare the energy and environmental performance of dwellings. If overheating was likely then the council would request measures to address it.

The slides for the presentation would be circulated with the minutes.

Dan Knowles /  
Carrie Anderson

**14. REVIEW AND PROGRESS REPORT OF OUTSTANDING ACTIONS FROM PREVIOUS MINUTES**

The Climate Change Officer had set out actions from previous meetings which were reviewed to account for any matters outstanding. The following was noted:

Nat Prodger

A £33,000 growth bid had been invested to green the council's energy supply, although the green basket energy tariff was not yet in place due to a delay on the part of the provider. The intention to change had been logged with the provider and it was anticipated the move would be made by April next year to the green energy option and by October 2023 for the green basket tariff.

It had been three years since the Council declared a climate emergency and the Board was of the view that it was appropriate to return to the original wording of the declaration for a review. It was also necessary to clarify the Council's definition and objectives with regard to 'net zero' within that declaration. There should be a consideration of whether scopes one, two and three should be included in a revised definition of 'net zero'. In addition, it should be clarified if the response of the Council should include the outcomes of carbon emissions such as air quality issues and biodiversity impacts in the form a revised action plan. Although it was not felt that a full re-write of the declaration was necessary, there was a full agenda of work planned for the next two meetings. It would be helpful to identify success criteria to build the business case. Consequently, it was agreed there should be an additional informal meeting of the Board devoted solely to this discussion. The DSO would canvass for a date. It was the view of the Board that the re-worded declaration should be taken back to full Council for approval.

Carrie Anderson

Nat Prodger

It was expected that new the climate communications plan would be ready to submit to the Board at the next meeting in September. This would include planning to produce information and guidance videos.

Nat Prodger

Nat Prodger

Climate Change questions would be included in any future business surveys drawn up by Economic Development.

The revised Carbon Trajectory report had just been delivered and there would be more information provided at the September meeting.

Nat  
Prodger/Chris  
Wheeler

The Council was in the process of rolling out new LEV (Low Emissions Vehicle) community minibuses. The reference to Surrey County Council in the original action was unclear but could relate to a funding opportunity. Nat and Chris would check to ensure there were no outstanding issues and the action could be closed. Confirmed by Chris that the Action could be closed.

An action was outstanding for Alistair to circulate a paper concerning natural capital and health and well-being costs.

It was recommended a specialist in carbon costs be invited to address the Board and to set out any opportunities for the Council. The Finance Team would be approached for more detail.

An action concerning collaboration with UNIS with regard to an influencing behaviours project was considered beneficial and should be retained.

**15. ANY OTHER BUSINESS**

There was no other business.

**16. DATES OF FUTURE MEETINGS**

The date of the next meeting would be Wednesday 28 September at 10:30am.

The meeting would be in-person in Committee Room 8 (Hatchlands) and on Teams ('Hybrid') at the request of the members.

## **Briefing note: Changes to the Building Regulations in June 15 2022**

Dan Knowles

19 May 2022

### **1. Introduction**

1.1 This briefing note sets out the changes to the building regulations and Approved Documents from June 15 2022. It has been prepared by planning policy officers at the request of councillors, does not constitute professional building control advice and should not be shared externally.

### **2. Current building regulations and Approved Documents**

2.1 The current building regulations are the Building Regulations 2010 (as amended). The 2010 regulations have been amended several times, including in 2013 which saw the introduction of the current maximum carbon emission rates (implemented in 2014).

2.2 The building regulations are accompanied by the [Approved Documents](#). The Approved documents have a number of 'parts' which each cover a specific matter. They provide guidance on how the building regulations can be satisfied in common construction situations by setting out typical approaches. Developers are not obliged to build in the way described by the Approved Documents as long as they achieve the overall outcomes prescribed by the building regulations.

