Report to Council

Date of Meeting: 13th October 2016

Subject: Public Bodies' Climate Change Duties: Clackmannanshire Council Annual Report

Report by: Head of Development & Environment

1.0   Purpose

1.1.   This report gives an overview of Clackmannanshire Council's compliance with its climate change duties, with measures to improve performance relating to sustainability and climate change.

2.0   Recommendations

It is recommended that Council :

2.1.   Approve the report on Clackmannanshire Council's progress in delivering its climate change duties (Appendix 1), for submission to the Scottish Government.

3.0   Background

Public bodies' climate change duties annual report

3.1.   Clackmannanshire Council has duties under Section 44 of the Climate Change (Scotland) Act to contribute to reducing Scotland's greenhouse gas emissions; to contribute to helping Scotland adapt to a changing climate; and to act in the way that it considers most sustainable. The Act gave the Scottish Ministers powers to require public bodies to report on their compliance with these duties.

3.2.   The Climate Change (Duties of Public Bodies: Reporting Requirements) Order requires public bodies to report annually on their compliance with the duties. This requirement applies from financial year 2015/16 onwards: Appendix 1 contains Clackmannanshire Council's report for 2015/16, which must be submitted by 30 November 2016.

3.3.   Since 2009, Clackmannanshire Council has reported annually its Climate Change and Sustainability performance on a voluntarily basis, through Scotland's Climate Change Declaration and through a trial year of reporting relating to the above Act. In recent years these reports have been analysed

by the Sustainable Scotland Network, and have been published on their website.

4.0   Considerations

4.1.   The reporting duties are set out in Schedule 2 of the order, and cover the following: governance, management and strategy; emissions, targets and projects; adaptation and procurement. Sections 4.2 – 4.5 detail the Council's current position and performance.

4.2.   *Governance, management and strategy*

4.2.1. The report sets out Clackmannanshire Council's governance and management arrangements relating to climate change: the main governance body for climate change scrutiny was the Enterprise and Environment Committee, while the management of climate change activity was (and remains) mostly through Development & Environment and Resources & Governance. In the future progress will be detailed in service performance reports to Scrutiny Committee.

4.2.2. The report shows that Clackmannanshire Council addresses climate change issues through a number of its plans and strategies; those which are not currently covered will be amended as strategies are updated. The council has a number of tools available for assessing and addressing climate change and sustainability impacts – such as strategic environmental assessment and a sustainability checklist.

4.3.   *Corporate emissions*

4.3.1. The report shows that Clackmannanshire Council's greenhouse gas emissions reduced by 2% in 2015/16 compared to 2014/15, and just under 3% compared to 2013/14. The council does not currently have specific targets for greenhouse gas emissions from its operations, but reductions are planned through street lighting and vehicle fuel use.

4.3.2. The report shows that the main source of greenhouse gas emissions from Clackmannanshire Council's activities is electricity consumption - for street lighting and buildings - comprising 57% of the footprint; the next two most significant sources are gas (28%) and fleet diesel (11%).

4.3.3. Projects to replace traditional street lighting with LEDs led to a reduction in electricity consumption from this source; however energy (both gas and electricity) consumption in Council buildings rose in 2014/15.

4.3.4. In order to manage and reduce greenhouse gas emissions a Carbon Management Plan is being drafted to be brought before Council over the coming months.

4.4.   *Adaptation*

4.4.1. Climate change adaptation is defined by the Scottish Government as "the adjustment in economic, social or natural systems in response to actual or expected climatic change, to limit harmful consequences and exploit beneficial opportunities." Climate change is already happening and we are already

starting to feel some effects. In the short to medium term, climate change in Clackmannanshire means:

	Change	Impact
A	Warmer, wetter winters and hotter, drier summers	Health; drought/water shortages; wildfires; subsidence.
B	More severe and extreme weather events.	Property, land and individuals Health Energy, Transport and Telecommunication services. Negative impact upon the local economy
C	Rising sea levels and increased storm surges.	As above

4.4.2. The report shows that the Council has started to assess the risks that climate change pose to its services and its customers through its flood prevention work both locally and regionally.

4.5. *Procurement*

4.5.1. Procurement is singled out in the Climate Change (Scotland) Act for its potential to contribute to the climate change duties and targets. Although the Council has a sustainable procurement policy, this area needs developed. Our aim for 2016/17 will be to establish systems to record the impact of procurement policies and practices on the council's climate change duties.

4.6. *Validation*

The guidance for the 2015/16 submission includes requirements for the validation of information and the importance of introducing internal and/or external arrangements to help ensure the quality of figures and information contained in the climate change report. Internal Audit will help meet the validation requirements by providing assurance on the accuracy and authenticity of the 2015-16 data in the report. Internal Audit have provided assurance that there are no significant emerging findings, and will accompany the submission to the Scottish Government.

4.7. Areas for Development

4.7.1. Steps are already in place to improve our performance. The following details areas of improvement that are being developed and implemented. Updates on progress will be reported in future reports to Scrutiny Committee.

- Building sustainability into training, learning and education through PRDs and competencies in conjunction with the introduction of "Sustainable Ways of Working Guidance", to make clear to staff and managers how they can contribute to the Council's sustainability and climate change objectives in their day-to-day work.

- Using tools and assessment methods such as the Scottish Government's Climate Change Assessment Tool (CCAT) to assess compliance with the public bodies' climate change duties.

- Revising the Sustainability and Climate Change Strategy and adopt a Carbon Management Plan.

- Building Climate Change and adaptation duties within our business planning guidance and procurement practices.

5.0 Sustainability Implications

5.1. The recommendations in this plan will enable the Council to better meet its sustainability and climate change duties. They are also likely to result in fewer adverse impacts on the environment, a reduction in greenhouse gas emissions, and better preparedness for the likely impacts of a changing climate.

