TABLE OF CONTENTS

Required

PART 1: PROFILE OF REPORTING BODY

PART 2: GOVERNANCE, MANAGEMENT AND STRATEGY

PART 3: EMISSIONS, TARGETS AND PROJECTS

PART 4: ADAPTATION

PART 5: PROCUREMENT

PART 6: VALIDATION AND DECLARATION

Recommended Reporting: Reporting on Wider Influence

RECOMMENDED – WIDER INFLUENCE

OTHER NOTABLE REPORTABLE ACTIVITY

PART 1: PROFILE OF REPORTING BODY

1(a) Name of reporting body

Angus Council

1(b) Type of body

Local Government

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

Angus Council - 3865

1(d) 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	m2	264474	Source: Angus Council Estates Team
Population size served	population	116200	https://www.nrscotland.gov.uk/files/statistics/council-a

1(e) Overall budget of the body									
Specify approximate £/annum for the report year.									
Budget	Budget Comments								
2710	017000								

1(f) Report year	
Specify the report year.	
Report Year	Report Year Comments
Financial (April to March)	

1(g) Context

Provide a summary of the body's nature and functions that are relevant to climate change reporting.

The local authority comprises two services within a diverse estate. The scope of this report covers operational estate and emissions that the Council directly controls. The built estate incorporates offices, schools/nurseries and community buildings. Since December 1st 2015, all leisure/ library buildings are operated by Angus Alive (Cultural and Leisure Trust). The Council continues to share facilities and asset mangement of these properties. The Council has an operational fleet. Where staff mileage is calculated, commuting is not included. The Council also records emissions which arise from municipal waste and from water supply and treatment.

PART 2: GOVERNANCE, MANAGEMENT AND STRATEGY

2(a) 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.

Responsibility for governing delivery of carbon management and wider climate change obligations lies with the Climate Change Member Officer Group. The group oversees activity and is informed by dedicated working groups dealing with carbon emissions, adaptation and sustainability. Progress is reported to the Policy & Resources Committees or Angus Council. See attached diagram. (Figure 1).

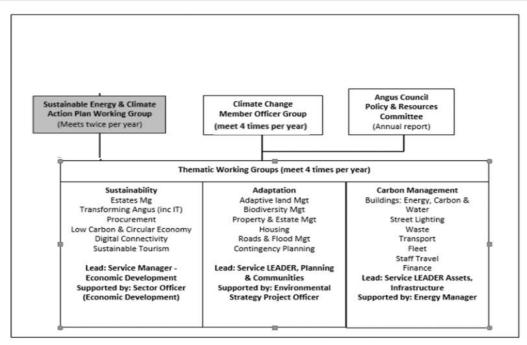


Figure 1. Angus Council climate change activty reporting structure

2(b) 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 (JPEG, PNG, PDF, DOC)

Climate Change Member Officer Group (CCMOG) - comprises elected members & senior staff. The remit includes Carbon and Greenhouse gas emissions, climate change adaptation and sustainability. The group meet four times per year to steer and monitor the delivery of work plans of the three working groups which will be guided by the Angus Sustainable Energy & Climate Action Plan (SECAP) from 2021. These groups in turn meet quarterly.

Each working group is chaired by a senior manager and comprises specialist officers and support staff for their topic area. The groups have agreed remits and are commencing work on developing delivery plans spanning the Council's functions.

SECAP Working Group- work has commenced on Angus Councils SECAP with delivery due late 2020.

Angus

Council has adopted targets to reduce carbon emissions, energy and water use by 2020. Targets have been allocated to operational areas of the Council estate. Responsibility for attaining these targets lies with relevant senior managers who receive quarterly reports on progress against targets.

2(c) 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
LOIP outcomes include: Inclusive & sustainable economy Safe, secure, vibrant & sustainable communities Reduced carbon footprint	Angus Local Outcomes Improvement Plan 2017-2030	https://www.angus.gov.uk/me dia/angus_local_outcomes_i mprovement_plan

2(d) 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.

Carbon Management Plan 2014-2020

http://archive.angus.gov.uk/ccmeetings/reports-committee2013/CorporateServices/353.pdf

The previous climate change and sustainability strategy is due to be replaced by a Sustainable Energy & Climate Action Plan in late 2020. The SECAP is currently under development and undergoing SEA.

Provide the name of any such document and the timeframe covered.										
Topic area	Name of document	Link	Time period	Comments						
Adaptation	Climate Change Strategy and Action Plan	https://www.angus.gov.uk/media/cli	2012-2016	To be replaced by SECAP which is						
	2012 - 2016	mate change strategy and action pl an		currently under development						
Business travel	Angus Council Active and Sustainable Travel Action Plan	Link not yet publicly available	2020 -24	Final draft sent to Angus Council on 30/03/20. Currently with senior management for checking before entering the committee cycle.						
Staff Travel	Angus Council Active and Sustainable Travel Action Plan	Link not yet publicly available	2020-24	Final draft sent to Angus Council on 30/03/20. Currently with senior management for checking before entering the committee cycle.						
Energy efficiency	Carbon Reduction Action Plan	See link cell 31	2014-2020							
Fleet transport	Vehicle replacement programme 2020/21	https://www.angus.gov.uk/sites/angus-cms/files/2020-03/125.pdf	2020/21							
Renewable energy	Carbon Reduction Action Plan	http://archive.angus.gov.uk/ccmeetings/reports-committee2013/CorporateServices/353.pdf	2014-2020							
Sustainable/renewable heat	Carbon Reduction Action Plan	http://archive.angus.gov.uk/ccmeetings/reports-	2014-2020							
Waste management		https://www.sepa.org.uk/environment/waste/waste-data/waste-data-reporting/waste-data-for-scotland/		There is currently no overreaching strategy document for waste management and direction continues to be taken from the Zero Waste Plan for Scotland and the Council Plan. See question 2H for further information.						

