

## **Aberdeen Planning Guidance 2023: Resources for New Development (DRAFT)**

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## **1. Introduction**

### **1.1 Status of Aberdeen Planning Guidance**

This Aberdeen Planning Guidance (APG) supports the Development Plan and is a material consideration in the determination of planning applications.

This APG expands upon the following Aberdeen Local Development Plan policies:

- Policy R6 – Low and Zero Carbon Buildings, and Water Efficiency

### **1.2 Introduction to Topic / Background**

This Aberdeen Planning Guidance focuses on policy requirements regarding water efficiency and the use of low and zero carbon generating technologies in the production of new developments. The guidance draws together a range of factors that can help to minimise resource use. This guidance requires the completion of a checklist to ensure compliance with a range of factors that will increase the sustainability of new development. The requirements and further guidance for each topic is set out below and checklists are contained in Appendix 1, 2 and 3.

### **1.3 Climate Change**

Energy required for the development and functioning of new buildings has a severe impact on climate change. Careful consideration of resources for new builds can drastically transform the sustainability of developments in Aberdeen. The United Nations Sustainable Development Goals encourage increased use of sustainable technology to enhance the efficiency of new developments, as identified in Goal 7: Affordable and Clean Energy, Goal 9: Industry, Innovation, and Infrastructure, and Goal 13: Climate Action.

In response to the global climate emergency the Scottish Government has committed to the target of reaching net zero national carbon emissions by 2045, and through collaborative working, a city target of net zero by 2037 has

been set. Ensuring all new developments are designed with minimal resource usage and low energy consumption will have a lasting impact on the sustainability of new developments in Aberdeen. Delivering an integrated response to the global climate emergency, this APG aligns with Aberdeen's wider application of net zero targets.

Aberdeen Adapts 2022, identifies 'Buildings and Infrastructure' as a priority area for securing climate adaptation in Aberdeen. This includes objectives to increase resilience for energy, water, and communications through collaboration, forward thinking and innovation; and to embed climate resilience into planning, design, upgrade, and policy for buildings and infrastructure. Additionally, the Net Zero Vision for Aberdeen 2020, objective 2: 'Accelerating Transition Demand' indicates Aberdeen's ambition to invest in assets that deliver energy and carbon savings in homes and businesses across all sectors. Providing infrastructure that supports the transition to a low carbon future will be instrumental in creating a climate positive city, this is further outlined in Aberdeen's Strategic Infrastructure Plan 2020.

Additionally, the Net Zero Aberdeen Routemap 2022 is accompanied by six enabling strategies, one of which is the 'Buildings and Heat Strategy', that aims for: reduced greenhouse gas emissions to net zero by 2045, through rapid decarbonisation across all sectors with many changes to the ways in which both power and heat is generated and used. Another is the 'Energy Supply Strategy', which includes the aim: to develop affordable low-carbon energy choices for our citizens and use our strengths as a global energy capital to put ourselves at the front of the energy transition; focusing on developing globally recognised centres of excellence for green hydrogen and offshore wind. As such, resource and energy use in new developments is a major component within Aberdeen's journey to net zero.

## **2. Aberdeen Planning Guidance**

### **2.1 Density**

Policy H3: Density, requires that all housing developments larger than 1 hectare achieve a net density of no less than 50 dwellings per hectare. The planning for this should take into consideration the sites characteristics and the surrounding area. Higher densities may be appropriate in central locations whereas lower densities may be more appropriate in other areas of a development providing the overall site meets the minimum requirement. Achieving higher density development can help to reduce travel distances and will improve the ability to support local services and facilities.

### **2.2 Energy Use in New Buildings**

Climate change, energy insecurity, and rising fuel poverty are key challenges for Scotland now and for the foreseeable future. The Climate Change (Emissions Reduction Targets) (Scotland) Act 2019 has amended the Greenhouse Gas emissions targets of the 2009 Act, to reduce Scotland's emissions to net-zero by 2045 at the latest, with interim reduction targets of a 75% reduction by 2030 and 90% reduction by 2040. This covers the basket of six greenhouse gases recognised by the United Nations Framework Convention on Climate Change and includes Scotland's share of emissions from international aviation and international shipping.

Around 15% of Scotland's total greenhouse gas emissions come from energy use in the residential sector. In Aberdeen City, housing makes up 34% of the City's carbon footprint, which is 4.2 tonnes CO<sub>2</sub> per capita. The Local Development Plan provides significant housing and employment allowance: 13,609 homes and 175 hectares of employment land to 2040 for Aberdeen City.

Requiring new buildings to meet more stringent energy standards will lessen their environmental impact, make them more affordable to heat, lessen our dependence on imported energy, and support a domestic market for low and zero carbon generating technologies.

## 2.3 Layout, Orientation, Shelter, and Aspect

Good, careful design at the outset will minimise the total energy demand for the lifetime of a development. Natural light is important to amenity as it ensures a pleasant and healthy place. In the initial design stages, consideration should be given to the orientation of the proposal so that it can benefit from the most natural light. Natural light is also beneficial in reducing energy demand by providing passive heating and lighting for the lifetime of the development.

