



Green Office Program

Division of Registrar and Student Services Green Office Report

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Executive Summary

The Sew S@W program run by ANUGreen is designed to improve the environmental credentials of faculties and organizations operating within the Australian National University. This study, conducted through the GreenSteps Internship Program, examines the Division of Registrar and Student Services, focusing on the Pauline Griffin Building. It has been written to analyze the environmental impact of work practices and make recommendations for institutional and behavioral change.

Energy, Behavioral and Waste Audits have revealed a considerable capacity for sustainable change. Over 70% of the waste currently going to landfill is recyclable, energy consumption is considerably more than usage time, and staff are willing, if not able, to change their actions to act in a sustainable way. This report will recommend, therefore, how combinations of educational posters, strategic bin placing, and management of power use through delegated responsibilities would substantially reduce the environmental impact of the operations within this building.

Introduction

Creating an environmentally sustainable workplace is a considerable challenge. In the rush to and from work, juggling family commitments and university, lunch breaks and social lives, few workers have time to spend pondering the size of the environmental footprint they leave behind in the rush.

The See S@w program is an ANU Green Initiative that aims to help manage this predicament. Using Community Based Social Marketing principles, students evaluate the sustainability status-quo in the workplace, and identify the infrastructural challenges and behavioral changes that need to take place in order to generate a sustainable workplace culture and minimise the workplace's environmental impact.

The Division of Registrar and Student Services offers an interesting case study. The Faculty has staff located in offices across the campus, and it forms one of the biggest institutions at the Australian National University. The Pauline Griffin Building houses the majority of the Division's office staff as well as the main desk for student administration enquiries on campus. The Exchange Office and the Academic Skills and Learning Centre also function adjacent to the main offices, and lighting, heating and waste management systems vary considerably across the working space.

One of the major obstacles to instigating long-term substantive change in any organisation, is establishing a conducive attitude towards sustainability in the workplace. Jenny Carlin, Associate Registrar of Student Recruitment, proved to be a particularly helpful, informed and engaged Green Office Representative throughout the auditing process. Her knowledge of workplace waste management practices was particularly helpful, and her support in the workplace for sustainability initiatives could easily prove to be a major catalyst for changes to environmental practices in the Division.

Method

Three audits were conducted during our study of the Pauline Griffin Building. The methodology was different in each case, as explained below.

Waste Audit

Several days waste was collected from the Faculty. Measuring six bags in volume, the waste was examined and sorted into appropriate categories; general waste, packaging, tissues, compostable material, paper recycling, coffee cups, aluminium, glass, plastics, tetra packs etc. The waste was then measured both by volume and weight. These measures were used to gain a snapshot of the proportions of landfill-bound waste which is recyclable, and reflects current waste disposal practices.