Land Use	River South Esk Catchment Partnership Management Plan and Review 2017.	http://theriversouthesk.org/assets/Docs/riversouth-esk-plan-dec09.pdf https://www.angus.gov.uk/media/the_river_south_esk_catchment_management_plan_review_2	2009 onwards	
Other (state topic area covered in comments)				
Land Use	Angus Local Development Plan 2016 - 2026	https://www.angus.gov.uk/directorie s/document_category/development _plan		Preparation of new plan will follow provisions of the Planning (Scotland) Act 2019
Land Use	Strategic Development Plan (Tayplan) 2016 - 2036	https://www.tayplan- sdpa.gov.uk/strategic development p lan	2016-2036	Action Programme Update published June 2019. No further work. SDP function ceases under provisons of Planning (Scotland) Act 2019
Land Use	Angus Shoreline Management Plan 2	https://www.angus.gov.uk/media/smp2-main-document	2017 onwards	
Other (state topic area covered in comments)	Angus Economic Strategy	http://www.angus.gov.uk/sites/angus-cms/files/Angus_Economic_Development_Strategy_2013_2020.pdf	2013-2020	Economic development with links to circular and low carbon economy
Flood Risk Management	Local Flood Risk Management Plans	https://www.angus.gov.uk/media/tay_estuary_a nd_montrose_basin_local_flood_risk_managem ent_plan AND	2016-22	Local Flood Risk Management Plans for 2016-22 with second cycle in development for 2022-28.
Adaptation	Angus Local Housing Strategy 2017-22	https://www.angus.gov.uk/sites/angus-cms/files/2018/02/Local%20Housing%20Strategy%202017-22_0.pd		Ongoing monitoring of LHS 2017- 22. Work underway for LHS 2022- 27.
Biodiversity and Land Use	Tayside Local Biodiversity Action Plan	http://www.taysidebiodiversity.co.uk/wp-content/uploads/2016/08/Tayside-LBAP-report-	2016-26	

Energy efficiency	Water Annual Report 2018/19	https://www.angus.gov.uk/sites/angu	2018/19	Annual report on water consumption and water and drainiage expenditure.
Energy efficiency	Energy Annual Report 2018/19	https://www.angus.gov.uk/sites/angus-cms/files/2019-10/330_Schd2.pdf	2018/19	Carbon Management Plan 2019/24 under development in 2020

2(f) 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.

- Publish, deliver and monitor the Angus Sustainable Energy Climate Action Plan (SECAP).
- Strengthen governance, management and strategy utilising outputs of Climate Change Assessment Tool. Develop mechanism & processes of the Climate Change Member Officer Group & dedicated work groups (Carbon, Adaptation & Sustainability) to embed considering of each in all Council functions by all staff.
- Optimise sustainability opportunities through implementation of the Angus Change programme which offers resource efficiencies through estate rationalisation, greater use of IT, reduced staff travel and commuting.
- Support the Change Programme to consolidate the Council estate, support home working and reduce staff travel through Smart Working programme.
- Implement Angus Shoreline Management Plan 2, Local Flood Risk Magement Plans & begin to prepare Evidence Report for next Local Development Plan for Angus (AngusPlan).

2(g) 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.

The Councill used the Climate Change Assessment Tool (CCAT) at a workshop in June 2019 with officers from across all services. The group appraised and scored the Council's existing performance on the specified areas as follows:

- 1. Governance (39%, previously 39%)
- 2. Emissions (79% previously 77%)
- 3. Adaptation (61% previously 46%)
- 4. Behaviour (55% previously 55%)
- 5. Procurement (13% previously 13%)

Overall score (55% previously 49%)

The paper set out a SWOT (strengths, weaknesses opportunities and threats) analysis for Angus Council which identified key strengths including:-

- Governance structure effective combination of the long standing Member Officer Group (MOG) on climate change, supported by Working Groups focusing on Adaptation, Carbon Reduction and Sustainable Development. Groups are meeting regularly, reporting on progress to the MOG.
- Corporate commitment to both annual and 2020 climate change related targets to reduce greenhouse gas emissions, water plus building and street lighting energy use. These are supported by relevant departmental budgets and monthly reports.
- Area wide commitment evidenced through signing up to deliver a Sustainable Energy and Climate Change Plan moving beyond operational boundaries to lead the wider area by example;
- Track record of assessing impacts of severe weather events through conducting two Climate Change Impact Assessments, approving policies and flood management, coastal management and a number of additional natural flood management strategies through partnership working;
- .Angus Council has a strong record for public reporting on climate change, reporting voluntarily through Scotland's Change Declaration and the new mandatory reports since 2010. It has reported publicly through the Carbon Reduction Commitment as well as through the Carbon Trust Standard, becoming the first UK body to attain The Standard in relation to water.

The Climate Change Action Tool uses the answers given to the 28 questions to automatically generate a series of recommended action. The headline recommendations include:

Action Priority 1- continue to work through the new Sustainable Development Working Group to produce and adopt the new area wide Sustainable Energy & Climate Action Plan

Action Priority 2 – finalise the newly drafted Carbon Management Plan, incorporating new Scottish Government carbon reduction commitments.