Climate change, energy insecurity and rising fuel poverty are key challenges for Scotland now and for the foreseeable future. Design considerations for a development as a whole and for the individual buildings will help to increase the efficiency of energy use. For example, simply changing the orientation of a proposed building to maximise solar gain can make improvements to energy performance.

Development layout design should maximise the potential for passive solar gain with public rooms facing south, or within 30 degrees of south. Where possible development should also maximise the use of south facing slopes to make use of solar gain.

Assessment of site topography and shelter from prevailing winds is also an important consideration in the siting of development. Site layouts that enable shelter from cold winds should be applied, particularly useful will be tree planting across the north of a site to protect against cold northerly winds. The use of trees combined with planting and fencing

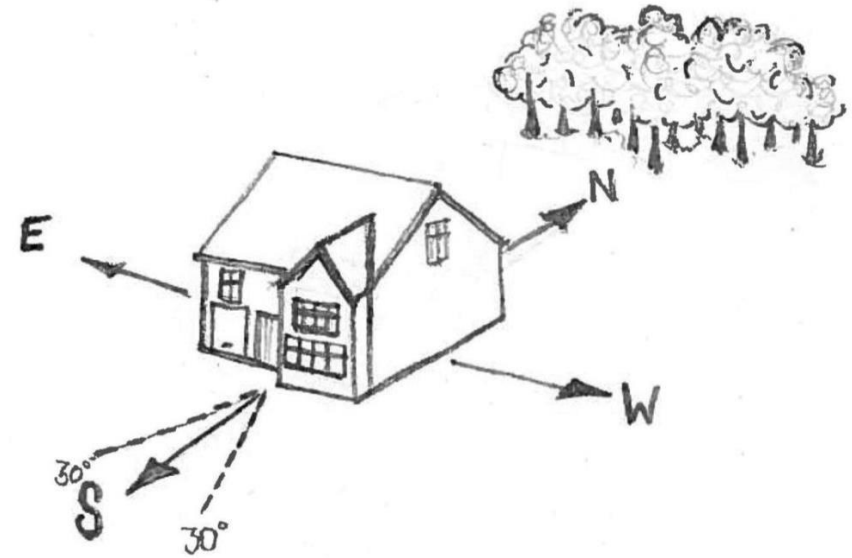


Figure 1: Diagram explaining shelter

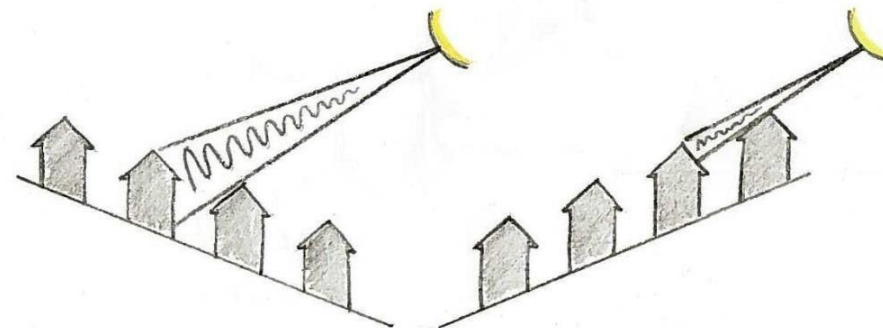


Figure 1: Diagram explaining aspect

provides some degree of wind shelter. Trees should attain a similar height to the building and planted 1 to 3 times height away or 3 to 4 if solar access is required

To utilise solar energy new developments should take maximum advantage of south facing slopes. A Landscape and Visual Impact Assessment and Environmental Impact Assessment will ensure the context opportunities are known at the start of the process.

### **3. Water Use Efficiency**

Making more efficient use of water is important in improving the sustainability of Aberdeen and the North East, particularly with the forecasts for population and economic growth. Water efficiency and conservation is important in adapting to climate change, and in protecting wildlife and natural resources. This is of particular relevance in Aberdeen where most water is currently abstracted from the River Dee, which is a Special Area of Conservation (a European Protected Site). Managing the use of water and increasing water efficiency is vital for new development and existing buildings.

#### **3.1 Policy**

In order to mitigate these concerns, the Local Development Plan policy for water use efficiency has been set in Policy R6: Low and Zero Carbon Buildings, and Water Efficiency. It seeks to ensure that all new buildings minimise the use of water and do not place unnecessary pressure on the River Dee.

Water use can be reduced in buildings through various measures including the following:

- Rainwater harvesting
- Grey water re-use
- Aeration of water from taps to reduce consumption and flow rate
- Dual flushes and reduced flow rates for toilets

- Water saving appliances, such as dishwashers and washing machines

The minimum level of water efficiency to be achieved for domestic building is the 'Gold' Level Sustainability performance identified in Building Standards Technical Handbook December 2022. A BREEAM rating of 'Excellent' should be achieved by non-domestic (commercial) buildings.

