

MINUTES

MINUTES OF THE MEETING OF THE ENVIRONMENT COMMITTEE HELD IN THE DOMUS ROOM AT 14:00 ON WEDNESDAY 5 MAY 2022

<p>Present: Prof Andrew Balmford (Chair); Joey Bream (Research Student – Carbon Footprint); Dr Jo Costin (Secretary); Kate Hargreaves (Head Gardener); Deborah Hoy (Estates Director); Haley Huang (UCS Rep 2022-23); and Dr André Cabrera Serrenho (CRA Rep).</p>		
Item (a)	Summary (b)	Action (c)
1 Apologies for Absence	Lizzie Ashworth (Conference and Marketing Associate); Lee Corke (Catering Manager); David Ewing Dr William Foster (Fellow); Prof Andrew Friend (Fellow); Jackie Searle (Accommodation Manager); and Tereza Zoumpalova (Clare Goes Green)	
2 Declarations of Interest	There were no declarations of interest.	
3 Minutes and Matters Arising	<p>Minutes: The minutes of the last meeting were agreed, with one amendment.</p> <p>New Staff Representation: Jo Costin to follow up with William Foster about the new staff representative.</p>	JC
4 Carbon Zero Routemap and Carbon Footprint	<p>Element Energy</p> <p>Overview: The report from Element Energy was circulated prior to the meeting. This covered emissions from energy use only. There will be a meeting with Element Energy on Monday afternoon and members of the committee were invited to attend. The overall conclusion was that it may be possible to hit a 2038 Net Zero target, but that 75% reduction by 2030 would be extremely tough, although a scenario was presented involving radical action in Old Court.</p> <p>Old Court: Generally, Old Court would be the biggest challenge, due to the nature of the building, the lack of space for Ground Source on College land on the town side of the River, and the new boilers. There is potential to install a Water Source Heat Pump to take heat from the Cam, and discussions are under way with other Colleges, but it was unlikely to have this by 2030. Old Court accounts for around 22% of emissions, so 75% reduction would not be possible without this.</p> <p>Colony: The Colony accounts for 20% of emissions, and additional information on the Colony strategy was requested.</p> <p>Solutions: It was agreed that the hydrogen solution should be avoided. A Ground Source Heat Pump was generally better over a 100 year period, as the groundworks lasted a lot longer than the equipment and the efficiency was better. There was no realistic payback period.</p> <p>Sensitivity of Results to Energy Cost Fluctuations: To be confirmed with Element Energy.</p>	

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	<p>Cost of Trajectories: Trajectories not meeting the targets should include offset costs. A reasonable carbon offsetting cost was £70 - £100 per tonne of CO₂e, though this may rise considerably.</p> <p>Target Date: The 2030 target date was from the University, on a study done 3-4 years ago. The preference was for an achievable target rather than an overambitious one. The 2038 target would be difficult to achieve, and the national 2050 target was already very ambitious. To be discussed further at the next Environment Committee, with a possibility of meeting over the summer.</p> <p>Memorial Court Heating Experiment</p> <p>Overview: Joey Bream’s research project on the College’s carbon footprint covers gas, electricity, food use, waste, fertiliser, and other imported items. In an average year, the College produces 2,500 tonnes of emissions. Gas accounts for 50% of the assessed emissions, mainly for heating. Of the gas used in all sites, Memorial Court accounts for half of this, meaning that gas consumption in Memorial Court accounts for 25% of Clare’s assessed emissions.</p> <p>Project: Jo read the sub meters in 4 of the main boiler rooms, and the settings were changed in PQR to a lower flow temperature. This simulated the flow temperature that would be experienced with an Air Source or Ground Source Heat Pump.</p> <p>Results: The project had very promising results. Although the heating was run for a longer period, gas consumption in PQR dropped by ~10%, which was a surprising outcome, and suggests a possibility of lowering emissions by several percent across the whole College. Although not run in the middle of Winter, it also suggests that the existing infrastructure may be able to support the use of an Air Source or Ground Source Heat Pump without changing all the radiators. More data are needed, but this was a really important and impactful piece of work and Joey was congratulated on the project.</p>	
<p style="text-align: center;">5 Environment Committee Webpages</p>	<p>The College is getting a new website shortly, and there will be additional space for the Environmental pages. The website will need:</p> <ul style="list-style-type: none"> • Externally focussed landing page – sales pitch for the College, aimed at future students • Information pages – various pages for different aspects of sustainability including a link to iRecord. • Images <p>Jo to circulate template items.</p>	<p style="text-align: center;">JC</p>
<p style="text-align: center;">6 Green Impact Update</p>	<p>College’s Workbook: The College workbook was submitted on Friday 29 April, with 79 out of 101 actions completed (382 out of 509 points). The audit will take place on Wednesday 11 May. Joey Bream has been nominated for a Student Leadership Award for his work on the College’s Carbon Footprint and the Memorial Court heating experiment.</p> <p>Excellence Project: The Excellence Project submission deadline is 13 May, and the final project report is in progress. The project was not as successful as hoped owing to the impact of Covid and meter data issues outside of the College’s control. However, there were still valuable results in identifying communication methods and how much time and effort various methods needed.</p>	

