Twelfth Annual Report on the Operation of Section 72 of the Climate Change (Scotland) Act 2009

Laying Number: SG/2022/43

Scottish Government
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1 Summary

This report provides information and conclusions fulfilling the Scottish Government's annual reporting requirements on the operation Section 3F of the Town and Country Planning (Scotland) Act 1997, as inserted by Section 72 of the Climate Change (Scotland) Act 2009 ('the 2009 Act'). The preparation of this report is required by Section 73 of the 2009 Act.

Section 3F requires local development plans prepared by planning authorities to include policies on reducing greenhouse gas emissions from all new buildings through the installation and operation of low and zero-carbon energy generating technologies. This report found that approximately 94% of planning authorities now have a policy in place in their adopted plans which responds to section 3F.

An assessment of the effectiveness of the approach at reducing emissions is also required. Previous versions of this report have highlighted research commissioned by the Scottish Government, which found that Section 3F is not the key driver to emissions reductions in new buildings[1]. This report does not alter that finding. The Scottish Government has since commissioned research on section 3F to inform the development of a revised National Planning Framework. [2]

The national policy position is provided in chapters 1 and 2 of this report, and the local development plan context is outlined in chapter 3.

[11] ClimateXChange (2016) The Effectiveness of Greenhouse Gas Emission Policies in Scottish Local Development Plans

[2]Scottish Government commissioned research on section 3F to inform the development of a revised National Planning Framework

2 CLIMATE CHANGE (SCOTLAND) ACT 2009 CONTEXT AND REPORTING HISTORY

Legislative Requirement

2.1 Section 72 of the Climate Change (Scotland) Act 2009[3] ('the 2009 Act'), which came into force on 1 April 2010, introduced Section 3F into the Town and Country Planning (Scotland) Act 1997 (referred to as 'the 1997 Act'). This report will refer to Section 3F, although references to Section 72 are also commonly recognised and used. Section 3F[4] requires that:

'A planning authority, in any local development plan prepared by them, must 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.'

2.2 Scottish Ministers are required by Section 73(1) of the Climate Change (Scotland) Act 2009[5] to report annually to the Scottish Parliament on two topics:

- the operation of the requirement on relevant planning authorities to include policies within development plans;
- an assessment of whether the Section 3F requirements have contributed effectively to the reduction of greenhouse gas emissions from developments.

2.3 Since 2015, or the fourth annual report on the operation of section 3F, the annual reports are required by Section 73(2) of the 2009 Act to include an assessment of whether the section continues to be needed. If it is considered no longer needed, Scottish Ministers may repeal sections 3F and 73 by order.

Understanding the Legislation

[3] The 2009 Act is amended by the Climate Change (Emissions Reduction Targets) (Scotland) Act 2019, Sections 72 and 73 of the 2009 Act are unchanged

[4] Section 3F: Greenhouse gas emissions policies, Town and Country Planning (Scotland) Act 1997

[5] Section 73: Annual report on operation of section 72, Climate Change (Scotland) Act 2009

2.4 Section 3F applies only to local development plans. Local development plans are prepared by planning authorities across Scotland as required by Section 16(1) of the 1997 Act.

2.5 Section 3F concerns the installation and operation of low and zero-carbon energy generation technologies, not energy efficiency improvements or energy-saving technologies.

Previous Reporting

2.6 Annual reports on the operation of section 72 of the Climate Change (Scotland) Act 2009 have been laid in the Scottish Parliament each year since 2011.

3 SCOTLAND'S GREENHOUSE GAS EMISSIONS REDUCTION TARGETS

3.1 The Climate Change (Scotland) Act 2009, as amended by the Climate Change (Emissions Reduction Targets) (Scotland) Act 2019, sets a target for net-zero emissions of all greenhouse gases by 2045. It also includes interim targets of 56%, 75% and 90% reductions in emissions by 2020, 2030 and 2040 respectively (relative to a 1990/1995 baseline). Annual emissions reduction targets are also set for the period between now and the net-zero target year.

3.2 The Scottish Government's package of policies and proposals for meeting emissions reduction targets is set out through regular Climate Change Plans. The third such Plan[6], which covers the period to 2032, was published in February 2018. An update[7] to the 2018 Climate Change Plan, published in December 2020.

3.3 It should be noted that there are a range of plans, programmes and strategies which contribute to emissions reductions in Scotland. Some examples of relevance to emissions from buildings are set out below.

3.4 Responding to the global climate emergency will be at the heart of a fourth National Planning Framework, preparation of which is currently underway and which will also incorporate Scottish Planning Policy. One of the six outcomes for the fourth National Planning Framework, as specified by the Planning (Scotland) Act 2019[8], is "*meeting any targets relating to the reduction of emissions of greenhouse gases, within the meaning of the Climate Change (Scotland) Act 2009, contained in or set by virtue of that Act*".

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[6] Scottish Government (2018) Climate Change Plan: third report on proposals and policies 2018 – 2032 (RPP3).

[7] Scottish Government (2020) Securing a green recovery on a path to net zero: climate change plan 2018–2032 – update

[8] Scottish Government (2019) Planning (Scotland) Act 2019, section 2 (4) (e)

3.5 The Scottish Energy Strategy[9] sets the long-term vision for Scotland's energy system; taking a 'whole-system' approach that considers how the energy system must evolve to drive our transition to net zero. Last year, we committed to publishing a refresh of the strategy in 2022 that will outline a coordinated vision for Scotland's energy system by supporting the delivery of a just transition. Our biggest priority is delivering the target of 50% of the energy for heat, transport and electricity consumption in Scotland to come from renewable sources. The refreshed strategy will take the form of a clear roadmap for the next decade, followed by a vision for the energy system in 2045, supporting the delivery of our net zero commitment.

3.6 The Heat in Buildings Strategy [10]sets out an ambitious package of policies to deliver a 68% reduction in emissions from buildings from 2020 to 2030. Achieving this will require conversion from fossil fuel heating to zero emissions heat systems in the vast majority of the 170,000 homes that currently use high emissions oil, LPG and solid fuels, as well as at least 1 million homes that currently use mains gas. By 2030, we will also need to convert the equivalent of 50,000 of Scotland's non-domestic properties. The large majority of buildings will need to achieve a good level of energy efficiency by 2030, equivalent to EPC C for homes, with all homes meeting at least this standard by 2033.

3.7 As set out in the Heat in Buildings Strategy, Local Heat and Energy Efficiency Strategies (LHEES) will set out the long-term plan for decarbonising heat in buildings and improving their energy efficiency across an entire local authority area, and will be in place for all local authority areas by the end of 2023. A pilot programme was undertaken with all 32 Scottish local authorities to test approaches for LHEES and build capacity[11]. The Scottish Government is developing a statutory framework for LHEES in partnership with COSLA and is committed to resourcing their development accordingly.

3.8 Section 3F only applies to new buildings and these are a very small proportion of the building stock in Scotland. Building regulations set greenhouse gas emissions targets for new buildings and minimum standards for building fabric

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[9] Scottish Government (2017) The future of energy in Scotland: Scottish energy strategy

[10] Heat in Buildings Strategy - achieving net zero emissions in Scotland's buildings

[11] Scottish Government (2022) Local Heat and Energy Efficiency Strategy (LHEES) pilot programme: synthesis evaluation

and services where work is undertaken in existing buildings. Reviews of these standards in 2007, 2010 and most recently in 2015 have resulted in emissions from new buildings built to current standards being, on aggregate, around 75% lower than those built to standards in force in 1990, with corresponding reductions in energy demand. The level of challenge of the most recent standards (2015), combined with lower capital costs for photovoltaic systems means that the use of low carbon generating equipment such as photovoltaic panels is now common in new construction, particularly in new homes. For example, analysis of Energy Performance Certificate data for new homes indicates that the amount of solar photovoltaic included each year has increased from 10% to 50% in homes between 2016 and 2019.

3.9 A further review of the energy standards set under building regulations is in progress which proposes aggregate emissions reductions of at least 32% for new domestic buildings and 16% for new non-domestic buildings. Responses to the public consultation, that closed on the 26th November are currently being analysed. The new standards are programmed to take effect in October 2022.

3.10 The outcome of proposed changes and the adoption of the revised UK calculation methodology [12]will affect decision making on the scale of installation of generating technologies as part of new buildings. This is due principally to two factors:

- Revision of UK carbon factors assigned to fuels means that the efficacy of on-site generation of electricity in offsetting emissions from other fuels such as mains natural gas will be cut by more than 70%. This reflects the ongoing decarbonisation of UK electrical generation.
- To support solutions which are effective in reducing the energy which needs to be supplied to a building, the component of on-site generation capacity exported to grid would be excluded from the building regulations compliance calculations.

