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Required

Recommended Reporting: Reporting on Wider Influence

PART 1: PROFILE OF REPORTING BODY

1(a) Name of reporting body
University of Aberdeen

1(b) Type of body
Educational Institutions

1(c) Highest number of full-time equivalent staff in the body during the report year
2514

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	210921	As per HESA (15/16 return)
Number of full-time students	number FTS	11889	As per HESA (15/16 return)

1(e) Overall budget of the body	
Specify approximate £/annum for the report year.	
Budget	**Budget Comments**
229962000	The above 'total income' figure at 1e is taken from the University's Annual Report and Accounts for 2015/16. Equivalent figures for 2016/17 will not be available until after their approval at the University Court in December 2017. The staff FTE figure at 1c is also taken from the University's Annual Accounts for 2015/16. Please note that the staff figure quoted in last year's PBCCD report [3394] was a head-count. The equivalent FTE number was 2881. Other figures at 1d are taken from the HESA return for 2015/16. This data is compiled annually and submitted in the spring after the completion of the academic year. As such, confirmed data for 2016/17 is not yet available.

1(f) Report year	
Specify the report year.	
Report Year	**Report Year Comments**
Academic	

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1(g) Context
Provide a summary of the body's nature and functions that are relevant to climate change reporting.
The University of Aberdeen is a research-intensive, ancient University with two main Aberdeen campuses at Old Aberdeen and Foresterhill. The University has research interests, collaborative relationships, and student recruitment interests around the world.

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.
The University's Strategic Plan to 2020 provides the high-level framework in which all institutional priorities are considered. It highlights that a "sustainable physical and digital infrastructure" underpins the University's ambition. Issues of sustainability and social responsibility are considered in the Advisory Group on Sustainability and Social Responsibility (AGSSR). It is chaired by the University Secretary and includes representation from the Directorates of Finance, Estates & Facilities (inc. Campus Services) and IT Services as well as functional leads and student, union and academic representatives. AGSSR is a working group of the University Management Group (UMG). The University Management Group (UMG) and other senior committees (e.g. Operating Board and Court) have received reports on the headline emissions, energy and waste reporting as part of the University's Monthly Management Reporting process. All papers drafted for high-level committees (Court, Operating Board, UMG etc) oblige authors to use a standard paper template that invites authors to outline the sustainability and social responsibility impacts. It asks for this alongside other key issues, for example resource implications, equalities issues, and risk context of the initiative in question. Management of compliance elements (e.g. waste management and emissions reporting) are overseen by our Directorate of Estates & Facilities. The University's Professional Services organogram is available at https://www.abdn.ac.uk/staffnet/documents/PS_Structure%20_Chart.pdf The University's organisational structure is available at https://www.abdn.ac.uk/staffnet/documents/Organisation_Chart.pdf

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)
AGSSR meets quarterly and as part of its work reviews, monitors and develops high-level sustainability KPIs (which reflect our organisational targets) and invites Professional Services directorates to report on local action being taken to embed sustainability (with actions that aim to address elements of sustainability in a range of areas e.g. governance, carbon management, energy efficiency, waste, water, business travel, procurement, IT, policy and more). Alongside Estates colleagues, AGSSR has representation from several key contributing sections (e.g. Procurement, Campus Services, IT Services, People (i.e. HR)). All participate in the development and monitoring of the institutional KPIs, while localised actions include specific commitments around their key areas of operational activity e.g. as regards the procurement Flexible Framework, Sustainable Food, and Greener ICT. Functional responsibility for management of the Carbon Management Plan and the major strands of climate change action lie with our Directorate of Estates & Facilities (e.g. Waste, Transport, Water, Energy, Buildings). AGSSR receives regular reports from the functional leads, while the Estates Operation Plan contains a section detailing all of its commitments across these functional responsibilities.

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**
Mission includes "To build an integrated, collaborative and sustainable physical and digital infrastructure to underpin the University's ambition."	Strategic Plan 2015-2020 The Strategic plan sets the high-level mission and ambition for the University, with detailed action provided in operational plans that sit below the main strategic plan at a functional level.	http://www.abdn.ac.uk/about/strategy-and-governance/strategic-plan-20152020-735.php
Outcome Agreement (Section 1.9) - In our Strategic Planning period 2015-2020, we aim to reduce carbon emissions by 20%, and to achieve a 4% reduction in energy consumption per m2 per annum, reflecting both international and Scottish Government targets.	Outcome Agreement (Scottish Funding Council) - 2017/18 Metrics underpinning this Aim include gross carbon footprint and associated reporting of action against Carbon Management Plan. The target for reduction is in line with the CMP i.e. 4% annually.	http://www.sfc.ac.uk/funding/outcome-agreements/outcome-agreements-2017-18/university-aberdeen-oa201718.aspx

