

University of Oxford  
**Environmental  
Sustainability Report**  
**2012/13**

Includes the ISCN-GULF  
Sustainable Campus Charter  
Report



## On this report

This is the third annual Environmental Sustainability report and the third year that the University of Oxford has prepared a Charter Report for [International Sustainable Campus Network \(ISCN\)](#); it is the first year the two reports have been combined.

The report covers the functional estate and does not include colleges which operate independently.

The most accurate and applicable data has been used and where available data as reported to Higher Education Statistics Agency (HESA) as part of the Estate Management Record (EMR) return. The EMR data can be accessed [here](#).

The performance data is from 31 July 2012 to 1 August 2013 unless otherwise stated.

Case studies and examples may be drawn from 2013/14.

The Carbon Emissions baseline target for 2005/6 is 65,900 tonnes of CO<sub>2</sub>e based on third party reviews of data.

The percentages provided as an indication of task complete is an indication only and is subjective.

It reports against the University's targets and actions and follows requirements of ISCN.

The report has been reviewed by the Sustainable Steering Group, University of Oxford.

For more information on the report contact the Environmental Sustainability team.

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# Introduction to the University of Oxford

As the oldest university in the English speaking world, the University of Oxford can lay claim to nine centuries of continuous existence. There is no clear date of foundation, but teaching existed at Oxford in some form in 1096 and developed rapidly from 1167. The University of Oxford is a unique and historic institution, located in the City of Oxford, 90 km north-west of London, Great Britain. It is a major research university and a member of the Russell Group; the Russell Group is made up of 24 of the UK's leading universities

## The Structure of the University

The Vice-Chancellor holds office for up to seven years and is the senior officer of the University. Five Pro-Vice-Chancellors have specific roles and responsibility for the following areas:

Development and External Affairs; Education, Academic Services and University Collections; Personnel and Equality; Planning and Resources; and Research. The Chancellor is usually an eminent public figure elected for life and serves as the titular head of the University, presiding over all major ceremonies.

The executive governing body of the University is Council. Council is responsible for the academic policy and strategic direction of the University, operating through five main committees: Education; General Purposes; Personnel; Planning and Resource Allocation; and Research.

Final responsibility for legislative matters rests with Congregation, which comprises over 4,900 members of the academic, senior research, library, museum and administrative staff.

Day-to-day decision-making in matters such as finance and planning is devolved to the University's four Academic Divisions: Humanities; Mathematical, Physical

and Life Sciences; Medical Sciences; and Social Sciences. Each division has a full-time divisional head and an elected divisional board. Continuing Education is the responsibility of a separate board.

The University has 38 independent and self-governing colleges, and 6 permanent private halls. The collegiate system is at the heart of the University's academic success.

## Finance

The University is a self-governing charity. The University enjoys charitable status as an exempt charity. An exempt charity experiences some of the benefits of a charity but is exempt from certain requirements, for example the requirement to register with the Charity Commission. In 2012/13 total University income was £1,086.9 million. The University's largest source of income (40%) continues to be external research funding. In 2012/13 £436.8 million of total income was from research grants and contracts. Of the remaining income, funding body grants were £193.8 million; academic fees and support grants were £197 million; other income such as from the commercialisation of research was £203 million; endowment and donation of heritage assets was £56.3 million.



## Education and Research

The University of Oxford aims to provide an exceptional education, developed by the close contact of students with leading scholars resulting from the collegiate and departmental communities.

The student body is made up of some 22,100 students including



11,772 undergraduates and 9,850 postgraduates. In addition there are around 15,000 enrolments on part-time courses offered by the Department of Continuing Education. Nearly 40% of the student body are international students.

Over 1,700 academic staff, more than 4,000 research support staff and 5,400 postgraduate research students undertake world class research in the four academic divisions: Humanities, Mathematical, Physical and Life Sciences, Medical Sciences and Social Sciences.

The University's over-arching research objectives are to lead the international research agenda across the disciplinary spectrum and through interdisciplinary initiatives, and to make significant contributions to society through its research. For more information on the University of Oxford's history click [here](#).

Data and information supplied by University of Oxford News & Information Office.



## Introduction to ISCN

International Sustainability Campus Network (ISCN) is a network of universities and colleges from around the world who agree to the [ISCN charter](#).

The mission statement of the ISCN is:

"To provide a global forum to support leading colleges, universities, and corporate campuses in the exchange of information, ideas, and best practices for achieving sustainable campus operations and integrating sustainability in research and teaching."

ISCN members come from all over the world and share their sustainability goals and performance indicators in their ISCN-GULF Charter Reports and report on three principles.

- Principle **1**: Sustainable Performance of Buildings on Campus
- Principle **2**: Campus wide Master Planning and Target Setting
- Principle **3**: Integration of Facilities, Research, and Education

More information on the principals can be found in [Appendix 1](#).



# Environmental Sustainability at the University of Oxford

## Environmental Sustainability Governance

At the University of Oxford environmental sustainability is governed by the Sustainable Steering Group (SSG). SSG reports to Buildings and Estates Sub Committee (BESC) and the Planning and Resource Allocation Committee (PRAC) which are overseen by Council.

The day to day running of Environmental Sustainability is the responsibility of the Environmental Sustainability team sitting within Estates Services; although it is recognised that environmental sustainability is everyone's responsibility.

The overriding plan is the [Estates Services Strategy](#).

Additionally there are principles which the University subscribes to, these are:

### Principle 1: Sustainable Performance of Buildings on Campus

The design and construction guidelines for new buildings and refurbishment projects are the responsibility of BESC. The ongoing performance of buildings during operations follows the overriding governance structure of Environmental Sustainability (see [Figure 1](#)).

### Principle 2: Campus wide Master Planning and Target Setting

Master planning is carried out by the Estates Services and falls within the remit of BESC. The University is required by its funding bodies to produce an Estates Strategy at least every five years. The Estates Strategy was reviewed and launched in 2013. The Strategy was adopted through the appropriate University committees and issued to the Higher Education Funding Council for England (HEFCE).

The University's Council approved the University's Environmental Sustainability Policy in 2014. Environmental sustainability within the University is the responsibility of the Sustainability Steering Group (SSG) which determines policies and targets before being approved by the committee structure. The Environmental Sustainability team is responsible for the implementation of the policies and strategies.

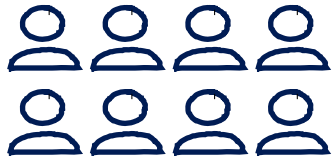
### Principle 3: Integration of Facilities, Research, and Education

The University's Strategic Plan, approved by Council in 2013, sets out the University's mission, values and objectives, and details commitments under learning and teaching, research, and wider engagement with society. The four major committees of Council is: The Education Committee, the General Purposes Committee (GPC), the Personnel Committee, and PRAC, they are jointly responsible for the oversight and delivery of the strategy.





IT STARTS HERE



The SUSTAINABILITY TEAM is made up of eight staff working specifically in sustainability-related areas



The University of Oxford Student Union (OUSU) Environment and Ethics Committee also sits on this committee.

Figure 1: Governance structure for Environmental Sustainability at the University of Oxford





# Welcome

I am pleased to introduce you to the third annual Environmental Sustainability Report and the third ISCN-GULF Sustainable Campus Charter Report. This is the first report to combine the two, and has been compiled by the University's Environmental Sustainability team.

The report covers the University's key sustainability initiatives and not only looks back at past performance but, just as importantly, forward to the planned work that is to come. The forward programme reflects the University's continued efforts towards continual improvement in sustainability issues.

The whole Oxford community needs to do its bit to help the University continue to improve its environmental performance. This report covers a period in which over 3,000 of our students have pledged to support an energy saving scheme and 199 staff have worked towards creating 500 positive environmental changes within their faculties and departments.

This has been another year of exciting sustainability improvements, and the networks that are being developed across Oxford will help the University support sustainability initiatives into the future.

Professor Andrew Hamilton FRS  
Vice-Chancellor, University of Oxford



As Chair of the Sustainability Steering Group, I am pleased to see that the shift of the last few years towards an increase in staff and students' expectations of environmental sustainability continues to grow, as does the embedding of environmental sustainability into business as usual.