[12] Scottish Government (2021) - Draft Guidance Section 6 Energy Domestic

3.11 Our Heat in Buildings Strategy[13] sets out the Scottish Government's intention to develop regulations which will require new buildings, where a building warrant is applied for from 2024, to only use zero direct emissions heating systems. The Scottish Government has also established the voluntary Net Zero Public Sector Building Standard, which sets out a possible approach for new public sector buildings to be developed to be net zero.[14]

[13] Scottish Governement (2021) Building Standards Domestic Technical Handbook (extract) Consultation proposals – Section 6 Energy

[14] Scottish Futures Trust – Net Zero Public Sector Buildings Standard

4 THE PLANNING SYSTEM

4.1 A review of the planning system began in 2015, supported by a report[15] from an independent panel, and subsequent public consultation[16] on proposals for change. The Planning (Scotland) Bill was introduced to the Scottish Parliament on 4 December 2017 and received Royal Assent on 25 July 2019. A work programme for implementing the Act is currently being progressed, after much of this work had been paused due to the impacts of the COVID-19 pandemic and need for physical distancing.

4.2 The 2017 consultation Places, People and Planning[17] invited views on whether Section 3F should be removed. Whilst there was general support for removing section 3F, there was also concern at the time that this would be inconsistent with the then emerging third Climate Change Plan. As every policy area needs to contribute to reducing emissions, the Scottish Government decided not to remove Section 3F through the Planning Bill.

4.3 The Planning (Scotland) Act 2019 includes new provisions for a stronger National Planning Framework, incorporating Scottish Planning Policy. It also includes provision for a restructured system of development plans, consisting of the National Planning Framework alongside local development plans, all to be informed by new regional spatial strategies. This means that local development plans prepared by planning authorities across Scotland, would not need to repeat the content of the revised National Planning Framework, but would focus only on policy where the planning authority considers a different approach to be needed locally, assuming that consideration is supported by appropriate justification and evidence.

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[15] Scottish Government (2016) Empowering planning to deliver great places: independent review report

[16] Scottish Government (2017) Places, People and Planning: consultation on the future of the Scottish planning system

[17] Scottish Government (2017) Places, People and Planning – Position Statement

4.4 The 2019 Act has introduced a statutory Purpose of Planning which underpins the preparation of the National Planning Framework and local development plans, “to manage the development and use of land in the long-term public interest”. Anything which contributes to sustainable development or achieves the national outcomes is to be considered as being in the long term public interest. Further information about the provisions of the Planning (Scotland) Act 2019 can be found in the legislation as enacted[18] and on the Scottish Government’s Transforming Planning website[19].

4.5 The 2019 Act also lengthens the review cycle for the National Planning Framework and local development plans to 10 years, although there would be scope for amendments within that time. This will have implications for the annual reporting requirements placed on the Scottish Government by Section 3F, as there will potentially be less change over the period than under the current system of five yearly reviews of local development plans. Any changes identified will continue to be reported.

[18] Scottish Government (2019) Planning (Scotland) Act 2019

[19] Transforming Planning website

5 ASSESSMENT OF PROGRESS IN IMPLEMENTING SECTION 3F

Reporting method

5.1 This section addresses the reporting requirements of Section 73 that relate to the inclusion of greenhouse gas emissions policies within local development plans as prescribed by Section 3F. As Section 3F only refers to local development plans, only those plans are considered here. A summary is provided in Table 2.

The local development plan context

5.2 Local development plans are currently produced every five years and are preceded by a number of preparatory stages:

- public consultation on a main issues report;
- public consultation on a proposed local development plan;
- examination of the proposed local development plan by independent reporters within the Scottish Government Department for Planning and Environmental Appeals; and
- adoption of the local development plan.

5.3 With a small number of exceptions, planning authorities prepare a single local development plan for their area.

5.4 Whilst Scottish Ministers can make representations on proposed plans where they feel there could be improved alignment with Ministerial policies, individual planning authorities are responsible for ensuring plans are legally compliant.

5.5 All current local development plan policies, considered to implement Section 3F, are presented in the Annex to this report. The development plan position is set out below.

5.6 There are 32 council areas in Scotland with planning authorities, and there are a further two national parks that have planning authority powers. Currently 33 out of the 34 planning authorities in Scotland have local development plans in place. One local authority is yet to adopt their first local development plan, however, it has an adopted local plan in place. Table 1 shows the stages in the local development plan cycle, reached by planning authorities as of 31 December 2021. Fifteen planning authorities have now adopted their second local development plan compared to twelve in the previous year. Cairngorms National Park, Renfrewshire Council and South Lanarkshire Council adopted their second local development plan in March, December and April 2021

respectively. Eight local development plans (LDP 2) are at the Main Issues Report or Proposed Plan stage.

Table 1. Stage reached in the Local development plan (LDP) cycle

	Local Development Plan 1			Local Development Plan 2		
Stage	Main Issues Report	Proposed Plan	Adopted Plan	Main Issues Report	Proposed Plan	Adopted Plan
Number of planning authorities	0	1	33	2	6	15

Notes:

1. The above figures do not include: East Ayrshire Minerals Local Development Plan, Fife Minerals Local Plan, South Lanarkshire Minerals Local Plan and East Ayrshire Town Centres and Retailing Local Development Plan given that they are topic specific.
2. This table counts only the Highland Council-wide plan, not the three area plans which contain local policies.
3. Plans at the examination stage have been counted as a 'proposed plan'. Proposed plans include City of Edinburgh Council, East Dunbartonshire Council, East Renfrewshire Council, Scottish Borders Council, South Ayrshire Council, West Dunbartonshire Council.
4. Plans reflect the development stage which they have reached as of 31 December 2021.

5.7 Table 2 shows the stages of local development plan preparation reached as of 31 December 2021 and indicates where section 3F has been addressed according to the Scottish Government. It demonstrates that approximately 94% of planning authorities now have a policy in place in their adopted plans which responds to section 3F. All adopted local development plans 2 have a policy which fulfils this requirement.

Table 2. Local Development Plan stages directly addressing section 3F

Local Development Plan 1					
Main Issues Report (0)		Proposed Plan (1)		Adopted Plan (33)	
Yes	No	Yes	No	Yes	No
0	0	1	0	32	1
Local Development Plan 2					
Main Issues Report (2)		Proposed Plan (6)		Adopted Plan (15)	
Yes	No	Yes	No	Yes	No
2	0	6	0	15	0

Notes:

1. Argyll and Bute Council's adopted local development plan, LDP1, does not have a policy reflecting Section 3F, however there was a policy addressing this in the Council's 2013 supplementary guidance.
2. Plans that have preceded LDP2 are not counted in the LDP1 adopted figures as LDP1 is superseded by LDP2.

   Numbers include four LDPs identified as not specifying a proportion of greenhouse gas emission reductions to be achieved but which otherwise addressed Section 3F.

5.8 Table 4 shows the total number of adopted local development plans responding to Section 3F over time.

Table 3. Number of adopted local development plans responding to Section 3F over time

Year	2012 / 2013	2013 / 2014	2014 / 2015	2015 / 2016	2016 / 2017	2017 / 2018	2018/ 2019	2019 / 2020	2020 / 2021	2021
Adopted Policies	4	6	14	20	24	29	32	32	32	32

5.9 The Scottish Government operates a requirement for planning authorities to include relevant policies responding to section 3F within development plans. **Tables 3 and 4 demonstrate that this approach is effective as take up continues and remains high.**

6 GUIDANCE ON IMPLEMENTING SECTION 3F

6.1 The Scottish Government currently uses two means of providing guidance to developers and planning authorities on the implementation of Section 3F:

1) Including guidance and identifying policy approaches taken in local development plans within the annual reports to the Scottish Parliament.
2) Making representations (where necessary) to planning authorities on their proposed local development plans.

6.2 On 19 August 2016 it was indicated through a Chief Planner Letter[20] that the Scottish Government would reduce their input to development plans to better focus resources. The Scottish Government therefore no longer provide responses to working drafts or main issues reports but will, as indicated in the Development Plan Gateway Service Standard[21], make representations about proposed local development plans. This will be done where it is not considered that Section 3F is adequately addressed.

6.3 As mentioned in previous reports, the Scottish Government look for three elements, which are considered to remain appropriate, to be covered in a local development plan policy aimed at implementing Section 3F:

- A proportion of emissions to be saved.
- At least one increase in the proportion of emissions to be saved.
- A requirement that savings should be achieved through the use of generating technology (rather than energy efficiency measures).