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.
Yes. During the summer of 2016 a new CMP was drafted for the period 2016-21. It was drafted to reflect the format of the Public Sector Duties reporting and provides a project framework for action in the coming five-year period. It was formally approved during 2016/17 and is now available online at https://www.abdn.ac.uk/staffnet/documents/policy-zone-sustainability/CMP-2016_2021-Final.pdf Our original Carbon Management Plan (2009-2014) was drafted in consultation with the Carbon Trust as part of the Universities and Colleges Climate Commitment for Scotland (UCCCFS) process.

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2(e) 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	n/a	n/a	n/a	See also Q5 below. Although not yet publicly available - we have taken steps to assess climate change vulnerabilities (with an Estates focus).
Business travel	Sustainable Travel Plan	https://www.abdn.ac.uk/staffnet/documents/policy-zone-sustainability/University_of_Aberdeen_Sustainable_Travel_Plan_2013_2017_v1_0.pdf	2013/17	This plan is in the process of being updated for the period covering 2018-2022.
Staff Travel	Sustainable Travel Plan	https://www.abdn.ac.uk/staffnet/documents/policy-zone-sustainability/University_of_Aberdeen_Sustainable_Travel_Plan_2013_2017_v1_0.pdf	2013/17	This plan is in the process of being updated for the period covering 2018-2022.
Energy efficiency	Environmental Sustainability Policy	https://www.abdn.ac.uk/staffnet/documents/policy-zone-sustainability/2016-SSR-EnviroSustPolicy-FINAL.pdf	updated annually	Carbon Management Plan 2016/21 also refers. https://www.abdn.ac.uk/staffnet/documents/policy-zone-sustainability/CMP-2016_2021-Final.pdf
Fleet transport	Sustainable Travel Plan	https://www.abdn.ac.uk/staffnet/documents/policy-zone-sustainability/University_of_Aberdeen_Sustainable_Travel_Plan_2013_2017_v1_0.pdf	2013/17	This plan is in the process of being updated for the period covering 2018-2022.
Information and communication technology				
Renewable energy	Environmental Sustainability Policy	https://www.abdn.ac.uk/staffnet/documents/policy-zone-sustainability/2016-SSR-EnviroSustPolicy-FINAL.pdf	updated annually	
Sustainable/renewable heat	Environmental Sustainability Policy	https://www.abdn.ac.uk/staffnet/documents/policy-zone-sustainability/2016-SSR-EnviroSustPolicy-FINAL.pdf	updated annually	
Waste management	Environmental Sustainability Policy	https://www.abdn.ac.uk/staffnet/documents/policy-zone-sustainability/2016-SSR-EnviroSustPolicy-FINAL.pdf	updated annually	
Water and sewerage	Environmental Sustainability Policy	https://www.abdn.ac.uk/staffnet/documents/policy-zone-sustainability/2016-SSR-EnviroSustPolicy-FINAL.pdf	updated annually	
Land Use	Estates Strategy	http://www.abdn.ac.uk/estates/documents/Estates-Strategy-2013-23%20higher%20resolution.pdf	2013/23	Development Frameworks for the two main campuses also apply.
Other (state topic area covered in comments)	Environmental Sustainability Policy	http://www.abdn.ac.uk/estates/documents/Estates-Strategy-2013-23%20higher%20resolution.pdf	2013/23	Buildings (New Build, Refurbishment & Extension)

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.

Our priorities for 2016/17 are to:

1) Continue with the implementation of projects associated with the 2016-21 Carbon Management Plan;

2) Further develop an institutional approach to Adaptation (including building links with the institutional Business Continuity process);

3) Refresh our Sustainable Travel Plan for a new planning period (2018-22);

4) Review the research, teaching and operational opportunities available to the University as part of the Aurora network of 9 European universities (and in which the University has taken the lead on the network's sustainability theme);

5) Consider how best to link institutional sustainability strategy to the Sustainable Development Goals.

In addition we intend to continue recent efforts to improve engagement between academic colleagues and operational colleagues on sustainability issues. For example, in 2016/17 an MSc student undertook a practical MSc thesis that enabled the University to develop a better understanding of adaptation issues in its Estates section.

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 CCAT tool was consulted as part of the development of our latest Carbon Management Plan but was not used to conduct a formal assessment.

The CFPF tool was used to inform the revised project-based format for our Carbon Management Plan.

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.