To monitor this, it will be expected that conditions will be placed on planning permission, requiring developers to submit evidence of achieving either the building standards Sustainability Label (for domestic), or the BREEAM (for non-domestic) at the appropriate level for that period. Limited exceptions may apply but all proposals must at least meet the standards established through the current Building Regulations.

At planning application stage, it will be necessary to submit the checklist in the Appendix. (Sustainability Checklist) to show the development will comply with this requirement.

## **4. Energy Efficiency in Buildings**

### **4.1 District Heating**

District heating is a means for delivering heat to multiple buildings from a central energy centre. The energy centre would contain a heating plant, top up and back up boilers a heat store and circulation pumps. New development does not necessarily have to provide a new energy centre and may be able to connect to an existing district heating scheme or make use of locally available waste heat.

A heat map has been prepared for Aberdeen City to identify the potential links in the network that could be considered, and further guidance will be contained in Aberdeen Planning Guidance: Heat Networks and Energy Mapping. The use of district heating can offer a lower heat price than using individual boilers or electrical heating and by combining heat and power generation fuel can be used more efficiently. Overall, a reduction in carbon emissions can be achieved through the use of district heating.

Larger developments that have a mix of both housing and business or include large energy users such as schools and swimming pools will provide a continued heat demand throughout the whole day. For this type of development, the use of decentralised and local renewable or low carbon sources of heat and power becomes more viable, and for combined heat and power plants this continued heat demand will ensure continued electricity generation.

There are a number of larger mixed use allocations in the Local Development Plan and this provides an opportunity to make use of these technologies to achieve greater CO2 savings.

During the process of preparing masterplans for larger mixed use developments developers will be required to carry out a feasibility study of the potential for renewable and low-carbon energy solutions across the site, for example, the potential to make use of decentralised combined heat and power using a renewable fuel source. This may result in an opportunity to make greater CO2 savings than required by Policy R6. In terms of residential developments this should cover developments of 500 units or more that include other uses than solely housing.

For sites where a decentralised energy scheme is commercially viable, and it is the preferred option, it will be important to consider the build programme and at which stage in the development the energy scheme will become viable. It will not always be feasible to implement the full decentralised energy scheme, using renewable fuel, designed to serve the whole development for the first phase of development because the projected heat load will not exist to support the plant.

In the case that development will, once complete, make use of a decentralised heating or combined heat and power plant, and it has been calculated that, on completion of the development, there will be additional CO2 savings above those required by Policy R6, flexibility in the application of policy should be applied to the earlier phases that make use of temporary sources of heat. For example, installing a temporary small scale gas powered decentralised energy plant in advance of providing a larger scale renewable fuel powered decentralised energy plant.

## **4.2 Policy Requirement Low and Zero Carbon Generating Technologies**



#### **4.2.1 Legislation**

Section 72 of the Climate Change (Scotland) Act 2009 requires Local Planning Authorities to “include policies requiring all developments in the local development plan area to be designed so as to ensure that all new buildings avoid a specified and rising proportion of the projected greenhouse gas emissions from their use, calculated on the basis of the approved design and plans for the specific development, through the installation and operation of low and zero carbon generating technologies.”

#### **4.2.2 Development Plan Context**

Section 25 of the Town and Country Planning (Scotland) Act 1997 requires decisions on planning applications to be made in accordance with the Development Plan unless material considerations indicate otherwise. Upon adoption of the Aberdeen Local Development Plan in 2023, the Development Plan for Aberdeen will be comprised of National Planning Framework 4, the Aberdeen Local Development Plan 2023 and associated Aberdeen Planning Guidance.

National Planning Framework 4:

Policy 2 ‘Climate Mitigation and Adaption’ aims to encourage, promote and facilitate development that minimises emissions and adapts to the current and future impacts of climate change. Resultantly, emissions from development are minimised and our places are more resilient to climate change impacts.

Local Development Plan:

Policy R6 states that “All new buildings will be required to demonstrate that a proportion of the carbon emissions reduction standard set by Scottish Building Standards will be met through the installation of low and zero carbon generating technology”.

#### **4.2.3 Building Standards Context**

The Building Standards Technical Handbook December 2022: Domestic Buildings and Building Standards  
Technical Handbook December 2022: Non-domestic Buildings, Section 6: Energy was implemented on 1 February

2023. Section 6.1 Energy demand and carbon dioxide emissions focuses on the reduction of energy demand and associated greenhouse gas emissions arising from the use of heating, hot water, lighting, ventilation, and cooling systems in a new dwelling or building and large extension in a non-domestic setting. The mandatory standard 6.1 C states that every building must be designed and constructed in such a way that it is a nearly net zero building. The definition of nearly zero, as cited within the Building Standards Technical Handbook's is, "a building that has a very high energy performance where the 'nearly zero' or very low amount of energy required by the building should be covered, to a very significant extent, by energy from renewable sources, produced on site or nearby". Energy from renewable sources is further defined as "energy from renewable non-fossil sources, namely wind, solar, aerothermal, geothermal, hydrothermal and ocean energy, hydropower, biomass, landfill gas, sewage treatment plant gas and biogases. In this context, current and ongoing decarbonisation of grid electricity is also now considered to contribute as a renewable source".