6.4 In 2016 ClimateXChange published a University of Dundee study[22], commissioned by the Scottish Government, on the effectiveness of greenhouse gas emissions policies in local development plans. The study, considered in detail in the sixth annual report, while not intended as guidance for planning authorities, is useful in helping to shape the policy approach taken locally. In

[20] Development plan preparation: change in approach, Scottish Government, August 2016

[21] Development Plan Gateway (DPGW) – Service Standard, Scottish Government, August 2016

[22] Effectiveness of greenhouse gas emissions policies in local development plans, ClimateXChange, University of Dundee, March 2016

terms of the application of Section 3F and securing uptake, the study found that a check-sheet approach at the planning application stage had proved useful.

6.5 The study was also clear that monitoring and enforcement of the implementation of low and zero-carbon energy generating technologies does not appear to have been strong to date.

7 ASSESSMENT OF EFFECTIVENESS OF SECTION 3F IN REDUCING GREENHOUSE GAS EMISSIONS FROM DEVELOPMENTS AND ASSESSMENT OF THE CONTINUING NEED FOR SECTION 3F

7.1 This section assesses the reporting requirements of Section 73(1) which relate to the effectiveness of Section 3F in reducing greenhouse gas emissions and Section 73(2) on the ongoing requirement for Section 3F.

7.2 There are two key approaches to addressing Section 3F. The first is that low and zero-carbon generating technology is used to create emissions savings that help the building to meet building regulations. The second approach is to use low and zero-carbon energy generating technology to create emissions savings in addition to meeting the minimum standards set out in building regulations. These approaches are referred to as Type 1 and Type 2 respectively in the following paragraph.

7.3 Table 6 shows the breakdown of adopted local development plans per policy type as described above. A substantial majority of local development plan policies which include 3F have a Type 1 policy. The remaining plans take a Type 2 approach.

Table 4. Adopted local development plan Section 3F policy types*

Type 1	Type 2
29	3

Notes:

* The two remaining LDPs not addressed above are those by Argyll & Bute Council which has their 3F policy in supplementary guidance, and North Lanarkshire Council, which has not yet adopted its LDP1.

7.4 We do not believe the above information alters the 2016 University of Dundee research finding that building standards are the primary driver for reducing emissions from buildings.

7.5 As outlined in the Eighth Annual Report on the Operation of Section 72 of the Climate Change (Scotland) Act 2009, responses to the consultation ‘Places,

People and Planning'[23] included responses to a question about the removal of Section 3F which were subject to independent analysis[24].

7.6 The Scottish Government's Places, People and Planning Position Statement[25] (2017) noted general support for the removal of Section 3F as well as concerns that it's removal is inconsistent with the aspirations of the emerging then Climate Change Plan. The Position Statement concluded that it was not the Scottish Government's intention to progress removal of Section 3F through the Planning Bill given the commitment to climate change and the need for every policy area to contribute to reducing emissions.

7.7 This report recognises that the changes planned in building and heat standards may at some point mean that the Section 3F may not be required, but at this time does not suggest that Section 3F should be withdrawn.

7.8 The planning system is already bound by law to contribute to sustainable development in the round. The Planning (Scotland) Act 2019 includes six outcomes for the National Planning Framework, one of which is meeting greenhouse gas emissions reductions targets arising from the Climate Change (Scotland) Act 2009. The draft National Planning Framework 4 (NPF4) was laid before Parliament in November 2021. Alongside Parliamentary scrutiny of the draft, we are running a public consultation, supported by an extensive engagement programme, and comments are invited by 31 March 2022. Draft NPF4 sets out how our approach to planning and development will help achieve a net zero, sustainable Scotland by 2045. The refocusing on net zero is supported by radically improved draft planning policies including: a requirement to give significant weight to the Global Climate Emergency in plans and decisions; enabling the infrastructure we will need including green energy, heat networks, facilities for a circular economy and sustainable transport; promoting local liveability through 20 minute neighbourhoods; and not supporting peat of fossil fuel extraction other than in exceptional circumstances. Following the consultation and scrutiny on draft NPF4, we will consider the responses received and any appropriate amendments before presenting a final draft to the

[23] Scottish Government (2017) Places, people and planning: consultation on the future of the Scottish planning system

[24] Scottish Government (2017) Planning Review: analysis of consultation responses

[25] Scottish Government (2017): Places, people and planning Position Statement

Scottish Parliament for its approval, in advance of adoption by the Scottish Ministers.

8 MATTERS FOR FUTURE REPORTS

8.1 The Scottish Government will continue to fulfil its reporting requirements arising from Climate Change legislation through future reports, as well as providing advice for planning authorities and developers where relevant.

8.2 We will also revisit the style and scope of future reports to the Scottish Parliament to ensure they properly and proportionately reflect the new system of development plans resulting from the implementation of the Planning (Scotland) Act 2019, as well as climate change legislation and plans as detailed in section 2 of this report.

8.3 The Scottish Government will continue to provide representations on proposed local development plans in relation to Section 3F.

9 ANNEX – ADOPTED SECTION 3F POLICIES TO 31 DECEMBER 2021

1. Aberdeen City Local Development Plan (adopted January 2017)

Policy R7 - Low and Zero Carbon Buildings and Water Efficiency

Low and Zero Carbon Buildings

All new buildings, must meet at least 20% of the building regulations carbon dioxide emissions reduction target applicable at the time of the application through the installation of low and zero carbon generating technology. This percentage requirement will be increased as specified in Supplementary Guidance.

This requirement does not apply to:

1. Alterations and extensions to buildings;
2. Change of use or conversion of buildings;
3. Ancillary buildings that are stand-alone having an area less than 50 square metres;
4. Buildings which will not be heated or cooled, other than by heating provided
5. Solely for the purpose of frost protection; or Buildings which have an intended life of less than two years.

2. Aberdeenshire Local Development Plan (adopted April 2017)

Policy C1 Using resources in buildings

All developments must be designed to reduce carbon dioxide emissions. Proposals should aim, wherever feasible, to achieve a Gold sustainability label under section 7 of the building standards technical handbook and by 2019 a platinum label.

Appropriate standards for water efficiency to achieve both environmental protection (particularly to avoid any adverse effect on the interest of the River Dee Special Area of Conservation) and to reduce energy costs should also be applied. For water efficiency, a Gold Sustainability level would apply and a BREEAM level 5 standard for non-domestic buildings. Limited exceptions may apply but all proposals must at least meet the standards established through the current building regulations.*

A target increasing over time in the range 15-30% of the CO_2 reduction should be achieved through installing low or zero-carbon energy generating technologies in new development and this will be applied.

The master planning process for major new development should assess the feasibility of meeting the standard in part through a district heating scheme. This should include the appropriate infrastructure in at least so far as from the edge of the development site to a location adjacent to the rising main of each property for the future installation of metered heat. In areas not served by gas, consideration should be given to alternative technologies such as hot rock geothermal or biomass sources.

If it is clearly demonstrated that no suitable low and zero-carbon generating technologies are appropriate, the full carbon reduction requirement must be achieved through energy efficiency measures. Alterations, extensions, changes of use or conversion of existing buildings, development of ancillary buildings of less than 50 square meters, or buildings heated solely to provide frost protection are exempt from these requirements. Buildings with an intended life of less than 2 years are also exempted from the requirements of this policy.

An Energy Statement should be submitted at the planning application stage to demonstrate how the proposed development will satisfy the requirements of this policy. Suspensive conditions may also be used to deliver this policy to avoid any unnecessary delays in processing planning applications.

* The Council will prepare guidance on the detail of this policy specifically the standards that would apply and where exceptions might be made including to take account of financial viability. The guidance would also set out the circumstances and timescales in applying an increase in the target for low or zero carbon generating technologies and the parameters for assessing the feasibility of district heating schemes in major developments.

3. Angus Local Development Plan (adopted September 2016)

Policy PV11 Energy Efficiency - Low and Zero Carbon Buildings

All qualifying new buildings must demonstrate that the installation and operation of low and zero-carbon generating technologies will avoid at least 10% of the projected greenhouse gas emissions from their use by 2016, and at least 15% by 2018.

This requirement does not apply to extensions, changes or use or conversion of buildings; stand-alone ancillary buildings under 50 sqm; buildings with a planned life of less than two years or which will not be heated or cooled for purposes other than frost protection. Development proposals should be accompanied by a statement of the level of sustainability achieved to demonstrate compliance with the above standards. Development proposals should also consider energy efficiency measures where possible including:

- siting, form, orientation and layout of buildings to maximise solar gain,

- natural ventilation and light;
- the use of landscaping and boundary treatment to modify temperature extremes such as shelter belts;
- and the re-use and/or local sourcing of building materials.

