

Energy Statements

Planning advice PA2023-05

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Purpose of this Planning Advice

This Planning Advice provides guidance on what to include in an Energy Statement when submitting a proposal for new development that is required to meet Policy C1 Using Resources in Buildings, as set out in the Aberdeenshire Local Development Plan 2023 (LDP). This guidance will also assist in implementing the overarching policy requirements of National Planning Framework 4 (NPF4) which add significant weight to meeting targets on reducing emissions to address the climate emergency (Policies 1 and 2).

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1. Introduction

When submitting plans for new development, whether residential or commercial, an Energy Statement will normally be required. Its purpose is to demonstrate how overall energy efficiency and reduction of carbon emissions will be achieved through energy efficient measures, design and management. Measures will typically include a mix of fabric improvements, renewable technologies and district or block heating networks (including partial or full use of renewable energy sources). The scale of these interventions will be reflective of the proposed scale of the development.

This Planning Advice supports Policy C1 Using Resources in Buildings as set out in the LDP 2023, and the overarching NPF4 policy requirements of Policy 1 'Tackling the climate and nature crises' and Policy 2 'Climate mitigation and adaptation'. The advice also recognises that Building Regulations and definitions of sustainability labels for technical standards are subject to change.¹

The LDP 2023 is the primary document against which planning applications will be determined. A planning permission will always require to comply with current building regulations.

This guidance note sets out:

- the current policy and regulatory context;
- the type of development the policy applies to;
- when to submit an energy statement;
- the information required from applicants to demonstrate that policy has been met;
- how the information will be assessed; and
- a checklist of key requirements (Appendix 1).

2. Policy and regulatory context

The national spatial strategy of NPF4 establishes an ambition that Scotland's future places will be net zero. Scotland's draft Energy Strategy and Just Transition Plan (2023)² sets out a vision that by 2045 Scotland will have "a climate-friendly energy system that delivers affordable, resilient and clean energy supplies for Scotland's households, communities and business." Ambitious national targets have been established through the Climate Change (Emissions Reduction Targets) (Scotland) Act 2019 which amends the Climate Change (Scotland) Act 2009. The new Act sets overall emission reduction targets of 75% by 2030, 90% by 2040 and net zero by 2045.

The Heat in Buildings Strategy (HiBS) 2022 sets out a pathway to zero emissions buildings by 2045 and details a series of actions and commitments, together with principles to apply to ensure zero emissions heat delivery programmes support

¹ Building Standards Technical Handbooks 2022 have been issued following review by the Scottish Government, with further changes to be introduced in support of the 2024 New Build Heat Standard. It is anticipated the new standard will be introduced in October 2023.

² Currently under consultation, to replace the current Scottish Energy Strategy: The future of energy in Scotland (Scottish Government, Dec 2017)

fuel poverty objectives³. This includes a fabric first approach, and a strong focus on heating system change. The new build heat standard introduces regulations from April 2024 prohibiting the use of direct emission from heating systems in new buildings – both domestic and non-domestic⁴.

Scotland's targets on reducing emissions are across all the greenhouse gases as covered by the Kyoto Protocol⁵. This means carbon dioxide, but also methane, nitrous oxide, and other greenhouse gases such as the Hydrofluorocarbons that contribute to global warming. The target of 'net-zero' is achieved when emissions of greenhouse gases to the atmosphere are balanced by removal of those gases (such as carbon being absorbed by forests).

To ensure that new development delivers on energy efficiency, Policy C1 'Using Resources in Buildings' states that all developments must be designed to reduce carbon dioxide emissions and reduce the use of energy. In line with current building regulations, this means that for all development the target is to at least meet the current Scottish building regulations'⁶ Target Emissions Rate (TER).

The LDP sets out an expectation for all development to achieve as a minimum the sustainability rating 'Gold' level for carbon dioxide reduction and energy efficiency through installation of low and zero carbon generating technologies. The LDP sets a further ambition to achieve a Platinum sustainability level as defined under section 7 of the building standards technical handbook, wherever feasible.

