Aberdeen Planning Guidance 2023: Resources for New Development

Table of Contents

Appendix A: Sustainability Checklist for Major Developments	Page 21
6 Further Reading	Page 20
5 Sustainability Checklist	Page 18
4 Energy Efficiency in Buildings 4.1 District Heating 4.2 Policy Requirement for Low and Zero Carbon Generating Technologies 4.3 Instances When Policy Will Be Relaxed 4.4 Pre-Application Discussions	Page 11 Page 11 Page 12 Page 15 Page 16
3 Water Use Efficiency 3.1 Policy	Page 9 Page 9
2 Aberdeen Planning Guidance 2.1 Density 2.2 Energy Use in Buildings 2.3 Layout, Orientation, Shelter, and Aspect	Page 6 Page 6 Page 6 Page 7
1 Introduction 1.1 Status of Aberdeen Planning Guidance 1.2 Introduction to Topic / Background 1.3 Climate Change 1.4 Health and Wellbeing	Page 3 Page 3 Page 3 Page 3 Page 5

Appendix B: Sustainability Checklist for Minor Developments	Page 28
Appendix C: Sustainability Checklist for Householder Developments	Page 33

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

Given the timing of the Local Development Plan, a pragmatic approach has been taken to changes in the planning system. National Planning Framework 4 (NPF4) was adopted following the examination and subsequent modification of the Local Development Plan, and the publication of a draft version of this APG for consultation. As a result, some terminology referred to in this APG may vary from the new NPF4 policy framework but it should be noted that the LDP together with NPF4 now forms the basis of the statutory development plan.

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 <u>United Nations Sustainable Development Goals</u> 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 <u>Net Zero Aberdeen Routemap 2022</u> 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.

1.4 Health and Wellbeing

Where we live, where we work, and where we spend our time has an important influence on our health and wellbeing. How places are designed within their urban or natural environmental are vital to the health of the people and communities within them.

This guidance can help to achieve the following Public Health Priorities for Scotland - Priority 1: A Scotland where we live in vibrant, healthy and safe places and communities.

This guidance is deemed to have minimal impact on population health and wellbeing. This means that, whilst it is unlikely a Health Impact Assessment (HIA) screening report will be requested to support any planning application, this will depend on the detail and scope of the application. There may be elements of the proposals that relate to the health and wellbeing of the population that warrant consideration. If that is the case, then a screening HIA will be required, and further advice on this will be provided.

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 CO2 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 provides

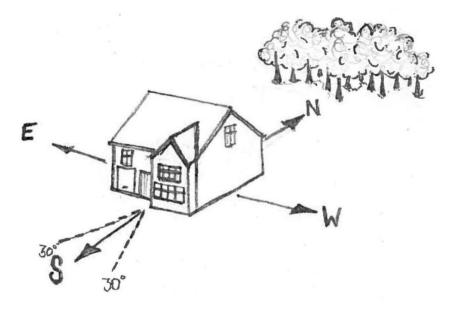


Figure 1: Diagram explaining shelter

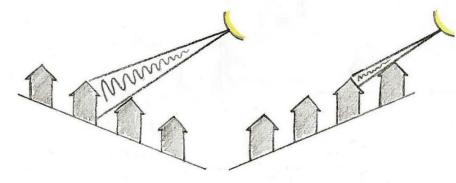


Figure 2: Diagram explaining aspect

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 for 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, aero-thermal, 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 <u>pre-application</u> 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: 10,000m² 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 9.999m² 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.

6. Further Reading

Building Standards Technical Handbooks Building regulations - Building standards - gov.scot (www.gov.scot)

Scottish Government, Climate Change (Emissions Reduction Targets) (Scotland) Act 2019 https://www.legislation.gov.uk/asp/2019/15/enacted

Scottish Government, Section 25 of the Town and Country Planning (Scotland) Act 1997 https://www.legislation.gov.uk/ukpga/1997/8/section/25

Scottish Government, Section 44 of the Climate Change (Scotland) Act 2009 https://www.legislation.gov.uk/asp/2009/12/section/44#:~:text=44Duties%20of%20public%20bodies%20relating%2 <a href="https://orange.ncbi.nlm.n

Scottish Government, Section 72 of the Climate Change (Scotland) Act 2009 https://www.legislation.gov.uk/asp/2009/12/section/72

Scottish Government, Water Environment (Controlled Activities) (Scotland) Regulations 2005 https://www.legislation.gov.uk/ssi/2005/348/contents/made