4. Cairngorm Local Development Plan (adopted 26 March 2021)

Policy 3: Design and Placemaking

3.3 Sustainable Design

All development proposals must also be designed to minimise the effects of the development on climate change in terms of siting and construction and, once complete, achieve at least the minimum standard in compliance with the Building Standards Technical Handbook

5. Clackmannanshire Local Development Plan (adopted August 2015)

Policy SC7 - Energy Efficiency and Low Carbon Development

This policy sets out the Council's expectations with regards to the energy efficiency of new buildings. All new buildings must achieve a minimum of 15% of the carbon dioxide emission reduction standards (as set by the relevant Scottish Buildings Standards at the time of the proposed development) through the use of Low and Zero Carbon Generating Technologies (LZCGTs). This proportion will increase to 20% from the beginning of 2018, and will thereafter be kept under review.

Planning applications for all new buildings must be supported by a statement which demonstrates how the level of carbon dioxide emissions reduction will be achieved through the use of LZCGTs and through the use of appropriate design, materials and construction. Once built, a sustainability label that includes the level of carbon dioxide emissions reduction achieved shall be affixed to the building.

The Council will encourage development proposals that seek to achieve a higher level of carbon dioxide emissions reduction than that required by this policy. Achievement of a higher level of carbon dioxide emissions reduction will be treated as a material consideration in determining any planning application.

SG7 (Energy Efficiency and Low Carbon Development) details how energy efficiency standards should be met in new development and explains limitations and exemptions.

The Council will review this policy and its associated supplementary guidance in the

event of any changes in Scottish Government policies or legislation. See also: SC5, SC13. Clackmannanshire supplementary guidance 7 – energy efficiency and low carbon development (august 2015) – contains further information on this policy.

6. Dundee City Local Development Plan (adopted 15 February 2019)

Policy 48: Low and Zero Carbon Technology in New Development

Proposals for 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 and operation of low and zero carbon generating technologies. The relevant Building Standards and percentage contribution required is set out in supplementary guidance. The supplementary guidance will be kept under review to ensure the proportion of the carbon emissions reduction standard to be met by these technologies will increase over time.

This requirement applies to all new buildings with the following exceptions:

1) Alterations and extensions to buildings.
2) Change of use or conversion of buildings.
3) Ancillary buildings that stand alone and cover an area less than 50 square metres. 4) Buildings which will not be heated or cooled, other than by heating provided solely for frost protection.
4) Buildings which have an intended life of less than two years.

A statement will be required to be submitted with an application for planning permission to demonstrate compliance with this requirement.

7. Dumfries and Galloway Local Development Plan (adopted 3 October 2019)

Policy OP1: Development Considerations - f) Sustainability

Development proposals should limit the impacts of climate change, support resilience, and promote sustainable development by:

- assisting the development of the local economy through sustainable economic growth;
- minimising adverse impacts on water, air and soil quality;
- reusing and/or regenerating previously used land and property, including derelict and contaminated land;

- making the most efficient use of land. This means looking for and where practical making use of opportunities to reduce greenhouse gas emissions, including low carbon district heating networks;
- integrating with existing infrastructure where possible;
- supporting the Scottish Government's Zero Waste objectives and the Council's waste resource management objectives;
- avoiding areas of significant flood risk;
- using sustainable drainage systems (SuDS);
- supporting reduction in carbon emissions through:
    - a reduction in carbon dioxide emissions through the introduction of energy efficiency measures and, where feasible, the installation of on-site renewable energy generation technology (information on this matter is provided in supplementary guidance: Design Quality and Placemaking);
    - passive aspects of design, including consideration of: location, layout, orientation, massing, materials, detailed design, topography, and vegetation; and
    - all new buildings being required to demonstrate that a proportion of the carbon emissions reduction standard set by Scottish Building Regulations will be met through the installation and operation of low and zero carbon technologies. The relevant building standards and percentage contribution required is set out in supplementary guidance. The supplementary guidance will be kept under review to ensure that the proportion of the carbon emissions reduction standard to be met by these technologies will increase over time.*

* Supplementary guidance provides further detail on this including its application to existing buildings and the circumstances where exceptions should apply.

8. East Ayrshire Local Development Plan (adopted April 2017)

Low and Zero Carbon Buildings

Policy ENV 14 Low and Zero Carbon Buildings

In order to meet with the requirements of Section 3F of the Town and Country Planning (Scotland) Act 1997 (as amended), development proposals will be required to incorporate low and zero carbon generating technologies to reduce greenhouse gas emissions. Proposals for all new buildings will require to demonstrate that at least 10% of the carbon emissions reduction standard set by the Scottish Building

Standards (2010) will be met through the installation and operation of zero carbon generating technologies. This percentage will increase to 15% from the beginning of 2019 and will be reviewed in 2021.

These requirements will not apply to:

I. Alterations and extensions to existing buildings;

II. Change of use or conversion of existing buildings;

III. Ancillary buildings that are ‘stand-alone’ and have an area of less than 50 sqm;

IV. Buildings which will not be heated or cooled, other than by heating to protect from frost; or

V. Buildings which have an intended life of less than two years.

- Compliance with this requirement will be demonstrated by the submission of a low carbon development statement.**9. East Dunbartonshire Council Local Development Plan** (adopted February 2017)

Policy 15. Renewable Energy and Low-Carbon Technology

Development will support the change to a low-carbon economy by ensuring that all new development reduces emissions and energy use in new buildings and considers the potential to develop heat networks. Energy infrastructure proposals should follow criteria for location, siting and design. The location of a wind farm proposal should be guided by the spatial framework for wind-farm development. Proposals should consider the need for restoration and aftercare, and relevant Supplementary Guidance. The following sections set out the detailed policy criteria for these aspects:

Reducing Emissions and Energy Use in New Buildings

Development proposals will reduce emissions and energy use by contributing to energy efficiency, heat recovery, efficient energy supply and storage, electricity and heat from renewable sources, and heat from non-renewable sources where greenhouse gas emissions can be significantly reduced.

Proposals for all new buildings will be required to demonstrate that at least 10% 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 technologies. This percentage will increase to 15% from the beginning of 2016 and will be reviewed in 2018.

The developments exempt from the above standards are buildings exempt from building regulations, alterations and extensions to buildings, changes of use and

conversion of buildings.

A low to zero-carbon development statement will be required to demonstrate compliance with this emissions-reduction standard. Supplementary Guidance: Design and Placemaking will include guidance on the standards and what to include in this statement.

10. East Lothian Local Development Plan (adopted September 2018)

SEH1: Sustainable Energy and Heat

The Council supports the principles of the 'energy hierarchy' and promotes energy-efficient design in new development. Community heating schemes are encouraged where they would not harm amenity and could co-exist satisfactorily with existing or proposed uses in the area. Applicants are encouraged to submit an Energy Statement indicating how such matters have been addressed. Where a district heat network exists or is planned, developments should include appropriate infrastructure for connection or safeguards to allow future connection. In particular, the Council supports the principle of the creation of district heat networks at Millerhill/Craighall, at Oxwellmains, Dunbar and at Cockenzie provided they would not harm amenity and could co-exist satisfactorily with existing or proposed uses in the area. Proposals in these areas must not prejudice the potential for heat networks to be developed. The council supports the principle of combined heat and power schemes and energy generation from renewable or low carbon sources.

Policy SEH2: Low and Zero Carbon Generating Technologies

All new buildings must include Low and Zero Carbon Generating Technologies (LZCGT) to meet the energy requirements of Scottish Building Standards, except for the following:

- Alterations and extensions to buildings;
- Changes of use or conversion of buildings;
- An ancillary building that is stand-alone, having an area less than 50 square metres;
- Buildings which will not be heated or cooled other than by heating provided solely for the purpose of frost protection;
- Buildings which have an intended life of less than two years;
- Any other buildings exempt from Building Standards.

Compliance with this requirement shall be demonstrated through obtaining an 'active'

sustainability label through Building Standards and submission of calculations indicating the SAP Dwelling Emissions Rate (DER) or SBEM Buildings Emissions Rate (BER) with and without the use of the LZCGT. LZCGT shall reduce the DER/BER by at least 10%, rising to at least 15% for applications validated on or after 1 April 2019. For larger developments, encouragement.

11. East Renfrewshire Local Development Plan (adopted June 2015)

Policy E2: Energy Efficiency

7.3.1. All new buildings must be designed so that at least 10% of the carbon dioxide emissions reductions standard, set by Scottish Building Standards, is met by the installation and operation of low and zero carbon generating technologies. This percentage will increase to 15% by the beginning of 2015, and may be changed again during the lifetime of this plan following any reviews of Scottish Building Standards.

7.3.2. Other solutions will be considered where:

- an applicant is able to demonstrate that there are significant technical constraints in using on-site low and zero-carbon generating technologies; or
- where there is likely to be an adverse impact on the historic environment; or
- where development of the following types is proposed: extensions to existing buildings, buildings which have an intended life of less than two years, stand-alone ancillary buildings with an area of less than 50 sqm, or buildings which will not be heated or cooled other than for the purposes of frost protection.