Building Standards Section 7: Sustainability makes reference to where Building Standards and Planning crosscut in relation to the obligations under Section 72 of the Climate Change (Scotland) Act 2009, they do so under Bronze Active Level and Silver Active level for both domestic and non-domestic buildings.

Policy R6: Low and Zero Carbon Buildings, and Water Efficiency of the Aberdeen Local Development Plan asks for a proportion of the carbon emissions reduction standard set by Scottish Building Standards will be met through the installation and operation of low and zero carbon generating technology. The implementation of this is outlined below.

As Aberdeen City has a Net Zero Target date of 2037, rather than the national target of 2045, consideration must be given as to how this will be achieved.

#### **4.2.4 Implementation**

For developments, the target is to at least meet the current Scottish building regulations' Target Emissions Rate (TER) and achieve the sustainability rating 'Gold' level for carbon dioxide reduction and energy efficiency, including through the installation of low and zero carbon generating technologies.

For non-domestic properties, Aspect Gold level 1: Carbon dioxide emissions is required to be achieved and includes the use of a low and zero carbon generating technology.

30% of the carbon dioxide emissions reduction standard set by the Scottish Building Standards Technical Handbooks December 2022, is to be met through the installation and operation of low and zero carbon generating technologies.

The equipment may be attached to the building or within the site boundary as shown on the planning application. This allows for the low and zero carbon generating technologies to benefit more than one building and being sited to maximise energy gain. The technologies eligible to meet the requirements of the policy are set out in Table 1. Additionally, consideration should be given to storage of surplus energy.

Table 1: Eligible Zero and Low Carbon Generating Technology

Biomass	Solar power	Air source heat pumps
Fuel cells	Photovoltaics	Combined heat and power
Micro-hydro	Ground source heat pumps	Heat exchange recovery systems
Micro-wind	Water source heat pumps	Geothermal
Solar Thermal	Passive flue gas heat recovery devices	District Heating

Applicants should consider how to meet the requirements of this guidance at an early stage of planning. It will be the responsibility of applicants to provide the necessary technical calculations in support of planning applications to demonstrate how the proposed development will satisfy the requirements of this guidance.

The policy target is specific to CO2 emissions from the energy performance. The assessment approach in this guidance therefore relates directly to this.

In order to demonstrate the appropriate reduction in CO2 emissions as a result of low and zero carbon generating technologies, the Standard Assessment Procedure energy rating (SAP) is required for dwellings and the Simplified Building Energy Model (SBEM) for all other developments. Other Dynamic Simulation Software may be used if agreed with the council.

### **4.3 Instances When Policy Will Be Relaxed**

National planning policy states that energy efficiency is a vital component in achieving low carbon places. The Council recognises that developments such as Passive Housing aim to reduce their energy consumption significantly rather than installing LZCGT. Development will therefore be deemed to have complied with the requirement to install LZCGT if it can be demonstrated that the development will achieve a CO2 saving 15% greater than required by the current Building Standards (the minimum standard is likely to change over the lifetime of the APG as Building Standards are increased).

#### **4.3.1 Justification**

Section 44 of the Climate Change (Scotland) Act 2009 seeks to ensure that public bodies act in the way best calculated to contribute to the delivery of the carbon reduction targets and carry these out in the most sustainable way. In addition, the Net Zero Aberdeen Routemap identifies 'Buildings and Heat' as a strategic aim that seeks to reduce greenhouse gas emissions to net zero by 2045, with rapid decarbonisation across all sectors including many changes to the ways in which both power and heat is generated and used.

It is accepted that the most sustainable way in which the carbon emissions from new buildings can be saved is through improving the energy efficiency of the building. By reducing the energy demand of a building in the first instance, as far as is practicable, it becomes more feasible to then provide the lower energy requirements through low and zero carbon generating technologies.

By allowing the relaxation of policy, if a greater CO2 saving can be achieved, the Council will make a greater contribution towards the delivery of the Scottish Government's carbon reduction targets and achieve progress towards Aberdeen City's net zero targets.

#### **4.4 Pre-Application Discussions**

The installation of LZCGT can raise additional issues which need to be tackled at an early stage in planning a development. As an example, ground source heat pumps (which are one of the eligible technologies listed in Table 1), can cause significant damage to trees. Where trees are present on, or adjacent to the site where associated pipes are to be buried, a tree survey should be submitted along with the application highlighting the likely impact of the excavation works on the tree(s) and any mitigation proposed. The impact the excavation works and installation are likely to have on local hydrology should also be investigated.

Notably, there may be potential noise impacts on the amenity of the surrounding area from the installation of LZCGT, therefore a Noise Impact Assessment may be required to be submitted.

Micro-hydro schemes may require authorisation from SEPA under the Water Environment (Controlled Activities) (Scotland) Regulations 2005.

Before submitting your planning application, we encourage you to discuss your proposal with us. We can advise you of your project's compliance with planning policies and on detailed design matters. See our [pre-application advice service](#).

