

# **Eighth Annual Report on the Operation of Section 72 of the Climate Change (Scotland) Act 2009**

**Laying Number: SG/2018/21**

**Laying Date: 28 March 2018**



## Table of Contents

Summary .....	2
1. Climate Change (Scotland) Act 2009 Context and Reporting History ..	3
2. National Policy on Climate Change .....	4
3. Review of the Planning System.....	6
4. Assessment of progress in implementing Section 3F .....	7
5. Guidance on Implementing Section 3F.....	10
6. Assessment of effectiveness of Section 3F in reducing greenhouse gas emissions from developments and Assessment of the continuing need for Section 3F .....	11
7. Matters for future reports.....	13
Annex – Adopted Section 3F Policies to 31 January 2018 .....	15

## Summary

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

Section 3F requires local development plans prepared by planning authorities to include policies which pursue greenhouse gas emissions savings from new buildings through the installation and operation of low and zero-carbon generating technologies.

The national policy position is provided, as well as the local development plan context.

An assessment of the effectiveness of the approach at reducing emissions is 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. This report also reflects on comments received to the 2017 consultation on planning reform in relation to Section 3F.

Scottish Ministers set out their intention not to use the Planning Bill to withdraw Section 3F in their Position Statement on Planning reform in June 2017. This report does not change that position.

## 1. Climate Change (Scotland) Act 2009 Context and Reporting History

### Legislative Requirement

1. Section 72 of the Climate Change (Scotland) Act 2009, which came into force on 1 April 2010, introduced Section 3F into the Town and Country Planning (Scotland) Act 1997 ('the 1997 Act'). This report will refer to Section 3F, although Section 72 is commonly recognised and used. Section 3F<sup>1</sup> 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. Scottish Ministers are required by Section 73(1) of the Climate Change (Scotland) Act 2009<sup>2</sup> 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.
3. The annual reports are required by Section 73(2) to include an assessment about whether Section 3F remains needed. If it is considered no longer to be needed, Scottish Ministers may repeal Section 3F and Section 73 by order.

### Understanding the Legislation

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.
5. Section 3F promotes energy generation technologies, not energy efficiency or energy saving technologies.

---

<sup>1</sup> Section 3F of The Town and Country Planning (Scotland) Act 1997:  
<http://www.legislation.gov.uk/ukpga/1997/8/section/3F>

<sup>2</sup> Section 73 of the Climate Change (Scotland) Act 2009:  
<http://www.legislation.gov.uk/asp/2009/12/section/73>

## Previous Reporting

6. Annual reports have been laid in the Scottish Parliament each year since 2011 and are available to read or for download from the Scottish Government's website: <https://beta.gov.scot/publications/>.

## 2. National Policy on Climate Change

7. The Climate Change Plan<sup>3</sup> was published on 28 February 2018 and sets out the Scottish Government approach to tackling greenhouse gas emissions out to 2032. It covers those sectors of the economy that generate greenhouse gas emissions: electricity; buildings; industry; transport; waste; land use, land use change and forestry; and agriculture. By 2032, 35% of the heat for our homes and 70% for our non-domestic buildings will be provided by low carbon technologies. Planning is not a sector in its own right but it is a facilitator of the approaches set out within the plan, and this is described in the plan.
8. The Climate Change Plan is supported by the Energy Strategy<sup>4</sup> which sets the long-term vision for the energy system in Scotland; taking a 'whole-system' approach to energy that considers both the use and the supply of energy for heat, power and transport. It sets out new targets for the equivalent of 50% of the energy requirements across the three sectors to be supplied by renewable sources by 2050 and that the productivity of energy use across the Scottish economy should have increased by 30% by the same time. This is a long-term strategy, designed to guide our decision making between now and the middle of the century. Through the introduction of two illustrative energy scenarios for 2050, the final Strategy acknowledges the need to take a flexible and open approach to decarbonisation, with a portfolio of technology options required. Our overall approach is to support energy efficiency, develop Scotland's huge renewable resource, and promote storage and flexibility while encouraging innovation and building on existing industry strengths.
9. The Climate Change Plan and Energy Strategy will be important in framing the upcoming review of National Planning Framework and Scottish Planning Policy, which is anticipated to formally commence once the Planning (Scotland) Bill<sup>5</sup> has completed its parliamentary process.

---

<sup>3</sup> Climate Change Plan third Report: Proposals and Policies 2018-2032, Scottish Government, February 2018: <https://beta.gov.scot/publications/scottish-governments-climate-change-plan-third-report-proposals-policies-2018/>

<sup>4</sup> The future of energy in Scotland: Scottish energy strategy, Scottish Government, December 2017: <https://beta.gov.scot/publications/scottish-energy-strategy-future-energy-scotland-9781788515276/>

<sup>5</sup> Planning (Scotland) Bill: <http://www.parliament.scot/parliamentarybusiness/Bills/106768.aspx>