Action Priority 3 – work with Contingency Planning Team to ensure that climate change is fully embedded in the Corporate Risk Register.

Action Priority 4- instigate whole life costing training for staff and explore fleet management contract to determine how strategic support service can be provided.

2(h) 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.

- The principal of promoting sustainable transport supported by well-located and accessible development, incorporated in the TAYplan SDP, is reflected in the strategy and policies of the Angus Local Development Plan 2016
- Long term Adaptation projects are included strategies such as:
- The 2nd Edition Tayside Biodiversity Action Plan (covering the period 2016-26). http://www.taysidebiodiversity.co.uk/
- Sustainability and resource efficiency are central to Angus Council's transformation agenda with significant progress during 2015/16 on: Angus Digital; Improved Business Processes; Improved Customer Experience; Agile Working and Estates Review.

 http://www.angus.gov.uk/sites/angus-cms/files/2017-07/46 0.pdf

 & http://www.angus.gov.uk/sites/angus-cms/files/2017-07/46 0.pdf
- Waste 2019 waste data will not be verified by SEPA until October 2020 thus cannot be provided (delay due to pandemic). In 2018 Angus Council had the seventh highest household recycling rate in Scotland at 54.7% and sent the least amount of waste (4.4%) to landfill of any Scottish authority. SEPA calculated the carbon Impact (TCO2e) at 112,134. In November 2017 Angus Council in partnership with Dundee City Council commenced a 28 year contract with MVV Environmental Baldovie for the treatment of residual waste at a thermal treatment plant in Dundee. This means that all household residual waste in Angus is now treated at a thermal Waste to Energy plant rather than landfill, and as a result the Angus Council landfill at Restenneth, Forfar closed on 31 March 2018. A review of recycling centre provision in Angus and the resultant removal of general waste skips from four out of seven recycling centres in February 2019 resulted in a significant increase in the recycling rate achieved, from 52.79% for the year March '18-February '19 to 65.12% for the year March '19-February '20.
- Sustainability in 2019/20 work focused largely on Local Food Growing Strategy and SECAP. Future work will complement Tay Cities Deal and Mercury Project

PART 3: EMISSIONS, TARGETS AND PROJECTS

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.

Reference Year	Year	Scope1	Scope2	Scope3	Total	Units	Comments
Baseline carbon footprint	2010/11	11170	13848	0	25018	tCO2e	2010/11 is the baseline year for the Carbon Management Plan. Full data is available for Scopes 1 & 2 and has been verified through the Carbon Trust Standard. Reliable historical data relating to Scope 3 is not available
Year 1 carbon footprint	2011/12	10490	13452	7485	31427	tCO2e	Full data is available for Scopes 1 & 2 and has been verified through the Carbon Trust Standard. Scope extended to include waste and water.
Year 2 carbon footprint	2012/13	11751	13727	11105	36583	tCO2e	Full data is available for Scopes 1 & 2 and has been verified through the Carbon Trust Standard. Scope extended to include waste and water.
Year 3 carbon footprint	2013/14	10766	13295	8870	32931	tCO2e	Full data is available for Scopes 1 & 2 and has been verified through the Carbon Trust Standard. Scope extended to include waste and water.
Year 4 carbon footprint	2014/15	10385	13674	7229	31288	tCO2e	Full data is available for Scopes 1 & 2 and has been verified through the Carbon Trust Standard. Scope extended to include waste and water.
Year 5 carbon footprint	2015/16	9870	12477	9102	31449	tCO2e	Full data is available for Scopes 1 & 2 and has been verified through the Carbon Trust Standard 2017 reaccreditation. Scope extended to include waste and water.
Year 6 carbon footprint	2016/17	9078	10534	10242	29854	tCO2e	Full data is available for Scopes 1 & 2 and has been verified through the Carbon Trust Standard 2017 reaccreditation. Scope extended to include waste and water
Year 7 carbon footprint	2017/18	9421	8498	10806	28725	tCO2e	Full data is available for Scopes 1 & 2 and has been verified through the Carbon Trust Standard 2017 reaccreditation. Scope extended to include waste and water
Year 8 carbon footprint	2018/19	9044	6492	3762	19297	tCO2e	Full data is available for Scopes 1, 2 & 3
Year 9 carbon footprint	2019/20	9134	5473	3684	18291	tCO2e	Full data is available for Scopes 1, 2 & 3

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.

