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RECOMMENDED – WIDER INFLUENCE

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PART 1: PROFILE OF REPORTING BODY

1(a) Name of reporting body
University of Glasgow

1(b) Type of body
Educational Institutions

1(c) Highest number of full-time equivalent staff in the body during the report year
5693

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 | 441074 | We compare our carbon efficiency, to that of other Russell Group comparators by dividing the carbon emissions relating to our gas and electricity consumption by Gross Internal Area (GIA) in m2. |

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

| Budget | Budget Comments |
|--------------|---|
| 607843000.00 | The income listed above is the consolidated income for the University and all of its subsidiaries. In addition to the numbers of staff listed above we also have 25,041 FTE students |

1(f) Report year
Specify the report year.

| Report Year | Report Year Comments |
|-------------|----------------------|
| Academic | |

1(g) Context
Provide a summary of the body's nature and functions that are relevant to climate change reporting.

The University of Glasgow has a well developed system for determining and reporting our organisational carbon emissions. Our Gilmorehill campus falls under the auspices of the EU ETS, while the remainder of our organisation falls under the auspices of the CRC Energy Efficiency Scheme. We use TEAM Sigma energy management software to collate information for both of these data returns. In addition, we report various other sources of carbon emissions (water, waste, transport [business travel and staff/student commuting]) to HESA on an annual basis.

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.

UofG has developed a sustainability strategy and action plan, that was approved by University Court in summer 2016. The University is striving to adopt a whole-of-institution approach to sustainability management.

Progress in this area is overseen by a sustainability working group, which has the following remit:

- To oversee implementation of the University's Sustainability Strategy and Action Plan
- To raise awareness of and engagement with the Strategy and Action Plan across the University community
- To make recommendations about future amendments or revisions to the Strategy and Action Plan
- To enhance the University's reputation and profile as an institution that is committed to the sustainability agenda
- To provide reports periodically to SMG and to Court via the Estates Committee.

and the following membership:

- Two co-chairs, one of whom is the Chief Operating Officer
- College Sustainability Champions
- University Services Sustainability Champion
- Two representatives of the SRC
- One senior officer from Estates & Commercial Services
- Head of Procurement

In attendance:

- Sustainable Environment Officer
- Communications and Public Affairs Officer (as required)

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 action is managed and delivered via our Sustainability Action Plan, which ensures that we secure the cooperation of relevant staff experts in addressing actions and targets

Delivery Champions have been appointed for each of the following areas:

- Sustainable Procurement
- Sustainable Food
- Carbon efficiency of the estate
- Efficient utilization of space
- Water efficiency
- Sustainable Construction
- Waste reduction, re-use and recycling
- Biodiversity
- Sustainable Transport

In addition the Delivery champions must ensure that robust reporting systems are put in place so that progress may be monitored, and reported to the Sustainability Working Group.

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| 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 |
| <p>SUSTAINABLE SPACES We want to do justice to the beauty, legacy and utility of our surrounding areas. We will:</p> <ul style="list-style-type: none"> -Respect and reflect the heritage, environment and communities around us. -Hold ourselves to rigorous standards of environmentally friendly and socially responsible construction. -Operate in a sustainable and environmentally and socially responsible manner. <p>In addition we aspire to having an organisational carbon footprint of 39kT by 2020 (Note: This target was set at a time when the scope of our footprint did not include Scope 3 emissions from staff/student commuting and business travel).</p> | Inspiring People; Changing the World. University Strategy 2015 - 2020. | http://www.gla.ac.uk/media/media_410447_en.pdf |

| 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. |
| <p>The University's Carbon Management Plan (CMP) was produced in 2009, to cover the 5 year period from 2009-2014. http://www.gla.ac.uk/media/media_192265_en.pdf</p> <p>The CMP is in need of revision.</p> <p>Current carbon reduction target The current University Strategy contains a target to reduce our annual carbon footprint to 39,000 ton CO2e by 2020. This target was set at a time when our annual carbon footprint was ~50,000 ton CO2e, and represented a desire to reduce emissions by ~20%. This target was also set at a time when the scope of the carbon footprint did not include emissions from either staff/student commuting or business travel and was prior to acquisition of the Western Infirmary site and approval of the Capital Plan.</p> <p>Progress Our carbon footprint for 14/15 was 71,058 ton CO2e and that for 15/16 was 69,591 ton CO2e; however, both of these figures include an extra ~20,000 ton CO2e per annum from the inclusion of staff/student commuting and business travel data in the footprint.</p> <p>Proposed revised target We are currently considering a revised annual carbon footprint target of 55,500 ton CO2e by 20/21. This is consistent with the original desire to reduce carbon emissions by 20% over the period, based on the 15/16 total, but includes the additional impact of including staff/student commuting and business travel emissions.</p> <p>Future carbon emissions A recent paper by the ARUP consultancy (Campus Extension Zero Carbon Options Appraisal) has projected what our annual carbon footprint might look like out to 2020/21, taking into account the revised capital plan for the WI development and the impact of future grid electricity decarbonisation. In the 'moderately challenging' scenario, where the level of grid decarbonisation is only 75% of that anticipated, the University's annual carbon footprint is likely to be in the region of 64,500 ton CO2e by 2020/21. This leaves an emissions gap of ~9,000 ton CO2e which would require to be closed in the interim period. These carbon savings would need to come from reducing gas/electricity consumption, as well as from travel-related sources.</p> |

| 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 | A formal climate change adaptation plan has yet to be developed. | n/a | n/a | During 2017, the University became a founding member of the Climate Ready Clyde initiative. We are currently developing a climate change adaptation plan. |
| Business travel | Strategic Transport and Travel Plan | http://www.gla.ac.uk/media/media_462432_en.pdf | 2016-2025 | |
| Staff Travel | Strategic Transport and Travel Plan | http://www.gla.ac.uk/media/media_462432_en.pdf | 2016-2025 | |

