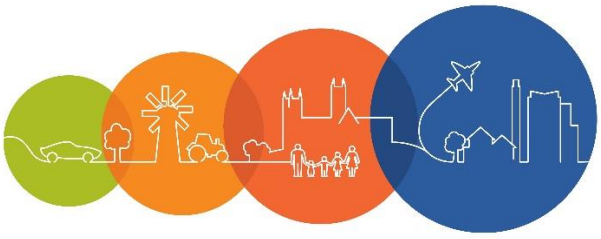
Providing an Energy Statement: A Guide for Applicants

November 2023

Central Lincolnshire
LOCAL PLAN



Contents

About this Guidance

The Central Lincolnshire Local Plan was adopted on 13 April 2023, replacing the 2017 Local Plan. One of the biggest changes in the new Local Plan was the introduction of Climate Change policies and these policies represent an important part of achieving a net zero carbon Central Lincolnshire.

It is recognised that these new policies will be challenging for the development industry to adjust to at first and so a number of additional tools have been produced to assist: the Central Lincolnshire Energy Efficiency Design Guide 2023; two Energy Efficiency Checklists – one for residential and one for non-residential developments; and now this Energy Statement guidance.

This guidance is aimed to assist in writing Energy Statements in order to provide clarity about what is expected from Energy Statements in order to assess development proposals against these policies.

It should be noted that there are countless scenarios which will call for a slightly different approach in Energy Statements, for example between outline and detailed applications or dependent on the scale of an application, so it may be necessary to adjust the approach of or details within an Energy Statement based on the application context.

What is an Energy Statement and when should I complete it?

A key requirement of new policies S6, S7 and S8 is the provision of an Energy Statement. The purpose of an Energy Statement is to set out the steps taken in a development proposal to demonstrate how it satisfies the policy requirements or any challenging areas where full compliance has not been possible.

It should document how energy efficiency has been considered at each stage of the process from early design stage leading up to the application being submitted. The Energy Statement can also be used to demonstrate how other policy considerations have been considered, potentially including S9: Decentralised Energy Networks and Combined Heat and Power, S10: Supporting a Circular Economy, S11: Embodied Carbon, S20: Resilient and Adaptable Design, and more.

Consideration of energy efficiency is needed throughout the design process with decisions on layout and built form at the very start of the process being fundamental parts of delivering energy efficient developments. As such the Energy Statement should document the 'journey' to submission of the application, demonstrating the decisions that have been made throughout the process.

It is therefore recommended that work commences on the Energy Statement at the very start of the development process, and it will be needed in order to obtain permission.

For outline applications, depending on what details are being left to reserved matters, it may be possible to defer the production of an Energy Statement until a detailed application is being prepared. However, in instances where numbers and layout are being agreed at outline stage some assessment may be needed to inform decisions. In such cases, it is recommended that discussions are held with the Local Planning Authority to understand what may be needed. Where there is any deferral of an Energy Statement in an outline application to later stages of the process, this will likely be conditioned.

An Energy Statement will be required for all scenarios regardless of whether the Passive House Planning Package (PHPP) or Standard Assessment Procedure (SAP) route to compliance are being pursued (or Design for Performance for non-residential schemes).

It is important to note that the Energy Statement should include all information relating to the relevant climate change policies in the Local Plan, not just energy efficiency, and it should include details of all known elements proposed to address climate change and satisfy the policy requirements in the local plan. Standards, features and specifications proposed may be conditioned as part of planning permissions issued.

Sources of Information for Energy Statements

It is likely that consultancy help will be needed to complete an Energy Statement, particularly in completing the technical information required on building fabric, performance and the calculations needed to demonstrate policy compliance, including through using the checklists.