Total	Comments – reason for	Emission source	Scope	Consumption	Units	Emission	Units	Emissions	Comments
	18291	Grid Electricity (generation)	Scope 2	21411039	kWh	0.2556	kg CO2e/kWh	5472.7	Source: Angus Council Energy Management Unit
		Grid Electricity (transmission & amp; distribution losses)	Scope 3	21411039	kWh	0.0217	kg CO2e/kWh	464.6	Source: Angus Council Energy Management Unit
		Natural Gas	Scope 1	33867185	kWh	0.18385	kg CO2e/kWh	6226.5	Source: Angus Council Energy Management Unit
		Gas Oil	Scope 1	469166	kWh	0.25676	kg CO2e/kWh	120.5	Source: Angus Council Energy Management Unit
		Fuel Oil	Scope 1	30715	kWh	0.26782	kg CO2e/kWh	8.2	Source: Angus Council Energy Management Unit
		Burning Oil (Kerosene)	Scope 1	657964	kWh	0.24675	kg CO2e/kWh	162.4	Source: Angus Council Energy Management Unit
		Biomass Wood Chips	Scope 1	1032785	kWh	0.01563	kg CO2e/kWh	16.1	Source: Angus Council Energy Management Unit
		Biomass Wood Pellets	Scope 1	4600	kWh	0.01563	kg CO2e/kWh	0.1	Source: Angus Council Energy Management Unit
		Water - Supply	Scope 3	156445	m3	0.344	kg CO2e/m3	53.8	Source: Angus Council Energy Management Unit
		Water - Treatment	Scope 3	137515	m3	0.708	kg CO2e/m3	97.4	Source: Angus Council Energy Management Unit
		Average Car - Unknown Fuel	Scope 3	2001868	Klms	0.29072	kg CO2e/mile	570.6	Source: Angus Council Payroll
		Diesel (average biofuel blend)	Scope 1	989965	litres	2.62694	kg CO2e/litre	2600.578657	Source: Tayside Contracts
		Refuse Municipal to Landfill	Scope 3	2702	tonnes	586.5	kg CO2e/tonne	1584.8	Source: Waste Services, Environmental Management Section
		Refuse Commercial & Industrial to Landfill	Scope 3	726	tonnes	99.8	kg CO2e/tonne	72.4	Source: Waste Services, Environmental Management Section
		Batteries Recycling	Scope 3	3	tonnes	64.6365	kg CO2e/tonne	0.2	Source: Waste Services, Environmental Management Section
		Organic Food & Drink AD	Scope 3	3350	tonnes	21.4	kg CO2e/tonne	34.2	Source: Waste Services, Environmental Management Section
		Organic Garden Waste Composting	Scope 3	9636	tonnes		kg CO2e/tonne	98.3	Source: Waste Services, Environmental Management Section
		Paper & Board (Mixed) Recycling	Scope 3	1016	tonnes	21.4	kg CO2e/tonne	21.7	Source: Waste Services, Environmental Management Section
		WEEE (Mixed) Recycling	Scope 3	1024	tonnes	21.4	kg CO2e/tonne	21.9	Source: Waste Services, Environmental Management Section
		Glass Recycling	Scope 3	471	tonnes	21.4	kg CO2e/tonne	10.1	Source: Waste Services, Environmental Management Section
		Metal Cans (Mixed) & Metal Scrap	Scope 3		tonnes		kg CO2e/tonne	18.8	Source: Waste Services, Environmental Management Section
		Refuse Municipal /Commercial /Industrial to Combustion	Scope 3		tonnes		kg CO2e/tonne		Source: Waste Services, Environmental Management Section
		Mixed recycling	Scope 3	9722	tonnes	21 4	kg CO2e/tonne	207.6	Source: Waste Services, Environmental Management Section

	Renewable Elec	ctricity	Renewable Heat		
Technology	Total consumed by the organisation (kWh)	Total exported (kWh)	Total consumed by the organisation (kWh)	Total exported (kWh)	Comments
Solar PV	459310	66670			Information taken from main PV recording sheet. First full year of operation for large arrays at Montrose SC, Bruce House and Digital Reprographics Unit.
Solar thermal			3202		Information taken from recorded reads at only solar therma site - Isla Primary School.
Biomass			1037385		Renewable heat element taken from Systemslink billing information for all 7 sites with Biomass with a total heat output of 1574 kW. Issues with 3 sites (Tannadice PS, Kinloch House and Montrose SC), this has resulted in reduced biomass running hours during 2019/20.

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		Units of baseline	Target completion year	Comments
Corporate energy consumption reduction target	percentage	-22.64%	kWh reduction	All energy use	114.80%	2010/11	77120397	kWh	2019/20	Annual reduction consumption target of 2%; we achieved a 1.3% reduction in 2019/20 on previous year. We reached our 2020 target in 2018/19.
Corporate Carbon Dioxide reduction target	percentage	-26.32%	tCO2e reduction	All energy use	157%	2010/11	24931	tCO2e	2019/20	Annual reduction consumption target of 3%; we achieved a 7% reduction in 2019/20 on previous year. We reached our 2020 target in 2016/17.

Corporate water	percentage	-33.60%	M3 reduction	Water and sewerage	139.20% 2011/12	257500 M3	2019/20	In 2016/17 there was a corporate adoption of a 5%
consumption reduction target								reduction in water consumption based on 2011/12 baseline. We have exceeded the target.

3e Estimated total annual carbon savings from all projects implemented by the body in the report year								
Total	Emissions Source	Total estimated	Comments					
26.2	Electricity		Information provided from Master If that sits in house with Energy Tear number of projects completed due being set aside for 3 large solar PV These solar PV projects were mea completed in 2019/20, but due to sthe projects slipped.	m. Small to money / projects. nt to be				
	Natural gas	0	No projects for gas this year					
	Other heating fuels	0	No projects for Oil/LPG or Biomass	s this year				
	Waste	0	No data					
	Water and sewerage	0	No projects for gas this year					
	Business Travel							
	Fleet transport							
	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	year of CO2e		Capital cost (£)	Operational cost (£/annum)		Primary fuel/emission source saved	Estimated carbon savings per year (tCO2e/annum)	Estimated costs savings (£/annum)	Behaviour Change	Comments
Carnoustie Leisure Centre - upgrade lighting in centre, beach hall and sports hall to LED with controls.	SALIX	2019/20	estimated	£20,500		20	Electricity	11	£5,999		Project completed by energy team
Monikie Country Park - upgrade lighting to LED with controls.	SALIX	2019/20	estimated	£6,036		20	Electricity	6.8	£3,189		Project completed by energy team
Websters High School - upgrade remaining areas of school with LED lighting with controls.	Centralised Energy Management	2019/20	estimated	£7,954		20	Electricity	1.9	£922		Project completed by energy team
Rosehill Resource Centre - upgrade lighting to LED with controls	Centralised Energy Management	2019/20	estimated	£24,625		20	Electricity	6.5	£3,538		Project completed by energy team

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.