#### **5. Sustainability Checklist**

The Checklists provide a list of sustainability objectives and aspirations that should be considered at various stages of development. This document is designed to provide guidance on Aberdeen City Council's expectations for new development when applying local plan policies, in line with national planning policy. The purpose of the APG is to guide development. We do not intend to make the process burdensome; therefore, the submission of information should be proportionate and relevant to the development proposed.

The checklists reflect objectives for new developments across four broad categories (Water Efficiency; Energy Efficiency; Design; and Climate Resilience) and set out what applications are expected to deliver or are encouraged to consider through the design process. Not all requirements will be suitable for every development. If a 'requirement' is not relevant for the development, this can be explained within the 'evidence' section of the checklist.

The applicant is expected to complete and submit the relevant checklist with their planning application for validation. Separate checklists are provided for different applications. You can submit further information through statements/reports, but you should also complete the checklist. Given these issues should be considered from the outset of a project the checklist should be submitted with outline planning permission applications, with the information provided proportionate to the matters for consideration. Equally, with an approval of matters specified in conditions, and detailed planning permission applications, the checklist would need to be submitted to consider the matters to be determined. The relevant checklist should also be submitted with pre-application advice requests.

The checklists are generally aimed at new build residential and commercial development. However, applications for 'Householder' development are encouraged to consider the Householder checklist to inform important early decisions and to influence their project.

Sustainable construction and design should be considered from the outset of a project, these checklists offer a starting point in the bid to reduce carbon emissions. Application submissions should endeavour to demonstrate how these points have been considered. Incorporating these considerations will add value to new developments, benefitting users of the sites and sustainably securing the longevity of new developments.

The overarching purpose of the planning system is to contribute to the achievement of sustainable development. Several policies and documents set out requirements to assist in achieving this; however, the collective implementation of all policy documents and strategies are what will ensure that Aberdeen is genuinely delivering sustainable development.

Appendix 1 is for Major Applications, and should be used on applications which meet the following criteria:

- Residential: 50 or more dwellings / 2 hectares or more

- Commercial: 10,000m<sup>2</sup> or more floorspace / 2 hectares or more

Appendix 2 is for Minor Applications, and should be used on applications which meet the following criteria:

- Residential: up to 49 dwellings
- Commercial: under 9,999m<sup>2</sup> floorspace / less than 1.99 hectare

Appendix 3 is for Householder Applications and should be used on applications for the following:

- Alteration or extension of a single house
- Works within the boundary/garden of a house

Where a particular requirement is not applicable for an application, the reason for this should be described in the Evidence column.

# Appendices

## Appendix A: Sustainability Checklist for Major Developments

WATER EFFICIENCY				
	Requirements	Met	Evidence	Policies and Relevant Documents
Limit Use and Re-Use	Residential units will seek to ensure developments are designed to minimise water consumption rates in each household.	<input type="checkbox"/>		<b>NPF4:</b> Policy 1: Tackling the climate and nature crisis
	<b>Additional Sustainability Questions</b>	<b>Yes / No / NA</b>	<b>Evidence</b>	Policy 2: Climate Mitigation and Adaptation
	Have water efficient appliances been included?			Policy 22: Flood Risk and Water Management
	Has the Scottish Water “Surface Water Policy” document been consulted?			<b>LDP:</b> NE4: Our Water Environment
	Can water recycling systems be implemented on site?			R6: Low and Zero Carbon Buildings, and Water Efficiency
	Is rainwater harvesting possible, if so, has it been implemented on site?			<b>APG:</b> Flooding, Drainage and Water Quality Resources for New Development <b>Other:</b> Scottish Water, “Standard Advice Note and Process Guidance: Surface Water Policy”

ENERGY EFFICIENCY				
	Requirements	Met	Evidence	Policies and Relevant Documents



Efficiency	Seek to limit CO <sub>2</sub> production to the minimum possible (operational and embodied carbon).	<input type="checkbox"/>		<b>NPF4:</b> Policy 1: Tackling the climate and nature crisis Policy 2: Climate Mitigation and Adaptation Policy 11: Energy Policy 19: Heating and Cooling  <b>LDP:</b> R6: Renewable and Low Carbon Energy Developments  <b>APG:</b> Resources for New Development
	Achieve a 'Gold' standard sustainability level referred to in section 6.1 of the Building Standards Technical Handbook (December 2022).	<input type="checkbox"/>		
	<b>Additional Sustainability Questions</b>	<b>Yes / No / NA</b>	<b>Evidence</b>	
	Have energy efficient materials been considered and implemented for the construction of the development?			
	Could the development be equipped with smart meters?			
	If the home/commercial property will have built in appliances, will these be selected with energy efficiency in mind?			
	Will the development produce a positive / high energy rating?			
Reduce	<b>Requirements</b>	<b>Met</b>	<b>Evidence</b>	
	Ensure that the development takes every opportunity to reduce the amount of energy required in using the development	<input type="checkbox"/>		
	Take account of landform, layout, building orientation, massing and landscaping to minimise energy consumption	<input type="checkbox"/>		
	<b>Additional Sustainability Questions</b>	<b>Yes / No / NA</b>	<b>Evidence</b>	
	Does the layout of the proposed construction maximise the natural light, while avoiding overheating?			