6.0 Resource Implications

6.1. *Financial Details*

6.2. There are no direct financial implications as a result of the recommendations set out in the report.

6.3. Finance have been consulted and have agreed the financial implications as set out in the report. Yes ☑

6.4. *Staffing*

6.5. To be developed and introduced with existing resources

7.0 Exempt Reports

7.1. Is this report exempt?   Yes ☐ (please detail the reasons for exemption below)   No ☑

8.0 Declarations

The recommendations contained within this report support or implement our Corporate Priorities and Council Policies.

(1) **Our Priorities** (Please double click on the check box ☑)

The area has a positive image and attracts people and businesses	☐
Our communities are more cohesive and inclusive	☐
People are better skilled, trained and ready for learning and employment	☐
Our communities are safer	☑
Vulnerable people and families are supported	☐
Substance misuse and its effects are reduced	☐
Health is improving and health inequalities are reducing	☐
The environment is protected and enhanced for all	☑
The Council is effective, efficient and recognised for excellence	☑

(2) **Council Policies** (Please detail)

9.0   Equalities Impact

9.1.   Have you undertaken the required equalities impact assessment to ensure that no groups are adversely affected by the recommendations?

Yes ☐   No ☑

10.0 Legality

10.1. It has been confirmed that in adopting the recommendations contained in this report, the Council is acting within its legal powers.   Yes ☑

11.0 Appendices

11.1. Please list any appendices attached to this report. If there are no appendices, please state "none".

Appendix 1 : 2014/15 Public bodies' Climate Change Duties Report
Appendix 2 : Proposed Sustainability Test

12.0 Background Papers

12.1. Have you used other documents to compile your report? (All documents must be kept available by the author for public inspection for four years from the date of meeting at which the report is considered)

Yes ☐ (please list the documents below) No ☑

Author(s)

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Ian Doctor	Regulatory Service Manager	Extension : 2577

Approved by

NAME	DESIGNATION	SIGNATURE
Gordon McNeil	Head of Development & Environment	███████████
Garry Dallas	Executive Director	███████████

Appendix 1   2014/15 Public bodies' climate change duties report

1 PROFILE OF REPORTING BODY

1a Name of reporting body

Provide the name of the listed body (the "body") which prepared this report.

Clackmannanshire Council

1b Type of body

Local Government

1c Highest number of full-time equivalent staff in the body during the report year.

2124

1d Metrics used by the body.

Specify the metrics that the body uses to assess its performance in relation to climate change and sustainability.

Metric	Unit	Value	Comments
Floor area	M^2	119150	
Population size served	Population	51360	

1e Overall budget of the body (£).

Specify approximate £/annum for the report year

118948000.00

Comments

1f Specify the report year type.

Financial (April to March)

1g Context

Clackmannanshire Council is the smallest mainland local authority in Scotland, covering an area of 159 square km. Clackmannanshire Council is responsible for providing a range of public services, including: education, social care, roads and transport, economic development, housing and planning, environmental protection, waste management, and cultural and leisure services. More information about the organisation can be found on its website, www.clacksweb.org.uk
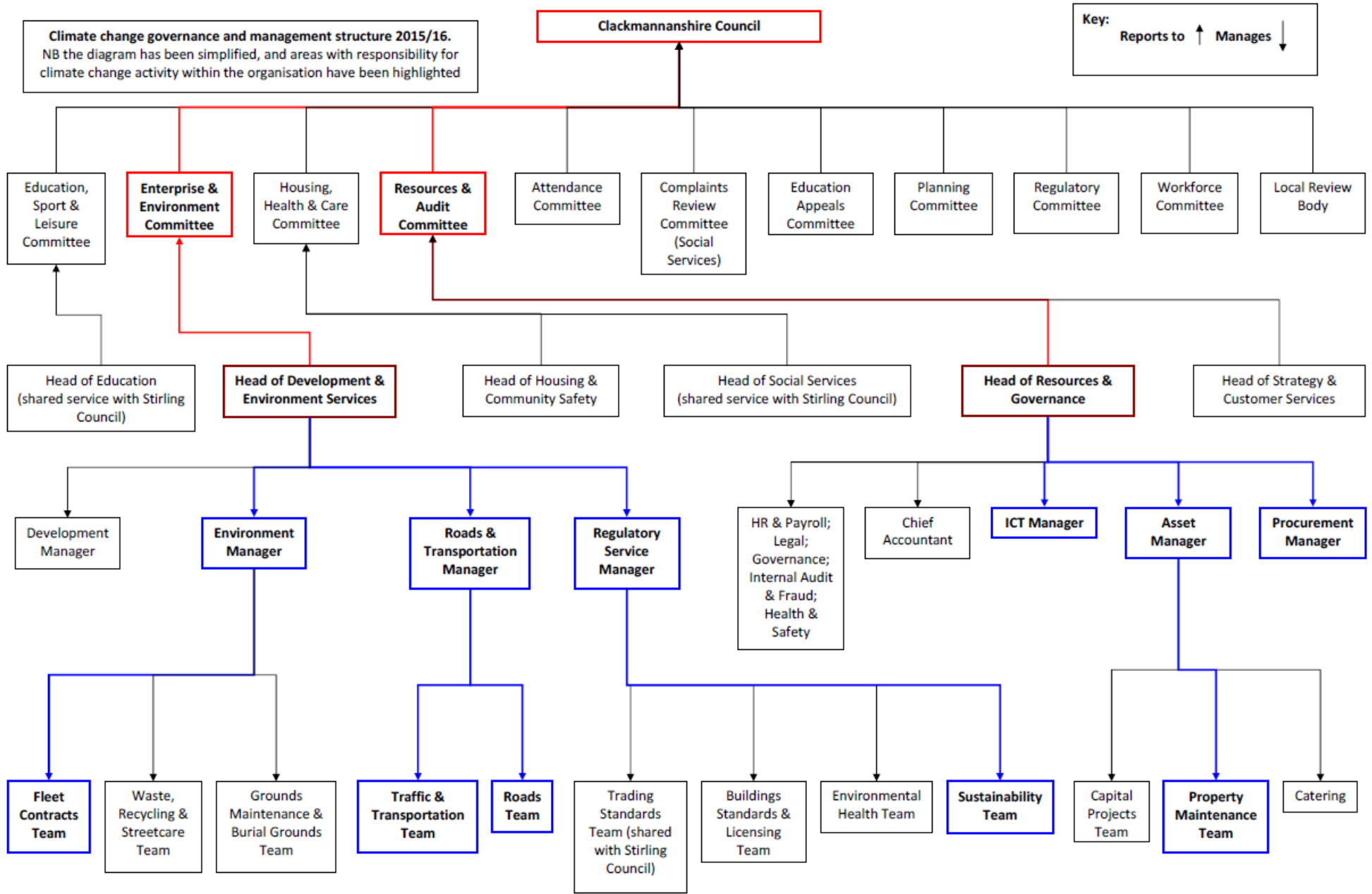
2 GOVERNANCE, MANAGEMENT AND STRATEGY

