



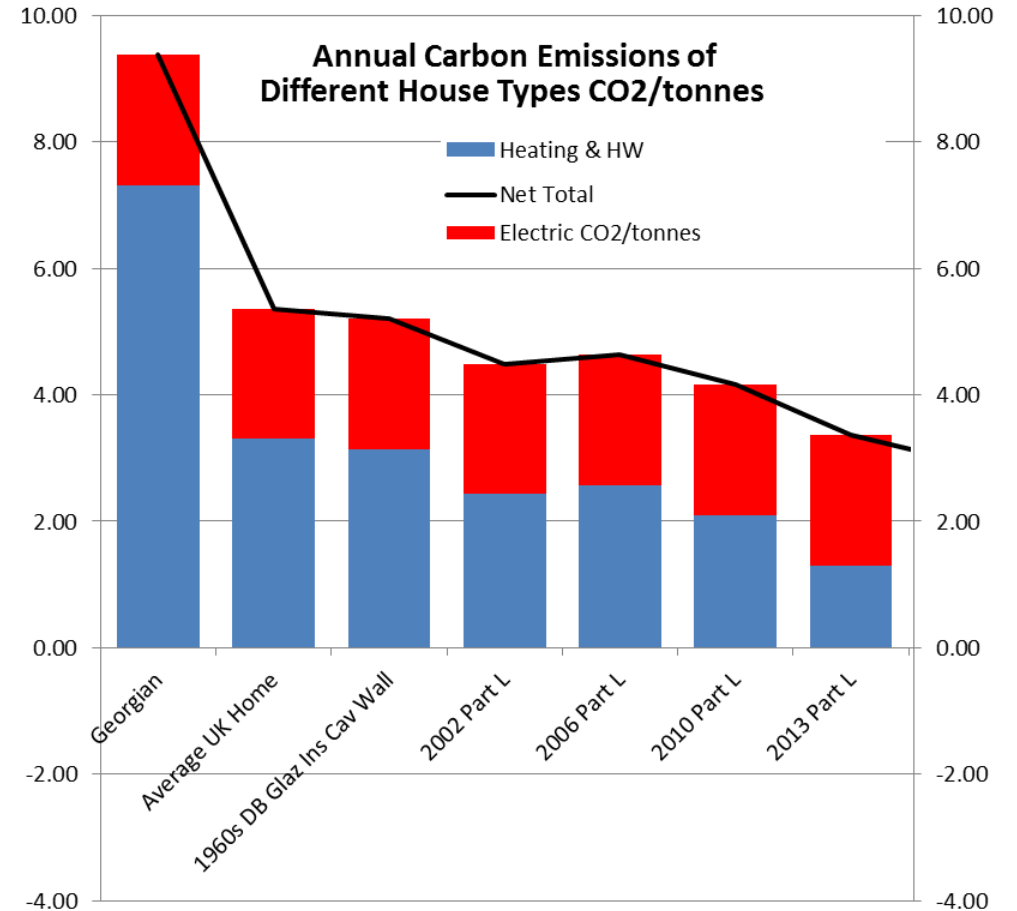
**Planning Policy
Presentation for Climate Change Board
August 2022**

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



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.

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)

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

	2013	2022
Electricity	0.519	0.233
Gas	0.216	0.210

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

Sustainable design and construction

(1) Proposals for zero carbon development are strongly supported. Applications for development, including refurbishment, conversion and extensions to existing buildings should include information setting out how sustainable design and construction practice will be incorporated. (Where applicable)

(2) The efficient use of natural resources and the incorporation of a proportion of the use of secondary aggregates and recycled materials (where applicable)

(3) Water efficiency, including water metering and the incorporation of rainwater harvesting systems that meet the highest national standard and demonstrate that energy and water resources are conserved and used sustainably

(4) When meeting these requirements, the energy and water resources should be conserved wherever possible. Measures should be taken to ensure that the energy and water resources are conserved wherever possible. Measures should be taken to ensure that the energy and water resources are conserved wherever possible.

Climate Change Adaptation

(5) All developments should be fit for purpose and remain so into the future. Proposals for new developments should include a sustainability statement setting out how the proposed development will be designed to be resilient to a changing climate and changing weather patterns in order to avoid increased risk of flooding and other climate change impacts.

Climate change mitigation, decentralised, renewable and low carbon energy

(6) The development of low and zero carbon and decentralised energy, including CO2HP, district networks, is strongly supported and encouraged.

(7) Where CO2HP distribution networks already exist, new developments are required to connect to them or be connected-ready unless it can be clearly demonstrated that using a different energy supply would be more sustainable or connect to the network.