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| | | | | |
|--|--|---|----------------------|--|
| Energy efficiency | Carbon Management Plan | https://www.gla.ac.uk/media/media_192265_en.pdf | 2009-2014 | As discussed above, we are currently developing an Energy Strategy and an updated CMP, which should outline how 6,000 ton CO2e per annum are to be saved from reducing gas/electricity consumption by 20/21. Furthermore, effective implementation of both the Strategic Travel and Transport Plan and the Waste Management Strategy will be required in order to deliver savings of 3,000 ton CO2e per annum, by 20/21. |
| Fleet transport | Strategic Transport and Travel Plan | http://www.gla.ac.uk/media/media_462432_en.pdf | 2016-2025 | |
| Information and communication technology | IT Services; Strategic Plan to 2016/17 | https://www.gla.ac.uk/media/media_259493_en.pdf | 2012-2017 | The current strategic plan for IT services highlights the aspiration for a single, efficient data centre for the University, that could help deliver a significant reduction in carbon emissions. |
| Renewable energy | Carbon Management Plan | https://www.gla.ac.uk/media/media_192265_en.pdf | 2009-2014 | As discussed above, we are currently developing an Energy Strategy and an updated CMP, which should outline how 6,000 ton CO2e per annum are to be saved from reducing gas/electricity consumption by 20/21. Furthermore, effective implementation of both the Strategic Travel and Transport Plan and the Waste Management Strategy will be required in order to deliver savings of 3,000 ton CO2e per annum, by 20/21. |
| Sustainable/renewable heat | Carbon Management Plan | https://www.gla.ac.uk/media/media_192265_en.pdf | 2009-2014 | As discussed above, we are currently developing an Energy Strategy and an updated CMP, which should outline how 6,000 ton CO2e per annum are to be saved from reducing gas/electricity consumption by 20/21. Furthermore, effective implementation of both the Strategic Travel and Transport Plan and the Waste Management Strategy will be required in order to deliver savings of 3,000 ton CO2e per annum, by 20/21. |
| Waste management | Waste minimization and recycling policy | https://www.gla.ac.uk/media/media_142657_en.pdf | Not stated in policy | We have recently developed a new Waste Management Strategy and Action Plan for the University, which is awaiting approval by our Senior Management Team. As such, this new document is not yet in the public domain. |
| Water and sewerage | Carbon Management Plan | https://www.gla.ac.uk/media/media_192265_en.pdf | 2009-2014 | As discussed above, we are currently developing an Energy Strategy and an updated CMP, which should outline how 6,000 ton CO2e per annum are to be saved from reducing gas/electricity/water consumption by 20/21. Furthermore, effective implementation of both the Strategic Travel and Transport Plan and the Waste Management Strategy will be required in order to deliver savings of 3,000 ton CO2e per annum, by 20/21. |
| Land Use | We do not currently have a land use strategy in place. | n/a | n/a | We have recently developed a new Biodiversity Strategy and Action Plan for the University, which is awaiting approval by our Senior Management Team. As such, this new document is not yet in the public domain. |
| Other (state topic area covered in comments) | n/a | n/a | n/a | n/a |

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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.

- 1 - Develop an Energy Strategy for the University and an updated Carbon Management Plan.
- 2 - Develop a Biodiversity Action Plan for the University.
- 3 - Develop a climate change adaptation plan for the University and continue to play an active role in the Climate Ready Clyde partnership.
- 4 - Review the content of our sustainability webpages, update and move them to a central, corporate location on the University's website (in this regard we have just employed an environmental communications intern, recruited from within our student body).
- 5 - Maintain our recently awarded 'gold star status' (Summer '17) under the Chartered Institute of Procurement and Supply (CIPS) sustainable procurement review. Continue to increase the proportion of our contractors and suppliers that have undergone assessment via the CIPS Sustainability Index (CSI).

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.

In previous years we have used the RES tool for determining our carbon footprint; this year we have not done so. We already use the TEAM Sigma energy management software for recording electricity, gas and water consumption across our estate; these figures, along with data relating to fugitive emissions, waste and travel/transport have been entered into Section 3 below, in order to calculate our total carbon footprint for the academic year 2016/17.

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 Glasgow University Environmental Sustainability Team (GUEST) is a student-led university body that provides project-based work placement opportunities to students in areas such as energy conservation, recycling, biodiversity, sustainable food, sustainable travel, waste management, communications and student engagement. These projects not only play a vital role in the ongoing promotion of sustainability on campus, but also provide an opportunity for students to develop both professionally and personally, while contributing to the everyday functioning of the University.