Through its strategies, objectives and plans the University continues to work towards improving its relationship with the environment, and the University is in a good position to carry on effective work in this area.

In 2014 and beyond the University will continue to work towards improving its environmental performance by setting objective and targets, by investing in technology and by engaging stakeholders.

Professor William James,

Chair, Sustainability Steering Group

I would like to take this opportunity to thank the many departments, students and wider stakeholders that have assisted to drive the environmental sustainability agenda forward this year. We look forward to working with these and more individuals between now and the following report.

This report provides a snapshot of our ongoing work. The report forms a part of our continual communications which includes events, workshops and social media for you to get involved with over the year ahead.

Harriet Waters,

Head of Environmental Sustainability, Estates Services





# Energy and Carbon Management

The University of Oxford will continuously strive to improve “by encouraging energy efficient practices and investing in its estate to reduce carbon emissions.” Environmental Sustainability Policy, 2014

What is ‘energy and carbon management’ and why is it important?

Energy can be consumed from the national grid through electricity and natural gas supplies or produced on site such as Combined Heat and Power (CHP),<sup>(1)</sup> and Renewables. Through the consumption of energy, emissions are released. These emissions are commonly converted into the equivalent amount of carbon produced for each kWh consumed or kg/tonnes of CO<sub>2</sub>e. Carbon emissions are considered in three groups, see Box 1 for details.

Energy consumption has been identified as a significant impact of the University, it is important due to its

impact on the environment through the potential use of natural resources and associated emissions. Energy consumption also has significant cost implications. The University has therefore created targets to reduce consumption.

The University has a short term target to reduce emissions in relation to scopes 1 and 2 by 11% from the 2005/6 level (65,900 tonnes of CO<sub>2</sub>e) by the end of the academic year 2015/16. There is also a long term target to reduce the 2005/6 baseline by 33% by the end of the 2020/21 academic year. This target is absolute meaning that new growth of the University and its facilities during the set time periods is included.

## BOX 1: SCOPE 1, 2 & 3 EMISSIONS

SCOPE 1 = direct carbon emissions eg gas consumption and University vehicles

SCOPE 2 = carbon emissions from off-site grid electricity

SCOPE 3 = embodied carbon emissions eg production, travel, waste and water

What we said in the 2011/12 report.	What we did?	Percentage Complete
We'll continue to invest in renewable energy and continue to purchase off-site renewable energy.	Energy (kWh) produced on site grew by 300% from 2011/12 to 2012/13 including CHP and Photovoltaics. The University has continued to purchase off-site renewable energy, 99% of energy was purchased through Green Tariffs in 2012/13	100%
We'll review our Carbon Management Strategy and integrate Scope 3 emissions reporting into the strategy.	Extensive work has been undertaken on the Carbon Plan, Carbon Programme and Scope 3 reporting to support the implementation of the Strategy, and work continues.	80%
We'll roll out the Energy Efficiency Monitoring (EEM) project and Midnight Oil project in medical research buildings.	Support for these projects continues and both continue to be expanded into new buildings. The Midnight Oil project is a study to assess usage patterns of four 24 hour buildings to identify energy savings through assessing operations. The results from initial reviews have been applied to make changes to overnight zoning and controls, and thereby reducing carbon emissions.	100%
We'll improve energy monitoring.	The University has continued to monitor and expand the network and accessibility of automated meter reads (AMRs) across sites. New electricity sub-meters have been fitted to improve detail of monitoring and work to install AMRs on all gas supplies is underway.	80%

(1) CHP integrates the production of usable heat and power (electricity), in one single, highly efficient process.





# Carbon reduction continued



## What do the numbers say?

Energy consumption across the University increased by 15% in 2012/13 (224,692,688 kWh) from 2011/12 (195,972,016 kWh). This increase reflects the extremely cold winter in 2012/13 following a mild winter in 2011/12, therefore more energy was used for heating. However a reduction of <1% in emissions occurred during this time. The difference between energy (15% increase) and emissions (<1% decrease) during this time reflects decarbonisation of the national grid and an increase of CHP usage at the University.

Comparing carbon per gross internal area (GIA) (m<sup>2</sup>) or building area is a useful indicator of efficiency. GIA information has been reported within the Estates Management Return (EMR) from 2009/10. When total CO<sub>2</sub>e per GIA for 2009/10 is compared with 2012/13 there was a decrease in CO<sub>2</sub> per GIA of 19% against a GIA increase of 8%,<sup>(3)</sup> see Figure 2.

Figure 2 shows that there was an increase of total GIA at the University of Oxford but carbon emissions for the same periods reduced. This demonstrates that the University of Oxford produce less carbon emissions per a GIA or m<sup>2</sup> in 2012/13 then in 2009/10.

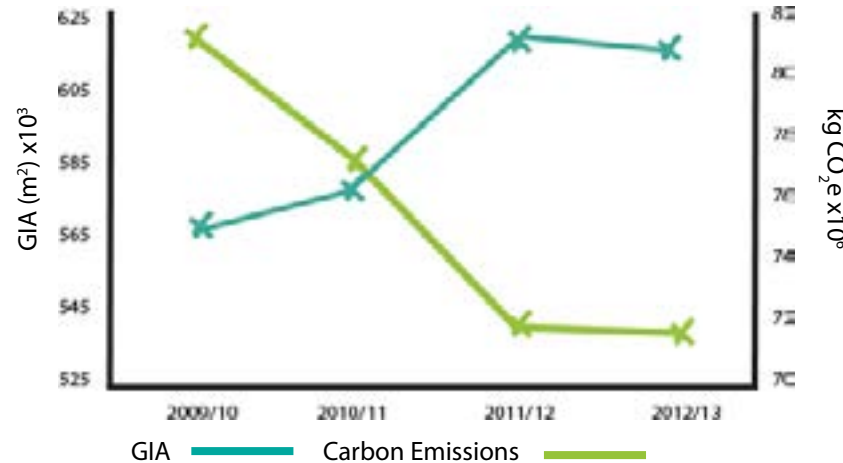


Figure 2: Gross Internal Floor Area (GIA) and Carbon Emissions of the University of Oxford

On-site energy production from 2009/10 to 2012/13 increased by over 6000%, this is due to the introduction of CHP in 2010/11 which grew substantially in 2011/12.<sup>(2)</sup> The Use of Photovoltaics has also continued to grow across the site and will continue to increase in provision of power.

Despite positive improvements in CO<sub>2</sub>e per GIA the progress against the absolute 2005/6 baseline target there was an increase of total CO<sub>2</sub>e of 8%, reflecting an increase in the size of the University and a cold winter; work to meet this target is ongoing and significant work is planned through the Carbon Management Plan.

## Photovoltaic System

At the Bodleian Libraries Book Storage Facility in Swindon a ground based photovoltaic system has been installed. The system at peak can produce 50 kW.

The installation accounts for 14.6% of total electricity consumption of the facility since installation and has produced 32,404 kWh or the same as the annual consumption of 8.3 average Oxford homes<sup>(4)</sup>.



(2) The average temperature for winter 2011/12 was 4.5°C and for 2012/13 it was 3.3°C. Source: Met Office

(3) 2005/6 Carbon emissions total was 65,900 tonnes of CO<sub>2</sub>e, 2012/13 was 71,434 tonnes of CO<sub>2</sub>e.

(4) Based on an average Oxford house using 3,918 kWh electricity in 2012. Source: Department for Energy and Climate Change in District Data Analysis Service: 'Domestic energy consumption in rural Oxfordshire', June 2014.



## Carbon reduction continued

# WHAT WILL WE DO NEXT?

- Continue to invest in technologies to increase energy efficiencies including the use of renewables and low carbon or zero carbon technologies
- Continue rollout the Carbon Management Plan and Programme to support the Carbon Management Strategy.
- Work with new developments and the soft landings of these new buildings to increase energy efficiency.
- Raise awareness with staff and students to utilise energy efficiently, including an extension of the Midnight Oil Project.
- Commission Display Energy Certificate (DECs)<sup>(5)</sup> in buildings over 500 m<sup>2</sup>.