Total			Increase or decrease in	Comments
	Estate changes	0		Majority of changes will already have been accounted for in previous sections
	Service provision	0		Majority of changes will already have been accounted for in previous sections
	Staff numbers	0		Majority of changes will already have been accounted for in previous sections
	Other (specify in comments)			

3h Anticipated annual carbon savings from all projects implemented by the body in the year ahead						
Total		Source	Saving	Comments		
	26.2	Electricity	26.2	Energy Team LED lighting projects.		
		Natural gas	0	none		
		Other heating fuels	0	none		
		Waste	0	no data		
		Water and sewerage	0	none		
		Business Travel	0	no data		
		Fleet transport	0	no data		
		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.				
Total	Emissions source	Total estimated	Increase or	Comments
C	Estate changes	0		Majority of changes will already have been accounted for in previous sections
	Service provision	0		Majority of changes will already have been accounted for in previous sections
	Staff numbers	0		Majority of changes will already have been accounted for in previous sections
	Other (specify in comments)			

•	luction project savings since the start of the year which a baseline for its carbon footprint
•	available, estimate the total emissions savings made from tart of that year ("the baseline year").

Total Comments

26.2 Only project savings dat provided is form the energy team.

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.

RATIONALISING ESTATE - A recent review of the impact of estate rationalisation on utilities consumption highlights that since 2013, 32 buildings are in the process of being sold/leased/demolished/otherwise removed from Angus Council estate. Resource consumption associated with these buildings suggests annual reductions of energy of -2,839,736 kWh (804 C02e tonnes) and of water of 6,978 m3 CO2e tonnes.

STREET LIGHTING -corporate commitment to reduce energy used in street lighting by 10% attained again in 2019/20.

PART 4: ADAPTATION

4(a) Has the body assessed current and future climate-related risks?

If yes, provide a reference or link to any such risk assessment(s).

Yes, assessments have been carried and reported through the following documents:

Angus Council Emergency Plan https://www.angus.gov.uk/media/angus council emergency plan

Angus Local Climate Impacts Profile (LCLIP) 1st edition https://www.angus.gov.uk/media/angus-local-climate-impacts-profile-lclip-1st-edition

Angus Local Climate Impacts Profile (LCLIP) 2nd edition https://www.angus.gov.uk/media/angus-local-climate-impacts-profile-lclip-2nd-edition

North of Scotland, Resilience Partnership Community Risk Register http://www.firescotland.gov.uk/media/864538/north_crr_version_1.2.pdf

2016/17 period saw development work on the Local Flood Risk Management Plan (approved June 2016) https://www.angus.gov.uk/the_environment/flooding_and_coastal_erosion/tay_estuary_and_montrose_basin_local_flood_risk

4(b) 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.

The Angus Local Development Plan 2016 (ALDP) strategy is based on a 'presumption in favour of sustainable development' and contains specific policies: PV12 Managing Flood Risk which states that to reduce potential risk from flooding, there will be a general presumption against built development proposals on the functional floodplain; which involve land raising resulting in the loss of the functional flood plain; or which would materially increase the probability of flooding to existing or planned development. Policy PV13 Resilience and Adaptation explores resilience to the effects of climate change such as flood and drought, extreme weather events and rising sea levels. In future Angus Council may require development proposals to incorporate adaptation measures Policy PV16 Coastal Planning supports a precautionary approach to potential impacts of coastal flooding. The ALDP is supported by an Environmental Report and Strategic Flood Risk Assessment which influenced plan development in light of some climate change impact.

Angus Council as Lead Local Authority for the Tay Estuary and Montrose Basin Local Plan District continue to deliver the actions in the Local Flood Risk Management Plan for Tay Estuary and Montrose Basin Local Plan District - http://apps.sepa.org.uk/FRMStrategies/pdf/lpd/LPD_07_FRMIS.pdf - and are partners on the Tay Local Plan District, which is led by Perth & Kinross Council.

Tayside Local Asset Resilience Register is maintained and developed. It is a list of community/ voluntary groups that can be called to action in the event of severe weather events.

Continue to support the

Resilient Business & Communities working group.

We continue to support and develop a number of active community groups, especially those at risk of getting cut off in severe weather or flooding including integration to the Council's emergency plans.

We continue to explore

capacity building e.g. first aid training, tie in with other community health empowerment initiatives such as issuing of defibrillators.

We continue

to work with schools to build resilience as part of the curriculum.

Use of SALIX funding

projects to reduce the Councils'CO2 emissions for all non housing properties. A few related work streams have progressed – holding fuel poverty and energy efficiency advice sessions for front line council staff to then convey the message to the public; developing a below tolerable standard strategy; improving our web-based advice/info sections relating to property condition.