Our Sustainable Buildings approach and associated commitments have led to a number of successful capital projects with strong sustainability credentials in recent years. Our Suttie Centre (medical teaching) and Sir Duncan Rice Library both achieved BREEAM 'Excellent', while more recently the new Rowett Institute building remains on course to achieve BREEAM 'Outstanding' and our new pre-school child-care facility for staff and students achieved Passive House certification (the first such Scottish Nursery, FE/HE or commercial building to do so) and was the first to be dual accredited as both Passive House and BREEAM 'Excellent'. It was also, in November 2016, awarded a prestigious Green Gown award [large institution] in the Built Environment category and remains a building of interest to the sector and wider community.

During 2016/17 we have made steady progress on the implementation of Carbon Management Plan projects resulting in a considerable reduction in our Scope 2 emissions. While this is in part due to improved emissions factors, absolute emissions have reduced due to a range of projects including - the extensive installation of LED lighting and insulation/draught proofing and a number of interventions in how our CHP engine is operated which have improved its efficiency and dramatically reduced associated emissions. A change in our waste contract has also seen a significant reduction in emissions related to waste, with non-recyclable waste streams now sorted prior to energy recovery rather than being landfilled. This will improve further in 2017/18 with a full year of this new process.

We continue to work collaboratively with other organisations in Aberdeen City to share best practice and seek mutually beneficial outcomes. We are part of a number of key climate change and sustainability focussed initiatives in the City (and region). These include:

- "Powering Aberdeen" (Aberdeen's city-wide Sustainable Energy Action Plan)
- "North East Scotland Climate Change Partnership" (regional forum for private and public sector partners to discuss climate change issues)
- "Aberdeen Adapts" (a City-led initiative to bring key stakeholders together to increase city resilience to climate impacts)

(see also 'wider influence' section)

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	2015/16	13094.67	12467.96	5957.53	31520	tCO2e	
Year 1 carbon footprint	2016/17	12957.79	10275.94	4754.81	27989	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.

Total	Comments – reason for difference between Q3a & 3b.	Emission source	Scope	Consumption data	Units	Emission factor	Units	Emissions (tCO2e)	Comments
27988.5		Refuse Municipal to Landfill	Scope 3	192.2	tonnes	588.906257787832	kg CO2e/tonne	113.2	
		Refuse Municipal /Commercial /Industrial to Combustion	Scope 3	127.82	tonnes	21.76	kg CO2e/tonne	2.8	
		Mixed recycling	Scope 3	64.71	tonnes	21.76	kg CO2e/tonne	1.4	
		Organic Garden Waste Composting	Scope 3	158.22	tonnes	6	kg CO2e/tonne	1.0	
		Paper & Board (Mixed) Recycling	Scope 3	64.41	tonnes	21.76	kg CO2e/tonne	1.4	
		Metal Cans (Mixed) & Metal Scrap Recycling	Scope 3	0.33	tonnes	21.76	kg CO2e/tonne	0.0	
		Glass Recycling	Scope 3	3.58	tonnes	21.76	kg CO2e/tonne	0.1	

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 difference between Q3a & 3b.**	**Emission source**	**Scope**	**Consumption data**	**Units**	**Emission factor**	**Units**	**Emissions (tCO2e)**	**Comments**
27988.5		Plastics (Average) Recycling	Scope 3	2.52	tonnes	21.76	kg CO2e/tonne	0.1	
		Other	Scope 3	20.20	tonnes	21.8	kg CO2e/tonne	0.4	Wood - recycled
		Paper & Board (Mixed) Recycling	Scope 3	221.16	tonnes	21.76	kg CO2e/tonne	4.8	
		Metal Cans (Mixed) & Metal Scrap Recycling	Scope 3	15.98	tonnes	21.76	kg CO2e/tonne	0.4	
		Organic Food & Drink Composting	Scope 3	44.62	tonnes	6	kg CO2e/tonne	0.3	
		WEEE (Mixed) Recycling	Scope 3	15.78	tonnes	21.76	kg CO2e/tonne	0.3	
		Other	Scope 3	90.08	tonnes	21.8	kg CO2e/tonne	2.0	Clinical waste - incinerated for energy
		Other	Scope 3	63.69	tonnes	21.8	kg CO2e/tonne	1.4	Chemical waste - recovery and disposal
		Domestic flight (average passenger)	Scope 3	2885089.3	passenger km	0.26744	kg CO2e/passenger km	771.6	All three categories of flight data come with caveats. This data is based in part on estimation from staff travel claims (around 1/3 of total km) but also from data provided by our Travel Management contractor (around 2/3 of total km). The former data set has known limitations as it relies on staff input of mileage, while the latter has also proven difficult to receive the necessary assurances that the km data is wholly reliable. In all three flight categories this is, therefore, a best estimate based on available data, with reasonable assumptions applied. For reasons of good practice, we have chosen to include this data in our footprint boundary rather than omit it completely.