(8) All CO2HP systems are required to be tested and operated in order to maintain the potential for carbon reduction.

(9) New buildings must achieve a reasonable reduction in carbon emissions of at least 20 per cent measured against the relevant Target Emission Rate (TER) set out in the Building Regulations (2010) (as amended) (Part L). This should be achieved through the provision of appropriate renewable and low carbon energy technologies on site and/or in the supply chain of the development and improvements to the energy performance of the building. Where it can be clearly demonstrated that this is not possible, other energy measures in line with the energy hierarchy should be delivered.

(10) Rural units falling within Use Classes A1, A2, A3 and A4 in Guildford Town Centre are not subject to the carbon reduction requirement in paragraph (9).

(11) Planning applications must include adequate information to demonstrate and quantify how proposals comply with the energy requirements in paragraphs 5-10 of the policy. For major development, this should take the form of an Energy Statement.

(CO2HP refers to both combined cooling heating and power (CCHP) and combined heating and power (CHP).

POLICY D1: Place shaping

(1) All new developments will be required to achieve high quality design that responds to distinctive local character (including landscape character) of the area in which it is set. Successful design will be characterised by a high quality of design, including a high quality of materials, a high quality of construction, a high quality of landscaping and a high quality of design. It will be characterised by a high quality of design, including a high quality of materials, a high quality of construction, a high quality of landscaping and a high quality of design.

(2) All new development is expected to have regard to and conform positively against the character of the area in which it is set. It should be designed to enhance the character of the area in which it is set. It should be designed to enhance the character of the area in which it is set.

Distinct local character

(3) All new development will be designed to reflect the distinct local character of the area in which it is set. It should be designed to enhance the character of the area in which it is set. It should be designed to enhance the character of the area in which it is set.

Safe, connected and efficient streets

(4) All new development will be designed to ensure it provides opportunities for walking, cycling and public transport. It should be designed to enhance the character of the area in which it is set. It should be designed to enhance the character of the area in which it is set.

Network of green spaces and public places

(5) All new development will be designed to provide opportunities for green spaces and public places. It should be designed to enhance the character of the area in which it is set. It should be designed to enhance the character of the area in which it is set.

Crime prevention and security measures

(6) All new development will be designed to provide opportunities for crime prevention and security measures. It should be designed to enhance the character of the area in which it is set. It should be designed to enhance the character of the area in which it is set.

Access and inclusion

(7) All new development will be designed to provide opportunities for access and inclusion. It should be designed to enhance the character of the area in which it is set. It should be designed to enhance the character of the area in which it is set.

Efficient use of natural resources

(8) All new development will be designed to provide opportunities for the efficient use of natural resources. It should be designed to enhance the character of the area in which it is set. It should be designed to enhance the character of the area in which it is set.

POLICY P4: Flooding, flood risk and groundwater protection zones

(1) Flood zones in the borough of Guildford are defined based on definitions contained within national planning practice guidance and the Council's Strategic Flood Risk Assessment (Level 1).

(2) Development in areas at medium or high risk of flooding, as identified on the latest Environment Agency flood risk maps and the Council's Strategic Flood Risk Assessment, including the 'developed' flood zone 3b (functional footprint), will be permitted provided that:

- The vulnerability of the proposed use is appropriate for the level of flood risk on the site
- the proposal passes the sequential and exception test (where required) as outlined in the NPPF and Government guidance
- a site-specific flood risk assessment demonstrates that the development, including the access and egress, will be safe for its lifetime, taking into account climate change, without increasing flooding elsewhere, and where possible, will reduce flood risk overall
- the scheme incorporates flood protection, flood resilience and resistance measures appropriate to the character and biodiversity of the area and the specific requirements of this site
- when relevant, appropriate flood warning and evacuation plans are in place and approved and
- site drainage systems are appropriately designed, taking account of storm events and flood risk of up to 1 in 100 year chance with an appropriate allowance for climate change.

(3) Development proposals in the 'developed' flood zone 3b will also only be approved where the footprint of the proposed building(s) is not greater than that of the existing building(s) and there will be no increase in development vulnerability. Proposals within these areas should facilitate greater floodwater storage.

(4) With the exception of the provision of essential infrastructure, undeveloped flood zone 3b will be safeguarded for flood management purposes.

(5) All development proposals are required to demonstrate that land drainage will be adequate and that they will not result in an increase in surface water run-off. Proposals should have regard to appropriate mitigation measures identified in the Guildford Surface Water Management Plan or Ash Surface Water Study. Priority will be given to incorporating SuDs (Sustainable Drainage Systems) to manage surface water drainage, unless it can be demonstrated that they are not appropriate. Where SuDs are provided, arrangements must be put in place for their management and maintenance over their full lifetime.