### **3. June 2022 Building Regulations Standards**

3.1 On June 15 2022 there will be a number of changes to the Building Regulations and the following Approved Documents:

- Part F: Ventilation
- Part L: Conservation of Fuel and Power
- Part S: Infrastructure for Charging Electric Vehicles (new Approved Document)
- Part O: Overheating (new Approved Document)

#### *Part L: Conservation of Fuel and Power*

3.2 The Target Emission Rate (TER, the maximum allowed carbon emission rate) for each new building will be around 31% lower for new dwellings and 27% lower for other types of building.

3.3 The limiting values (worst allowable u-values) for thermal elements like external walls, roofs and doors will be improved by 25-35%. There are modest improvements to the worst allowable values for thermal bridging and airtightness, which also effect energy efficiency. In order to achieve the TER, thermal elements have to be significantly better than the limiting values on the whole.

3.4 A new performance metric, 'primary energy', will be introduced. The new metric gives a complete picture of total energy used by heating, lighting, ventilation etc., but also considers upstream activities such as power station efficiency and energy used in the production and delivery of fuel to the building. New buildings will have a Target Primary Energy Rate (TPER) which they must not exceed.

- 3.5 Heating systems will have to be designed to operate at a maximum flow temperature of 55 degrees, a temperature compatible with ordinary heat pumps. Heating control devices must be self-regulating and based on zones.
- 3.6 Carbon emissions factors for different fuels and mains electricity will be revised. The main change is that the carbon emission factor for grid electricity will fall by 73%, reflecting the ongoing decarbonisation of electricity from the grid. As a result, electric technologies like heat pumps will perform much better in emission rate calculations.

*Part S: Infrastructure Charging for Electric Vehicles*

- 3.7 Newly introduced Part S reflects changes to the Building Regulations that will require the installation of Electric Vehicle Charge Points (EVCPs) or cable routes in new developments. It covers residential and non-residential new build, material change of use of buildings, major renovation and mixed-use buildings undergoing specified building work.
- 3.8 Whilst there are nuances to the regulations, a typical new residential building with associated parking must have access to an EVCP. For new non-residential buildings, one space must have access to an EVCP, and cable routes must be installed in a minimum of one fifth of the total number of remaining spaces. Various exemptions apply, detailed in Part S.
- 3.9 Part S suggests the regulations could be met by the installation of a 7kW untethered charge point (where a chargepoint is to be installed). Where cable routes are to be installed, this would include various aspects such as space for an electrical connection at a consumer unit or feeder pillar, a dedicated cable route, a future connection location, labelling and space for a future charge point to be installed.

*Part O: Overheating*

- 3.10 Part O covers overheating in domestic dwellings and commercial properties with a residential function (e.g. care homes and student accommodation).
- 3.11 The new regulations state that dwellings, or other buildings containing rooms for residential purposes, should a) make reasonable provision to limit unwanted solar gains in summer and b) provide an adequate means to remove heat from the indoor environment. Proposals must take account of the safety of the building's occupants and reasonable enjoyment of the residence. Mechanical cooling may only be used where other methods would be insufficient.
- 3.12 Developers may choose one of two routes to compliance:
  - The Simplified Method – England is divided into areas of 'high' and 'moderate' risk of overheating (Guildford borough is within an area of moderate risk) and development is classified as having cross-ventilation or not. Based on these two classifications, a maximum glazing area is specified. In high risk locations, further measures such as low-g glass or external shutters are required to east, south and west elevations.
  - The Dynamic Thermal Modelling Method – The building design must be subject to a prescribed overheating assessment: "TM59 Design Methodology for the Assessment of Overheating Risk in Homes" produced by the Chartered Institution of Building Services Engineers (CIBSE).