Energy Audit

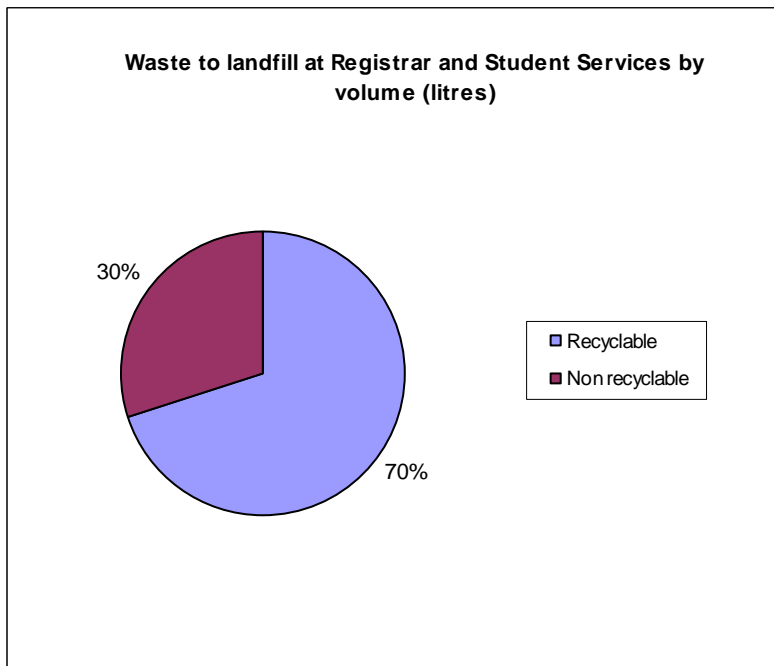
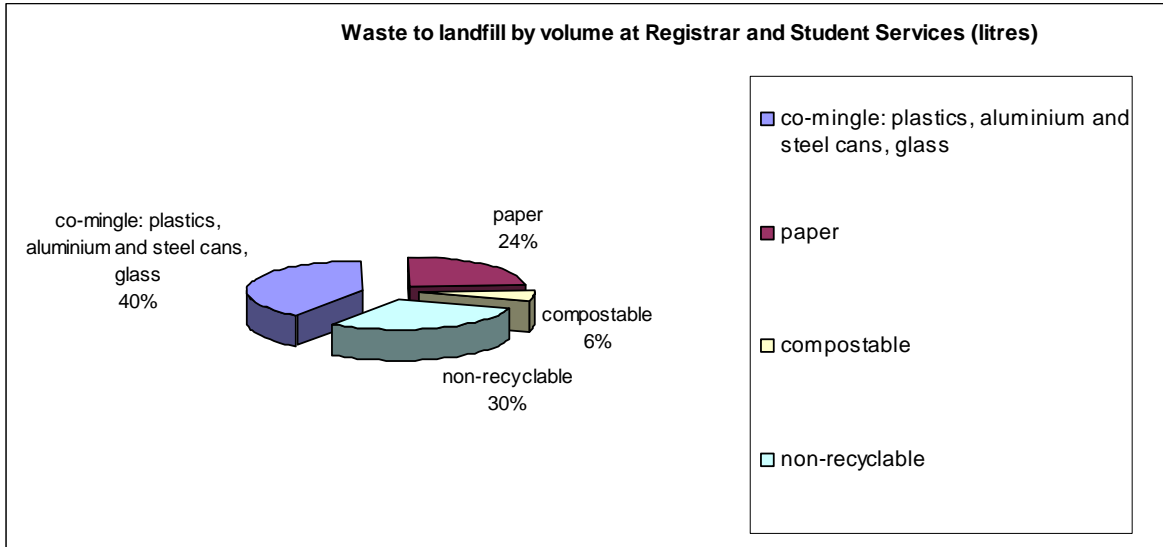
The energy audit of the Pauline Griffin Building was conducted during the early evening on a weekday when the majority of staff had left for the day. This was to allow us to see what office equipment and lights had been left on overnight. Checking what equipment had been left on would give us a chance to determine potential energy savings. A walk around of the Pauline Griffin Building meant auditing computers, lights and office equipment such as printers and photocopiers. Some office spaces were locked so results relied on estimates arising from similar office spaces in the building.

Behavioural Audit

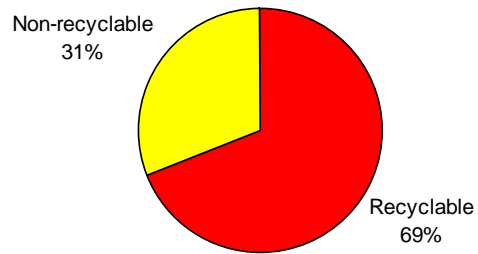
A sample of 29 staff from the Division of Registrar and Student Services were surveyed on a series of questions relating to sustainable actions within the workplace. The questions either required a 'yes' or 'no' answer or asked staff to respond on a scale of 'never', 'sometimes', 'about half', 'often' and 'always'. The surveying was conducted by the Greensteps team to determine staff attitudes and behaviour towards environmental office issues.