4(c) 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

Angus Council through the Cairngorm National Park Authority (CNPA) joint catchments project continue to investigate landscape scale approaches to natural flood management, riparian tree planting schemes and peatland restoration, all of which are excellent land use management approaches to mitigate against the effects of climate change and provide innovative adaptation examples. During 2019/20 the CNPA successfully secured a place in round two of the Heritage Horizons HLF Fund and over the next year climate change adaptation and community resilience projects will be developed for the final bid.

Treatment of Invasive Non-Native Species (INNS) during 2019/20, particularly along river corridors to reduce soil erosion in high spate events, thereby increasing the stability of the river bank continued on Angus rivers from May-October 2019. Volunteer effort to control Himalayan balsam in some areas has been quite successful. The Scottish Invasive Species Initiative, now in its third year, has successfully increased the volunteer pool with INNS treatment skills. http://theriversouthesk.org/projects/hogweed-and-knotweed-control/

Brechin Flood Prevention Scheme was completed and opened in October 2106. The 1.5km of flood embankments and walls up to 1.8m high have been installed along the north bank of the River South Esk to provide a 1 in 200 yr. flood defence. Environmental improvements have been delivered on site increasing native biodiversity and opportunities for access and outdoor learning. INNS treatment has been carried out annually to enhance the area for biodiversity and the public.

https://www.angus.gov.uk/the_environment/flooding_and_coastal_erosion/brechin_flood_prevention_scheme

Arbroath (Brothock Water) Flood Protection Scheme - which is ranked nationally as a priority project and is an action in the Tay Estuary and Montrose Basin Local Flood Risk Management Plan - has been the subject of formal notification and construction is anticipated to be complete before 2022. hard engineering and Natural Flood Management solutions will feature.

https://www.angus.gov.uk/the environment/flooding and coastal erosion/arbroath brothock water flood prevention scheme

The River South Esk catchment saw watercourses restored and reconnected to their natural flood plain over 2018/19. Particularly notable are phases 2&3 of the Pow Burn restoration in the lower catchment. These improvements were achieved through the creation of 915m of second-stage channels, the removal of 350m of embankments in places, and the setting back of 350m of existing river bank to provide re-connection of relict meander features currently cut off from the channel. The site has been used in 2019/20 as good practice site and the CNPA Joint catchment Group (Dee and Spey) visited the site to witness adaptation in practice. https://www.youtube.com/watch?v=2TGKyb496mw Work on the Pow Burn in Montrose

Previously, a large scale forestry project aimed at reducing peak flows in the upper South Esk catchment saw contour tree planting take place in two areas of Glen Clova and Doll. This follows the example of work carried out in a number of studies, where it has been found that tree planting along the contours of a hillside can result in a flood peak reduction of around 40%. Funding for further large scale planting (£3.2million) is in place and the planting of 165 Ha (246,000) trees began in spring 2019. Further phases will be delivered in 2021. The site has been used in 2019/20 as good practice site and the Angus Council Climate Change Member Officer Group visited the site to witness adaptation in practice http://theriversouthesk.org/projects/contour-planting/

"Our Rivers" LEADER Transnational Cooperation Project - River South Esk Catchment Partnership -The overall purpose of the project is to facilitate the creation of resilient, innovative and prosperous Communities on a landscape scale. A Transnational meeting took pace in August 2019 and a group from Scotland visited Merikarvia in Finland to share good practice. The overall project focus is on collaborative river management, invasive non-native species control, climate change resilience and community volunteering http://theriversouthesk.org

The Angus LDP 2016 promotes renewable and low carbon energy development (Policy PV9), heat mapping, heat networks and decarbonised heat (Policy PV10) and energy efficiency (Policy PV11) to reduce emissions and our contribution to man made global warming. Policy PV9 is supported by Renewable and Low Carbon Energy Development Supplementary Guidance which sets out the spatial framework for onshore wind energy and detailed criteria to assist the preparation and assessment proposals for renewable and locarbon energy development.

Montrose Bay is a Super Site under the Scottish Government's Dynamic Coast project. The project is establishing there effects of climate change on our coastline with the latest mapping and modelling. An adaptation plan is under development for publication in 2019/20.

4(d) 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. If it is not responsible for delivering any policy or proposal under a particular objective enter "N/A" in the 'Delivery progress made' column for that objective. (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** Theme Policy / **Delivery progress made** reference **Proposal** reference

Understand the effects of climate change and their impacts on the natural environment.	N1	Natural Environment	N1-1	Measuring the effects of climate change on the natural environment is a huge task and Angus Council are guided by our partners through collaborative project work and strategy development. The Tayside LBAP published in Aug 2016 takes into account the effects of climate change on a variety of species and habitats. Surveys are undertaken on invasive species movement e.g. Co Coasts and INNS in riverine and estuarine areas in particular. Citizen science projects are developed and supported by the partnership allowing us to better understand species migration, abundance and decline. Montrose Bay is a Super Site under the Scottish Government's Dynamic Coast project. The project is establishing there effects of climate change on our coastline with the latest mapping and modelling. An adaptation plan is under development for publication in 2019/20.
--	----	---------------------	------	--

Support a healthy and diverse natural environment with capacity to adapt.	N2	Natural Environment	N2-1	Climate change is embedded in the Tayside LBAP and other policy documents such as SMP2 and Flood Risk Strategies which include flood management and coastal management policies. All three plans favour natural mitigation and adaptation measures where possible, enabling healthy ecosystem services. In the River South Esk Catchment approximately 6 natural flood management schemes have been delivered and nature-based solutions continue to be explored throughout Angus.
---	----	---------------------	------	--