Approximately 10 paid placements are available each year; students work for 12 hours per week over a period of 20 weeks. In addition GUEST also offers the opportunity for interns to work on its projects on a voluntary basis.

Our procurement team won a sustainable procurement award at the GoScotland Procurement Awards in October '17.

Our Hospitality Services Team recently achieved the Sustainable Restaurant Association's 2 star accreditation for their campus catering operation (Summer '17).

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 | 2014/15 | 15737 | 32343 | 15537 | 63617 | tCO2e | |
| Year 1 carbon footprint | 2015/16 | 18534 | 26799 | 24257 | 69590 | tCO2e | With respect to the previous year, Scope 1 emissions have increased as a result of the installation of a gas-fired CHP engine. Scope 2 emissions have decreased, in part, because we are now generating some of our own electricity via CHP and in part because of the decarbonisation of the national grid. Scope 3 emissions have increased, based on data from an updated staff/student travel survey and due to an enhanced ability to collect data relating to business travel. |
| Year 2 carbon footprint | 2016/17 | 20376 | 20526 | 23207 | 64109 | 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 |
|---------|--|---|---------|------------------|-------|-----------------------|-------------|-------------------|------------------------------------|
| 64109.2 | | Grid Electricity (generation) | Scope 2 | 56949866 | kWh | 0.35156 | kg CO2e/kWh | 20021.3 | non-residential electricity |
| | | Grid Electricity (transmission & distribution losses) | Scope 3 | 56949866 | kWh | 0.03287 | kg CO2e/kWh | 1871.9 | non-residential electricity |
| | | Natural Gas | Scope 1 | 101918309 | kWh | 0.1841639 89077374 | kg CO2e/kWh | 18769.7 | non-residential gas, including CHP |
| | | Water - Supply | Scope 3 | 290937 | m3 | 0.344 | kg CO2e/m3 | 100.1 | non-residential water |
| | | Water - Treatment | Scope 3 | 276390 | m3 | 0.708 | kg CO2e/m3 | 195.7 | non-residential water |

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| 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 |
| 64109.2 | | Biomass (Wood Pellets) | Scope 1 | 75 | tonnes | 59.45671 | kg CO2e/tonne | 4.5 | non-residential biomass |
| | | Fuel Oil | Scope 1 | 213431 | kWh | 0.2678917 20207764 | kg CO2e/kWh | 57.2 | non-residential heating oil |
| | | R410A | Scope 1 | 104.4 | kg | 2088 | kg CO2e/kg | 218.0 | |
| | | HFC-134a | Scope 1 | 5.6 | kg | 1430 | kg CO2e/kg | 8.0 | |
| | | R407C | Scope 1 | 143.82 | kg | 1774 | kg CO2e/kg | 255.1 | |
| | | R404a | Scope 1 | 19.02 | kg | 3922 | kg CO2e/kg | 74.6 | |
| | | Refuse Municipal to Landfill | Scope 3 | 909 | tonnes | 588.90625 7787832 | kg CO2e/tonne | 535.3 | |
| | | Mixed recycling | Scope 3 | 250.6 | tonnes | 21.76 | kg CO2e/tonne | 5.5 | |
| | | Mixed recycling | Scope 3 | 3.7 | tonnes | 21.76 | kg CO2e/tonne | 0.1 | cardboard and paper |
| | | Organic Food & Drink AD | Scope 3 | 49.32 | tonnes | 21.76 | kg CO2e/tonne | 1.1 | |
| | | Clinical Waste - Yellow Stream | Scope 3 | 60.31 | tonnes | 297 | kg CO2e/tonne | 17.9 | |
| | | WEEE (Mixed) Recycling | Scope 3 | 148.3 | tonnes | 21.76 | kg CO2e/tonne | 3.2 | |

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| 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 |
| 64109.2 | | Construction (Average) Recycling | Scope 3 | 396.83 | tonnes | 1.37 | kg CO2e/tonne | 0.5 | construction waste LTH |
| | | Refuse Commercial & Industrial to Landfill | Scope 3 | 8.73 | tonnes | 100.07286365479 | kg CO2e/tonne | 0.9 | construction waste LTH |
| | | Petrol (average biofuel blend) | Scope 1 | 6576 | litres | 2.19835360740471 | kg CO2e/litre | 14.5 | fleet |
| | | Gas Oil | Scope 1 | 26618 | litres | 2.95350526301928 | kg CO2e/litre | 78.6 | fleet |
| | | Diesel (average biofuel blend) | Scope 1 | 39816 | litres | 2.60016271124822 | kg CO2e/litre | 103.5 | fleet |
| | | Van - Class III (1.74 to 3.5 tonnes) Diesel | Scope 1 | 107238 | miles | 0.443621332917071 | kg CO2e/mile | 47.6 | fleet |
| | | Taxi (regular) | Scope 3 | 245251 | passenger km | 0.15617 | kg CO2e/passenger km | 38.3 | |
| | | Motorbike - Average | Scope 3 | 321799 | km | 0.11662 | kg CO2e/km | 37.5 | |
| | | Light rail and tram | Scope 3 | 2385902 | passenger km | 0.04446 | kg CO2e/passenger km | 106.1 | |
| | | Bus (local bus, not London) | Scope 3 | 18196790 | passenger km | 0.12259 | kg CO2e/passenger km | 2230.7 | |
| | | Average Car - Unknown Fuel | Scope 3 | 36586759 | km | 0.18242 | kg CO2e/km | 6674.2 | |
| | | Domestic flight (average passenger) | Scope 3 | 2684762 | passenger km | 0.26744 | kg CO2e/passenger km | 718.0 | |