Central Lincolnshire Information

The Central Lincolnshire website includes a number of documents to assist in satisfying the Local Plan Policies, these are:

- Central Lincolnshire Energy Efficiency Design Guide 2023
- Central Lincolnshire Energy Efficiency Checklist – Residential
- Central Lincolnshire Energy Efficiency Checklist – Non-residential
- Energy Efficiency Policies FAQs

These documents provide a suite of useful tools and information specifically needed to meet the policy requirements locally.

The relevant checklist should be submitted alongside the Energy Statement.

External Information

Beyond Central Lincolnshire there is a vast amount of information and tools available to help understand energy efficiency in buildings and that can help with designing schemes and informing what will be included in a scheme:

- Passivhouse Institute – lots of information about Passivhaus standards – https://passivehouse.com/
- Passivhaus Trust – lots of information about Passivhaus standards – https://www.passivhaustrust.org.uk/
- BREEAM – lots of information about BREEAM certification – https://bregroup.com/products/breeam/
- Good Homes Alliance – a cross-sector think tank with lots of information on climate change and energy efficient housing – https://goodhomes.org.uk/
- Energy Saving Trust – information on the benefits of reducing carbon emissions and wide-reaching ways in which it can be achieved - https://energysavingtrust.org.uk/
- UK Green Building Council - a network of industry partners to take energy efficiency forward - https://ukgbc.org/
- Greenspec – a ‘green building’ resource with lots of useful information - https://www.greenspec.co.uk/
- LETI – a network of built environment professionals collaborating to put the UK on a path to a zero-carbon future - https://www.leti.uk/

Additional information on energy efficiency, standards, tools, assessors, and more can be obtained from web searches.

A Template for Energy Statements

To assist applicants in understanding what should be included in an Energy Statement, this section sets out a template for them. There is no requirement for this approach to be followed, but it will assist in ensuring that the information is presented in a coherent way, consistent across applications, that can be easily understood by decision makers.

The template is broken down into suggested sections, but again, this is optional and may vary depending on the site context. The following headings are those that might be useful to include, and suggestions are provided under each section heading.

Where Energy Statements do not follow this template, it is advised that some of the recommendations below are included in Energy Statements to avoid planning authorities asking for additional information.

Cover Page

The first page or cover of every Energy Statement should clearly state the date that the Energy Statement was drafted, the location of the scheme to which it applies, and who is completing it along with details of any suitable qualifications or memberships.

Executive Summary

It is strongly recommended that Energy Statements include a brief Executive Summary which briefly details:

- A brief summary of the orientation, form factor, and any other key features of the proposal site or design approach;
- The built fabric specifications in table format: identifying u values for walls, window and doors, floor and roof (potentially including brief details of the specific materials such as insulation type and standard of glazing); the proposed ventilation system; and the airtightness standard proposed;
- Details of the proposed heating system and confirmation that there is no proposed connection to the gas network or use of bottled oil or gas;
- Confirmation of standard and efficiency rating of appliances to be fitted or given as options to purchasers and confirmation of the overall expected unregulated energy use;
- Confirmation of the overall space heating demand and energy use intensity of the building/s;
- Details of the renewables proposed for the site and clear confirmation that this is adequate to meet the regulated and unregulated energy needs of the property;
- Details of proposed post construction testing and monitoring and confirmation that this will be completed by a suitably qualified person, and any proposed measures to ensure the occupant will operate the building effectively; and
- Details of any areas where the site cannot meet the standards and any justification for this.

Essentially, the Executive Summary should include all the key elements that a decision maker needs to understand the proposal and how it has factored in the requirements of policies S6, S7/S8 and other relevant climate change policies. Further detail will then follow in the wider Energy Statement and its appendices.

Information Checklist

Energy Statements should include the below checklist to clearly demonstrate that the necessary information has been provided and where it can be found. The second column should be tailored so that it identifies where each item can be found, and it can also be used to identify anything that has not been supplied and to justify why this is the case. Please note, it is not expected that every Energy Statement will need to incorporate all items, but please do not exclude these items from the Energy Statement, but instead use this to clarify why it has not been provided.