Appendix 1: Sustainability Checklist for Major Developments

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

	ENERGY EF	FICIENCY	7	
	Requirements	Met	Evidence	Policies and
	•			Relevant
				Documents
	Seek to limit CO2 production to the			NPF4:
	minimum possible (operational and	_		Policy 1:
	embodied carbon).			Tackling the
	Achieve a 'Gold' standard	П		climate and
	sustainability level referred to in	_		nature crisis
	section 6.1 of the Building			Policy 2:
	Standards Technical Handbook			Climate
	(December 2022).			Mitigation and
ည်	Additional Sustainability	Yes /	Evidence	Adaptation
ien	Questions	No/		Policy 11:
Efficiency		NA		Energy
臣	Have energy efficient materials			Policy 19:
	been considered and implemented			Heating and
	for the construction of the			Cooling
	development?			
	Could the development be			LDP:
	equipped with smart meters?			R6:
	If the home/commercial property			Renewable
	will have built in appliances, will			and Low
	these be selected with energy			Carbon
	efficiency in mind?			Energy
	Will the development produce a positive /			Developments
	high energy rating?	NACT	Cylidanaa	ADC:
	Requirements	Met	Evidence	APG:
	Ensure that the development takes			Resources for New
	every opportunity to reduce the			
	amount of energy required in using the development			Developments
	Take account of landform, layout,			
	building orientation, massing and			
ģ	landscaping to minimise energy			
<u> </u>	consumption			
Reduce	Additional Sustainability	Yes /	Evidence	
82	Questions	No /	Lviderice	
	Questions	NA		
	Does the layout of the proposed	•		
	construction maximise the natural			
	light, while avoiding overheating?			
	Have light wells and skylights been			
	considered?			
	oondadioa.			

necessary? Will locally sourced suppliers be considered / used? Requirements Have you considered Energy Generating technology on the site? Consult the Local Heat and Energy Efficiency Strategy when available. Additional Sustainability Questions Poes 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? Solar water heating systems Solar photovoltaic systems Generation from biomass or bio fuels Wind generated energy Heat pumps Battery energy storage systems Are there already sources of renewable energy which could be		Are so many artificial light sources		
Requirements		necessary?		
Requirements Have you considered Energy Generating technology on the site? Consult the Local Heat and Energy Efficiency Strategy when available. Additional Sustainability Questions 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? Solar water heating systems Solar photovoltaic systems Generation from biomass or bio fuels Wind generated energy Heat pumps Battery energy storage systems Are there already sources of		Will locally sourced suppliers be		
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Are there already sources of		, ,,		
Tollowabic ellergy willor tould be		•		
used to power the development?				

	DESIGN				
Layout	Requirements	Met	Evidence	Policies and Relevant Documents	
and Lay	Provide a Transport Assessment (for 100+ dwellings) or a Transport Statement (for up to 99 dwellings)			NPF4: Policy 1: Tackling the	
Location	Provide a Travel Plan (for 100+ dwellings)			climate and nature crisis	
Loc	Are Sustainable Urban Drainage Systems (SUDS) incorporated to manage surface water drainage?			Policy 2: Climate	

	Are pollution (air, land or water)			Mitigation and
	control measures incorporated			Adaptation
	adequately?			Policy 12: Zero
	Additional Sustainability	Yes /	Evidence	Waste
	Questions	No/		Policy 13:
		NA		Sustainable
	Do the location, layout and design			Transport
	of the development allow for 'Modal			Policy 14:
	Shift' and designing out car			Design,
	dependency?			Quality and Place
	Has the Cycle Network been			Policy 15:
	considered when deciding the			Local Living
	layout of the proposal? Does the location of the			and 20-Minute
	development allow for access to			Neighbourhoo
	services and facilities (such as			ds
	nursery, school, convenience store,			
	GP practice, playground) by foot?			LDP:
	Does the layout prioritise the needs of			D1: Quality
	pedestrians, cyclists, and users of public			Placemaking
	transport?			D2: Amenity
	Is the development within easy walking distance of regularly served public			D5: Landscape
	transport provision? (Within 400m of bus			Design
	stop and/or 800m of a railway station).			R3: New
	Have car club vehicles been considered?			Waste
	Does the development provide adequate			Management
	cycle parking, and include details of location, security and design?			Facilities
	Requirements	Met	Evidence	R5: Waste
	Adequately address the need to	П		Management Requirements
	reduce resource and energy			for New
	consumption			Development
	Well designed and easy to use			R6: Low and
	waste and recycling facilities			Zero Carbon
	Have the Six Qualities of			Buildings, and
es	Successful places been			Water
tur	considered?			Efficiency
Features	Additional Sustainability	Yes /	Evidence	T2:
ш	Questions	No /		Sustainable
	D # 1 1 1 1 1 1	NA		Transport
	Does the development comply with			T3: Parking
	the Electric Vehicle Charging			4.00
	Infrastructure section of the			APG:
	Transport and Accessibility APG?			Food Growing
	If the development provides above			Landscape
	minimum car parking requirements	l		