Governance and management

2a How is climate change governed in the body?

Provide a summary of the roles performed by the body's governance bodies and members in relation to climate change. If any of the body's activities in relation to climate change sit outside its own governance arrangements (in relation to, for example, land use, adaptation, transport, business travel, waste, information and communication technology, procurement or behaviour change), identify these activities and the governance arrangements.

In 2015/16, the Development and Environment Service (which includes the remit for sustainability, corporate approaches to climate change mitigation and adaptation, roads and transportation, street lighting and fleet) reported to the Enterprise and Environment Committee. This included twice yearly performance reports, twice-yearly progress update reports, and the agreement of business plans for the service. Likewise the Resources and Governance Service (which includes responsibilities for buildings and ICT) reported to, and had its business plan agreed by, the Resources and Audit Committee. In some circumstances, these committees had to refer their decisions to the full Council: for example, the approval of main policies and strategies. The Clackmannanshire Council is made up of 18 Councillors: 9 Scottish National Party, 8 Labour, 1 Conservative.

Climate change governance and management structure 2015/16.
NB the diagram has been simplified, and areas with responsibility for climate change activity within the organisation have been highlighted

Key:
Reports to ↑   Manages ↓

Clackmannanshire Council

Education, Sport & Leisure Committee

Enterprise & Environment Committee

Housing, Health & Care Committee

Resources & Audit Committee

Attendance Committee

Complaints Review Committee (Social Services)

Education Appeals Committee

Planning Committee

Regulatory Committee

Workforce Committee

Local Review Body

Head of Education (shared service with Stirling Council)

Head of Development & Environment Services

Head of Housing & Community Safety

Head of Social Services (shared service with Stirling Council)

Head of Resources & Governance

Head of Strategy & Customer Services

Development Manager

Environment Manager

Roads & Transportation Manager

Regulatory Service Manager

HR & Payroll; Legal; Governance; Internal Audit & Fraud; Health & Safety

Chief Accountant

ICT Manager

Asset Manager

Procurement Manager

Fleet Contracts Team

Waste, Recycling & Streetcare Team

Grounds Maintenance & Burial Grounds Team

Traffic & Transportation Team

Roads Team

Trading Standards Team (shared with Stirling Council)

Buildings Standards & Licensing Team

Environmental Health Team

Sustainability Team

Capital Projects Team

Property Maintenance Team

Catering

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2b How is climate change action managed and embedded by the body?
Provide a summary of how decision-making in relation to climate change action by the body is managed and how responsibility is allocated to the body's senior staff, departmental heads etc. If any such decision-making sits outside the body's own governance arrangements (in relation to, for example, land use, adaptation, transport, business travel, waste, information and communication technology, procurement or behaviour change), identify how this is managed and how responsibility is allocated outside the body.
Clackmannanshire Council is structured as six services: Development & Environment; Resources & Governance; Housing & Community Safety; Strategy & Customer Services; Education; and Social Work (these last two services were shared with Stirling Council, but this arrangement is being phased out, starting in 2015/16, and expected to be complete in 2016/17). Under each Head of Service are a number of Service Managers; the following remits are relevant to climate change: Under the Head of Development & Environment: the Regulatory Service Manager is responsible for, inter alia, the Sustainability Team, which leads on climate change mitigation and adaptation, and sustainability action - this includes both strategy and implementation; the Roads and Transportation Service Manager's remit includes staff travel and street lighting; the Environment Service Manager is responsible for fleet and for waste management. In 2015/16 the Home Energy Strategy function and Home Energy Advice Team were brought into Sustainability Team from Housing and Community Safety. Under the Head of Resources and Governance: the Asset Manager is responsible for energy and water consumption in buildings, capital projects, and cleaning and caretaking; the ICT Service Manager is responsible for the organisation's ICT systems and assets; and the Procurement Manager is the focal point for providing specialist advice, guidance, support and leadership on all procurement-related matters. This includes tendering and EU procurement, ensuring due diligence is applied to all procurement with EU/UK legislation (procurement is a responsibility that is devolved to each service). All Council and Committee reports have a "sustainability implications" section, to be completed based on a best value & sustainability checklist: this is intended to ensure that decision makers take climate change and sustainability impacts into account. Guidance on business planning within the Council expects services to highlight any actions which will have a significant impact on the Council's responsibilities in relation to sustainability. The Sustainable Scotland Network's e-learning module on the public bodies' climate change duties is available to all staff.