Results

Waste Audit



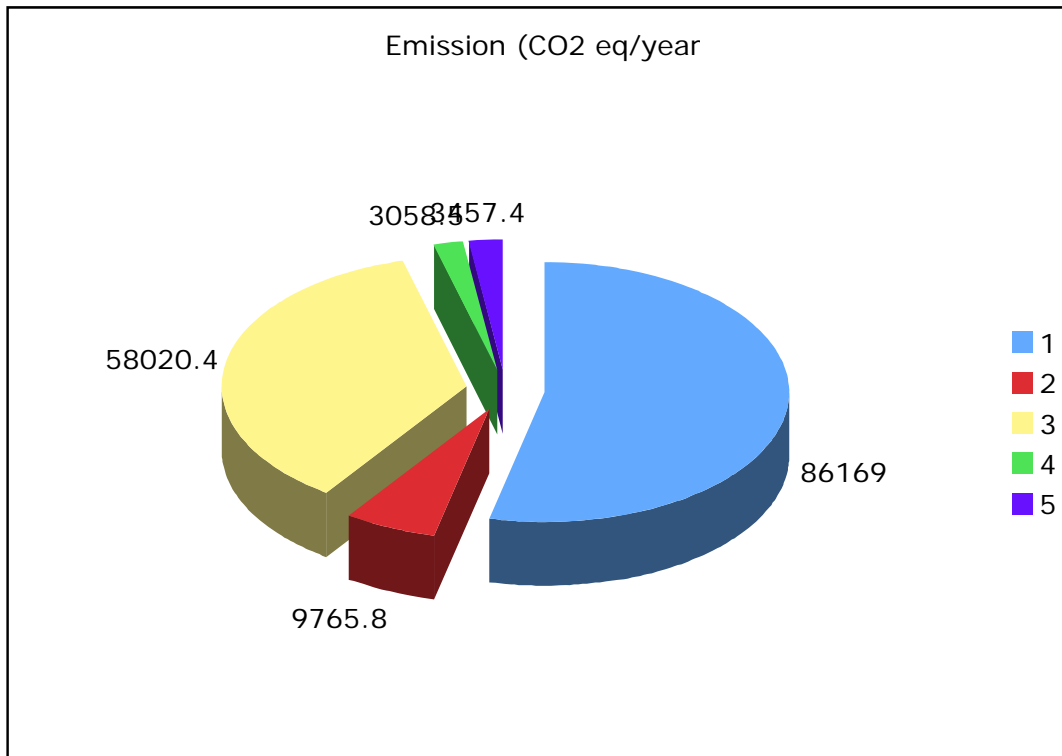
Waste to landfill by volume in 2007



Energy Audit

Work Hours (30% of the Year)