(6) Development within Groundwater Source Protection Zones and Principal Aquifers will only be permitted provided that it has no adverse impact on the quality of the groundwater resource and it does not put at risk the ability to maintain a public water supply.

Use of Design Review Panel

(16) In addition to the strategic site, the Council will expect other large schemes to be subject to assessment by a Design Review Panel.

Villages

(17) Proposals for new development within villages will have particular regard to:

- The distinctive character and the surrounding landscape
- The impact of new development on the surrounding landscape
- Views within the village of local landmarks

Ash & Tongham

(18) In order to avoid detrimental development and to protect and enhance the existing character of Ash & Tongham and Ash Green, proposals within the area will have particular regard to:

- The relationship and connectivity between adjacent areas in different contexts
- The distinctive character of the Ash & Tongham and Ash Green
- The extent, form and quality of the landscape
- The relationship and connectivity between adjacent areas in different contexts
- The distinctive character of the Ash & Tongham and Ash Green
- The extent, form and quality of the landscape

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

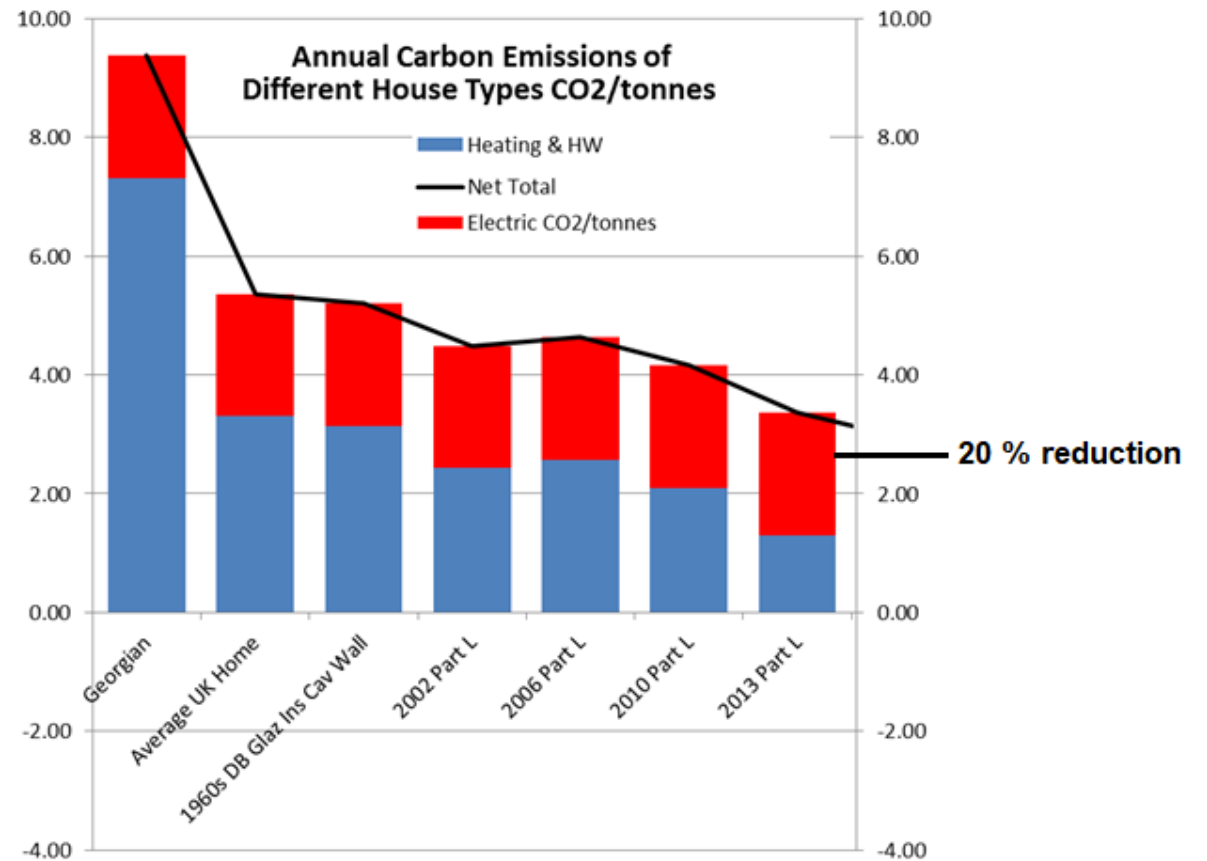
Energy

- 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.



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?