Strategy

2c Does the body have specific climate change mitigation and adaptation objectives in its corporate plan or similar document?		
Provide a brief summary of objectives if they exist.		
Objective	Doc Name	Doc Link
We effectively tackle the causes and effects of climate change	Taking Clackmannanshire Forward: Corporate Priorities 2012-2017	http://www.clacksweb.org.uk/site/documents/makingclackmannanshirebetter/takingclackmannanshireforwardcorporatepriorities20122017/

2d Does the body have a climate change plan or strategy?
If yes, provide the name of any such document and details of where a copy of the document may be obtained or accessed.
Clackmannanshire Sustainability and Climate Change Strategy: http://www.clacksweb.org.uk/document/2858.pdf

2e Does the body have any plans or strategies covering the following areas that include climate change?				
Provide the name of any such document and the timeframe covered.				
Topic area	Name of document	Link	Time period covered	Comments
Adaptation				An approach to climate change adaptation has been developed. A next step is to develop an Adaptation Strategy.
Business travel	Strategic Travel Plan	http://www.clacksweb.org.uk/transport/counciltravelplan/	2012-2017	The travel plan addresses all modes of transport for visitors, commuting and business journeys. The overall aim of the travel plan is to demonstrate the impact each individual journey has on the environment, community and transport network to allow everyone to make an informed choice regarding transport in the Clackmannanshire area.
Staff Travel	Strategic Travel Plan	http://www.clacksweb.org.uk/transport/counciltravelplan/	2012-2017	The travel plan addresses all modes of transport for visitors, commuting and business journeys. The overall aim of the travel plan is to demonstrate the impact each individual journey has on the environment, community and transport network to allow everyone to make an informed choice regarding transport in the Clackmannanshire area.
Energy efficiency	Carbon Management Plan	http://www.clacksweb.org.uk/site/documents/environment/localauthoritycarbonmanagementprogrammestrategyimplementationplan/	2011-2016	Officers have undertaken a review of the Carbon Management Plan and a revised plan is being drafted.
Fleet transport	Fleet Asset Management Plan	http://www.clacksweb.org.uk/document/meeting/227/541/4283.pdf	2013-2018	Includes the objective of "a fleet which is efficiently run, maximises value for money, is environmentally and energy efficient and contributes directly to delivering year on year reductions in greenhouse gas emissions

2e Does the body have any plans or strategies covering the following areas that include climate change?				
Provide the name of any such document and the timeframe covered.				
Topic area	Name of document	Link	Time period covered	Comments
Information and communication technology	ICT Strategy	http://www.clacksweb.org.uk/site/documents/informationtechnology/informationandcommunicationstechnologyictstrategy/	2012-2017	One of the aims is "to use ICT to enable modern, smarter ways of working which enhance the ability of the Council to serve the needs of its citizens while reducing our impact on the environment". Includes a commitment to "improve our sustainability", including through reducing power requirements, and thus energy consumption, and re-use of equipment.
Renewable energy				The Clackmannanshire Local Development Plan includes policies on renewable energy
Sustainable/renewable heat				The Clackmannanshire Local Development Plan includes a policy on decentralised energy, which includes district heating. Clackmannanshire Council has taken part in the Heat Network Partnership for Scotland's Local Authority District Heating Strategy Programme, and has undertaken work towards producing a district heating strategy
Waste management	Zero Waste Strategy	http://www.clacksweb.org.uk/document/meeting/227/485/3866.pdf	2012-2022	Addresses waste in Clackmannanshire as a whole, rather than in the Council's own operations. Addresses 7 main issues, one of which is Climate Change
Water and sewerage				Water and sewerage is expected to be covered in the revised Carbon Management Plan.
Land Use	Local Development Plan	http://www.clacksweb.org.uk/property/developmentplanupdate/	2015-2035	Strategic environmental assessment was used in the preparation of the Local Development Plan to ensure that the plan and its policies contribute to reducing greenhouse gas emissions and climate change adaptation.
Other (state topic area covered in comments)	Biodiversity Action Plan	http://www.clacksweb.org.uk/document/4519.pdf	2012-2017	Addresses the impacts of climate change on biodiversity, and the role of ecosystems in adapting to climate change.

2f What are the body's top 5 priorities for climate change governance, management and strategy for the year ahead?

Provide a brief summary of the body's areas and activities of focus for the year ahead.

- Rationalisation and remodelling of the Sustainability Team
- Re-define governance and reporting structures for climate change activity following disestablishment of committees in June 2016
- Revise the Sustainability and Climate Change Strategy and implement 2016/17 actions
- Meet the requirements of the Procurement Reform (Scotland) Act
- Adopt and implement Sustainable Ways of Working Guidance

2g Has the body used the Climate Change Assessment Tool (a) or equivalent tool to self-assess its capability / performance?

If yes, please provide details of the key findings and resultant action taken.
(a) This refers to the tool developed by Resource Efficient Scotland for self-assessing an organisation's capability / performance in relation to climate change.

No.

Further Information

2h Supporting information and best practice

Provide any other relevant supporting information and any examples of best practice by the body in relation to governance, management and strategy.

Moving the home energy efficiency function into the Sustainability Team brings together two related policy areas, and formalises existing informal joint working practices. Clackmannanshire Council has been one of the most successful local authorities in Scotland in delivering home energy efficiency measures, according to a recent report by Citizens' Advice Scotland http://www.cas.org.uk/publications/taking-temperature

3 EMISSIONS, TARGETS AND PROJECTS

Emissions

3a Emissions from start of the year which the body uses as a baseline (for its carbon footprint) to the end of the report year.

Complete the following table using the greenhouse gas emissions total for the body calculated on the same basis as for its annual carbon footprint /management reporting or, where applicable, its sustainability reporting. Include greenhouse gas emissions from the body's estate and operations (a) (measured and reported in accordance with Scopes 1 & 2 and, to the extent applicable, selected Scope 3 of the Greenhouse Gas Protocol (b)). If data is not available for any year from the start of the year which is used as a baseline to the end of the report year, provide an explanation in the comments column.
(a) No information is required on the effect of the body on emissions which are not from its estate and operations.
(b) This refers to the document entitled "The greenhouse gas protocol. A corporate accounting and reporting standard (revised edition)", World Business Council for Sustainable Development, Geneva, Switzerland / World Resources Institute, Washington DC, USA (2004), ISBN: 1-56973-568-9.