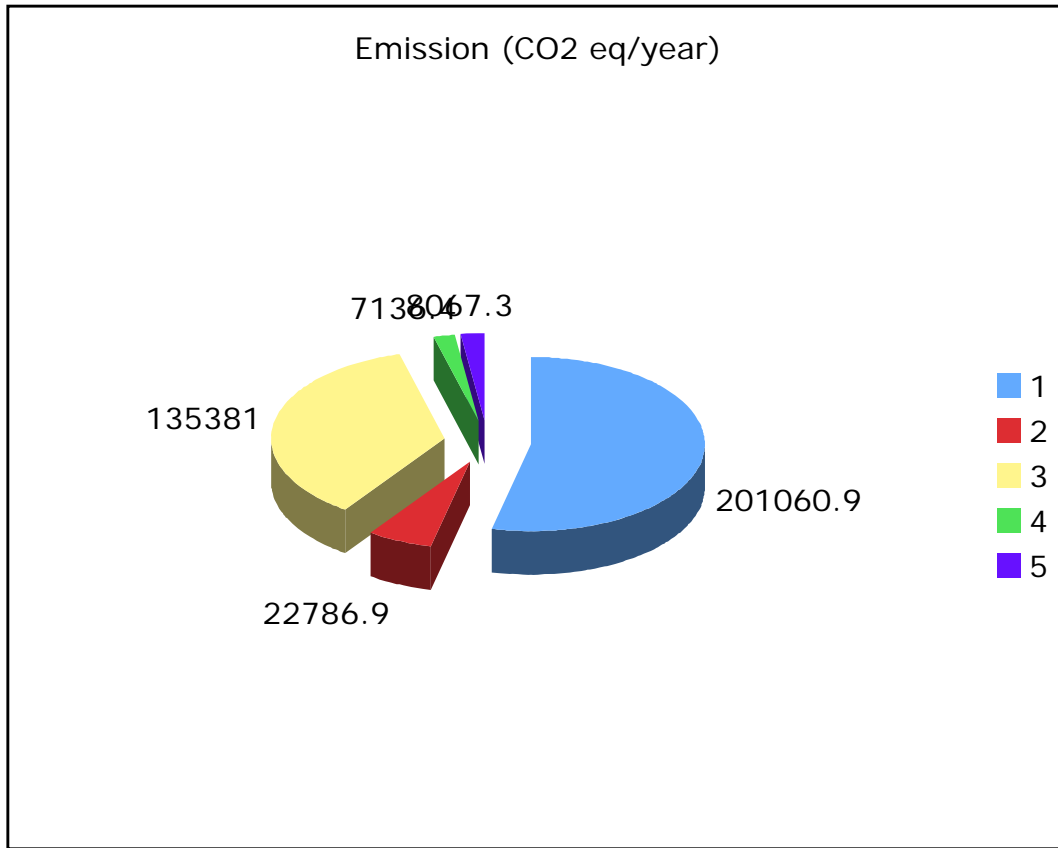
Appliance is on Full Power



1. Computer CPU
2. LCD Monitor
3. Fluorescent Lights
4. Photocopier
5. Printer

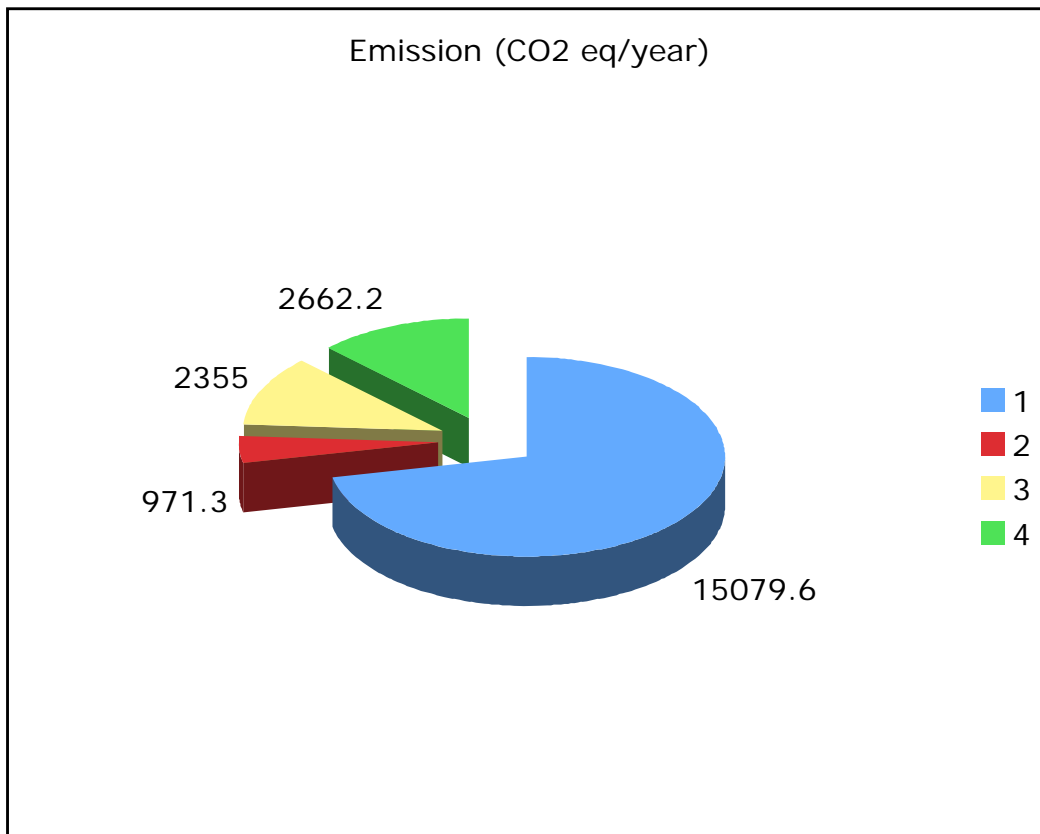
Non-Work Hours (70% of the year, including after hours, weekends and holidays)