10. Since the last annual report there has also been consultation on proposals to create a statutory strategy to guide investment in energy efficiency and heat decarbonisation at a local level (a Local Heat & Energy Efficiency Strategy – LHEES)<sup>6,7</sup>. These LHEES would be led by local authorities and would support, and would be supported by, the development planning system. The proposed LHEES would prioritise opportunities for energy efficiency and heat decarbonisation and identify areas where heat networks are thought to be most viable. There would be no compulsion to connect to a heat network. It would be for property owners in areas with a heat network to decide whether or not they wish to connect to the heat network.
11. Section 3F only applies to new buildings and these are a very small proportion of the building stock in Scotland. One of the challenges addressed in the Climate Change Plan is the energy demand for space heating in our existing buildings. Making our existing buildings more energy efficient will have significant results in reducing emissions related to space heating. The Scottish Energy Efficiency Programme is a 15 to 20 year programme aimed at driving energy efficiency and supporting a low carbon energy system, which includes a focus on removing poor energy performance as a driver of fuel poverty.
12. Building regulations set greenhouse gas emissions targets for new buildings and minimum standards for building fabric and services where work is undertaken in existing buildings. Review of these standards in 2007, 2010 and most recently in 2015 has 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 current standard means that use of low carbon equipment such as photovoltaic panels is now common in new construction, particularly in new homes.
13. A further review of these standards will commence in March 2018 and sets out proposals for the investigation of further improvement to building energy performance. As noted in our Energy Strategy, this review will “consider the role for solar and other renewable technologies” amongst other topics.

---

<sup>6</sup> Heat and energy efficiency strategies and district heating regulation: consultation, Scottish Government, January 2017: <https://beta.gov.scot/publications/consultation-heat-energy-efficiency-strategies-regulation-district-heating/>

<sup>7</sup> Heat and energy efficiency strategies: consultation, Scottish Government, November 2017: <https://beta.gov.scot/publications/scotlands-energy-efficiency-programme-second-consultation-local-heat-energy-efficiency/>

### 3. Review of the Planning System

14. The planning system has been under review since 2015, supported by a report<sup>8</sup> from an independent panel, a public consultation<sup>9</sup> on 20 proposals for change and, building on this, a further consultation on a Position Statement<sup>10</sup>. The Planning (Scotland) Bill was introduced to the Scottish Parliament on 4 December 2017 and is currently being scrutinised by the Scottish Parliament.
15. The consultation on planning reform invited views on whether Section 3F should be removed. Whilst there was general support for removing section 3F, there was also concern that this would be inconsistent with the emerging 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.
16. The effect of the proposals in the Planning Bill would be to give development plan status to National Planning Framework, incorporating Scottish Planning Policy. These documents set out a long term spatial and thematic approach to Scotland's long term development. Making them part of the development plan means that local development plans prepared by planning authorities across Scotland, would not need to repeat the content of the National Planning Framework, but would focus only on policy for those aspects where the planning authority consider a different approach is needed locally. Further information about the proposals are set out in the policy memorandum<sup>11</sup> accompanying the Planning (Scotland) Bill.
- 17. From 2018 as we review Scottish Planning Policy, we will consider how the next version might respond to Section 3F in a way which could be taken forward locally by planning authorities.**
18. The Planning Bill also lengthens the review cycle for National Planning Framework and Scottish Planning Policy as well as development plans to 10 years, although there is scope for amendments within that time. This will have implications for the annual reporting requirements placed on the Scottish Government By Section 73 of the Climate Change (Scotland ) Act 2009, as there will potentially less change over the period than under the current system of five yearly reviews of national and local level plans. Any changes identified will continue to be reported.

---

<sup>8</sup> Empowering planning to deliver great places, an independent review of the Scottish Planning System, Scottish Government, May 2016: <https://beta.gov.scot/publications/empowering-planning-to-deliver-great-places/>

<sup>9</sup> Places, People and Planning: consultation on the future of the Scottish planning system, Scottish Government, January 2017: <https://beta.gov.scot/publications/places-people-planning-consultation-future-scottish-planning-system/>

<sup>10</sup> Places, People and Planning – Position Statement, Scottish Government, June 2017: <https://consult.gov.scot/planning-architecture/places-people-and-planning-position-statement/>

<sup>11</sup> Planning (Scotland) Bill Policy Memorandum, 5 December 2017: <http://www.parliament.scot/parliamentarybusiness/Bills/106768.aspx>

#### 4. Assessment of progress in implementing Section 3F

19. This section addresses the reporting requirements of Section 73 that relate to the inclusion within development plans of greenhouse gas emissions policies as prescribed by Section 3F. As Section 3F only refers to local development plans, only those plans are considered here.
20. Local development plans are published every five years and are preceded by a number of preparatory stages:
- Public consultation of a main issues report.
  - Public consultation of 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.
  - Adoption of the local development plan.
21. Whilst local plans had been produced for many years, it was the Planning etc. (Scotland) Act 2006 that required local development plans to be produced. Section 3F applies only to local development plans. The five yearly review of local development plans means that some planning authorities have moved on from their first local development plan.
22. With a small number of exceptions, planning authorities prepare a single local development plan for their area.
23. 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 the plans are legally compliant.
24. All the current local development plan policies which are considered to implement Section 3F are presented in the Annex. The development plan position is set out below.
25. There are 32 planning authorities in Scotland covering the 32 council areas. The two national parks also have planning authority functions. Currently 31 out of 34 planning authorities in Scotland have local development plans in place, 3 local authorities are yet to adopt their first local development plan, but have an adopted local plan in place. Table 1 shows the stages in the local development plan cycle, reached by planning authorities as of the 31st January 2018. Of the 31 adopted plans, 13 are currently in the process of being revised. Two planning authorities have adopted their second local development plan.