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| Total | Comments – reason for difference between Q3a & 3b. | Emission source | Scope | Consumption data | Units | Emission factor | Units | Emissions (tCO2e) | Comments |
|---------|--|---|---------|------------------|--------------|-----------------------|----------------------|-------------------|---|
| 64109.2 | | Long-haul flights (average passenger) | Scope 3 | 5126500 | passenger km | 0.19745 | kg CO2e/passenger km | 1012.2 | |
| | | Short-haul flights (Economy class) | Scope 3 | 1131396 | passenger km | 0.15845 | kg CO2e/passenger km | 179.3 | |
| | | Short-haul flights (Business class) | Scope 3 | 28869 | passenger km | 0.23767 | kg CO2e/passenger km | 6.9 | |
| | | Long-haul flights (Business class) | Scope 3 | 6114775 | passenger km | 0.43843 | kg CO2e/passenger km | 2680.9 | |
| | | Long-haul flights (Economy Class) | Scope 3 | 28166686 | passenger km | 0.15119 | kg CO2e/passenger km | 4258.5 | |
| | | Long-haul flights (Premium economy class) | Scope 3 | 1091315 | passenger km | 0.24189 | kg CO2e/passenger km | 264.0 | |
| | | Ferry (Foot passenger) | Scope 3 | 3022 | passenger km | 0.019275 | kg CO2e/passenger km | 0.1 | |
| | | Rail (International rail) | Scope 3 | 125631 | passenger km | 0.01225 | kg CO2e/passenger km | 1.5 | |
| | | Rail (National rail) | Scope 3 | 47319138 | passenger km | 0.04678 | kg CO2e/passenger km | 2213.6 | |
| | | Grid Electricity (generation) | Scope 2 | 1436500 | kWh | 0.35156 | kg CO2e/kWh | 505.0 | residential electricity consumption - note estimated consumption data from cost data |
| | | Grid Electricity (transmission & distribution losses) | Scope 3 | 1436500 | kWh | 0.03287 | kg CO2e/kWh | 47.2 | residential electricity consumption - note estimated consumption data from cost data |
| | | Natural Gas | Scope 1 | 4044649 | kWh | 0.1841639 89077374 | kg CO2e/kWh | 744.9 | residential gas consumption - note estimated consumption data from cost data |
| | | Water - Supply | Scope 3 | 2856 | m3 | 0.344 | kg CO2e/m3 | 1.0 | residential water consumption - note estimated consumption data from cost data |
| | | Water - Treatment | Scope 3 | 2713 | m3 | 0.708 | kg CO2e/m3 | 1.9 | residential water consumption - note estimated consumption data from cost data |
| | | Organic Garden Waste Composting | Scope 3 | 452.97 | tonnes | 6 | kg CO2e/tonne | 2.7 | Large animal manure and bedding from Veterinary Hospital - this is sent for composting. |

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| 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. | | | | | |
| Technology | Renewable Electricity | | Renewable Heat | | Comments |
| | Total consumed by the organisation (kWh) | Total exported (kWh) | Total consumed by the organisation (kWh) | Total exported (kWh) | |
| Biomass | | | 271584 | 0 | Biomass boiler in Stoker Building |
| Solar PV | | | | | Solar panels installed on GLASS building; generation data not available for the reporting year. |
| Solar PV | | | | | Solar panels on Stoker building; generation data not available for the reporting year. |

| 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 |
| Carbon Reduction Target | absolute | 39000 | Other (specify in comments) | Other (please specify in comments) | | 2015/16 | | Other (specify in comments) | 2020/21 | We aim to reduce our carbon footprint to 39000 ton CO2e by 2020. The target was set at a time when the scope of our footprint did not include Scope 3 emissions from staff/student commuting and business travel. |

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| 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 |
| 133.94 | Electricity | 133.94 | combined savings from the three projects listed in Table 3f, below. |
| | Natural gas | | |
| | Other heating fuels | | |
| | Waste | | |
| | Water and sewerage | | |
| | 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 | 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 |
| Bower building + Kelvin Building Lab Lighting | Salix | 2017/18 | Estimated | 97000 | | | Grid Electricity | 41.77 | 12179.20 | | |
| LED Lighting at Lilybank Gardens | Salix | 2017/18 | Estimated | 184000 | | | Grid Electricity | 70.83 | 20492.42 | | |
| Garscube LED Lighting Upgrades 2017 | Salix | 2017/18 | Estimated | 56350 | | | Grid Electricity | 21.34 | 6173.96 | | |