**4. Implementation and transitional arrangements**

- 4.1 The new Building Regulations come into force on 15 June 2022. A key change is that the new regulations will apply to each individual building rather than entire schemes, and schemes will no longer be able to 'lock in' the extant standards for the entire scheme or phase when they commence.
- 4.2 Where schemes submit an initial notice or building notice or deposit full plans after 15 June 2022, all the buildings covered by the notice or deposit must comply with the new regulations in full.
- 4.3 Where schemes submit a notice or deposit full plans before 15 June 2022, there is a transitional phase whereby the current (2013) standards will continue to apply to any individual buildings for which work is commenced before 15 June 2023.
- 4.4 All buildings commenced after 15 June 2023 must meet the new regulations in full.
- 4.5 Commencement may be deemed to have occurred when substantial work has begun, e.g. excavation for foundations, piling/boring for piles or other substantial work within the footprint of the proposed building.
- 4.6 The government intends to improve standards further with the implementation of 'Future Homes' and 'Future Buildings' in 2025, which will involve further improvements to energy efficiency standards and set maximum carbon emission rates around 70-80% lower than current (2013) maximums. The June 2022 standards are described as an interim step on the path to those future standards.

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# Planning Policy Presentation for Climate Change Board August 2022

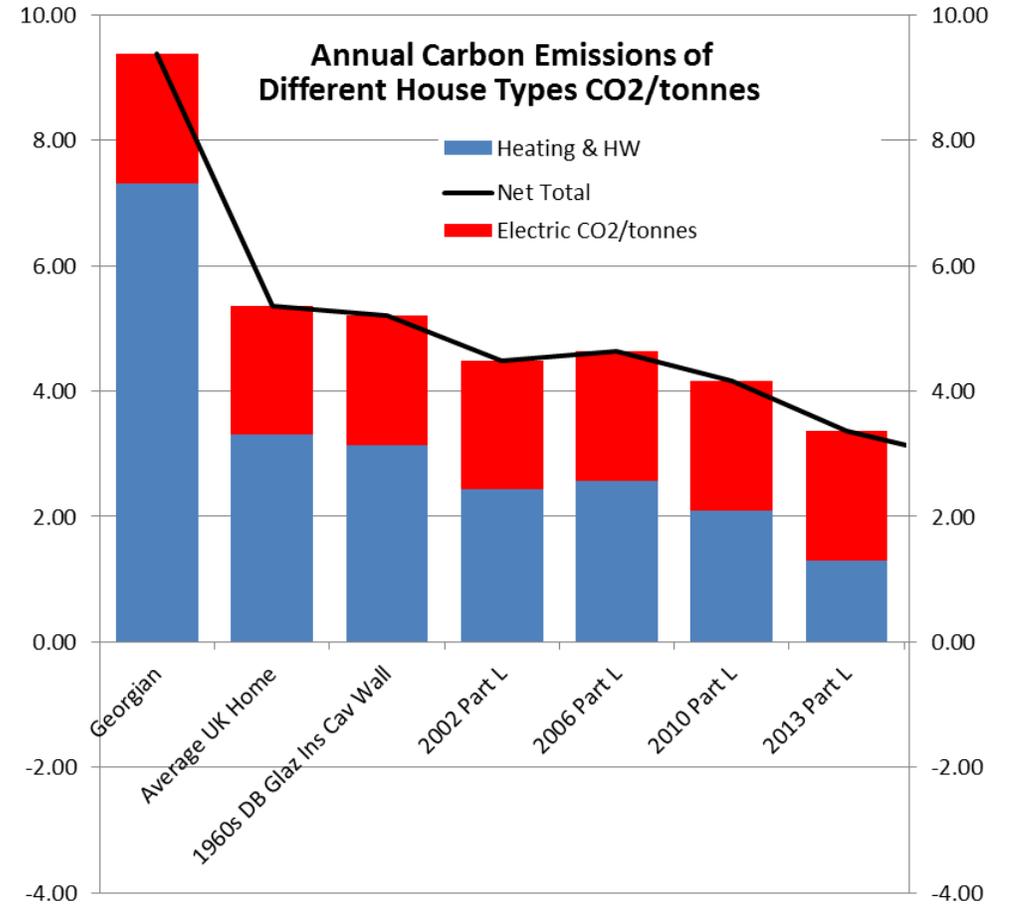
# Presentation: Planning policy work on climate change