	Have light wells and skylights been considered?			
	Are so many artificial light sources necessary?			
	Will locally sourced suppliers be considered / used?			
Generation	<b>Requirements</b>	<b>Met</b>	<b>Evidence</b>	
	Have you considered Energy Generating technology on the site?	<input type="checkbox"/>		
	Consult the Local Heat and Energy Efficiency Strategy when available.	<input type="checkbox"/>		
	<b>Additional Sustainability</b>	<b>Yes / No /</b>	<b>Evidence</b>	
	<b>Questions</b>	<b>NA</b>		
	Does the Local Heat and Energy Efficiency Strategy identify the area to have potential for renewable energy on site?			
	Have these technologies been considered for inclusion in the development? <ul style="list-style-type: none"> <li>Solar water heating systems</li> <li>Solar photovoltaic systems</li> <li>Generation from biomass or bio fuels</li> <li>Wind generated energy</li> <li>Heat pumps</li> <li>Battery energy storage systems</li> </ul>			
	Are there already sources of renewable energy which could be used to power the development?			

DESIGN				
	<b>Requirements</b>	<b>Met</b>	<b>Evidence</b>	<b>Policies and Relevant Documents</b>

Location and Layout	Provide a Transport Assessment (for 100+ dwellings) or a Transport Statement (for up to 99 dwellings)	<input type="checkbox"/>		<b>NPF4:</b> Policy 1: Tackling the climate and nature crisis Policy 2: Climate Mitigation and Adaptation Policy 12: Zero Waste Policy 13: Sustainable Transport Policy 14: Design, Quality and Place
	Provide a Travel Plan (for 100+ dwellings)	<input type="checkbox"/>		
	Are Sustainable Urban Drainage Systems (SUDS) incorporated to manage surface water drainage?	<input type="checkbox"/>		
	Are pollution (air, land or water) control measures incorporated adequately?	<input type="checkbox"/>		<b>LDP:</b> D1: Quality Placemaking D2: Amenity D5: Landscape Design R3: New Waste Management Facilities R5: Waste Management Requirements for New Development R6: Low and Zero Carbon Buildings, and Water Efficiency T2: Sustainable Transport T3: Parking
	<b>Additional Sustainability Questions</b>	<b>Yes / No / NA</b>	<b>Evidence</b>	
	Do the location, layout and design of the development allow for 'Modal Shift' and designing out car dependency?			
	Has the Cycle Network been considered when deciding the layout of the proposal?			
	Does the location of the development allow for access to services and facilities (such as nursery, school, convenience store, GP practice, playground) by foot?			

	Does the layout prioritise the needs of pedestrians, cyclists, and users of public transport?			<b>APG:</b> Food Growing Landscape Resources for New Development Transport and Accessibility Waste Management Requirements for New Development  <b>Other:</b> Aberdeen Electric Vehicle Framework 2020-2030
	Is the development within easy walking distance of regularly served public transport provision? (Within 400m of bus stop and/or 800m of a railway station).			
	Have car club vehicles been considered?			
	Does the development provide adequate cycle parking, and include details of location, security and design?			
<b>Features</b>	<b>Requirements</b>	<b>Met</b>	<b>Evidence</b>	
	Adequately address the need to reduce resource and energy consumption	<input type="checkbox"/>		
	Well designed and easy to use waste and recycling facilities	<input type="checkbox"/>		
	Have the Six Qualities of Successful places been considered?	<input type="checkbox"/>		

Additional Sustainability Questions	Yes / No / NA	Evidence
Does the development comply with the Electric Vehicle Charging Infrastructure section of the Transport and Accessibility APG?		
If the development provides above minimum car parking requirements have you submitted a justification for such?		
Does the design provide space for storage for refuse and recycling to achieve increased level of household waste recycling?		
Does the design allow for easy maintenance of its constituent parts?		
Have you considered space for Working from Home?		
Does the development protect the future amenity of residents?		
Is amenity space provided within the development?		
Does the proposal provide space for food growing?		
Does the landscaping include space for edibles?		
Is it possible to incorporate green walls or green roofs as part of the development?		
Do any of the design features require ongoing management? If so is there a maintenance plan?		

<b>Materials</b>	<b>Additional Sustainability Questions</b>	<b>Yes / No / NA</b>	<b>Evidence</b>
	Does the building fabric exceed the minimum regulations on thermal efficiency?		
	Have you designed with responsibly sourced materials?		
	Are the materials themselves for construction harmful to the environment in any way?		
<b>Waste</b>	<b>Requirements</b>	<b>Met</b>	<b>Evidence</b>
	Provide a Site Waste Management Plan	<input type="checkbox"/>	
	Consider the Waste Hierarchy	<input type="checkbox"/>	
	<b>Additional Sustainability Questions</b>	<b>Yes / No / NA</b>	<b>Evidence</b>
	Are there existing buildings on the site? Has their reuse and refurbishment been considered, to prevent any unnecessary demolition?		
	Have you designed for long-term use/recoverability/longevity/adaptability and flexibility?		
	Is the development being carried out in a way which produces the minimum of waste?		
	How will you minimise the quantities of new materials used?		
	Can the demolition material be repurposed for use in the development?		
	Are locally sourced materials used, to reduce the amount of travelling required?		