Reference Year	Year	Scope1	Scope2	Scope3	Total	Units	Comments
Baseline carbon footprint	2013/14	3623	5902	242	9767	tCO2e	
Year 1 carbon footprint	2014/15	3846	5581	276	9703	tCO2e	
Year 2 carbon footprint	2015/16	3792	5017	684	9493	tCO2e	

3b Breakdown of emission sources

Complete the following table with the breakdown of emission sources from the body's most recent carbon footprint (greenhouse gas inventory); this should correspond to the last entry in the table in 3(a) above. Use the 'Comments' column to explain what is included within each category of emission source entered in the first column. If, for any such category of emission source, it is not possible to provide a simple emission factor(a) leave the field for the emission factor blank and provide the total emissions for that category of emission source in the 'Emissions' column.
If providing consumption data for Water – Supply, please also include the Emission Source and consumption data for Water – Treatment.
If providing consumption data for Grid Electricity (generation), please also include the Emission Source and consumption data for Grid Electricity (transmission & distribution losses).
(a) Emission factors are published annually by the UK Government Department for Environment, Food and Rural Affairs (Defra).

Total	Emission source	Scope	Consumption data	Units	Emission factor	Units	Emissions (tCO2e)	Comments
9493.2	Natural Gas	Scope 1	14603695	kWh	0.18445	kg CO2e/kWh	2693.7	
	LPG	Scope 1	80260	kWh	0.21468	kg CO2e/kWh	17.2	
	Fuel Oil	Scope 1	188709	kWh	0.26798	kg CO2e/kWh	50.6	
	Biomass (Wood Pellets)	Scope 1	191400	kWh	0.01320	kg CO2e/kWh	2.5	
	Diesel (average biofuel blend)	Scope 1	398000	litres	2.58390	kg CO2e/litre	1028.4	
	Grid Electricity (generation)	Scope 2	10853841	kWh	0.46219	kg CO2e/kWh	5016.5	Building electricity and street lighting.
	Grid Electricity (transmission & distribution losses)	Scope 3	10853841	kWh	0.03816	kg CO2e/kWh	414.2	Building electricity and street lighting.
	Water - Supply	Scope 3	86767	m3	0.34400	kg CO2e/m3	29.8	
	Water - Treatment	Scope 3	82429	m3	0.70800	kg CO2e/m3	58.4	Water treated is assumed to be 95% of water consumed, in accordance with Resource Efficient Scotland advice.
	Average Car - Unknown Fuel	Scope 3	606413	miles	0.299901254	kg CO2e/mile	181.9	

3c Generation, consumption and export of renewable energy

Provide a summary of the body's annual renewable generation (if any), and whether it is used or exported by the body.

	Renewable Electricity		Renewable Heat		
Technology	Total consumed by the organisation (kWh)	Total exported (kWh)	Total consumed by the organisation (kWh)	Total exported (kWh)	Comments
Solar PV	286028	0			
Wind	1375	0			
Biomass			191400	0	

Targets

3d Targets

List all of the body's targets of relevance to its climate change duties. Where applicable, overall carbon targets and any separate land use, energy efficiency, waste, water, information and communication technology, transport, travel and heat targets should be included.

Name of Target	Type of Target	Target	Units	Boundary/scope of Target	Progress against target	Year used as baseline	Baseline figure	Units of baseline	Target completion year	Comments
										Targets have been proposed in the draft Carbon Management Plan, but this has not yet been adopted.

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Projects and changes

Total	Emissions Source	Total estimated annual carbon savings (tCO2e)	Comments
3e Estimated total annual carbon savings from all projects implemented by the body in the report year			
If no projects were implemented against an emissions source, enter "0". *If the body does not have any information for an emissions source, enter "Unknown" into the comments box.* *If the body does not include the emissions source in its carbon footprint, enter "N/A" into the comments box.*			
17	Electricity	17	34368kWh from replacing traditional street lights with LEDs (17tCO2e). Lighting and other electrical upgrades in council buildings are expected to have led to reduced emissions, but we do not currently estimate the energy reductions attributable to these projects. We intend to finalise our Carbon Management Plan, which will include a project register which sets out projected emissions reductions from each project we
	Natural gas		Savings from heating upgrades and building fabric improvements are expected to have led to reduced emissions from gas. However, we do not currently estimate the energy reductions attributable to these projects. We intend to finalise our Carbon Management Plan, which will include a project register which sets out projected emissions reductions from each project we intend to implement
	Other heating fuels		Unknown
	Waste		N/A
	Water and sewerage		Unknown
	Business Travel		Carbon savings from projects have not been measured, but there is known to have been increased use of pool vehicles, offsetting grey fleet miles.
	Fleet transport		Fleet fuel use reduced through fuel efficient driver training for all drivers; and replacement vehicles having the latest engine specification, e.g. stop/start management to limit vehicle idling and ECU programmed to limit acceleration.
	Other (specify in comments)		

3f Detail the top 10 carbon reduction projects to be carried out by the body in the report year

Provide details of the 10 projects which are estimated to achieve the highest carbon savings during report year.

Project name	Funding source	First full year of CO2e savings	Are these savings figures estimated or actual?	Capital cost (£)	Operational cost (£/annum)	Project lifetime (years)	Primary fuel/emission source saved	Estimated carbon savings per year (tCO2e/annum)	Estimated costs savings (£/annum)
Fuel efficient driver training for all fleet drivers							Diesel (average biofuel blend)		
Increased use of pool vehicles to reduce grey fleet miles			Estimated				Average Car - Unknown Fuel		
Street lighting - LED lantern replacements in Clackmannan, Tullibody, Dollar Sauchie and other areas	Roads Street Lighting Improvments budget & Corporate Asset Management Budget		Estimated	178500	5000	20	Grid Electricity	17	3440
Alloa Secondary Schools support unit: windows, fire exit and roof upgrade. Thermal roof to gym and double glazing installations	Capital budget					10	Natural Gas		
Clackmannan Primary School: refurbishment	Capital budget					10	Natural Gas		
Craigbank Primary School: lighting replacement with LED	Capital budget					10	Grid Electricity		
Park Primary School: heating emitter replacement, north wing	Capital budget					10	Natural Gas		
St Serf's Primary School:heating emitter upgrade throughout	Capital budget					10	Natural Gas		

3f Detail the top 10 carbon reduction projects to be carried out by the body in the report year

Provide details of the 10 projects which are estimated to achieve the highest carbon savings during report year.