7.3.3. Further detailed information and guidance is provided in the Energy Efficient Design Supplementary Planning Guidance (June 2015).

12. Edinburgh Local Development Plan (adopted November 2016)

Policy Des 6 Sustainable Buildings

Planning permission will only be granted for new development where it has been demonstrated that:

a) the current carbon dioxide emissions reduction target has been met, with at least half of this target met through the use of low and zero carbon generating technologies.

b) other features are incorporated that will reduce or minimise environmental resource use and impact, for example:

I. measures to promote water conservation

II. sustainable urban drainage measures that will ensure that there will be no increase in rate of surface water run-off in peak conditions or detrimental impact on the water environment. This should include green roofs on sites where measures on the ground are not practical

III. provision of facilities for the separate collection of dry recyclable waste and food waste

IV. maximum use of materials from local and/or sustainable sources

V. measures to support and encourage the use of sustainable transport, particularly cycling, including cycle parking and other supporting facilities such as showers.

13. Falkirk Local Development Plan (adopted August 2020)

Policy Low and Zero Carbon Development

1. All new buildings should incorporate on-site low and zero carbon-generating technologies (LZCGT) to meet a proportion of the overall energy requirements. Applicants must demonstrate that 12% of the overall reduction in CO2 emissions as required by Building Standards has been achieved via on-site LZCGT. This proportion will be increased as part of subsequent reviews of the LDP. All proposals must be accompanied by an Energy Statement which demonstrates compliance with this policy. Should proposals not include LZCGT, the Energy Statement must set out the technical or practical constraints which limit the application of LZCGT. Further guidance is contained in Supplementary Guidance SG14 Renewable and Low Carbon Energy. Exclusions from the requirements of this policy are:

- Proposals for change of use or conversion of buildings;
- Alterations and extensions to buildings;
- Stand-alone buildings that are ancillary and have an area less than 50 square metres;
- Buildings which will not be heated or cooled other than by heating provided solely for the purpose of frost protection;
- Temporary buildings with consent for 2 years or less; and
- Where implementation of the requirement would have an adverse impact on the historic environment as detailed in the Energy Statement or accompanying Design Statement.

2. The design and layout of development should, as far as possible, seek to minimise energy requirements through the other sustainability aspects of the current Sections 6 and 7 of the current Building Standards Technical Handbook.

14. Fife Local Development Plan (adopted February 2017 and FifePlan [adopted September 2017], which complements the LDP)

Policy 11: Low Carbon

Sustainable Buildings

Planning permission will only be granted for new development where it has been demonstrated that:

1) The proposal meets the current carbon dioxide emissions reduction target (as set out by Scottish Building Standards), and that low and zero carbon generating technologies will contribute at least 15% of these savings from 2016 and at least 20% from 2020. Statutory supplementary guidance will provide additional advice on compliance with this requirement;
2) Construction materials come from local or sustainable sources;
3) Water conservation measures are in place;
4) sustainable urban drainage measures will ensure that there will be no increase in the rate of surface water run-off in peak conditions or detrimental impact on the ecological quality of the water environment; and
5) Facilities are provided for the separate collection of dry recyclable waste and food waste.

All development should encourage and facilitate the use of sustainable transport appropriate to the development, promoting in the following order of priority: walking, cycling, public transport, cars.

The council will produce statutory supplementary guidance on low carbon energy schemes, including wind energy. This shall be submitted to Ministers within 12 months of the date of the adoption of the plan. The guidance will accord with the current Scottish Planning Policy, and will set out the detailed policy considerations against which all proposals for low carbon energy schemes, including wind energy, will be assessed, based on those considerations set out above.

15. Glasgow City Development Plan (adopted March 2017)

- CDP 5 RESOURCE MANAGEMENT
- LOW AND ZERO-CARBON GENERATING TECHNOLOGIES
- New buildings should also include low and zero-carbon generating technologies (LZCGT) to offset a proportion of emissions arising from the use of the buildings, as specified in the table below.

- All buildings must receive an appropriate sustainability label as per the Building Standards Technical Handbook Section 7: Sustainability.
- As a minimum, the specified level of sustainability for a dwelling or non-domestic property, at the planning application submission date, should be as set out in Table 3.
- Table 3 Required levels of sustainability for proposed domestic and non-domestic properties
- Bronze Active (2014) - The baseline level for sustainability achieved where the building meets the functional standards set out in Sections 1-6 of the Technical Handbook and includes a minimum 10% carbon dioxide emissions abatement through the use of Low and Zero-Carbon Generating Technology (LZCGT).
- Silver Active (2016) - Where the building complies with the Silver Active level in each of the 8 aspects in the handbook and includes a minimum 15% carbon dioxide emissions abatement through the use of LZCGT.
- Gold (2018) - where the building complies with the Gold level in each of the 8 aspects in the handbook and includes a minimum 20% carbon dioxide emissions abatement through the use of LZCGT.

SG [*supplementary guidance*] 5 supports the above policy by providing guidance on the use and derivation of energy and the processing of waste in new development. Accordingly, SG5 includes advice on:

- the production of renewable energy and heat (including different sources and, where appropriate, favoured locations), its use in new development and how new proposals will be assessed;
- more efficiently using, and distributing, energy and heat, including through heat mapping and district heating;
- designing new development to reduce energy use including, if appropriate, urban lighting;
- the use of low and zero carbon generating technologies (including different sources) in new development;
- the means by which the impact of new energy/heat proposals will be assessed;
- sub-surface infrastructure;
- on-shore oil and gas extraction and the means by which its land use implications will be assessed;
- energy and carbon master planning; and

- the means by which proposals for new waste management facilities will be assessed.

Supplementary Guidance SG5: Resource Management

4.6 A statement on Energy will be required to support all applications to which this policy applies (for exceptions see paragraph 4.8). Further information on the requirements of a Statement on Energy will be found in Section 7. Figure 3 indicates how the council will ensure that the requirements of Table 3 are delivered in new development.

Table – 3 from CDP5

- Bronze Active (2014) – the baseline level for sustainability achieved where the building meets the functional standards set out in Section 1-6 of the Technical Handbook and includes a minimum 10% carbon dioxide emissions abatement through the use of Low and Zero-Carbon Generating Technology (LZGT).
- Silver Active (2016) – where the building complies with the Silver Active level in each of the 8 aspects in the handbook and includes a minimum 15% carbon dioxide emissions abatement through the use of LZCGT.
- Gold (2018) – where the building complies with the Gold level in each of the 8 aspects in the handbook and includes a minimum 20% carbon dioxide emissions abatement the use of LZCGT.

Eligible Low and Zero-Carbon Generating Technologies

4.7 Technologies which may contribute to a reduction in carbon emissions are:

- Biomass
- Fuel Cells
- Micro-Hydro
- Micro-Wind
- Solar Thermal
- Photovoltaics
- Ground Science Heat Pumps
- Water Source Heat Pumps
- Air Source Heat Pumps
- Combined Heat and Power
- Heat Exchange and Recovery Systems
- Geothermal

Exceptions

4.8 This requiremet does not apply to:

a) Alterations and extensions to buildings;

b) Conversions of buildings;

c) Buildings that are ancillary to a dwellings that are stand-alone having an area less than 50 square metres;

d) Buildings which will not be heated or cooled other than by heating provided soley for the purpose of frost protection;

e) Buildings intend to have a life not exceeding the period of two years; or

f) conservatories

16. Highland Wide Local Development Plan (adopted 5 April 2012)

Policy 28: Sustainable Design

The Council will support developments which promote and enhance the social, economic and environmental wellbeing of the people of Highland.

Proposed developments will be assessed on the extent to which they:

- are compatible with public service provision (water and sewerage, drainage, roads, schools, electricity);
- are accessible by public transport, cycling and walking as well as car;
- maximise energy efficiency in terms of location, layout and design, including the utilisation of renewable sources of energy and heat;
- are affected by physical constraints described in Physical Constraints on Development: Supplementary Guidance;
- make use of brownfield sites, existing buildings and recycled materials;
- demonstrate that they have sought to minimise the generation of waste during the construction and operational phases. (This can be submitted through a Site Waste Management Plan);
- impact on individual and community residential amenity;
- impact on non-renewable resources such as mineral deposits of potential commercial value, prime quality agricultural land, or approved routes for road and rail links;
- impact on the following resources, including pollution and discharges, particularly within designated areas:

    - habitats
    - freshwater systems
    - species
    - marine systems
    - landscape
    - cultural heritage
    - scenery
    - air quality;
- demonstrate sensitive siting and high quality design in keeping with local character and historic and natural environment and in making use of appropriate materials;
- promote varied, lively and well-used environments which will enhance community safety and security and reduce any fear of crime;
- accommodate the needs of all sectors of the community, including people with disabilities or other special needs and disadvantaged groups; and
- contribute to the economic and social development of the community.