## CLIMATE RESILIENCE

	Requirements	Met	Evidence	Policies and Relevant Documents
Flooding	Submit a Flood Risk Assessment if required.	<input type="checkbox"/>		<b>NPF4:</b> Policy 1: Tackling the climate and nature crisis Policy 2: Climate Mitigation and Adaptation Policy 22: Flood Risk and Management  <b>LDP:</b> NE4: Our Water Environment  <b>APG:</b> Flooding, Drainage and Water Quality
	Ensure there is no increase in surface water runoff from the development	<input type="checkbox"/>		
	Include a Sustainable urban drainage system (SuDS)	<input type="checkbox"/>		
	<b>Additional Sustainability Questions</b>	<b>Yes / No / NA</b>	<b>Evidence</b>	
	Have the SEPA Flood Maps been consulted, and the impact of flooding assessed?			
	Is there a Sustainable Drainage Scheme, supported by technical reports and details of whole life management and maintenance?			
	Does the proposal ensure there is no more than 20% impermeable surfaces throughout the development			
Heat Stress	<b>Requirements</b>	<b>Met</b>	<b>Evidence</b>	
	Assess the risk of overheating and drought	<input type="checkbox"/>		
	<b>Additional Sustainability Questions</b>	<b>Yes/No/NA</b>	<b>Evidence</b>	
	Does the development consider the effect of Global Warming?			
	Has the development been designed to minimise overheating?			
	Have natural ventilation and cooling techniques been considered?			

## Appendix B: Sustainability Checklist for Minor Developments

Please note that the submission of information should be proportionate to the scale of development being proposed.

WATER EFFICIENCY				
Limit Use and Re-Use	Requirements	Met	Evidence	Policies and Relevant Documents
	Residential units will seek to ensure developments are designed to minimise water consumption rates in each household.	<input type="checkbox"/>		<b>NPF4:</b> Policy 1: Tackling the climate and nature crisis Policy 2: Climate Mitigation and Adaptation Policy 22: Flood Risk and Water Management  <b>LDP:</b> R6: Low and Zero Carbon Buildings and Water Efficiency
	Additional Sustainability Questions	Yes / No / NA	Evidence	APG:
	Have water efficient appliances been considered?			Flooding, Drainage and Water Quality
	Has Scottish Waters' "Surface Water Policy" document been consulted?			<b>Other:</b> Scottish Water, "Standard Advice Note and Process Guidance: Surface Water Policy"

ENERGY EFFICIENCY				
Efficiency	Requirements	Met	Evidence	Policies and Relevant Documents
	Seek to limit CO <sub>2</sub> production to the minimum possible (operational and embodied carbon).	<input type="checkbox"/>		<b>NPF4:</b> Policy 1: Tackling the



	Achieve a 'Gold' standard sustainability level referred to in section 6.1 of the Building Standards Technical Handbook (December 2022).	<input type="checkbox"/>		climate and nature crisis Policy 2: Climate Mitigation and Adaptation Policy 11: Energy Policy 19: Heating and Cooling  <b>LDP:</b> R6: Renewable and Low Carbon Energy Developments
	<b>Additional Sustainability Questions</b>	<b>Yes / No / NA</b>	<b>Evidence</b>	<b>APG:</b> Resources for New Development
	Have Energy Efficient Materials been considered and implemented for the construction of the development?			
	Could the development be equipped with smart meters?			
<b>Reduce</b>	<b>Requirements</b>	<b>Met</b>	<b>Evidence</b>	
	Ensure that the development takes every opportunity to reduce the amount of energy required in using the development.	<input type="checkbox"/>		
	Take account of landform, layout, building orientation, massing and landscaping to minimise energy consumption	<input type="checkbox"/>		
	<b>Additional Sustainability Questions</b>	<b>Yes/No/NA</b>	<b>Evidence</b>	
	Will locally sourced suppliers be considered / used?			
<b>Generation</b>	<b>Requirements</b>	<b>Met</b>	<b>Evidence</b>	
	Have you considered Energy Generating technology on the site?	<input type="checkbox"/>		
	<b>Additional Sustainability Questions</b>	<b>Yes/No/NA</b>	<b>Evidence</b>	
	Are there sources of renewable energy which could be used to power the development?			