If appliance is left running on full power



1. Computer CPU
2. LCD Monitor
3. Fluorescent Lights
4. Photocopier
5. Printer

If appliance goes into power saving mode

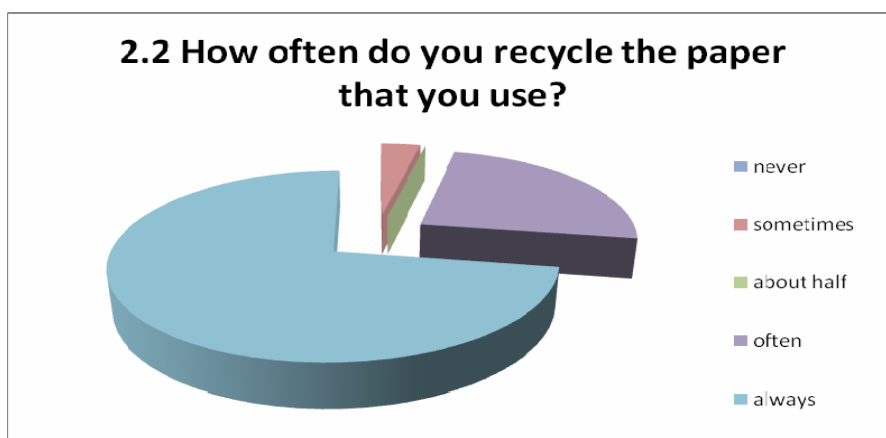


The above graph does not contain fluorescent lighting for the reason that it does not have a power saving mode.

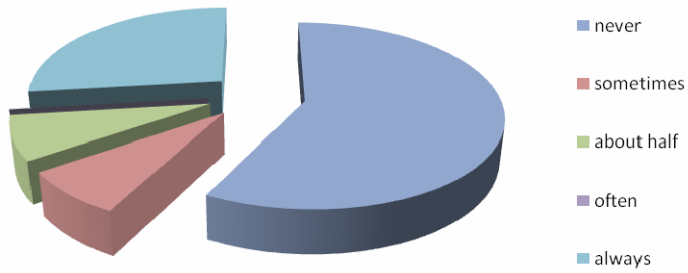
1. Computer CPU
2. LCD Monitor
3. Photocopier
4. Printer

Note: If the appliance is turned off it will generate no green house gases

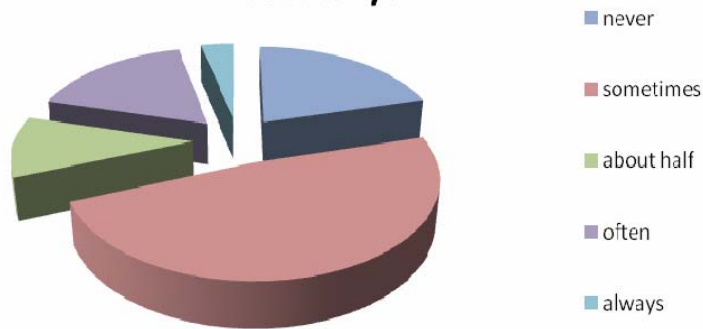
Behavioural Audit



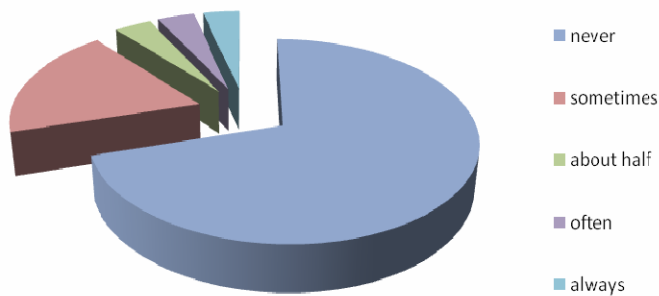
2.4 How often do you recycle the bottles and cans that you use?