Sustain and enhance the benefits, goods and services that the natural environment provides.	Natural Environment	N3-1	The ALDP 2016 produced by Angus Council contains Policy PV14 Water Quality, its purpose is to protect and enhance the quality of the water environment. Development proposals will be assessed within the context of: the National Marine Plan; the Scotland River Basin Management Plan and associated Area Management Plans; relevant guidance on controlling the impact of development and associated works; relevant guidance on engineering works affecting water courses; and potential mitigation measures. Actions to enhance ecosystem services are/will be embedded in the Sustainable Energy and Climate Action Plan, LBAP, ALDP and ongoing greennetwork and Local nature Conservation Site work. All focus on ecosystem scale projects, supporting healthy functioning ecosystems
---	---------------------	------	--

Understand the effects of climate change and their impacts on buildings and infrastructure networks.	B1	Buildings and infrastructure networks	B1-1	Embedded in the newly developed Local Housing Strategy, LBAP, ALDP 2016 and Open Space Strategy. Gradual increase in highlighting impacts and costs of climate change in committee reports.
Provide the knowledge, skills and tools to manage climate change impacts on buildings and infrastructure.	B2	Buildings and infrastructure networks	B2-1	Embedded in the Local Housing Strategy, LBAP, ALDP 2016 and Open Space Strategy.
Increase the resilience of buildings and infrastructure networks to sustain and enhance the benefits and services provided.	В3	Buildings and infrastructure networks	B3-1	Montrose Bay is a Super Site under the Scottish Government's Dynamic Coast project. The project is establishing there effects of climate change on our coastline with the latest mapping and modelling. An adaptation plan is under development for publication in 2019/20.

Understand the effects of climate change and their impacts on people, homes and communities.	S1	Society	S1-1	Embedded in the Local Housing Strategy, LBAP, ALDP and Open Space Strategy, supported development of local resilience planning. Have established a Resilient Business & Communities working group. Sharing good practice with communities and landowners is ongoing.
Increase the awareness of the impacts of climate change to enable people to adapt to future extreme weather events.	S2	Society	S2-1	Embedded in the Local Housing Strategy, Results of both LCLIPs were widely promoted and published to raise corporate and public awareness. Have established a Resilient Business & Communities working group. Working with high schools to raise awareness of resilience. See also Local Flood Risk Management Plans and links to National Flood Risk Assessment by SEPA.
Support our health services and emergency responders to enable them to respond effectively to the increased pressures associated with a changing climate.		Society	S3-1	Exploring capacity building e.g. first aid training, ties in with other community health empowerment initiatives such as issuing of defibrillators building sustainable communities.

4(e) 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

A detailed Adaptation Action Plan has been developed and will be incorporated into the Angus Sustainable Energy & Climate Action Plan. Many projects covered in the original action plan are ongoing and valuable. There is potential for them to be streamlined into focused work that ties directly into the mandatory reporting template. Progress will be monitored through regular meetings of the Climate Change Member Officer Group- Adaptation Working Group.

Flood Risk Management Planning allows for the updating of National Flood Risk Assessments for changing forecasts for climate change and impact on adaptation actions.

4(f) 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

The Climate Change Adaptation Working Group continues to set the tone of adaptation work in Angus. Partnership work is key and there are many strong adaptation focused teams collaborating in the group. Delivery of the adaptation element of the SECAP will be monitored by the group. The work of the group will then be reported to the Climate Change Member Officer Group four times per year.. A Flood Risk management Member Officer Group continues to meet and adaptation delivered through flood risk management is regularly monitored.

River South Esk Partnership Steering Group continues to meet 3 times p.a. and reviews the impacts of projects including those with an adaptation element. A consultation was carried out in 2019 to form a second catchment management plan in which adaptation and nature based solutions features heavily.

Interim and Final Reports on the delivery of actions in the Local Flood Risk Management Plans are published 2-3 years and 5-6 years after publication of the Plans, i.e. 2019 and 2022 respectively.

4(g) 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.

Angus Council achieved their 5 targets for 2019/20. Going forward we hope to:

- 1. Through the Member/Officer Group for climate change Adaptation Working Group deliver and monitor the adaptation component of the Sustainable Energy & Climate Action.
- 2. Use Green Network and Local Nature Conservation Site site data to enhance ecosystem health and connectivity increasing resilience. Both urban and rural areas will be covered by this approach.
- 3. Deliver both the Angus Shoreline Management Plan 2 and Local Flood Risk Management Plans.
- 4. Deliver the Tayside Local Biodiversity Action Plan 2016-26 & publish the 2nd edition River South Esk Catchment Management Plan using it as a basis to role out catchment scale nature based solutions across Angus.
- 5. Engage in community resilience networks and local climate change action plans enabling the community to participate in adaptation works in their communities.

4(h) Supporting information and best practice

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

https://www.angus.gov.uk/media/tayside-local-biodiversity-action-plan-20162026

https://www.angus.gov.uk/media/smp2-main-document

http://theriversouthesk.org/projects/

https://www.youtube.com/watch?v=2TGKyb496mw

https://www.angus.gov.uk/the_environment/flooding_and_coastal_erosion/tay_estuary_and_montrose_basin_local_flood_risk

http://www.readyscotland.org/my-community/local-plans-and-good-practice/edzell-flood-group-and-action-plan/

PART 5: PROCUREMENT

5(a) 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.