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	3	29	7	6	2
Notes:						
<ol style="list-style-type: none"> <li>1. The figures do not include; East Ayrshire Minerals Local 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.</li> <li>2. This table counts only the Highland wide plan, not the three area plans which contain local policies.</li> <li>3. Plans that have proceeded to LDP2 are not counted in the LDP1 adopted figures as LDP1 is superseded by LDP2.</li> <li>4. Plans at examination stage have been counted as 'proposed plan'.</li> <li>5. Plans are logged to reflect the stage of published plan that they have reached at 31 January 2018.</li> </ol>						

26. Table 2 shows the adoption schedule for the each planning authorities' first local development plan. The remaining three local development plans are expected to be adopted in 2018 and 2019.

Table 2: Local Development Plan 1 adoption schedule	
Year of expected first LDP (as per the LDP scheme)	Number of planning authorities
LDP1 upto 2018	31
LDP1 2018 to 2019	33
LDP 1 2019 onwards	34
Notes:	
<ol style="list-style-type: none"> <li>1. The figures do not include; East Ayrshire Minerals Local Plan, Fife Minerals Local Plan, South Lanarkshire Minerals Local Plan and East Ayrshire Town Centres and Retailing Local Plan given that they are topic specific.</li> <li>2. This table counts only the Highland wide plan, not the three area plans also available for The Highland Council area that do not contain overarching planning policies.</li> </ol>	

27. Table 3 shows the stages of local development plan preparation reached by January 2018 and indicates where the Scottish Government considers section 3F has been addressed. It demonstrates that **approximately 85% of planning authorities now have policy in place in their adopted plans which responds to section 3F. This has increased from about 71% in year 2016/17.**

Table 3: Local Development Plan stages directly addressing section 3F					
Local Development Plan 1					
Main Issues Report (0)		Proposed Plan (3)		Adopted Plan (29)	
Yes	No	Yes	No	Yes	No
0	0	2	1	27	2
Local Development Plan 2					
Main Issues Report (7)		Proposed Plan (6)		Adopted Plan (2)	
Yes	No	Yes	No	Yes	No
6	1	6	0	2	0
Notes:					
1. The current Argyll and Bute adopted local development plan, LDP1 does not have a policy reflecting Section 3F in their plan, but there is a policy in supplementary guidance.					
2. Plans that have proceeded to LDP2 are not counted in the LDP1 adopted figures as LDP1 is superseded by LDP2.					

28. Table 4 shows the total number of adopted local development plans responding to Section 3F over time. **This has increased by about 20% over the last year.**

Table 4: Number of adopted local development plans responding to Section 3F over time								
Year	2010/ 2011	2011/ 2012	2012/ 2013	2013/ 2014	2014/ 2015	2015/ 2016	2016/ 2017	2017/ 2018
Adopted Policies	0	1	4	6	14	20	24	29

29. **Tables 3 and 4 demonstrate that the Scottish Government's operation of the requirement for planning authorities to include relevant policies responding to section 3F within development plans is effective. Take up continues and remains high.**

Table 5: Representations and modifications for local development plans adopted between 31 January 2017 and 31 January 2018			
Action	Scottish Government Representations made about Section 3F	Representations resolved before examination and Development Plan modified by Planning Authority	Representations considered at examination and Development Plan modified by Reporter
Number of LDPs	2	0	3
Note: 1. This table does not include adopted plans which were included in the seventh Operational Report.			

30. Table 5 demonstrates the number of plans where the Scottish Government has made representations on the subject of 3F at proposed plan stage. Representations made about Section 3F were considered by reporters in relation to 3 Local Development Plans, with reporters subsequently recommending modifications to the plan.

31. **Taken together these tables show that positive progress is being made in implementing section 3F, which is now present in the majority of local development plans.** However, for a small number of proposed plans, the Scottish Government has made representations about Section 3F, to encourage it to be addressed.

## 5. Guidance on Implementing Section 3F

32. 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 of 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.

33. On 19 August 2016 it was indicated through a Chief Planner Letter<sup>12</sup> that the Scottish Government would be reducing their input to current development plans. This is to better focus resources on ensuring the pace and inclusive approach to Planning Reform is maintained whilst maintaining an appropriate involvement in plan preparation. The Scottish Government therefore no longer provide

<sup>12</sup> Development plan preparation: change in approach, Scottish Government, August 2016: <https://beta.gov.scot/publications/change-involvement-development-plan-preparation/>

responses to working drafts or main issues reports but will as indicated in the Development Plan Gateway Service Standard<sup>13</sup> make representations about proposed local development plans. This will be done where it is not considered that Section 3F is adequately addressed.

34. 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 emission to be saved.
- A requirement that the savings should be achieved through the use of generating technology (rather than energy efficiency measures).

35. In 2016 ClimateXChange published a study by Dundee University<sup>14</sup> about the effectiveness of greenhouse gas emissions policies in local development plans. The was commissioned by the Scottish Government. The study, considered in detail in the sixth annual report, is not intended as guidance for planning authorities but is useful in helping to shape the policy approach taken locally. In terms of application of Section 3F and securing uptake, the study finds a check-sheet approach at the planning application stage had proved useful.

36. The study is also clear that monitoring and enforcement of the implementation of low and zero-carbon generating technologies does not appear to have been strong to date. Planning authorities may need to consider if the current local arrangements are sufficient.

## **6. Assessment of effectiveness of Section 3F in reducing greenhouse gas emissions from developments and Assessment of the continuing need for Section 3F**

37. 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.