Item	**Location and additional Comments** (tailor this to identify what has been submitted, where it is and to justify anything not provided)	**Provided?**
Completed Energy Efficiency Checklist	*E.g. Yes, provided alongside application*	✓ / ✗
Table format setting out the standards being achieved in your scheme as set out in the Design Guide	*E.g. Yes, provided in Executive Summary*	✓ / ✗
Detailed SAP/PHPP calculations	*E.g. Provided at Appendix 1*	✓ / ✗
Details of glazing proposed	*E.g. Provided in Appendix 2*	✓ / ✗
Details of insulation proposed	*E.g. Provided in Appendix 2*	✓ / ✗
Details of ventilation proposed	*E.g. Details and ventilation strategy provided in Appendix 3*	✓ / ✗
Details of heat supply proposed	*E.g. Specifications of air source heat pump provided at Appendix 4*	✓ / ✗
Details of renewables proposed	*E.g. Specifications of photovoltaic panels provided at Appendix 5*	✓ / ✗
Location of heat pump and renewables	*E.g. Shown on site plan ref … and on elevations ref …*	✓ / ✗
Orientation plan	*E.g. Shown on accompanying plan number …*	✓ / ✗
Solar gains plan	*E.g. Including details of shading, landscaping, etc. provided in Appendix 6*	✓ / ✗
Assessment of embodied carbon (only required from major development)	*E.g. Included in Appendix 7 and summarised in Fabric First Chapter of this Energy Assessment*	✓ / ✗
Details of known appliances and lighting (where known)	E.g. List of options to be provided and energy rating at Appendix 8	✓ / ✗
Details of as-built verification to be provided including a commitment for it to be completed by a suitably qualified individual	E.g. Yes, provided in the Executive Summary	✓ / ✗

Please note, proposals may not require all the items listed above or may require additional information to be submitted. If, through the planning process, plans are updated it may be necessary to update the details in the checklist.

Introduction and context

It is always useful to provide a brief introduction to set the context of a scheme, this can include the policy context, location details, a summary of what is being proposed and anything else needed to be considered. There may be occasions where external consultants are appointed by the Local

Planning Authority to assess an Energy Statement, so it is recommended that the introduction and context section contains everything that is needed to understand the nature and context of the proposal in relation to energy efficiency without having to look at other documents. However, this does not mean duplicating everything in the applications and should be concise.

It is not necessary to duplicate policy wording from either national policy or Local Plan policy.

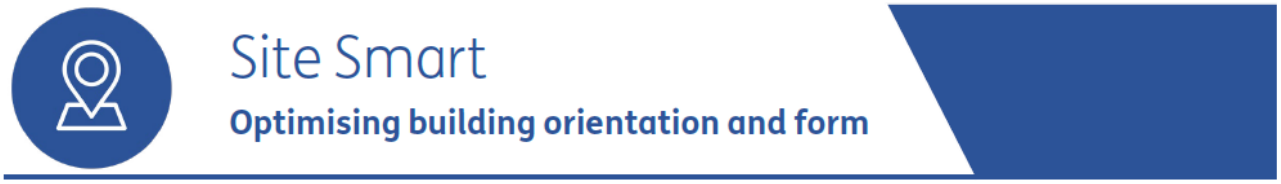
Confirmation of Compliance Route

Before the Energy Statement goes into any detail it is highly beneficial to set out the route to compliance that is being followed. On page 7 of the Energy Efficiency Design Guide it sets out two potential routes to compliance.

The first, and most straight forward route to compliance is using PHPP modelling. If this method is used then the Energy Statement should confirm this, provide the outputs from the PHPP modelling which demonstrates space heating demands, total energy demand, and net zero balance and details of how this will be achieved. It will need to demonstrate that Passivhaus Plus or Passivhaus Premium has been achieved. If Passivhaus Classic is achieved, then additional information will be required to demonstrate that the policy is being complied with through confirmation of renewable energy generation to meet the demands of the property.

