Lowering a college’s environmental footprint: a practical guide

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Clare College
The next 40 minutes

1. Why bother?
2. Clare College
3. What we’ve done (and failed to do)
4. What next?
5. Lessons learnt
Why bother?

**carbon dioxide levels**

Why bother?

Water use

![Water use chart](chart.png)

- **Industrial**
- **Municipal**
- **Agriculture**

Shiklomanov 2000
Why bother?

loss of other species
Why bother?

Saving the planet

Saving money
(directly + in CRC tax)

Team building

Ellie Adams, Amy Carmichael, Will Cavert, Lee Corke, Jac Davies, Steve Elstub, Andrew Friend, Donald Hearn, Deborah Hoy, Alex Lewicka, Sam Ludford, Jamie Osborn, Mick Petty, Teal Phelps-Bondaroff, Fingal Plumpton, Sam Sanalitro, Jackie Searle, Clare Thacker, Nancy Wilson, Nigel Woodcock, David Williams, Paula Yardy Saban
Clare College

760 students + staff + fellows

3 main sites

Environment Committee - est. 2011, broad representation, good support

Environment Policy (2012)
Recycling and cleaning

produce enough rubbish to fill 1.5 Olympic swimming pools

costs ~£40K/y

recycling bins - in all student rooms (incl. graduates), gyp rooms, offices

helped by Council co-mingling system
Recycling and cleaning

changed accessibility - more recycling bins, emptied more often

library rubbish, 1 June 2015

library rubbish, 2 June 2015

pioneered uptake of British Heart Foundation’s red bag scheme
Recycling and cleaning

overall generation of waste not falling, but general waste ↓d 35%, and now recycle >50%

because charges for co-mingled waste lower, saves ~£8300/y
Recycling and cleaning

switched to less damaging cleaning products, and introduced systematic decanting and dilution saves ~£3000/y
Heating and lighting

commissioned survey of energy-saving options

delayed implementation until new Buildings Manager in post (2013)

automatic meter readers, radiator valves, boiler replacement, energy-efficient lighting, office timer switches, lower settings for washing machines, heating schedule ...
Heating and lighting
awareness raising + student staircase competition

Memorial Court electricity use ↓d 13% 2013-14 to 2015-16 – saving ~£6000/y
Heating and lighting

boiler replacements + insulation typically cut gas use by ~40%

eg Castle House refurbishment - saves ~£3000/y
Heating and lighting

College-wide, changes to heating have ↓d gas use by 13% since 2013-14

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<table>
<thead>
<tr>
<th>Annual Gas Use (kWh)</th>
<th>2013-14</th>
<th>2014-15</th>
<th>2015-16</th>
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<td>6,665,031</td>
<td>6,206,772</td>
<td>5,807,802</td>
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saves ~£65,000/y
Food and drink

introduced in-house water bottling – saves ~£2000/y

trying to lower food waste, through portion control (also ↓s costs)
**Food and drink**

state of major fisheries

European eel
CRITICALLY ENDANGERED
same as black rhino

Atlantic cod
VULNERABLE
same as African elephant

[Graph showing state of major fisheries, FAO 2014]
Food and drink
signed-up to Sustainable Fish Cities ...

... though could go further: Marine Stewardship Council

includes anchovy, prawns, salmon, tuna
Food and drink
vastly disproportionate footprint of beef + lamb

more emissions than flying
↓g meat vastly more effective than buying local or organic
... and cuts costs
Food and drink

termly Green Formal Halls

40% of meals sold in buttery

now vegetarian

but meat purchasing static at best

60% higher (and ↑g much faster) Jul-Sep: conferences
**Gardens**

switched to green bins for non-compostable organic waste: saves ~£7000/y on skips

**MCR biodiversity survey**

**May Ball**

2016 – Amy Carmichael ran first carbon-neutral May Ball

⇒ Sustain-a-Ball accreditation

**Travel**

commuting – fraught

flying – sensitive
Recognition
#2 in 2015 Green League Table (/21)

Cambridge University NUS Green Impact awards
Gold Award (2014, 2015, 2016)
Excellence Award (2016)
Student Leadership (winner 2015, winner 2016)
Environmental Improvement (runner up 2015, winner 2016)

Green Impact at the University of Cambridge
This year’s top teams!

Top College Teams:
1) 368 points Clare College
2) 341 points Downing College
3) 321 points Corpus Christi College
4) 257 points St Catharine’s College
5) 253 points Robinson College
Lessons learnt

support (fellows, staff + students)

ideas (incl. other colleges’)

commitment (key staff, some ££)

data