



# Climate Change, Sustainable Design, Construction and Energy SPD

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# Introduction

1. DPDs and SPDs
2. Local plan policies
3. The SPD
4. The sustainable design and construction guide
5. Questions

# Development Plan Documents (DPDs)

## The Development Plan:

- Local Plan (LPSS and extant 2003 LP policies)
- South East Plan - Policy NRM6 (SPA and SANGs)
- SCC Waste and Minerals Plans
- Neighbourhood Plans

***Planning decisions must be taken in accordance with the development plan unless material considerations indicate otherwise***



## DPDs vs. SPDs

### Development Plan Document (DPD)

### Supplementary Planning Document (SPD)

Status

- Part of the Development Plan
- Starting point for decision makers

- Not part of the Development Plan
- Material consideration

Role

- Establishes policy that sets a vision and a framework for future development

- Provides guidance for policy, adds further detail, but does not create policy

Process

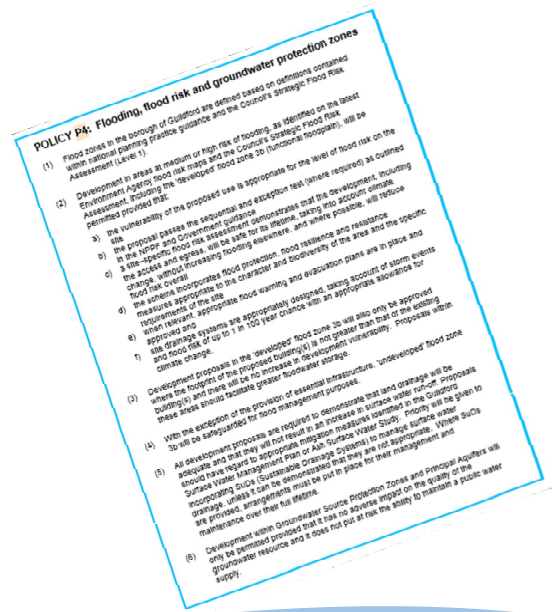
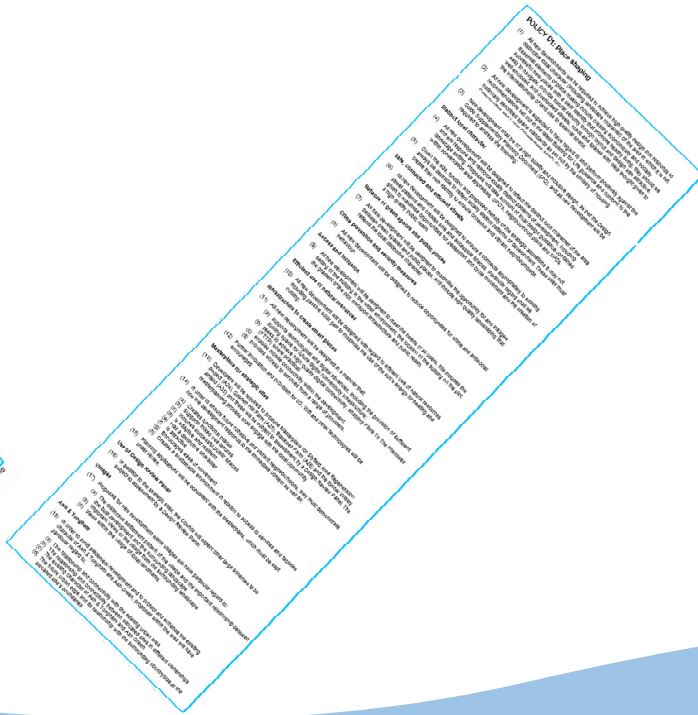
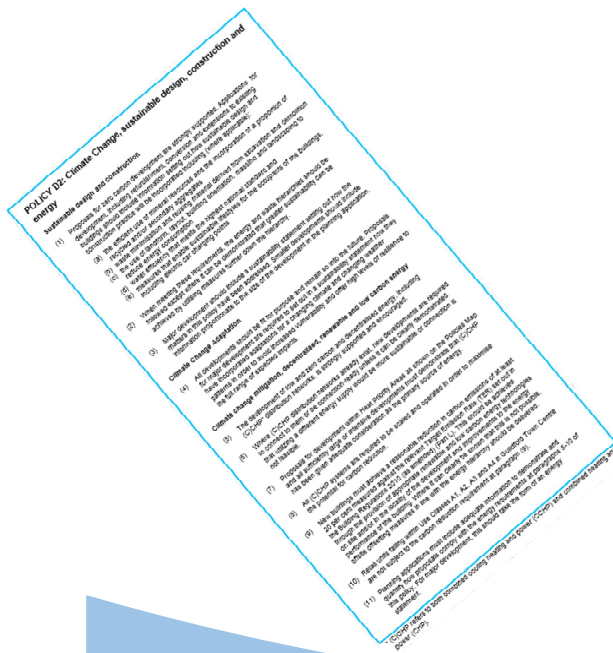
- Minimum 2x6-week consultations
- Subject to examination by SoS
- Adopted by Full Council

- Minimum 1x4-week consultation
- Not subject to examination by SoS
- Adopted by Executive

# Local Plan policies covered by the SPD

Local Plan: Strategy and Sites 2015-2034:

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

### Energy

- Supports low/zero carbon energy
- Some developments must consider CCHP/heat networks
- All new buildings must be at least 20% better on carbon emissions except town centre retail

### S. Design and construction

- Efficient use of minerals
- Minimisation of C&D waste
- Water efficiency
- Low energy design
- Enable sustainable lifestyles (EV points)
- Development should follow **waste and energy hierarchies**



## Principle:

### 1. Eliminate and minimise demand/consumption

### 2. Use sustainable resources

### 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.

#### The waste hierarchy

##### Step 1: Eliminate waste

Construction practice and design should reduce waste wherever possible through measures including:

- efficient procurement avoiding over-supply and excessive packaging
- eliminating waste at the design stage.