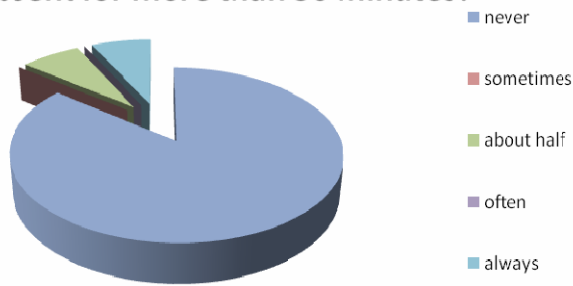
3.1 How often do you print/photocopy documents that are not absolutely necessary?



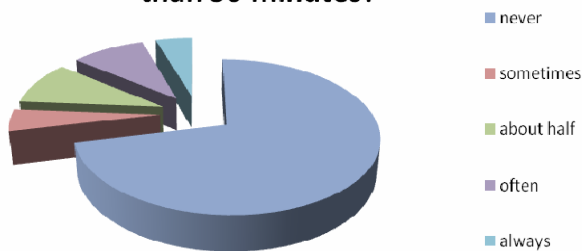
3.7 How often do you reduce when printing or photocopying?



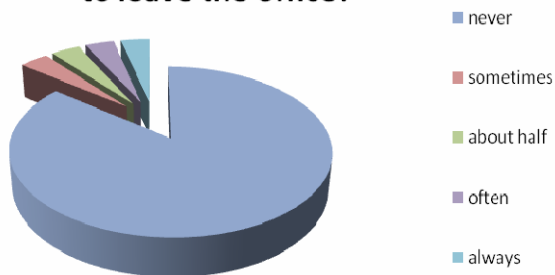
4.2 How often do you turn off your computer monitor when you will be absent for more than 30 minutes?



4.3 How often do you turn lights off when you will be absent for more than 30 minutes?

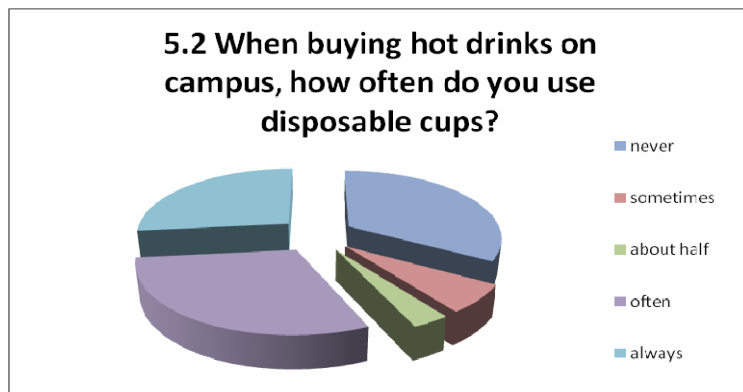


4.5 How often do you turn off equipment when you are the last person to leave the office?



5.1 When eating on campus, how often do you use durable (i.e. non-disposable) crockery and cutlery?





Discussion

Waste

Results

- Awareness of paper and cardboard recycling is high (most people have an ANUGreen paper recycling box which they make the most of) but people don't know how to recycle bottles and cans as there is only a recycling bin for these items on the ground floor of actually outside the building.
- Most staff indicated that they often print documents that they do not really need to print, although many used once-used paper for taking phone notes, etc.
- All staff indicated they know how to print and photocopy double sided yet around half don't actually do it, this indicates a need for a training session and/or awareness raising.
- Over half of the staff indicated they know how to reduce when printing/photocopying yet only 7% actually do this.
- A considerable number of staff use disposable cutlery and crockery as it is convenient and easily discarded; no time is needed to wash up. One staff member was concerned that using his own mug would mean washing it up which would use more water than recycling a cup.
- Many staff surveyed indicated that they did use disposable cups when purchasing hot drinks such as coffee but as they were recyclable; they believed they were doing a good thing.

Recommendations

- Recycling facilities for bottles and cans on each floor – ANUGreen are able to assist with this.
- Remove rubbish bins from office spaces so that people walk to the recycling facilities in kitchen areas to get rid of any waste.
- Signage asking people to think about whether they really need to print some documents highlighting the benefits of reducing their paper use as well as signage asking people to use once-used paper as scrap paper for taking messages or use in the fax machine.
- Printing double-sided as default on all computers – instructions on how to do this can be found on the ANUGreen website under '10 tips to a green office'.
- Signage instructing staff how to reduce when photocopying and printing.
- Providing sufficient non-disposable crockery and cutlery in kitchens for staff as well as explaining which items can be recycled or composted.
- Encouraging staff to use non-disposable mugs which they can wash themselves and keep at their desk - possibly through the provision of divisional mugs.
- The introduction of a 'free to good home' shelf would help reduce any food waste.
- Introduce an organic recycling scheme in line with the ANUGreen Hot Rot program.