### What are the challenges?

- Every member of the University community has an impact on energy consumption and the efficiency of the University.
- Many buildings are listed for their historical value and this can create unique challenges when retrofitting efficiency measures.
- The University is a research intensive university, research is frequently energy intensive.
- Legislation relating to Renewables and carbon schemes continues to be modified and altered.



### How can you get involved?

- The little things really do add up:
  - Switch lights off whenever possible.
  - Use energy efficient settings including computers and printers.
  - Boil only the water you need in the kettle.
  - Don't over heat or over cool space.
- Student Switch Off was launched for the first time in 2013 at the University of Oxford and had some of the best engagement results from any of the participating universities, the scheme will continue in 2014.
- Green Impact is a departmental award scheme which includes lots of ideas and suggestions for staff to make energy savings in their working environment from quick wins to longer term goals. Any department can join Green Impact.
- Purchase equipment and consider the item's life cycle, for example an energy efficient light bulb may cost more to buy but an energy efficient light will save money on electricity costs over its life time.

If all 10,767 staff switched off a light for just 15 minutes daily whilst at work we would all save 16,581 kWh per year equivalent to the annual consumption of 4.2 average Oxford houses .<sup>(6)</sup>



### Do you want to find out more?

- [Carbon Management Strategy](#)
- [Green Impact](#)
- [University of Oxford Student Switch Off](#)
- If you have any queries you can contact [sustainability@admin.ox.ac.uk](mailto:sustainability@admin.ox.ac.uk).

"Environmental Sustainability is the responsibility of all of us"  
 Professor Andrew Hamilton,  
 Vice-Chancellor, University of Oxford.

<sup>(5)</sup> Display Energy Certificates (DECs) show the energy efficiency of a building during its operations and are used to communicate this to the public and building users.

<sup>(6)</sup> Based on a 28W lamp, 220 day working year and an average Oxford house using 3,918 kWh electricity in 2012. Source: [Department for Energy and Climate Change in District Data Analysis Service: 'Domestic energy consumption in rural Oxfordshire', June 2014.](#)



# Water Management

The University of Oxford will continuously strive to “reduce water consumption through water efficient practices and technologies.” Environmental Sustainability Policy, 2014

What is ‘water management’ and why is it important?

Water consumption relates predominately to the clean fresh drinking quality water that enters the buildings and the waste water (trade effluent) that we put back down the drain that needs treating.

Water management is important because the supply of clean fresh water is energy intensive and it removes water a vital resource from the environment. Using water also costs the University money. It has been identified as a significant environmental aspect for the University.

## DID YOU KNOW?

The University has a target to reduce water consumption by 11% by 2015 compared to 2009/10 levels.

What we said in the 2011/12 report.	What we did?	Percentage Complete
Continue to roll out our Water Management Strategy and prioritise high water consumers.	The Water Management Strategy has continued to be implemented with high water consumers identified. A Water Implementation Plan is being developed to support the strategy.	100%
Calibrate taps and showers for shorter run times and fit low flow taps and showers.	Water efficient fittings have been used during refurbishments and new builds.	100%
Fit smart meters on water supplies to identify leaks	Half hourly water meter consumption patterns have been analysed. Meters have been fitted into new builds.	100%
Improve the efficiency of equipment that produces laboratory grade water.	Ongoing support for those systems that are already efficient has been provided. The Water Implementation Plan will identify and rank the potential savings for priority in the future.	50%

What do the numbers say?

We can measure the amount of water we use through meters installed for utility billing. This data shows us that water consumption has increased by 4% in 2012/13 from the 2009/10 baseline and by 4% over the last year from 2011/12 to 2012/13. There has however been a positive increase in the amount of grey water and rain water harvesting consumed which has also increased by 4% since the 2009/10 baseline.

Water consumption is often compared to the number of building users. When the number of staff and students is compared to water consumption it shows consumption has stayed consistent from 2009/10 to 2012/13 at 13 m<sup>3</sup> per person<sup>(7)</sup> per annum (Figure 3). Both consumption per a person and total consumption of water indicate that there is a requirement to further significantly reduce water consumption in order to meet the target. The Water Management Plan will play a key role in achieving this.



(7) Total number of students and staff as reported in the EMR, HESA data.



## Water Management continued

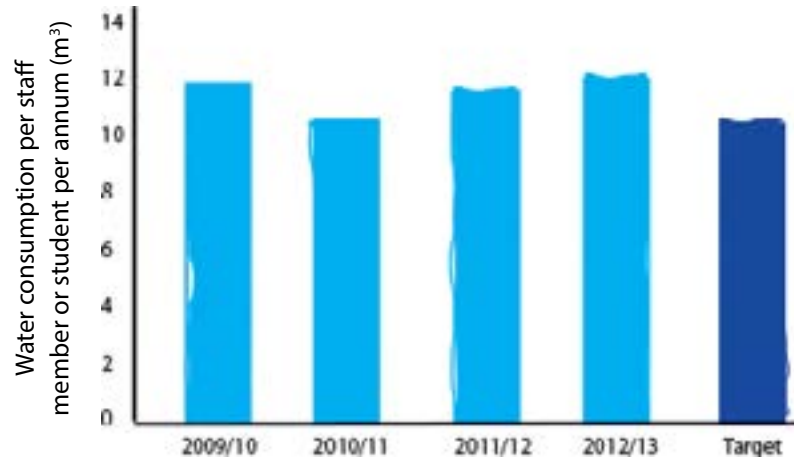


Figure 3: Water usage per a staff member or student.

## WHAT WILL WE DO NEXT?

- Review the water strategy and finalise the Water Implementation Plan.
- Continue to support the installation of water efficient equipment.
- Increase engagement with staff and students through Green Impact and other initiatives to support positive behaviours.
- Work with regulators and other key stakeholders.
- Improve monitoring, measuring and reporting of water.

### What are the challenges?

- All staff, students, visitors and guests use water and their behaviours impact consumption.
- Water is often seen as a plentiful and free resource.
- Many of the procedures and processes required for research are water intensive.

### How can you get involved?

Green Impact - is a departmental award scheme which assists the local implementation of positive environmental and social changes. Within this are a number of criteria relating to water efficiency including information on:

- items that can be retrofitted to washrooms including taps, showers, urinals and toilets which reduce water consumption.
- avoiding washing your coffee cup or laboratory equipment under a running tap or using the dishwasher when its only half full – both use more water than necessary

Report water leaks –don't assume it has already been reported. Remember that a hot water tap left to drip not only consumes water unnecessarily it also consumes energy from heating the water.

### Do you want to find out more?

- [Water Management Strategy](#)
- [Sustainable Procurement Strategy](#)
- [Green Impact](#)
- If you have any queries you can contact [sustainability@admin.ox.ac.uk](mailto:sustainability@admin.ox.ac.uk).

### DID YOU KNOW?

A dripping tap can use as much as 1 litre per hour, in one week that's enough to fill a bath tub.

Source European Environment Agency



# Waste and Material Resources

The University of Oxford will continuously strive to increase its positive impact “by encouraging, preventing and reducing waste and reuse of resources prior to recycling or disposal.” Environmental Sustainability Policy, 2014

What is ‘waste and material resources’ and why is it important?

The production of waste and use of material resources refers to the utilisation of natural resources and how the material is utilised up to its final disposal.

Waste production and the use of materials both impact on the environment in a number of ways. This includes the use of raw materials from the environment, the energy and materials used during production and the final treatment of materials whether for re-use, recycling or final disposal. Using materials wisely preserves natural resources and reduces waste. The way the University uses such resource has implications for the cost of purchasing material as well as the cost of disposal.

It has been identified as a significant environmental impact of the University of Oxford. Waste is included in Scope 3 carbon emissions see [Carbon and Emissions](#).