Project name	Funding source	First full year of CO2e savings	Are these savings figures estimated or actual?	Capital cost (£)	Operational cost (£/annum)	Project lifetime (years)	Primary fuel/emission source saved	Estimated carbon savings per year (tCO2e/annum)	Estimated costs savings (£/annum)
Tillicoultry Primary School: lighting replacement with LED	Capital budget					10	Grid Electricity		
Marshill & Town Hall Lodge: lighting replacement with LED	Capital budget					10	Grid Electricity		

3g Estimated decrease or increase in the body's emissions attributed to factors (not reported elsewhere in this form) in the report year

If the emissions increased or decreased due to any such factor in the report year, provide an estimate of the amount and direction.

Emissions source	Total estimated annual emissions (tCO2e)	Increase or decrease in emissions	Comments
Estate changes			Rationalisation of our buildings portfolio has had a neutral effect on our carbon footprint. The trend over the past year has been for gas and electricity consumption in our buildings to rise, particularly in buildings to which staff have been relocated due to building closures. There is the potential for this to stabilise and for reductions in consumption to be achieved once the Sustainable Ways of Working Guidance is implemented.
Service provision			We do not have a methodology to estimate how changes in service provision have affected our carbon footprint. In our 2014/15 public bodies' duties report we requested guidance on this from the Scottish Government. Once this has been produced, we will develop processes to capture this data.
Staff numbers			Changes in staff numbers are unlikely to have had a significant impact on building energy use, although a reduced staff complement will have reduced the use of hot water. Reduce staff numbers are also likely to have led to reduced staff mileage.
Other (specify in comments)		Increase	Our Scope 3 emissions have increased significantly this year due to the inclusion of electricity transmission and distribution losses as a separate element of the carbon footprint; previously this was assumed to be covered in Scope 2.

3h Anticipated annual carbon savings from all projects implemented by the body in the year ahead

If no projects are expected to be implemented against an emissions source, enter "0".
If the body does not have any information for an emissions source, enter "Unknown" into the comments box.
If the body does not include the emissions source in its carbon footprint, enter "N/A" into the comments box.

Source	Saving	Comments
Electricity	380	760,000 kWh from replacing existing street lights with LEDs (380tCO2e)
Natural gas		Unknown
Other heating fuels		Unknown
Waste		N/A
Water and sewerage		Unknown
Business Travel	0	Unknown
Fleet transport		Telematics system to improve fleet efficiency to be installed in 2016/17. Carbon savings have not been estimated.
Other (specify in comments)		

3i Estimated decrease or increase in the body's emissions attributed to factors (not reported elsewhere in this form) in the year ahead

If the emissions are likely to increase or decrease due to any such factor in the year ahead, provide an estimate of the amount and direction.

Emissions source	Total estimated annual emissions (tCO2e)	Increase or decrease in emissions	Comments
Estate changes			Estate Strategy for 2016/17 onwards will support reductions.
Service provision			We do not have a methodology to estimate how any changes in service provision will affect our emissions. In our 2014/15 public bodies' duties report we requested guidance on this.
Staff numbers			Staff numbers are expected to continue to reduce; although this is unlikely to have a significant impact on building energy use, although a reduced staff complement is likely to reduce the use of hot water. Reduce staff numbers are also likely to lead to reduced staff mileage.
Other (specify in comments)			

3j Total carbon reduction project savings since the start of the year which the body uses as a baseline for its carbon footprint	
If the body has data available, estimate the total emissions savings made from projects since the start of that year ("the baseline year").	
Total	Comments
	Clackmannanshire Council's greenhouse gas emissions have reduced by 55tCO2e , but we do not have a carbon management project register, so we are unable to estimate how much of this is attributable to carbon reduction projects.

Further information

3k Supporting information and best practice
Provide any other relevant supporting information and any examples of best practice by the body in relation to its emissions, targets and projects.

4 ADAPTATION

Assessing and managing risk

4a Has the body assessed current and future climate-related risks?
If yes, provide a reference or link to any such risk assessment(s).
The Council completed a Local Climate Impact Profile in 2009 and we are reviewing this in the light of the Council's Incident Report; generic impacts identified by neighbouring local authorities and other East/Central Scotland sources; and business plans. Climate change is featured in the corporate risk log as a subset of "Failure to Prepare for Severe Weather Events". In addition, we have specific measures for certain aspects, most notably flood risk management planning. We still need to assess current and future climate risk in a more structured and comprehensive manner and we are seeking to build climate/severe weather considerations into risk management and project planning. This may be on a pilot basis in the first instance.

4b What arrangements does the body have in place to manage climate-related risks?
Provide details of any climate change adaptation strategies, action plans and risk management procedures, and any climate change adaptation policies which apply across the body.
We have risk management procedures in place, and are developing a risk-based approach to adaptation. Adaptation is also embedded in our proposed Local Development Plan and associated supplementary guidance.

Taking action

4c What action has the body taken to adapt to climate change?
Include details of work to increase awareness of the need to adapt to climate change and build the capacity of staff and stakeholders to assess risk and implement action.
Climate change adaptation is included in the Sustainability and Climate Change Strategy . We have delivered presentations to staff groups and community planning partners on climate change adaptation. Clackmannanshire Council participates in the Adaptation Learning Exchange. Progress against the 5 Steps has been mapped. Elements of adaptation are built into the Local Development Plan; elements of adaptation have been undertaken as part of broader good practice including flood risk management.

