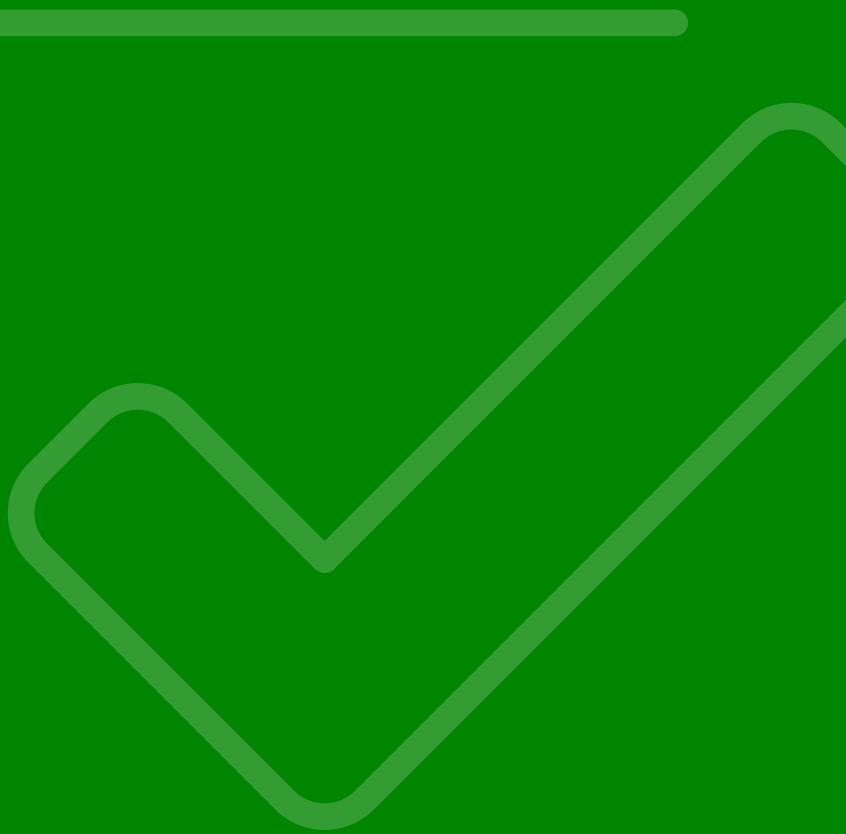

ENERGY STATEMENT CHECKLIST & GUIDANCE

(Based on GLA memo template)



City of Westminster

**ZERO
CARBON
2040**
Westminster Climate Action

Energy Statement Pre-app Checklist and Guidance (Based on GLA memo template)

Policy Requirements:

1. **London Plan 2021:** Sets out the carbon, energy, and heat risk policies. Applicants must adhere to Policies SI2, SI3, and SI4.
2. **Westminster City Plan 2019-2040:** Aligns with the London Plan 2021 regarding on-site carbon reductions and overheating policy. Key policies include Policies 36 and 38, as well as the Environmental Supplementary Planning Document (ESPD).

Regulation Update:

- Part L 2021 of the National Building Regulations came into effect on 15 June 2022.
- **GLA's Energy Assessment Guidance** and **Carbon Emissions Reporting Spreadsheet** have been updated in line with these changes.
- A cover note has been published alongside the guidance to highlight the key changes.

Guidance for Major Development Applications:

- Requirement: All major developments.
- Supporting Documents: Energy Statement and Overheating Assessments.
- Purpose: To ensure compliance with the pertinent policies and guidelines.

Relevant Policies to Adhere to:

1. **Westminster:**
 - City Plan 2019-2040: Policy 36
 - Environmental Supplementary Planning Document (ESPD)
2. **Greater London Authority:**
 - London Plan 2021, Chapter 9:
 - Policy SI2: Minimising greenhouse gas emissions
 - Policy SI3: Energy infrastructure
 - Policy SI4: Managing heat risk

Guidelines:

- Applicants should refer to the GLA Energy Assessment Guidance that's current at the time of submission.

The provided checklist and guidance aim to assist applicants in their submission process. They ensure early awareness of relevant policy requirements, reducing potential issues during the planning application phase. While the checklist highlights key points to be addressed in the energy strategy, it is advisable to refer to the Mayor's detailed guidance for a comprehensive understanding.