Energy

Results

- Energy management of computers is driven by the university's IT division request that they do not turn their computers off completely as they want to be able to update computers at will. The computer CPU is the device which consumes the most energy within the office and as such, creates the greatest amount of greenhouse gases, this is closely followed by fluorescent lighting. These are the two areas that would be most beneficial to focus on.
- There is the potential to make easy gains by encouraging staff to be increasingly energy aware, a task which can be achieved through encouraging small behavioural changes. For instance encouraging staff to turn off their computer monitors if they anticipate not using their computer for longer than thirty minutes - just over 16% of staff turn off their monitors when away from their computer for half an hour or more.
- 71% of staff don't turn off lights when they will be absent from their office for a period of half an hour or more – in some cases this is because the lights are in common areas but a large portion of staff that are in solitary office spaces do not turn off their lights. One staff member thought that it may use more energy to turn the lights on and off during the time period than it would to just keep them on. This is not actually true (see ANUGreen 10 point plan fact sheet).
- The majority of staff do not turn off office equipment when they are the last to leave. If the last person to leave did look around and turn off any equipment which was still on this could have considerable energy savings. Many did not turn off lights because they said that the cleaners would turn them off once they were done – this may mean that the cleaners need to be aware that the lights should be turned off when they are finished cleaning of an evening.

Recommendations

- Addressing the problem of turning off computers at night as computers are a major energy user - if it is not possible to turn off every night, then maybe work on a rotating roster that will enable the Department of Information to carry out the necessary system maintenance.
- Signage encouraging staff to turn off computer monitors and lights when away from their desk for half an hour or more – 'Switch it off' stickers are available from ANUGreen.
- Signage addressing some of the energy myths – an information sheet can be found on the ANUGreen See S@W website ('10 tips for a green office').
- A weekly/fortnightly/monthly email newsletter with energy saving tips.
- Signage at desk areas encouraging staff to turn off office equipment when they are the last to leave – highlighting the financial and environmental energy savings.
- Developing an arrangement with the cleaners to make sure they turn off lights when they leave.
- Investigate the possibility of zoned lighting, either motion censored or activated by switches. The introduction of such lighting will avoid the problem of having large banks of lighting on after hours.
- It might also be beneficial to have the last person in the office turn off the lights when they leave. Although the cleaners will need to turn the lights back on when they come in, depending on the time gap it may be more efficient to have the lights off in the intermittent period.

Transport

Results

- Almost half of the staff surveyed said that they either ride, walk or catch public transport to work at least one day a week

- As most meetings are on the university campus, staff walk where possible to meetings

Recommendations

- Encouraging staff to consider more sustainable forms of transport through the provision of bus passes and end of trip cycling facilities. Loads of options are outlined on the ANUGreen website in the transport section
- Get a 'Timely Tredley' departmental bike from ANUGreen so that staff can ride to meetings on campus and within the city

Awareness/Management

Results

- When asked about environmental issues that required attention in the office, staff indicated the following:
 - Paper usage was high
 - People printed documents and didn't collect them leaving them to be thrown out, people would then re-print the thrown out document
 - No facilities for recycling anything other than paper
 - It was suggested by some staff members that having a nominated Green Officer for the workplace would be beneficial
- More commitment from management, simplified and user-friendly systems and providing staff with information on the environmental and financial costs and savings to business related sustainable actions was seen as important or crucial by a large majority of staff.

Recommendations

- Provision of information from management to illustrate management's commitment to office sustainability and provide a champion for environmental issues – this role could also be filled by a nominated See S@w representative who would receive support from ANUGreen.
- Providing staff with information on the environmental and financial costs and savings to business related sustainable actions through signage and weekly/fortnightly/monthly email newsletters – perhaps highlighting monthly energy savings or excesses.