What we said in the 2011/12 report.	What we did?	Percentage Complete
We'll continue to implement the Waste Strategy and roll out across departments, through the Non-hazardous Waste Implementation Group.	The Waste Strategy has been implemented with a review of the non-hazardous waste service provision. From 2014 the University will have one service provider and receive actual weights for trade collection waste.  The University has adopted a disposal system which is now consistent across the University to assist with segregation	100%
We'll reuse even more good quality items and we'll continue to expand reuse schemes across the University and encourage an increasing number of staff and students to use these schemes.	The provision of the reuse scheme was reviewed and a new model identified. During this period proactive advertising of the current scheme has been limited. The new system will be available from 2014.	80%
We'll continue to improve the online Waste Toolkit A-Z so that departments have access to up to date waste guidance and best practice.	The waste toolkit has been reviewed following amendments to the waste service provision across the University. Work will continue to develop this area in partnership with others.	80%



## What do the numbers say?

Available data for waste should be applied cautiously as it is based on estimated figures, however the figures indicate positive changes from 2011/12 with a 7% decrease in tonnage of waste produced, and a 29% increase in the total tonnage of recycling produced. The total tonnage recorded in 2011/12 was 3,690 tonnes, to put this into context it is equivalent in weight to 22 blue whales.

Reporting from 2014/15 will be based on actual bin weights and will allow accurate monitoring and measuring, and the setting of objectives and targets.

## WHAT WILL WE DO NEXT?

- Create a Waste Management Plan to deliver the strategy
- Analyse and report on actual weights from 2014 and work with departments to increase their recycling rates, and set targets and objectives.
- Increase awareness and communication regarding waste, use of material resources, and methods of waste reduction.
- Build on Scope 3 reporting for waste.

## What are the challenges?

- Each user and visitor of the University has a role to play in segregating their waste.
- As is common with waste data, information has been based on average weights of bins and therefore progress has been difficult to compare and monitor.

## How can you get involved?

- Familiarise yourself with the University's [Waste Recycling Guide](#).
- Follow the waste hierarchy. The waste hierarchy indicates that the most favourable options are prevention, reduction and reuse, the least favourable is landfill. The higher up the waste hierarchy the better, here are some questions to consider:
  - Prevent: Do you really need to create the waste in the first place for example if you are buying something new do you really need it?
  - Reduce: Do you need the quantity identified or can you buy materials with recyclable content? Can you use materials more efficiently for example if you print, print double sided?
  - Reuse: Can it be repaired or upgraded or can someone else use it?
  - Recycle: If you cannot prevent, reduce or reuse the waste segregate the waste to facilitate its recovery.
  - If it cannot be recycled the waste can be incinerate and energy recovered from it. The least favourable option is disposal to landfill.

- Green Impact is a departmental award scheme run for staff and supported by students. It has a number of ways for you and your department to reduce waste, use materials wisely and reduce costs.

## Do you want to find out more?

- [Waste Strategy](#)
- [Green Impact](#)
- If you have any queries you can contact [sustainability@admin.ox.ac.uk](mailto:sustainability@admin.ox.ac.uk).



**DID YOU KNOW?**  
 Recycling is only half way up the waste hierarchy, there are three options better for the environment.



# Sustainable Travel

The University of Oxford will continuously strive to increase its positive impact “by reducing emissions from work-related travel and University owned vehicles.” Environmental Sustainability Policy, 2014

## What is Sustainable Travel and why is it important?

Sustainable travel is all about using transport more efficiently, using more efficient alternatives or replacing the need to travel for example with video conferencing facilities; to reduce the impact of travel on the environment. Travel impacts the environment through emissions and the use of natural resources such as petrol and oil; there are also local impacts such as dust and noise. Sustainable travel such as walking and cycling also has positive health and financial benefits. Travel has been recognised as a significant environmental impact of the University of Oxford.



What we said in the 2011/12 report.	What we did?	Percentage Complete
Continue to improve sustainable travel facilities for staff and students.	Cycle parking was improved at six sites.	100%
Create a personalised travel planning service for staff at Old Road Campus.	160 personalised travel plans were provided to help Old Road Campus staff and identified alternative travel choices including use of the recently expanded Thornhill Park and Ride site.	100%
Expand and improve cycle parking in the University Science Area.	The proposed new cycle parking facility was not permitted due to site developments and an alternative solution has yet to be identified.	0%
Publish a new Travel Plan for 2013-18.	A draft University travel strategy was developed and is to be approved by Council in 2014/15.	75%
In 2013 the University will join the automatic bike hire scheme in Headington.	An Oxonbikes station has been installed at the Old Road campus.	100%
Identify improvements in data to report scope 3 emissions.	A Scope 3 working group has been convened to identify key areas, availability and accuracy of data and finalising the Scope 3 targets in these key areas.	75%
Work in partnership to improve staff cycling.	Safe cycling workshops were delivered across the University that was attended by over 200 staff and students. 100 hours of individual on road cycle training provided to staff and students.	100%

# Sustainable Travel continued

## What do the numbers say?

The transport figures indicate continued improvement in this area for example cycle parking across the University has increased by 5% from last year where as the number of car parking spaces has stayed the same. The figures of those walking or cycling are also very high with 90% of students and 45% of staff are doing so.

The number of fuel in litres used by the University's own vehicles has increased by 13% or 27,764 litres in 2012/13 from 2011/12. It is currently at the highest level since the University supplied fleet consumption figures for EMR data.

Work in all areas continues and objectives and targets are being set.

## WHAT WILL WE DO NEXT?

- Continue work and roll out of the Travel Strategy and Travel Plan including the setting of targets and objectives.
- Continue to work and support wider City initiatives including work on a Distribution Transport Hub.
- Continue to run staff awareness events and awareness raising sessions.

## Electric Bikes at Castle Mill

Following a successful application to the University Travel Fund the Graduate Accommodation team have purchased three electric bikes for the staff based at the Castle Mill site. They are being used to help the caretakers get around the site quickly and to transport kit up and down the site with the use of a specially built trailer for heavy or awkward items.



The bikes are already proving popular with the team. Caretaker, Steve, says: 'We're all really impressed and I would recommend an electric bike to anyone who is looking at an alternative to plain pedal power.'

Further funding for similar initiatives (such as pool bikes, trailers, cycle training or cycle parking) is available to all University departments.

## What are the challenges?

- Many have habits, behaviours or perceived and real barriers which can impact an individual's choice of transport.
- Data availability regarding transport is limited due to complexities of collection across the University.
- The University's buildings are spread across eleven sites.
- The City's transport routes are a shared resource with often competing needs.







## Sustainable Travel continued

How can you get involved?

- Look at the University of Oxford's [travel information pages](#) and see if you could take a more sustainable method of transport to work and find out about discounts and other opportunities.
- Inform visitors and guests about alternatives to driving or make use of video conferencing and other facilities.
- If you drive, share your car. You can also take steps to drive efficiently, for instance avoid heavy braking to reduce fuel consumption.
- Green Impact is a departmental award scheme with lots of travel ideas for you to help yourself and colleagues green their transport options. For example the Language Centre created a display from an old bike to communicate cycling information, they then fixed the bike and it is now available as a departmental pool bike.

Do you want to find out more?

- [Travel information and Strategy](#)
- [Green Impact](#)
- [Oxonbikes](#)
- If you have any queries you can contact [sustainability@admin.ox.ac.uk](mailto:sustainability@admin.ox.ac.uk).

90% OF STUDENTS

&

45% OF STAFF  
ALREADY

WALK OR

CYCLE

TO THE UNIVERSITY.





# Education, Research and Knowledge

The University of Oxford will continuously strive to increase its positive impact “by increasing awareness and understanding of environmental sustainability by staff and students and serving society by contributing and promoting the University’s research and knowledge transfer on sustainability.” Environmental Sustainability Policy, 2014

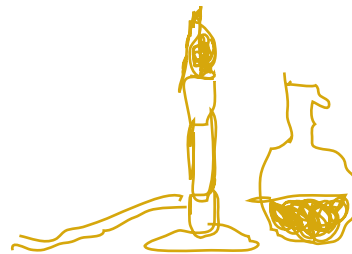
What is ‘Education, research and knowledge transfer’ and why is it important?

The behaviours of individuals have a large role to play in the University’s impact on the environment; through education and engagement the University can increase the positive impacts of the University itself and its associated individuals have on the environment.

The University is able to share best practices and transfer knowledge across the sector and beyond through both local, national and international networks such the Low Carbon Hub, The Environmental Association for Universities and Colleges (EAUC) and ISCN respectively.