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| 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 |
| -5300.00 | Estate changes | | Increase | It should be noted that GIA has increased with respect to 15/16 reporting year. This is because the figure reported last year was in fact total internal area of rooms, and not GIA |
| | Service provision | | | |
| | Staff numbers | | Increase | It should be noted that both staff and student numbers are increased with respect to 15/16 reporting year |
| | Other (specify in comments) | 6300 | Decrease | due to reduced grid electricity consumption post CHP installation and grid decarbonisation |
| | Other (specify in comments) | 1000 | Decrease | emissions due to reduced business travel (flights) |
| | Other (specify in comments) | 2000 | Increase | due to increased gas consumption during first full year of CHP operation |

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| 3h Anticipated annual carbon savings from all projects implemented by the body in the year ahead | | | |
|--|-----------------------------|--------|-----------|
| Total | Source | Saving | Comments |
| 0.00 | Electricity | | 0 unknown |
| | Natural gas | | 0 unknown |
| | Other heating fuels | | 0 unknown |
| | Waste | | 0 unknown |
| | Water and sewerage | | 0 unknown |
| | Business Travel | | 0 unknown |
| | Fleet transport | | 0 unknown |
| | Other (specify in comments) | | 0 unknown |

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| 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) | | | |
| | 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 |
|-------|---|
| 2566 | Based on the total reported last year (2432 ton), plus savings associated with projects in Table 3f |

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.

n/a

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).

The University is in the process of assessing current and future climate-related risks, and developing a climate change adaptation plan.

We are keen to build alliances with other organisations across the region, in order that wide scale resilience may be effectively developed. It is clear that an inward looking approach, with something like Climate Change Adaptation is only going to be of limited use, when you begin to consider the various interdependencies that very large organisations such as ourselves rely on, in order to function effectively (e.g. utilities, public transport etc).

In this regard, over the past year the University has:

- Participated in the Climate Ready Clyde Accelerator Programme.
- Become a founding member of the Climate Ready Clyde Initiative, with the University represented both on the CRC Board, and on the 'Risks and Opportunities' Subgroup.
- Supported the work of Glasgow City Council's Adaptation Task Force.

The Climate Ready Clyde partnership is currently assessing the climate change risks and opportunities facing Glasgow City Region through to the 2080s, under a high emissions climate change scenario.

<https://www.sniffer.org.uk/climatereadyclyde>

This stage of work is due to be completed in March/April 2018, and will help us identify the relevant climate change risks or opportunities for the University of Glasgow.

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.

As stated above, the University is currently in the process of developing a Climate Change Adaptation Plan; we hope that this will also be informed by the output from the Climate Ready Clyde 'Risks and Opportunities' Subgroup over the course of the coming year.

Subsequent implementation of the Climate Change Adaptation Plan will be overseen by the Sustainability Working Group (See Section 2a).

It should be noted that one of the key principles highlighted in the Gilmorehill campus redevelopment framework (http://www.gla.ac.uk/media/media_343419_en.pdf) is to create a campus that is demonstrably sustainable. With regard to Climate Change Adaptation, it is proposed that any future development:

'considers the impact on and resilience of the building stock to the predicted changes in climate. This will include: flexibility and adaptability for long term changes in use; ability to mitigate increased risk of overheating to occupants and increased demand for cooling; potential threats to infrastructure due to flooding with implementation of SUDS on the campus'

Furthermore, the Masterplan and associated Sustainability Statement for the Gilmorehill campus redevelopment also places a strong emphasis on Climate Change Adaptation and Resilience.

In addition, the Climate Ready Clyde board, subgroups and networks will provide a forum for the University to engage with other stakeholders to understand the collective climate risks for the City Region. Doing so will also enable dialogue between our organisation and others about the wider consequences of one organisation's climate risks on other organisations (e.g. disruptions to transport network affecting the ability for employees to get to work).

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| |
|--|
| 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. |
| <p>The infrastructure design for our Gilmorehill campus redevelopment is currently being developed with sustainable urban drainage in mind</p> <p>The drainage scheme proposed for the masterplan has been designed to cope with an increase in peak flow rates due to climate change in line with best practice. A variety of Sustainable Urban Drainage Systems (SuDS) are proposed to mitigate flooding, attenuate surface water and to assist with natural filtration. These include tree pits with small cellular storage; permeable paving; a filter blanket; a swale or filter trench; and a SuDS basin. Moreover, the surface water strategy for the masterplan has been designed to include as many green features providing attenuation and treatment as practicable. Where possible, it is intended that all surface water will be treated at source to the necessary standards, and then attenuated to greenfield runoff rates for the 1:30 year event before discharge. It is hoped that surface water will be taken out of the combined sewer and discharged to the River Kelvin, thus reducing reliance upon the conventional combined sewer system. SuDS are not only proposed for the WI site, but potential also exists to incorporate SuDS and store surface water within the existing areas and buildings of the campus to the north of University Avenue.</p> <p>It should also be noted that the University is now hosting the new National Centre for Resilience (NCR) on its Dumfries campus which will be Scotland's first resilience 'centre of excellence' focusing on natural hazards and how Scotland can become more resilient towards them. It will help improve our understanding of the impact of natural hazards, such as extreme weather events on communities, and provide support to them including practical tools kits, learning and exercise opportunities. The centre will be a national resource helping with, anticipating, and reducing problems from developing in the first place and, where they do emerge, enabling individuals and communities to recover quickly.</p> <p>Through it's membership of Climate Ready Clyde, the University is working to create consensus around the need to adapt in the City Region. The University has also taken part in the Climate Ready Clyde accelerator programme for staff across the City Region in partnership with Adaptation Scotland. In addition, we took part in a working group which contributed to the development of an LCLIP for Glasgow.</p> |