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 difference between Q3a & 3b.**	**Emission source**	**Scope**	**Consumption data**	**Units**	**Emission factor**	**Units**	**Emissions (tCO2e)**	**Comments**
27988.5		Short-haul flights (average passenger)	Scope 3	6541622.85	passenger km	0.16103	kg CO2e/passenger km	1053.4	See note at domestic flight data.
		International flights (average passenger)	Scope 3	13043958.11	passenger km	0.18026	kg CO2e/passenger km	2351.3	See note at domestic flight data.
		Bus (local bus, not London)	Scope 3	156583.02	passenger km	0.12259	kg CO2e/passenger km	19.2	
		Average Car - Unknown Fuel	Scope 3	1298615.60	km	0.18242	kg CO2e/km	236.9	Comprising staff, student, and hire car mileage
		Taxi (regular)	Scope 3	113479.76	passenger km	0.15617	kg CO2e/passenger km	17.7	
		Rail (National rail)	Scope 3	1642024.76	passenger km	0.04678	kg CO2e/passenger km	76.8	
		London Underground	Scope 3	16391.02	passenger km	0.04674	kg CO2e/passenger km	0.8	
		Ferry (Foot passenger)	Scope 3	33467.42	passenger km	0.019275	kg CO2e/passenger km	0.7	
		Bus (local bus, not London)	Scope 3	36081.72	passenger km	0.12259	kg CO2e/passenger km	4.4	University Shuttle Bus
		Diesel (average biofuel blend)	Scope 3	19726.24	litres	2.6001627 1124822	kg CO2e/litre	51.3	
		LPG	Scope 3	292.49	litres	1.5080713 57	kg CO2e/litre	0.4	
		Petrol (average biofuel blend)	Scope 3	18594.74	litres	2.1983536 0740471	kg CO2e/litre	40.9	

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 difference between Q3a & 3b.**	**Emission source**	**Scope**	**Consumption data**	**Units**	**Emission factor**	**Units**	**Emissions (tCO2e)**	**Comments**
27988.5		Diesel (average biofuel blend)	Scope 1	13172.23	litres	2.6001627 1124822	kg CO2e/litre	34.3	
		Petrol (average biofuel blend)	Scope 1	2344.56	litres	2.1983536 0740471	kg CO2e/litre	5.2	
		Natural Gas	Scope 1	70146100	kWh	0.1841639 89077374	kg CO2e/kWh	12918.4	
		Grid Electricity (generation)	Scope 2	18017848	kWh	0.35156	kg CO2e/kWh	6334.4	
		Grid Electricity (transmission & distribution losses)	Scope 2	18017848	kWh	0.03287	kg CO2e/kWh	592.3	
		Gas Oil	Scope 2	201432	kWh	0.2758763 74117495	kg CO2e/kWh	55.6	
		LPG	Scope 2	21356	kWh	0.2145097 23	kg CO2e/kWh	4.6	
		Water - Supply	Scope 2	185128	m3	0.344	kg CO2e/m3	63.7	
		Water - Treatment	Scope 2	177868	m3	0.708	kg CO2e/m3	125.9	
		Purchased Heat and Steam	Scope 2	15701190	kWh	0.1974110 06275712	kg CO2e/kWh	3099.6	

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	155027	0			
Solar thermal			1423	0	

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
Reduce waste sent for disposal	annual	5	annual % reduction	Waste	22					5% annual reduction target - 22% reduction achieved
Increase waste recycled	annual	4	% increase	Waste	9					4% annual increase target - 9% increase achieved.
Reduce energy consumption 4% YOY	annual	4	annual % reduction	All energy use	2	2015/16	10581126 2.4	kWh		Increase in steam consumption and new medical site coming online Baseline figure is from the 2016/2021 CMP baseline
Reduce water consumption 2% YOY	annual	2	annual % reduction	Water and sewerage	-23	2015/16	150461.60	M3		Additional water supplies added. Several major leaks occured during the reported year Baseline figure is from the 2016/2021 CMP baseline