4d Where applicable, what progress has the body made in delivering the policies and proposals referenced N1, N2, N3, B1, B2, B3, S1, S2 and S3 in the Scottish Climate Change Adaptation Programme(a) ("the Programme")?
If the body is listed in the Programme as a body responsible for the delivery of one or more policies and proposals under the objectives N1, N2, N3, B1, B2, B3, S1, S2 and S3, provide details of the progress made by the body in delivering each policy or proposal in the report year. *(a) This refers to the programme for adaptation to climate change laid before the Scottish Parliament under section 53(2) of the Climate Change (Scotland) Act 2009 (asp 12) which currently has effect. The most recent one is entitled "Climate Ready Scotland: Scottish Climate Change Adaptation Programme" dated May 2014.*

Objective	Objective reference	Theme	Policy / Proposal reference	Delivery progress made	Comments
Understand the effects of climate change and their impacts on the natural environment.	N1	Natural Environment	N1-8	The Local Flood Risk Management Plan has been published and work is under way to take forward the actions within it.	
			N1-10	The Local Flood Risk Management Plan has been published and work is under way to take forward the actions within it.	

4d Where applicable, what progress has the body made in delivering the policies and proposals referenced N1, N2, N3, B1, B2, B3, S1, S2 and S3 in the Scottish Climate Change Adaptation Programme(a) ("the Programme")?					
If the body is listed in the Programme as a body responsible for the delivery of one or more policies and proposals under the objectives N1, N2, N3, B1, B2, B3, S1, S2 and S3, provide details of the progress made by the body in delivering each policy or proposal in the report year. *(a) This refers to the programme for adaptation to climate change laid before the Scottish Parliament under section 53(2) of the Climate Change (Scotland) Act 2009 (asp 12) which currently has effect. The most recent one is entitled "Climate Ready Scotland: Scottish Climate Change Adaptation Programme" dated May 2014.*					
Objective	Objective reference	Theme	Policy / Proposal reference	Delivery progress made	Comments
Support a healthy and diverse natural environment with capacity to adapt.	N2	Natural Environment	N2-2	The Local Development Plan and Supplementary Guidance documents have policy and guidance to enhance habitat and green networks. Clackmannanshire Council is engaged in the Forth Area River Basin Management Plan Advisory Group.	
			N2-11	The Local Development Plan and Supplementary Guidance documents have policy and guidance to enhance habitat and green networks.	
			N2-17	Clackmannanshire Council is engaged in the Forth Area River Basin Management Plan Advisory Group.	
			N2-20	The Local Flood Risk Management Plan has been published and work is under way to take forward the actions within it.	
Sustain and enhance the benefits, goods and services that the natural environment provides.	N3	Natural Environment			Local authorities are not listed as responsible for delivering any projects under objective N3.
Understand the effects of climate change and their impacts on buildings and infrastructure networks.	B1	Buildings and infrastructure networks	B1-13	The Local Flood Risk Management Plan has been published and work is under way to take forward the actions within it.	
			B1-14	The Local Flood Risk Management Plan has been published and work is under way to take forward the actions within it.	

4d Where applicable, what progress has the body made in delivering the policies and proposals referenced N1, N2, N3, B1, B2, B3, S1, S2 and S3 in the Scottish Climate Change Adaptation Programme(a) ("the Programme")?

If the body is listed in the Programme as a body responsible for the delivery of one or more policies and proposals under the objectives N1, N2, N3, B1, B2, B3, S1, S2 and S3, provide details of the progress made by the body in delivering each policy or proposal in the report year.
(a) This refers to the programme for adaptation to climate change laid before the Scottish Parliament under section 53(2) of the Climate Change (Scotland) Act 2009 (asp 12) which currently has effect. The most recent one is entitled "Climate Ready Scotland: Scottish Climate Change Adaptation Programme" dated May 2014.

Objective	Objective reference	Theme	Policy / Proposal reference	Delivery progress made	Comments
Provide the knowledge, skills and tools to manage climate change impacts on buildings and infrastructure.	B2	Buildings and infrastructure networks			Local authorities are not listed as responsible for delivering any projects under objective B2; however, see question 4h for how we contribute to B2-2.
Increase the resilience of buildings and infrastructure networks to sustain and enhance the benefits and services provided.	B3	Buildings and infrastructure networks	B3-2	Related activity in the Council includes the Local Development Plan and Supplementary Guidance on Water (B3-2, B3-3), the Open Space Strategy (B3-3), ongoing work on energy efficiency and fuel poverty (B3-6, 7, 8, 9), and river basin management planning (B3-13).	
			B3-3	Related activity in the Council includes the Local Development Plan and Supplementary Guidance on Water (B3-2, B3-3), the Open Space Strategy (B3-3), ongoing work on energy efficiency and fuel poverty (B3-6, 7, 8, 9), and river basin management planning (B3-13).	
Understand the effects of climate change and their impacts on people, homes and communities.	S1	Society			Local authorities are not listed as responsible for delivering any projects under objective S1; however, see question 4h for how we contribute to S3-1.

4d Where applicable, what progress has the body made in delivering the policies and proposals referenced N1, N2, N3, B1, B2, B3, S1, S2 and S3 in the Scottish Climate Change Adaptation Programme(a) ("the Programme")?					
If the body is listed in the Programme as a body responsible for the delivery of one or more policies and proposals under the objectives N1, N2, N3, B1, B2, B3, S1, S2 and S3, provide details of the progress made by the body in delivering each policy or proposal in the report year. *(a) This refers to the programme for adaptation to climate change laid before the Scottish Parliament under section 53(2) of the Climate Change (Scotland) Act 2009 (asp 12) which currently has effect. The most recent one is entitled "Climate Ready Scotland: Scottish Climate Change Adaptation Programme" dated May 2014.*					
Objective	Objective reference	Theme	Policy / Proposal reference	Delivery progress made	Comments
Increase the awareness of the impacts of climate change to enable people to adapt to future extreme weather events.	S2	Society			Local authorities are not listed as responsible for delivering any projects under objective S2; however, see question 4h for how we contribute to S2-5.
Support our health services and emergency responders to enable them to respond effectively to the increased pressures associated with a changing climate.	S3	Society			Local authorities are not listed as responsible for delivering any projects under objective S3.