| 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 | N1-2 | Our School of Geographical and Earth Sciences (Prof. James Hansom and Dr. Larissa Naylor) has carried out a wide range of research relating to the effects of climate change and impacts on the natural environment over the past year. Perhaps most important to highlight is the publication and launch of the game-changing 'Dynamic Coast' website (Scotland's National Coastal Change Assessment (NCCA), which contains online interactive maps of erosion affected areas and assets (www.dynamiccoast.com). It is the first national overview of coastal erosion and flooding that now forms the evidence-base for Scottish Government and local authorities' coastal strategy. Past changes are projected forward to identify those lengths of coast and assets (roads, rail, houses etc.) behind the coast that are expected to be affected by future erosion. These are assessed and quantified in detail to allow evidence-based adaptational action to proceed in planning terms. | |

Hansom, J.D., Fitton, J.M., and Rennie, A.F. (2017) Dynamic Coast - National Coastal Change Assessment: National Overview, CRW2014/2

The NCCA was also mentioned several times in source documents for the Scottish Climate Change Adaptation Programme and in the Cabinet Secretary's speech at the European Climate Change Adaptation (ECCA) conference in Glasgow in mid-2017.

Other relevant published research in this area includes the following;

Stockamp, J., Bishop, P., Li, Z., Petrie, E.J., Hansom, J.D. & Rennie, A.F. 2016. State of the art in studies of Glacial Isostatic Adjustment for the British Isles: a literature review. Earth and Environmental Science Transactions of the Royal Society of Edinburgh, 1-26. doi:10.1017/S1755691016000074

(Land uplift needs to be accounted for in order to establish the true sea level rise rate for adaptation planning)

Fitton, J.M., Hansom, J.D. & Rennie, A.F. 2016. A National coastal erosion susceptibility model for Scotland. Ocean and Coastal Management, 132, 80-89. doi. org/10.1016/j.ocecoaman.2016.08.018

(Natural erosion susceptibility is key to identifying problem areas and allowing authorities to adopt mitigation and adaptation strategies and actions to reduce risk)

Etienne, S., Hansom, J.D. and Forbes, D.L. 2016. Géomorphologie des côtes rocheuses Arctiques. In Joly, D. (ed) L'Arctique en Mutation. Les Memoires du Laboratoire de Geomorphologie, Vol 46, Dinard, Chapitre 3, 39-64.

(How the Arctic coast is changing with climate change, sea level, reductions in sea ice and increases in permafrost melt, all with impacts of the local communities)

Hansom, J.D., Maxwell, F., Naylor, L. and Piedra M. 2017 Impacts of Sea Level Rise and Storm Surges due to Climate Change in the Firth of Clyde. Scottish Natural Heritage. Commissioned Research Report No.89

(Identifies rates of climate-driven change expected in the Firth of Clyde and identifies areas where adaptation actions may prove more sustainable than the engineered alternatives)

Hansom, J.D., Fitton, J.M., and Rennie, A.F. (2017) Dynamic Coast - National Coastal Change Assessment: Coastal

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| | | | | |
|---|----|---------------------|--|--|
| | | | <p>Erosion Policy Context, CRW2014/2.</p> <p>(A detailed review of the existing policy instruments in place relating to coastal erosion and flooding)</p> <p>Brown, K., Naylor, L. A. and Quinn, T. (2017) Making space for proactive adaptation of rapidly changing coasts: a windows of opportunity approach. Sustainability, 9(8), 1408. (doi:10.3390/su9081408)</p> <p>Fazey, I. et al. (2017) Transformation in a changing climate: a research agenda. Climate and Development, (doi:10.1080/17565529.2017.1301864) (Early Online Publication)</p> <p>Naylor, L. A., Spencer, T., Lane, S. N., Darby, S. E., Magilligan, F. J., Macklin, M. G. and Möller, I. (2017) Stormy Geomorphology: geomorphic contributions in an age of climate extremes. Earth Surface Processes and Landforms, 42(1), pp. 166-190. (doi:10.1002/esp.4062)</p> <p>Spencer, T., Naylor, L., Lane, S., Darby, S., Macklin, M., Magilligan, F. and Möller, I. (2017) Stormy geomorphology: an introduction to the Special Issue. Earth Surface Processes and Landforms, 42(1), pp. 238-241. (doi:10.1002/esp.4065)</p> <p>Finally, our academic staff were also involved in the development of the 'Edinburgh Adapts' action plan that was published in December of 2016, and took part in a NERC public engagement pilot project with Edinburgh Living Landscapes which has a video associated with it.</p> <p>https://www.adaptationscotland.org.uk/application/files/5514/7940/1819/Edinburgh_Adapts_Adaptation_Action_Plan_Final_For_Web.pdf</p> <p>https://edinburghlivinglandscape.org.uk/project/grey-to-green/</p> | |
| Support a healthy and diverse natural environment with capacity to adapt. | N2 | Natural Environment | n/a to University of Glasgow | |