3e Estimated total annual carbon savings from all projects implemented by the body in the report year			
Total	**Emissions Source**	**Total estimated annual carbon savings (tCO2e)**	**Comments**
1010.99	Electricity	133.45	21 Projects
	Natural gas	743.03	6 Projects
	Other heating fuels		
	Waste	134	2 Projects
	Water and sewerage	0.51	1 Project
	Business Travel	0	
	Fleet transport	0	
	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)	Behaviour Change	Comments
Maximise CHP Secondary Pumps Control	Capitalised	2017/18	Actual	1500			Natural Gas	313.95	51141.82		
Clean CHP Heat Exchanger	Capitalised	2017/18	Actual				Natural Gas	220.94	35991.54		
Meston Building Draught Proofing	Capitalised	2017/18	Actual	76397.52			Natural Gas	140.89	22950.84		
William Guild Loft Insulation	Capitalised	2017/18	Actual	16342			Natural Gas	37.43	6097.6		
William Guild - Upgrade Corridor and office Lighting	Capitalised	2017/18	Actual	100000			Grid Electricity	37.21	8710.2		
Hillhead Adam Smith Wall Insulation	Capitalised	2017/18	Actual	22206			Natural Gas	21.44	3491.84		
IMS Freezer Upgrade	Capitalised	2017/18	Actual	50000			Grid Electricity	16.52	3867.93		
Upgrade West Block AC and condensers	Capitalised	2017/18	Actual	22207.04			Grid Electricity	12.11	2834.01		
Edward Wright Lighting (Excluding LG Floor)	Capitalised	2017/18	Actual	22140			Grid Electricity	11.01	2578.5		
Replacement of 8W Maintained Fittings	Capitalised	2017/18	Actual	6000			Grid Electricity	9.63	2254.94		

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	**Emissions source**	**Total estimated annual emissions (tCO2e)**	**Increase or decrease in emissions**	**Comments**
0.00	Estate changes			
	Service provision			
	Staff numbers			
	Other (specify in comments)			

3h Anticipated annual carbon savings from all projects implemented by the body in the year ahead			
Total	**Source**	**Saving**	**Comments**
1361.44	Electricity	754.83	Estimate based on 1/5th of CMP re-electricity specific projects not completed in 2016/17.
	Natural gas	606.61	Estimate based on 1/5th of CMP re-gas specific projects not completed in 2016/17.
	Other heating fuels	0	
	Waste	0	
	Water and sewerage	0	
	Business Travel	0	
	Fleet transport	0	
	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 annual emissions (tCO2e)**	**Increase or decrease in emissions**	**Comments**
0.00	Estate changes			
	Service provision			
	Staff numbers			
	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**
876.99	2015/2016 submission is used as baseline year 876.99 tonnes from energy and water projects

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.
The University of Aberdeen has achieved significant cost savings and carbon reductions by tendering for waste services with another University in the city, Robert Gordon University This has resulted in improved services which, in turn, have led to improved recycling rates and a large proportion of our residual waste being diverted from landfill to an energy from waste plant. This has allowed us to exceed our targets and to accelerate our efforts to move waste up the waste hierarchy.

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, although materials are not yet available online. Please see the narrative below.

During the summer of 2017, an MSc student on the University's Environmental Partnership Management (EPM) programme was based in the Estates section completing a partnership thesis to help establish an initial approach to adaptation.

As part of the thesis, a series of workshops were held with colleagues in Estates during which key climate change vulnerabilities across our campuses were discussed, mapped and assessed.

This process used as its starting point the guidance for Public Bodies in Scotland and aimed to provide key recommendations and an initial adaptation risk register around which the University could build its subsequent approach to adaptation. It's key focus was:

1. To examine climate change adaptation in the context of Scottish Public Bodies and the University of Aberdeen in particular.
2. To seek to understand the potential consequences of future climate specific to the University of Aberdeen.
3. To identify and prioritise ways to manage climate risks.
4. To provide recommendations for the implementation of practical climate adaptation measures.

The workshops identified 31 current climate issues spread across six campus locations and further sub-divided between four categories of 'issue' (buildings, people, grounds/green spaces, infrastructure). Additionally 20 potential future impacts were identified and summarised in a risk register.

The project was successfully completed, with the student's work well received by colleagues in Estates. Moreover, the submitted thesis was highly regarded by the student's academic mentors.

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 work undertaken during 2017 has been considered initially by the University's Advisory Group on Sustainability and Social Responsibility (AGSSR) and it is our intention to take this to the University's Business Continuity committee. This will happen in late 2017 with a view to embedding consideration of adaptation issues as part of the wider institutional resilience framework.

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 risk and implement action.

The work undertaken over the course of the summer of 2017 represents our first concerted effort to raise awareness of adaptation more generally. Colleagues from across Estates participated in a series of workshops that provided a context and framework around which to consider adaptation and identify current and future issues/risks. As part of this exercise we also sought to tackle misconceptions or misunderstanding e.g. making clear the differences between adaptation and mitigation.