38. As previous reports have stated there are two key approaches to addressing Section 3F, the first is that the 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 generating technology to

---

<sup>13</sup> Development Plan Gateway – Service Standard, Scottish Government, September 2016: <https://beta.gov.scot/publications/change-involvement-development-plan-preparation/>

<sup>14</sup> Effectiveness of greenhouse gas emissions policies in local development plans, ClimateXChange and Dundee University, 2016: <http://www.climatexchange.org.uk/reducing-emissions/effectiveness-greenhouse-gas-emission-policies-local-development-plans/>

create emissions savings in addition to meeting the minimum standards set out in building regulations.

39. Table 6 shows the breakdown of adopted local development plan per policy type as described above. A substantial majority, 83%, of local development plan policies which include 3F have a type 1 policy. The minority of plans take a type 2 approach or a combination of both approaches.

Table 6: Adopted local development plan Section 3F policy types		
Type 1	Type 2	Type 1&2 combined
24	2	3

40. The 2016 Dundee University report remains recent and has not been updated. **We do not believe that there has been a significant shift in policy approach from the 2016 research finding that building standards are the primary driver for reducing emissions from buildings.**
41. Responses to the consultation ‘Places, People and Planning’ on 20 proposals for change in the planning system included responses to the question about the removal of Section 3F and was subject to independent analysis<sup>15</sup>.
42. Objections to removal of the requirement were based on this being at odds with Scottish climate change targets, a reduction in awareness that development should seek to reduce emissions, and concerns that this would ultimately result in an increase in emissions. Some respondents suggested that, should the requirements be removed, they should be replaced by other legislation that reduces emissions in other ways, such as locating development close to public transport links.
43. Some respondents felt that energy efficiency of buildings is a matter covered by building standards and that the planning policy requirement could be removed without major consequences.
44. Those supporting removal of the legislation made suggestions for alternative ways in which the planning system could address sustainable development such as through heat networks and local energy systems, improved public transport and active travel infrastructure as well as better placemaking so people don’t have to travel to work and recreation.
45. It is worth noting that Scottish Planning Policy already addresses the kind of issues that many respondents were raising. The scope to maximise the contribution of these topics to reducing emissions can be considered again when Scottish Planning Policy is reviewed.

<sup>15</sup> Planning Review analysis of consultation responses, Scottish Government, June 2017: <https://beta.gov.scot/publications/planning-review-analysis-of-consultation-responses-june-2017/>

46. **The Scottish Government set out its commitment to retain Section 3F in its Places, People and Planning Position Statement<sup>10</sup>** as a visible means for planning to contribute to greenhouse gas emissions reduction.
47. Independent analysis<sup>16</sup> of responses to the subsequent consultation on the Scottish Government's Position statement showed a low response rate to the position of retaining Section 3F. Civil society respondents agreed that section 3F should be retained and they also expressed support for further permitted development rights for micro-renewables, electric vehicle charging points and cycling infrastructure, as well as alignment with the Climate Change Plan and related strategies. Planning and policy respondents were supportive of the operation of low and zero-carbon generating technologies but maintained concerns about the retention of Section 3F. Similar views were held by the development industry. Planning and policy respondents sought further information on how duplication of work between planning and building standards can be avoided in relation to Section 3F, (see paragraph 17 for information on the review of Scottish Planning Policy). Responses to the two consultations do not quantify the benefit or cost of Section 3F to greenhouse gas emissions.
48. The planning system is already bound by law to contribute to sustainable development in the round. The Scottish Government utilises the planning system where appropriate to facilitate progress towards meeting the overall target of the Climate Change (Scotland) Act 2009. We recognise that some people responding to consultations on changes to the planning system feel that direct action set out in Section 3F is important in providing a visible message to developers on action towards climate change.
49. **This report does not change the commitment to retain Section 3F as set out in the Places, People and Planning Position Statement.**

## 7. Matters for future reports

50. The Scottish Government will continue to fulfil its reporting requirements arising from the Climate Change Act through future reports, as well as providing advice for planning authorities and developers where relevant.
51. 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 that emerges following scrutiny of the Planning (Scotland) Bill.
52. The Scottish Government will continue to provide representations on proposed local development plans in relation to Section 3F until such a time that the

---

<sup>16</sup> Planning review position statement: Analysis of Responses, Scottish Government, October 2017: <https://beta.gov.scot/publications/planning-review-analysis-position-statement-responses/>

changes to development planning set out in the Planning (Scotland) Bill come into force.

53. The Scottish Government will work with others to co-produce the next versions of National Planning Framework and Scottish Planning Policy. This will provide a new opportunity to consider how the requirements of Section 3F can be best met in the design of relevant policy.

## **Annex – Adopted Section 3F Policies to 31 January 2018**

### **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 meters;
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.

### **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<sub>2</sub> reduction should be achieved through installing low or zero carbon generating technologies in new development will be applied.

The masterplanning 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.

### **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.

### **Argyll and Bute Local Development plan (Adopted 2015)**

#### **6.2 Policy LDP 10 – Maximising our Resources and Reducing Our Consumption**

The Council will support all development proposals that seek to maximise our resources and reduce consumption and where these accord with the following:

- The settlement strategy;
- Sustainable design principles;
- Minimising waste and/or contributing to recycling;

- Minimising the impact on the water environment both in terms of pollution and abstraction;
- Avoiding areas subject to flood risk or erosion;
- Minimising the impact on biodiversity and the natural environment;
- Safeguarding our mineral resources and minimising the need for extraction;
- Avoiding the loss of trees and woodland
- Contributing to renewable energy generation;
- Avoiding the disturbance of carbon rich soils;
- Safeguarding our best agricultural land.

