

# Clare Environment Committee Annual Report 2012-13

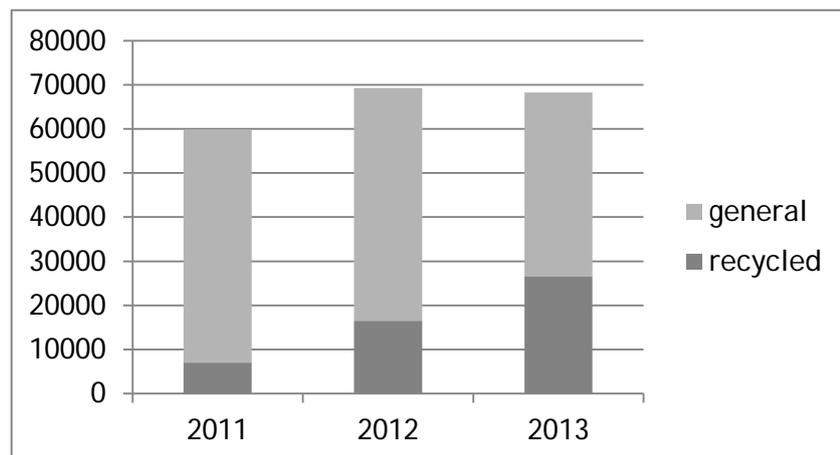
May 2013

The Environment Committee was set up in Michaelmas Term 2011. It aims to bring together expertise, energy and ideas from the staff, the students and the fellowship to help reduce the College's environmental footprint. So far its work has focused on three main areas. This report summarises progress over the past 12 months and plans for the coming year.

## Housekeeping

1. Accommodation Manager Jackie Searle and her team have put considerable effort into improving recycling rates around the College, taking advantage of council provision for co-mingled waste by putting special bins into most student rooms and making sure these are emptied frequently. The results are striking. Although the overall volume of waste increased from 2011 to 2013, the proportion which is recycled has grown from 12% to 39%. Because collection charges are lower for co-mingled waste than general waste, current charges are around 9% lower than they would have been (if volume had grown but recycling had not improved), saving College ~£2K/year. Next year will see continued efforts to improve recycling rates, especially in Old Court.

*Waste (in litres) produced each week by College. While total volume has increased by ~14% over two years, the proportion recycled has more than trebled.*



2. Jackie has also been introducing environmentally-friendly cleaning products, and reducing the use of those that cannot be easily substituted by systematically decanting and watering them down. This is producing savings of ~£3K/year. In addition, switching from using staircase cupboards for storage to using centrally re-supplied trolleys produced a net one-off saving of over £200.

3. Together with Sam Ludford, Jackie has been quantifying the performance of energy-saving kettles. These cost ~£20 more than standard kettles but save ~£40/year in energy. The models so far tested may not be robust enough for use by students, but Jackie and Sam hope that over the next year they can find a suitable model for replacing the College's existing kettles as these become unserviceable.

## Catering

4. Catering Manager Lee Corke has worked with UCS Green Officer Ellie Adams to lower consumption of meat and dairy products and increase the availability and

diversity of vegetarian food on offer in College. "Low-meat Mondays" were introduced in the Buttery from the start of Lent Term and have proved popular, and a vegetarian Formal Hall held in February sold out within 24 hours. Lee is collating monthly data on meat consumption and sales of vegetarian meals so we can monitor future progress quantitatively.

5. To cut down on glass waste and carbon emissions Lee has recently ordered an in-house water bottling plant so tap water can be filtered and used to refill still and sparkling water bottles. This ~£5K machine has a payback period of ~2 years and after that will save the College more than £2K/year.

6. Lee and Nigel Woodcock have investigated what happens to the College's kitchen waste and been pleased to discover that (rather than going to landfill) it is taken to the AmeyCespa plant at Waterbeach where it is used to produce compost and liquid manure and to power an experimental anaerobic digester - probably as efficient an end-use as possible.

## Energy

7. Following their identification in an initial survey by Enviro, major energy-saving projects which the College might undertake were put on hold until the appointment of a new Buildings Manager. Deborah Hoy started in post only in May but has already drawn up a programme to refine and implement these suggestions, starting over the summer with a pilot sub-metering scheme, the insulation of heater valves and pumps and The Colony's roof voids, some draft proofing in Old Court, and exploration of the scope for introducing voltage optimization in Memorial Court. Future plans include College-wide roll-out of sub-metering, and boiler optimization work in Memorial court and The Colony.

8. This year Clare joined 22 other colleges in signing up for the Student Switchoff campaign, at a cost of £240/year. Working with the UCS Green Officer this uses competitions and information disseminated by social media to persuade students to lower their energy use. Results so far have been mixed, with early interest falling away somewhat. Reasons suggested include overly-simplistic messages and lack of cross-college information on comparative energy consumption (because of a failure of the recommended TEAM software). The Committee will review Clare's involvement in the scheme once this year's overall results become available.

9. Following a request from the Catering Manager motion-sensitive lighting has been installed into infrequently-visited areas of the kitchens.

10. At the suggestion of MCR Representative Teale Phelps-Bondaroff, over the summer work will be carried out to insulate two St Regis flats in an experimental trial of an internal wall-lining product, at a cost of ~£2700. Recent thermal imagery reveals the extent of existing heat leakage through external walls.



*Temperature difference between external and interior walls (top) and between a wardrobe (providing insulation) and the wall beside it. Thermal imagery provided by Cambridge Carbon Footprint.*

Subsequent energy use and comfort levels will be compared with that of two flats that will not be insulated.

### **Other initiatives**

11. After discussion with senior fellows and staff we have introduced a section on student travel grant application forms asking students to estimate the carbon emissions of their trips. Data on these will be collated and tracked, with a view to offsetting.

12. Over the year organisers of two different conferences asked whether the College has an Environment Policy, and were pleased to learn that we did. We think this is may be helpful side-benefit of the Committee's work.

We thank the fellows, staff and students for their continuing support of our efforts.

**Committee members, 2012-13**

Ellie Adams (UCS Green Officer)

Andrew Balmford (Chair)

Will Cavert (Fellow)

Lee Corke (Catering Manager)

Donald Hearn (Bursar)

Deborah Hoy (Buildings Manager)

Sam Ludford (Staff Representative)

Mick Petty (Steward)

Teal Phelps-Bondaroff (MCR Representative)

Jackie Searle (Housekeeping Manager)

Nigel Woodcock (Fellow)