Engagement underpins all of the impacts identified as significant and can play a key role in reaching each of the targets

What we said in the 2011/12 report.	What we did?	Percentage Complete
We’ll work in partnership with the Careers Office and the Community Action Groups Project to further promote opportunities for student exchanges who want to gain on-hands experience managing sustainability projects in organisations.	<p>The team has continued to work with the Careers Office and has run two student consultancy projects.</p> <p>The team has worked with a number of local groups and projects for instance Low Carbon Oxford of which the University of Oxford is a pathfinder member.</p>	100%
We’ll provide sustainability internships for students to work on projects within the Sustainability Team.	Offered continued student exchanges through the International Alliance of Research Universities (IARU) summer scheme. These exchanges have also supported sharing of best practice and knowledge.	100%





## Education, Research and Knowledge continued

### What do the numbers say?

Across the University there are a number of assets which lead on environmental sustainability and have a long history of engagement; Wytham Woods, is the most researched piece of woodland in the world and runs a number of events see Box 2 for some of their engagement facts and figures.

The Environmental Sustainability team launched Student Switch Off (SSO) and Green Impact in 2013. SSO and Green Impact are initiatives devised by the National Union of Students. Both are interactive and engaging and allow students and staff to gain extra skills and knowledge through training. An outline of the two key initiatives and some of the key figures from the first year have been provided below.

### [Green Impact](#)

Green Impact is a departmental based award scheme which encourages departments to make step changes to reduce their environmental impact. The teams work through criteria and receive awards reflecting their achievements. In the first year:

- 199 staff directly involved with Green Impact
- 565 Green criteria covered
- 23 Green Impact departments
- 5013 staff work in green impact departments
- 29 students received training including project

assistant and auditing training

- 19 awards were handed out to 15 departments at the Green Impact Awards evening

### [Student Switch Off](#)

SSO is an engagement based initiative encouraging students to save energy in their accommodation with photo competitions, climate change quizzes and a host of other events designed and run by students within colleges. The winning team in its first year was Oriel College; some other facts and figures are below:

- 2,054\* students pledged to save energy (13% of 15,770 students in the 28 colleges)
- 3,689\* people on [Facebook fan page](#)
- Over 6,600\* climate change quiz entrants
- 133 energy-saving photos submitted by students over the year
- 52 students attended training sessions

\*SSO is run throughout the country and these indicate the best results in the country.

In addition to these two key areas there are a number of internship opportunities, student representation on working groups, work experience, and training sessions. The Environmental Sustainability team has also met regularly with the student Environment and Ethics



### Box 2: Wytham Woods

During 2013 Wytham Woods

- Hosted over 70 researchers
- Welcomed 20,000 visitors
- Ran over 30 walks, talks and training days
- Planted 1,500 trees
- 800 species of butterfly and moth make it home
- 426.6 hectares
- Welcomed six film crews
- Acted as the outdoor classroom for 9 Primary schools every week via Forest School

representatives from colleges. To support the teams wider engagement initiatives the Environmental Sustainability team in 2013 launched two social media platforms on [Facebook](#) and [Twitter](#).





## Education, Research and Knowledge continued

### WHAT WILL WE DO NEXT?

- Increase monitoring and measuring of key performance indicators such as hours of training provided.
- Continue to work with Oxford University Students Union and student representatives.
- Increase departments supporting Green Impact and continue to run SSO.
- Increase presence at events, workshops, guided walks.

#### What are the challenges?

- By its very nature the University has new students every year which is a great opportunity and a challenge in keeping up messages.
- Engagement needs to be on-going.
- There are many competing demands for staff and student time.

Trained  
Green Impact  
Student  
Auditors

#### How can you get involved?

- Follow us on social media.
- Look out for workshops and events.
- Take part in Green Impact and/or Student Switch Off.

#### Do you want to find out more?

- [Green Impact](#)
- [Student Switch Off](#)
- [Wytham Woods](#)
- Follow us on [Twitter](#) and [Facebook](#)
- The University of Oxford [Estates Services](#)
- If you have any queries you can contact [sustainability@admin.ox.ac.uk](mailto:sustainability@admin.ox.ac.uk).





# Biodiversity

The University of Oxford will continuously strive to increase its positive impact “by increasing awareness and understanding of environmental sustainability by staff and students and serving society by contributing and promoting the University’s research and knowledge transfer on sustainability.” Environmental Sustainability Policy, 2014

What is ‘biodiversity’ and why is it important?

Biodiversity in this setting focuses on the variety of species and habitats and the conservation and enhancement of these. Biodiversity is not only an excellent indication of the state of the environment but also underlies the requirements for us as a species. The University impacts biodiversity through its operations, land utilisation, and landscaping, and also wider biodiversity through what it consumes and procures.

The approach to biodiversity within the estate is to increase the amount, the variety and to better join habitats or - bigger, better and joined. This is supported by areas such as Wytham Woods, the University Parks, and Harcourt Arboretum which cover 1,167 acres as well as educational elements of the University of Oxford Botanic Gardens and Oxford University Museum of Natural History. These examples all play key roles in promoting, protecting and educating about biodiversity.

What we said in the 2011/12 report.	What we did?	Percentage Complete
We’ll develop a Biodiversity Strategy.	<p>A draft biodiversity strategy was developed with baseline surveys conducted to identify four pilot areas. A site plan has been drafted.</p> <p>A working group has been put together to finalise the strategy and plans. The strategy will be formally signed off in 2014/15.</p>	90%
We’ll keep adding to our online Biodiversity Toolkit.	The toolkit was reviewed as part of the preparation work for the strategy. A new section regarding a swift survey, designed and launched in 2014, has been added. The application and information contained within the toolkit will be revised as the strategy and plan are implemented.	100%

What do the numbers say?

As part of the Biodiversity Strategy relevant key performance indicators and monitoring and measuring is being identified by the working group and will inform future reports.

In 2014, 57 people from students, staff and the public became involved with a project involving swifts, a bird which summers and breeds in Oxford. Engagement included attending a workshop, a guided walk and completing a survey, all conducted in partnership with Continued Education. The records will support planning decisions within the University and feed into wider studies conducted by the Royal Society for the Protection of Birds (RSPB).





## Biodiversity continued

# WHAT WILL WE DO NEXT?

- Formalisation of the Biodiversity Strategy, identification of indicators and monitoring and measuring.
- Extension and development of volunteering and education opportunities in addition to those already offered including partnership working.

### What are the challenges?

- Complexity of natural systems and identification of suitable indicators.
- The city location of the University, the wide dispersal of buildings with small mono habitats which are often isolated.

### How can you get involved?

- Look out for and support surveys, workshops and talks.
- Green Impact is a departmental award scheme which includes a

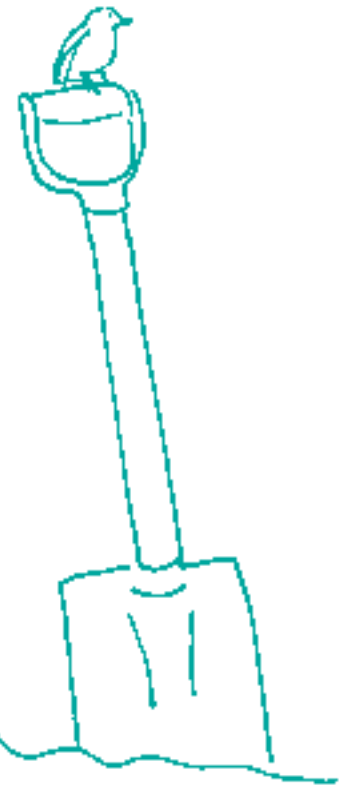
number of criteria relating to biodiversity.

- Learn about and visit Wytham Woods, University Parks, Oxford University Botanic Gardens, Harcourt Arboretum, and Oxford University Museum of Natural History.



Do you want to find out more?

- [Green Impact](#)
- The University of Oxford [Estates Services](#)
- [Wytham Woods](#)
- The [University of Oxford Parks](#)
- The [University of Oxford Botanic Garden](#)
- The [University of Oxford Harcourt Arboretum](#)
- [Oxford University Museum of Natural History](#)
- If you have any queries you can contact [sustainability@admin.ox.ac.uk](mailto:sustainability@admin.ox.ac.uk).