	have you submitted a justification for such? Does the design provide space for storage for refuse and recycling to achieve increased level of			Resources for New Developments Transport and Accessibility
	household waste recycling?			Waste
	Does the design allow for easy maintenance of its constituent parts?			Management Requirements for New
	Have you considered space for Working from Home?			Developments
	Does the development protect the future amenity of residents?			Other: Aberdeen
	Is amenity space provided within the development?			Electric Vehicle
	Does the proposal provide space for food growing?			Framework 2020-2030
	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?			
	Additional Sustainability Questions	Yes / No / NA	Evidence	
Materials	Does the building fabric exceed the minimum regulations on thermal efficiency?			
Mat	Have you designed with responsibly sourced materials?			
	Are the materials themselves for construction harmful to the environment in any way?			
	Requirements	Met	Evidence	
	Provide a Site Waste Management Plan			
ste	Consider the Waste Hierarchy			
Waste	Additional Sustainability Questions	Yes / No / NA	Evidence	
	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/adapta bility 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	
	Submit a Flood Risk Assessment if required.			NPF4: Policy 1:	
	Ensure there is no increase in surface water runoff from the development			Tackling the climate and nature crisis	
б	Include a Sustainable Urban Drainage System (SUDS)			Policy 2: Climate Mitigation and Adaptation Policy 22: Flood Risk and Management LDP: NE4: Our Water Environment	
Flooding	Additional Sustainability Questions	Yes / No / NA	Evidence		
	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			APG:	
¥	Requirements	Met	Evidence		
Heat	Assess the risk of overheating and drought				

Additional Sustainability	Yes /	Evidence	Flooding,
Questions	No /		Drainage and
	NA		Water Quality
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 2: Sustainability Checklist for Minor Developments

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

	WATER EFF	ICIENCY		
	Requirements	Met	Evidence	
				Relevant Documents
	Residential units will seek to	П		NPF4:
	ensure developments are designed			Policy 1:
	to minimise water consumption			Tackling the
	rates in each household.			climate and
	Additional Sustainability	Yes /	Evidence	nature crisis
	Questions	No / NA		Policy 2: Climate
	Have water efficient appliances	МА		Mitigation and
	been included?			Adaptation
	Has the Scottish Water "Surface			Policy 22:
	Water Policy" document been			Flood Risk
	consulted?			and Water
Jse				LDP:
6-L				R6: Low and
2 2				Zero Carbon
an				Buildings, and
se				Water
Limit Use and Re-Use				Efficiency
<u>=</u>				APG:
_				Flooding,
				Drainage and
				Water Quality Resources for
				New
				Developments
				'
				Other:
				Scottish
				Water, "Standard
				Advice Note
				and Process
				Guidance:
				Surface Water
				Policy"

	ENERGY EF	FICIENCY	7	
	Requirements	Met	Evidence	Policies and
				Relevant
				Documents
	Seek to limit CO2 production to the			NPF4:
	minimum possible (operational and			Policy 1:
	embodied carbon).			Tackling the
	Achieve a 'Gold' standard			climate and
	sustainability level referred to in			nature crisis
ည	section 6.1 of the Building			Policy 2:
ier	Standards Technical Handbook			Climate
Efficiency	(December 2022).			Mitigation and
Ef	Additional Sustainability	Yes /	Evidence	Adaptation
	Questions	No /		Policy 11:
		NA		Energy
	Have energy efficient materials			Policy 19:
	been considered and implemented			Heating and
	for the construction of the			Cooling
	development?			LDP:
	Could the development be			R6:
	equipped with smart meters?			Renewable
	Requirements	Met	Evidence	and Low
	Ensure that the development takes			Carbon
	every opportunity to reduce the			Energy
	amount of energy required in using			Developments
	the development			2 o voiopinionio
Reduce	Take account of landform, layout, building orientation, massing and			APG:
ρg	landscaping to minimise energy			Resources for
Re	consumption			New
	Additional Sustainability	Yes /	Evidence	Developments
	Questions	No /	LVIdence	
	4400110110	NA		
	Will locally sourced suppliers be			
	considered / used?			
	Requirements	Met	Evidence	
	Have you considered Energy	П		
ď	Generating technology on the site?			
tio	Additional Sustainability	Yes /	Evidence	
era	Questions	No/		
Generation		NA		
Ğ	Are there already sources of			
	renewable energy which could be			
	used to power the development?			