Further information and detail will be provided in Supplementary Guidance in relation to the following matters: resources and consumption; addressing climate change; minerals; renewable energy; and sustainable design.

### **Argyll and Bute Proposed Local Development Plan Supplementary Guidance – (Feb 2013)<sup>17</sup>**

#### **SG LDP – Climate Change**

- A. The Council will engage with developers to deliver well designed, sustainable buildings and high-quality environments suitable for low carbon living in a changing climate.
- B. In determining new planning applications, the Council expects proposed new development to be designed to contribute to achieving national targets to reduce greenhouse gas emissions by:
- I. supporting innovative, well designed sustainable buildings that incorporate
  - II. renewable technologies and/or seek to minimise energy use;
  - III. using landform, layout, building orientation, massing and landscaping to reduce likely energy consumptions;
  - IV. using the layout, density and mix of development to support identified opportunities for decentralised energy;
  - V. connecting to an existing decentralised energy supply system where there is capacity to supply the proposed development, or by being designed for a future connection where there are firm proposals for such a system;
  - VI. providing public or private open space as appropriate so that an accessible choice of shade and shelter is offered, recognising the opportunities for people, biodiversity,
  - VII. flood storage and carbon management provided by multi-functional green spaces
  - VIII. and green networks.
  - IX. give priority to the use of sustainable drainage systems (SuDS), paying attention
  - X. both to the potential contribution to water harvesting to be gained from impermeable
  - XI. surfaces and to layouts that accommodate waste water recycling;
  - XII.

<sup>17</sup> NB Forthcoming replacement Supplementary Guidance for the adopted local plan is at the notice of Intention to adopt stage.

- XIII. support sustainable waste management by providing space for recycling and
- XIV. composting;
- XV. by reducing the need to travel by steering significant scales of development to our larger settlements, by implementing green travel plans and ensuring connections are made to existing or new active travel routes;
- XVI. providing for safe and attractive walking and cycling opportunities, secure cycling,
- XVII. parking and, where appropriate, showers and changing facilities; and
- XVIII. managing the provision of car parking including the need for zero parking in town centre locations for specified scales of development;
- XIX. be designed to avoid adding to the vulnerability of existing or other proposed development to impacts arising from changes in the climate. In assessing proposals account will be taken of policy LDP PROP 1 – SUSTAINABLE DEVELOPMENT and all other Policies and SG in the LDP that support or define these principles.

### **Cairngorms National Park Local Development Plan (Adopted 2015)**

#### **Policy 3: Sustainable Design**

##### 1 Design statements

A design statement must accompany **all** development proposals to demonstrate how the proposal has been designed to:

- a) minimise the effect of the development on climate change in terms of siting, construction and once complete – to achieve at least the minimum standard in compliance with those set out in the Building Standards Technical Handbook; and
- b) be sympathetic to the traditional pattern and character of the surrounding area, local vernacular and local distinctiveness, whilst encouraging innovation in design and use of materials; and
- c) use materials and landscaping that will complement the setting of the development; and
- d) make sustainable use of resources, (including the minimisation of energy, waste, and water usage), within the future maintenance arrangements, and for any decommissioning which may be necessary - to achieve at least the minimum standard in compliance with those set out in the Building Standards Technical Handbook; and
- e) enable the storage, segregation and collection of recyclable materials and make provision for composting; and
- f) promote sustainable transport methods including making provision for the storage of bicycles, and reducing the overall need to travel;
- g) improve or add to existing public and amenity open space; and
- h) maintain and maximise all opportunities for responsible outdoor access, including links into the existing path network. All developments will be consistent with the Core Paths Plan;
- i) protect the amenity enjoyed by neighbours including minimisation of disturbance caused by access to the development site; and
- j) include an appropriate means of access, egress, levels of private amenity ground, and space for off-street parking; and

k) create opportunities to further biodiversity and promote ecological interest.

**Policy 3: Sustainable Design Non-statutory Guidance**<sup>18</sup>

6. All new developments must meet the minimum energy standards set out by the Building (Scotland) Regulations in the Building Standards Technical Handbook. It is mandatory for all buildings to achieve a bronze level of the sustainability labelling scheme, however opportunities to achieve bronze active and above through good design and the use of low and zero carbon generating technologies (LZCGT) are actively encouraged.

**Clackmannanshire Local Development plan (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.

---

<sup>18</sup> This policy guidance is provided in non-statutory guidance so does not form part of the local development plan. It is included here for information only.

**Comhairle nan Eilean Siar – Outer Hebrides Local Development Plan** (Adopted 9 November 2012)

**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 is integral to the structure requiring minimal additional mechanisation (the passive house concept).
- buildings which have an intended life of less than two years.

**Dundee City Local Development Plan** (Adopted 5 December 2013)

**Policy 29: Low and Zero Carbon Technology in New Development**

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 (2007) will be met through the installation and operation of zero-carbon generating technologies. This percentage will increase to 15% from the beginning of 2016 and will be reviewed in 2018.

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

A statement will be required to be submitted demonstrating compliance with this requirement.