# Sustainable Buildings

The University of Oxford will continuously strive to increase its positive impact “by making full use of available space and designing and refurbishing buildings in line with the University’s Sustainable Building Philosophy” Environmental Sustainability Policy, 2014

What is ‘Sustainable building’ and why is it important?

Sustainable building is a holistic approach with the goal of minimising the environmental impact of a building in terms of its location, material resource use, construction impacts and whole life resource consumption.

It seeks to ensure that the building is fit for purpose, future proofed, robust and adaptable and in this provides the greatest return on the natural and economic resources invested in it.

Each capital building project represents a significant legacy for the University in terms of operational functionality, maintenance cost and carbon emissions and an inimitable opportunity to ensure that this is positive.

The University recognises that its buildings and the utilisation of those buildings are a significant environmental impact.

What we said in the 2011/12 report.	What we did?	Percentage Complete
We’ll continue to work with Libraries to identify more opportunities for energy reduction and cost savings.	Implemented 48 out of 50 energy surveys opportunities which were identified by external consultants.  Work included the installation of inverters on two Air Handling Units (AHUs) to reduce the air changes in the Sackler library which reduced draughts and made the space more comfortable for the students.	100%
We’ll aim for BREEAM Excellent ratings.	Projects have successfully attained the necessary credits in their post construction stage BREEAM assessments to be awarded Excellent ratings.	100%
We’ll implement the Sustainable Buildings Philosophy for all new buildings and major refurbishments and utilise the ‘Soft Landings’ protocol.	The Sustainable Buildings Philosophy continues to be implemented on all projects and is currently subject to a periodic review to take account of legislative changes.  Soft Landings is being implemented on the Mathematic Institute (Andrew Wiles Building) project and is the subject of a more formal governance review to optimise its implementation on future projects.	70%
We’ll implement a pilot project in the Blavatnik School of Government which will focus on low energy and low carbon, natural ventilation, exposed thermal mass to regulate temperature and a double skin façade for a high level of insulation	The project is ongoing with the construction phase well underway. It is due to be completed in August 2015	50%



## Sustainable Buildings continued

### What do the numbers say?

Many recent University capital projects demonstrate significant sustainable construction features, such as ground source heat pump systems (Earth Sciences, Said Business School Phase II, Andrew Wiles building and Blavatnik School of Government) and integrated photovoltaic panels (Biochemistry Building and New Radcliffe House). Current master plans demonstrate a potential 43% increase in the size of the University functional Estate and the current Estate Strategy places significant weight on sustainability in the light of this.



## WHAT WILL WE DO NEXT?

- Increase support and guidance to developments at the University of Oxford through the use and application of the following guidance:
  - BREEAM – the University has adopted the Building Research Establishment Environmental Assessment Method (BREEAM) methodology for major new construction and refurbishment projects. BREEAM is the leading such scheme internationally and the University has required an ‘Excellent’ rating for all projects over £1m since 2009.
  - The Sustainable Buildings Philosophy Document
  - Carbon Management Strategy – defines the steps that the University has taken and will take in future to achieve a reduction in its CO2 emissions. This important emphasis on operational energy consumption and CO2 emissions positions the University significantly in advance of statutory compliance (Part L Building Regulations) to a focus on in-use efficiency of buildings.
- Continue to raise awareness and engage individuals to utilise buildings efficiently through Green Impact, Midnight Oil and other initiatives.

### What are the challenges?

- Balancing the needs of building users and operational requirements, security and a low energy approach to design.
- Ensuring opportunities are not missed on smaller projects with less design flexibility and more constrained budgets.
- A complex and ambitious design programme.

### How can you get involved?

- Utilise buildings sustainably, refer to Green Impact for ideas and suggestions.
- Find out how to report issues or faults with equipment such as over heating or cooling and report them as soon as you notice them.

### Do you want to find out more?

- [Sustainable Building Philosophy Document](#)
- [Carbon Management Strategy](#)
- [Green Impact](#)
- The University of Oxford [Estates Services](#)
- [BREEAM](#)
- If you have any queries you can contact [sustainability@admin.ox.ac.uk](mailto:sustainability@admin.ox.ac.uk).





# Sustainable Procurement

The University of Oxford will continuously strive to increase its positive impact “by encouraging and embedding sustainable and lifecycle considerations into purchasing decisions.” Environmental Sustainability Policy, 2014

What is ‘Sustainable Procurement’ and why is it important?

Sustainable procurement to the University of Oxford means routinely considering the environmental, social and economic opportunities and impacts of purchasing decisions, whilst taking a long term view. In support of this view the University has produced a Sustainable Procurement Strategy which supports the objectives in the wider University’s Procurement Strategy.

Given the range and scale of sustainability issues which are potentially relevant to the University of Oxford, the Sustainable Procurement Strategy has identified six priority issues which will be considered in all of University Procurement’s Department (UPD) decisions (see Box 3).

## Box 3: Sustainable Procurement Priority Areas:

1. Optimise the use of natural resources in our procurement decisions and throughout our supply chain
2. Effectively manage waste in the supply chain
3. Effectively manage the delivery of goods and services to the University
4. Support the management of our carbon impact and the delivery of the University’s Carbon Management Strategy
5. Work with suppliers and departments to raise awareness of sustainability to build a more sustainable economy
6. Ensure that ethical considerations such as fair trade and a living wage are considered in our procurement practices

What we said in the 2011/12 report.	What we did?	Percentage Complete
We will report on the indirect carbon emission arising from purchasing as part of HEFCE’s requirement.	This data has been reported as part of the University’s Higher Education Statistics (HESA) data submission	100%
We will work with one of our preferred furniture suppliers to identify sustainable opportunities such as using recycled packaging and using sustainably-sourced biodiesel.	The UPD have worked with the Commercial Group to use recycled packaging and reviewed the use of bio-diesel.	70%
We will continue to expand our Managed Print Services to the Radcliffe Observatory Quarter and Old Road Campus, to save income, reduce paper/ print consumption and reduce carbon emissions.	A review of operations identified that alternative options existed and work is on-going in this field.	20%



## Sustainable Procurement continued

### What do the numbers say?

In 2013 the first Sustainable Procurement Strategy was implemented leading to a number of achievements in its first year:

- 177 supplier reviews conducted were sustainability purchasing priorities were discussed.
- 37 category impact assessments were conducted which reviewed the environmental, economic and social impacts of a service or provision, taking into account positive attributions as well as negative impacts. The analysis also ties everything back to the sustainability procurement strategy and the six priorities, see box 2 for details.
- Level three of the Flexible Framework was achieved. The Flexible Framework looks to embed sustainable development considerations into procurement and investment decisions.

## WHAT WILL WE DO NEXT?

- Progress activities within UPD's Flexible Framework action plan to achieve level 4.
- All UPD staff to attend advanced sustainability training (anticipated one-day duration).
- Conduct joint sustainability projects with at least four identified suppliers or in at least four identified categories.
- Introduce a basic 'whole life' costing model.

### Sustainable Procurement Case Study – Waste

The University Purchasing Department, Facilities Management and Environmental Sustainability worked together to form the Non-Hazardous Waste Working Group.

The group undertook a category management process to review the management and disposal of all non-hazardous waste across the central University.



The contract was awarded to Select Environmental Services Ltd in April, 2014 who meets a number of the University Sustainable Purchasing priorities.





## Sustainable Procurement continued



### What are the challenges?

- The wide variation of service and product requirements across the University, as well as the demand for specialised equipment and purchasing demands.
- 100's of devolved purchasing choices made across the university each day.
- Complexity of sustainable information relating to a product or service impact.

### How can you get involved?

- Consider whether an item is really required, could you reuse or mend?
- Apply and encourage others to apply the sustainable procurement strategy.
- Join and support Green Impact which has a section about procurements and encourages departments to consider fair trade and recycled choices among others.