In discussion it became clear that, in recent years, a number of important maintenance projects have taken forward 'adaptation measures' without, at the time, using that terminology (e.g. a number of roofing upgrade projects have seen guttering and pipework improved to increase the capacity of our buildings to cope with incidences of extreme weather).

As part of a major new-build project, the workshops have prompted the Projects Team to invite the Design Team to undertake an adaptation workshop as part of the ongoing desigr process.

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 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			
Support a healthy and diverse natural environment with capacity to adapt.	N2	Natural Environment			
Sustain and enhance the benefits, goods and services that the natural environment provides.	N3	Natural Environment			
Understand the effects of climate change and their impacts on buildings and infrastructure networks.	B1	Buildings and infrastructure networks			
Provide the knowledge, skills and tools to manage climate change impacts on buildings and infrastructure.	B2	Buildings and infrastructure networks			

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 reference**	**Theme**	**Policy / Proposal reference**	**Delivery progress made**	**Comments**
Increase the resilience of buildings and infrastructure networks to sustain and enhance the benefits and services provided.	B3	Buildings and infrastructure networks			
Understand the effects of climate change and their impacts on people, homes and communities.	S1	Society			
Increase the awareness of the impacts of climate change to enable people to adapt to future extreme weather events.	S2	Society			
Support our health services and emergency responders to enable them to respond effectively to the increased pressures associated with a changing climate.	S3	Society			

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 assessments referred to in Question 4(a) and adaptation strategies, action plans, procedures and policies in Question 4(b).

At this stage formal arrangements and processes have yet to be finalised but it is our intention to take the findings of the work undertaken in the summer of 2017 to the University's Business Continuity committee (Dec 17). Our intention is to embed adaptation among the other key 'resilience' issues considered by that group.

See also 4g - among the key recommendations of the work to date is the need to expand awareness of adaptation beyond Estates and, in due course to consider the wider 'adaptation' impacts that may apply to universities away from their campuses. In the first instance the main focus is, however, likely to remain on buildings and infrastructure issues.

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 Question 4(c) and Question 4(d).

Please see 4e.

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.

As part of the work undertaken in the summer of 2017, 5 key recommendations for adaptation were identified:

1. Continue to work in partnership e.g. with EAUC, Adaptation Scotland and in regional bodies such as Aberdeen Adapts.
2. Raise awareness of adaptation to identify knowledge gaps and misconceptions (in particular among staff involved in estates and grounds).
3. Further identify adaptation risks by broadening the range of staff involved in adaptation workshops.
4. Embed adaptation as part of the institution's business continuity and resilience thinking.
5. Promote environmental sustainability more generally and give further consideration to appointing a senior champion for all aspects of sustainability.

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.

We were delighted to be in a position to adopt a 'living laboratory' approach to our initial development of climate change adaptation thinking.

Students from the MSc Environmental Partnership Management have now been involved over successive summers in helping establish local adaptation initiatives. In 2016 a student helped establish the Aberdeen Adapts programme (with Aberdeen City Council) and then in 2017 a student from this cohort provided the impetus and practical support necessary to engage colleagues at the University of Aberdeen in developing a framework around which we can build our approach to adaptation.

In sharing this submission in advance with the James Hutton Institute, we have alerted that organisation to the possibility of accessing one of these 'partnership' thesis opportunities in 2018.

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 University Procurement Strategy and Action Plan (2016 – 2021) was ratified by University Court then published and sent to Scottish Government ministers in line with section 15 of Procurement Reform (Scotland) Act 2014 in December 2016.

One of our key objectives is to embed sound ethical, social and environmental policies within the University's function and to comply with relevant Scottish, UK and EU legislation in the performance of the sustainable procurement duty.

We undertake that all regulated procurements will be carried out in compliance with the Sustainable Procurement Duty and are committed to utilise available tools & systems such as APUC SUSTAIN.

The strategy document is available at

https://www.abdn.ac.uk/staffnet/documents/finance-e5-other/Procurement_Strategy_and_Action_Plan_2016.pdf

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.

The University of Aberdeen is a founding member of Electronics Watch and in February 2017 helped to persuade APUC (Advanced Procurement for Universities & Colleges) to procure a consortium arrangement which would grant all members of APUC (i.e. all Scottish HE/FE institutions) affiliate membership of Electronics Watch. This resulted in a further 42 institutions having access to all the benefits membership to this organisation brings including access to reports and tools.

Electronics Watch is an independent not for profit organisation who monitor labour standards and the environmental and social impact of making, running and disposing of electronic equipment. They strive to improve worker conditions in ITC hardware supply chains used by public procurers. The University provides regular reports to Electronics Watch with ICT Data to enable them to approach appropriate suppliers and/or brands to request sub tier supply chain disclosure.