- 1) National context – past, present, future
- 2) Our past work:
  - The Local Plan Part 1
  - Climate Change SPD
- 3) Our current work:
  - Local Plan part 2
  - Development management support

# National context: the past

- Improvements to energy efficiency
- Limited change 1960s - 2014
- New house built to 2014 standards (2013 Part L) typically emits just over 3 tonnes of CO2 per annum
- Grid has decarbonised since 2014

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Source: Transition Bath <https://transitionbath.org/impact-housing-standards-energy-costs-co2-emissions/> (image has been edited)  
 Values are carbon emission rates under Part L 2013 as at 2014.

Minute Annex  
Appendix 1

# National context: the present

- New Building Regulations from June 2022 (2021 Part L):
  - CO2 from new homes 31% lower
  - CO2 from non-residential 27% lower
- Emission factors: electricity 55% lower in CO2 than in 2013
- Moderate improvements to minimum energy efficiency
- New measure: primary energy use
- All heating systems to be low temperature
- New requirements on overheating (Part O) and EV charging (Part S)

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SAP Emission factors: kg of CO2 per Kw hour of energy

	2013	2022
Electricity	0.519	0.233
Gas	0.216	0.210

Minute Annex  
Appendix 1

## National context: the future

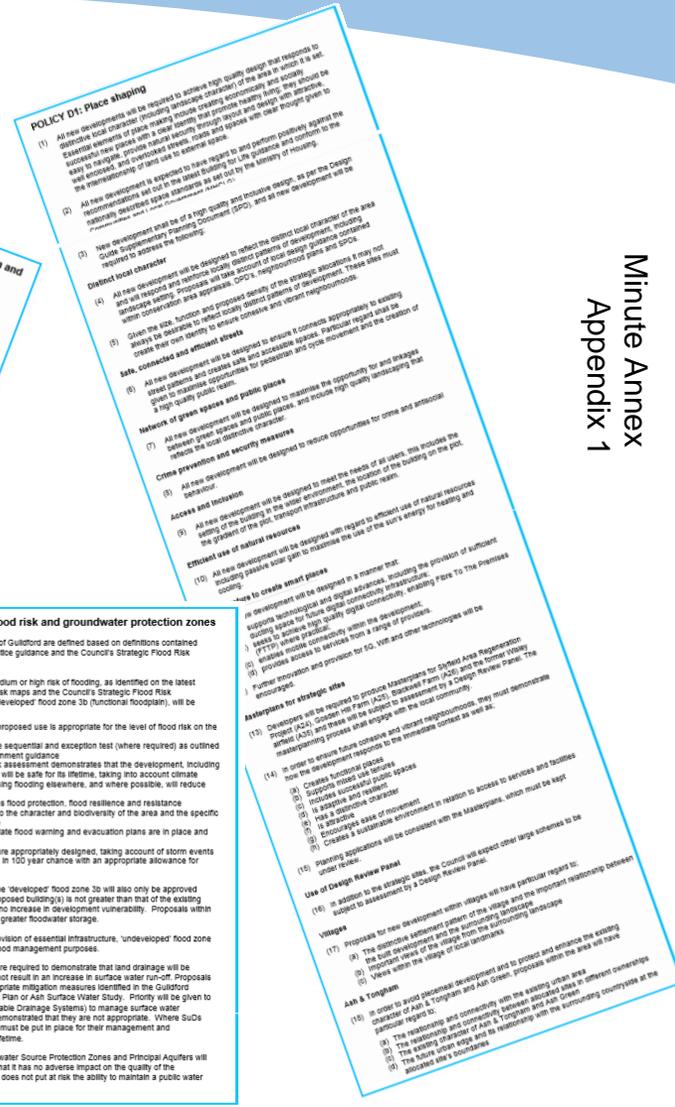
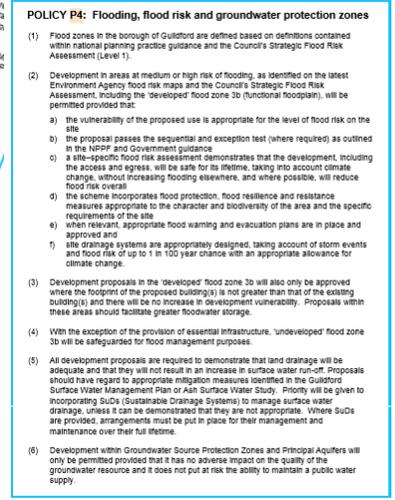
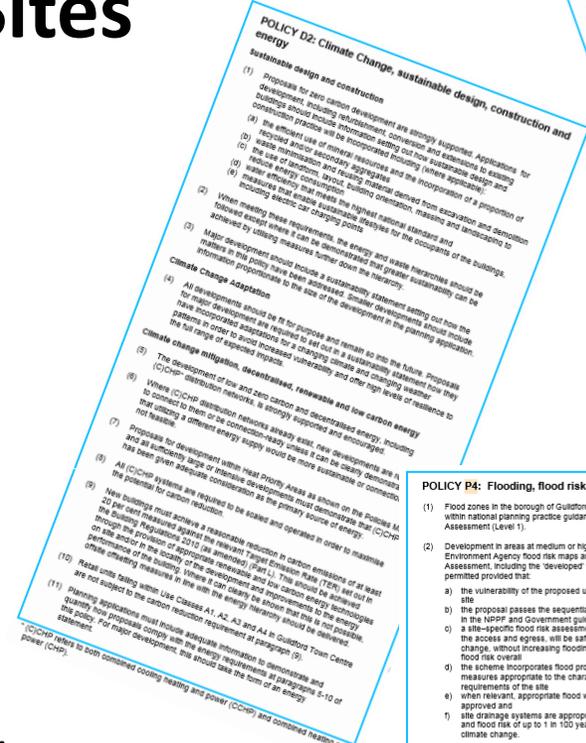
- 'Future Homes' – new homes 70-80% lower in CO2 (against 2013 Part L)
- Further improvement to fabric standards
- No gas boilers in new homes
- 2035 – gas boilers banned from sale
- 2035 – national grid decarbonised