The masterplanning for major new development should meet the standard in part through district or block heating schemes. In order to meet NPF4 Policy 19d, for national and major developments that will generate surplus heat and which are

³ Heat in Buildings Strategy (HiBS) <u>https://www.gov.scot/publications/heat-in-buildings-strategy-2022-update/</u>

⁴ New build heat standard <u>https://consult.gov.scot/energy-and-climate-change-directorate/new-build-heat-standard-part-two/</u>

⁵ The international agreement linked to the United Nations Framework Convention on Climate Change which sets internationally binding emission reduction targets (<u>https://unfccc.int/kyoto_protocol</u>).

⁶ <u>https://www.gov.scot/policies/building-standards/monitoring-improving-building-regulations/</u>

located in areas of heat demand⁷, a Heat and Power Plan should demonstrate how energy recovered from the development will be used to produce electricity and heat (Policy 19 Heating and cooling). NPF4 Policy 19b supports retrofitting a connection to a heat network and refers to all proposals, not just those masterplanned. Furthermore, NPF4 Policy 19c supports future connection to a heat network where planned but not yet in place⁸. Consideration should be given to alternative district heating technologies including hot rock geothermal or biomass sources.

Water efficiency is required for all new development alongside energy efficiency to minimise resource demand and so meet Policy C1 of the LDP 2023. Reducing water consumption within new developments in Aberdeenshire will also be important in limiting impacts on our natural environment including rivers and streams. The River Dee Special Area of Conservation is particularly vulnerable, this being a major source of drinking water to the region as well as providing wildlife habitat, outdoor recreation and supporting local economies, in particular tourism.

3. Type of development requiring an Energy Statement

Under Policy C1 of the LDP, all new development is required to submit an Energy Statement, with the exception of the type of buildings to which the minimum energy efficiency standard does not apply as set out in Scottish building regulations. Exempt development includes:

- alterations and extensions to buildings; changes of use;
- conversion of existing buildings;
- development of ancillary buildings of less than 50 square metres;
- buildings heated solely to provide frost protection; and
- buildings with an intended life of less than 2 years.

⁷ Subject to publication of Local Heat and Energy Efficiency Strategy (LHEES), expected 2024 ⁸ Under NPF4, proposals within or adjacent to a Heat Network Zone identified in the LDP will only be supported if it can be connected to the existing heat network: as yet there are no HNZs identified in Aberdeenshire, and as yet no Local Heat and Energy Efficiency Strategy (LHEES) in place.

Applications for Planning Permission in Principle are often submitted at a very early formative stage of a development proposal. Compliance with the policy is still a requirement for such applications with a normal practice that suspensive conditions would be applied to any consent granted (see "When to submit an Energy Statement").

Financial viability may be a factor taken into consideration when assessing an Energy Statement. However, this would be considered on a case-by-case basis, and under all circumstances the minimum standard must be met in relation to water efficiency. With regard to overall energy efficiency, site specific analysis is required to demonstrate why renewable technologies are not considered feasible.

4. When to submit an Energy Statement

The earlier in the planning application process that the Energy Statement can be carried out, the better.

As planning policy requires compliance with the Building Regulations, an Energy Statement would not need to identify where those standards are going to be met. As noted below, only those measures relating to the renewable energy component, and measures relating to raising the sustainability standard to Gold or Platinum need to be considered.

Exceptionally, a planning application, such as an application for Planning Permission in Principle, can be approved subject to a condition being applied that stipulates an Energy Statement will be submitted. This is called a 'suspensive condition' meaning that no construction work can be commenced without the Energy Statement but avoids unnecessary delays in the processing planning applications. A suspensive condition may also require that the building cannot be occupied unless the proposed energy efficiency measures have been delivered.

If the proposed energy efficiency measures stated in the Energy Statement result in any material changes to the approved proposal, then it is likely that a new planning application will be required and be subject to greater conditions. This is of particular importance in areas of special architectural or historic significance, notably within Conservation Areas or development affecting listed buildings. In these circumstances, it is important that external installations such as solar panels are factored into the design of the proposal presented in the planning application at the earliest possible time to avoid a further planning application.

5. What to include in an Energy Statement

Applicants can either submit an Energy Statement as a stand-alone document, or as part of a Design Statement, or as part of a Sustainability Statement. The document must demonstrate how the development proposal is energy efficient in its design, layout, and through the installations and technologies used. The level of information provided should be proportionate to the scale and nature of the development proposed.