The Council's sustainable procurement policy position remains as stated in the 2016 report: Angus Council at its meeting on 22 March 2012 approved sustainable procurement policy which applies to all Council procurement. Work has been completed to carry out a 'Prioritisation Exercise' using the tools developed by Sustainable Procurement Limited.

A report was submitted to the Procurement Sounding Board at its meeting on 8 December 2015 which proposed a series of next steps to devise an Angus Sustainable Procurement Plan and self-assessment against the 'Flexible Framework. The revised overall target for preparation of the action plan was December 2016 and self-assessment against the 'Flexible Framework' in December 2017

5(b) 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.

Since the Council's report in 2016, a Sustainable Procurement Working Group was formed and work has taken place to take forward work to develop a sustainable procurement plan for the Council. This included work with Sustainable Procurement Limited to help the Council approach this on a strategic, categorised basis using a "sustainability test" and a "prioritisation tool" in line with the Scottish Government's Procurement Journey guidance. However, due to staff resource changes and other Service priority changes, this work was not taken forward as from May / June 2016. At this point in time, no plans are in place to revive that activity

5(c) Supporting information and best practice

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

Since the Council's report in 2016, no other sustainable procurement best practice activity examples have been brought forward.

PART 6: VALIDATION AND DECLARATION

6(a) Internal validation process

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

This report has circulated to the Carbon, Adaptation & Sustainability Working Group leads and to the Climate Change Carbon Member Officer Group. It was subsequently circulated across all Council Services as part of the committee report consultation process.

6(b) Peer validation process

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

N/A. See above

6(c) External validation process

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

N/A. See above

6(d) 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.

N/A. See above

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.

Name	Role in the body	Date
TBC - Stewart Ball	Head of Communities, Place.	

Q4) Partnership Working, Communication and Capacity Building.
Please detail your Climate Change Partnership, Communication or Capacity Building Initiatives below.

Key Action Type Description Action Organisation's Project Role Lead Organisation (if not Private Partners Public Partners Comments reporting organisation)

Delivery of Angus SECAP through wide

Sustainable Energy stakeholder engagement

Faciltation of partnership work and monitoring

Action & Climate Plan under development

Please use the text box below to detail further climate change related activity that is not noted elsewhere within this reporting template

ACTIVE & SUSTAINABLE TRAVEL

Angus Council has been awarded funds from Smarter Choices Smarter Places (SCSP) for delivery of an active travel programme over the financial year 2019/20. A number of projects targeted at local commuters, residents, students and pupils, as well as visitors, are being delivered throughout the year to encourage a change in travel behaviour. Examples of some of the projects for this year are listed below:

- Schools: WOW (Walk Once a Week) and Travel Tracker Programme will seek to encourage and reward active and sustainable travel to school by pupils.,
 - Encourage safer parking while also promoting a reduction in traffic speed, congestion and pollution around school gates through the Park Smarter Programme,
 - an On bus-workshop and holiday hop programme will be carried out encouraging pupils to use public transport wherever possible if unable to walk or cycle.
- Cycling: support of Angus Cycle Hub programme of community cycling programme,
 - initiatives such as fun round the loch, Young Persons Activity Day, and Friockheim Get Cycling Get Walking Initiative,
 - Community Bike Maintenance and Servicing Courses. installation of cycling signage and bike racks throughout the Council area.
- Walking: Sign posting of active travel routes in Monifieth
- Community: Community Planning Projects These projects will involve proactively engaging key members of the Forfar and Monifieth communities and other stakeholders in a community engagement process designed to understand community need around accessibility and sustainable mobility as well as to stimulate travel behavioural change in both towns.
- Various: support of area wide car share scheme,
 - lift share license for Council employees and,
 - social media 'Get on the Go' programme to encourage active & sustainable travel.

Cycling Walking Safer Streets: - Footpath improvements at West Links, Arbroath on National Cycle Route 1 (NCR1) as well as upgrading of existing barriers and repositioning of chicanes elsewhere on the route.

- Alteration of footway on Shanwell Road, Carnoustie to shared use footway/cycleway,
- New footway link and dropped kerb provision at Checkiefield, near Kirriemuir,
- -Upgrade of existing footpath at Ashludie Park, Monifieth and,
- -Dropped kerb provision at Craig o Loch Road, Forfar.

Successfully obtaining grant funding through Tactrans active travel fund to install dropped kerbs throughout angus forming links to hospitals and health centres

- Successfully obtaining grant funding through Tactran to carry out a feasibility study to look into an active travel route between Arbroath and Friockheim
- Continue to progress Arbroath's Places for Everyone developed design and public engagement through our appointed consultant
- Extended our EV fleet, now 8 pool cars available at Angus House which are being used extensively. All journeys are being recorded for analysis purposes.

A regional EV Strategy has recently been published with a series of actions identified both locally and regionally. Angus Council are in the process of organising a steering group to deliver on the local actions. A regional forum will also be set up to deliver on regional actions which will include Angus Council representation.

- •Commence construction phase of the low carbon travel and transport (LCTT) EV hub at Orchard Loan, Forfar
- Angus Council has received grant funding from Transport Scotland to install additional EV charging infrastructure throughout Angus over the financial year 2019/20. Charging Infrastructure will be installed in Arbroath, Brechin, Carnoustie, Friockheim, Glamis, Monikie and Kirriemuir.
- Angus Council is working in partnership with Dundee City Council to provide a high quality coastal walking and cycle route between Broughty Ferry and Monifieth.