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| 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 |
| Sustain and enhance the benefits, goods and services that the natural environment provides. | N3 | Natural Environment | | n/a to University of Glasgow | |
| Understand the effects of climate change and their impacts on buildings and infrastructure networks. | B1 | Buildings and infrastructure networks | | n/a to University of Glasgow | |
| Provide the knowledge, skills and tools to manage climate change impacts on buildings and infrastructure. | B2 | Buildings and infrastructure networks | | n/a to University of Glasgow | |
| Increase the resilience of buildings and infrastructure networks to sustain and enhance the benefits and services provided. | B3 | Buildings and infrastructure networks | | n/a to University of Glasgow | |
| Understand the effects of climate change and their impacts on people, homes and communities. | S1 | Society | | n/a to University of Glasgow | |

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| 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 awareness of the impacts of climate change to enable people to adapt to future extreme weather events. | S2 | Society | | n/a to University of Glasgow | |
| Support our health services and emergency responders to enable them to respond effectively to the increased pressures associated with a changing climate. | S3 | Society | | n/a to University of Glasgow | |

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).

As discussed in previous sections, we are currently developing our first Climate Change Adaptation Plan. Once this plan is in place, the intention would be to review it on a regular basis.

As noted earlier, we are one of the founding members of the Climate Ready Clyde Initiative, with the University represented both on the CRC Board, and on the 'Risks and Opportunities' Subgroup.

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).

We currently have no formal arrangements in place to monitor and evaluate the impact of adaptation actions.

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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.

Over the course of the coming year it is our aim to:

- 1- continue to support the work of the Climate Ready Clyde initiative, with Board level representation from the University
- 2- better understand the risks and opportunities that Climate Change will create for the City of Glasgow (via our membership of the Climate Ready Clyde 'Risks and Opportunities' Subgroup)
- 3- develop a Climate Change Adaptation Plan for UofG
- 4- develop climate change adaptation content for our sustainability webpages
- 5- ensure that the redevelopment of the Gilmorehill campus progresses with resilience to future climate impacts 'built in'.

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.

n/a

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 of Glasgow Procurement Policy clearly describes the role of procurement as follows:

“We will procure all goods and services with high ethical standard and focussed on social, economic and environmental considerations by applying principles of sustainable procurement”
The policy is also publically communicated through the University’s Procurement Website.

This demonstrates acting sustainably in alignment to the Public Bodies Climate Change Duties guidance document. Sustainability is one of the eight core values that are fully embedded in all aspects of our service. These are Compliance to regulation, Sustainable Procurement, Effectiveness & Efficiency, Risk Management, Performance, Brand Professionalism, Stakeholder Engagement and Brand / Professionalism.

All tendering activity carried out by the University includes the Sustainable Procurement Programme, our “Supply Chain Code of Conduct.” This covers 3 key areas across Social, Ethical & Economic and Environmental. Sustainable Procurement questions form part of the assessment criteria, which covers areas of Supply Chain Code of Conduct, community benefits, supported business; workforce matters, working with SMEs and driving compliance to the Modern Slavery Act and environmental considerations as appropriate to the buying need.

The Procurement Policy also includes guidance on each stage of the procurement journey. This includes assessment of environmental sustainability and social factors including community benefits requirements at start of procurement process for data gathering, tender strategy and also in further stages such as tender criteria and ongoing supplier relationship management.

The University has updated its Procurement policy in line with the Procurement Reform Act. Aspects such as impact of contract to local community, environment, promoting use of SME and supported businesses are considered before conducting a regulated procurement. The University publishes its Policy on disposal of assets including Electronic, IT and Electrical Equipment on its website and this policy is included in tender documentation.

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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.

Procurement Policy and Procurement Strategy includes value for money at the heart of all procurement activity conducted by the University and whole life costing methodology is adopted in all tenders. This is in compliance to Public Bodies Climate Change Duties guidance as per Climate Change (Scotland) Act 2009

The University's Sustainability Strategy is supported by the Sustainability Governance Committee and executed through Sustainability Delivery Boards which includes Sustainability Action Plan. As a member of this Board, Procurement is focussed on ensuring that our key supply chain partners are delivering value in the areas of community benefits, supported business; workforce matters, working with SMEs and driving compliance to the Modern Slavery Act. The Procurement Strategy is committed to delivering our Sustainable Procurement Objectives. The University has achieved the Chartered Institute of Procurement and Supply (CIPS) Sustainable Procurement Review GOLD award which is designed in alignment to the Scottish Government's Flexible Framework and is an external assessment process.