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Yes/No – Explanation

Net Zero Carbon Target

Have you met or exceeded the minimum on site 35% reduction as required by the LP? The Mayor's London Plan 2021 requires all major developments (residential and non-residential) to meet his net-zero carbon target.

Yes

No

Specify the on-site reduction in carbon emissions beyond Part L of 2021 Building Regulations. Have carbon emission reductions on-site been maximized?

Have you completed a Carbon Emissions Reporting spreadsheet (to confirm the anticipated carbon performance of the development)?

Yes

No

Please note that this now includes the requirement to report EUI predictions for the development based on robust calculations methodologies.

Have the carbon emission figures been reported against a Part L 2021 baseline?

Yes

No

Have you provided the SAP full calculation worksheets (both DER and TER sheets) for all the sample dwellings and/or BRUKL reports for all stages of the energy hierarchy to support the savings claimed?¹

Have you clearly differentiated between newly built and refurbished sections within your development in the Energy Statement?

Yes

No

Have you provided an overall assessment of on-site regulated carbon emissions as well as separate estimates for new builds and refurbishments?

Yes

No

Have you established a baseline for the refurbished building as described in the relevant appendix of the Energy Statement?

Yes

No

¹ For more information on how to carry out the calculation underpinning the assessment please refer to (including any subsequent updates of this guidance):

Commercial www.uk-ncm.org.uk

Residential bregroup.com/sap/sap10

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Yes/No – Explanation

Be Lean Demand Reduction

Have you met the following London Plan 2021 energy efficiency targets?

Yes

No

- Residential – at least a 10% improvement on 2021 Building Regulations from energy efficiency
- Residential – Have you evaluated and reported the Fabric Energy Efficiency Standard (FEES) for the development as a whole?
- Non-residential – at least a 15% improvement on 2021 Building Regulations from energy efficiency

How has your design sought to meet all energy policy areas and how will building form contribute to meeting energy policy targets?

Yes

No

Have you considered the suitability of other design areas which may be negatively impacting the energy consumption and overheating risk of the proposed development?

Energy Flexibility

Have you investigated the potential for energy flexibility in the development, and have you included proposals to reduce the amount of capacity required to reduce peak demand? Has this been included within your energy assessment?

Yes

No

Have you considered the benefits of Demand Side Flexibility, including potential cost savings for developers and occupiers in light of predicted future energy cost increases and grid constraints?

Are the buildings in your development enabled to modify their energy consumption in real-time using Demand Side Management (DSM) and storage systems?

Have you reported the calculations of peak demands for the entire development?

Have you engaged with DNOs and district heating operators to determine local capacity, including considerations for future phases?

Have you laid out proposals to implement flexibility measures that would reduce peak demand across the development site such as:

- Electrical and heat energy storage capacity?
- Utilizing renewable energy generation for load matching?
- Integrated smart systems, such as smart charge points for EVs and gateways?
- Any other initiatives or systems related to flexibility that have been implemented?

Cooling and Overheating

Have you submitted The Good Homes Alliance (GHA) Early Stage Overheating Risk Tool² to identify potential overheating risk and passive responses early in the design process (applicable only to residential spaces)

Yes

No

How will you minimise the demand for cooling and the risk of overheating through passive design in accordance with the cooling hierarchy?

Yes

No

Have you conducted Dynamic overheating modelling in line with CIBSE Guidance?

Did you use TM59 for residential and TM52 for non-residential scenarios?

Were all TM49 weather scenarios taken into consideration during the modelling?

Have you clearly demonstrated that the development will need comfort cooling to avoid the risk of overheating?

Have you explored the possibility of using natural ventilation and/or free cooling?

Is the use of natural ventilation and/or free cooling viable in accordance with the cooling hierarchy?

Have you applied the Part O requirements for a detailed overheating assessment of residential spaces?

Has the area weighted average (MJ/m²) and total (MJ/year) cooling demand for the actual and notional building been provided?

Yes

No

Have you demonstrated that the actual building's cooling demand is lower than the notional?

² <http://goodhomes.org.uk/wp-content/uploads/2019/07/%20GHA-Overheating-in-New-%20Homes-Tool-and-Guidance-%20Tool-only.pdf>

Costs to Occupants

Have you considered the estimated costs to occupants of the energy assessment?