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	<p>Next Year: An initial launch meeting for next year’s Green Impact to take place during the summer vacation.</p> <p>[Results - Post Meeting Note]: The College has achieved a Gold College’s Award. The Excellence Project was submitted, but not awarded.</p>	
<p>7 UCS Update</p>	<p>Handover: Some information on student-led initiatives were not handed over. Most of the information is available on Moodle, so Jo will give Haley access.</p> <p>Michaelmas: Most of the initiatives need to start in Michaelmas. This includes the ‘Staircase Competition’, run in conjunction with the Housekeeping Department and which has been successful in previous years.</p> <p>Fresher’s Handbook & Talks: Important to consider what goes in these, including simple actions like using radiator valves and recycling.</p> <p>Clare Garden Party: Following ‘Sustainaball’ guidance.</p> <p>Recycling Rates: Relatively static. Joey Bream to follow up with Jackie Searle on arranging a talk from Amey Cespa for early in Michaelmas.</p> <p>Green Week: Clothes swap currently ongoing.</p> <p>Student Participation: Generally lower participation, across all areas of the College.</p> <p>Shared Items: Gown exchange and inventory for the UCS underway. The JCR was also looking into having a stash of items for parties etc that would be stored in I Basement and could be requested, rather than people buying individually.</p> <p>Clare Goes Green: Tereza Zoumpalova was thanked for her support.</p>	<p>JC</p> <p>HH</p> <p>HH</p> <p>HH</p> <p>JB/JS/AB</p>
<p>8 MCR Update</p>	<p>[David Ewing was unable to attend, but sent an update prior to the meeting.]</p> <p>MCR Rep: David was thanked for his support on the Committee.</p> <p>Dr Bike Event: The MCR will be running a Dr Bike event later in Easter term.</p>	
<p>9 Buildings</p>	<p>69 Alpha Road: The project for insulation and installation of an Air Source Heat Pump is out to tender.</p> <p>Braeside: This project has been submitted to planning. This is a second submission after issues were raised with the glazing, insulation, and dormers. Following a pre-app, the College hopes to receive permission for all sustainability elements. This project will include installation of an Air Source Heat Pump.</p> <p>EV Charging Points: A planning application has been submitted to install charging points on Thirkill Drive.</p> <p>Double Glazing Castle House: Intention to double glaze Castle House in two phases, owing to the cost. The project is slightly behind as it is not yet out to tender.</p> <p>Secondary Glazing Etheldreda: Installed in whole building.</p> <p>10 Year Programme: Generally looking to add all sustainability projects from the Element Energy report into the 10 year programme. Other elements include electric lawnmowers.</p> <p>Memorial Court Heating: Feasibility received for sustainable heating in Memorial Court. This was produced by Joel Gustaffson, who has done some consultancy work for the University, and indicates that Air</p>	<p>DH</p>

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	<p>Source or Ground Source Heat Pumps could provide heat for the site. There are some details to clarify around how much of the site could be supplied from Ground Source Heat Pumps.</p> <p>Washing Line: A new outside washing line has been installed at Clare St Regis, if successful a second will be added.</p> <p>Energy Audit: The Energy Audit was shared, this showed particular improvement in Etheldreda following the installation of secondary glazing and work carried out on the heating controls.</p>	
10 Gardens	<p>Wild Walk: Organised with Ed Turner on 23 June at 1:15 pm. Email has been circulated, and a reminder will go out nearer the time.</p> <p>Wild Areas: Additional strip added to Memorial Court lawn, and one inside Memorial Court. Grass is purposely being left long in parts of Thirkill Court.</p> <p>Allotment: Up and running, Clare Growers can be followed on Instagram.</p> <p>Sustainability Information: Louise Bacon is collating biodiversity information across Colleges.</p> <p>Ladybirds: Jonathan Shanklin visited Clare with a group and found lots of ladybird species in Memorial Court, including some rare species.</p>	KH
11 AOB	<p>Climate League of Oxford and Cambridge: Clare currently ranked near the middle, though given good marks for the Environment Committee. It was hoped that the new website would improve the ranking by making information more easily available.</p>	JB
12 Dates for Next Meetings	<p>All meetings at 1:30pm, members of the committee are welcome to bring lunch.</p> <p>13 October 2022 19 January 2023 4 May 2022</p>	

Distribution:

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UCS President