Minimum requirements

- a) Full details of the additional energy efficiency measures and/or renewable technologies proposed to be incorporated into the development (over and above the minimum requirements of the current Building Regulations) should be provided. Examples of the measures that can be adopted for Gold and Platinum levels of sustainability are given in the building regulations and include highly efficient appliances and equipment, building control systems, fabric insulation, heating systems, lighting and performance windows and doors (providing they are above those specified for Buildings Regulations).
- b) Assessment of possible low and zero carbon options, including connecting into low and zero carbon generation networks where they exist. Reasons for discounting certain technologies and selection of the preferred technology with full details of the selected technology is required. For major new developments (for example, more than 50 homes), the Masterplanning process should meet the required standard in part through district heating schemes. Where a district network exists, or is planned, or can be provided viably, new development should include infrastructure for connection and therefore provide the option to use heat from the network. This should include the safeguarding of pipe runs within a development up

to the curtilage. Heat networks may initially be reliant on carbon-based fuels, but it must be demonstrated that these can be converted to renewable or low carbon sources of heat in the future.

- c) Where no 'anchor' development exists that could provide a source of heat for a heat network e.g. hospital, school, or heat intensive industry, there is an obligation on the developer to consider a neighbourhood low energy heat network.
- d) Where heat networks are not viable, microgeneration and heat recovery technologies associated with individual properties should be implemented.
- e) Consideration of alternative technologies in areas not served by mains gas should be considered e.g. hot rock geothermal or biomass sources.
- f) Consideration of providing facilities for alternative fuel vehicles including electric and hydrogen refuelling is required.
- g) A target SAP or SBEM rating may be stated in order to demonstrate where energy efficiency targets have been exceeded, and this will be assured through a suspensive condition. Where possible, calculations using the SAP⁹ or SBEM¹⁰ Government approved methodologies for calculating the energy performance of buildings should be shown. These can be used to demonstrate that the reduction in carbon dioxide emissions rates for the development arising from the measures proposed, will enable the development to comply with Policy C1 'Using Resources in Buildings' of the LDP.
- h) Appropriate standards for water efficiency to achieve both environmental protection and to reduce energy costs is required. For water efficiency a Gold Sustainability performance level would apply and a BREEAM rating of 'Excellent' for non- domestic buildings¹¹. Limited exceptions may apply but

⁹ Standard Assessment Procedure (SAP) - a methodology for assessing and comparing the energy and environmental performance of dwellings. Its purpose is to provide accurate and reliable assessments of dwelling (domestic building) energy performances that are needed to underpin Building Regulations and other policy initiatives.

¹⁰ Simplified Building Energy Model (SBEM) - a computer program that provides an analysis of a building's energy consumption. The purpose of the software is to produce consistent and reliable evaluations of energy use in non-domestic buildings for Building Regulations compliance.

¹¹ The Gold Sustainability Level applies to domestic buildings and the BREEAM (BREGlobal Limited (part of the BRE (Building Research Establishment) Group)) is an independent third- party

all proposals must at least meet the standards established through the current building regulations.

The Energy Statement must contain the following sections:

- Physical layout:- How layout and orientation of buildings minimise energy use e.g. benefits from passive solar gain, taking account of the natural landscape form for instance south facing slopes and features of a site such as tree belts that provide wind shelter;
- **Renewable energy provision**:- How the development maximises the use of low and zero carbon energy generation e.g. solar PV panels;
- Circular economy issues:- Consideration of materials, methods and techniques which promote sustainability and support the circular economy, including low impact, sustainably sourced, durable, reused and recycled materials;
- Waste minimisation measures:- The minimisation of waste and the maximisation of recycling during the construction and operation of the development;
- **Measures to provide future flexibility**:- 'Future proofing' the development in terms of flexibility and adaptability of the development to meet future occupants' requirements.
- Precautionary measures for climate change impacts:- Future proofing the development in terms of being 'climate ready' to manage uncertain direct and indirect climate impacts e.g. disruption to services.
- **Control of heat**:- How the development minimises the impact of overheating and aids temperature control;
- Conservation of Water:- How water is conserved;
- Flood risk mitigation:- How flood risks are reduced in the development.

approvals body offering certification of fire, security, and sustainability products and services to an international market.