Developments which are judged to be significantly detrimental in terms of the above criteria will not accord with this local development plan. All development proposals must demonstrate compatibility with the Sustainable Design Guide: Supplementary Guidance, which requires that all developments should:

- conserve and enhance the character of the Highland area;
- use resources efficiently;
- minimise the environmental impact of development;
- enhance the viability of Highland communities.

Compatibility should be demonstrated through the submission of a Sustainable Design Statement where required to do so by the Guidance.

All developments must comply with the greenhouse gas emissions requirements of the Sustainable Design Guide.

In the relatively rare situation of assessing development proposals where the potential impacts are uncertain, but where there are scientific grounds for believing that severe damage could occur either to the environment or the wellbeing of communities, the Council will apply the precautionary principle.

Where environmental and/or socio-economic impacts of a proposed development are likely to be significant by virtue of nature, size or location, The Council will require the preparation by developers of appropriate impact assessments. Developments that will have significant adverse effects will only be supported if no reasonable alternatives exist, if there is demonstrable over-riding strategic benefit or if satisfactory overall mitigating measures are incorporated.

Highland Sustainable Design Guide Supplementary Guidance (adopted 16 January 2013)

Incorporating small-scale renewable or low-carbon energy systems into developments or individual buildings can make significant reductions in CO2 emissions. Examples include:

- Small-scale standalone wind turbines;
- Solar thermal heating panels;
- Solar energy photovoltaic cells, tiles and panels;
- Air, ground, or water source heat pumps;
- Small scale hydro-electric schemes;
- Biomass heating systems;
- Anaerobic digesters/biogas.

When considering incorporating these technologies into developments or individual buildings there are a range of planning considerations and constraints, and a suite of applicable policies and guidance, therefore pre application advice should be sought.

Community heating schemes should be considered for small-scale developments of two or three buildings as well as for larger-scale developments. Larger-scale developments should also consider the use of a combined heat and power scheme (CHP).:

Sustainable design checklist, renewable energy has the energy demand for the development been calculated to determine:

A. The amount of low or zero carbon technology e.g. wind, solar, hydro, photovoltaic (PV), Combined Heat and Power (CHP) that is practicable to meet the extant Building Standards CO2 emissions reduction target.
B. The % of total site energy demand that will be produced from on-site renewable energy technologies.

C. Meeting the remaining energy demand efficiently, e.g. non-renewable or waste powered district heating and cooling.

Minimum Standards:

- A-C is required only where the development is 500m^2 or over.
- The CO^2 emissions reduction target should be met through a combination of on-site low or zero carbon technologies (LZCT) and other appropriate measures.
- The amount of low or zero carbon technologies (LZCT) employed will depend on the technical constraints and scale of the proposed development.

Relevant Policies & Additional Guidance:

- Climate Change (Scotland) Act
- Scottish Planning Policy (SPP)
- A Low Carbon Building Standards Strategy for Scotland
- Scottish Building Standards

17. Inverclyde Local Development Plan (adopted 26 August 2019)

POLICY 6 – LOW AND ZERO CARBON GENERATING TECHNOLOGY

Support will be given to all new buildings designed to ensure that at least 15% of the

carbon dioxide emissions reduction standard set by Scottish Building Standards is

met through the installation and operation of low and zero-carbon generating technologies. This percentage will increase to at least 20% by the end of 2022.

Other solutions will be considered where:

(a) it can be demonstrated that there are significant technical constraints to

using on-site low and zero-carbon generating technologies; and

(b) there is likely to be an adverse impact on the historic environment.

*This requirement will not apply to those exceptions set out in Standard 6.1 of the 2017 Domestic and Non-Domestic Technical Handbooks associated with the Building (Scotland) Regulations 2004, or to equivalent exceptions set out in later versions of the handbook.

18. Loch Lomond and Trossachs Local Development Plan (adopted December 2016)

Overarching Policy 2

Development proposals should not conflict with nearby land uses and where relevant, must address the following requirements:

Climate Friendly Design: demonstrate how proposed buildings will meet a reduction in greenhouse gas emissions through;

a) Minimising overall energy requirements through conservation measures, and

b) Incorporating on-site low and zero carbon generating technologies to meet 10% of the overall energy requirements of the building rising to 20% by December 2021.

19. Midlothian Local Development Plan (adopted November 2017)

Policy NRG 3

Energy Use and Low & Zero-Carbon Generating Technology

Through attention to location, development mix, phasing, site and building layout and adaptability of buildings to future use, demand for energy should be limited.

Shelter and passive solar gain should be optimised in this regard. Conventional air conditioning should be avoided, as far as reasonable, through passive design including natural ventilation, vegetation and external summer shading.

Each new building shall incorporate low and/or zero-carbon generating technology in order to meet the minimum carbon dioxide emission reduction target of the 2015, and any subsequent revision to, Building Regulations. The Council encourages all proposals for new development to incorporate measures to achieve the higher levels of sustainability, as defined by the Building Regulations.

Policy NRG 4

Interpretation of Policy NRG3

For the purpose of policy NRG3, the buildings subject to low and/ or zero-carbon generating technology (LZCGT) requirements and greenhouse gases referred to are limited to those within the scope of the relevant CO_2 emissions standard under the Building Regulations. Where LZCGT is the main heating source and the Building Regulations methodology includes an option for that technology to be used as such, a special Target Emissions Rate shall be used based on the main heating being

mains gas with a 90% efficient boiler. The percentage reduction is then assessed by reference to this special Target Emissions Rate. The 'floor-area-weighted average' approach in the Building Regulations CO_2 emissions standard (for buildings with multiple dwellings such as a block of flats or terrace of houses) may be adopted.

Policy NRG3's LZCGT requirements shall not apply in the case of:

A. Buildings where technical constraints preclude incorporation, in which case active energy efficiency measures (e.g. heat exchange recovery systems) should be used unless also precluded by technical constraints.
B. The applicant shall evidence any such constraints. On their own, financial considerations do not constitute a technical constraint here; buildings in respect of which community heating pipework is installed with a view to connection at a later date (see policy NRG6);
C. Section 3F of the Town and Country Planning (Scotland) Act 1997 no longer being in force.

20. Moray Development Plan 2 (adopted July 2020)

DP1 Development Principles

(i) Design

j) All developments must 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.

21. North Ayrshire Local Development Plan (28 November 2019)

Policy 29: Energy Infrastructure Development

Buildings: Low and Zero Carbon Generating Technology

Proposals for all new buildings will be required to demonstrate that at least 10% of the current carbon emissions reduction set by Scottish Building Standards will be met through the installation and operation of low and zero-carbon generating technologies. A statement will be required to be submitted demonstrating compliance with this requirement. The percentage will increase at the next review of the local development plan. This requirement will not apply to:

1. Alterations and extensions to buildings
2. Change of use or conversion of buildings
3. Ancillary buildings that stand alone and cover an area less than 50 square metres 4. Buildings which will not be heated or cooled, other than by heating provided solely for frost protection.
4. Buildings which have an intended life of less than two years.

22. Orkney Local Development Plan (adopted April 2017)*

POLICY 1 Criteria for All Development

1.1 In working toward achieving the Plan's vision for Orkney, planning applications will be assessed against all policies in the Plan. The purpose of this overarching policy is to set out the key guiding principles that will be a consideration in the assessment of all planning applications.

1.2 Where it is essential to make a proposal acceptable in planning terms, Developer Contributions will be sought toward upgrades to existing, and the provision of new, infrastructure. Contributions may be sought toward transport infrastructure, active travel network, schools, waste facilities, open space provision, strategic flood risk defences. Details of where contributions are required will be set out within the relevant settlement statement, development brief or masterplan.

Development will be supported where:

i. It is sited and designed taking into consideration the location and the wider townscape, landscape and coastal character;
ii. The proposed density of the development is appropriate to the location;
iii. It is not prejudicial to the effective development of, or existing use of, the wider area;
iv. The amenity of the surrounding area is preserved and there are no unacceptable adverse impacts on the amenity of adjacent and nearby properties/users;
v. It would not create an unacceptable burden on existing infrastructure and services that cannot be resolved;
vi. It does not result in an unacceptable level of risk to public health and safety;
vii. It is resource efficient and utilises sustainable construction technologies, techniques and materials and, where practicable, low and zero carbon generating technologies are installed;

viii. It facilitates the prevention, reuse, recycling, energy recovery and disposal of waste, including where relevant, the use of Site Waste Management Plans;

ix. It protects and where possible enhances and promotes access to natural heritage, including green infrastructure, landscape and the wider environment; and

x. It protects and where possible enhances Orkney's cultural heritage resources.