**Dumfries and Galloway Local Development Plan (Adopted 29 September 2014)**

**1f) Sustainability**

Development proposals should limit the impacts of climate change 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;
- Integrating with existing infrastructure where possible;
- Supporting the Council's waste resource management objectives;
- Avoiding areas of significant flood risk;
- Using sustainable drainage systems (SuDS);
- Incorporating sustainable principles by demonstrating that in all new buildings at least 10% of the carbon emissions reduction standard set by Scottish Building Standards has been met through the installation and operation of zero carbon generating technologies. This percentage will increase to 15% from the beginning of 2015 and will be reviewed in 2017.\*

**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 sq m;
- 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.
- VI. Compliance with this requirement will be demonstrated by the submission of a low carbon development statement.

**East Dunbartonshire Council adopted 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.

**East Renfrewshire Local Development plan** (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 sq.m, 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).

### **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:

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.

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.

### **Falkirk Local Development Plan (July 2015)**

#### **Policy D04 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 10% of the overall reduction in CO<sub>2</sub> 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 will be contained in Supplementary Guidance SG15 'Low and Zero Carbon Development'.

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 harnessing solar gain and shelter;

3. Decentralised energy generation with heat recycling schemes (combined heat and power and district heating) will be encouraged in major new developments, subject to the satisfactory location and design of associated plant. Energy Statements for major developments should include an assessment of the potential for such schemes.

### **Fife Local development plan (Adopted February 2017)**

#### **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.

**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

Submission Date	Domestic and Non-domestic Properties
2014	Bronze Active – 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).
2016	Silver Active – 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.
2018	Gold – 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.

SG5 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 masterplanning; and
- the means by which proposals for new waste management facilities will be assessed.

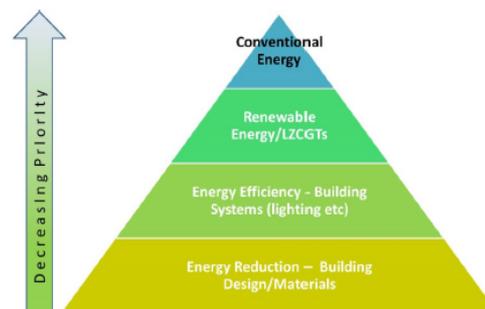
## Supplementary Guidance SG5: Resource Management

### 4. LOW AND ZERO CARBON GENERATING TECHNOLOGIES

- 4.1 The Town and Country Planning (Scotland) Act 1997, as amended by the Climate Change (Scotland) Act 2009, requires Local Planning Authorities to include policies which require buildings in new developments to be designed to avoid a specified and rising proportion of projected greenhouse emissions from their use through the installation of low and zero carbon generating technologies.
- 4.2 Policy CDP5 Resource Management requires all new developments to be designed to reduce the need for energy from the outset. This can be done through careful siting, layout and design and should make the best use of energy efficiency techniques and materials. SG1: The Placemaking Principle provides further guidance on how this can be done. Following the energy hierarchy (see Figure 2) when designing new developments will have the effect of making other requirements of CDP5, such as low and zero carbon generating technologies, easier to deliver.
- 4.3 Policy CDP5 requires that all new domestic and non-domestic developments make use of low and zero carbon generating technologies in order to contribute to meeting greenhouse emission targets. The requirement for new developments will change throughout the life of the plan, as set out in Table 3.
- 4.4 All new developments are required to meet the appropriate sustainability level. In order to achieve this, a range of low and zero carbon generating technologies may be implemented.

- 4.5 New developments will be designed to contribute to a reduction in carbon emissions through the installation of onsite low or zero carbon technologies. Equipment may be mounted onto buildings or installed at an appropriate location within the red line boundary of the development site, but the overall development shall be designed to reflect the approach to placemaking and design set out in CDP1/SG1. It is expected that large developments will consider the viability of decentralised low and zero carbon sources of heat and power, with equipment sited where possible to allow low and zero carbon generating technologies to benefit more than one building and maximise energy gain.

Figure 2: The Energy Hierarchy



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 can 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

Submission Date	Domestic and Non-domestic Properties
2014	Bronze Active – 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).
2016	Silver Active – 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.
2018	Gold – 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.

*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 Source Heat Pumps
- Water Source Heat Pumps
- Air Source Heat Pumps
- Combined Heat and Power
- Heat Exchange and Recovery Systems
- Geothermal

*Exceptions*

4.8 This requirement does not apply to:

- a) alterations and extensions to buildings;
- b) conversions of buildings;
- c) buildings that are ancillary to a dwelling 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 solely for the purpose of frost protection;
- e) buildings intended to have a life not exceeding the period of two years; or
- f) conservatories

## 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)

*Extract*

Incorporating small-scale renewable or low-carbon energy systems into developments or individual buildings can make significant reductions in CO<sub>2</sub> emissions. Examples include:

- Small-scale stand alone 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).