	DES	SIGN		
ıt	Requirements	Met	Evidence	Policies and Relevant
Layout				Documents
	Provide a Transport Statement			NPF4:
pu	(for 5+ dwelling apps)			Policy 1:
n a	Additional Sustainability	Yes /	Evidence	Tackling the
Location and	Questions	No / NA		climate and nature crisis
၂၁၁	Does the development provide adequate	IIA		Policy 2:
Ľ	cycle parking, and include details of			Climate
	location, security and design?	Met	Evidence	Mitigation and
	Requirements Adequately address the need to	IVIEL	Evidence	Adaptation
	reduce resource and energy			Policy 12: Zero Waste
	consumption			Policy 13:
	Well designed and easy to use			Sustainable
	waste and recycling facilities			Transport
	Additional Sustainability	Yes /	Evidence	Policy 14:
	Questions	No / NA		Design, Quality and Place
	Does the development comply			Policy 15: Local
	with the Electric Vehicle Charging			Living and 20-
	Infrastructure section of the			Minute
,,	Transport and Accessibility APG?			Neighbourhoods
Features	If the development provides above minimum car parking			I DD.
atn	requirements have you submitted			LDP: D1: Quality
Fe	a justification for such?			Placemaking
	Have you consulted the guidance			D2: Amenity
	for Waste and Recycling in new			D5: Landscape
	developments in the Waste			Design
	Management APG?			R5: Waste
	Does the design allow for easy maintenance of its constituent			Management Requirements
	parts?			for New
	Have you considered space for			Development
	Working from Home?			R6: Low and
	Does the development protect			Zero Carbon
	the future amenity of residents?			Buildings, and
	Is amenity space provided within			Water Efficiency
	the development?			

	Do any of the design features			T2: Sustainable
	require ongoing management? If			Transport
	so is there a maintenance plan?			T3: Parking
		Yes /	Evidence	13. Faiking
	Additional Sustainability		Evidence	APG:
	Questions	No /		Food Growing
<u>s</u>		NA		_
Materials	Does the building fabric exceed			Landscape
te	the minimum regulations on			Resources for
Ma	thermal efficiency?			New
	Are the materials themselves for			Developments
	construction harmful to the			Transport and
	environment in any way?			Accessibility
	Requirements	Met	Evidence	Waste
	Consider the Waste Hierarchy			Management
	Additional Sustainability	Yes /	Evidence	Requirements
	Questions	No /		for New
	4400110110	NA		Developments
	Are there existing buildings on			
	the site? Has their reuse and			
	refurbishment been considered,			
	to prevent any unnecessary			
به	demolition?			
Waste	How will you minimise the			
Š	quantities of new materials used?			
	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					
ng	Requirements	Met	Evidence	Policies and Relevant Documents	
Floodir	Submit a Flood Risk Assessment if required.			NPF4: Policy 1: Tackling	
	Ensure there is no increase in surface water runoff from the development			the climate and nature crisis	

Include a Sustainable Urban Drainage System (SUDS)			Policy 2: Climate Mitigation and
Additional Sustainability	Yes /	Evidence	Adaptation
Questions	No / NA		Policy 22: Flood
Has the impact of flooding on the			Risk and
proposed development been			Management
considered?			
Is there a Sustainable Drainage			LDP:
Scheme, supported by technical			NE4: Our Water
reports and details of whole life			Environment
management and maintenance?			
			APG:
			Flooding, Drainage
			and Water Quality

Appendix 3: Sustainability Checklist for Householder Developments

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

	DESIGN, EFFICIENCY AND	CLIMATE	RESILIEIN	E
	Questions	Yes / No / NA	Evidence	Policies and Relevant Documents
Design	Does the proposal adequately address the need to reduce resource and energy consumption? 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 parts? re the materials themselves for construction harmful to the environment in any way?			NPF4: 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 LDP: Policy NE3: Our Natural Heritage NE4: Our Water Environment NE5: Trees and Woodland D1: Quality Placemaking D2: Amenity
Efficiency	Does the design ensure that the development takes every opportunity to reduce the amount of energy required to 'use' the development? Have Energy Efficient Materials been considered for the construction?			
	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			
Climate Resilience	Have water efficient appliances been considered? 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? Are locally sourced materials used, to reduce the amount of travelling required?			

	R3: New
	Waste
	Management
	Facilities
	R6: Low and
	Zero Carbon
	Buildings, and
	Water
	Efficiency
	APG:
	Flooding,
	Drainage and
	Water Quality
	Resources for
	New
	Developments
	Transport and
	Accessibility
	Trees and
	Woodland