Fairtrade University status was awarded to us in 2007 by the Fairtrade Foundation, in recognition of our continued promotion of Fairtrade products and principles. The University of Aberdeen is committed to fair trade procurement, awareness, and research. Procurement contributes to an internal Fairtrade & Sustainable Procurement Steering Group with representation from student side, local campaigners, our in-house catering service and the University's sustainability adviser.

From March 2017, Procurement began using the APUC SUSTAIN tool for regulated procurements (i.e. procurements of £50K and over) when appropriate. SUSTAIN is a web based supply chain sustainability tool that looks to assess social, ethical, economic and environmental standards and achievements of suppliers and their supply chains. The tool identifies a suppliers' current situation and areas for ongoing development. It provides suppliers and contract managers with a summary of areas for improvement.

University Procurement Policy & Procedures advises consideration of whole life costs, environmental and social impacts in assessment of value for money. We follow the Scottish Government Procurement Journey and the Sustainable Procurement Duty outlined in the Procurement Reform (Scotland) Act 2014 (introduced in 18 April 2016) which requires that institutions must think about how they can improve the social, environmental and economic well-being in every regulated procurement exercise undertaken.

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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.
Our Procurement Team was trained in March 2017 on the APUC SUSTAIN Tool, which is now used for regulated procurements when appropriate (notes for Supplier Engagement are available). We have conducted a collaborative Waste Management Agreement with Robert Gordon University (RGU) which aims for zero waste through landfill (see also 3k above). We are working on an electronic invoicing project with suppliers to reduce the amount of paper invoices coming into the University. We use Supported Businesses for the supply of mattresses to our student residencies and for the provision of particular furniture. We have procured new Multi-Function Devices for the University against a framework agreement. This has resulted in equipment which operates on average 38% more efficiently in relation to energy consumption than previous devices. https://www.abdn.ac.uk/about/documents/SSR-CaseStudy-CampusMFDs.pdf

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.
The co-ordination of this submission was undertaken by our Estates & Facilities Directorate. Data was provided by the functional leads in the relevant areas, notably Energy, Waste and Transport. The information has been reviewed and signed off by the Director of Estates & Facilities and was considered and endorsed for dissemination by the University Management Group on 20 November 2017.

6(b) Peer validation process
Briefly describe the body's peer validation process, if any, of the data or information contained within this report.
As part of a light-touch peer evaluation exercise, this submission has been shared with colleagues at Robert Gordon University and at the James Hutton Institute. We had an opportunity to provide feedback on our respective reports, with reciprocal sharing offers made. We intend to get together early in 2018 to review the exercise.

6(c) External validation process
Briefly describe the body's external validation process, if any, of the data or information contained within this report.
Please note that elements of the data being submitted here will also be submitted as part of the 2016/17 Higher Education Statistics Agency (HESA) exercise later in the academic year. The timing of this return is, therefore, out of synch with other key exercises e.g. the HESA process (which is the sector's key data submission and validation exercise is due in early 2017) and the University's annual report approval process. That latter process does not approve the University's annual accounts until Court's meeting in December. As such some of the contextual responses here relate to 2015/16 and not to 2016/17. Updates can be made available early in 2018.

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.
As part of our commitment to this important exercise, we will continue to assess how best to validate future submissions, with a particular focus on how that can be achieved within the restrictions imposed by reporting on the basis of an academic year. We will continue to review our submission, including those areas where there are acknowledged gaps (e.g. the wider influence section).

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**
Angus Donaldson	Director of Estates & Facilities	2017-11-30

RECOMMENDED – WIDER INFLUENCE

Q1 Historic Emissions (Local Authorities only)
Please indicate emission amounts and unit of measurement (e.g. tCO2e) and years. Please provide information on the following components using data from the links provided below. Please use (1) as the default unless targets and actions relate to (2). (1) UK local and regional CO2 emissions: **subset dataset** (emissions within the scope of influence of local authorities): (2) UK local and regional CO2 emissions: **full dataset:**
Select the default target dataset

Table 1a - Subset													
Sector	**2005**	**2006**	**2007**	**2008**	**2009**	**2010**	**2011**	**2012**	**2013**	**2014**	**2015**	**Units**	**Comments**

Table 1b - Full													
Sector	**2005**	**2006**	**2007**	**2008**	**2009**	**2010**	**2011**	**2012**	**2013**	**2014**	**2015**	**Units**	**Comments**

Q2a – Targets									
Please detail your wider influence targets									
Sector	**Description**	**Type of Target (units)**	**Baseline value**	**Start year**	**Target saving**	**Target / End Year**	**Saving in latest year measured**	**Latest Year Measured**	**Comments**

Q2b) Does the Organisation have an overall mission statement, strategies, plans or policies outlining ambition to influence emissions beyond your corporate boundaries? If so, please detail this in the box below.