# The Local Plan: Strategy and Sites (Local Plan part 1)

## Local Plan: Strategy and Sites 2015-2034:

- Started 2013
- Adopted 2019
- Strategic policies:
  - Policy D2: Climate Change, Sustainable Design, Construction and Energy
  - Policy D1: Place shaping (paras (2) and (10))
  - Policy P4: Flooding, flood risk and groundwater protection zones (para. (5))



## Policy D2: Climate Change, Sustainable Design, Construction and Energy

### Climate change adaptation

- Fit for current climate/weather
- Resilient to full range of expected climate change impacts

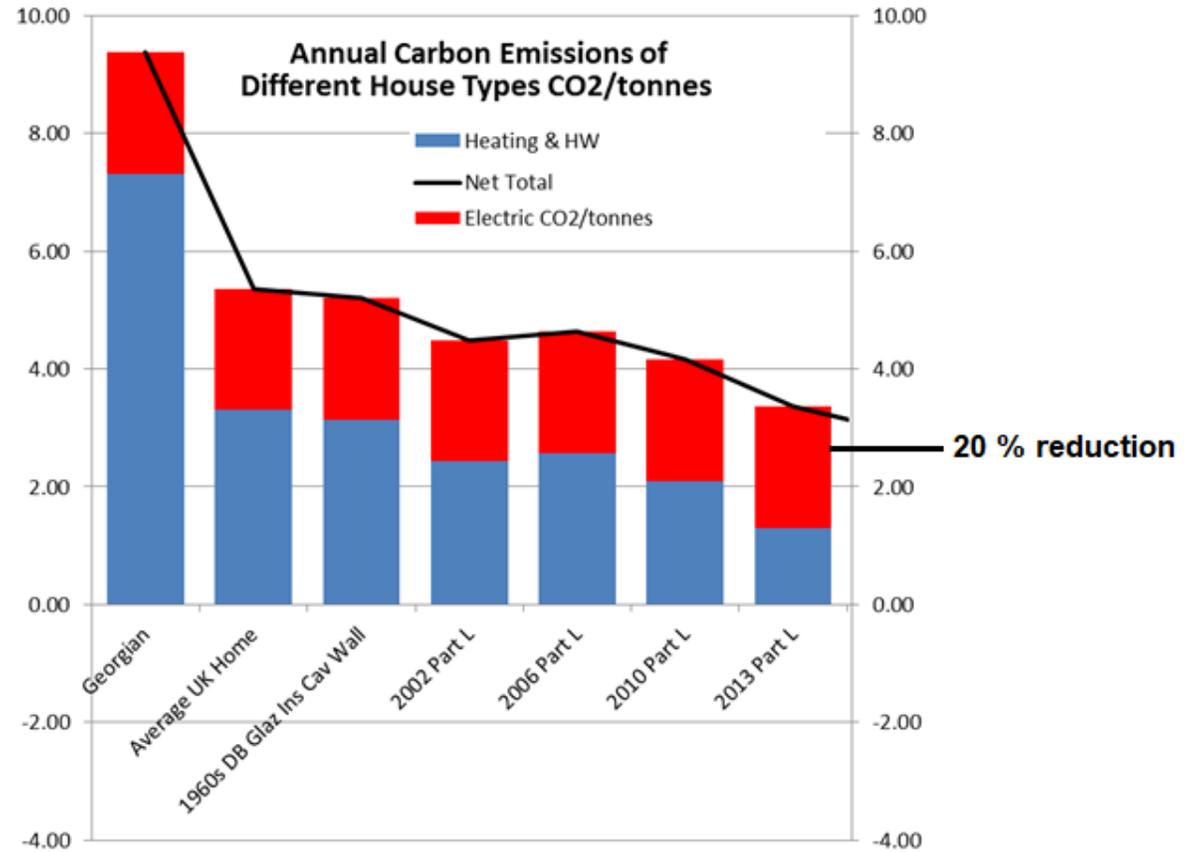
### Energy

- Supports low/zero carbon energy
- Some developments must consider heat networks
- All new buildings 20% lower carbon emissions than 2013 Part L
- Designs must apply energy hierarchy

## Policy D2: Climate Change, Sustainable Design, Construction and Energy

### 20% carbon reduction

- Implemented April 2019
- 20% carbon reduction – baseline is 2013 standards



## The energy hierarchy

### 1. Eliminate and minimise demand/ consumption

### 2. Use low carbon energy

### 3. Mitigate remaining impacts

#### The energy hierarchy

##### Step 1: Eliminate energy need

Developments should be designed to eliminate the need for energy through measures including:

- design of the scheme layout
- thermally efficient construction methods and materials
- design features that eliminate the need for appliances
- making optimal use of passive heating and cooling systems

##### Step 2: Use energy efficiently

Developments should incorporate energy efficient systems, equipment and appliances to reduce the remaining energy demand. Energy storage devices may improve efficiency.

##### Step 3: Supply energy from renewable and low carbon sources

The remaining energy need should be met from renewable and low carbon sources.

##### Step 4: Offset carbon emissions

As a final step, remaining emissions should be offset, for example through off-site measures that reduce carbon emissions or remove carbon from the atmosphere.