Review, monitoring and evaluation

4e What arrangements does the body have in place to review current and future climate risks?
Provide details of arrangements to review current and future climate risks, for example, what timescales are in place to review the climate change risk assessments referred to in Question 4(a) and adaptation strategies, action plans, procedures and policies in Question 4(b).
As part of our proposed approach to a Climate Change Adaptation Strategy, it will be necessary to consider inclusion of review periods for assessing climate risks: the strategy will be an ideal place to present all this information in one place and provide a sense as to appropriate review periods for the various actions listed in 4 (b) above.

4f What arrangements does the body have in place to monitor and evaluate the impact of the adaptation actions?
Please provide details of monitoring and evaluation criteria and adaptation indicators used to assess the effectiveness of actions detailed under Question 4(c) and Question 4(d).
At present we do not have these criteria and indicators. We are seeking to address these through ongoing work with partners, including those in the Adaptation Learning Exchange, to develop and share good practice.

Future priorities for adaptation

4g What are the body's top 5 priorities for the year ahead in relation to climate change adaptation?
Provide a summary of the areas and activities of focus for the year ahead.
- To review delivery of climate change activity across the Council to improve integration and opportunities for improvement.   - To integrate adaptation into existing strategies and processes: in particular to build climate considerations into risk assessment in business planning.   - To harmonise climate change adaptation work with the Council's Risk Management Strategy.   - To identify and engage with set of key leads across the Council reflecting the "Sectors" (transport, flooding, wellbeing etc) identified in the Scottish Climate Change Adaptation Programme, in order to build upon existing good practice and work already ongoing such as in Local Development Plan, Emergency Planning, Flood Risk Planning.   - To conduct retrospective risk assessment of existing operational and business plans, using the findings to inform the initial action plan. Initial focus initially on the Council's own operations but taking into account how severe weather impacts will affect our service users and suppliers, leading over time into more formal engagement with Community Planning Partners.

Further information

4h Supporting information and best practice
Provide any other relevant supporting information and any examples of best practice by the body in relation to adaptation.
There are a number of policies and proposals in the Adaptation Programme where local authorities are actively engaged but are not listed as delivery agents in the

4h Supporting information and best practice

Provide any other relevant supporting information and any examples of best practice by the body in relation to adaptation.

Programme. In particular, Clackmannanshire Council considers that it contributes to:

N1-9 (supporting citizen science and voluntary environmental monitoring) by working with the Clackmannanshire Biodiversity Partnership and partners in the Inner Forth Landscape Initiative in support of environmental recording and volunteer engagement;

N2-4 (manage designated sites for land based biodiversity) by conducting an ongoing review of Local Nature Conservation Sites with a view to ensuring appropriate management;

N2-7 (reduce the pressure on ecosystems from invasive non-native species (INNS) by working with Inner Forth Landscape Initiative partners to develop better understanding of the spread of invasive non-native species at a landscape level and to assess climate change impacts for the overall Inner Forth Landscape Initiative programme;

N2-9 (implement the Scottish Biodiversity Strategy) by supporting an active Biodiversity Partnership to deliver the Clackmannanshire Local Biodiversity Action Plan (CBAP) in support of the Scottish strategy, with stronger emphasis on climate change following review of the 2012-17 CBAP;

B2-2 (sustainable urban drainage systems working party) by engaging with Scottish Water in a pilot project to assess existing SUDS in relation to adoptable Council and Scottish Water standards and works required to meet standards; and

S2-5 (Develop and promote resources which support capacity building in communities, to help build resilience to emergencies, including responding to severe weather events) by ongoing work to develop "What can I do?" advice for households affected by severe weather events.

With regard to S3-1 (NHS Scotland Boards to develop individual climate change adaptation plans), with the integration of health and social care initiated in 2014-15, this is an issue on which local authorities and NHS boards need to work together, and we have started to work with NHS Forth Valley, Stirling Council and Falkirk Council with support from Adaptation Scotland to identify areas where partnership approaches can be of especial benefit.

Clackmannanshire Council continues to participate in the Adaptation Scotland-led Adaptation Learning Exchange in order to establish and share best practice in climate adaptation.

Clackmannanshire Council has taken significant steps either as specific climate adaptation measures or as part of broader good practice including using our experience of the impacts of flooding on vulnerable groups informs our work on flood risk management; and carrying out presentations to staff groups and community planning partners.

5 PROCUREMENT

5a How have procurement policies contributed to compliance with climate change duties?

Provide information relating to how the procurement policies of the body have contributed to its compliance with climate changes duties.

Clackmannanshire Council has a sustainable procurement policy, but we do not currently have a system to monitor compliance with it or to monitor its impacts.

5b How has procurement activity contributed to compliance with climate change duties?

Provide information relating to how procurement activity by the body has contributed to its compliance with climate changes duties.

We do not currently have a system to monitor or record how procurement activity contributes to our compliance with the climate change duties.

5c Supporting information and best practice

Provide any other relevant supporting information and any examples of best practice by the body in relation to procurement.

6 VALIDATION AND DECLARATION

6a Internal validation process

Briefly describe the body's internal validation process, if any, of the data or information contained within this report.

Internal Audit validated the 2015-16 Climate Change Submission to ensure the figures were accurate and complies with the requirements of Part IV of the Climate Change (Scotland) Act 2009. All figures were checked to ensure accurately calculated and were supported by documentation.

6b Peer validation process

Briefly describe the body's peer validation process, if any, of the data or information contained within this report.

None

6c External validation process

Briefly describe the body's external validation process, if any, of the data or information contained within this report.

None

6d No Validation Process

If any information provided in this report has not been validated, identify the information in question and explain why it has not been validated.

As detailed in 6a, all information provided in the report has been validated.

6e Declaration

I confirm that the information in this report is accurate and provides a fair representation of the body's performance in relation to climate change.