23. Perth and Kinross Local Development Plan (adopted 29 November 2019)

Policy 32: Embedding Low and Zero Carbon Generating Technology in New Development

Proposals for all new buildings will be required to demonstrate that at least 10% of the current carbon emissions reduction set by Scottish Building Standards will be met through the installation and operation of low and zero-carbon generating technologies. A statement will be required to be submitted demonstrating compliance with this requirement. The percentage will increase at the next review of the local development plan. This requirement will not apply to the following developments:

- Alterations and extensions to buildings.
- Change of use or conversion of buildings.
- Ancillary buildings that stand alone and cover an area less than 50 square metres.
- Buildings which will not be heated or cooled, other than by heating provided solely for frost protection.
- Buildings which have an intended life of less than two years.

24. Renfrewshire Local Development Plan (adopted 15 December 2021)

POLICY 17 – Zero and Low Carbon Buildings

All new buildings, with the exception of those listed below, shall, in meeting building regulation energy requirements, install technology that produces low or no amounts of carbon dioxide emissions, to reduce the predicted emissions by at least 15% below 2007 building standards.

The developments exempt from the above standards are as follows:

- Buildings exempt from building regulations;

- Alterations and extensions to buildings;
- Changes of use or conversion of buildings;
- An ancillary building that is stand-alone, having an area less than 50 square metres;
- Buildings which will not be heated or cooled other than by heating provided solely for the purpose of frost protection;
- Buildings which have an intended life of less than two years.

25. Scottish Borders Local Development Plan (adopted May 2016)*

Place making and design - Policy PMD2: Quality Standards

All new development will be expected to be of a high quality in accordance with sustainability principles, designed to fit with Scottish Borders townscapes and to integrate with its landscape surroundings. The standards which will apply to all development are that:

Sustainability

a) In terms of layout, orientation, construction and energy supply, the developer has demonstrated that appropriate measures have been taken to maximise the efficient use of energy and resources, including the use of renewable energy and resources such as District Heating Schemes and the incorporation of sustainable construction techniques in accordance with supplementary planning guidance. Planning applications must demonstrate that the current carbon dioxide emissions target has been met, with at least half of this target met through the use of low or zero carbon technology.

26. Shetland Local Development Plan (adopted 26 September 2014)

GP2 General Requirements for All Development

Applications for new buildings or for the conversion of existing buildings should meet all of the following General Requirements:

a) Developments should not adversely affect the integrity or viability of sites designated for their landscape and natural heritage value.
b) Development should not occur any lower than 5 metres Above Ordnance Datum (Newlyn) unless the development meets the requirements of Policy WD1;

c) Development should be located, constructed and designed so as to minimise the use of energy and to adapt to impacts arising from climate change, such as the increased probability of flooding; water stress, such as water supply; health or community impacts as a result of extreme climatic events; and a change in richness of biodiversity.

d) Suitable water, waste water and surface water drainage must be provided;

e) All new buildings shall avoid a specified and rising proportion of the projected greenhouse gas emissions from their use, through the installation and operation of low and zero-carbon generating technologies (LZCGT). The proportion of such emissions shall be specified in the council's Supplementary Guidance – Design. That guidance will also set out the approach to existing buildings which are being altered or extended, including historic buildings, and the approach to applications where developers are able to demonstrate that there are significant technical constraints to using on-site low and zero carbon generating technologies.

f) Suitable access, car parking and turning should be provided;

g) Development should not adversely affect areas, buildings or structures of archaeological, architectural or historic interest;

h) Development should not sterilise mineral reserves;

i) Development should not sterilise allocated sites as identified within the Shetland local development plan;

j) Development should not have a significant adverse effect on existing uses;

k) Development should not compromise acceptable health and safety standards or levels;

l) Development should be consistent with National Planning Policy, other local development plan policies and Supplementary Guidance.

Justification

A forward-looking, visionary and ambitious Plan will guide future development. This Plan provides potential developers and investors with guidance and the opportunity to participate in shaping the future of Shetland's communities; and give a structure within which decisions can be made with confidence. The Plan will lead and guide change. These General Requirements set out to:

- Ensure that Shetland's natural and man-made resources are used sustainably;

- Maintain and enhance the natural heritage and landscape character of Shetland;
- Maintain and enhance the vitality and viability of existing settlements;
- Reflect the established settlement pattern;
- Support the rural population and reduce rural depopulation;
- Reinforce existing development patterns;
- Reduce servicing costs;
- Promote well ordered, sustainable, accessible and safe development;
- Support and implement the requirements of the Climate Change (Scotland) Act 2009;
- Make best use of existing infrastructure and services;
- Build safe, pleasant and successful communities
- Promote opportunities for participation and healthy lifestyles

Forthcoming Supplementary Guidance - Design will provide more information on minimising energy use.

27. South Ayrshire Local Development Plan (adopted 23 September 2014)

Environment and Climate Change: LDP policy: low- and zero-carbon buildings

To meet the requirements of Section 3F of the Town and Country Planning (Scotland) Act 1997 (as amended), development proposals will be required to incorporate low and zero-carbon generating technologies to reduce greenhouse gas emissions. The target reduction for new buildings required by this policy will be set out in related supplementary guidance, which we will produce, and be based on the 2010 building standards. A rising proportion of greenhouse gases will require to be offset through the use of low and zero-carbon generating technologies and the supplementary guidance will specify incremental targets to achieve this. These requirements will not apply where the development is:

a. an alteration or extension to an existing building;

b. to change or convert an existing building;

c. an ancillary building that is ‘stand-alone’ and has an area of less than 50 square metres;

d. a building which will not be heated or cooled, other than by heating provided to

protect it from frost; or

e. a building which has an intended life of less than two years.

Developers must show they meet this requirement by giving us a low-carbon development statement and by consulting our Building Standards service.

We will support the reuse and recycling of waste in the construction of new developments.

28. South Lanarkshire Local Development Plan (adopted 9 April 2021)

Policy 2 Climate change

Any new development proposals should seek to minimise and mitigate against such effects by ensuring that they;

1. Are sustainable located;
2. Where appropriate involve the reuse of vacant and derelict land;
3. Utilise renewable energy sources;
4. Incorporate low and zero carbon energy generating technologies at an early design stage, and therefore reduce predicted carbon dioxide emissions in line with current building standards;
5. Avoid areas of medium to high flood risk;
6. Protect ecosystem service by ensuring no significant adverse impacts on the water and soil environment, air quality, biodiversity and blue/green networks, have no adverse effect on the integrity of any Natura 2000 sites and identify opportunities for enhancement of the natural heritage;
7. Include opportunities for active travel routes and provide trips by public transport;
8. Include opportunities for the creation and enhancement of green infrastructure;
9. Include opportunities for the greening of vacant and derelict land;
10. Provide electric vehicle recharging infrastructure to encourage greater use of low carbon vehicles;
11. Minimise waste through the provision of appropriate recycling, storage and collection points within developments;

12. Where appropriate, development proposals should ensure that they can be connected to heat networks, including district heating, which may be developed in the future; and
13. Avoid or minimise disturbance of carbon-rich soils and, where appropriate, include provision for restoration of damaged peatlands.

- Where an applicant is able to demonstrate that a proposal has a significant technical constraints in the use of low and zero-carbon generating technologies other solutions will be considered.
- Development proposals must also accord with other relevant policies and proposals in the development plan.

Policy SDCC7 Low and Zero Carbon Emissions from New Buildings

All new buildings must be designed so that at least 10% of the carbon dioxide emissions reduction standard set by Scottish Building Standards is met by the installation and operation of low and zero-carbon generating technologies.

This requirement will not apply to the following types of development:

- extensions to existing buildings;
- changes of use or conversion of buildings;
- buildings which have an intended life of less than two years;
- stand-alone ancillary buildings with an area of less than 50 sq m; and
- buildings which will not be heated or cooled other than for the purposes of frost protection.
  - Other solutions will be considered where:
  - 1. the applicant is able to demonstrate that there are significant technical constraints in using on-site low and zero carbon generating technologies; or
  - 2. there is likely to be an adverse impact on the historic environment.
  - All relevant applications must be accompanied by an “Energy Statement” demonstrating compliance with this policy.