The University has set a robust "sustainability test" for its supply chain. The University of Glasgow has adopted a Supply Chain Code of Conduct document in alignment with the sustainable procurement programme led by Advanced Procurement for Universities and Colleges (APUC). The code of conduct is included in tendering activity and as compliance criteria for suppliers. Supplier's performance against the environmental, social, ethical and economic criteria is assessed through the Chartered Institute of Procurement and Supply (CIPS) Sustainability Index (CSI). The Index allows suppliers to obtain a rating of their performance CIPS Sustainability Index (CIPS-SI) in the areas of Economic, Social and Environmental sustainability.

The University has adopted use of Marrakech approach for categorisation of goods, services and works to identify sustainability risks within its supply chain. DEFRA tools are applied to further analyse the sustainability risks, and high risk suppliers are also measured and monitored through CIPS CSI as described above. Examples of high risk areas identified are Construction, Utilities, IT, Travel, Food, Waste Management

The University's target for FY16-17 was 50 suppliers, identified as high sustainability risk, to be CSI rated. The University currently has:

79 Suppliers with published CSI rating (of which, 53 were identified as high sustainable risk)

9 in process of assessment

1 registered to start assessment

Further suppliers are being identified continually through the categorisation process.

The CIPS CSI assessment includes detailed environmental questions (examples list below) and clearly identifies improvement actions where a low score is achieved.

- Has your organisation been successfully prosecuted for a breach of any environmental Laws
- Has your organisations operations ever been served with any enforcement notices by the UK Environment Agency or Environmental Protection Agency or Natural resources Agency in respect of your non-compliance of Environmental Law?
- Does your organisation embed sustainability principles such as eco design, life cycle thinking, into its product / service development process
- Does your organisation measure and report its greenhouse gas emissions? If yes give your latest measurements/reports
- Does your organisation set improvement targets to reduce your businesses greenhouse gas emissions under Scopes 1, 2 and 3? if Yes give details including time periods
- In respect of your organisations overall energy usage do you measure and report by energy source (ie. gas, electricity, oil, other) set targets for year on year reduction
- Do you make direct efforts to include/increase the use of renewables/ waste heat / energy from waste/cogeneration as alternative sources of energy within your organisation
- Does your organisation have a written Waste Management policy which quantifies and monitors your organisation's direct waste production and effective disposal including the promotion of reduction, reuse and recycling where possible
- Does your organisation measure ,report and set targets to systematically reduce or eliminate air, water and land pollution in your operations
- Does your organisation set annual targets to reduce its overall water usage?
- Does your organisation have a process in place to engage with / encourage your suppliers to reduce their environmental impact in the following areas: a) Carbon /energy reduction b) Waste and water management c) Sustainable sourcing
- Does your organisation have a process in place to reduce the level of packaging in products you produce and the environmental impact created by the packaging, handling and transportation of your sourced materials

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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.

In addition to the above, the University's Supplier Relationship Management programme used as a contract management mechanism includes sustainability as one of the key performance indicators of realised benefits of the contract.

Procurement Office team members have attended various sustainability training sessions, most recently this has included the Scottish Govt Reform Act training and APUC Reform Act training. Sustainability objectives are also embedded as an internal performance measure and also form part of Procurement Category Managers individual objectives in the Annual Performance and Development Review (P&DR).

Food - The University's Hospitality Team works with its food suppliers to maximise the proportion of their produce sourced sustainably. For instance KPIs have been implemented with key suppliers to measure the proportion of produce locally sourced. For instance Butcher meat is 100% Scottish produce, Poultry 100% UK and Bakery 100% UK.

Travel - Procurement office engage in quarterly performance reviews with its two nominated travel providers. Sustainability is part of the KPIs of these contracts and the travel providers report on sustainability items such as carbon usage and offset.

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.

We participate in both the EU ETS and the CRC Energy Efficiency Scheme. Thus Scope 1 and 2 emissions from gas and electricity consumption are regularly audited/validated externally. Emissions from Scope 3 sources are compared to those submitted previously and sense-checked through discussion with relevant University Officers.

6(b) Peer validation process

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

There is currently no peer validation process in place.

6(c) External validation process

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

The University participates in both the EU ETS and the CRC Energy Efficiency Scheme. Thus the recording of both electricity and gas consumption across our estate is regularly audited/validated externally. In the case of the EU-ETS, auditing is carried out by Lloyd's Register.

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

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 |
|----------------|------------------------|------------|
| Stewart Miller | Sustainability Officer | 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 |
|--------|------|------|------|------|------|------|------|------|------|-------|------|-------|----------|
| | | | | | | | | | | 71058 | | tCO2e | |

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 implementation | Year that the policy / action will be fully implemented | Annual CO2 saving once fully implemented (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 | Board Member of Climate Ready Clyde Initiative | Partnership working of climate change or sustainability | Participant | Sniffer | | East Dunbartonshire Council West Dunbartonshire Council Glasgow City Council North Lanarkshire Council South Lanarkshire Council East Renfrewshire Council SPT Transport Scotland University of Glasgow University of Strathclyde NHS Greater Glasgow and Clyde | | Method statement on climate risk and opportunity assessment Draft list of climate risks and opportunities for Glasgow City Region Data, evidence and outputs from risk assessment process | We are investing £7,250 + VAT p.a. into the partnership. |

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