*Checklist:*

Sustainable Design Checklist	Minimum Standards	Relevant Policies & Additional Guidance
<p><b>8. Renewable energy</b> Has the energy demand for the development been calculated to determine:</p> <p>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 CO<sub>2</sub> emissions reduction target.</p> <p>B. The % of total site energy demand that will be produced from on-site renewable energy technologies.</p> <p>C. Meeting the remaining</p>	<p>A-C is required only where the development is 500m<sup>2</sup> or over.</p> <p>The CO<sub>2</sub> emissions reduction target should be met through a combination of on-site low or zero carbon technologies (LZCT) and other appropriate measures.</p> <p>The amount of low or zero carbon technologies (LZCT) employed will depend on the technical constraints and scale of the proposed development.</p>	<p>Climate Change (Scotland) Act</p> <p>Scottish Planning Policy (SPP)</p> <p>A Low Carbon Building Standards Strategy for Scotland</p> <p>Scottish Building Standards</p>

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

**Inverclyde Local Development Plan (Adopted 29 August 2014)**  
**Policy INF2 - Energy Efficiency**

Support will be given to all new buildings designed to ensure that at least 10% 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 15% by the end of 2016. 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.
- c) Excluded from this requirement are: buildings that have an intended life of less than 5 years; or
- d) stand-alone ancillary buildings of less than 50 sq m; or
- e) buildings which will not be heated or cooled other than for the purposes of frost protection.

**Note:** It is recognised that Building Standards may change during the lifetime of this Plan. The requirements are therefore percentages of the Building Standard in operation at the time applications are determined.

**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.

**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 CO2 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 CO2 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.

#### **Moray Development Plan (Adopted June 2015)**

##### **Policy CC2:**

In order to contribute to reducing greenhouse gas emissions, developments of 10 or more houses and buildings in excess of 500 sq m should address the following:

- Be in sustainable locations that make efficient use of land and infrastructure,
- Optimise accessibility to active travel options and public transport,
- Create quality open spaces, landscaped areas and green wedges that are well connected,
- Utilise sustainable construction techniques and materials and encourage energy efficiency through the orientation and design of buildings,
- Where practical, install low and zero carbon generating technologies,
- Prevent further development that would be at risk of flooding or coastal erosion,

- Where practical, meet heat and energy requirements through decentralised and local renewable or low carbon sources of heat and power.
- Minimise disturbance to carbon rich soils and, in cases where it is agreed that trees can be felled, to incorporate compensatory tree planting.

**North Ayrshire Local Development Plan (20 May 2014)**

**POLICY PI 13: CARBON EMISSIONS AND NEW BUILDINGS**

All new buildings must reduce their carbon dioxide emissions above or in line with building standards through appropriately designed:

- On-site low or zero carbon generating technologies (LZCGTs); **and/or**
- Passive/operational energy efficiency measures.

The following are exempt from this policy :

- (a) Buildings exempted from building regulations;
- (b) Individual buildings having an area less than 50 square metres;
- (c) Extensions to buildings, other than extensions to stand-alone buildings having an area less than 50 square metres that would increase the area to 50 square metres or more;
- (d) Buildings which will not be heated or cooled other than by heating provided solely for the purpose of frost protection;
- (e) Limited life buildings which have an intended life of less than two years;
- (f) CO<sub>2</sub> emissions arising from any apparatus operating within the proposed development which is not related to the heating or cooling of a building.

Applicants are required to demonstrate to the satisfaction of the Council how this requirement will be met. A suspensive condition may be used to allow applicants to submit energy saving or on-site LZCGT schemes at the time of Building Warrant submissions. On-site LZCGTs not permissible under General Permitted Development rights shall be considered against other relevant LDP policies and guidance. Further guidance will be contained within Supplementary Guidance: Climate Change.

**Orkney Local Development Plan (Adopted April 2014)**

**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.

**Perth and Kinross Local Development Plan (Adopted 3 February 2014)**

<b>Policy EP1: Climate Change, Carbon Reduction and Sustainable Construction</b>		
Sustainable design and construction will be integral to new development in Perth and Kinross. Applications for development may require a Sustainability Statement to demonstrate how developments will uphold sustainable construction principles and contribute to mitigating and adapting to climate change and to meeting targets to reduce carbon dioxide emissions. New buildings should also include low and zero-carbon generating technologies (LZCGT) to off-set a proportion of emissions arising from the use of the buildings, as specified in the table below. Some relevant buildings must be accompanied by a sustainability statement and all buildings must receive an appropriate sustainability label as per the Building Standards Technical Handbook Section 7 – Sustainability. The specified level of sustainability for a dwelling or non-domestic property should be selected from the following table which also shows the standard expected and by which date.		
	Domestic	Non-domestic
2012	Bronze Active This is the baseline level for sustainability achieved where the dwelling meets the functional standards set out in Sections 1-6 of the Technical Handbook and includes a minimum 2% carbon dioxide emissions abatement through the use of Low and Zero-	Bronze Active This is 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 2% carbon dioxide