6. How an Energy Statement will be assessed

Information provided in support of development will be considered along with other supporting information associated with a planning application. All planning proposals will be considered on their own merit and take into account individual circumstances.

If there is doubt that the higher optional standards encouraged by Policy C1 of the Aberdeenshire LDP have been met by measures incorporated and committed to in the Energy Statement, the Council's Housing and Building Standards Service will advise the Planning and Economy Service.

Suspensive conditions attached to a planning application will be a means by which the planning authority can ensure that energy and water efficiency standards will be met. These conditions will reflect the content of the Energy Statement and the standards that this commits the developer to meet, prior to the building being completed and/or occupied (depending on what is stated in the planning condition). Failure to comply with a suspensive condition will be a breach of planning control.

Appendix 1 – Energy Statement Checklist

1. Does your proposal meet policy requirements and building regulations?

- Have you made early engagement with the planning authority?
- Is your development exempt from the policy? Exemptions include alterations, extensions, changes of use, conversion of existing buildings, development of ancillary buildings less than 50 sqm; buildings heated solely for frost protection; buildings with intended life less than 2 years.
- Have you prepared an Energy Statement? All new development types will need an Energy Statement to demonstrate they are being designed to reduce carbon dioxide emissions, achieve water efficiency, and reduce energy costs.
- If you are proposing a Major new development (50 + homes) have you considered a district or block heating scheme through the masterplanning process, with provision of a low energy heat network. If identified as unfeasible, can you evidence why this is impractical?

2. Preparing an Energy Statement

- Was the assessment of the energy needs of your development carried out early in the design process?
- Is your Energy Statement a stand-alone document, or part of a Design Statement, or part of a Sustainability Statement?

3. Feasibility

- Has site specific analysis demonstrated why renewable technologies are not considered feasible? Have you provided evidence for this?
- If you have clearly demonstrated that no suitable low and zero carbon generating technologies are appropriate, have you identified carbon reduction through additional energy efficiency measures?

- Do you exceed the minimum standard in relation to water efficiency? Have you provided evidence of this?
- If you consider that addressing the energy needs of your proposal will render the development financially unviable, have you provided a justification for this? The Planning Authority will consider this on a caseby-case basis.

4. Ensure your proposal meets minimum requirements of an Energy Statement by including/demonstrating:

- Do you provide full details of proposed energy efficiency measures and/or renewable technologies?
- Have you demonstrated how layout, design and orientation minimise energy use?
- Have you identified how your development maximises use of low and zero carbon energy generation? Have you provided reasons/justifications for your preferred technology selections?
- Have you shown any external installations e.g. solar panels on the application plans?
- Can you demonstrate that you have considered facilities for alternative fuel vehicles?
- Have you made provision in your construction for the minimisation of waste and maximisation of recycling? Can you evidence this?
- Have you demonstrated how your development is "future proofed" for occupants against the predicted implications of climate change?
- Have heat and temperature controls been incorporated into the design
- Is there a risk of flooding, now or in a potentially wetter future? How have flood risks been reduced?

5. Does your Energy Statement demonstrate where energy performance is exceeded?

- An Energy Statement does not need to demonstrate Building Regulations compliance. Has your energy statement identified those measures intended to be undertaken to achieve a sustainability standard of Gold or Platinum?
- If they are available, have you included calculations using the SAP or SBEAM Government approved methodologies to evidence the predicted energy performance of your building?
- Will your proposal meet 'TER' and minimum sustainability rating 'Gold' label for CO2 reduction and energy efficiency?
- Will your Water conservation, and water efficiency measures achieved a minimum Gold Sustainability performance level, and BREEAM rating of 'Excellent' for non-domestic buildings?

6. Planning approval

Planning permission may on occasion be approved subject to suspensive conditions stating that:

- An Energy Statement is to be provided prior to construction.
- Energy efficiency measures are in place prior to building occupation.

Note: failure to comply with a suspensive condition will be a breach of planning control.