It should be noted that there may be design performance tools, other than PHPP, that can be used to demonstrate compliance with the policy. In such instances, full details of the tool, along with details of the performance assessment, will be required as part of the Energy Statement and wider evidence. It is recommended that any such tool should follow the CIBSE TM54 methodology.

Where the SAP route to compliance is proposed to be used, it is recommended that the following sections are then included in the Energy Statement to ensure that the route to compliance is demonstrated following the recommendations of the Energy Efficiency Design Guide.



As is set out in the Design Guide, it is important that consideration of how best to deliver energy efficient buildings is incorporated at the earliest stages of the design process.

In this section of the Energy Statement there should be commentary about the way in which this has been approached and considered throughout the design process. This is where detail of the choices made, and the potential impacts of these choices, will be set out. It is also where any limitations relating to the site should be set out, such as any unavoidable shadowing, impacts of prevailing wind direction, or limited options for orientation and why.

It should include details about the decisions made on built form to optimise the buildings and maximise efficiency and energy generation. It can also reference the plans which demonstrate the assessments undertaken and decisions made in the scheme.

This section should detail measures taken to ensure heat resilience to prevent overheating such as shading or landscaping, or any proposed green walls or roofs or other measures as required in Local Plan Policy S20.

Images and extracts of plans submitted alongside the applications (or of earlier plans dismissed in an effort to improve efficiency) may help to demonstrate points being made and add clarity over the decisions being made.

Should any demolition be proposed in the scheme, detailed justification for this demolition should be provided against the relevant criteria in Policy S11. If this justification is in relation to parts 2 or 3 of the policy this should include two assessments – one relating to the carbon if the building were retained as part of a scheme and one assessing the carbon of the proposed scheme, taking into account embodied energy and operational energy use.

For **outline applications**, the level of information available may vary depending on what detail is being secured. Energy Statements for outline applications should clearly explain what detail is being provided and what is left to be established at reserved matters stage. Conditions may be placed on outline applications to secure details at reserved matters stage. It is likely that elements such as layout and orientation, approach to built form on the site, and other decisions about the site will be capable of some consideration and agreement at outline stage in many cases.

Fabric First

Optimising building materials and airtightness

In this section the Energy Statement should include the full details of the fabric being proposed in buildings in the applications. This should include details of materials and performance specifications for walls, ground floor, roof, windows and doors and should include the u-values of each.

It should also detail the airtightness level proposed to be achieved and the approach to achieving this in the design and build.

It should include details of the ventilation strategy, such as what method is being proposed, details of where they will be located and how it will work, where known. The Design Guide provides some details of the options for this.

For major applications, this section should also include details of decisions made in relation to embodied carbon as required by Policy S11 of the Local Plan. This can include decisions made with materials that will reduce the carbon needed to build the house and any comparison against alternatives to demonstrate the benefits of the selection.

For schemes with multiple buildings, it will be beneficial to provide details for each house type being proposed.

For **outline applications** where full details of built fabric is not known, this may be conditioned for reserved matters stage. However, it will be beneficial if a commitment to a fabric first approach and any specific deliverables can be made at this stage wherever possible.

Sustainable Systems

Optimising energy systems and hot water demand

The sustainable systems section of the Energy Statement should set out the system/s proposed to heat the property and to provide hot water. The Design Guide provides details of the systems that are likely to ensure compliance with the policies, typically being heat pumps.

This section should also include details of any other efficiency systems proposed such as smart meters, or tap, shower and toilet standards where known, including details of the anticipated benefits of these.

Plans supporting the application should clearly demonstrate the location of the proposed systems and this can be referenced or reflected in this section.

For schemes with multiple buildings any differences between buildings should be detailed here.

It may also be appropriate to include details of any instructions intended to be provided to future occupants to ensure the system is used effectively and efficiently.