Yes

No

How have you outlined your commitment to protect consumers from high energy prices?

In alignment with the energy hierarchy, have you prioritized energy demand reduction?

Have you ensured that energy efficiency measures are your primary consideration before selecting an energy system?

Have you considered the following quality assurance mechanisms and commitments as part of your energy strategy (not applicable for all the schemes):

- Have you gained any quality assurance accreditation (e.g., Heat Trust)?
- Are you following recognized quality standards (e.g., CIBSE Code of Practice)?
- Have you ensured transparent billing, separating the ongoing maintenance and capital replacement aspects of the standing charge?
- Have you provided aftercare support (e.g., BREEAM Man 05 Aftercare)?
- Have you offered multiple heat tariff options to occupants?
- Have you given occupants a choice in metering arrangements at no extra cost (e.g., Prepayment Meters (PPM))?
- Have you linked thermal storage to pricing signals and renewable generation?

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Yes/No – Explanation

Be Clean Heating Infrastructure

Have you investigated opportunities for connection to nearby existing or planned district heating networks (DHNs) using the London Heat Map and the Local Authority Energy Plan (LAEP)? Where such opportunities exist, this should be the priority for supplying heat to the site in line with the London Plan 2021 heating hierarchy.

Yes

No

Has evidence of this investigation been provided including evidence of active two-way communication with the network operator, the local authority and other relevant parties? This should include information on connection timescales and confirmation that the network has available capacity. See the guidance for full details on the information that should be provided.

Where all buildings/uses on site will be connected, does the site have a single point of connection and a communal heating network?

Yes

No

Have relevant drawings/schematics demonstrating the above been provided?

Will the development be future proofed for connection to wider district networks now or in the future, where an immediate connection is not available?

Yes

No

Where a DHN connection is not available, either now or in the future, have you followed the London Plan 2021 heating hierarchy to identify a suitable communal heating system for the site?

Yes

No

The London Plan 2021 limits the role of CHP to low-emission CHP and only in instances where it can support the delivery of an area-wide heat network at large, strategic sites. To use low-emission CHP will be asked to provide sufficient information to justify its use and strategic role while ensuring that the carbon and air quality impact is minimised.

Yes

No

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Yes/No – Explanation

Be Green Renewable Energy

Have you maximized opportunities for renewable energy generation by producing, using, and storing renewable energy on-site? If so, please list all renewable energy sources utilized, even if the 35% on-site target has been achieved through earlier stages of the energy hierarchy.

Yes

No

Are heat pumps proposed for the development?

Yes

No

Have you conducted a thorough performance analysis of the heat pump system?

If there are opportunities for DHN connection, have you ensured the system's compatibility?

Can you provide an estimate of the heating and/or cooling energy (in MWh/annum) that the heat pumps will supply to the development?

What percentage contribution will the heat pumps provide to the site's heat loads?

Can you demonstrate how the heat fraction from heat pump technologies will be maximized?

How have you calculated the Seasonal Coefficient of Performance (SCOP) and Seasonal Energy Efficiency Ratio (SEER) for energy modeling?

Is your calculation based on a dynamic evaluation of the system boundaries throughout the year, accounting for variations in source temperatures and design sink temperatures for space heat and hot water?

What are the expected heat source temperature and heat distribution system temperature?

Can you explain how you will minimize the difference between these temperatures to ensure the system operates efficiently?

Have you calculated the distribution loss factor based on the aforementioned information for further calculation purposes?

Is an ambient loop heat network proposed?, If so have you engaged with local DHN stakeholders and demonstrated that proposals will be compatible and commercially viable for future connection to district heating.

Yes

No

Carbon Offsetting

Have you demonstrated that carbon emission reductions on-site been maximized?

Yes

No

Have you calculated the shortfall in carbon emissions and the offset payment that will be made?

Yes

No

Be Seen Energy Monitoring

Applicants will be expected to monitor their development's energy performance and report on it through the GLA's online monitoring portal.

Yes

No

Have you reviewed the 'Be Seen' energy monitoring guidance³ to ensure you are aware of the relevant requirements to comply with the 'be seen' policy?

Will the development be designed to enable post-construction monitoring?

How will this be achieved?

Note: This will be secured through suitable legal wording.