### Do you want to find out more?

- [Procurement Strategy 2013 – 2017](#)
- [Sustainable Procurement Strategy 2013 – 2017](#)
- [Flexible Framework](#)
- [HESA Data](#)
- If you have any queries you can contact [sustainability@admin.ox.ac.uk](mailto:sustainability@admin.ox.ac.uk).

177  
SUPPLIER  
REVIEWS  
WHERE  
SUSTAINABILITY  
WAS  
DISCUSSED





# Environmental Management

## - Emissions and Discharge

The University of Oxford will continuously strive to increase its positive impact “by putting in place appropriate controls to prevent pollution and work to reduce where practicable emissions and discharges to air, land and water.” Environmental Sustainability Policy, 2014

What is ‘Environmental Management’ and why is it important?

The University is working to manage the way it interacts with the environment more effectively and systematically, as such a bespoke Environmental Management System (EMS) has been created.

An EMS is a set of tools and processes, not unlike those needed to manage Health and Safety (H&S) which will lead to improvements in the University’s interaction with the environment including its emissions and discharge. For example when dealing with H&S risk assessments are carried out to assess the potential impact of an activity, changes may be made to mitigate risks or a procedure put in place, checks, audits and reviews are conducted to see if the controls are effective, this is the same for an EMS but the focus is the environment.

An EMS can be audited by a third party and certified against an international standard such as ISO 4001 to confirm that an effective and suitable system is in place.

What we said in the 2011/12 report.	What we did?	Percentage Complete
Pilot an Environmental Management System.	<p>The pilot study has led to the development of key central materials, including an updated Environmental Sustainability Policy, an EMS Manual, baseline and compliance audits, a legal register and an impacts register.</p> <p>The system is to be certified to ISO 14001 standard to confirm it is working effectively.</p>	80%





## Environmental Management continued

### What do the numbers say?

The EMS is in place and six buildings from across the functional estate and will be gradually rolled out across the estate.

The system has identified over 100 pieces of current legislation that have environmental implications and that apply to the University of Oxford. A review of our key activities and interactions with the environment has resulted in the following actions being identified as significant:

- Use of buildings/building design
- Use of gas and electricity from the grid
- Purchasing
- Travel
- Water consumption
- Waste production

## WHAT WILL WE DO NEXT?

- Complete formal certification of the system to ISO 14001 standard.
- Increase the number of buildings included within the formal scope of the EMS.
- Increase awareness and communications regarding the EMS.

### What are the challenges?

- The University's operations are diverse and spread over a large number of sites leading to diverse impact and variable requirements.
- Each user of the University has a role to play.

### How can you get involved?

- Familiarise yourself with the Environmental Policy.
- Participate in Green Impact the departmental award scheme.
- Consider the environment in all your actions; could you reduce the risk to environment through stopping or changing your actions?



### Do you want to find out more?

- [Environmental Policy Estates Services](#)
- [Green Impact](#)
- The University of Oxford [Estates Services](#)
- If you have any queries you can contact [sustainability@admin.ox.ac.uk](mailto:sustainability@admin.ox.ac.uk).



# Summary Table

Topic	Goals		Results				Future
	Priority topics (with units of measurement)	Objectives and targets (for reporting year, for the following year, and/or beyond)	2009/10 data	2010/11 data	2011/12 data	2012/13 data and actions	What will be done?
Principle 1							
Resource use	Water Consumption (m <sup>3</sup> )	Reduce water use by 11% by 2015 compared to 2009/2010 levels nt.	379,560	349,490	382,232	396,271 (+4 from 2009/10)  11.9 m <sup>3</sup> per person per a year.	<ul style="list-style-type: none"> <li>Review the water strategy and finalise the Water Implementation Plan.</li> <li>Continue to support the installation of water efficient equipment.</li> <li>Increase engagement with staff and students through Green Impact and other initiatives to support positive behaviours.</li> <li>Work with regulators and other key stakeholders.</li> <li>Improve monitoring, measuring and reporting of water.</li> </ul>
	Rain/Grey Water Consumption (m <sup>3</sup> )		1000	642	1269	1037 (+4% from 2009/10)	
	Electricity (kWh)		110,752,829 195 kWh per m <sup>2</sup>	113,710,120 197 kWh per m <sup>2</sup>	105,728,754 172 kWh per m <sup>2</sup>	113,820,852 (+3% from 2009/10) 185 kWh per m <sup>2</sup>	See Carbon Emissions in Principle 2
	Gas (kWh)		99,013,026 175 kWh per m <sup>2</sup>	92,375,414 160 kWh per m <sup>2</sup>	86,898,770 141 kWh per m <sup>2</sup>	105,769,206 (+7% from 2009/10) 172 kWh per m <sup>2</sup>	
	MTHW (heat) (kWh)		2,162,304 3.8 kWh per m <sup>2</sup>	3,154,565 5.5 kWh per m <sup>2</sup>	2,098,955 3.4 kWh per m <sup>2</sup>	2,385,000 (+10% from 2009/10) 3.8 kWh per m <sup>2</sup>	
	Oil (kWh)		540,607 0.9 kWh per m <sup>2</sup>	774,054 1.3 kWh per m <sup>2</sup>	532,470 0.8 kWh per m <sup>2</sup>	571,250 (+6% from 2009/10) 0.9 kWh per m <sup>2</sup>	
	Renewables and Combined Heat and Power (kWh)		3500	5361	713,067	2,146,380 (+61,325% from 2009/10)	
	Vehicles (Litres)		213,000	220,000	215,000	242,264 (+14% from 2009/10)	



Topic	Goals		Results				Future
	Priority topics (with units of measurement)	Objectives and targets (for reporting year, for the following year, and/or beyond)	2009/10 data	2010/11 data	2011/12 data	2012/13 data and actions	What will be done?
Waste, recycling, local emissions, and non-compliance	Total waste produced (tonnes)	Implement waste strategy	1,723	3,259	3,974	<p>3,690</p> <ul style="list-style-type: none"> <li>The Waste Strategy has been implemented with a review of the non-hazardous waste service provision. From 2014 the University will have one service provider and receive actual weights for trade collection waste.</li> <li>The University has adopted a disposal system which is now consistent across the University to assist with segregation.</li> <li>The provision of the reuse scheme was and a new model identified. During this period proactive advertising of the current scheme has been limited. The new system will be available from 2014.</li> <li>The waste toolkit has been reviewed following amendments to the waste service provision across the University. Work will continue to develop in this area in partnership with others.</li> </ul>	<ul style="list-style-type: none"> <li>Create a Waste Management Plan to deliver the strategy</li> <li>Analyse and report on actual weights from 2014 and work with departments to increase their recycling rates and set targets and objectives.</li> <li>Increase awareness and communication regarding waste, use of material resources, and methods of waste reduction.</li> <li>Build on Scope 3 reporting for waste.</li> </ul>
Users	Stakeholder engagement	Increase engagement regarding Environmental Sustainability with key stakeholders.				<ul style="list-style-type: none"> <li>The team has continued to work with the Careers Office and has run two student consultancy projects.</li> <li>The team has worked with a number of local groups and projects for instance Low Carbon Oxford of which the University of Oxford is a pathfinder member.</li> </ul>	<ul style="list-style-type: none"> <li>Increase monitoring and measuring of key performance indicators such as hours of training provided.</li> <li>Continue to work with Oxford University Students Union and student representatives.</li> <li>Increase departments supporting Green Impact and continue to run SSO.</li> <li>Increase presence at events, workshops, guided walks and other.</li> </ul>
Building design aspects	Sustainable Building Standards	<p>Building Projects over £1m to target points equivalent to BREEAM Excellent</p> <p>Pilot a low carbon design.</p>					
	Soft landings	Implement the soft landings protocol.					