Energy hierarchy = fabric first

Qualitative - no technical standard

However, rule of thumb – 10% carbon reduction through fabric alone for new dwellings

## Policy D2: Climate Change, Sustainable Design, Construction and Energy

### Climate change adaptation

#### Key issues:

- Overheating
- Heavy rainfall
- Drought

# Climate Change, Sustainable Design and Construction SPD 2020

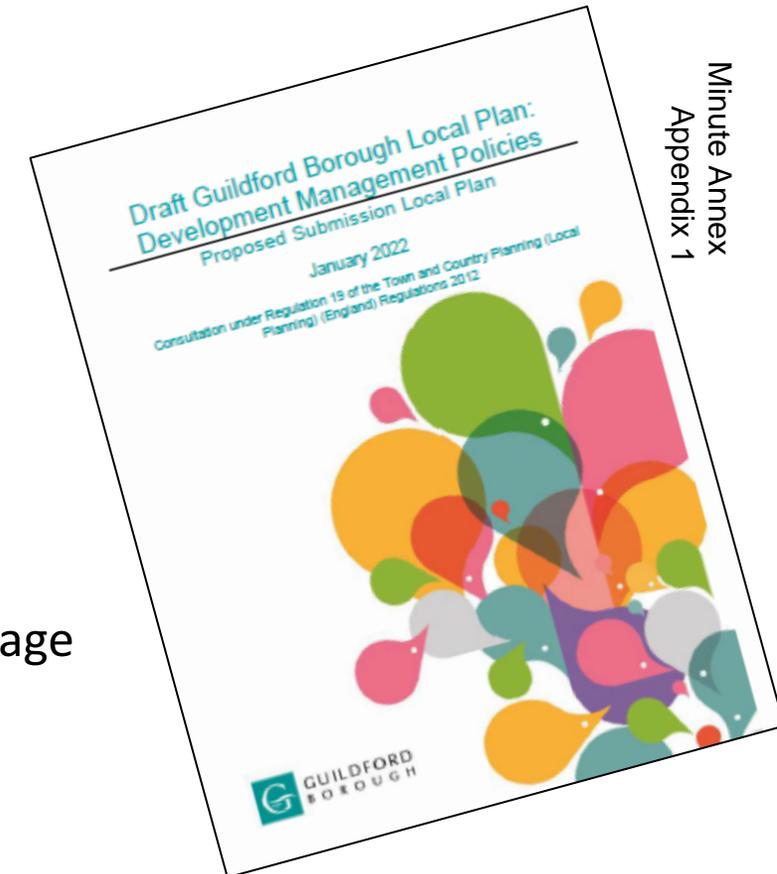
- Policy D2 requests a lot of information from applicants
- Some information not adequate or robust
- SPD Adopted September 2020
- What information needed and how to present it
- Provides general good practice guidance e.g. sustainable design



# The Local Plan: Development Management policies (Local Plan part 2)

- Currently with Secretary of State at examination
- Detailed policies:
  - Policy D12: Sustainable and Low Impact Development
  - Policy D13: Climate Change Adaptation
  - Policy D14: Carbon Emissions from Buildings
  - Policy D15: Renewable and Low Carbon Energy Generation and Storage
  - Biodiversity policies – adaptation and sequestration
  - Transport policies – EV charging standards etc.

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## Policies D12 and D13

### Policy D12: Sustainable and Low Impact Development

- Fabric first
- Embodied carbon
- Supports retrofit
- Site Waste Management Plans for major developments
- Water efficiency

### Policy D13: Climate Change Adaptation

- Thermal comfort (overheating)
- Urban heat island
- Severe rainfall events
- Wild fire risk

## Policy D14: Carbon Emissions from Buildings

- CCHP heat networks → low carbon heat networks
- Carbon reduction aligned with June 2022 building regulations

## Policy D15: Renewable and Low Carbon Energy Generation and Storage

- New policy area
- Sets out planning considerations for renewable energy schemes
  - White paper – 500% increase in solar
  - Solar costs tumbling – national increase in schemes
  - Question marks over future of onshore wind

# Development Management Support

- Planning Policy are consulted on climate change/sustainability matters
  - Energy statements
  - Sustainability statements
  - Site Waste Management Plans
  - SAP/SBEM modelling assessments
  - Negotiation
- Appeals
  - Written proofs for appeals
  - Advise Council's representative
- Keep policy up to date
  - June 2022 building regulations note
  - SPD review in due course

**Any questions?**

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