DESIGN				
<b>Location</b>	<b>Requirements</b>	<b>Met</b>	<b>Evidence</b>	<b>Policies and Relevant Documents</b>
	Provide a Transport Statement (for 5+ dwelling apps)	<input type="checkbox"/>		<b>NPF4:</b> Policy 1: Tackling the

Features	<b>Additional Sustainability Questions</b>	<b>Yes / No / NA</b>	<b>Evidence</b>	climate and nature crisis
	Does the development provide adequate cycle parking, and include details of location, security, and design?			Policy 2: Climate Mitigation and Adaptation Policy 12: Zero Waste Policy 13: Sustainable Transport Policy 14: Design, Quality and Place Policy 15: Local Living and 20-Minute Neighbourhoods
	<b>Requirements</b>	<b>Met</b>	<b>Evidence</b>	<b>LDP:</b>
	Adequately address the need to reduce resource and energy consumption	<input type="checkbox"/>		D1: Quality Placemaking
	Well designed and easy to use waste and recycling facilities	<input type="checkbox"/>		D2: Amenity D5: Landscape Design
	<b>Additional Sustainability Questions</b>	<b>Yes / No / NA</b>	<b>Evidence</b>	R5: Waste Management Requirements for New Development
	Does the development comply with the Electric Vehicle Charging infrastructure section of the Transport and Accessibility APG?			R6: Low and Zero Carbon Buildings, and Water Efficiency
	If the development provides above minimum car parking requirements have you submitted a justification for such?			T2: Sustainable Transport T3: Parking
	Have you consulted the guidance for Waste and Recycling in new developments in the Waste Management APG?			
	Does the design allow for easy maintenance of its constituent			<b>APG:</b>
	Have you considered space for Working from Home?			Food Growing Landscape
	Does the development protect the future amenity of residents?			Resources for New Development

	Is amenity space provided within the development?			Transport and Accessibility
	Do any of the design features require on-going management? If so, is there a maintenance plan?			
Materials	Does the building fabric exceed the minimum regulations on thermal efficiency?			Waste Management Requirements for New Developments
	Are the materials themselves for construction harmful to the environment in any way?			
Waste	<b>Requirements</b>	<b>Met</b>	<b>Evidence</b>	
	Consider the Waste Hierarchy	<input type="checkbox"/>		
	<b>Additional Sustainability Questions</b>	<b>Yes / No / NA</b>	<b>Evidence</b>	
	Are there existing buildings on the site? Has their reuse and refurbishment been considered, to prevent any unnecessary demolition?			
	How will you minimise the quantities of new materials used?			
	Can the demolition material be repurposed for use in the development?			
	Are locally sourced materials used to reduce the amount of travelling required?			

CLIMATE RESILIENCE			
	<b>Requirements</b>	<b>Met</b>	<b>Evidence</b>
			<b>Policies and Relevant Documents</b>

Flooding	Submit a Flood Risk Assessment if required.	<input type="checkbox"/>		<b>NPF4:</b> Policy 1: Tackling the climate and nature crisis Policy 2: Climate Mitigation and Adaptation Policy 22: Flood Risk and Management  <b>LDP:</b> NE4: Our Water Environment  <b>APG:</b> Flooding, Drainage and Water Quality
	Ensure there is no increase in surface water runoff from the	<input type="checkbox"/>		
	Include a Sustainable drainage system (SuDS).	<input type="checkbox"/>		
	<b>Additional Sustainability</b>	<b>Yes / No / NA</b>	<b>Evidence</b>	
	Has the impact of flooding on the proposed development been considered?			
	Is there a Sustainable Drainage Scheme, supported by technical reports and details of whole life management and maintenance?			

## Appendix C: Sustainability Checklist for Householder Developments

*Please note that the submission of information should be proportionate to the scale of development being proposed.*

DESIGN EFFICIENCY AND CLIMATE RESILIENCE				
	Questions	Yes / No / NA	Evidence	Policies and Relevant Documents
Design	Does the proposal adequately address the need to reduce resource and energy consumption?			<b>NPF4:</b> Policy 1: Tackling the climate and nature crisis Policy 2: Climate Mitigation and Adaptation Policy 11: Energy Policy 12: Zero Waste Policy 13: Sustainable Transport Policy 14: Design, Quality and Place Policy 22: Flood Risk and Management
	If proposing a new or replacement garage, does the development comply with the Electric Vehicle Charging infrastructure section of the Transport and Accessibility APG?			
	Does the design allow for easy maintenance of its constituent			
	Are the materials themselves for construction harmful to the environment in any way?			
Efficiency	Does the design ensure that the development takes every opportunity to reduce the amount of energy required to 'use' the			<b>LDP:</b> Policy NE3: Our Natural Heritage NE4: Our Water Environment NE5: Trees and Woodland D1: Quality Placemaking D2: Amenity
	Have Energy Efficient Materials been considered for the construction?			
Climate	Are existing mature trees and hedgerows or other habitats retained?			
	Ensure there is no increase in surface water runoff from the development			

	Have water efficient appliances been considered?			R3: New Waste Management Facilities R6: Low and Zero Carbon Buildings, and Water Efficiency <b>APG:</b> Flooding, Drainage and Water Quality Resources for New Development Transport and Accessibility Trees and Woodland
	Have you considered the Waste Hierarchy?			
	Are there existing buildings on the site? Has their reuse and refurbishment been considered, to prevent any unnecessary demolition?			
	How will you minimise the quantities of new materials used?			
	Can the demolition material be repurposed for use in the development?			
	Are locally sourced materials used to reduce the amount of travelling required?			