##### Step 2: Reuse waste materials

Reuse waste materials, ideally in its current location, avoiding the energy costs associated with transport and recycling.

##### Step 3: Recycle/compost waste materials

Recover materials through recycling and substitute for primary materials. Compost organic material to produce rich soils that replace fertilisers, ideally in a closed system to avoid the emissions released by organic material in landfill.

##### Step 4: Recover energy

If it cannot be reused or recycled, use waste instead of fossil fuels in energy generation to recover embodied energy.

##### Step 5: Disposal to landfill

Usually the last resort. Disposal to landfill wastes materials and embodied energy.



## Policy D2 Submission requirements

	Major Development (10+ homes/1000+ sqm employment floorspace)	Non-major development
Sustainable design and construction/ climate change adaptation	Sustainability statement	“Proportionate information”
Low carbon energy/ carbon emissions	Energy Statement	“Adequate information”



## Policy D1: Place shaping (paras (2) and (10))

- All new development to perform positively against Building for Life guidance
  - Industry standard for new design
  - Limited coverage of energy efficiency
- Efficient use of natural resources, maximise passive solar gain

## Policy P4: Flooding, flood risk and groundwater protection zones (para. (5))

- Prioritises SuDS for surface water management
- Mitigate heavy rainfall events



# The SPD

## Aims of the SPD

- Improve compliance with policy
  - Clarifies what the policy is seeking to achieve
  - Clarifies the scope and level of information needed to demonstrate compliance
- Better decision making process
  - Applicants and decision makers know what is expected
  - Avoid delays
- Get better development outcomes
  - Compliance with policy
  - Includes a sustainable design and construction guide

## Parts 1 – 3:

- Introduction
- Summary of policy
- Overview of information that must be submitted in support of planning apps

## Part 4: Energy statements (major development)

- Very common practice in industry
- Can be very extensive documents
- Can still be non-compliant with policy

### The SPD:

- Aligns energy statements with policy D2 5-10
  - Method for calculating carbon reductions
    - Clarity on percentage carbon reduction
    - Shows balance between energy efficiency and low carbon energy
    - Modelling outputs, SAP/SBEM
- Summary for decision makers

## Part 5: Sustainability statements (major development)

- Less common than energy statements
- Less guidance nationally than for energy statements
- Content varies
- Submission has not been consistent

### The SPD:

- Aligns sustainability statements with D2 paras 1, 2 and 4, D1 and P4
- Specifies the matters that statements must cover
- Part 5 includes a standalone “sustainable design and construction guide” (see later)

## Part 6: Non-major developments

Lower bar for information but covers same ground

- “Adequate information” covering sustainable design and construction and climate change adaptation - often very limited information
- “Proportionate” energy information - sometimes not conclusive

The SPD:

- Sets the level of information that should be submitted
- Offers questionnaire as an alternative to producing documents  
(Appendix 1 of SPD)
  - Covers all policy matters, easy to complete
  - Simplified table for carbon reduction calculation
  - Refers back to the Sustainable Design and Construction Guide

# Sustainable Design and Construction Guide



## Sustainable design and construction guide

- Standalone document within SPD
- Content aligns with a policy
- Provides guidance on best design and construction practice
- Based on guidance from reputable bodies and internal practitioners

## Sustainable design and construction guide

### The energy hierarchy (p.23)

- Reiterates energy policy
- Aligns with idea of “fabric first”
- Guidance for offsetting in zero carbon schemes

## Sustainable design and construction guide

### Site layout, landscaping and urban form (p.24)

- Layout
- Shading
- Topography
- ...

### Building design (p.25)

- Passive solar gain (orientation, internal layout etc.)
- Passive ventilation
- Overheating
- Natural light

## Sustainable design and construction guide

### Water efficiency (p.26)

- Reiterates “optional building regulation” for homes
- Confirms general requirement applies to all development
- Guidance on demand reduction, harvesting and grey-water

## Sustainable design and construction guide

### Climate change adaptation (p.28)

- Sets out expected climate impacts:
  - Hotter, drier summers, heatwaves
  - Wetter winters, heavy rainfall
- Sets out potential adaptations
- Urban heat island
- SuDS

## Sustainable design and construction guide

Measures that enable sustainable lifestyles (p.30)

- Low carbon transport
- Designing out energy need (non-regulated)
- Smart energy
- Recycling storage
- Community food growing

## Sustainable design and construction guide

### Resources, materials and waste (p.32)

- Efficient use of minerals
- Reuse and recycling
- Responsible sourcing
- Embodied carbon
- Waste reduction and Site Waste Management Plans

## Part 5: Sustainable design and construction guide

### Building for life (p.35)

- Mainly about good design (character, transport, security...)
- Traffic light system for 12 criteria
- Limited reference to solar gain and overheating





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# Any questions?

[www.guildford.gov.uk](http://www.guildford.gov.uk)