	Carbon Generating Technology.	emissions abatement through the use of Low and Zero-Carbon Generating Technology.
2016	<p>Silver Active</p> <p>Where the dwelling complies with the Silver Active level in each of the 8 aspects below and includes Low and Zero-Carbon Generating Technology:</p> <p><i>Aspect 1</i> - Carbon dioxide emissions;  <i>Aspect 2</i> - Energy for space heating;  <i>Aspect 3</i> - Energy for water heating;  <i>Aspect 4</i> - Water use efficiency;  <i>Aspect 5</i> - Optimising performance;  <i>Aspect 6</i> - Flexibility and adaptability;  <i>Aspect 7</i> - Wellbeing and security;  <i>Aspect 8</i> - Material use and waste.</p> <p>New buildings should include a minimum 3% carbon dioxide emissions abatement through the use of Low and Zero-Carbon Generating Technology</p>	<p>Silver Active</p> <p>Carbon dioxide emissions equivalent to a 50% improvement on the 2007 standards. A minimum 3% of this emissions improvement should come from the use of Low and Zero-Carbon Generating Technology.</p>
2020	<p>Gold</p> <p>Where the dwelling complies with the Gold level in each of the 8 aspects below:</p> <p><i>Aspect 1</i> - Carbon dioxide emissions.  <i>Aspect 2</i> - Energy for space heating.  <i>Aspect 3</i> - Energy for water heating.  <i>Aspect 4</i> - Water use efficiency.  <i>Aspect 5</i> - Optimising performance.  <i>Aspect 6</i> - Flexibility and adaptability.  <i>Aspect 7</i> - Wellbeing and security.  <i>Aspect 8</i> - Material use and waste.</p> <p>New buildings should include a minimum 5% carbon dioxide emissions abatement through the use of Low and Zero-Carbon Generating Technology.</p>	<p>Gold</p> <p>Carbon Dioxide emissions equivalent to a 75% improvement on the 2007 standards. A minimum 5% of this emissions improvement should come from the use of Low and Zero-Carbon Generating Technology.</p>
2022	<p>Platinum</p> <p>Carbon Dioxide emissions equivalent to a 100% improvement on the 2007 standards including a minimum 6% carbon dioxide abatement through the use of Low and Zero-Carbon Generating Technology.</p>	
<p>All new development will be required to provide satisfactory arrangements for the storage and collection of refuse and recyclable materials as an integral part of its design. Major developments should include communal facilities for waste collection and recycling where appropriate. New homes and workplaces should allow for the provision of high-speed broadband access to enable provision of next generation broadband.</p> <p><b>Note:</b> Supplementary Guidance will expand on the above requirements including:</p> <ul style="list-style-type: none"> <li>identifying the type of building which will require to submit a sustainability</li> </ul>		

statement.

- where combined heat and power technologies may be appropriate.

### **Policy EP1A**

The Council is committed to ensuring that development minimises disturbance to, and the loss of, carbon rich soils, including peatland, which are of value as carbon stores. Development will only be permitted on areas of undisturbed carbon rich soils, including peatland, where it has been clearly demonstrated that there is no viable alternative, or where the economic and social benefits of the development outweigh any potential detrimental effect on the environment.

### **'Sustainable Design and Zero Carbon Development Supplementary Guidance'**

(April 2014) is available: <http://www.pkc.gov.uk/sustainabledesign>

### **Renfrewshire Local Development Plan (Adopted 28 August 2014)**

#### **POLICY I7 – Low Carbon Developments**

All new buildings, with 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.

The submission of a statement will be required to demonstrate to the satisfaction of the Council that this requirement can be met or setting out the reasons why it is neither practical nor viable to meet the requirement in part or in full.

### **Scottish Borders Local Development Plan (Adopted May 2016)**

#### **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

**South Lanarkshire Local Development Plan (June 2015)**  
**Policy 2 Climate change**

Proposals for new development must, where possible, seek to minimise and mitigate against the effects of climate change by;

- i. being sustainably located;
- ii. maximising the reuse of vacant and derelict land;
- iii. utilising renewable energy sources;
- iv. being designed to be as carbon neutral as possible;
- v. using, where appropriate, low and zero carbon energy generating technologies, that reduce predicted carbon dioxide emissions to meet current building standards within new buildings;
- vi. avoiding areas of medium to high flood risk;
- vii. having no significant adverse impacts on the water and soils environment, air quality, biodiversity (including Natura 2000 sites and protected species) and green networks;
- viii. ensuring new development includes opportunities for active travel routes and provisions for public transport and for the creation and enhancement of green networks,
- ix. providing electric vehicle recharging infrastructure in new developments to encourage the adoption of low carbon vehicles; and
- x. minimising waste. Development proposals must also accord with other relevant policies and proposals in the development plan and other appropriate supplementary guidance.

**Stirling Local Development Plan (Adopted September 2014)**  
**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\*<sup>19</sup> 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;

---

<sup>19</sup> 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.

- 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.

[SG17 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].

**Stirling Supplementary Guidance** (Approved October 2014)

[http://www.stirling.gov.uk/\\_documents/temporary-uploads/economy,-planning-and-regulation/approved-ldp/sg-teith-house-jan-2015/sg17-low-and-zero-carbon-buildings\\_feb-2015.pdf](http://www.stirling.gov.uk/_documents/temporary-uploads/economy,-planning-and-regulation/approved-ldp/sg-teith-house-jan-2015/sg17-low-and-zero-carbon-buildings_feb-2015.pdf)

**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.

**South Ayrshire Local Development Plan (Adopted 23 September 2014)**  
**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.

 [@ScotGovPlanning](https://twitter.com/ScotGovPlanning)

 [youtube.com/channel/UCFXVlacEAuv\\_YMbbaekmoTQ](https://youtube.com/channel/UCFXVlacEAuv_YMbbaekmoTQ)

 [uk.pinterest.com/creativeplaceSG/](https://uk.pinterest.com/creativeplaceSG/)

 [www.flickr.com/photos/sgpad](https://www.flickr.com/photos/sgpad)

 [blogs.scotland.gov.uk/planningarchitecture](https://blogs.scotland.gov.uk/planningarchitecture)

 [npfactionprogramme.com](https://npfactionprogramme.com)

 [www.gov.scot/Topics/Built-Environment/planning](https://www.gov.scot/Topics/Built-Environment/planning)

 [www.eplanning.scot/ePlanningClient](https://www.eplanning.scot/ePlanningClient)