Topic	Goals		Results				Future
	Priority topics (with units of measurement)	Objectives and targets (for reporting year, for the following year, and/or beyond)	2009/10 data	2010/11 data	2011/12 data	2012/13 data and actions	What will be done?
Principle 2							
Institution-wide carbon targets and related achievements	Carbon Emissions (tCO <sub>2</sub> e)	<p>Medium Term: Reduce carbon emissions by 11% below the 2005/6 baseline by 2015/16</p> <p>Long Term: Reduce carbon emissions by 33% below the 2005/6 baseline by 2020/21</p>	8,100	77,161	71,722	<p>71,434 (-12% from 2009/10) (+8% from 2005/6 baseline)</p> <p>116 kWh per m<sup>2</sup></p> <p>Energy (kWh) produced on site grew by 300% from 2011/12 to 2012/13 including CHP and Photovoltaics.</p> <p>The University has continued to purchase off-site renewable energy, 99% of energy was purchased through Green Tariffs in 2012/13.</p> <p>Extensive work has been undertaken on the Carbon Plan, Carbon Programme and Scope 3 reporting to support the implementation of the Strategy and work continues.</p>	<p>Continue to invest in technologies to increase energy efficiencies including the use of Renewables and low carbon or zero carbon technologies</p> <p>Continue rollout the Carbon Management Plan and Programme to support the Carbon Strategy.</p> <p>Work with new developments and the soft landings of these new buildings to increase energy efficiency.</p> <p>Raise awareness with staff and students to utilise energy efficiently, including an extension of the Midnight Oil Project.</p> <p>Commission Display Energy Certificate (DECs) in buildings over 500 m<sup>2</sup>.</p>
Transport	Sustainable travel.	Review strategy and set objectives and targets to increase the sustainability of business travel.				<ul style="list-style-type: none"> <li>Improved cycle parking at six sites.</li> <li>Provided 160 personalised travel plans.</li> <li>Developed a draft University travel strategy to be approved by Council 2014/15.</li> <li>Oxonbikes station has been installed at the Old Road campus.</li> <li>A Scope 3 working group has been convened.</li> <li>Delivered safe cycling workshops across the University that was attended by over 200 staff and students.</li> <li>Provided 100 hours of individual on road cycle training to staff and students.</li> </ul>	<ul style="list-style-type: none"> <li>Continue work and roll out of the Travel Strategy and Travel Plan including the setting of targets and objectives.</li> <li>Continue to work and support wider City initiatives including work on a Distribution Transport Hub.</li> <li>Continue to run staff awareness events and awareness raising sessions.</li> </ul>
Master Planning	Strategies	Review strategies and associated implementation as required.				<p>Estates Strategy Produced.</p> <p>Environmental Policy reviewed.</p> <p>Transport Strategy reviewed.</p> <p>Sustainable Procurement Strategy produced.</p> <p>Draft Biodiversity Strategy produced.</p> <p>Draft Water Plan produced.</p> <p>Carbon Management Programme produced.</p> <p>Work on all strategies continued.</p>	Continue to review strategies as required and produce and implement plans and programmes.
Food	Sustainable Food	Produce a sustainable food policy.				<p>In 2014 a draft sustainable Food Policy has been established and is due to be finalised 2014/15. (50% complete)</p>	Finalise the Sustainable Food Policy for the University and work with caterers.





Topic	Goals		Results				Future
	Priority topics (with units of measurement)	Objectives and targets (for reporting year, for the following year, and/or beyond)	2009/10 data	2010/11 data	2011/12 data	2012/13 data and actions	What will be done?
Land-use and biodiversity	Biodiversity	Create a biodiversity strategy				<ul style="list-style-type: none"> <li>Developed a draft biodiversity strategy with baseline surveys conducted to identify four pilot areas. A site plan has been drafted.</li> <li>A working group has been put together to finalise the strategy and plans.</li> <li>Reviewed the toolkit as part of the preparation work for the strategy.</li> </ul>	<ul style="list-style-type: none"> <li>Formalisation of the Biodiversity Strategy, identification of indicators and monitoring and measuring.</li> <li>Extension and development of volunteering and education opportunities in addition to those already offered including partnership working.</li> </ul>
<b>Principle 3</b>							
Topical Integration	Best practice	Sharing of real-life University Sustainability case studies				Provided case studies and continue to attend sector meetings to share best practice and experiences. (100% complete)	Continue to produce case studies and or present findings and share best practice.
	Education	Run Sustainability Internships.				The University has hosted two interns through IARU.	Continue to support the IARU internships and/or others as applicable.
		Hold workshops, training sessions and events.				The University completes a wide range of sessions and events on sustainability and is looking to expand this in future years	Continued to expand offers. Identify and record key performance indicators.
Social Integration	Community sector groups.	Attend groups with cross representation from the community.				Members of the Environmental Sustainability team continue to represent the University at relevant groups where there is representation from local charities, councils and business.	Continue to represent the University at relevant groups.
	Social Media	Establish a social media presence.				In 2013 a Facebook and Twitter page was set up for Environmental Sustainability at the University of Oxford.	Develop and expand use of social media.
Research & Education projects on Laboratory/ IT facilities and sustainability	Green Impact	To launch green impact in 2013/14 and sign up 20 departments.				The initiative was launched in 2013 with 23 departments participating in the initial year.	Continue to support departments who signed up in 2013 and increase departments participating in Green Impact.
	Midnight Oil project	Review use of trials in 24 hour buildings and identify savings.				See Carbon Emissions section in Principle 2	See Carbon Emissions section in Principle 2
Commitments and resources for campus sustainability	Environmental Management	Pilot and certify an Environmental Management System (EMS)				<p>The pilot study has led to the development of key central materials, including an updated Environmental Sustainability Policy, an EMS Manual, baseline and compliance audits, a legal register and an impacts register.</p> <p>The system is to be certified to ISO 14001 standard to confirm it is working effectively.</p>	<ul style="list-style-type: none"> <li>Complete formal certification of the system to ISO 14001 standard.</li> <li>Increase the number of buildings included within the formal scope of the EMS.</li> <li>Increase awareness and communications regarding the EMS.</li> </ul>



# Appendix 1: The Three Principles of ISCN

## Principle 1 – Sustainable Performance of Buildings on Campus

Principle 1: To demonstrate respect for nature and society, sustainability considerations should be an integral part of planning, construction, renovation, and operation of buildings on campus.

A sustainable campus infrastructure is governed by respect for natural resources and social responsibility, and embraces the principle of a low carbon economy. Concrete goals embodied in individual buildings can include minimizing environmental impacts (such as energy and water consumption or waste), furthering equal access (such as non-discrimination of the disabled), and optimizing the integration of the built and natural environments. To ensure buildings on campus can meet these goals in the long term, and in a flexible manner, useful processes include participatory planning (integrating end-users such as faculty, staff, and students) and life-cycle costing (taking into account future cost-savings from sustainable construction).

## Principle 2 – Campus wide Master Planning and Target Setting

Principle 2: To ensure long-term sustainable campus development, campus-wide master planning and target-setting should include environmental and social goals.

Sustainable campus development needs to rely on forward-looking planning processes that consider the campus as a

whole, and not just individual buildings. These processes can include comprehensive master planning with goals for impact management (for example, limiting use of land and other natural resources and protecting ecosystems), responsible operation (for example encouraging environmentally compatible transport modes and efficiently managing urban flows), and social integration (ensuring user diversity, creating indoor and outdoor spaces for social exchange and shared learning, and supporting ease of access to commerce and services). Such integrated planning can profit from including users and neighbours, and can be strengthened by organization-wide target setting (for example greenhouse gas emission goals). Existing low-carbon lifestyles and practices within individual campuses that foster sustainability, such as easy access for pedestrians, grey water recycling and low levels of resource use and waste generation, need to be identified, expanded and disseminated widely.

## Principle 3 – Integration of Facilities, Research, and Education

Principle 3: To align the organization's core mission with sustainable development, facilities, research, and education should be linked to create a "living laboratory" for sustainability.

On a sustainable campus, the built environment, operational systems, research, scholarship, and education are linked as a "living laboratory" for sustainability. Users (such as students, faculty, and staff) have access to

research, teaching, and learning opportunities on connections between environmental, social, and economic issues. Campus sustainability programs have concrete goals and can bring together campus residents with external partners, such as industry, government, or organized civil society. Beyond exploring a sustainable future in general, such programs can address issues pertinent to research and higher education (such as environmental impacts of research facilities, participatory teaching, or research that transcends disciplines). Institutional commitments (such as a sustainability policy) and dedicated resources (such as a person or team in the administration focused on this task) contribute to success.

Source: [ISCN](#)