Q3) Policies and Actions to Reduce Emissions														
Sector	**Start year for policy / action imple - mentation**	**Year that the policy / action will be fully imple - mented**	**Annual CO2 saving once fully imple - mented (tCO2)**	**Latest Year measured**	**Saving in latest year measured (tCO2)**	**Status**	**Metric / indicators for monitoring progress**	**Delivery Role**	**During project / policy design and implementation, has ISM or an equivalent behaviour change tool been used?**	**Please give further details of this behaviour change activity**	**Value of Investment (£)**	**Ongoing Costs (£/ year)**	**Primary Funding Source for Implementation of Policy / Action**	**Comments**

Please provide any detail on data sources or limitations relating to the information provided in Table 3

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 reporting organisation)	Private Partners	Public Partners	3rd Sector Partners	Outputs	Comments
Partnership Working	Powering Aberdeen http://www.aberdeencity.gov.uk/council_government/shaping_aberdeen/SustainableEnergyActionPlan.asp	Partnership working of climate change or sustainability	Participant	Aberdeen City Council	Various (e.g. Chamber of Commerce)	Various (e.g. RGU, NHS)	Various (e.g. Energy Saving Trust, Nestrans)	Sustainable Energy Action Plan	
Partnership Working	Aberdeen Adapts http://www.aberdeencity.gov.uk/nmsruntime/saveasdialog.asp?lID=75425&sID=25596	Partnership working of climate change or sustainability	Participant	Aberdeen City Council	Various (e.g. Chamber of Commerce)	Various (e.g. RGU, NHS)	Various (e.g. Energy Savings Trust, Nestrans)	Multi-stakeholder workshops on adaptation.	
Partnership Working	North East Scotland Climate Change Partnership (NESCCP) http://www.aberdeencity.gov.uk/planning_environment/environmental/your_environment/cma_northeastscotlandclimatechangepartnership.asp	Partnership working of climate change or sustainability	Participant	Aberdeen City Council	Various (e.g. Chamber of Commerce, Federation of Small Businesses)	Various (e.g. RGU, NHS, Fire & Rescue Service, Moray Council, Aberdeenshire Council)	Various (e.g. Energy Savings Trust, Nestrans)	Multi-sector declaration on adaptation and mitigation.	
Partnership Working	Aberdeen Fairtrade Steering Group http://www.afairerworld.org.uk/fair-trade/aberdeen-fairtrade-city-steering-group/	Awareness Raising	Participant	Aberdeen City Council	Various (e.g. Northlink Ferries, Co-op)	n/a	Various (e.g. Aberdeen for a Fairer World, Soroptimists)	Aberdeen's Fairtrade City Status renewal	
Partnership Working	Environmental Association for Universities and Colleges http://www.eauc.org.uk/home	Skills/Capacity Building	Participant	EAUC Scotland	n/a	Further & Higher Ed in Scotland	as necessary e.g. SSN	CPD sessions, workshops, TSNs, and training.	
Partnership Working	Aurora Network https://aurora-network.global/	Multi organisation Communications	Lead	n/a	n/a	9 Universities across Europe	n/a	New initiative - aim is to share best practice on operational sustainability and build research synergies.	
Education	Aberdeen Biodiversity Centre https://www.abdn.ac.uk/biodiversity/	Learning/Training	Lead	n/a	n/a	n/a	n/a	Schools outreach and public engagement on biodiversity issues.	

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 reporting organisation)	Private Partners	Public Partners	3rd Sector Partners	Outputs	Comments
Education	Public Engagement with Research https://www.abdn.ac.uk/engage/	Awareness Raising	Lead	n/a	Various sponsors	Varies by event	Varies by event	Varied programme of research engagement including public lectures and festivals. Frequent sustainability content.	
Education	Cruickshank Botanic Garden https://www.abdn.ac.uk/botanic-garden/	Awareness Raising	Lead	n/a			Cruickshank Charitable Trust	Exists to promote an appreciation of plant biodiversity and an understanding of their role in the natural world.	

OTHER NOTABLE REPORTABLE ACTIVITY

Q5) Please detail key actions relating to Food and Drink, Biodiversity, Water, Procurement and Resource Use in the table below.				
Key Action Type	**Key Action Description**	**Organisation's Project Role**	**Impacts**	**Comments**

Q6) Please use the text box below to detail further climate change related activity that is not noted elsewhere within this reporting template