For **outline applications**, where details of the systems are not known, this may be conditioned for reserved matters. However, it will be beneficial to commit to an approach on the site at this stage where possible.

Green Generation

Optimising local renewable energy generation and use

This section of the Energy Statement should set out the type of renewable energy proposed to be generated on the site and the anticipated generation, dependent on the orientation. For schemes with multiple buildings this may summarise the generation from different house types and orientations.

This section should reference, and may include extracts from, plans showing the location and extent of proposed generation. For PV this should achieve the target figures in the design guide.

Where any renewable energy generation is proposed to be shared by occupiers of multiple buildings that will be in different ownership this should include a clear demonstration of how this will work in practice, how much energy will go to each property and how maintenance of the shared resource will be managed.

For **outline applications**, it is likely that schemes will need to indicate what form of generation is proposed and where it is likely to be located. Specific details of the amount to be generated may be conditioned for reserved matters stage.

Unregulated Energy

The energy statement should include a section on unregulated energy use. This can include any calculations that have gone into the overall energy assessment and a breakdown of what appliances will contribute to the unregulated energy use.

Unregulated energy use is one area where current SAP calculations have not kept up with modern standards. To ensure that a realistic and more up to date calculation on unregulated energy is provided calculations from PHPP can be used as a proxy. The Good Homes Alliance undertook a Building Standards Comparison in 2020.[1] In this document it provided a calculation for different house types/sizes. Using this, it is reasonable for a scheme which is proposing the use of energy efficient appliances to include the following assumed Unregulated Energy Calculation within their Energy Statement and calculations:

[1] https://kb.goodhomes.org.uk/wp-content/uploads/2020/09/Building-Standards-Comparison-October-2020-v1.2.pdf

Gross Internal Floor Area (m^2)	Calculated Occupancy (SAP)	Unregulated Energy kWh / m^2 / year
50	1.69	24.4
61	2.01	21.9
84	2.53	19.3
110	2.81	16.3

The nearest dwelling size should be used in calculations.

If these figures are being used in the place of the SAP figures, this section must include a commitment to providing efficient appliances where applicable and the standards of appliance that will be achieved. This will be particularly important where SAP calculations are showing that achieving the Energy Use Intensity in the policy is challenging in the standard calculations, but should be proposed in all schemes.

For **outline applications**, where details of the appliances are not known, this may be conditioned for reserved matters. However, it will be beneficial to commit to providing appliances of specific efficiency levels at this stage where possible.

Post-construction testing, monitoring and achieving the committed standards

Energy Statements should include details of proposed post-construction testing and monitoring. Conditions on permissions will in most cases include requirements to submit results of this testing by a suitably qualified individual.

It is important that standards being proposed are being achieved wherever possible. However, in the event that the proposed standards are not achieved it will be necessary to identify any shortfalls and to understand why this has occurred. It may also be necessary to provide mitigation against any shortfall, potentially through providing additional renewables on site, or by purchasing off-site credits. It will also be important to demonstrate reflection on this shortcoming and identify how this will be avoided in the future.

It is also essential that future occupiers of buildings understand how the system and appliances work and therefore operate it effectively. A commitment to providing information for future occupiers should be included where the heating system, appliances, or ventilation and fabric mean that operation may be different to what we would typically be familiar with.

For **outline applications**, details of post-construction testing and monitoring may be conditioned for reserved matters stage, but can be included at this stage.

Conclusion

It is helpful to briefly bring together the key information from the previous sections and summarise what has been achieved on the site and conclude whether the full policy requirements have been achieved or not. This need not repeat the Executive Summary.

Appendices

Additional supporting information for the Energy Statement and in support of the energy efficiency and other climate change considerations should be included within the appendices to the Energy Statement wherever possible.

The checklist, introduced above, allows applicants to identify the location of other supporting information on plans and elevations for example and it is not necessary to duplicate these in the appendices.