29. Stirling Local Development Plan (adopted 8 October 2018)

Policy 4.1: Low and Zero Carbon Buildings

a) All new buildings must be designed so that at least 10% of the carbon dioxide emissions reduction standard set by Scottish Building Standards*[26] is met by the installation and operation of low and zero-carbon generating technologies. This percentage will increase to 15%* in 2016.

b) Part (a) does not apply where development of any of the following types is proposed: -

- Extensions to existing buildings
- Changes of use or conversion of buildings
- Buildings which have an intended life of less than two years
- Stand-alone ancillary buildings with an area of less than 50 sq. m;
- Buildings which will not be heated or cooled other than for the purposes of frost protection.

c) Other solutions will be considered where: -

(i) An applicant is able to demonstrate that there are significant technical constraints in using on-site low and zero-carbon generating technologies; or

(ii) There is likely to be an adverse impact on the historic environment (see Policy 7.7).

d) All relevant applications must be accompanied by a 'Low and Zero-Carbon Buildings Statement' demonstrating compliance with this policy.

[SG: Placemaking supports this policy by providing further guidance on how the requirements of this policy can be met, and the information required in the Low and Zero-Carbon Buildings Statement].

[* It is recognised that Building Standards are likely to change during the lifetime of this Plan. Therefore, the requirements are percentages of the Building Standard in operation at the time at which applications are being determined].

30. West Dunbartonshire Council Local Development Plan (adopted March 2010)

[26] It is recognised that Building Standards are likely to change during the lifetime of this Plan. Therefore, the requirements are percentages of the Building Standard in operation at the time at which applications are being determined.

12.17.6 In new developments with a total cumulative floor space of 500 sq metres or more, on-site zero or low carbon equipment contributing at least an extra 15% reduction in CO2 emissions beyond the 2007 building regulations carbon dioxide emissions standard will be required. Where it can be demonstrated, however, that technical constraints exist which would prevent achieving this requirement, equivalent carbon savings elsewhere in the area will be sought through agreement. PAN 84 provides information and guidance on the implementation of this target.

Appendix 1: Low and zero carbon generating technologies

Low and/or zero carbon generating technology shall be installed in all new buildings with the exception of:

- alterations and extensions to buildings, other than alterations and extensions to stand-alone buildings having an area less than 50 square metres that would increase the area to 50 square metres or more, or alterations to buildings involving the fit-out of the building shell which is the subject of a continuing requirement;
- conversions of buildings;
- buildings that are ancillary to a dwelling that are stand-alone having an area less than 50 square metres;
- buildings which will not be heated or cooled other than by heating provided solely for the purpose of frost protection;
- buildings intended to have a life not exceeding the period specified in regulation 6 of the Building Standards Regulations; or
- conservatories.

Proposals for new buildings should conform to the sustainability standards set out in the table below for the year in which they are submitted unless the proposal is considered to be an exception to the policy. The emissions savings should form a part of those emissions savings required by Building Standards regulations in force in the given year.

31. West Lothian Local Development Plan (adopted 4 September 2018)

POLICY NRG 1a Low and Zero Carbon Generating Technology

Proposals for all new buildings will be required to demonstrate that at least 10% of the current carbon emission reduction set by Scottish Building Standards will be met through the installation and operation of low and zero-carbon generating technologies. A statement will be required to be submitted demonstrating compliance

with this requirement. The percentage will increase at the next review of the local development plan

This requirement will not apply to:

- Alterations and extensions to buildings;
- Change of use or conservation of buildings
- Ancillary buildings that stand alone and cover less than 50 square metres
- Buildings which will not be heated or cooled, other than by heating provided solely for frost protection;
- Buildings which have an intended life of less than two years.

32. Comhairle nan Eilean Siar – Outer Hebrides Local Development Plan

(adopted 18 November 2018)

Zero and Low Carbon Buildings

Context

Climate change is a significant issue and Scotland is leading the UK with reductions in greenhouse gas emissions. Planning Legislation states that all local authorities in their local development plans must seek to reduce carbon emissions through the use of low and zero carbon generating technologies (LZCGT) in all new building developments. This will contribute to meeting Scottish Government's CO_2 emission reduction targets and Building Standards Energy and Sustainability requirements.

The principle of sustainability is embedded within Planning and Building Standards, through the concept of Sustainability Labelling which aims to reward the achievement of either meeting or exceeding Building Standards and opting to meet higher levels in terms of energy and carbon emissions targets as well as water efficiency and flexibility in design.

Policy PD4: Zero and Low Carbon Buildings

All Planning applications for new buildings must demonstrate that the carbon dioxide emissions reduction target, as required by Scottish Building Standards, has been met; with at least 15% of this target being met through the use of low or zero carbon technology. This figure will be reviewed in 2021.

Compliance with this policy shall be demonstrated through obtaining an 'active' sustainability label through Building Standards and submission of calculations indicating the SAP Dwelling Emissions Rate (DER) or SBEM Buildings Emissions

Rate (BER) with and without the use of the LZCGT.

A suspensive condition may be used to allow the applicant to submit energy saving or onsite LZCGT schemes at the time of Building Warrant submissions.

This policy does not apply to any of the following:

a) buildings which will not be heated or cooled, other than by heating provided solely for the purpose of frost protection;
b) alterations and extensions to buildings;
c) changes of use or conversion of buildings;
d) ancillary buildings that are stand-alone, having an area less than 50 square metres;
e) buildings which are designed so that the energy necessary is integral to the structure requiring minimal additional mechanisation (the passive house concept);
f) buildings which have an intended life of less than two years.

Policy EI 8: Energy and Heat Resources

The Comhairle will support proposals that contribute to meeting the targets and objectives of the National Planning Framework 3, the Climate Change Act, and the National Renewables Infrastructure Plan in relation to electricity grid reinforcement, infrastructure and renewable energy generation.

Development proposals for all scales of onshore wind energy development will be assessed against the Supplementary Guidance for Wind Energy Development.

The Comhairle supports the principle of wind farm development in Areas with Potential for Wind Farms (SG Map 1) subject to a satisfactory assessment against other policies in this plan and the Supplementary Guidance. Many of these areas, particularly in the Uists, will however be constrained by MoD radar. The Supplementary Guidance will give further details of the radar constraints.

The Comhairle will also consider wind farm development in Areas of Constraint, with potential in certain circumstances (Map 1) subject to a satisfactory assessment against other policies in this plan and the Supplementary Guidance.

The Comhairle will not support wind farm developments in Areas Unacceptable for Wind Farms (Map 1).

Proposals for all other renewable energy projects and oil and gas operations

(including land based infrastructure associated with offshore projects) will be required to demonstrate all the following:

a) appropriate location, siting and design including the technical rationale for the choice of site;

b) no significant adverse impact (including cumulative) on: landscape, townscape and visual aspects; natural, built and cultural heritage resources; the water environment; peatlands; aviation, defence and telecommunications transmitting and receiving systems, e.g., broadband; public health and safety, and amenity (including noise); neighbouring land uses, transport management and core paths;

c) appropriate decommissioning and site reinstatement arrangements;

d) phasing arrangements, where appropriate;

e) the contribution towards meeting national energy supply targets and local economic impact.

Micro generation* renewable energy developments, not subject to the Supplementary Guidance for Wind Energy Development, will be required to meet criteria a) to c) above and all the following criteria:

a) the proposal does not have a significant adverse direct, indirect or cumulative impact on residential amenity; and

b) colour, form, finish and height are appropriate to the setting and are designed to minimise visual impact and distraction; and

c) sufficient information is provided to enable a balanced assessment of any other likely effects of the development.

The type, scale and size of the proposed development will have a significant effect on the way the Comhairle will consider an application and the level of accompanying information that will be required. Conditions and, where necessary, a planning agreement may be used to control the detail of the development. Non-permanent elements of a development will be granted permission consistent with their lifespan and/or projected period of use. In line with the Zero Waste Plan the Comhairle will support ‘energy from waste’ developments subject to wider Plan policies. Opportunities to co-locate or connect with district heating schemes or heat producers should be investigated.

*micro generation is the production of heat (less than 45 kilowatt capacity) and/or electricity (less than 50 kilowatt capacity) from zero or low carbon source technologies.

Policy 3: Zero and Low Carbon Buildings

Low and/or zero carbon generating technology must be installed in all new buildings (with the exception of those listed below) to reduce predicted carbon dioxide emissions from buildings to meet minimum building standards.

A sustainability statement detailing the technologies proposed as demonstrating proposed achievement of Bronze Active Sustainability rating (Achieving or exceeding Building Standards), must be submitted as part of planning applications for new buildings.

This requirement does not apply to any of the following:

- buildings which will not be heated or cooled, other than by heating provided solely for the purpose of frost protection.
- alterations and extensions to buildings.
- changes of use or conversion of buildings.
- ancillary buildings that are stand-alone, having an area less than 50 square metres.
- buildings which are designed so that the energy necessary in integral to the structure requiring minimal additional mechanisation (the passive house concept).

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